Docusign Envelope ID: 123CBD13-CC93-86BE-82D4-881916C1066A

HISTORIC DISTRICT COMMISSION
APPLICATION FOR WORK APPROVAL

City of Detroit - Planning & Development Department
2 Woodward Avenue, Suite 808
Detroit, Michigan 48226

APPLICATION ID
HDC2026-00462

PROPERTY INFORMATION

ADDRESS(ES): 347 West Grand Blvd

HISTORIC DISTRICT: Hubbard Farms

SCOPE OF WORK: (Check ALL that apply)

☒	Windows/ Doors	☒	Walls/ Siding	☒	Painting	☒	Roof/Gutters/ Chimney	☒	Porch/Deck/Balcony	☐	Other
☒	Demolition	☐	Signage	☐	New Building	☐	Addition	☒	Site Improvements (landscape, trees, fences, patios, etc.)		

BRIEF PROJECT DESCRIPTION:

The existing 12-unit historic apartment building will be repaired and renovated throughout; New unit layouts to provide (6) additional units for a total of (18) units; Framing repairs/replacement of compromised floors and roofs; Replacement of roofing membrane and asphalt shingle roofing; Replacement of gutters and downspouts; Replacement Skylights; Full window replacement throughout; Restoration of leaded glass windows; New exterior doors with some select doors to be repair/restored; Restoration/repair of the existing Colonnaded portico; Restoration/repair of the existing cornice; Restoration of porch steps and replacement of handrails; Sitework to include a new parking lot, required screening, dumpster enclosure, and repair of deteriorated sidewalks around the property.

APPLICANT IDENTIFICATION

TYPE OF APPLICANT: Architect/Engineer/Consultant

NAME: Joseph Hudec	**COMPANY NAME:** Infuz Architects		
ADDRESS: 1451 Bagley St, Suite 7	**CITY:** Detroit	**STATE:** MI	**ZIP:** 48216
PHONE: +1 (412) 779-9046	**EMAIL:** joehudec@infuzarchitects.com		

I AGREE TO AND AFFIRM THE FOLLOWING:

☒	I understand that the failure to upload all required documentation may result in extended review times for my project and/or a denied application.
☒	I understand that the review of this application by the Historic District Commission does not waive my responsibility to comply with any other applicable ordinances including obtaining appropriate permits (building, sign, etc.) or other department approvals prior to beginning the work.
☒	I hereby certify that the information on this application is true and correct. I certify that the proposed work is authorized by the owner of record and I have been authorized to make this application as the property owner(s) authorized agent.
☒	As required by the state Local Historic Districts Act, Act 169 of 1970 (MCL399.205), I hereby certify that the property where work will be undertaken has, or will have before the proposed project completion date, a fire alarm system or a smoke alarm complying with the requirements of the Stille-DeRossett-Hale single state construction code act, 1972 PA 230, MCL 125.1501 to 125.1531

Signed by: Joseph Hudec

SIGNATURE

08/14/2026
DATE

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NOTE: Based on the scope of work, additional documentation may be required. See www/detroitmi.gov/hdc **for scope-specific requirements.**

PROJECT DETAILS – TELL US ABOUT YOUR PROJECT

Instructions: Add project details using the text box in each section. If your details exceed the space provided, attach the details via the attachment icon for that section.

ePLANS PERMIT NUMBER:
(only applicable if you've already applied for permits through ePLANS) N/A

GENERAL

1. DESCRIPTION OF EXISTING CONDITION
Please tell us about the current appearance and conditions of the areas you want to change. You may use a few sentences or attach a separate prepared document on the right. (For example, "existing roof on my garage is covered in gray asphalt shingles in poor condition.")

Refer to attached Writeup

2. PHOTOGRAPHS
Help us understand your project. Please attach photographs of all areas where work is proposed.

3. DESCRIPTION OF PROJECT
In this box, tell us about what you want to do at the areas described above in box #1. (For example, Install new asphalt shingle roofing at garage.)

Refer to attached Writeup
Refer to HDC Drawing Set

4. DETAILED SCOPE OF WORK
In this box, please describe all steps necessary to complete the work described in box #3. (For example, "remove existing shingles, replace wood deck as necessary, replace wood eaves, install roof vents, replace rotted fascia boards, paint, clean worksite.")

Refer to attached Writeup
Refer to HDC Drawing Set

5. BROCHURES/CUT SHEETS
Please provide information on the products or materials you are proposing to install. For example, a brochure on the brand and color of the shingles proposed.

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ADDITIONAL DETAILS

6. WINDOWS/DOORS *Detailed photographs of window(s) and/or door(s) proposed for replacement showing the condition of the interior and exterior of the window(s) and/or door(s)*	
7. DEMOLITION *If demolition is proposed for reasons of structural failure or catastrophic damage, please provide illustrated report from structural engineer or licensed architect.*	
8. SITE IMPROVEMENTS *If site improvements are proposed, please provide any relevant site improvement plans pertaining to your project.*	

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INfuz Ltd
ARCHITECTS + INNOVATORS

347 West Grand Blvd Apartments

HISTORIC DISTRICT COMMISSION SUBMISSION
08.14.2026

Project Introduction:
The Owner (Hubbard Farms Lofts LLC) of the 347 West Grand Blvd Apartments requests that the Historic District Commission grant approval for the proposed rehabilitation of the historic structure and redevelopment project at this property at the corner of Grand Blvd and Porter St. This building sits within the Hubbard Farms Local Historic District. Following an approval, the Owners intend to proceed with construction per the approved certificate of appropriateness for the exterior work. This correspondence is accompanied by a set of drawings/documents that have additional information detailing the existing conditions and proposed remedies. The Architect has done due diligence over the past several months to evaluate the conditions presented here.

Background:
Adam Burkhieser and Son, mason, contractors and builders, were issued permit #506 on April 18, 1905 to construct this two story brick veneer apartment building at a cost of $14,500. It was owned by John S. Christa and Henry Christa, and remained in the Christa family until 1958. Colonial revival in style, this two story 8-unit building features a monumental colonnaded portico. The four two-story columns facing the Boulevard and an identical one on Porter rest on massive plinths and support the pedimental roof. Balconies to the second floor apartments are created between the columns. Flanking the colonnade at the corners of the Boulevard elevation and adjoining side of the south (Porter) elevation are bowed sections. Detail is in the colonial mode, ie. the modillion cornice and the keystones in splayed lintels. The columns are fluted and bear Ionic capitals.

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Description of Existing Conditions:
The existing building experienced a fire back in November of 2025. Much of the wood framed roof is compromised and requires structural repair and reconstruction. The existing interior masonry bearing walls and steel frame structure are generally in good condition, but portions of the wood framed floor and walls are compromised and require some reconstruction. The exterior brick veneer is in good shape given the fire, with some minor cleaning required. There is red face brick on the primary facades and common brick at the secondary side and rear facades. The splayed stone lintels and stone sills are in good shape. The original wood windows have been boarded up for protection after the fire, as many windows were burnt and charred beyond repair; or smashed in during the fire fighting process. From photos of before the fire, the windows were constructed of wood and are a mix of 1 over 1, 6 over 1, 8 over 1, and a few arch and fixed windows above porch doors. There are also a few leaded glass windows at each portico entry that are in fair shape and can be preserved. There are over 100 windows in this project. The existing main entry doors at each portico are in fair shape. These wood doors are full-lite and are flanked by sidelights. Similarly, the 2nd floor balcony doors off the main stairs are full-lite and are flanked by sidelights. There are two existing solid doors off Porter street at the basement level. These doors are not original. The existing rear wood doors are half-lite and are flanked by a small hung window. The existing 2-story colonnaded portico is in fair shape, with some damaged or missing components. The 2nd floor balcony and railing will require restoration. The existing fluted ionic columns are made of wood and require some minor repair and touch up. The column bases are masonry/stone and are in fair to poor shape in select areas. The porch steps and slab are in fair condition and require some repair. The existing metal railings are experiencing some failures and require replacement. The colonnaded portico pediment detailing has experienced some fire damage that requires restoration. The cornices are in good to fair condition, with some areas of fire damage that require restoration. The roof membrane has been compromised due to the fire and requires full replacement. There are (2) existing skylights above the rear stair locations. These are in poor shape and require replacement. The asphalt shingles on the portico roofs are in poor shape and require replacement. The existing metal gutters and downspouts have been damaged, requiring replacement. There is a chain link at the front corner that is not historic appropriate.

Description of Exterior Scope of Work:
The following describes the proposed exterior work planned for the building and site, which includes: Framing repairs/replacement of compromised floors and roofs; Replacement of roofing membrane and asphalt shingle roofing; Replacement of gutters and downspouts; Replacement Skylights; Full window replacement throughout; Restoration of leaded glass windows; New exterior doors with some select doors to be repair/restored; Restoration/repair of the existing Colonnaded portico; Restoration/repair of the existing cornice; Restoration of porch steps and replacement of handrails; Sitework to include a new parking lot, required screening, dumpster enclosure, and repair of deteriorated sidewalks around the property.

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Detailed Scope of Work:

Demolition

- Remove all compromised existing wood framed roof assembly.
- Remove areas of compromised existing wood floors, walls, etc.
- Remove all compromised existing windows.
- Remove wall area to lower sill for new egress windows at select basement units.
- remove existing compromised skylights.

Masonry Brick

- Inspect existing masonry throughout, clean brick using the gentlest means possible.
- New infill of former basement windows.
    - Infill brick is to match, color, size, and texture.
    - 'N' Type mortar will be used and will match in color, texture, and tooling.

Stone Elements

- Inspect all existing sills, restore/repair as required, replace any damaged or missing elements, match existing detailing.
- Restore/repair all existing column bases at portico entries, replace any damaged or missing elements, match existing detailing.
- Restore/repair all existing steps at portico entries, replace any damaged or missing elements, match existing detailing.
- All existing stone elements requiring patching will match the stones color, texture, and strength. Mortar-Based Patch, Jahn Limestone Patch M70 or Dutchman are acceptable means for patching. Sample test areas will be provided in work areas prior to starting construction.
- Remove all staining and paint/coatings from existing stone elements on the primary elevations using the gentlest means possible. Chemical, acid, abrasive, and blasting methods will not be allowed. Alkaline-based paint stripper, Prosoco Enviro Klean Safety Peel 1 or approved equal, low pressure power wash with water and soft bristle brushes will be acceptable means of removing paint. Sample test areas will be provided in work areas prior to starting construction.

Parapets & Cornice

- Inspect existing parapet caps & flashing, restore/repair as required, replace any damaged or missing elements.
- Restore/repair all areas of existing built-up wood cornice, replace any fire damaged or compromised elements with replicas to match existing shapes, profiles, and detailing.
- A new metal cap flashing will be installed on top of the existing cornice. The drip edge will be minimally exposed. Metal cap flashing color to match the cornice.

Windows

- Due to the fire in November of 2025, the original wood windows have been burned or busted up and are beyond repair. Refer to photos.
- With the condition of the windows, a full window replacement is proposed throughout (100+ total).
    - Replacement windows to be Pella Lifestyle Series or approved equal.
    - Replacement windows to match the former divided lite patterns.
    - Provide extruded brickmould trim
- The sets of leaded glass windows aside the portico entries are to be restored.
- Selected windows at basement units are identified to have lower sills for egress compatibility.
- An egress compliant simulated double-hung casement is proposed at one identified basement unit along Porter St.

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Doors

- Remove (2) existing non-original solid embossed doors at the basement level on the Porter St. facade. Prep for installation of replacement door.
- Replacement doors to be solid exterior hollow-metal doors
    - Replacement doors to be Steelcraft or approved equal.
- The main entry doors and sidelights at the porticos are to be restored.
- Similarly, the 2nd floor balcony doors and sidelights at the porticos are to be restored.
- The rear entry doors and side windows are to be restored.

Exterior Painting

- Color selections to be compliant with the HDC color system guidelines
- Color System C - Colonial Revival
    - Historically, white has been used in Colonial Revival.
- Paint all trims, cornices, portico columns, balcony railings, pediments, selected doors and sidelites.
    - Paint color to be Sherwin Williams SW 9582 White Sand

Exterior Lighting

- New exterior lighting to be provided throughout, refer to the Site Lighting attachment by GBA
- Decorative uplighting to highlight the portico colonnades.
- Decorative lighting to highlight the pediments
- Decorative uplighting at the water table / sill to highlight a few select wall areas and cornice along Porter st.
- Wall scones at all entry doors in existing lighting locations.
- Decorative exterior chandelier at the 2nd floor balconies.
- The parking lot is illuminated by one pole mounted fixture and one wall mounted fixture.
- Refer to cut-sheets for all exterior lighting selections

Roofing

- The existing roof structure is compromised and will be rebuilt and repaired.
- Remove all damaged areas of existing roof structure, provide new roof framing/structure per Structural.
- Replace membrane roof with new 0.60mm EPDM adhered membrane system throughout all areas of low slope roof.
- Replace asphalt shingle roofing with new Asphalt shingle roofing system.
    - Replacement singles to be Certainteed Landmark series in Georgetown Gray or approved equal.
- Provide new pre-finished aluminum gutters & downspouts as required, utilize all former locations for each.
    - Replacement Gutter and Downspouts to be PAC-TITE WR system or approved equal.
- Restore/repair existing parapet cap/copings, replace where damaged or missing.
- Replace existing skylights with new aluminum skylight system.
    - Replacement skylights to be Wasco Pinnacle 350 Series or approved equal
    - The scope of work will not be visible from the public right-of-way.

Metal Railings

- Replace existing handrails at the portico entry steps.
- Replacement handrails to be simple single pipe railings, painted black.

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Portico Collonades

- Restore all existing fluted wood columns, repair and patch as required.
- Restore 2nd floor balcony decks, beadboard ceiling/soffits, and wood railings. Repair and rebuild as required, any damaged or missing elements to be replaced with replicas to match existing detailing.

Site Improvements

- New parking lot, concrete walks, and landscaping, refer to Civil.
- New required screening to be a 4 ft tall Aluminum fence.
    - Ultra Aluminum privacy panel fencing or approved equal
    - Color: Textured Bronze
- New dumpster enclosure, refer to details in drawing set
    - Provide spit-face block (dark charcoal)
    - Provide Ultra Aluminum privacy panel gates to match screening/fencing.
- New small retaining wall and walkway at exterior door location at basement unit, refer to Civil
- All existing chainlink fencing is to be removed.

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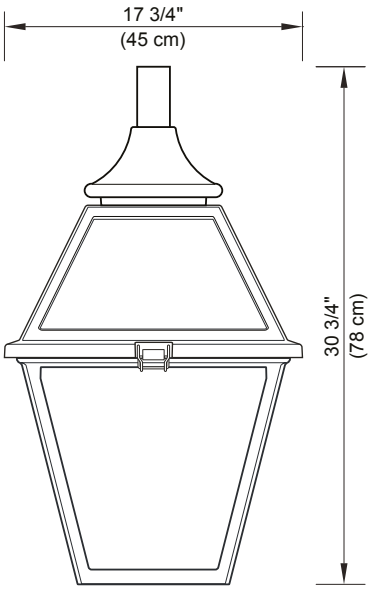
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cyclone

Hudson HUDP1A
Approval – Specification

Project: | **Order:**

Qty: | **Luminaire:** HUDP1A | **Type:**



EPA: 1.31 ft² **Weight:** 27 lbs / 12 kg

Roof module: Square shaped classic lantern style housing made from die cast A360 aluminum. The roof module is mechanical assembled to the cage module by two hinges, and a latch that allows tool-free access to the driver. A cast A356 aluminum decorative element is mechanically attached to the roof module. Fitted with a vertical tenon of 1.9" (4.8cm) O.D. by 4" (10.2cm) long with a 0.2" (0.5cm) wall. The luminaire is suspended from a 2 3/8" (6cm) Ø outside diameter by 5 1/2" (14cm) minimum length, and 0.156" (0.4cm) wall tenon by means of pressure screws. The roof module is mechanical assembled to the cage module by two hinges, and a latch that allows tool-free access to the driver.

Cage module: The die cast A360 aluminum cage module is mechanically assembled to the optical module for easy replacement. The luminaire is without a lens or with a flat lens attached to the optical module.

Optical module: The die cast A380 aluminum heat sink is designed to minimize the temperature of the LEDs, increasing their longevity and efficiency. The optical module is mechanically assembled to the heat-sink for easy replacement. The optical module is sealed with a molded silicone gasket, achieving an IP66 weatherproof protection. The high efficiency Orion LED optical engine is mechanically assembled on the heat sink. The lifetime of the LEDs is 100,000 hours. It is based on the LM-80 test and extrapolated with TM-21. This data is calculated when 50% of the LEDs produce 70% of their initial luminous flux (L70). The minimum color rendering index (CRI) is 70. The optical acrylic lenses are sealed on the LED board and are designed to illuminate only where needed while achieving excellent uniformity with maximum spacing. The available light distribution types are T1, T1A, T1AHS, T2, T2HS, T2M, T2MHS, T3, T3HS, T3M, T3MHS, T4, T4HS, T5. A white decorative acrylic protection plate is mechanically assembled under the optical module. The combination of two distribution types (backward optics) is also available in the same optical module as well as the integration of crosswalk optics (TCWR and TCWL) for pedestrian crossing.

Driver module: Class 1 (P70 and P80) or Class 2 (P10 to P60). Primary tension is of 120 to 480VAC Volts, 50/60Hz, THD max 20% with a high-power factor of 90%. Operating temperature is -40°F (-40°C) to 131°F (55°C). The regulator offers an output of 0-10 Volts and is ROHS compliant. Assembled with pull-out connectors. Complete with 10kV/5kA or 20kV/10kA tripolar surge protection for live-MALT, live-neutral and neutral-MALT lines according to IEEE/ANSI C62.41 2002 C.

Wiring / Hardware: Type TEWT 14-7 AWG, 12" (30.5cm) minimum exceeding luminaire. All electrical connections between the modules are provided with quick-disconnect connectors for easy maintenance. All outside accessible hardware is made of 304 stainless steel.

Color: All Cyclone colors are available in textured (TX) or smooth (SM) finish, unless otherwise specified. A durable polyester powder coating is applied and meets the AAMA 2604 requirements (5 years exposure to all weather conditions). The finish meets the ASTM G7, B117, D1654 and D2247 requirements relative to salt spray and humidity resistance. **Cyclone recommends a textured finish for this product**.

cULus: According to standard C22.2 / UL1598

Warranty: 5-year limited warranty. Complete warranty terms located at:
www.cyclonelighting.com/assets/Legal/Cyclone-Sales-TermsConditions-en.pdf

Stamp/Approval:	**Name:**
Name: **Date:**	**Date:**

Cyclone Lighting: 2175 Des Entreprises Blvd, Terrebonne (QC) Canada J6Y 1W9 www.cyclonelighting.com
Phone: 1-866-436-5500 - info@cyclonelighting.com © 2025 Acuity Brands Lighting Inc. All Rights Reserved.

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cyclone

Hudson HUDP1A
Approval – Specification

Project: | **Order:**

Qty: | **Luminaire:** HUDP1A | **Type:**

Ordering Code

Model	Lens	Distribution	Performance Package [3]	CCT	Volts	Surge Protector
HUDP1A						
HUDP1A	**FGC** Flat Glass Clear **NL** No Lens	**T1** Type 1 **T1A** Type 1A **T1AHS** Type 1A with HS **T2** Type 2 **T2HS** Type 2 with HS **T2M** Type 2M **T2MHS** Type 2M with HS **T3** Type 3 **T3HS** Type 3 with HS **T3M** Type 3M **T3MHS** Type 3M with HS **T4** Type 4 **T4HS** Type 4 with HS **T5** Type 5 **TCWR** [1] Crosswalk right **TCWL** [1] Crosswalk left BACKWARD OPTICS [2]	**P10** (3000lm) **P20** (4300lm) **P30** (5600lm) **P40** (6700lm) **P50** (7700lm) **P60** (10100lm) **P70** (13100lm) **P80** (14800lm)	**30K** 3000K **40K** 4000K	**MVOLT** 120-277VAC **HVOLT** 347-480VAC **120** **208** **240** **277** **347** **480**	**10KV** 10kV/5kA **20KV** 20kV/10kA

Options

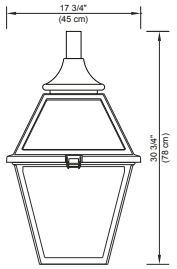
Adaptor	Photocell [4]	Dimming
ADS Fitted with a vertical tenon of Ø 1.9" (4.8cm) O.D. and 0.203" (0,5cm) wall **ADS** Side Mount Adaptor **ADP** Ball tenon for suspended mounting adaptor	**PTDR** **PT** Photocell W/7-PIN receptacle (ANSI C136.41) **PX** Shorting cap W/7-PIN receptacle (ANSI C136,41) **PTL** Long life photocell W/7-PIN receptacle (ANSI C136.41) **PTDR** 7-PIN receptacle (ANSI C136.41)	**PND506** **PND506** [5] Program 50% for 6 hours (11PM to 5AM) **PND508** [5] Program 50% for 8 hours (9PM to 5AM) **SD** [5] Field adjustable 10% increment step-dimming switch

Options

Color	Texture	Pre-finish
BK Black RAL9005 **DG** Dark green RAL6012 **MA** Marine blue RAL5013 **SI** Metallic silver RAL9006 (smooth only) **BZ** Dark bronze RAL8019 **BG** Burgundy RAL3005 **GM** Moss green RAL6005 **PG** Pale grey RAL7040 **WH** White RAL9003 **SG** [6] Steel Gray **BKH** [7] Black Holophane **BZH** [7] Dark bronze Holophane **GNH** [7] Green Holophane **GHH** [7] Graphite Holophane **GRH** [7] Gray Holophane **SLH** [7] Silver Holophane **WHH** [7] White Holophane	**TX** Textured **SM** Smooth **SX** [8] Textured, matt (Sandtex)	**MG** **MG** Marine grade pre-finish

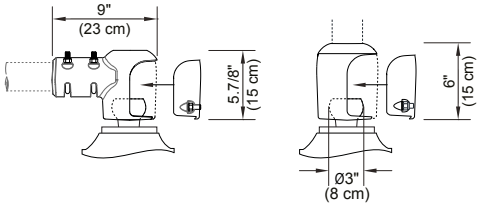
1 - Available only with a clear flat glass lens (FGC) or with the no lens (NL) option.
2 - Backward optic: The Orion light engine features 180° orientable optics that can be customized as needed. This makes it a simple matter to combine two distribution types in a single light engine, simultaneously lighting a road and a bike path or sidewalk, for instance. Contact factory for more information.
3 - Values shown represent the maximum lumen output, which may vary depending on the selected configuration or options.
4 - Photocells are only available with the ADS adaptor.
5 - Only one of the following options may be selected: SD, PND506, or PND508. These options cannot be combined.
6 - Available in SX finish only
7 - Holophane colors are only available in Smooth (SM) finish
8 - SX finish only available with SG color.

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice. Please consult our web site for up-to-date product information and IES files.



EPA: 1.31 ft² **Weight:** 27 lbs / 12 kg

Optional Adaptors



ADS **ADP**

For more details on ADS and ADP options, consult spec sheets:

> ***ADS Spec sheet***

> ***ADP Spec Sheet***

ADP option is only compatible with Cyclone's mounting arms.

Stamp/Approval:

Name: **Date:**

Name:

Date:

Cyclone Lighting: 2175 Des Entreprises Blvd, Terrebonne (QC) Canada J6Y 1W9 www.cyclonelighting.com
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cyclone



Photometric Data Tables

Hudson - HUDP1A-NL (Suspended - No Lens)

		3000K								4000K								LLD @ 25C			
Performance Package	Watts System	Optic	Lumen Output	Efficacy (LM/W)	B U G	Optic	Lumen Output	Efficacy (LM/W)	B U G	Optic	Lumen Output	Efficacy (LM/W)	B U G	Optic	Lumen Output	Efficacy (LM/W)	B U G	25K Hours	50K Hours	75K Hours	100K Hours
		T1	2908	128	B1-U0-G1					T1	3053	134	B1-U0-G1								
		T1A	2879	126	B1-U0-G1	T1AHS	2520	111	B1-U0-G1	T1A	3023	133	B1-U0-G1	T1AHS	2646	116	B1-U0-G1				
		T2	2738	120	B1-U0-G1	T2HS	2299	101	B0-U0-G1	T2	2875	126	B1-U0-G1	T2HS	2414	106	B0-U0-G1				
		T2M	2849	125	B1-U0-G1	T2MHS	2233	98	B1-U0-G1	T2M	2992	131	B1-U0-G1	T2MHS	2344	103	B1-U0-G1				
P10	22.8	T3	2768	121	B1-U0-G1	T3HS	2351	103	B0-U0-G1	T3	2906	127	B1-U0-G1	T3HS	2469	108	B0-U0-G1	0.98	0.98	0.97	0.97
		T3M	2799	123	B1-U0-G1	T3MHS	2224	98	B1-U0-G1	T3M	2946	129	B1-U0-G1	T3MHS	2341	103	B1-U0-G1				
		T4	2810	123	B1-U0-G1	T4HS	2191	96	B0-U0-G1	T4	2950	129	B1-U0-G1	T4HS	2301	101	B0-U0-G1				
		T5	2942	129	B2-U0-G1					T5	3089	135	B2-U0-G1								
		TCWL	2916	128	B1-U0-G0	TCWR	2917	128	B1-U0-G0	TCWL	3070	135	B1-U0-G0	TCWR	3070	135	B1-U0-G0				
		T1	4157	124	B2-U0-G2					T1	4365	131	B2-U0-G2								
		T1A	4116	123	B1-U0-G1	T1AHS	3603	108	B1-U0-G1	T1A	4322	129	B1-U0-G1	T1AHS	3783	113	B1-U0-G1				
		T2	3915	117	B1-U0-G1	T2HS	3287	98	B1-U0-G1	T2	4110	123	B1-U0-G1	T2HS	3451	103	B1-U0-G1				
		T2M	4073	122	B1-U0-G1	T2MHS	3192	96	B1-U0-G1	T2M	4277	128	B1-U0-G1	T2MHS	3351	100	B1-U0-G1				
P20	33.4	T3	3956	118	B1-U0-G1	T3HS	3361	101	B1-U0-G1	T3	4154	124	B1-U0-G1	T3HS	3529	106	B1-U0-G1	0.98	0.98	0.97	0.97
		T3M	3983	119	B1-U0-G1	T3MHS	3165	95	B1-U0-G1	T3M	4192	126	B1-U0-G1	T3MHS	3332	100	B1-U0-G1				
		T4	4017	120	B1-U0-G1	T4HS	3133	94	B1-U0-G1	T4	4218	126	B1-U0-G1	T4HS	3289	98	B1-U0-G1				
		T5	4205	126	B2-U0-G1					T5	4416	132	B2-U0-G1								
		TCWL	4150	124	B1-U0-G0	TCWR	4150	124	B1-U0-G0	TCWL	4368	131	B1-U0-G0	TCWR	4369	131	B1-U0-G0				
		T1	5361	122	B2-U0-G2					T1	5629	129	B2-U0-G2								
		T1A	5308	121	B2-U0-G1	T1AHS	4646	106	B2-U0-G1	T1A	5574	127	B2-U0-G1	T1AHS	4879	111	B2-U0-G1				
		T2	5049	115	B1-U0-G1	T2HS	4239	97	B1-U0-G1	T2	5301	121	B1-U0-G1	T2HS	4450	102	B1-U0-G1				
		T2M	5253	120	B1-U0-G1	T2MHS	4116	94	B1-U0-G1	T2M	5516	126	B1-U0-G1	T2MHS	4322	99	B1-U0-G1				
P30	43.8	T3	5102	116	B1-U0-G1	T3HS	4335	99	B1-U0-G1	T3	5358	122	B1-U0-G1	T3HS	4552	104	B1-U0-G1	0.98	0.98	0.97	0.97
		T3M	5132	117	B1-U0-G2	T3MHS	4079	93	B1-U0-G1	T3M	5402	123	B1-U0-G2	T3MHS	4293	98	B1-U0-G1				
		T4	5180	118	B1-U0-G2	T4HS	4040	92	B1-U0-G2	T4	5439	124	B1-U0-G2	T4HS	4242	97	B1-U0-G2				
		T5	5424	124	B3-U0-G1					T5	5695	130	B3-U0-G1								
		TCWL	5347	122	B1-U0-G1	TCWR	5348	122	B1-U0-G1	TCWL	5628	128	B1-U0-G1	TCWR	5629	129	B1-U0-G1				
		T1	6520	118	B2-U0-G2					T1	6846	124	B2-U0-G2								
		T1A	6456	117	B2-U0-G2	T1AHS	5651	103	B2-U0-G1	T1A	6779	123	B2-U0-G2	T1AHS	5933	108	B2-U0-G1				
		T2	6140	111	B1-U0-G1	T2HS	5155	94	B1-U0-G1	T2	6447	117	B1-U0-G1	T2HS	5413	98	B1-U0-G1				
		T2M	6389	116	B1-U0-G1	T2MHS	5006	91	B1-U0-G1	T2M	6709	122	B1-U0-G1	T2MHS	5257	95	B1-U0-G1				
P40	55.1	T3	6206	113	B1-U0-G2	T3HS	5272	96	B1-U0-G1	T3	6516	118	B1-U0-G2	T3HS	5536	100	B1-U0-G2	0.97	0.97	0.96	0.95
		T3M	6195	112	B1-U0-G2	T3MHS	4924	89	B1-U0-G1	T3M	6521	118	B2-U0-G2	T3MHS	5183	94	B1-U0-G1				
		T4	6300	114	B1-U0-G2	T4HS	4913	89	B1-U0-G2	T4	6615	120	B1-U0-G2	T4HS	5159	94	B1-U0-G2				
		T5	6596	120	B3-U0-G1					T5	6926	126	B3-U0-G1								
		TCWL	6455	117	B1-U0-G1	TCWR	6456	117	B1-U0-G1	TCWL	6795	123	B1-U0-G1	TCWR	6796	123	B1-U0-G1				
		T1	7437	117	B2-U0-G2					T1	7809	123	B2-U0-G2								
		T1A	7364	116	B2-U0-G2	T1AHS	6445	101	B2-U0-G1	T1A	7732	122	B2-U0-G2	T1AHS	6767	107	B2-U0-G1				
		T2	7003	110	B1-U0-G1	T2HS	5880	93	B1-U0-G1	T2	7353	116	B1-U0-G1	T2HS	6174	97	B1-U0-G1				
		T2M	7287	115	B2-U0-G1	T2MHS	5710	90	B1-U0-G1	T2M	7652	121	B2-U0-G2	T2MHS	5995	94	B1-U0-G1				
P50	63.5	T3	7078	111	B1-U0-G2	T3HS	6013	95	B1-U0-G2	T3	7432	117	B1-U0-G2	T3HS	6314	99	B1-U0-G2	0.97	0.97	0.96	0.95
		T3M	7286	115	B2-U0-G2	T3MHS	5791	91	B1-U0-G2	T3M	7670	121	B2-U0-G2	T3MHS	6096	96	B1-U0-G2				
		T4	7186	113	B1-U0-G2	T4HS	5604	88	B1-U0-G2	T4	7545	119	B1-U0-G2	T4HS	5884	93	B1-U0-G2				
		T5	7523	118	B3-U0-G1					T5	7899	124	B3-U0-G2								
		TCWL	7592	120	B1-U0-G1	TCWR	7593	120	B1-U0-G1	TCWL	7992	126	B1-U0-G1	TCWR	7993	126	B1-U0-G1				
		T1	9930	116	B3-U0-G3					T1	10426	122	B3-U0-G3								
		T1A	9654	113	B3-U0-G2	T1AHS	8605	101	B3-U0-G2	T1A	10323	121	B3-U0-G2	T1AHS	9036	106	B3-U0-G2				
		T2	9182	108	B1-U0-G2	T2HS	7850	92	B1-U0-G2	T2	9818	115	B2-U0-G2	T2HS	8243	97	B1-U0-G2				
		T2M	9730	114	B2-U0-G2	T2MHS	7624	89	B1-U0-G1	T2M	10216	120	B2-U0-G2	T2MHS	8005	94	B2-U0-G2				
P60	85.3	T3	9280	109	B1-U0-G2	T3HS	8029	94	B1-U0-G2	T3	9923	116	B2-U0-G2	T3HS	8430	99	B1-U0-G2	0.97	0.97	0.96	0.95
		T3M	8943	105	B2-U0-G2	T3MHS	7108	83	B1-U0-G2	T3M	9413	110	B2-U0-G2	T3MHS	7482	88	B2-U0-G2				
		T4	9421	110	B1-U0-G2	T4HS	7483	88	B1-U0-G2	T4	10074	118	B2-U0-G2	T4HS	7857	92	B1-U0-G2				
		T5	9864	116	B3-U0-G2					T5	10547	124	B3-U0-G2								
		TCWL	9318	109	B1-U0-G1	TCWR	9319	109	B1-U0-G1	TCWL	9808	115	B1-U0-G1	TCWR	9809	115	B2-U0-G1				
		T1	12926	117	B3-U0-G3					T1	13572	122	B3-U0-G3								
		T1A	12798	115	B3-U0-G3	T1AHS	11202	101	B3-U0-G2	T1A	13438	121	B3-U0-G3	T1AHS	11762	106	B3-U0-G2				
		T2	12172	110	B2-U0-G2	T2HS	10219	92	B1-U0-G2	T2	12781	115	B2-U0-G2	T2HS	10730	97	B1-U0-G2				
		T2M	12666	114	B2-U0-G2	T2MHS	9924	89	B2-U0-G2	T2M	13299	120	B2-U0-G2	T2MHS	10420	94	B2-U0-G2				
P70	110.9	T3	12302	111	B2-U0-G2	T3HS	10451	94	B1-U0-G2	T3	12917	116	B2-U0-G2	T3HS	10974	99	B1-U0-G2	0.97	0.97	0.96	0.95
		T3M	11297	102	B2-U0-G3	T3MHS	8979	81	B2-U0-G2	T3M	11891	107	B2-U0-G3	T3MHS	9451	85	B2-U0-G2				
		T4	12490	113	B2-U0-G3	T4HS	9740	88	B1-U0-G2	T4	13114	118	B2-U0-G3	T4HS	10227	92	B1-U0-G2				
		T5	13076	118	B4-U0-G2					T5	13730	124	B4-U0-G2								
		TCWL	11771	106	B2-U0-G1	TCWR	11772	106	B2-U0-G1	TCWL	12390	112	B2-U0-G1	TCWR	12392	112	B2-U0-G1				
		T1	14626	113	B3-U0-G3					T1	15357	118	B3-U0-G3								
		T1A	14481	112	B3-U0-G3	T1AHS	12675	98	B3-U0-G2	T1A	15205	117	B3-U0-G3	T1AHS	13309	103	B3-U0-G2				
		T2	13773	106	B2-U0-G2	T2HS	11563	89	B1-U0-G2	T2	14461	111	B2-U0-G2	T2HS	12141	94	B2-U0-G2				
		T2M	14331	110	B2-U0-G2	T2MHS	11229	87	B2-U0-G2	T2M	15048	116	B2-U0-G2	T2MHS	11791	91	B2-U0-G2				
P80	129.7	T3	13920	107	B2-U0-G2	T3HS	11826	91	B2-U0-G2	T3	14616	113	B2-U0-G2	T3HS	12417	96	B2-U0-G2	0.97	0.97	0.96	0.95
		T3M	12678	98	B2-U0-G3	T3MHS	10076	78	B2-U0-G2	T3M	13345	103	B3-U0-G3	T3MHS	10606	82	B2-U0-G2				
		T4	14132	109	B2-U0-G3	T4HS	11021	85	B1-U0-G3	T4	14839	114	B2-U0-G3	T4HS	11572	89	B1-U0-G3				
		T5	14795	114	B4-U0-G2					T5	15535	120	B4-U0-G2								
		TCWL	13210	102	B2-U0-G1	TCWR	13211	102	B2-U0-G1	TCWL	13905	107	B2-U0-G1	TCWR	13907	107	B2-U0-G1				

Note: Actual performance may differ as a result of end-user environment and application.
All values are design or typical values, measured under laboratory conditions at 25°C.
Specifications subject to change without notice.

Lumen ratio for different CCT

PC Amber	2200K	2700K	3000K	4000K
0.6	0.75	0.95	0.95	1.00

Cyclone Lighting: 2175 Des Entreprises Blvd, Terrebonne (QC) Canada J6Y 1W9 www.cyclonelighting.com
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Docusign Envelope ID: 123CBD13-CC93-86BE-82D4-881916C1066A

cyclone



Photometric Data Tables

Hudson - HUDP1A-FGC (Suspended - Flat Glass Clear)

		3000K								4000K								LLD @ 25C			
Performance Package	Watts System	Optic	Lumen Output	Efficacy (LM/W)	B U G	Optic	Lumen Output	Efficacy (LM/W)	B U G	Optic	Lumen Output	Efficacy (LM/W)	B U G	Optic	Lumen Output	Efficacy (LM/W)	B U G	25K Hours	50K Hours	75K Hours	100K Hours
		T1	2666	117	B1-U0-G1					T1	2800	123	B1-U0-G1								
		T1A	2625	115	B1-U0-G1	T1AHS	2323	102	B1-U0-G1	T1A	2757	121	B1-U0-G1	T1AHS	2439	107	B1-U0-G1				
		T2	2474	109	B1-U0-G1	T2HS	2105	92	B0-U0-G1	T2	2598	114	B1-U0-G1	T2HS	2210	97	B1-U0-G1				
		T2M	2683	118	B1-U0-G1	T2MHS	2113	93	B1-U0-G0	T2M	2817	124	B1-U0-G1	T2MHS	2218	97	B1-U0-G1				
P10	22.8	T3	2438	107	B1-U0-G1	T3HS	2123	93	B1-U0-G1	T3	2559	112	B1-U0-G1	T3HS	2229	98	B1-U0-G1	0.98	0.98	0.97	0.97
		T3M	2649	116	B1-U0-G1	T3MHS	2110	93	B1-U0-G1	T3M	2788	122	B1-U0-G1	T3MHS	2221	97	B1-U0-G1				
		T4	2413	106	B1-U0-G1	T4HS	1945	85	B0-U0-G1	T4	2533	111	B1-U0-G1	T4HS	2042	90	B0-U0-G1				
		T5	2492	109	B1-U0-G1					T5	2616	115	B2-U0-G1								
		TCWL	2814	123	B1-U0-G0	TCWR	2814	123	B1-U0-G0	TCWL	2962	130	B1-U0-G0	TCWR	2963	130	B1-U0-G0				
		T1	3812	114	B2-U0-G1					T1	4003	120	B2-U0-G1								
		T1A	3753	112	B1-U0-G1	T1AHS	3321	99	B1-U0-G1	T1A	3941	118	B1-U0-G1	T1AHS	3487	104	B1-U0-G1				
		T2	3537	106	B1-U0-G1	T2HS	3010	90	B1-U0-G1	T2	3714	111	B1-U0-G1	T2HS	3160	95	B1-U0-G1				
		T2M	3836	115	B1-U0-G1	T2MHS	3020	90	B1-U0-G1	T2M	4028	121	B1-U0-G1	T2MHS	3171	95	B1-U0-G1				
P20	33.4	T3	3485	104	B1-U0-G1	T3HS	3035	91	B1-U0-G1	T3	3659	110	B1-U0-G1	T3HS	3187	95	B1-U0-G1	0.98	0.98	0.97	0.97
		T3M	3769	113	B1-U0-G1	T3MHS	3002	90	B1-U0-G1	T3M	3967	119	B1-U0-G1	T3MHS	3160	95	B1-U0-G1				
		T4	3449	103	B1-U0-G1	T4HS	2781	83	B1-U0-G1	T4	3622	108	B1-U0-G1	T4HS	2920	87	B1-U0-G1				
		T5	3562	107	B2-U0-G1					T5	3740	112	B2-U0-G1								
		TCWL	4004	120	B1-U0-G0	TCWR	4005	120	B1-U0-G0	TCWL	4215	126	B1-U0-G0	TCWR	4216	126	B1-U0-G0				
		T1	4916	112	B2-U0-G2					T1	5162	118	B2-U0-G2								
		T1A	4841	111	B2-U0-G1	T1AHS	4283	98	B2-U0-G1	T1A	5083	116	B2-U0-G1	T1AHS	4497	103	B2-U0-G1				
		T2	4562	104	B1-U0-G1	T2HS	3881	89	B1-U0-G1	T2	4790	109	B1-U0-G1	T2HS	4075	93	B1-U0-G1				
		T2M	4947	113	B1-U0-G1	T2MHS	3895	89	B1-U0-G1	T2M	5194	119	B1-U0-G1	T2MHS	4090	93	B1-U0-G1				
P30	43.8	T3	4494	103	B1-U0-G1	T3HS	3915	89	B1-U0-G1	T3	4719	108	B1-U0-G1	T3HS	4110	94	B1-U0-G1	0.98	0.98	0.97	0.97
		T3M	4856	111	B1-U0-G1	T3MHS	3868	88	B1-U0-G1	T3M	5112	117	B1-U0-G1	T3MHS	4072	93	B1-U0-G1				
		T4	4448	102	B1-U0-G1	T4HS	3586	82	B1-U0-G1	T4	4671	107	B1-U0-G1	T4HS	3765	86	B1-U0-G1				
		T5	4594	105	B2-U0-G1					T5	4823	110	B2-U0-G1								
		TCWL	5159	118	B1-U0-G1	TCWR	5160	118	B1-U0-G1	TCWL	5431	124	B1-U0-G1	TCWR	5432	124	B1-U0-G1				
		T1	5979	109	B2-U0-G2					T1	6278	114	B2-U0-G2								
		T1A	5887	107	B2-U0-G1	T1AHS	5209	95	B2-U0-G1	T1A	6182	112	B2-U0-G1	T1AHS	5470	99	B2-U0-G1				
		T2	5548	101	B1-U0-G1	T2HS	4720	86	B1-U0-G1	T2	5826	106	B1-U0-G1	T2HS	4956	90	B1-U0-G1				
		T2M	6017	109	B1-U0-G1	T2MHS	4737	86	B1-U0-G1	T2M	6318	115	B2-U0-G1	T2MHS	4974	90	B1-U0-G1				
P40	55.1	T3	5466	99	B1-U0-G1	T3HS	4761	86	B1-U0-G1	T3	5739	104	B1-U0-G1	T3HS	4999	91	B1-U0-G1	0.97	0.97	0.96	0.95
		T3M	5863	106	B2-U0-G1	T3MHS	4670	85	B1-U0-G1	T3M	6171	112	B2-U0-G1	T3MHS	4916	89	B1-U0-G1				
		T4	5410	98	B1-U0-G2	T4HS	4361	79	B1-U0-G1	T4	5680	103	B1-U0-G2	T4HS	4579	83	B1-U0-G1				
		T5	5587	101	B3-U0-G1					T5	5866	106	B3-U0-G1								
		TCWL	6228	113	B1-U0-G1	TCWR	6230	113	B1-U0-G1	TCWL	6556	119	B1-U0-G1	TCWR	6558	119	B1-U0-G1				
		T1	6820	107	B2-U0-G2					T1	7161	113	B2-U0-G2								
		T1A	6715	106	B2-U0-G2	T1AHS	5941	94	B2-U0-G1	T1A	7050	111	B2-U0-G2	T1AHS	6239	98	B2-U0-G1				
		T2	6328	100	B1-U0-G1	T2HS	5384	85	B1-U0-G1	T2	6645	105	B1-U0-G1	T2HS	5653	89	B1-U0-G1				
		T2M	6862	108	B2-U0-G1	T2MHS	5403	85	B1-U0-G1	T2M	7206	113	B2-U0-G1	T2MHS	5673	89	B1-U0-G1				
P50	63.5	T3	6234	98	B1-U0-G1	T3HS	5430	86	B1-U0-G1	T3	6546	103	B1-U0-G1	T3HS	5702	90	B1-U0-G1	0.97	0.97	0.96	0.95
		T3M	6896	109	B2-U0-G2	T3MHS	5492	86	B1-U0-G1	T3M	7258	114	B2-U0-G2	T3MHS	5782	91	B1-U0-G1				
		T4	6170	97	B1-U0-G2	T4HS	4974	78	B1-U0-G2	T4	6479	102	B1-U0-G2	T4HS	5223	82	B1-U0-G2				
		T5	6372	100	B3-U0-G1					T5	6691	105	B3-U0-G1								
		TCWL	7326	115	B1-U0-G1	TCWR	7327	115	B1-U0-G1	TCWL	7711	121	B1-U0-G1	TCWR	7713	121	B1-U0-G1				
		T1	9105	107	B3-U0-G2					T1	9561	112	B3-U0-G3								
		T1A	8965	105	B3-U0-G2	T1AHS	7933	93	B2-U0-G2	T1A	9414	110	B3-U0-G2	T1AHS	8330	98	B3-U0-G2				
		T2	8449	99	B2-U0-G1	T2HS	7189	84	B1-U0-G1	T2	8872	104	B2-U0-G1	T2HS	7548	88	B1-U0-G1				
		T2M	9163	107	B2-U0-G2	T2MHS	7214	85	B2-U0-G1	T2M	9621	113	B2-U0-G2	T2MHS	7575	89	B2-U0-G1				
P60	85.3	T3	8324	98	B1-U0-G2	T3HS	7250	85	B1-U0-G2	T3	8740	102	B2-U0-G2	T3HS	7613	89	B1-U0-G2	0.97	0.97	0.96	0.95
		T3M	8463	99	B2-U0-G2	T3MHS	6741	79	B2-U0-G2	T3M	8908	104	B2-U0-G2	T3MHS	7096	83	B2-U0-G2				
		T4	8238	97	B1-U0-G2	T4HS	6642	78	B1-U0-G2	T4	8650	101	B2-U0-G2	T4HS	6974	82	B1-U0-G2				
		T5	8508	100	B3-U0-G1					T5	8933	105	B3-U0-G1								
		TCWL	8991	105	B2-U0-G1	TCWR	8993	105	B2-U0-G1	TCWL	9464	111	B2-U0-G1	TCWR	9466	111	B2-U0-G1				
		T1	11853	107	B3-U0-G3					T1	12445	112	B3-U0-G3								
		T1A	11670	105	B3-U0-G2	T1AHS	10327	93	B3-U0-G2	T1A	12254	110	B3-U0-G2	T1AHS	10843	98	B3-U0-G2				
		T2	10999	99	B2-U0-G2	T2HS	9358	84	B1-U0-G2	T2	11549	104	B2-U0-G2	T2HS	9825	89	B1-U0-G2				
		T2M	11927	108	B2-U0-G2	T2MHS	9391	85	B2-U0-G2	T2M	12524	113	B2-U0-G2	T2MHS	9861	89	B2-U0-G2				
P70	110.9	T3	10835	98	B2-U0-G2	T3HS	9438	85	B2-U0-G2	T3	11377	103	B2-U0-G2	T3HS	9910	89	B2-U0-G2	0.97	0.97	0.96	0.95
		T3M	10691	96	B2-U0-G2	T3MHS	8515	77	B2-U0-G2	T3M	11254	101	B2-U0-G2	T3MHS	8964	81	B2-U0-G2				
		T4	10724	97	B2-U0-G2	T4HS	8646	78	B1-U0-G2	T4	11260	102	B2-U0-G2	T4HS	9078	82	B1-U0-G2				
		T5	11075	100	B3-U0-G2					T5	11629	105	B3-U0-G2								
		TCWL	11357	102	B2-U0-G1	TCWR	11360	102	B2-U0-G1	TCWL	11955	108	B2-U0-G1	TCWR	11958	108	B2-U0-G1				
		T1	13411	103	B3-U0-G3					T1	14082	109	B3-U0-G3								
		T1A	13205	102	B3-U0-G3	T1AHS	11685	90	B3-U0-G2	T1A	13865	107	B3-U0-G3	T1AHS	12269	95	B3-U0-G2				
		T2	12445	96	B2-U0-G2	T2HS	10588	82	B2-U0-G2	T2	13067	101	B2-U0-G2	T2HS	11118	86	B2-U0-G2				
		T2M	13496	104	B2-U0-G2	T2MHS	10626	82	B2-U0-G2	T2M	14170	109	B2-U0-G2	T2MHS	11158	86	B2-U0-G2				
P80	129.7	T3	12260	95	B2-U0-G2	T3HS	10679	82	B2-U0-G2	T3	12873	99	B2-U0-G2	T3HS	11213	86	B2-U0-G2	0.97	0.97	0.96	0.95
		T3M	11998	93	B2-U0-G2	T3MHS	9557	74	B2-U0-G2	T3M	12629	97	B2-U0-G2	T3MHS	10060	78	B2-U0-G2				
		T4	12135	94	B2-U0-G2	T4HS	9783	75	B1-U0-G2	T4	12741	98	B2-U0-G2	T4HS	10272	79	B2-U0-G2				
		T5	12532	97	B3-U0-G2					T5	13158	101	B4-U0-G2								
		TCWL	12746	98	B2-U0-G1	TCWR	12749	98	B2-U0-G1	TCWL	13417	103	B2-U0-G1	TCWR	13420	103	B2-U0-G1				

Note: Actual performance may differ as a result of end-user environment and application.
All values are design or typical values, measured under laboratory conditions at 25°C.
Specifications subject to change without notice.

Lumen ratio for different CCT

PC Amber	2200K	2700K	3000K	4000K
0.6	0.75	0.95	0.95	1.00

Cyclone Lighting: 2175 Des Entreprises Blvd, Terrebonne (QC) Canada J6Y 1W9 www.cyclonelighting.com
Phone: 1-866-436-5500 - info@cyclonelighting.com
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TEAR SHEET

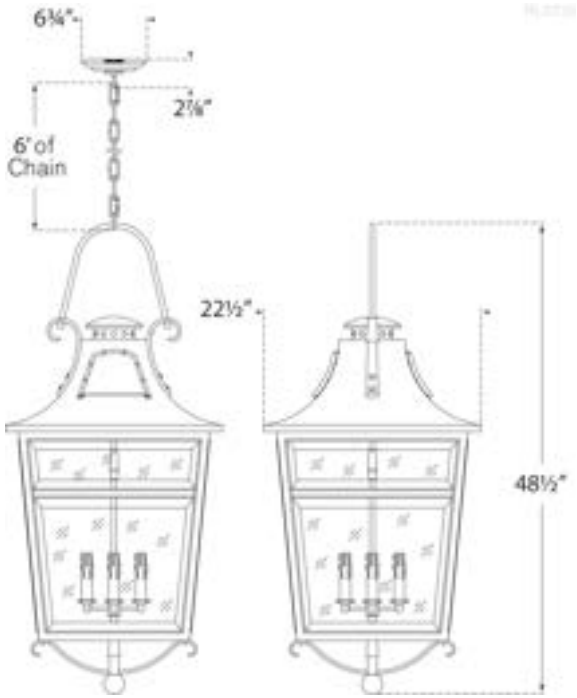


Carrington Large Lantern

Item # RL 5735WVG-CG

Designer: Ralph Lauren

Height: 48.5"
Width: 22.5"
Canopy: 6.75" Square
Finishes: FR, WVG
Glass Options: CG
Socket: 4 - E12 Candelabra
Wattage: 4 - 60 C11
Weight: 67 Pounds



VISUAL COMFORT & CO.

Docusign Envelope ID: 123CBD13-CC93-86BE-82D4-881916C1066A

VISUAL COMFORT & CO.

OL15400TXB: Mini Wall Lantern



Collection: Warren

Featured in the decorative Warren collection

1 A19 Medium 75 watt light bulb

clear glass panels

Made from a unique composite material which is engineered to withstand the harshest environmental conditions and backed by a 5-year warranty.

ETL listed for wet locations

UPC #:014817590531

Finish: Textured Black (TXB)

Dimensions:

Width: 6.5"
Height: 14.38"
Weight: 3.52 lbs.

Extends: 7.5'
Wire: 8" (color;Black/White)
Mounting Proc.: Wall / Bath
Connection: Mounted To Box

Bulbs:

1 - Medium A19 75.0w Max. 120v Not included

Features:

- Made from a unique composite material which is engineered to withstand the harshest environmental conditions and backed by a 5-year warranty.

Material List:

1 Body - StoneStrong - Textured Black

Safety Listing:

Safety Listed for Wet Locations
Safety Listed for Wet Locations

Instruction Sheets:

Trilingual (English, Spanish, and French) (ol15400 ol15401 ol15402 ol15403 ol15404)

Shade / Glass / Diffuser Details:

Part	Material	Finish	Quantity	Item Number	Length	Width	Height	Diameter	Fitter Diameter	Shade Top Length	Shade Top Width	Shade Top Diameter
Panel	Glass	Clear	4			4.75	7.0					

Backplate / Canopy Details:

Type	Height / Length	Width	Depth	Diameter	Outlet Box Up	Outlet Box Down
Back Plate	5.88	5.0	0.75		8.12	

Shipping Information:

Package Type	Product #	Quantity	UPC	Length	Width	Height	Cube	Weight	Frt. Class	UPS Ship
Individual	OL15400TXB	1	014817590531	10.5	10.0	18.0	1.09	4.9	0	Yes
Master Pack	OL15400TXB	0	10014817590538							No
NJ Pallet		70		48.0	40.0	71.5	79.44	343.0		No
NV Pallet		70		48.0	40.0	71.5	79.44	343.0		No

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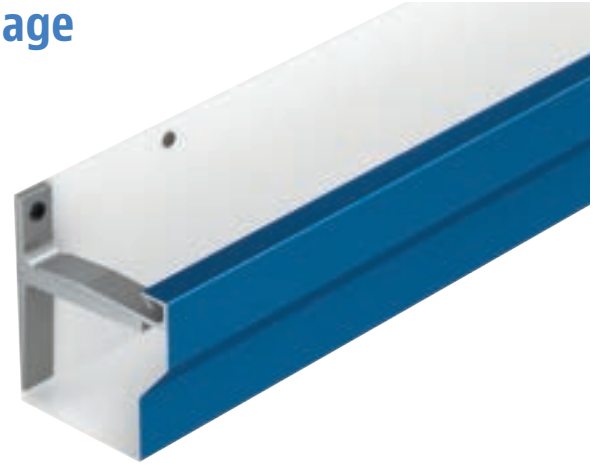
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PAC-TITE WR Gutter

Prefabricated Gutter and Downspout Systems

PAC-CLAD PETERSEN

Superior, Tested, Attractive Roof Drainage



Superior roof drainage, easy installation, and attractive appearance make PAC-TITE prefabricated gutters and downspouts stand out from the crowd.

Prefabricated PAC-TITE WR Gutters are specifically engineered and tested to meet the requirements of the ANSI/SPRI GT-1 Standard for Gutter Systems Used with Low-Slope Roofs. The design incorporates an extruded internal gutter hanger for strength and support. It also reduces the torque of the metal with expansion and contraction in temperature changes.

FEATURES

- 30 Year, 160 MPH Wind Warranty
- ANSI/SPRI GT-1 Tested to Comply with International Building Code
- FM Approved for Wind Uplift Protection
- Pre-Punched Holes and No External Brackets=Less Installation Time
- Prefabricated Miters and Accessories Eliminate Need for Field Fabrication
- Variety of Colors, Sizes & Materials

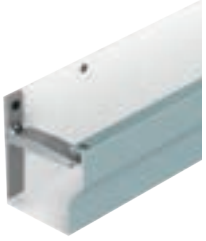
STANDARD SIZES

(Front / Bottom / Back)

- 5.25" / 5.25" / 6.25"
- 5.75" / 5.75" / 6.75"
- 6.25" / 6.25" / 7.25"
- 6.75" / 6.75" / 7.75"
- 7.25" / 7.25" / 8.25"
- 7.75" / 7.75" / 8.75"

MATERIALS

- 24 ga. Steel
- 22 ga. Steel
- 040" Aluminum
- 050" Aluminum
- 063" Aluminum

	STANDARD	FM DESIGN
Offset		
Chamfer		
Box		

NOTE: FM Approved Design has an alternative bracket configuration.

PAC-CLAD.COM | 800 PAC CLAD

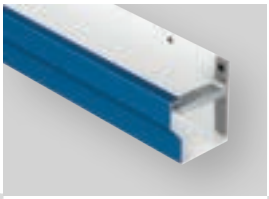
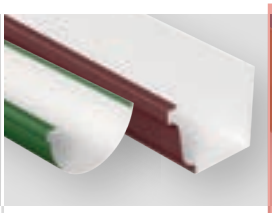
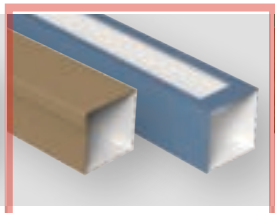
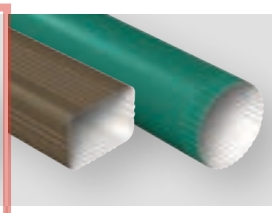
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PAC-TITE WR Gutter

Prefabricated Gutter and Downspout Systems

PAC-CLAD PETERSEN

				
Product Line	**WR Gutters**	**LT Gutters**	**Industrial Downspouts**	**LT Downspouts**
Versions	· Offset · Chamfer · Box	· Half Round · K-Style	· Closed · Open Face	· Corrugated · Round
Sizes	**Bottom Width & Front Height:** 5.25", 5.75", 6.25", 6.75", 7.25", 7.75" **Back Height:** 1" More Than Front Height	**Half Round:** 5", 6", 7", 8", 9", 10" (Diameter) **K-Style:** 6", 7", 8" (Width)	**Width:** Min. 3" | Max. 10" **Depth:** Min. 3" | Max. 10"	**Round:** 3", 4", 5", 6", 8" (Diameter) **Corrugated:** 3" x 4" and 4" x 5"
Materials	24 ga., 22 ga. .040", .050", .063"	24 ga., 22 ga. .032", .040", .050"	24 ga., 22 ga. .040", .050", .063"	24 ga., 22 ga. .032",.040", .050"
Warranty	30 Year, 160 MPH	10 Year, 90 MPH	5-Year Workmanship	5-Year Workmanship
ANSI/SPRI GT-1 Tested	X		N/A	N/A
FM Approved	X		N/A	N/A

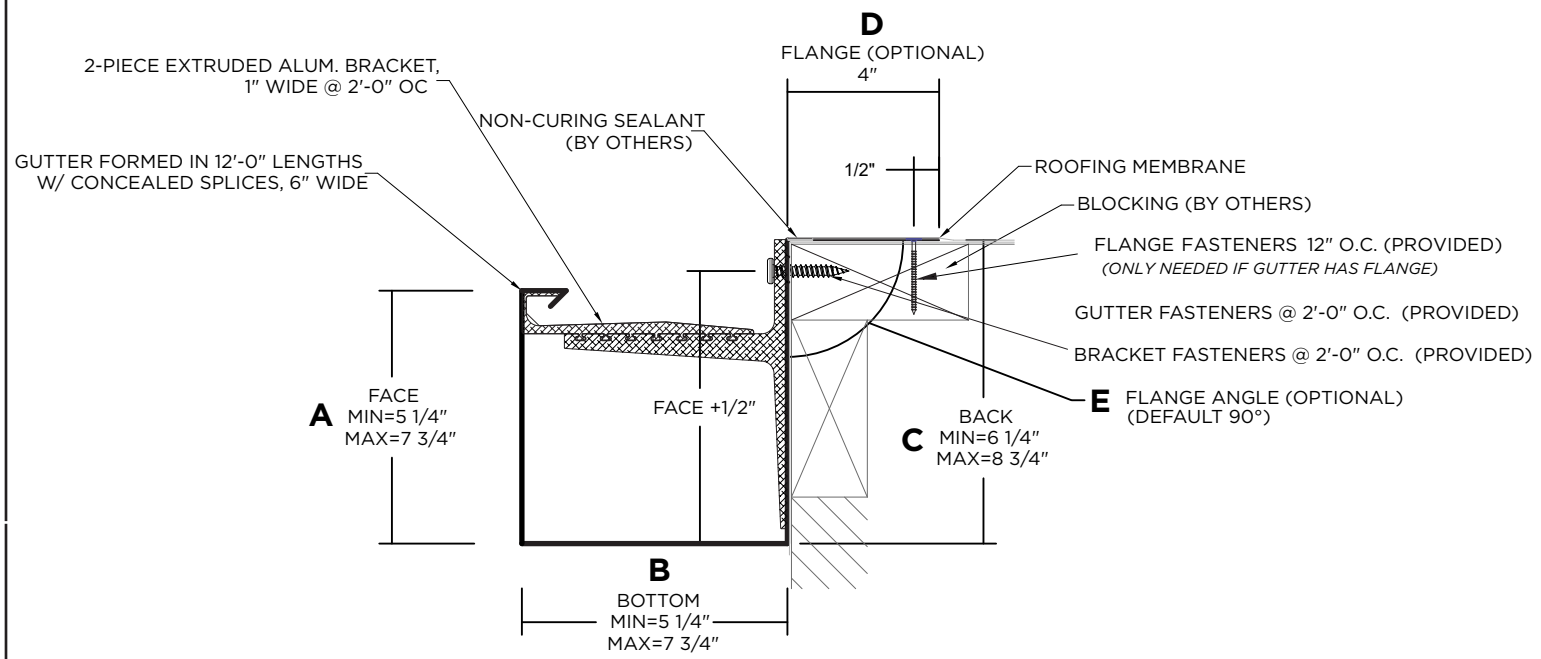
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PAC-CLAD PETERSEN a CARLISLE company

PAC-TITE WR GUTTER

BOX



NOTES

- Bottom sizes are provided in 1/2" increments
- Maximum downspout dimension not to exceed "B" minus 9/16"
- Roof flange is optional. If flange size is not provided, the gutter will not include a roof flange. If flange angle is not provided, the gutter will have a 90-degree flange.
- Pop rivets provided
- Unless otherwise noted, fabrication of miters and accessories are provided with a non- penetrating quicklock joint, then factory sealed watertight
- Welded accessories require minimum material thickness of .050 aluminum.
- For non-90 miters, see separate print approval
- Product should be installed per provided installation instructions
- ANSI/SPRI GT-1 Test Pressure up to 223 psf (Horizontal) and 136 psf (Vertical)

APPROVALS

ANSI/SPRI/GT-1
Test Pressures listed in notes

DIMENSIONS

SELECT SIZE	A (FACE)	B (BOTTOM)	C (BACK)	FLANGE (OPTIONAL)
☐	5 1/4"	5 1/4"	6 1/4"	**D (FLANGE)** PLEASE SELECT ONE:
☐	5 3/4"	5 3/4"	6 3/4"	WITH FLANGE ☐ WITHOUT FLANGE ☐
☐	6 1/4"	6 1/4"	7 1/4"	NOTE: IF NEITHER BOX IS CHECKED, THE GUTTER WILL BE PROVIDED **WITHOUT** A ROOF FLANGE
☐	6 3/4"	6 3/4"	7 3/4"	
☐	7 1/4"	7 1/4"	8 1/4"	**E (FLANGE ANGLE)** NOTE: IF ANGLE IS NOT PROVIDED, FLANGE WILL BE 90° ☐
☐	7 3/4"	7 3/4"	8 3/4"	

MATERIAL

- ☐ 24 Ga. Galv. Steel
- ☐ 22 Ga. Galv. Steel
- ☐ .040" Aluminum
- ☐ .050" Aluminum
- ☐ .063" Aluminum
- ☐ OTHER: _____

Color: _____

Finish: _____

Substrate:
If substrate is not given, wood fasteners will be provided.

- ☐ Wood
- ☐ Masonry
- ☐ Metal

QUANTITIES

- _____ Lineal Feet (12'-0" Lengths)
- _____ Outside Miter (90°)
- _____ Inside Miter (90°)
- _____ Right Endcaps
- _____ Left Endcaps
- _____ Expansion Joints (If Required)

Accessory Type: ☐ Quicklock (Default) ☐ Welded (Surcharge)

PROJECT INFO

Project Name: _____

Architect: _____

Roofing Contractor: _____

Project Type: _____

☐ By selecting this box you have verified and confirmed that dimensions, sizes, and quantities are correct. All products will be installed in strict accordance with printed instructions.

Date: _____

Petersen Aluminum Corporation
Phone: 800-323-1960
Fax: 800-722-7150
www.pac-clad.com
e-mail: info@pac-clad.com

SHT #: _____ of _____

DATE: **06/20/25**

DRN BY : **PL**

CKD BY : **MM**

DWG # : **41012-38994**

REV: **B**

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PAC-CLAD®

PETERSEN

A CARLISLE COMPANY

Color Guide

▲$ SANDSTONE	▲$ SIERRA TAN
▲$ DARK BRONZE	▲$ BURNISHED SLATE
$ MIDNIGHT BRONZE	▲$ MANSARD BROWN
▲$ CHARCOAL	▲$ GRAPHITE
▮$ ONYX (fka Matte Black)	$ TRADITIONAL BLACK
▲$ CARDINAL RED	▲▮$ MILITARY BLUE
$ AWARD BLUE	▲$ HEMLOCK GREEN
$ FOREST GREEN	▲▮$ PATINA GREEN
▮$ HARTFORD GREEN	$ GALVALUME PLUS

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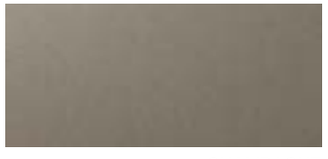
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Premium Colors


● ▲ $$$ ANODIC CLEAR


● ▲ $$$ SILVERSMITH


● ▲ $$ SILVER


● ▲ $$ CHAMPAGNE


● ▲ $$ WEATHERED ZINC


● ▲ $$ COPPER PENNY


▮ $$$ WEATHERED STEEL

Standard Colors

▲ $ BONE WHITE

▲ $ STONE WHITE

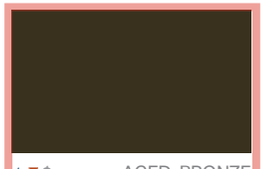
▲ ▮ $ ALMOND

▲ $ SANDSTONE


▲ $ SIERRA TAN


▲ ▮ $ BUCKSKIN


▲ $ MEDIUM BRONZE

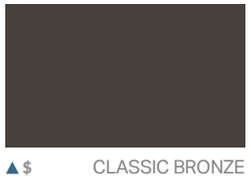

▲ ▮ $ AGED BRONZE


▲ $ DARK BRONZE


▲ $ BURNISHED SLATE


▲ $ GRANITE


▲ ▮ $ ANTIQUE BRONZE


▲ $ CLASSIC BRONZE


$ MIDNIGHT BRONZE


▲ $ MANSARD BROWN


▲ $ CITYSCAPE


▲ $ SLATE GRAY


▲ $ MUSKET GRAY


▲ $ CHARCOAL


▲ $ GRAPHITE


$ BLACK (fka Black Aluminum)


▲ $ IRON ORE


$ INKWELL


▮ $ ONYX (fka Matte Black)


$ TRADITIONAL BLACK


▲ $ TERRA COTTA


▲ $ COLONIAL RED


▮ $ BURGUNDY


▲ $ CARDINAL RED


▲ ▮ $ MILITARY BLUE


▲ $ PACIFIC BLUE (fka Slate Blue)


$ INTERSTATE BLUE

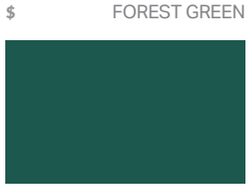

▮ $ BERKSHIRE BLUE


$ AWARD BLUE


▲ $ HEMLOCK GREEN


$ FOREST GREEN


▲ ▮ $ PATINA GREEN


▮ $ HARTFORD GREEN

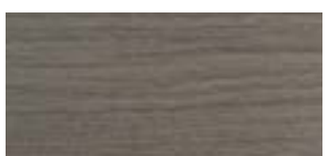

$ GALVALUME PLUS

Timber Series Wood Grain

Available in 24 gauge steel and .032 aluminum


$$$ BROWN TIMBER


$$$ COPPER TIMBER


$$$ GRAY TIMBER


$$$ TAN TIMBER


$$$ WHITE TIMBER

70% polyvinylidene fluoride (PVDF) pre-finished steel and aluminum for all architectural cladding applications

● Metallic Colors $ Pricing ▲ Cool Colors ▮ Extended Lead Time

See back for color performance and availability chart

PAC-CLAD® PETERSEN
A CARLISLE COMPANY

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AZ: 833 750 1935
TX: 800 441 8661
GA: 800 272 4482
MD: 800 344 1400
WA: 833 750 1935

PAC-CLAD.COM

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Performance and Availability

STANDARD COLORS	REFLECTIVITY	EMISSIVITY	3 YEAR EXPOSURE	SRI	STEEL		ALUMINUM				20-IN. COIL	
					24 GA.	22 GA.	.032	.040	.050	.063	24 GA.	.032
AWARD BLUE †	0.25	0.86	0.23	24	✓		✓					
BLACK (FKA BLACK ALUMINUM)	0.05	0.90	0.04	0	✓	✓	✓	✓	✓	✓	✓	✓
BONE WHITE	0.70	0.86	0.69	85	✓	✓	✓	✓	✓	✓	✓	✓
BURNISHED SLATE	0.32	0.86	0.31	33	✓						✓	
CARDINAL RED †	0.44	0.86	0.44	49	✓		✓				✓	✓
CHARCOAL	0.30	0.87	0.30	31	✓		✓	✓	✓		✓	✓
CITYSCAPE	0.05	0.87	0.50	57	✓	✓	✓	✓	✓		✓	✓
CLASSIC BRONZE * NEW	0.27	0.87	N/A	27	✓						✓	
COLONIAL RED	0.34	0.87	0.31	36	✓		✓	✓	✓		✓	✓
DARK BRONZE	0.27	0.86	0.29	26	✓	✓	✓	✓	✓	✓	✓	✓
FOREST GREEN	0.10	0.88	0.10	5	✓		✓	✓			✓	✓
GRANITE *	0.32	0.86	0.33	33	✓	✓	✓	✓	✓			✓
GRAPHITE	0.25	0.86	0.28	24	✓						✓	
HEMLOCK GREEN	0.31	0.87	0.30	32	✓		✓				✓	
INKWELL * NEW	0.27	0.86	N/A	26	✓						✓	
INTERSTATE BLUE	0.16	0.87	0.15	12	✓		✓		✓		✓	✓
IRON ORE NEW	0.27	0.87	N/A	27	✓		✓	✓	✓		✓	✓
MANSARD BROWN	0.31	0.87	0.31	32	✓		✓	✓	✓		✓	✓
MEDIUM BRONZE	0.30	0.88	0.29	31	✓	✓	✓	✓	✓	✓	✓	✓
MIDNIGHT BRONZE	0.06	0.90	0.06	1	✓			✓			✓	
MUSKET GRAY	0.32	0.87	0.31	33	✓	✓	✓		✓		✓	✓
PACIFIC BLUE (fka SLATE BLUE)	0.28	0.87	0.27	28	✓		✓				✓	✓
SANDSTONE	0.48	0.87	0.48	55	✓	✓	✓	✓	✓	✓		
SIERRA TAN	0.38	0.85	0.31	40	✓	✓	✓	✓	✓		✓	✓
SLATE GRAY	0.41	0.87	0.37	45	✓	✓	✓	✓	✓		✓	✓
STONE WHITE	0.69	0.86	0.67	84	✓	✓	✓	✓	✓	✓		
TERRA COTTA	0.35	0.87	0.33	37	✓		✓		✓		✓	✓
TRADITIONAL BLACK * NEW	0.28	0.87	N/A	28	✓		✓				✓	✓
EXTENDED LEAD TIME												
AGED BRONZE	0.29	0.87	0.27	29	✓						✓	
ALMOND	0.63	0.85	0.55	75	✓	✓	✓	✓	✓			
ANTIQUE BRONZE NEW	0.28	0.86	N/A	27	✓		✓	✓			✓	✓
BERKSHIRE BLUE *	0.29	0.86	0.27	29	✓							
BUCKSKIN NEW	0.37	0.86	N/A	39	✓						✓	✓
BURGUNDY	0.24	0.86	0.13	22	✓						✓	
HARTFORD GREEN	0.08	0.88	0.08	3	✓			✓			✓	
MILITARY BLUE	0.31	0.87	0.30	32	✓		✓				✓	✓
ONYX (fka MATTE BLACK STEEL)	0.26	0.85	0.25	24	✓	✓					✓	
PATINA GREEN	0.33	0.86	0.32	34	✓							
WEATHERED STEEL ♛	0.26	0.86	N/A	25	✓							
PREMIUM COLORS												
ANODIC CLEAR ♛	0.53	0.81	0.31	60				✓				
CHAMPAGNE ♛	0.40	0.78	0.49	40	✓		✓	✓	✓			✓
COPPER PENNY ♛	0.50	0.86	0.52	57	✓		✓	✓			✓	✓
SILVER ♛	0.47	0.82	0.46	52	✓	✓	✓	✓	✓		✓	✓
SILVERSMITH ♛	0.54	0.81	0.32	61				✓				
WEATHERED ZINC ♛	0.24	0.83	0.46	21	✓		✓		✓		✓	✓
CLEAR-COAT ACRYLIC FINISH (NON-PVDF)												
GALVALUME PLUS	0.68	0.14	0.55	57	✓	✓					✓	

PAC-CLAD Premium finishes are available from stock at a moderate extra cost. PAC-CLAD Copper Penny is a Non-Weathering finish. Solar Reflectance Index calculated according to ASTM E-1980. Reflectivity and solar reflectance index (SRI) values are provided by Sherwin-Williams®.

* Low Gloss/Low Sheen, 70% PVDF finish † 10-year finish warranty ♛ Premium Colors

TECHNICAL DATA FOR 70% PVDF COATING:

- South Florida Exposure: Color (ASTM D 2244) - No more than 5ΔE Hunter units at 20 years; Chalk (ASTM D 4214) – Rating no less than 8 at 20 years; Film integrity – 20 years.
- Accelerated Weathering (ASTM D 4587, ASTM G 154): 5000 Hours; Chalk, per ASTM D 4214, rating of 6 or better; Color, per ASTM D 2244, < 5ΔE (Hunter Units) color change.
- Chemical/Acid Pollution Resistance (ASTM D 1308): Pass
- T-Bend (ASTM D 4145): 1T – 3T with no loss of adhesion
- Humidity Resistance (ASTM D 2247): Galvalume or HDG, 100% RH, 2000 hours – No field blisters; Aluminum, 100% RH, 3000 hours – No field blisters
- Salt Spray Resistance (ASTM B 117): Aluminum: 3000 hours, creep from scribe no more than 1/16" (2mm), no field blisters. Galvalume or HDG:2000 hours, creep from scribe no more than 1/8" (4mm), no field blisters
- Pencil hardness (ASTM D 3363): HB – 2H
- Specular Gloss (ASTM D 523) @ 60 degrees: Typical – 20 – 35
- Abrasion Resistance (ASTM D 968): 80 Liters/Mil +/- 5 Liters
- Cross Hatch Adhesion (ASTM D 3359): No loss of adhesion
- Reverse Impact (ASTM D 2794): Galvalume or HDG, 2x metal thickness inch-pounds, no loss of adhesion; Aluminum, 1.5x metal thickness inch-pounds, no loss of adhesion
- Flame Test (ASTM E 84): Class A Coating

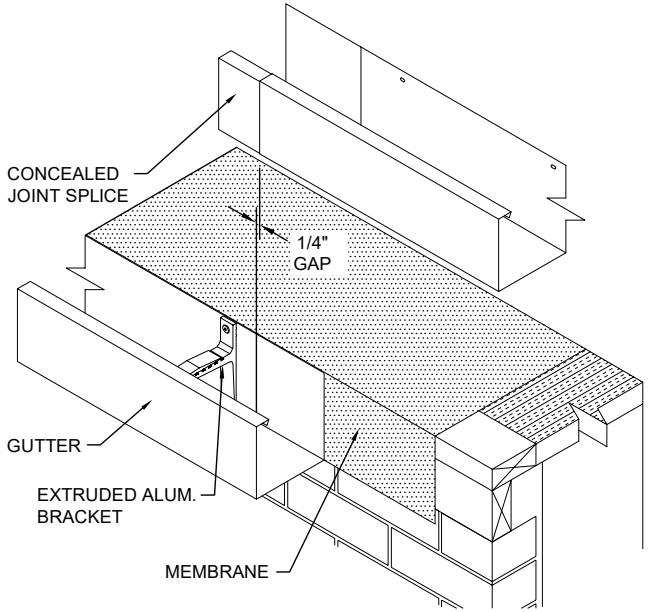
PAC-CLAD® is a registered trademark of Petersen Aluminum Corp. The PAC-CLAD finish is 70% polyvinylidene fluoride (PVDF).
Sherwin-Williams® is a trademark of SWIMC LLC. Galvalume Plus® is a registered trademark of BIEC International. 10/25

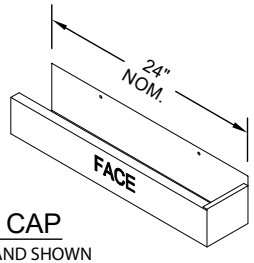
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PAC-CLAD PETERSEN

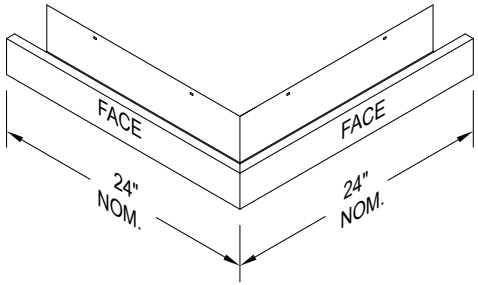
PAC-TITE WR GUTTER

BOX STANDARD ACCESSORIES

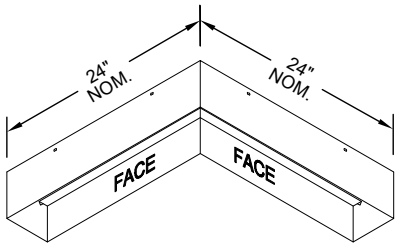




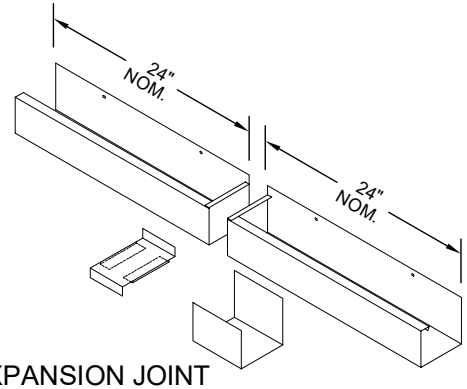
END CAP
LEFT HAND SHOWN



OUTSIDE MITER



INSIDE MITER



EXPANSION JOINT
(IF REQUIRED)

Standard gutter miter leg lengths are 24" Nominal
Standard gutter miter angle is 90°
For special miter requirements, attach sketches or consult manufacturer for assistance.

Petersen Aluminum Corporation
Phone: 800-323-1960 Fax: 800-722-7150
www.pac-clad.com
e-mail: info@pac-clad.com

SHT #: _____ of _____
DATE: 06/20/25
DRN BY : PL
CKD BY : MM
DWG # : 41012-38994
REV: B

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W. GRAND BLVD. APARTMENTS

HUBBARD FARMS LOFTS LLC

OMAR HERNANDEZ
347 WEST GRAND BLVD
DETROIT, MI 48209



SHEET LIST	
SHEET NUMBER	SHEET NAME
1CS	COVER SHEET
2CSP	ARCHITECTURAL SITE PLAN
3CS	CODE SHEET
4CS	ARCHITECTURAL NOTES
A-1.0	DEMOLITION PLANS
A-1.1	DEMOLITION PLANS
A-1.2	DEMOLITION ELEVATIONS
A-2.0	PROPOSED FLOOR PLAN
A-2.1	PROPOSED FLOOR PLAN
A-2.2	PROPOSED FLOOR PLAN
A-2.3	PROPOSED ROOF PLAN
A-3.0	PROPOSED EXTERIOR ELEVATIONS
A-3.1	PROPOSED EXTERIOR ELEVATIONS
A-3.2	PROPOSED ELEVATIONS
A-5.0	PROPOSED REFLECTED CEILING PLAN
A-5.1	PROPOSED REFLECTED CEILING PLAN
A-5.2	PROPOSED REFLECTED CEILING PLAN
A-5.3	LIGHT FIXTURE SCHEDULE
D-1.2	SITE DETAILS - DUMPSTER ENCLOSURE

PROJECT INFORMATION

OWNER: HUBBARD FARMS LOFTS LLC

REPRESENTATIVE: OMAR HERNANDEZ

LOCATION: 347 W GRAND BLVD.
DETROIT, MI 48216

PROJECT DESCRIPTION:
THE EXISTING 12-UNIT 2-STORY HISTORIC APARTMENT BUILDING WILL BE REPAIRED & RENOVATED THROUGHOUT; NEW UNIT LAYOUTS TO PROVIDE (6) ADDITIONAL UNITS FOR A TOTAL OF (18) APARTMENTS; FRAMING REPAIRS TO DAMAGED FLOORS AND ROOF, REFER TO STRUCTURAL; ROOFING MEMBRANE AND ASPHALT SHINGLES TO BE REPLACED, NEW GUTTERS AND DOWNSPOUTS PROVIDED; FULL WINDOW REPLACEMENT THROUGHOUT; NEW DOORS W/ SOME SELECT DOORS TO BE REPAIRED OR RESTORED; NEW FINISHES THROUGHOUT W/ SOME SELECT INTERIOR FINISHES TO BE REPAIRED OR RESTORED; NEW KITCHENS AND BATHROOMS THROUGHOUT; NEW MECHANICAL, ELECTRICAL, & PLUMBING THROUGHOUT, REFER TO MEP DOCUMENTS; ACCESSORY STORAGE; LAUNDRY, & UTILITY AREAS LOCATED THE EXISTING BASEMENT; SITEWORK TO INCLUDE A NEW PARKING LOT, REQUIRED SCREENING, DUMPSTER ENCLOSURE, AND REPAIR OF DETERIORATED SIDEWALKS AROUND THE PROPERTY, REFER TO CIVIL.

BUILDING SUMMARY:

EXISTING GROSS BUILDING AREAS:

BASEMENT:	MECH, STORAGE & RESIDENTIAL	4,800 SFG	
FIRST FLOOR:	RESIDENTIAL DWELLING UNITS	4,800 SFG	
SECOND FLOOR:	RESIDENTIAL DWELLING UNITS	4,800 SFG	
TOTAL EXISTING GROSS BUILDING AREA		14,400 SFG	(NO CHANGE)

GOVERNING CODES:
2021 MICHIGAN REHABILITATION CODE FOR EXISTING BUILDINGS (MRCEB)
2021 MICHIGAN MECHANICAL CODE (MMC)
2021 MICHIGAN PLUMBING CODE (MPC)
2023 NATIONAL ELECTRICAL CODE (NEC)
2021 MICHIGAN UNIFORM ENERGY CODE (MUEC)
2021 INTERNATIONAL FIRE CODE NFPA 1, UNIFORM FIRE CODE

COMPLIANCE METHOD: WORK AREA COMPLIANCE METHOD (CH. 6)
LEVEL 3: WORK AREA > 50% (SECT. 604)

CONSTRUCTION TYPE: **TYPE VB / S** (SPRINKLER SYSTEM PROVIDED)

DISCLAIMER: ALL CONDITIONS DEPICTED ARE BASED ON KNOWLEDGE DISCOVERED UPON FIELD MEASURE (OR CONVEYED BY OWNER). IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ARCHITECT AND OWNER OF ANY DISCOVERIES EXPOSED UPON DEMOLITION / NEW CONSTRUCTION THAT DIFFER FROM CONDITIONS DEPICTED HEREIN.

VICINITY MAP — **PROJECT LOCATION**



GENERAL SYMBOLS

SECTION WITH SECTION NUMBER & NAME

DETAIL WITH DETAIL NUMBER & NAME

WINDOW TYPE

DOOR TYPE

LEVEL WITH NAME & HEIGHT

REVISION

NORTH DESIGNATION

ABBREVIATIONS

@	AT
ACOUST.	ACOUSTICAL
A.C.T.	ACOUSTICAL CEILING TILE
ADJ.	ADJACENT
A.F.F.	ABOVE FINISHED FLOOR
ALUM.	ALUMINUM
ANOD.	ANNODIZED
BD.	BOARD
BLDG.	BUILDING
BLK.	BLOCK
BLKG.	BLOCKING
B.O.	BOTTOM OF
B.O.F.	BOTTOM OF FOOTING
CEM.	CEMENT
CFM.	CUBIC FEET PER MINUTE
CL.	CENTERLINE
C.O.	CLEANOUT
COL.	COLUMN
COL.G.	CORNER GUARD
CONST.	CONSTRUCTION
CONT.	CONTINOUS
CORR.	CORRUGATED
CPT.	CARPET
C.T.	CERAMIC TILE
DET.	DETAIL
DIA.	DIAMETER
DIM.	DIMENSION
DN.	DOWN
D.O.	DOOR OPENING
DR.	DOOR
DWG.	DRAWING
EA.	EACH
ELEV.	ELEVATION
E.W.	EACH WAY
EX.	EXISTING
EXIST.	EXISTING
EXP.	EXPANSION/EXPOSED
EXT.	EXTERIOR
F.D.	FLOOR DRAIN
FDN.	FOUNDATION
FRP	FIBER REINFORCED PANELS
FIN.	FINISH
FLR.	FLOOR
F.O.	FACE OF
F.O.S.	FACE OF STUD
FR.	FRAME
FTG.	FOOTING
GA.	GAUGE
GALV.	GALVANIZED
GYP.	GYPSUM
HDW.	HARDWARE
H.M.	HOLLOW METAL
HORIZ.	HORIZONTAL
HT.	HEIGHT
I.D.	INSIDE DIAMETER
INSUL.	INSULATION
INT.	INTERIOR
JT.	JOINT
LAV.	LAVATORY
LG.	LONG
LLO.	LONG LEG OUTSTANDING
LLV.	LONG LEG VERTICAL
MAX.	MAXIMUM
MECH.	MECHANICAL
MET.	METAL
MEZZ.	MEZZANINE
M.I.	MISCELLANEOUS IRON
MIN.	MINIMUM
MISC.	MISCELLANEOUS
M.O.	MASONRY OPENING
N.I.C.	NOT IN CONTRACT
N.S.	NO SCALE
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
O.D.	OUTSIDE DIAMETER
OPNG.	OPENING
OPP.	OPPOSITE
PL.G.	PLATE GLASS
PL.S.	PLATE STEEL
PL.	PLATE
P-LAM.	PLASTIC LAMINATE
PLAS.	PLASTER
PREFAB.	PREFABRICATED
PROJ.	PROJECT
P..F.	POUNDS PER SQUARE FOOT
PT.	PAINT/POINT
R.	RISER
R.A.	RETURN AIR
R.B.	RUBBER BASE
R.C.	ROOF CONDUCTOR
R.F.	RUBBER FLOORING
REINF.	REINFORCED/REINFORCING
REQ'D.	REQUIRED
RFG.	ROOFING
RM.	ROOM
R.S.	ROOF SUMP
R.T.	RUBBER TILE
SAN.	SANITARY
SCHED.	SCHEDULE
SHT.	SHEET
SIM.	SIMILAR
SPEC.	SPECIFICATION
S.S.	SERVICE SINK/STAINLESS STEEL
STL.	STEEL
STD.	STANDARD
STOR.	STORAGE
STRUCT.	STRUCTURAL
SUSP.	SUSPENDED
SW.	SWITCH
SYM.	SYMMETRICAL
T.	TREAD
T&B	TOP AND BOTTOM
TEL.	TELEPHONE
TERR.	TERRAZZO
T&G	TONGUE AND GROOVE
THK.	THICK/THICKNESS
THRES.	THRESHOLD
T.O.	TOP OF
T.O.F.	TOP OF FOOTING
T.O.S.	TOP OF STEEL
TYP.	TYPICAL
U/C	UNDERCUT
U.N.O.	UNLESS NOTED OHTERWISE
U/S	UNDERSIDE
V.B.	VINYL BASE
V.C.B.	VINYL COBE BASE
V.C.T.	VINYL COMPOSITE TILE
V.I.F.	VERIFY IN FIELD
V.S.B.	VINYL STRAIGHT BASE
VERT.	VERTICAL
W.	WIDE/WIDTH
WAINS.	WAINSCOT
W.A.	WATER CLOSET
WD. WIN.	WOOD WINDOW
WD.	WOOD
WT.	WEIGHT
W.W.F.	WELDED WIRE FABRIC
W.W.M.	WOVEN WIRE MESH

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NO.	DESCRIPTION	DATE
1	Preliminary Pricing Set	05.07.2026
2	Pricing Set	07.31.2026
3	HDC Set	08.14.2026

SEAL

NOT FOR CONSTRUCTION

DATE SEALED

W. GRAND BLVD. APARTMENTS
347 WEST GRAND BLVD
DETROIT, MI 48209

HUBBARD FARMS LOFTS LLC

SHEET TITLE
COVER SHEET

SHEET NUMBER
1CS

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GENERAL SITE NOTES:

THE DRAWINGS HEREIN ARE FOR INFORMATIONAL PURPOSES AND CONVEYANCE OF DESIGN INTENT. INFORMATION DEPICTED IS NOT INTENDED TO BE CONSTRUED AS LEGAL SURVEY OR ENGINEERED CIVIL. REFER TO SUBMITTALS BY PROFESSIONAL CONSULTANTS FOR WORK BEYOND THE SCOPE DEPICTED HEREIN.

1. GENERAL CONTRACTOR TO VERIFY ALL EXISTING ELEVATIONS AND BUILDING CONDITIONS IN FIELD PRIOR TO START OF CONSTRUCTION. THE CONTRACTOR SHALL HAVE A REGISTERED LAND SURVEYOR TIE OUT AND RESET ANY PROPERTY CORNERS OR SECTION CORNERS PLANNED TO BE DISTURBED BY CONSTRUCTION OF THIS PROJECT, AND SHALL HAVE A REGISTERED LAND SURVEYOR RE-ESTABLISH ANY PROPERTY CORNERS OR SECTION CORNERS INADVERTENTLY DISTURBED DURING CONSTRUCTION OF THIS PROJECT.
2. ALL STREET, SANITARY SEWER, STORM SEWER AND WATERLINE CONSTRUCTION SHALL CONFORM TO THE LOCAL MUNICIPALITY STANDARDS AND SPECIFICATIONS CURRENT AT THE DATE OF EXECUTION OF THE CONSTRUCTION.
3. STREET PAVING SHALL NOT BEGIN UNTIL SUBGRADE COMPACTION TESTS ARE TAKEN AND THE CITY ENGINEER APPROVES THE RESULTS.
4. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF THE SOILS REPORT PREPARED FOR THIS PROJECT AND APPROVED BY THE MUNICIPALITY'S ENGINEER.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING MISSDIG. CALL TWO BUSINESS DAYS PRIOR (NOT INCLUDING THE DAY OF THE CALL) TO DIGGING, GRADING OR EXCAVATING FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.
6. PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE THE ENGINEER 24 HOURS ADVANCED NOTICE.
7. TEMPORARY EROSION CONTROL MEASURES SHALL BE PROVIDED BY THE CONTRACTOR DURING CONSTRUCTION AS IDENTIFIED ON THE EROSION CONTROL PLAN. MAINTENANCE OF ONSITE DRAINAGE AND EROSION CONTROL FACILITIES DURING CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
8. PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION, THE CONTRACTOR SHALL CONTACT ALL UTILITIES TO COORDINATE SERVICE AND SCHEDULES.
9. PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION THAT WILL AFFECT TRAFFIC SIGNS OF ANY TYPE, THE CONTRACTOR SHALL CONTACT THE MUNICIPALITY.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL DURING CONSTRUCTION:
    - A. ALL SIGNS, STRIPING AND TRAFFIC CONTROL DEVICE SHALL CONFORM TO, AND PLACEMENT SHALL BE PERFORMED IN ACCORDANCE WITH, THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION AND MDOT OR COUNTY STANDARDS, LATEST EDITION.
    - B. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE AND CLEANING OF TRAFFIC CONTROL DEVICES.
    - C. THE CONTRACTOR SHALL MAINTAIN EXISTING PAVEMENT MARKINGS DURING CONSTRUCTION OPERATIONS, IN CONFORMANCE WITH CONSTRUCTION DOCUMENTS.
    - D. REMOVAL OF EXISTING PAVEMENT MARKINGS SHALL BE ACCOMPLISHED BY A METHOD THAT DOES NOT MATERIALLY DAMAGE THE SURFACE OR TEXTURE OF THE PAVEMENT OR EXISTING SURFACING. THE PAVEMENT MARKINGS SHALL BE REMOVED TO THE EXTENT THAT THEY ARE NOT VISIBLE UNDER DAY OR NIGHT CONDITIONS.
    - E. SCRAPE AND REPAINT ALL EXISTING PAINTED SITE FEATURES, INCLUDING, BUT NOT LIMITED TO CURBS, BOLLARDS, RAILINGS, & SITE LIGHTING BASES.
11. THE CONTRACTOR SHALL CONTACT THE LOCAL CONSTRUCTION INSPECTOR PRIOR TO ANY STREET CUT. THE EXISTING STREET CONDITION SHALL BE DOCUMENTED BY THE CONSTRUCTION INSPECTOR BEFORE ANY CUTS ARE MADE. ANY STREET PATCHING SHWN ON THE DRAWINGS IS APPROXIMATE. ACTUAL LIMITS OF STREET PATCH SHALL BE DETERMINED BY THE CONSTRUCTION INSPECTOR. PATCHING SHALL BE DONE IN CONFORMANCE WITH MUNICIPAL DESIGN CRITERIA AND CONSTRUCTION SPECIFICATIONS. ALL LARGE PATCHES SHALL BE PAVED WITH AN ASPHALT LAY-DOWN MACHINE. IN STREETS WHERE MORE THAN ONE CUT IS MADE, AN OVERLAY OF THE ENTIRE STREET WIDTH, INCLUDING THE PATCHED AREA, MAY BE REQUIRED. IN ACCORDANCE WITH THE REFERENCED SPECIFICATIONS, THE ENGINEER SHALL MAKE THE DETERMINATION OF THE NEED FOR A COMPLETE OVERLAY.
12. THE CONTRACTOR SHALL RESTORE ANY DISTURBED AREAS TO EQUAL OR BETTER CONDITION THAN EXISTED BEFORE CONSTRUCTION. DRAINAGE DITCHES OR WATERCOURSES THAT ARE DISTURBED BY CONSTRUCTION SHALL BE RESTORED TO THE GRADES AND CROSS-SECTIONS THAT EXISTED BEFORE CONSTRUCTION, UNLESS OTHERWISE SHOWN ON THE CONSTRUCTION DOCUMENTS.
13. THE CONTRACTOR SHALL CAREFULLY PRESERVE BENCHMARKS, PROPERTY CORNERS, REFERENCE POINTS, STAKES AND OTHER SURVEY REFERENCE MONUMENTS OR MARKERS. IN CASE OF WILLFUL OR CARELESS DESTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORATIONS. RESETTING OF MARKERS SHALL BE PERFORMED UNDER THE DIRECTION OF A LICENSED PROFESSIONAL LAND SURVEYOR.
14. THE CONTRACTOR SHALL IMMEDIATELY REMOVE ANY CONSTRUCTION DEBRIS AND MUD TRACKED ONTO EXISTING ROADWAYS. THE CONTRACTOR SHALL REPAIR ANY EXCAVATION OR PAVEMENT FAILURES CAUSED BY THE CONSTRUCTION.
15. ALL DAMAGED EXISTING CURB, GUTTER, AND SIDEWALK SHALL BE REPAIRED PRIOR TO ACCEPTANCE OF COMPLETED IMPROVEMENTS.
16. THE TYPE, SIZE, LOCATION AND NUMBER OF ALL KNOWN UNDERGROUND UTILITIES ARE APPROXIMATE WHEN SHOWN ON THESE CONSTRUCTION DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE AND LOCATION OF ALL UNDERGROUND UTILITIES ALONG THE ROUTE OF THE WORK PRIOR TO COMMENCING ANY NEW CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE OF ANY UNKNOWN UNDERGROUND UTILITIES.
17. THE CONTRACTOR SHALL NOTIFY THE PUBLIC WORKS DEPARTMENT AT LEAST 48 HOURS PRIOR TO INSTALLING A NEW SEWER, WATER SERVICE OR ABANDONING AN EXISTING WATER SERVICE.
18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE SERVICES OF A QUALIFIED TESTING LABORATORY TO PERFORM ALL COMPACTION TESTING, ASPHALT TESTING, CONCRETE TESTING AND ANY OTHER TESTING AS MAY BE REQUIRED TO COMPLETE THE WORK. QUALITY CONTROL TEST RESULTS MUST BE SUBMITTED FOR ALL PHASES OF THIS PROJECT PER THE MUNICIPALITY'S REQUIREMENTS.
19. THE CONTRACTOR SHALL MAINTAIN ONE (1) SET OF "REDLINED" PRINTS OF THE CONSTRUCTION PLANS. THE "REDLINED" PRINTS SHALL BE KEPT CURRENT TO ACCURATELY REPRESENT THE DIMENSIONS AND LOCATIONS OF ALL WORK PERFORMED BY THE CONTRACTOR. PRIOR TO FINAL PAYMENT, THE CONTRACTOR MUST PRESENT THE "REDLINED" PRINTS TO THE OWNER'S ENGINEER FOR PREPARATION OF A SET OF REPRODUCIBLE "RECORD DRAWINGS" WHICH SHALL BE SUBMITTED TO THE MUNICIPAL ENGINEER WITHIN 30 DAYS OF CONSTRUCTION ACCEPTANCE.
20. THE OWNER/DEVELOPER SHALL BE RESPONSIBLE FOR PROVIDING ALL REQUIRED LOT STAKING AND CONSTRUCTION STAKING. THE CONTRACTOR SHALL COORDINATE THROUGH THE OWNER'S DESIGNATED REPRESENTATIVE TO ASSURE THAT THE SURVEYOR IS GIVEN ADEQUATE NOTICE AND INSTRUCTION IN ORDER TO COMPLETE THE SURVEY REQUIREMENTS FOR THE VARIOUS PHASES OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST OF RE-SURVEYING REQUIRED DUE TO THE CONTRACTOR'S, OR SUBCONTRACTOR'S, ACTIVITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COSTS ASSOCIATED WITH RESCHEDULING THE SURVEYOR TO ACCOMMODATE THE CONTRACTOR'S REQUESTS FOR UNSCHEDULED STAKING.
21. THE CONTRACTOR SHALL PROVIDE AND IMPLEMENT A "TRAFFIC CONTROL PLAN" RELATED TO ALL CONSTRUCTION ACTIVITIES FOR THIS PROJECT.
22. THE CONTRACTOR SHALL PERFORM ALL WORK ACCORDING TO ALL LOCAL, COUNTY, STATE AND FEDERAL SAFETY AND HEALTH REGULATIONS. IN PARTICULAR, THE TRENCHING AND OPEN EXCAVATION OPERATIONS SHALL COMPLY WITH ALL CURRENT O.S.H.A. REGULATORY REQUIREMENTS.
23. ALL CONSTRUCTION ACTIVITIES MUST COMPLY WITH LOCAL AND STATE PERMITTING PROCESSES FOR "STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY."
24. WHEN DISCHARGING GROUNDWATER, ALL DEWATERING METHODS SHALL BE IN CONFORMANCE WITH ALL LAWS AND REGULATIONS OF THE STATE. THE CONTRACTOR SHALL TAKE ALL NECESSARY AND PROPER PRECAUTIONS TO PROTECT ADJACENT PROPERTIES FROM ANY AND ALL DAMAGE THAT MAY OCCUR FROM STORMWATER RUNOFF AND /OR DEPOSITION OF DEBRIS RESULTING FROM ANY AND ALL WORK.
25. THE ENGINEER WHO HAS PREPARED CIVIL PLANS, BY EXECUTION AND/OR SEAL HEREON, DOES HEREBY AFFIRM RESPONSIBILITY FOR ANY ERRORS AND OMISSIONS CONTAINED IN THESE PLANS, AND APPROVAL OF THESE PLANS SHALL NOT RELIEVE THE ENGINEER WHO HAS PREPARED THESE PLANS OF ANY SUCH RESPONSIBILITY.
26. ALL PARKING LOT IMPROVEMENTS SHALL MEET THE REQUIREMENTS OF THE ADA ACT AND PROVIDE FOR PARKING, SIGNAGE AND ACCESS. IT IS THE CONTRACTOR AND OWNER'S RESPONSIBILITY TO PROVIDE. PROVIDE DETECTABLE WARNING AT TRANSITION FROM SIDEWALK TO DRIVE AISLE. ACCESSIBLE PARKING SPACES AND ACCESS AISLES SHALL HAVE A SURFACE SLOPE NOT TO EXCEED 2% IN ALL DIRECTIONS. CROSS SLOPE ALONG ENTIRE LENGTH OF ACCESSIBLE ROUTE NOT TO EXCEED 2%.
27. REFER TO ELECTRICAL DRAWINGS FOR SITE RELATED ELECTRICAL SCOPE.

ZONING REQUIREMENTS

LOCAL AUTHORITY:	CITY OF DETROIT
LOCAL ORDINANCE:	DETROIT ZONING ORDINANCE
ZONING CLASSIFICATION:	R-5: MEDIUM DENSITY RESIDENTIAL DISTRICT
HISTORIC DISTRICT:	HUBBARD FARMS HISTORIC DISTRICT (SEC. 21-2-157.)
USE CLASSIFICATION:	MULTIPLE FAMILY DWELLING / EXISTING USE (SEC. 50-8-44 & SEC. 50-8-50)
REQUIRED SETBACKS:	(SECS. 50-13-3., 50-13-231., & 50-16-382.) EXISTING BUILDING / NO CHANGE
MINIMUM LOT SIZE:	(SEC. 50-13-3. & SEC. 50-13-222.) EXISTING BUILDING / NO CHANGE
MAXIMUM HEIGHT:	(SEC. 50-13-3. & SEC. 50-13-232.) EXISTING BUILDING / NO CHANGE
LOT COVERAGE:	(SECS. 50-13-3., 50-13-236., & 50-13-237.) EXISTING BUILDING / NO CHANGE
FLOOR AREA RATIO:	(SECS. 50-13-3., 50-13-236., & 50-13-237.) EXISTING BUILDING / NO CHANGE
REQUIRED PARKING:	(SECS. SEC. 50-14-34, & 50-14-2.) EXISTING OFF-STREET PARKING PROVIDED: 0 SPACES 0 ADDITIONAL UNITS X 1.25/UNIT = 0 OFF-STREET PARKING REQ'D. FOR INTENSIFICATION: 0 SPACES PARKING PROVIDED: 11 SPACES IN PARKING LOT

*EXISTING BUILDING / ONLY REQUIRED FOR INCREASE IN INTENSITY (SEC. 50-14-2 (2))

OFF STREET LOADING:	(SEC. 50-14-112) EXISTING OFF-STREET PARKING PROVIDED: 0 SPACES OFF-STREET LOADING PROVIDED: 0 SPACES

KEYNOTE LEGEND

NOTE:
1. ARCHITECTURAL SITE PLAN FOR REFERENCE ONLY.
2. REFER TO SITE PLAN BY CIVIL ENGINEER FOR ALL CIVIL ENGINEERING INFORMATION.
3. ALL INFO PROVIDED BY OWNER AND PUBLICLY PROVIDED INFO.
4. ALL LANDSCAPE SELECTIONS BY OWNER/CONTRACTOR.



1 / A-1.2 **SITE PLAN - ARCHITECTURAL**
1" = 10'-0"

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Revision Schedule

#	Description	Date
1	Preliminary Pricing Set	05.07.2026
2	Pricing Set	07.31.2026
3	HDC Set	08.14.2026

SEAL

NOT FOR CONSTRUCTION

DATE SEALED

W. GRAND BLVD. APARTMENTS
PROJECT NUMBER: 22040
347 WEST GRAND BLVD
DETROIT, MI 48209
HUBBARD FARMS LOFTS LLC
SHEET TITLE
ARCHITECTURAL SITE PLAN

SHEET NUMBER
2CSP

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BUILDING CODE SUMMARY

GOVERNING CODES:
2021 MICHIGAN REHABILITATION CODE FOR EXISTING BUILDINGS (MRCEB)
2021 MICHIGAN MECHANICAL CODE (MMC)
2021 MICHIGAN PLUMBING CODE (MPC)
2023 NATIONAL ELECTRICAL CODE (NEC)
2021 MICHIGAN UNIFORM ENERGY CODE (MUEC)
2021 INTERNATIONAL FIRE CODE NFPA 1, UNIFORM FIRE CODE

YEAR CONSTRUCTED: 1905

COMPLIANCE METHOD: WORK AREA COMPLIANCE METHOD

WORK AREAS:
BASEMENT: LEVEL 3: WORK AREA >50% OF FLOOR AREA
FIRST FLOOR: LEVEL 3: WORK AREA >50% OF FLOOR AREA
SECOND FLOOR: LEVEL 3: WORK AREA >50% OF FLOOR AREA

USE AND OCCUPANCY:
BASEMENT-2ND FLOORS / PRIMARY USE: RESIDENTIAL GROUP R-2 /APARTMENT BLDG
BASEMENT / ACCESSORY USE: ACCESSORY STORAGE & EQUIPMENT

ALLOWABLE HEIGHTS AND AREAS: (MBC TABLES 504.3, 504.4 AND 506.2)
CONSTRUCTION TYPE: TYPE V B / S13R (SPRINKLER SYSTEM PROVIDED)
ALLOWABLE HEIGHT: 3 STORIES / 60 FEET
ACTUAL HEIGHT: 2 STORIES / 30 FEET +/-
ALLOWABLE AREA PER FLOOR: 7,000 GSF
ACTUAL AREA PER FLOOR: 4,800 GSF

FIRE RESISTANCE RATINGS: (MBC TABLES 601 & 602)
CONSTRUCTION TYPE: TYPE V B
PRIMARY STRUCTURAL FRAME: 0 HOURS
EXTERIOR BEARING WALLS: 0 HOURS
INTERIOR BEARING WALLS: 0 HOURS
INTERIOR NON-BEARING WALLS: 0 HOURS
FLOOR CONSTRUCTION: 0 HOURS
ROOF CONSTRUCTION: 0 HOURS
EXTERIOR FIRE SEPARATION: (TABLE 602)
X<5 FEET: 1 HOUR
5 ≤ X < 10 FEET: 1 HOUR
10 ≤ X < 30 FEET: 0 HOUR
X ≥ 30 FEET: 0 HOUR

FIRE & SMOKE PROTECTION FEATURES:
UNIT DEMISING WALLS: 1 HOUR / STC 50 MIN.
FLOOR/CEILING ASSEMBLIES: 1 HOUR / STC 50 MIN, IIC 50 MIN.
CORRIDORS, EXIT ACCESS ENCLOSURES: 1 HOUR
INTERIOR EXIT STAIRWAYS/PASSAGEWAYS: 1 HOUR
VERTICAL OPENINGS: 1 HOUR (≤3 STORIES)
2 HOUR (≥4 STORIES)

INTERIOR FINISHES: (MBC TABLE 803.11)
INTERIOR EXIT STAIRWAYS/PASSAGEWAYS: CLASS B
CORRIDORS, EXIT ACCESS ENCLOSURES: CLASS B
ROOMS AND ENCLOSED SPACES: CLASS C

FIRE PROTECTION:
AUTOMATIC FIRE SUPPRESSION SYSTEM: (MRCEB SECT. 803 / 904)
- NO EXISTING AUTOMATIC SPRINKLER SYSTEM
- LEVEL 2 WORK AREAS EXCEED 50% OF FLOOR AREA; SPRINKLER SYSTEM IS REQUIRED (MRCEB 803.2.2)
- THE WORK AREA IS REQUIRED TO BE PROVIDED WITH AUTOMATIC SPRINKLER PROTECTION IN ACCORDANCE WITH THE MICHIGAN BUILDING CODE AS APPLICABLE TO NEW CONSTRUCTION. (MRCEB 904.1.4)

PORTABLE FIRE EXTINGUISHERS (MBC SECT. 906 / TABLE 906.3(1))
LOW HAZARD / TYPE 2-A / MAXIMUM TRAVEL DISTANCE = 75 FT.

FIRE ALARM AND DETECTION SYSTEM: (MCREB SECT. 501.4)
FIRE ALARM AND DETECTION SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 907 OF THE MICHIGAN BUILDING CODE AS REQUIRED FOR NEW CONSTRUCTION.

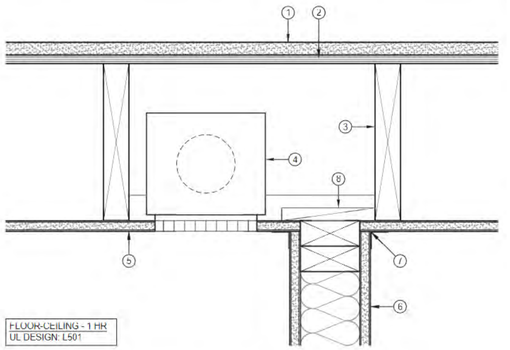
SINGLE-STATION SMOKE ALARMS INSTALLED ON EACH FLOOR LEVEL, INCLUDING THE BASEMENT, AND IN EACH SLEEPING ROOM OR IN EACH AREA DIRECTLY OUTSIDE THE SLEEPING ROOM

MEANS OF EGRESS:
REPAIRS & ALTERATIONS MAINTAIN LEVEL OF FIRE PROTECTION PROVIDED. NO CHANGE TO EXISTING MEANS OF EGRESS (MRCEB 604.1, 704.1)

EMERGENCY ESCAPE & RESCUE OPENINGS: (MRCEB 702.5)
ESCAPE OPENINGS: WINDOWS PROVIDED CONTAIN THE LARGEST POSSIBLE OPENABLE AREA WITHIN THE EXISTING OPENINGS.

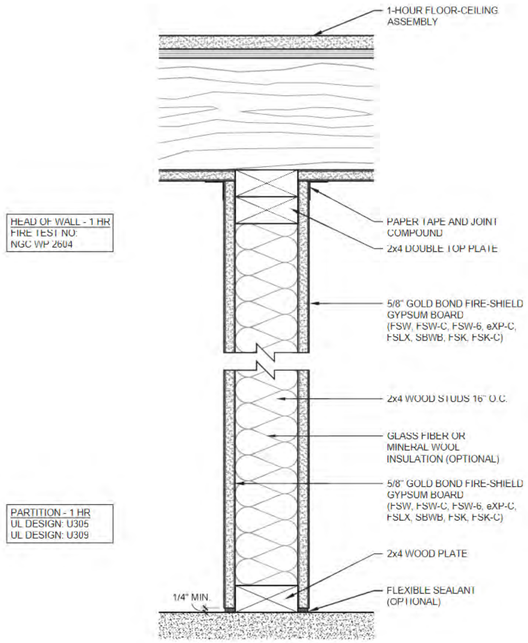
ACCESSIBILITY:
ACCESSIBLE MEANS OF EGRESS REQUIRED BY CHAPTER 10 OF THE MICHIGAN BUILDING CODE ARE NOT REQUIRED TO BE ADDED IN EXISTING FACILITIES. (MCREB 306.7.2)

TYPE B DWELLING OR SLEEPING UNITS REQUIRED BY SECTION 1108 OF THE MICHIGAN BUILDING CODE ARE NOT REQUIRED TO BE PROVIDED IN HISTORIC BUILDINGS. (MCREB 306.7.16.7)

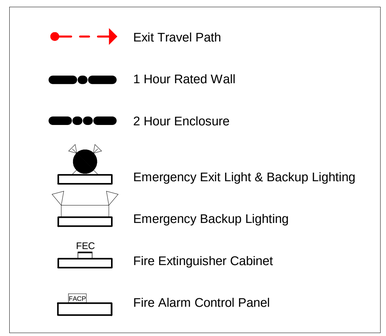


1. FLOOR TOPPING MIXTURE (THICKNESS VARIES BY PRODUCT), MIN. 1x4 T&G LUMBER PERPENDICULAR TO JOISTS OR 19/32" WOOD STRUCTURAL PANEL FINISH FLOOR
2. MIN. 1x6 T&G DIAGONAL LUMBER, 15/32" PLYWOOD, OR 7/16" OSB WOOD STRUCTURAL PANEL SUBFLOOR
3. MIN. 2x10 WOOD JOISTS 16" O.C.
4. CEILING DAMPER AND GRILLE (OPTIONAL)
5. 5/8" FIRE-SHIELD GYPSUM BOARD (FSW, FSK, FSW-6, FSW-C, FSK-C, eXP-C)
6. PARTITION INTERSECTION WITH 5/8" GOLD BOND FIRE-SHIELD GYPSUM BOARD (FSW, FSW-C, FSW-6, eXP-C, FSLX, SBWB, FSK, FSK-C) EACH SIDE (2018 IBC 714.4.2 EXCEPTION 7)
7. TAPE AND JOINT COMPOUND
8. BLOCKING AS REQUIRED FOR ATTACHMENT OF GYPSUM BOARD

1-HR RATED FLOOR / CEILING ASSEMBLY
UL DESIGN L501



1-HR RATED WALL ASSEMBLY
UL DESIGN U305/309



LIFE SAFETY LEGEND
1/4" = 1'-0"

ALL OTHER AREAS = WORK AREA > 50% = LEVEL 3

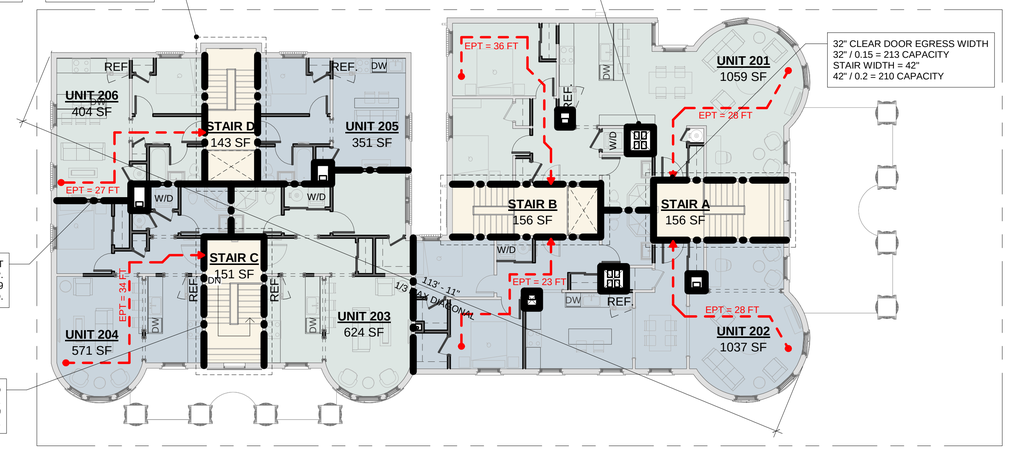
STAIRWAY = AREA OF REPAIR, TYP.

1-HR RATED VERTICAL SHAFT ENCLOSURE, TYP.

1-HR RATED UNIT DEMISING WALLS, TYP. UL U305/309 OR APPROVED EQ.

1-HR RATED STAIRWELL WALLS, TYP. UL U305/309 OR APPROVED EQ.

32" CLEAR DOOR EGRESS WIDTH
32" / 0.15 = 213 CAPACITY
STAIR WIDTH = 42"
42" / 0.2 = 210 CAPACITY



SECOND FLOOR - LIFE SAFETY PLAN
3 / A-1.2
1" = 10'-0"

ALL OTHER AREAS = WORK AREA > 50% = LEVEL 3

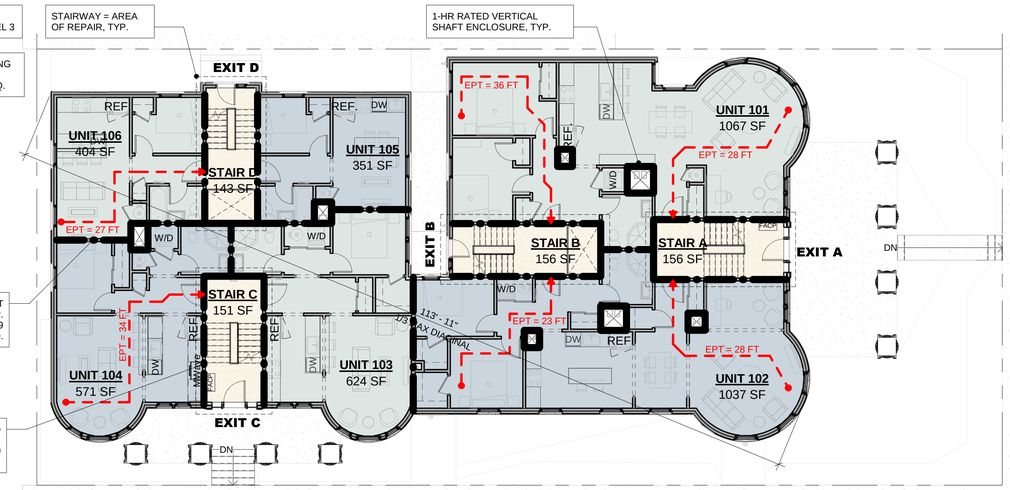
STAIRWAY = AREA OF REPAIR, TYP.

1-HR RATED VERTICAL SHAFT ENCLOSURE, TYP.

1-HR RATED FLOOR/CEILING ASSEMBLY BTW. LEVELS UL L501 OR APPROVED EQ.

1-HR RATED UNIT DEMISING WALLS, TYP. UL U305/309 OR APPROVED EQ.

1-HR RATED STAIRWELL WALLS, TYP. UL U305/309 OR APPROVED EQ.



FIRST FLOOR - LIFE SAFTEY PLAN
2 / A-1.2
1" = 10'-0"

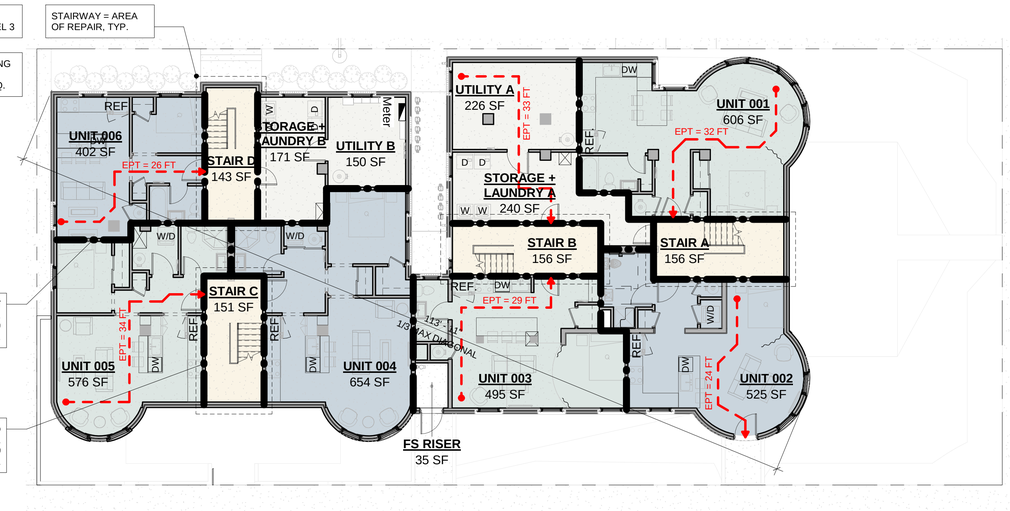
ALL OTHER AREAS = WORK AREA > 50% = LEVEL 3

STAIRWAY = AREA OF REPAIR, TYP.

1-HR RATED FLOOR/CEILING ASSEMBLY BTW. LEVELS UL L501 OR APPROVED EQ.

1-HR RATED UNIT DEMISING WALLS, TYP. UL U305/309 OR APPROVED EQ.

1-HR RATED STAIRWELL WALLS, TYP. UL U305/309 OR APPROVED EQ.



LOWER FLOOR - LIFE SAFETY PLAN
1 / A-1.2
1" = 10'-0"

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DATE SEALED

W. GRAND BLVD. APARTMENTS
PROJECT NUMBER 22040
347 WEST GRAND BLVD
DETROIT, MI 48209
HUBBARD FARMS LOFTS LLC
SHEET TITLE
CODE SHEET

SHEET NUMBER
3CS

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DEMOLITION NOTES:

REGULATORY REQUIREMENTS:

A. COMPLY WITH GOVERNING EPA NOTIFICATION REGULATIONS BEFORE STARTING DEMOLITION. COMPLY WITH HAULING AND DISPOSAL REGULATIONS OF AUTHORITIES HAVING JURISDICTION. OBTAIN AND PAY FOR ALL PERMITS REQUIRED. WHERE TOXIC SUBSTANCES ARE SUSPECTED TO BE PRESENT, PARTICULARLY LEAD PAINT AND ASBESTOS, A CERTIFIED REMOVAL ENTITY SHALL BE RETAINED AND FOLLOW GOVERNING AGENCY GUIDELINES FOR REMOVAL AND DISPOSAL.
B. CONTRACTOR SHALL PROVIDE ALL NECESSARY TEMPORARY PROTECTION REQUIRED BY FEDERAL, STATE, AND LOCAL LAW TO INSURE PUBLIC AND WORKER SAFETY. COMPLY WITH OSHA AND EPA REQUIREMENTS.

PREPARATION:

A. AS PART OF THE PROJECT SCOPE, THE CONTRACTOR SHALL PREPARE ALL DRAWINGS, DOCUMENTS, AND APPLICATIONS AND SHALL OBTAIN ALL GOVERNMENT AGENCY APPROVALS AND PERMITS REQUIRED FOR DEMOLITION ACTIVITIES.
B. CONDUCT DEMOLITION OPERATIONS AND REMOVE MATERIALS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKS, AND OTHER ADJACENT OCCUPIED AND UTILIZED FACILITIES.
C. DO NOT CLOSE OR OBSTRUCT STREETS, WALKS, OR OTHER ADJACENT OCCUPIED OR UTILIZED FACILITIES WITHOUT PERMISSION FROM AUTHORITIES HAVING JURISDICTION. PROVIDE ALTERNATE ROUTES AROUND CLOSED OR OBSTRUCTED TRAFFIC WAYS IF REQUIRED BY GOVERNING REGULATIONS.
D. CONDUCT DEMOLITION OPERATIONS TO PREVENT INJURY TO PEOPLE AND DAMAGE TO ADJACENT BUILDINGS AND FACILITIES TO REMAIN. ENSURE SAFE PASSAGE OF PEOPLE AROUND DEMOLITION AREA.
E. ERECT TEMPORARY PROTECTION, SUCH AS WALKS, FENCES, RAILINGS, CANOPIES, AND COVERED PASSAGEWAYS, WHERE REQUIRED BY AUTHORITIES HAVING JURISDICTION.
F. MAINTAIN TEMPORARY PROTECTION TO PEOPLE AT EXTERIOR AREAS OF THE EXISTING BUILDING WHERE DECORATIVE MEDALLION REMOVAL WORK IS BEING DONE.
G. PROTECT EXISTING SITE IMPROVEMENTS, APPURTENANCES, AND LANDSCAPING THAT ARE DESIGNATED TO REMAIN IN PLACE.
H. PROVIDE AND MAINTAIN INTERIOR AND EXTERIOR SHORING, BRACING, OR STRUCTURAL SUPPORT TO PRESERVE STABILITY AND PREVENT MOVEMENT, SETTLEMENT, OR COLLAPSE OF BUILDINGS TO BE DEMOLISHED AND ADJACENT BUILDINGS TO REMAIN.
I. STRENGTHEN OR ADD NEW SUPPORTS WHEN REQUIRED DURING PROGRESS OF DEMOLITION.
J. VERIFY THAT UTILITIES HAVE BEEN DISCONNECTED AND CAPPED.
SURVEY EXISTING CONDITIONS AND CORRELATE WITH REQUIREMENTS INDICATED TO DETERMINE EXTENT OF DEMOLITION AND RECYCLING REQUIRED.
K. SURVEY CONDITION OF THE BUILDING TO DETERMINE WHETHER REMOVING ANY ELEMENT MIGHT RESULT IN A STRUCTURAL DEFICIENCY OR UNPLANNED COLLAPSE OF ANY PORTION OF THE STRUCTURE OR ADJACENT STRUCTURES DURING DEMOLITION.
L. RETAIN A LICENSED AND QUALIFIED STRUCTURAL ENGINEER TO PROVIDE ANALYSIS, INCLUDING CALCULATIONS, NECESSARY TO ENSURE THE SAFE EXECUTION OF THE DEMOLITION WORK. BEARING WALLS, STRUCTURAL STEEL, CONCRETE FOUNDATIONS AND SUPPORTED SLABS WITH STRUCTURAL FRAMING SHALL NOT BE ALTERED WITHOUT A FIELD INVESTIGATION BY THE ARCHITECT OR A STRUCTURAL ENGINEER.

GENERAL :

A. DEMOLITION DRAWINGS INDICATE GENERAL AREAS OF DEMOLITION ONLY. EXTENT OF REMOVAL OF EXISTING CONSTRUCTION MATERIALS TO BE DETERMINED BY FIELD INVESTIGATION AND COORDINATION WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DOCUMENTS AS REQUIRED TO ACCOMMODATE THE NEW CONSTRUCTION. EXISTING MECHANICAL, PLUMBING, AND ELECTRICAL TO BE RELOCATED PER DRAWINGS, COORDINATE WITH CONTRACTORS AS REQUIRED.
B. COORDINATE REMOVAL OF EXISTING ITEMS WITH PROPOSED FRAMING DETAILS, INTERIOR ELEVATIONS, AND DETAILS. PROVIDE TEMPORARY STRUCTURAL SUPPORT AS REQUIRED PRIOR TO STRUCTURAL DEMOLITION.
C. PATCH AND REPAIR EXISTING MATERIALS TO REMAIN AS REQUIRED WHERE REMOVAL OF EXISTING CONSTRUCTION OR WHERE REQUIREMENTS OF NEW CONSTRUCTION NECESSITATES CUTTING OR ALTERING EXISTING MATERIALS. EXISTING WALLS, FLOORS, AND CEILING TO REMAIN INTACT AS IS INDICATED ON DRAWINGS. COORDINATE WITH ARCHITECTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DOCUMENTS. CONTRACTOR IS RESPONSIBLE FOR THE PATCH AND REPAIR OF ALL DAMAGE ARISING FROM DEMOLITION OPERATIONS AS REQUIRED TO MATCH EXISTING.
D. ALL DEMOLITION WORK SHALL ATTEMPT TO SALVAGE ADJACENT AREAS AND RE-USABLE MATERIALS TO THE EXTENTS POSSIBLE. VERIFY OWNER'S INTENT TO REUSE OR STORE ANY BUILDING COMPONENTS PRIOR TO DISPOSAL. EXCEPT FOR ITEMS OR MATERIALS INDICATED TO BE REUSED, SALVAGED, REINSTALLED, OR OTHERWISE INDICATED TO REMAIN PROPERTY OF OWNER, DEMOLISHED MATERIALS SHALL BECOME THE CONTRACTOR'S PROPERTY AND SHALL BE REMOVED, RECYCLED, OR DISPOSED FROM PROJECT SITE IN AN APPROPRIATE AND LEGAL MANNER.
E. EVERY ATTEMPT SHALL BE MADE BY THE DEMOLITION CONTRACTOR TO SEPARATE BUILDING MATERIALS INTO RECYCLABLE CONTENT.
F. LOCATE DEMOLITION EQUIPMENT THROUGHOUT THE BUILDING AND REMOVE DEBRIS AND MATERIALS SO AS NOT TO IMPOSE EXCESSIVE LOADS ON SUPPORTING WALLS, FLOORS, OR FRAMING.
G. REMOVE STRUCTURAL FRAMING MEMBERS AND LOWER TO GROUND BY METHOD SUITABLE TO AVOID FREE FALL AND TO PREVENT GROUND IMPACT OR DUST GENERATION.
H. PROVIDE TEMPORARY AND SECURE WATERPROOF ENCLOSURE DURING CONSTRUCTION.
I. PREPARE ALL SURFACES AS REQUIRED TO RECEIVE NEW WORK AND NEW FINISHES AS INDICATED ON THE DRAWINGS AND SPECIFICATIONS.
J. ALL SALVAGED ITEMS TO BE CLEANED, REPAIRS, OR PATCHED AS NECESSARY PRIOR TO NEW INSTALLATION.
K. REMOVE ANY DAMAGED MASONRY AT REMAINING WALLS. PROVIDE NEW INFILL TO MATCH EXISTING.
L. REMOVE EXISTING MECHANICAL AND PLUMBING SYSTEMS, VENTS, FIXTURES, DRAINS, AND DUCTWORK NOT INDICATED FOR REUSE. DO NOT ABANDON ITEMS IN PLACE UNLESS NOTED OTHERWISE. REFER TO MECHANICAL AND PLUMBING FOR ADDITIONAL INFORMATION.

DISPOSAL PRACTICES AND HAULING:

A. LEGALLY TRANSPORT AND DISPOSE OF MATERIALS THAT CANNOT BE DELIVERED TO A SOURCE-SEPARATED OR MIXED RECYCLING FACILITY TO A TRANSFER STATION OR DISPOSAL FACILITY THAT CAN LEGALLY ACCEPT THE MATERIALS FOR THE PURPOSE OF DISPOSAL.
B. USE A PERMITTED WASTE HAULER OR CONTRACTOR'S TRUCKING SERVICES AND PERSONNEL. TO CONFIRM VALID PERMITTED STATUS OF WASTE HAULERS, CONTACT THE APPROPRIATE WASTE MANAGEMENT AGENCY.
C. BECOME FAMILIAR WITH THE CONDITIONS FOR ACCEPTANCE OF NEW CONSTRUCTION, EXCAVATION AND DEMOLITION MATERIALS AT RECYCLING FACILITIES, PRIOR TO DELIVERING MATERIALS.
D. DELIVER TO FACILITIES THAT CAN LEGALLY ACCEPT NEW CONSTRUCTION, EXCAVATION AND DEMOLITION MATERIALS FOR PURPOSE OF RE-USE, RECYCLING, COMPOSTING, OR DISPOSAL.
E. DO NOT BURN, BURY OR OTHERWISE DISPOSE OF RUBBISH AND WASTE MATERIALS ON PROJECT SITE.
F. DEMOLISH CONCRETE AND MASONRY IN SIZES THAT WILL BE SUITABLE FOR ACCEPTANCE AT RECYCLING OR DISPOSAL FACILITIES.

ELECTRICAL DEMOLITION:

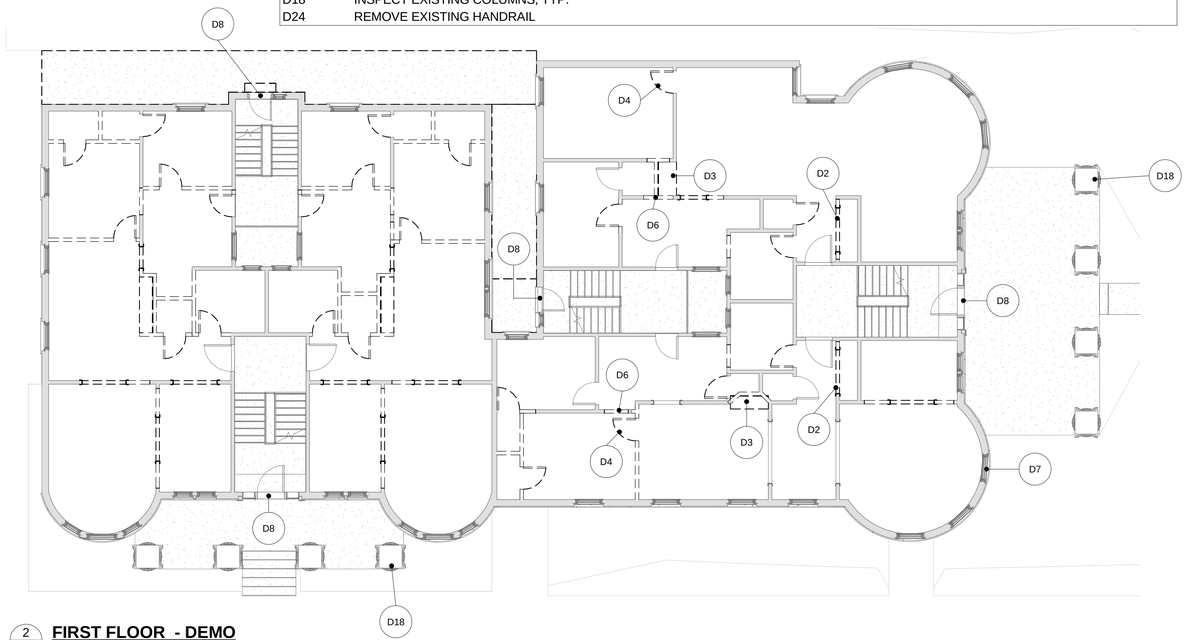
A. SAFETY-RELATED WORK PRACTICES SHALL BE EMPLOYED TO PREVENT ELECTRIC SHOCK OR ELECTRICAL CONTACTS, WHEN WORK IS PERFORMED NEAR OR ON EQUIPMENT OR CIRCUITS WHICH ARE OR MAY BE ENERGIZED. LIVE PARTS SHALL BE DE-ENERGIZED BEFORE WORK COMMENCES ON THEM. ONLY QUALIFIED ELECTRICIAN MAY WORK ON ENERGIZED CIRCUITS OR EQUIPMENT.
B. THE CIRCUITS AND EQUIPMENT TO BE WORKED ON SHALL BE DISCONNECTED FROM ALL ELECTRIC ENERGY SOURCES. ELECTRIC EQUIPMENT OR CIRCUITS WHICH HAVE BEEN DE-ENERGIZED SHALL BE LOCKED OUT OR TAGGED OR BOTH.
C. A QUALIFIED ELECTRICIAN SHALL USE TEST EQUIPMENT (VOLT-OHM METER, ETC.) AND SHALL VERIFY THAT THE CIRCUIT AND EQUIPMENT ARE DE-ENERGIZED. IF THE CIRCUIT IS OVER 600 VOLTS, THE TEST EQUIPMENT SHALL BE CHECKED FOR PROPER OPERATION IMMEDIATELY BEFORE AND IMMEDIATELY AFTER THIS TEST.
D. STORED ELECTRIC ENERGY WHICH MIGHT ENDANGER PERSONNEL SHALL BE RELEASED. CAPACITORS SHALL BE DISCHARGED AND HIGH CAPACITANCE ELEMENTS SHALL BE SHORT-CIRCUITED AND GROUNDED, IF THE STORED ELECTRIC ENERGY MIGHT ENDANGER PERSONNEL.
E. A QUALIFIED ELECTRICIAN SHALL CONDUCT TESTS AND VISUAL INSPECTIONS TO VERIFY THAT ALL TOOLS, ELECTRICAL JUMPERS, SHORTS, GROUNDS, AND OTHER SUCH DEVICES HAVE BEEN REMOVED, SO THAT THE CIRCUITS AND EQUIPMENT CAN BE SAFETY ENERGIZED.
F. CAP, TERMINATE, OR REMOVE ALL MISCELLANEOUS POWER WIRES, OUTLETS, AND SWITCHES AS REQUIRED DURING CONSTRUCTION AND DEMOLITION
G. DISCONNECT AND REMOVE ALL EXISTING ELECTRICAL LIGHTING FIXTURES, LOW VOLTAGES TRANSFORMERS, WIRING DEVICES IN ENTIRETY. ALL CONDUIT, WIRING, CABLING, ETC. SHALL BE REMOVED BACK TO THE SOURCE.

GAS PIPING:

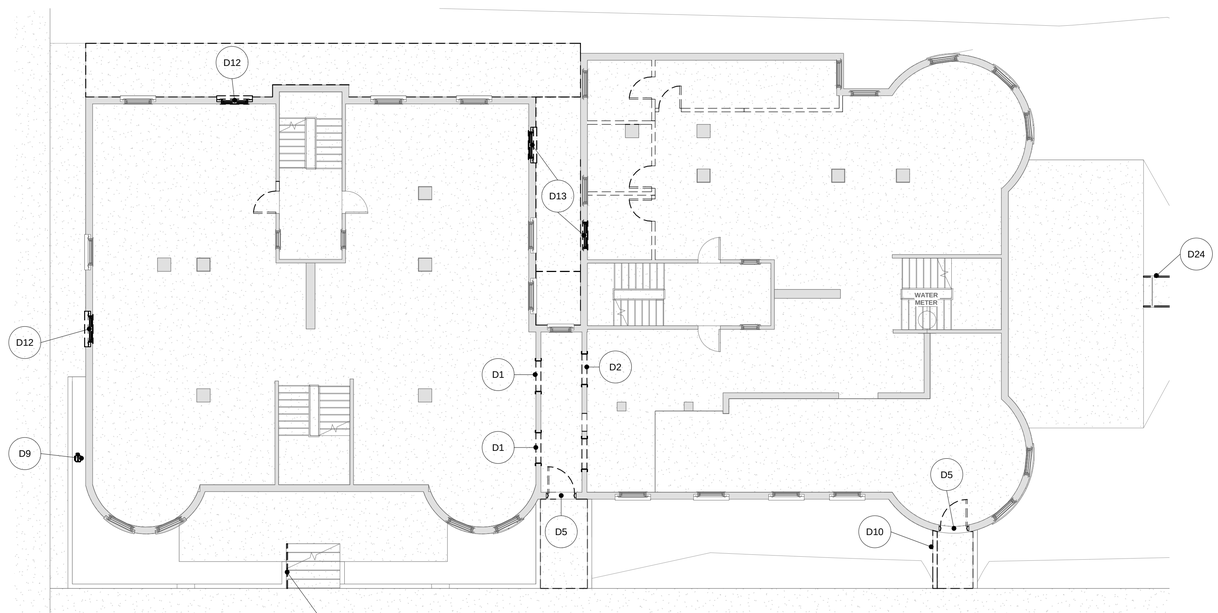
A. ALL GAS TO BE SHUT OFF TO AREAS OF DEMOLITION BY A QUALIFIED CONTRACTOR. TEST FOR LEAKS PRIOR TO COMMENCING WORK.
B. WHERE APPLICABLE, PROVIDE NEW SHUT OFF VALVES WHERE PIPING REACHES AREA OF DEMOLITION.

KEYNOTE LEGEND

D1	PREP EXISTING OPENING FOR NEW INFILL, REFER TO NEW PLANS
D2	PREP EXISTING OPENING FOR NEW DOOR, REFER TO NEW PLANS
D3	REMOVE EXISTING BUILT-IN MILLWORK
D4	REMOVE EXISTING DOOR, PREP FOR NEW INFILL, REFER TO NEW PLANS
D5	REMOVE EXISTING DOOR, PREP FOR REPLACEMENT
D6	REMOVE EXISTING WALL AREA FOR NEW DOOR LOCATION, REFER TO PROPOSED PLANS
D7	REMOVE EXISTING WINDOW, PREP FOR REPLACEMENT, TYP. THROUGHOUT (UNO)
D8	PREP EXISTING DOOR & SIDELITES FOR REPAIR/RESTORATION, WHERE EXISTING DOOR IS MISSING OR DAMAGED BEYOND REPAR, PREP FOR REPLACEMENT TO MATCH
D9	REMOVE EXISTING GAS METER, PREP FOR RELOCATION, REFER TO MECH/PLUMBING
D10	REMOVE EXISTING CONCRETE RETAINING WALL, REFER TO CIVIL
D12	REMOVE EXISTING BASEMENT WINDOW AND SILL, REMOVE MASONRY WALL AREA TO LOWER SILL HEIGHT, PREP FOR NEW WINDOW
D13	REMOVE EXISTING BASEMENT WINDOW AND SILL, PREP FOR INFILL, BRICK TO MATCH EXISITNG
D18	INSPECT EXISTING COLUMNS, TYP.
D24	REMOVE EXISTING HANDRAIL



2 A-1.2 **FIRST FLOOR - DEMO**
1/8" = 1'-0"



1 A-1.2 **LOWER FLOOR - DEMO**
1/8" = 1'-0"

LEGEND

DEMOLISHED

EXISTING

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Revision Schedule

#	Description	Date
1	Preliminary Pricing Set	05.07.2026
2	Pricing Set	07.31.2026
3	HDC Set	08.14.2026

SEAL

NOT FOR CONSTRUCTION

DATE SEALED

W. GRAND BLVD. APARTMENTS

PROJECT NUMBER: 22040
347 WEST GRAND BLVD
DETROIT, MI 48209

HUBBARD FARMS LOFTS LLC

SHEET TITLE
DEMOLITION PLANS

SHEET NUMBER
A-1.0

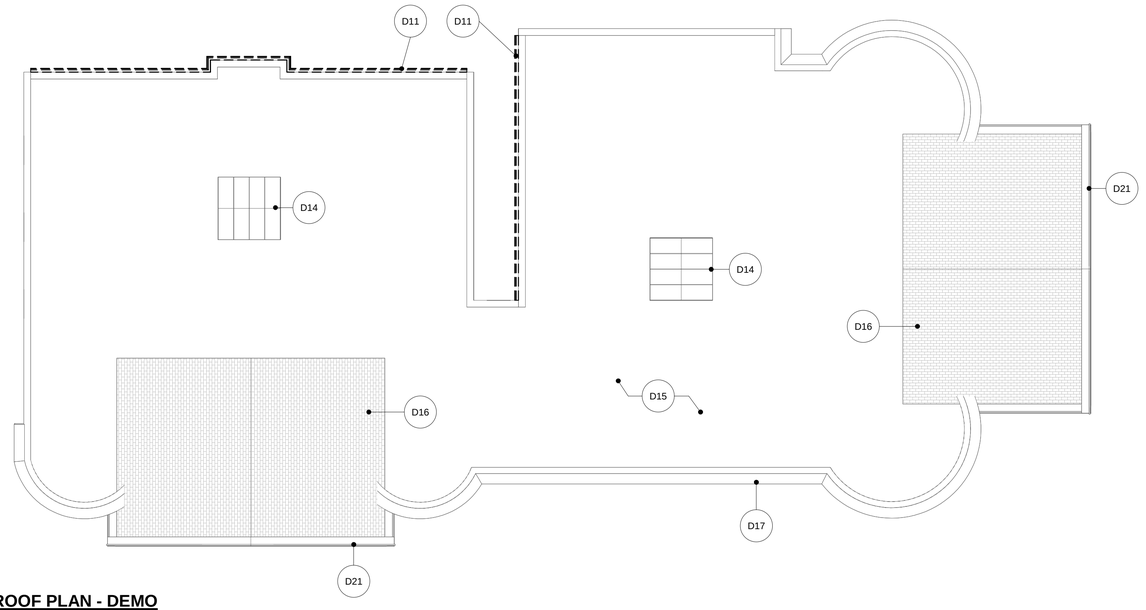
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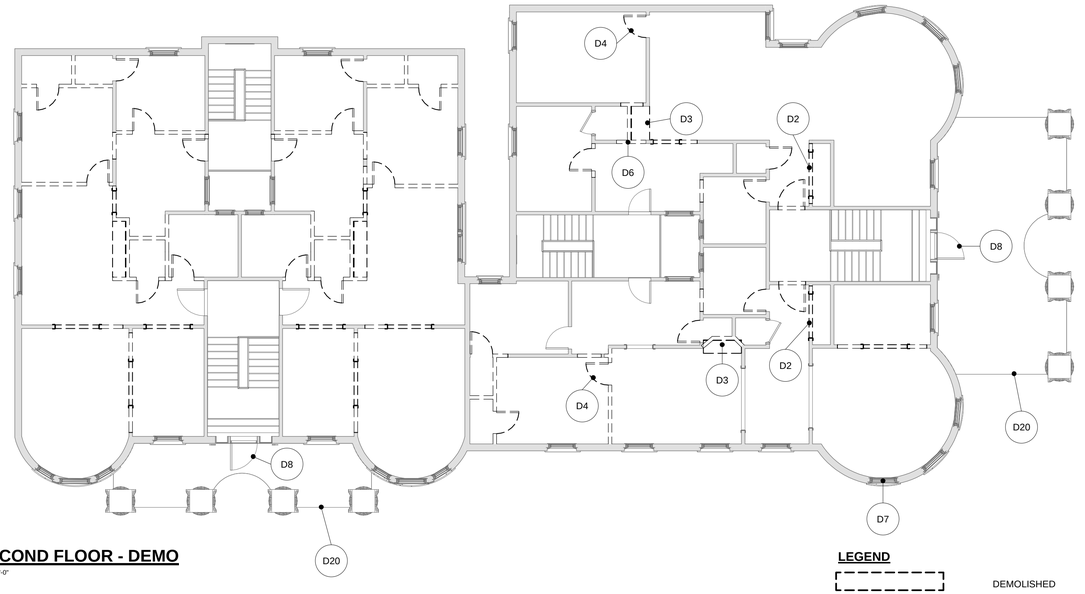
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KEYNOTE LEGEND

D2	PREP EXISTING OPENING FOR NEW DOOR, REFER TO NEW PLANS
D3	REMOVE EXISTING BUILT-IN MILLWORK
D4	REMOVE EXISTING DOOR, PREP FOR NEW INFILL, REFER TO NEW PLANS
D6	REMOVE EXISTING WALL AREA FOR NEW DOOR LOCATION, REFER TO PROPOSED PLANS
D7	REMOVE EXISTING WINDOW, PREP FOR REPLACEMENT, TYP. THROUGHOUT (UNO)
D8	PREP EXISTING DOOR & SIDELITES FOR REPAIR/RESTORATION, WHERE EXISTING DOOR IS MISSING OR DAMAGED BEYOND REPAR, PREP FOR REPLACEMENT TO MATCH
D11	REMOVE EXISTING GUTTERS & DOWNSPOUTS, PREP FOR REPLACEMENT
D14	REMOVE EXISTING SKYLIGHT, PREP FOR REPLACEMENT
D15	REMOVE EXISTING ROOF MEMBRANE, PREP FOR REPLACEMENT
D16	REMOVE EXISTING ASPHALT SHINGLE ROOFING, PREP FOR REPLACEMENT
D17	INSPECT EXISTING CORNICE, TYP.
D20	INSPECT EXISTING PORCH RAILING, TYP.
D21	INSPECT EXISTING PEDIMENT, TYP.



2 A-1.2 **ROOF PLAN - DEMO**
1/8" = 1'-0"



1 A-1.2 **SECOND FLOOR - DEMO**
1/8" = 1'-0"

LEGEND

DEMOLISHED

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W. GRAND BLVD. APARTMENTS

PROJECT NUMBER: 2250A0

347 WEST GRAND BLVD
DETROIT, MI 48209

HUBBARD FARMS LOFTS LLC

SHEET TITLE
DEMOLITION PLANS

SHEET NUMBER
A-1.1

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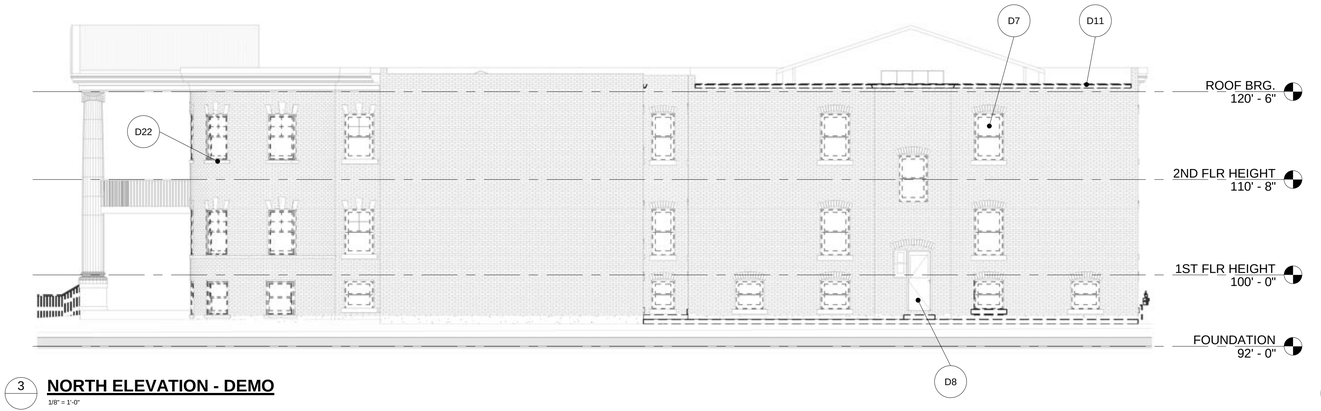
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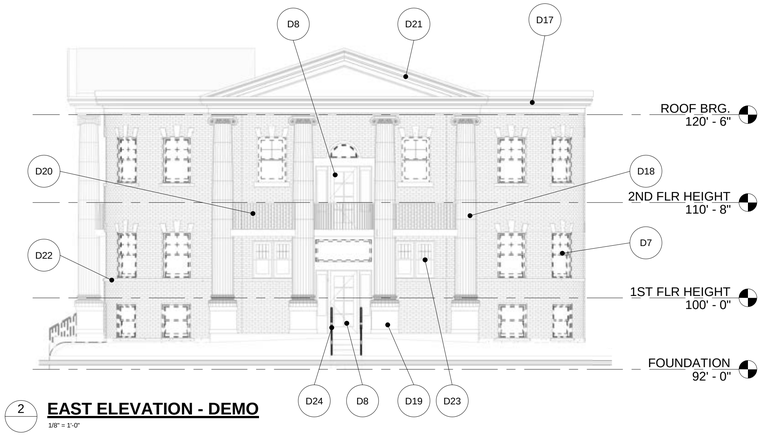


KEYNOTE LEGEND

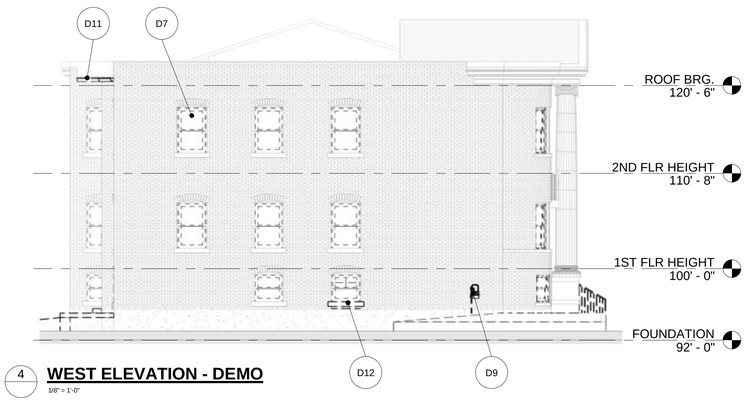
D5	REMOVE EXISTING DOOR, PREP FOR REPLACEMENT
D7	REMOVE EXISTING WINDOW, PREP FOR REPLACEMENT, TYP. THROUGHOUT (UNO)
D8	PREP EXISTING DOOR & SIDELITES FOR REPAIR/RESTORATION, WHERE EXISTING DOOR IS MISSING OR DAMAGED BEYOND REPAR, PREP FOR REPLACEMENT TO MATCH
D9	REMOVE EXISTING GAS METER, PREP FOR RELOCATION, REFER TO MECH/PLUMBING
D10	REMOVE EXISTING CONCRETE RETAINING WALL, REFER TO CIVIL
D11	REMOVE EXISTING GUTTERS & DOWNSPOUTS, PREP FOR REPLACEMENT
D12	REMOVE EXISTING BASEMENT WINDOW AND SILL, REMOVE MASONRY WALL AREA TO LOWER SILL HEIGHT, PREP FOR NEW WINDOW
D17	INSPECT EXISTING CORNICE, TYP.
D18	INSPECT EXISTING COLUMNS, TYP.
D19	INSPECT EXISTING COLUMN BASES, TYP.
D20	INSPECT EXISTING PORCH RAILING, TYP.
D21	INSPECT EXISTING PEDIMENT, TYP.
D22	INSPECT EXISTING SILLS, TYP.
D23	EXISTING LEADED GLASS WINDOWS TO REMAIN, PREP FOR REPAIR/RESTORATION, TYP.
D24	REMOVE EXISTING HANDRAIL



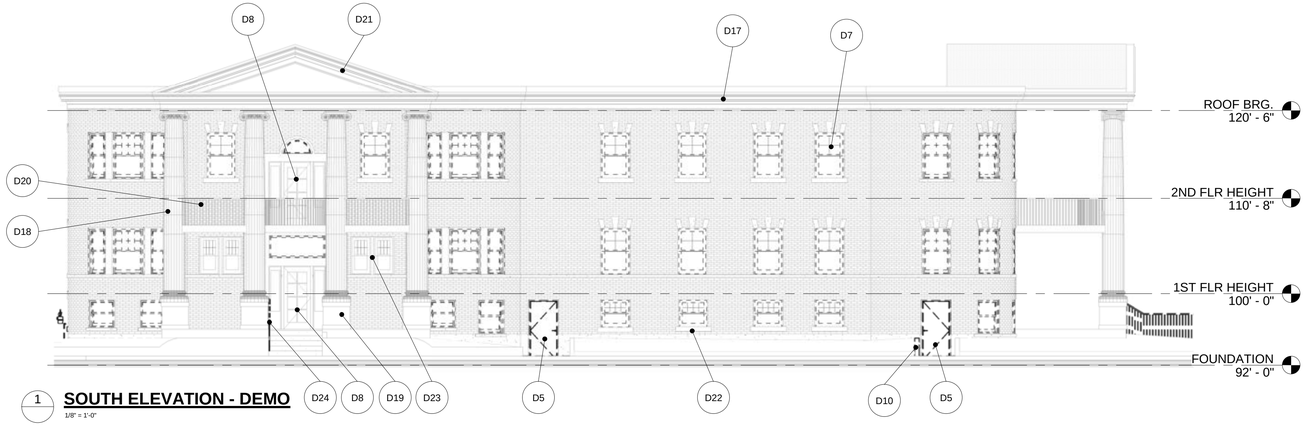
3 **NORTH ELEVATION - DEMO**
1/8" = 1'-0"



2 **EAST ELEVATION - DEMO**
1/8" = 1'-0"



4 **WEST ELEVATION - DEMO**
1/8" = 1'-0"



1 **SOUTH ELEVATION - DEMO**
1/8" = 1'-0"

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Revision Schedule

#	Description	Date
1	Preliminary Pricing Set	05.07.2026
2	Pricing Set	07.31.2026
3	HDC Set	08.14.2026

SEAL

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DATE SEALED

W. GRAND BLVD. APARTMENTS

PROJECT NUMBER - 22040
347 WEST GRAND BLVD
DETROIT, MI 48209

HUBBARD FARMS LOFTS LLC

SHEET TITLE
DEMOLITION ELEVATIONS

SHEET NUMBER
A-1.2

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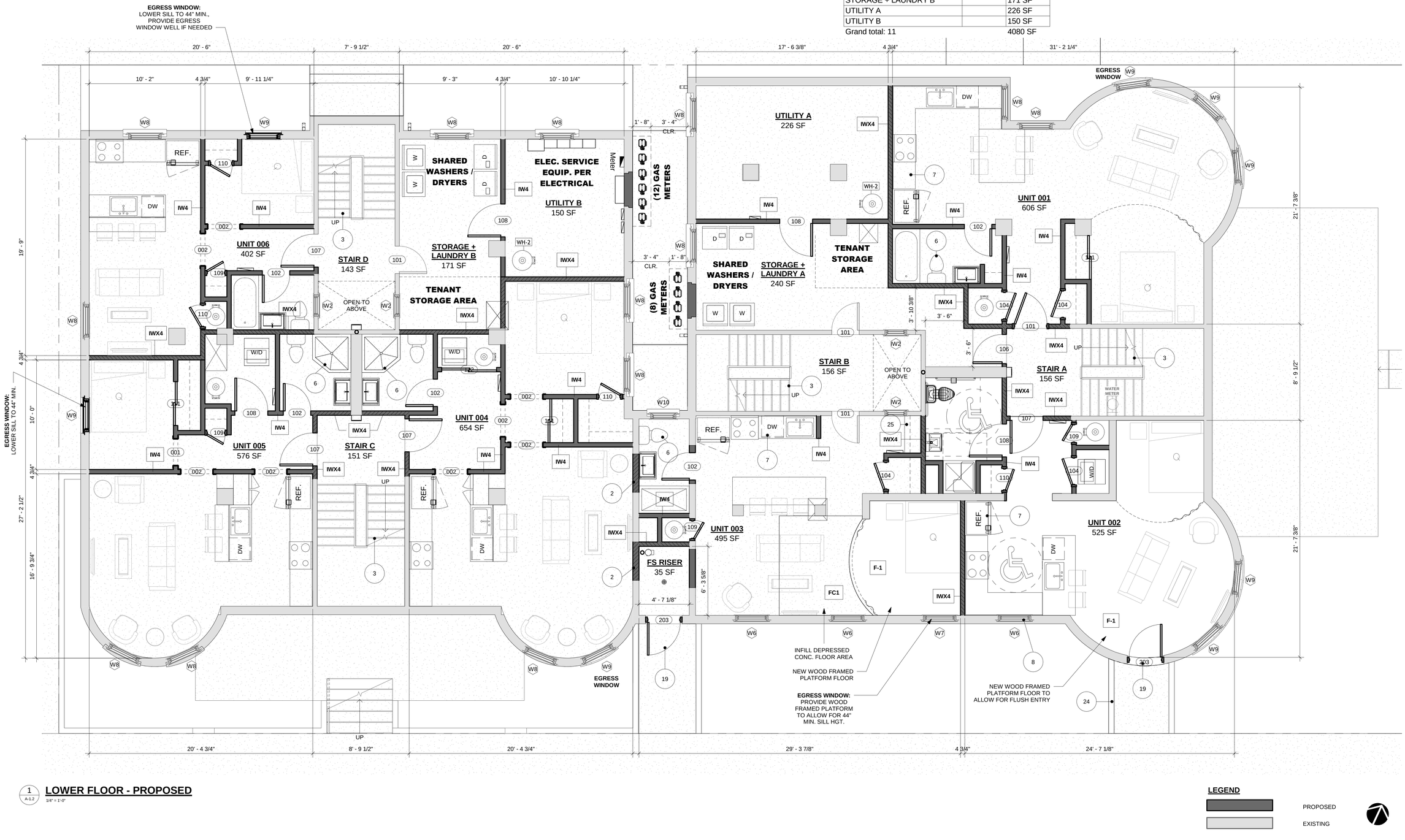
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INTERIOR WALL SCHEDULE					
Type Mark	Area	Description	Fire Rating	STC	Comments
IW4	5305 SF	5/8" GYP. ON 2x4 WOOD STUDS @ 16" O.C. ON 5/8" GYP.			
IWX4	2037 SF	5/8" TYPE X GYP. ON 2x4 WOOD STUDS @ 16" O.C. ON 5/8" TYPE X GYP. UL- U305 OR APPV'D EQUIVALENT 1-HR RATED ASSEMBLY	1	50 MIN	@ UNIT DEMISING WALLS
IWX6	0 SF	5/8" TYPE X GYP. ON 2x6 WOOD STUDS @ 16" O.C. ON 5/8" TYPE X GYP. UL- U305 OR APPV'D EQUIVALENT 1-HR RATED ASSEMBLY	1		
Grand total	7342 SF				

LOWER FLOOR ROOM SCHEDULE		
Name	Unit Type	Area
FS RISER		35 SF
RESIDENTIAL A		
UNIT 001	STUDIO	606 SF
UNIT 003	STUDIO	495 SF
UNIT 005	STUDIO	576 SF
RESIDENTIAL B		
UNIT 002	STUDIO	525 SF
UNIT 004	STUDIO	654 SF
UNIT 006	STUDIO	402 SF
UTILITY		
STORAGE + LAUNDRY A		240 SF
STORAGE + LAUNDRY B		171 SF
UTILITY A		226 SF
UTILITY B		150 SF
Grand total: 11		4080 SF

KEYNOTE LEGEND

2	INFILL EXISTING FORMER OPENING, MATCH ADJACENT WALL FINISH
3	RESTORE EXISTING STAIRWELLS, RESTORE OR REPLACE FINISHES PER OWNER SELECTIONS
6	NEW BATHROOM PLUMBING FIXTURES IN NEW LOCATION, PROVIDE NEW FINISHES PER OWNER SELECTIONS
7	NEW KITCHEN CABINETRY & FIXTURES/APPLIANCES, FINAL SELECTIONS BY OWNER
8	NEW ALUMINUM CLAD WOOD WINDOWS, TYP. THROUGHOUT, REFER TO WINDOW SCHEDULE
19	NEW EXTERIOR DOOR, REFER TO DOOR SCHEDULE
24	NEW CONCRETE RETAINING WALL AND WALKWAY, REFER TO CIVIL
25	NEW WINDOW SEAT BY DESIGN/BUILD MILLWORK



1 A-1.2 **LOWER FLOOR - PROPOSED**
1/4" = 1'-0"

LEGEND
PROPOSED
EXISTING

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3	HDC Set	08.14.2026

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W. GRAND BLVD. APARTMENTS
PROJECT NUMBER: 22040
347 WEST GRAND BLVD
DETROIT, MI 48209
HUBBARD FARMS LOFTS LLC
SHEET TITLE
PROPOSED FLOOR PLAN

SHEET NUMBER
A-2.0

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APPLIANCE SCHEDULE

Type Mark	Count	Description	Comments
D-1	4	DRYER (GAS)	
DW-1	18	DISHWASHER 24"	
R-1	16	RANGE 30" (GAS)	
R-2	2	RANGE 24" (GAS)	
REF-1	18	REFRIGERATOR 36"	
W-1	4	WASHER	
WD-1	11	WASHER/DRYER STACK (GAS)	
WH-1	17	WATER HEATER (ELECTRIC)	
WH-2	2	WATER HEATER (GAS)	COMMON LAUNDRY

Grand total: 92

INTERIOR DOOR SCHEDULE

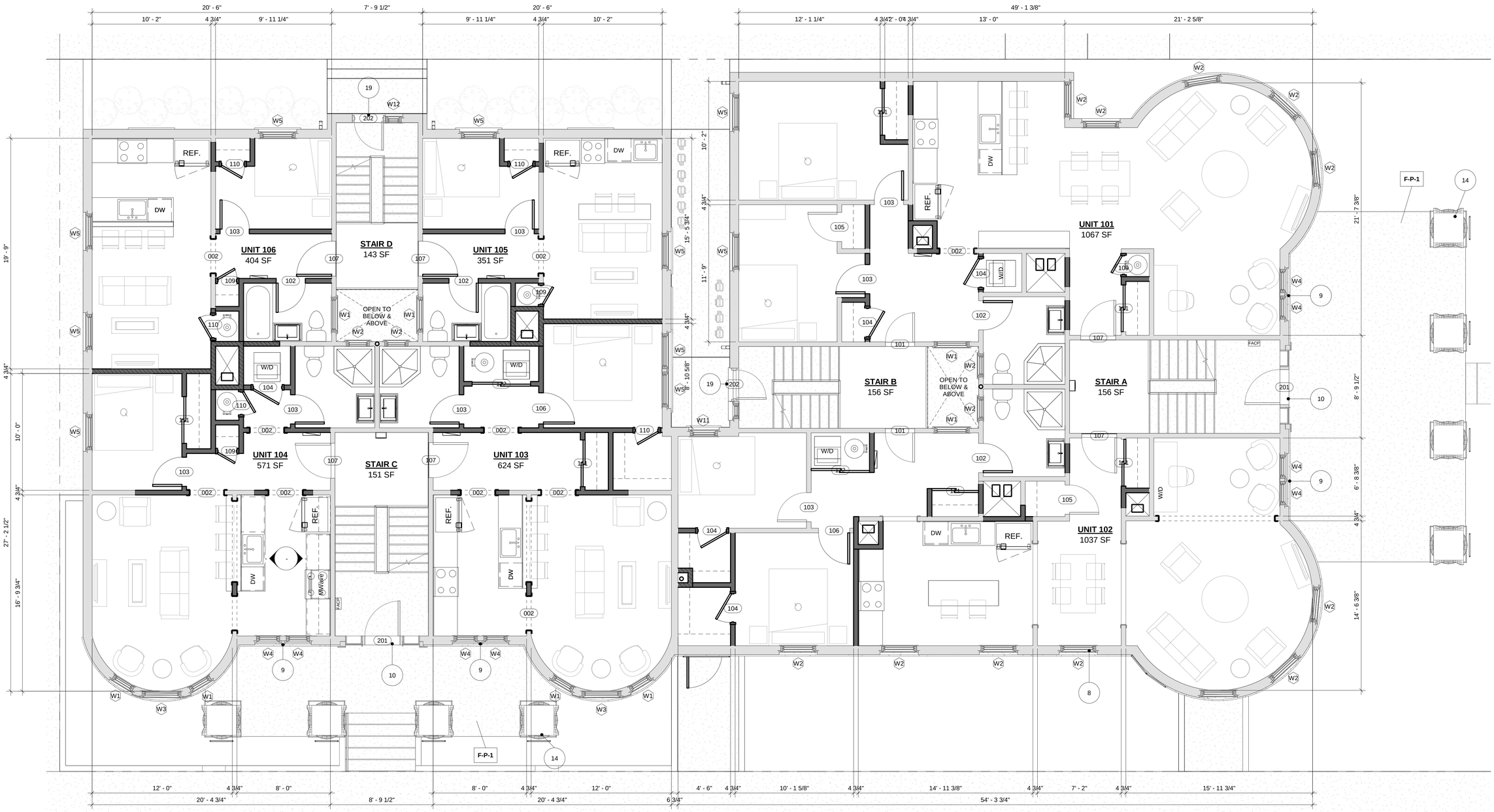
Type Mark	Count	Width	Height	Description	Fire Rating	W.S.	Panic HDWR	Closer	Hardware	Comments
001	5	2' - 6"	6' - 8"	CASED OPENING						
002	32	3' - 0"	6' - 8"	CASED OPENING						
101	10	2' - 6"	6' - 8"	SOLID WOOD DOOR				Yes	LOCK SET	
102	49	2' - 6"	6' - 8"	SOLID WOOD DOOR					PRIVACY SET	
103	20	2' - 6"	6' - 8"	SOLID WOOD DOOR					PRIVACY SET	
104	17	2' - 6"	6' - 8"	SOLID WOOD DOOR					PASSAGE SET	
105	13	2' - 6"	6' - 8"	SOLID WOOD DOOR					PASSAGE SET	
106	4	2' - 8"	6' - 8"	SOLID WOOD DOOR					PRIVACY SET	
107	18	3' - 0"	6' - 8"	SOLID WOOD DOOR				Yes	LOCK SET	
108	5	3' - 0"	6' - 8"	SOLID WOOD DOOR					PASSAGE SET	
109	12	1' - 8"	6' - 8"	SOLID WOOD DOOR					PASSAGE SET	
110	14	2' - 0"	6' - 8"	SOLID WOOD DOOR					PASSAGE SET	
111	15	4' - 0"	6' - 8"	SLIDING CLOSET						
112	5	5' - 0"	6' - 8"	SLIDING CLOSET						

FIRST FLOOR ROOM SCHEDULE

Name	Unit Type	Area
CIRCULATION		
STAIR A		156 SF
STAIR B		156 SF
STAIR C		151 SF
STAIR D		143 SF
RESIDENTIAL A		
UNIT 101	2 BEDROOM	1067 SF
UNIT 103	1 BEDROOM	624 SF
UNIT 106	1 BEDROOM	404 SF
RESIDENTIAL B		
UNIT 102	2 BEDROOM	1037 SF
UNIT 104	1 BEDROOM	571 SF
UNIT 105	1 BEDROOM	351 SF
Grand total: 10		4662 SF

KEYNOTE LEGEND

8	NEW ALUMINUM CLAD WOOD WINDOWS, TYP. THROUGHOUT, REFER TO WINDOW SCHEDULE
9	RESTORE EXISTING LEADED GLASS WINDOW AT MAIN ENTRY, INSPECT ALL PANES, REPLACE ALL BROKEN OR MISSING PIECES, REPAIR & RESODER ALL LEAD CAMMING AS NEEDED
10	RESTORE EXISTING DOOR, SIDELITES, & TRANSOM, REPAIR OR REPLACE EXISTING DECORATIVE TRIM, PAINT
14	RESTORE EXISTING COLUMN BASES, PAINT
19	NEW EXTERIOR DOOR, REFER TO DOOR SCHEDULE



1 A-1.2 **FIRST FLOOR - PROPOSED**

1/4" = 1'-0"

LEGEND

PROPOSED

EXISTING

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Revision Schedule

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3	HDC Set	08.14.2026

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W. GRAND BLVD. APARTMENTS

PROJECT NUMBER 2326A0

347 WEST GRAND BLVD
DETROIT, MI 48209

HUBBARD FARMS LOFTS LLC

SHEET TITLE

PROPOSED FLOOR PLAN

SHEET NUMBER

A-2.1

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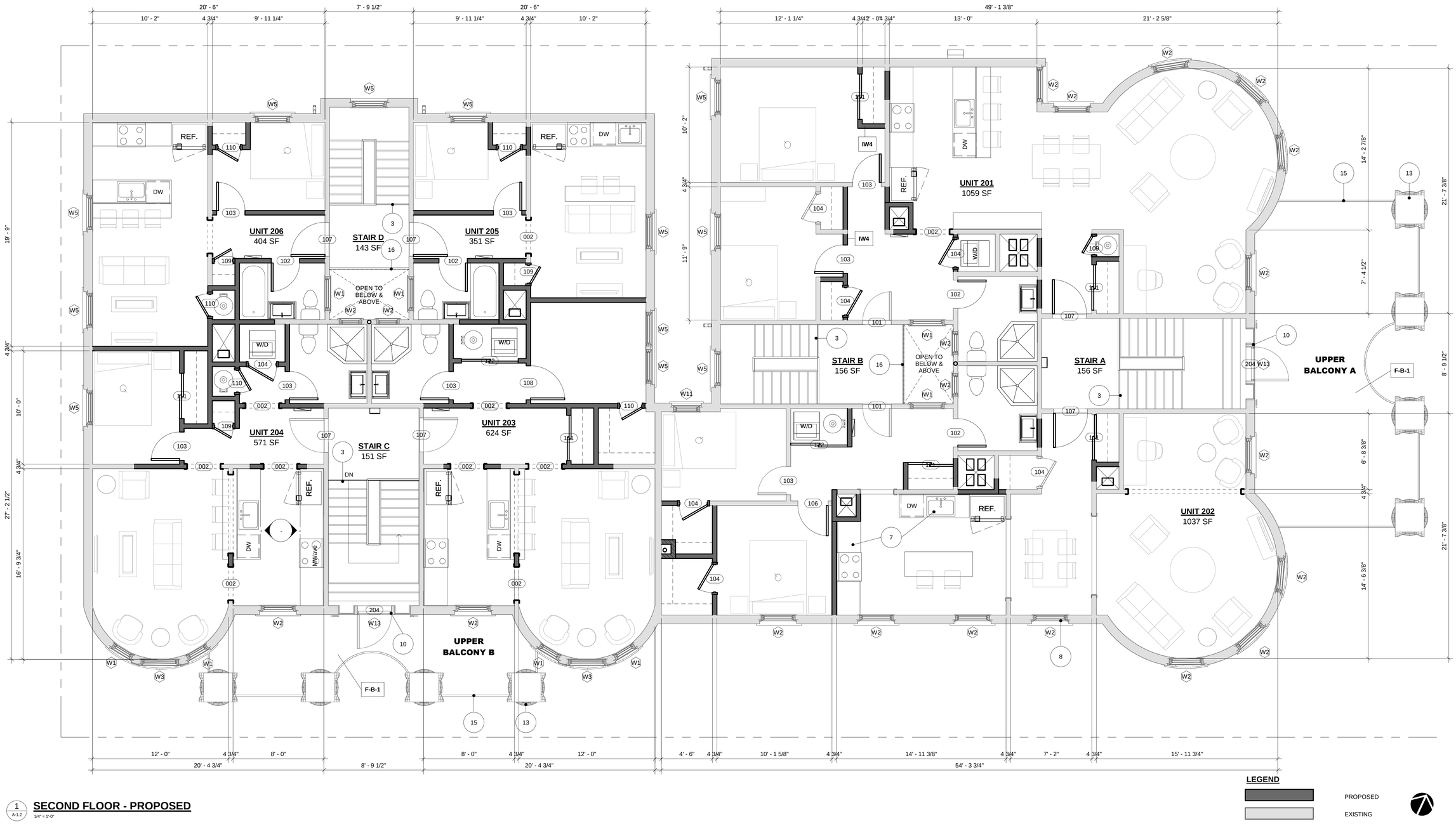
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FLOOR SCHEDULE			
Type Mark	Description	Area	Comments
F-1	EXISTING WOOD FRAMED FLOOR - REPAIR / REPLACE AS REQ'D.	4692 SF	
F-B-1	EXISTING WOOD FRAMED BALCONY - REPAIR / REPLACE AS REQ'D.	4656 SF	
F-P-1	EXISTING CONCRETE PORCH - REPAIR / REPLACE AS REQ'D.	655 SF	
FC1	EXISTING CONCRETE SLAB - REPAIR / REPLACE AS REQ'D.	4707 SF	
Grand total: 11		14709 SF	

SECOND FLOOR ROOM SCHEDULE		
Name	Unit Type	Area
RESIDENTIAL A		
UNIT 201	2 BEDROOM	1059 SF
UNIT 203	1 BEDROOM	624 SF
UNIT 206	1 BEDROOM	404 SF
RESIDENTIAL B		
UNIT 202	2 BEDROOM	1037 SF
UNIT 204	1 BEDROOM	571 SF
UNIT 205	1 BEDROOM	351 SF
Grand total: 6		4047 SF

KEYNOTE LEGEND

3	RESTORE EXISTING STAIRWELLS, RESTORE OR REPLACE FINISHES PER OWNER SELECTIONS
7	NEW KITCHEN CABINETRY & FIXTURES/APPLIANCES, FINAL SELECTIONS BY OWNER
8	NEW ALUMINUM CLAD WOOD WINDOWS, TYP. THROUGHOUT, REFER TO WINDOW SCHEDULE
10	RESTORE EXISTING DOOR, SIDELITES, & TRANSOM, REPAIR OR REPLACE EXISTING DECORATIVE TRIM, PAINT
13	RESTORE EXISTING COLUMNS, PAINT
15	RESTORE EXISTING PORCH RAILING, REPLACE ANY BROKEN OR MISSING PICKETS, PAINT
16	RESTORE EXISITNG STAIR RAILING



1 A-1.2 **SECOND FLOOR - PROPOSED**
1/4" = 1'-0"

LEGEND
PROPOSED
EXISTING

ARCHITECTS + INNOVATORS
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PROJECT NUMBER: 22040
347 WEST GRAND BLVD
DETROIT, MI 48209
HUBBARD FARMS LOFTS LLC
SHEET TITLE
PROPOSED FLOOR PLAN

SHEET NUMBER
A-2.2

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Docusign Envelope ID: 123CBD13-CC93-86BE-82D4-881916C1066A

SKYLIGHT SCHEDULE

Type Mark	Count	Width	Height	Description	Comments
SL-1	1	7' - 0"	7' - 0"	WASCO PINNACLE 350 OR APPROVED EQUAL	
SL-2	1	7' - 0"	7' - 0"	WASCO PINNACLE 350 OR APPROVED EQUAL	

Mechanical Equipment Schedule

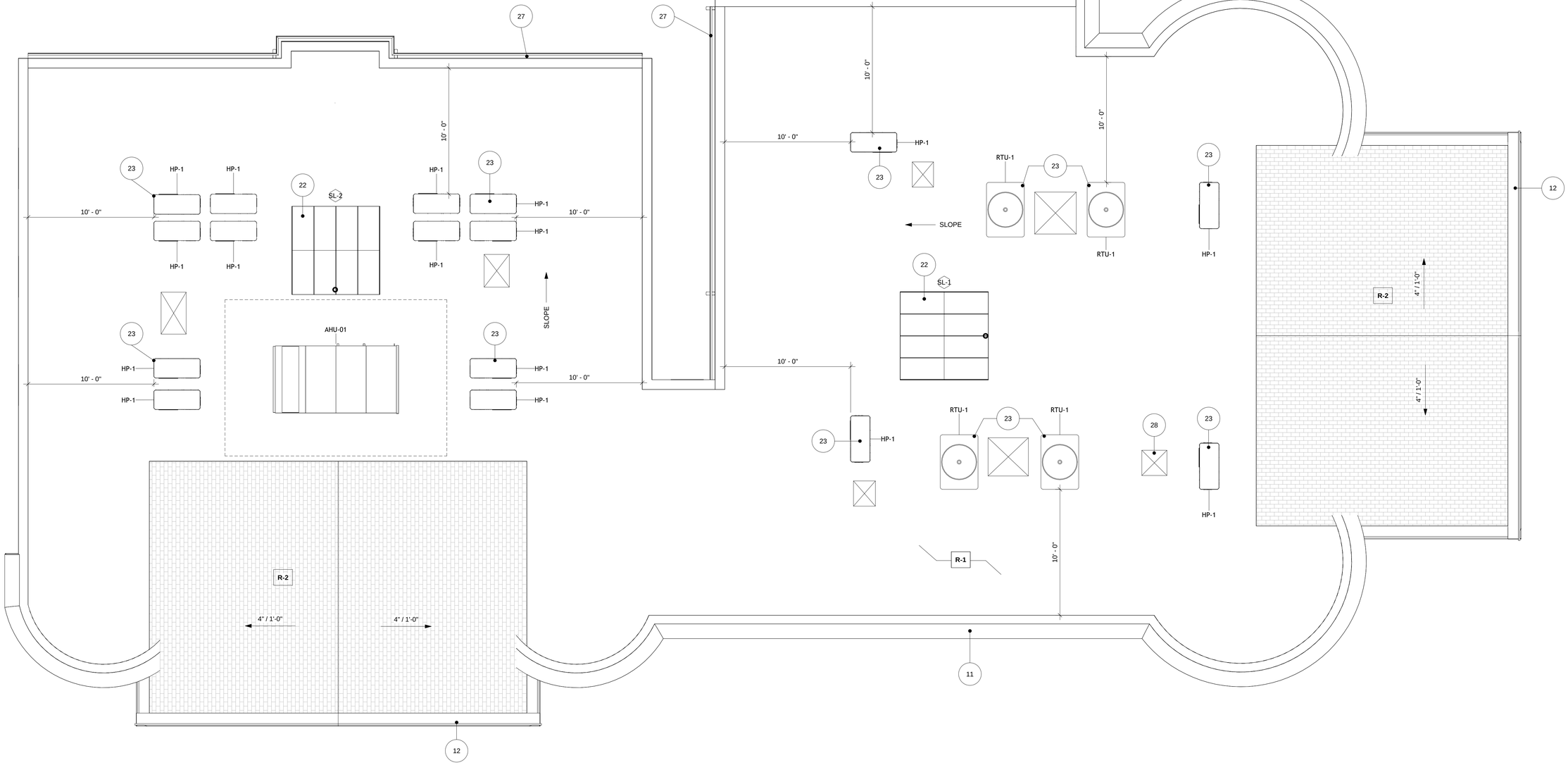
Type Mark	Count	Manufacturer	Model	Description	Comments
AHU-01	1	YORK	JROA 36 1	PACKAGED UNIT - DOAS	
HP-1	16	HITACHI	PAS-12BUFASDQ1 / PPK-12BUFASDQ1	12000 BTU/HR WALL MOUNT HEAT PUMP SYSTEM	
RTU-1	4	FRASER JOHNSTON	PG3E24L07S21	RESIDENTIAL 2-TON	

ROOF SCHEDULE

Type Mark	Area	Description	Comments
R-1	4488 SF	NEW 0.60 MIL EPDM MEMBRANE ROOF ASSEMBLY, EXISTING ROOF FRAMING TO BE REBUILT PER STRUCTURAL	
R-2	1270 SF	NEW ASPHALT SHINGLE ROOFING, CERTAINTEED LANDMARK IN GEORGETOWN GRAY, OR APPROVED EQUAL, EXISTING ROOF FRAMING TO BE REBUILT PER STRUCTURAL	
Grand total	5757 SF		

KEYNOTE LEGEND

11	RESTORE EXISTING CORNICE, PAINT
12	RESTORE EXISTING PEDIMENT, PAINT
22	RESTORE / REPLACE EXISTING SKYLIGHT
23	NEW ROOFTOP EQUIPMENT, REFER TO HVAC
27	NEW PRE-FINISHED ALUMINUM GUTTERS AND DOWNSPOUTS, TYP.
28	PROPOSED SHAFT LOCATION, TYP.



1 A-1.2 **ROOF PLAN - PROPOSED**
1/4" = 1'-0"

LEGEND
PROPOSED
EXISTING

fuz LTD ARCHITECTS + INNOVATORS
Port Huron Office
208 Huron Ave., Suite 1
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Web: infuzarchitects.com

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Revision Schedule

#	Description	Date
1	Preliminary Pricing Set	05.07.2026
2	Pricing Set	07.31.2026
3	HDC Set	08.14.2026

SEAL

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DATE SEALED

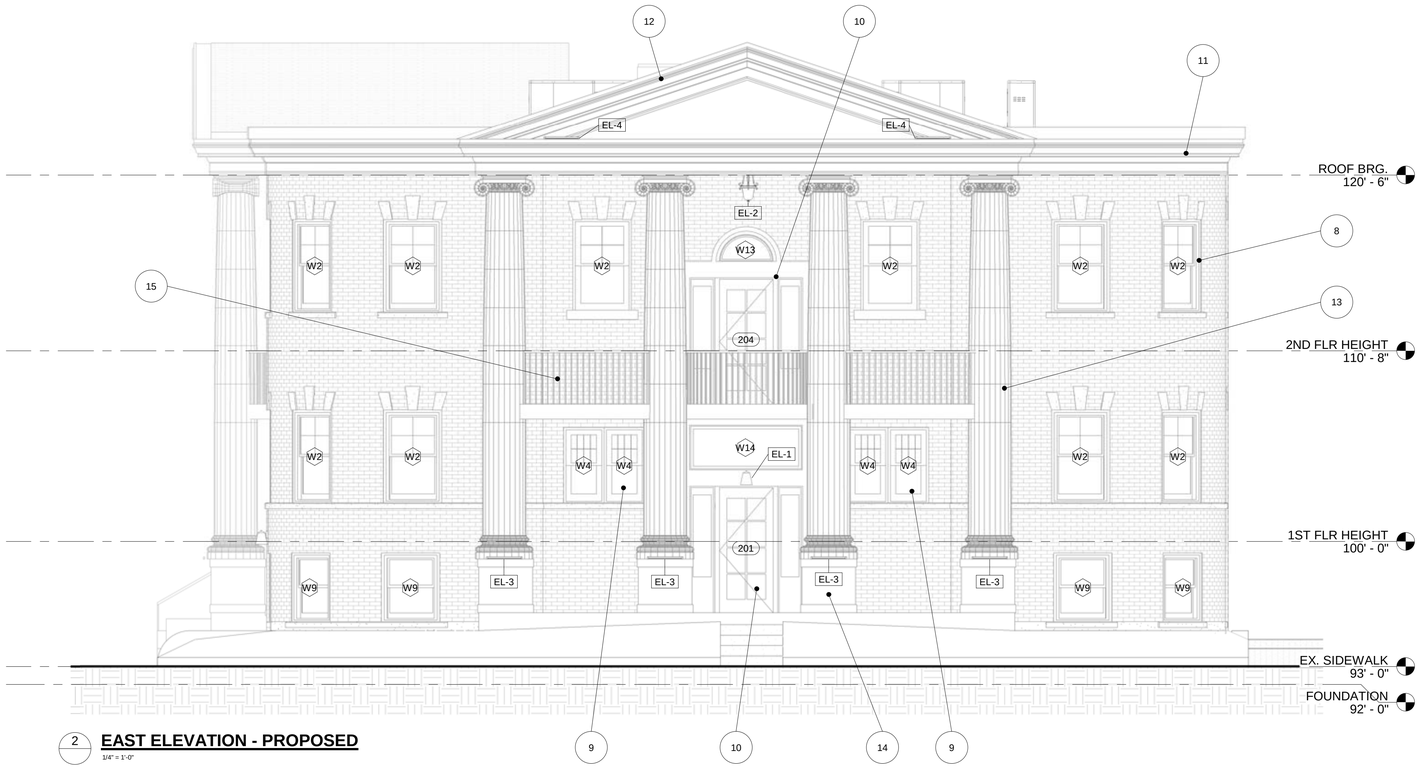
W. GRAND BLVD. APARTMENTS
PROJECT NUMBER 22040
347 WEST GRAND BLVD
DETROIT, MI 48209
HUBBARD FARMS LOFTS LLC
SHEET TITLE
PROPOSED ROOF PLAN

SHEET NUMBER
A-2.3

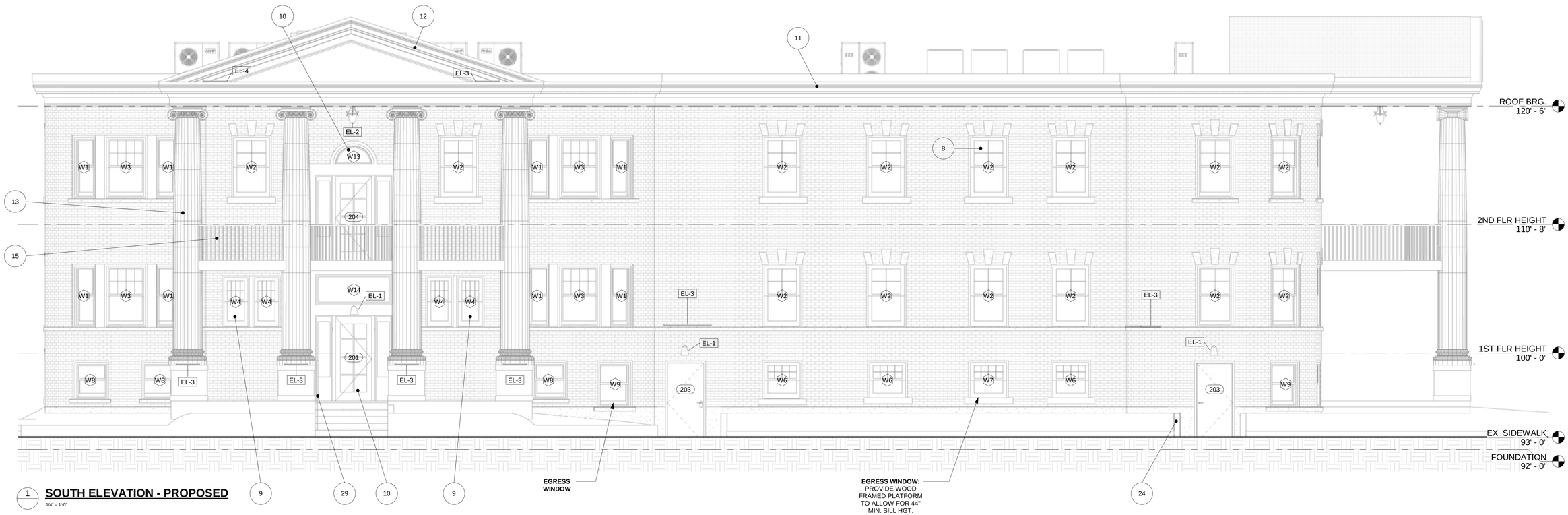
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2 **EAST ELEVATION - PROPOSED**
1/4" = 1'-0"



1 **SOUTH ELEVATION - PROPOSED**
1/4" = 1'-0"

KEYNOTE LEGEND

8	NEW ALUMINUM CLAD WOOD WINDOWS, TYP. THROUGHOUT, REFER TO WINDOW SCHEDULE
9	RESTORE EXISTING LEADED GLASS WINDOW AT MAIN ENTRY, INSPECT ALL PANES, REPLACE ALL BROKEN OR MISSING PIECES, REPAIR & RESODER ALL LEAD CAMMING AS NEEDED
10	RESTORE EXISTING DOOR, SIDELITES, & TRANSOM, REPAIR OR REPLACE EXISTING DECORATIVE TRIM, PAINT
11	RESTORE EXISTING CORNICE, PAINT
12	RESTORE EXISTING PEDIMENT, PAINT
13	RESTORE EXISTING COLUMNS, PAINT
14	RESTORE EXISTING COLUMN BASES, PAINT
15	RESTORE EXISTING PORCH RAILING, REPLACE ANY BROKEN OR MISSING PICKETS, PAINT
24	NEW CONCRETE RETAINING WALL AND WALKWAY, REFER TO CIVIL
29	NEW METAL PIPE HANDRAIL, PAINT BLACK

NEW WINDOW SCHEDULE

Type Mark	Count	Width	Height	Window Type	Comments
W1	8	2' - 0"	5' - 0"	Double Hung: 1 over 1	
W2	28	3' - 0"	5' - 0"	Double Hung: 4 over 1	
W3	4	3' - 4"	5' - 0"	Double Hung: 8 over 1	
W4	8	2' - 0"	4' - 0"	Double Hung: Leaded Glass	RESTORE EXISTING
W5	22	3' - 0"	5' - 0"	Double Hung: 1 over 1	
W6	3	3' - 0"	3' - 0"	Double Hung: 8 over 1	
W7	1	3' - 0"	3' - 0"	Double Hung: 8 over 1	SIMULATED DOUBLE-HUNG CASEMENT FOR EGRESS
W8	13	3' - 0"	3' - 0"	Double Hung: 1 over 1	
W9	8	3' - 0"	3' - 8"	Double Hung: 1 over 1	
W10	1	2' - 4"	3' - 0"	Double Hung: 1 over 1	
W11	2	2' - 4"	5' - 0"	Double Hung: 1 over 1	
W12	2	1' - 4"	3' - 0"	Double Hung: 1 over 1	
W13	2	3' - 0"	1' - 6"	Arched Transom Window	
W14	2	6' - 4"	2' - 6"	Transom Window	

WINDOW NOTES:
ALL REPLACEMENT WINDOWS TO BE PELLA LIFESTYLE SERIES OR APPROVED EQUAL

EXTERIOR DOOR SCHEDULE

Type Mark	Count	Width	Height	Description	W.S.	Panic HDWR	Closer	Hardware	Comments
201	2	3' - 0"	7' - 0"	Existing Full-Lite Door	Yes		Yes		
202	2	2' - 6"	6' - 8"	Existing Half-Lite Door	Yes		Yes		
203	4	3' - 0"	6' - 8"	Solid Door	Yes		Yes		
204	2	3' - 0"	7' - 0"	Existing Full-Lite Door	Yes				

DOOR NOTES:
REPLACEMENT SOLID DOORS TO BE STEELCRAFT OR APPROVED EQUAL

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Revision Schedule

#	Description	Date
1	Preliminary Pricing Set	05.07.2026
2	Pricing Set	07.31.2026
3	HDC Set	08.14.2026

SEAL

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DATE SEALED

W. GRAND BLVD. APARTMENTS
347 WEST GRAND BLVD
DETROIT, MI 48209
PROJECT NUMBER 25040
HUBBARD FARMS LOFTS LLC
SHEET TITLE
PROPOSED EXTERIOR ELEVATIONS

SHEET NUMBER
A-3.0

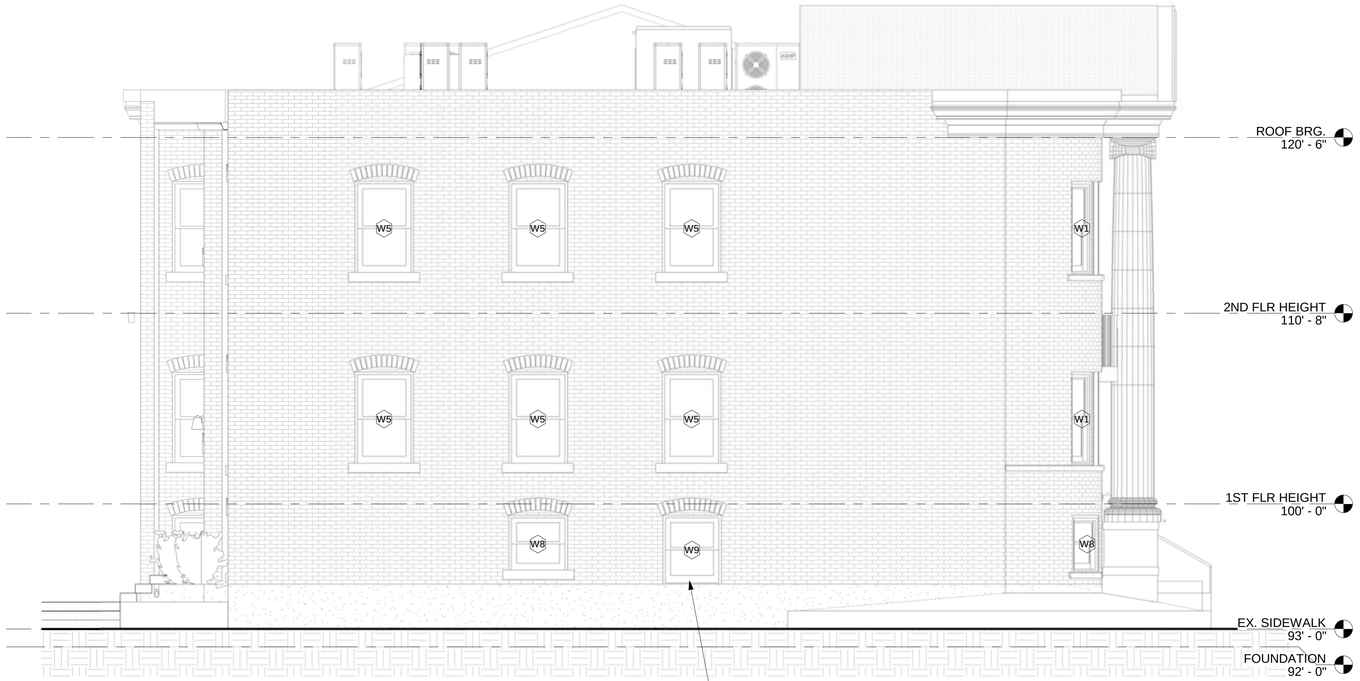
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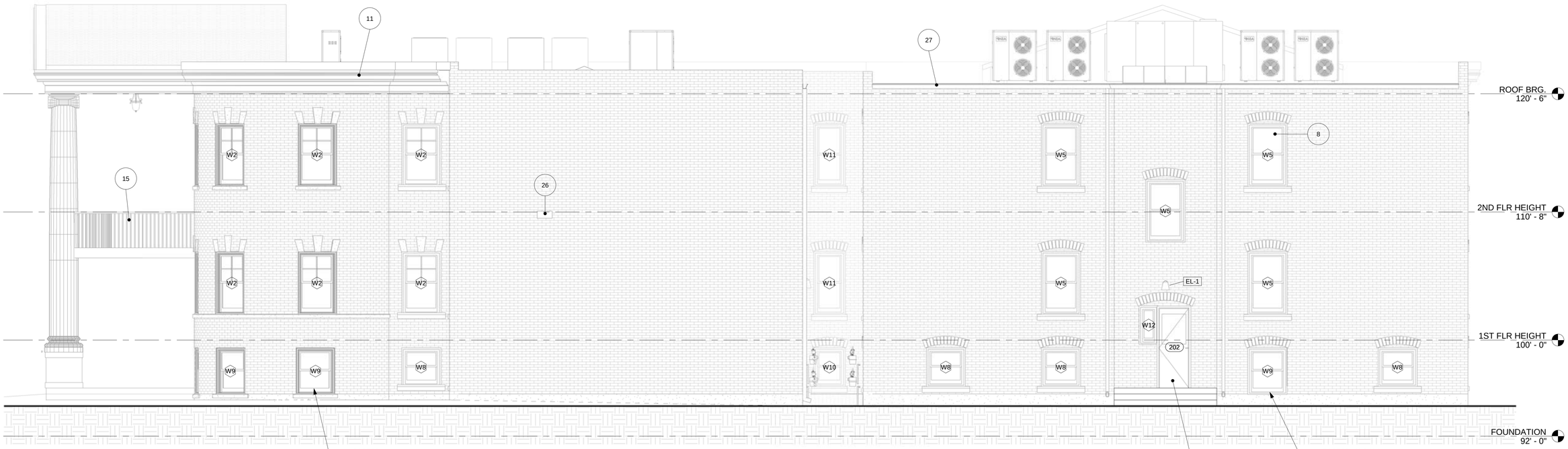
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KEYNOTE LEGEND

8	NEW ALUMINUM CLAD WOOD WINDOWS, TYP. THROUGHOUT, REFER TO WINDOW SCHEDULE
11	RESTORE EXISTING CORNICE, PAINT
15	RESTORE EXISTING PORCH RAILING, REPLACE ANY BROKEN OR MISSING PICKETS, PAINT
19	NEW EXTERIOR DOOR, REFER TO DOOR SCHEDULE
26	NEW WALL MOUNT EXTERIOR LIGHT FIXTURE FOR THE PARKING LOT, REFER TO SITE LIGHTING
27	NEW PRE-FINISHED ALUMINUM GUTTERS AND DOWNSPOUTS, TYP.



2 **WEST ELEVATION - PROPOSED**
1/4" = 1'-0"



1 A-202 **NORTH ELEVATION - PROPOSED**
1/4" = 1'-0"

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W. GRAND BLVD. APARTMENTS

PROJECT NUMBER 22040
347 WEST GRAND BLVD
DETROIT, MI 48209

HUBBARD FARMS LOFTS LLC

SHEET TITLE
PROPOSED EXTERIOR ELEVATIONS

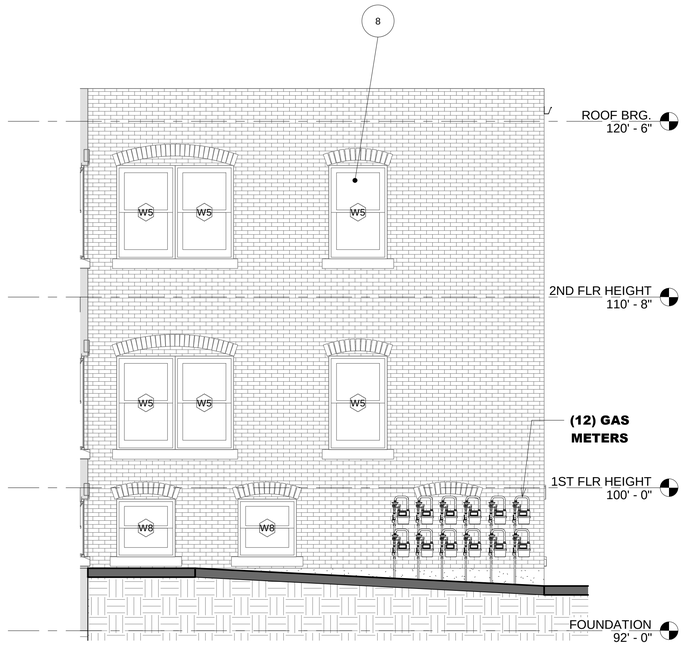
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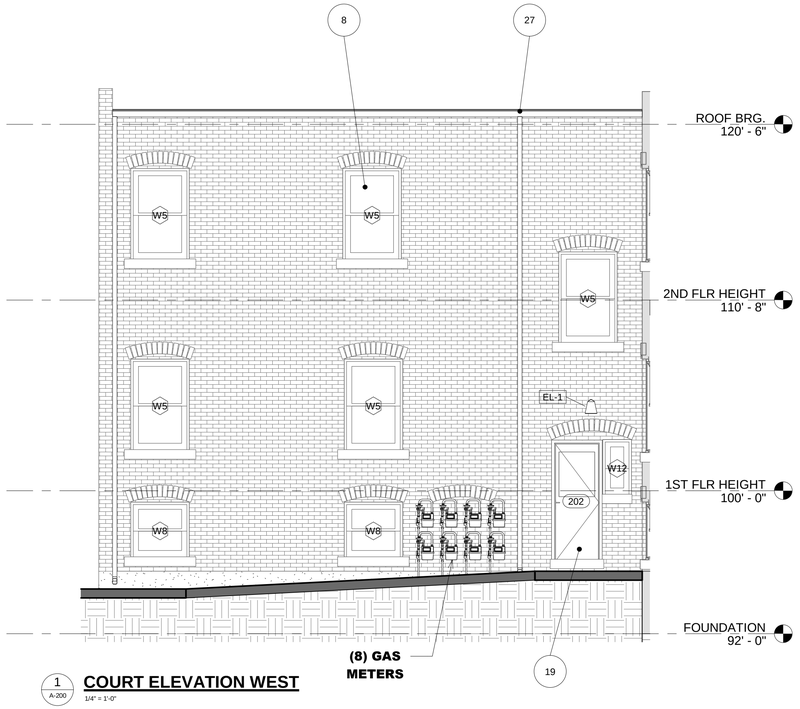
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KEYNOTE LEGEND	
8	NEW ALUMINUM CLAD WOOD WINDOWS, TYP. THROUGHOUT, REFER TO WINDOW SCHEDULE
19	NEW EXTERIOR DOOR, REFER TO DOOR SCHEDULE
27	NEW PRE-FINISHED ALUMINUM GUTTERS AND DOWNSPOUTS, TYP.



2 A-200 **COURT ELEVATION EAST**
1/4" = 1'-0"



1 A-200 **COURT ELEVATION WEST**
1/4" = 1'-0"

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3	HDC Set	08.14.2026

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W. GRAND BLVD. APARTMENTS

347 WEST GRAND BLVD
DETROIT, MI 48209

PROJECT NUMBER 22040

HUBBARD FARMS LOFTS LLC

SHEET TITLE

PROPOSED ELEVATIONS

SHEET NUMBER

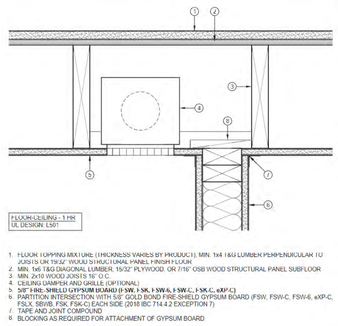
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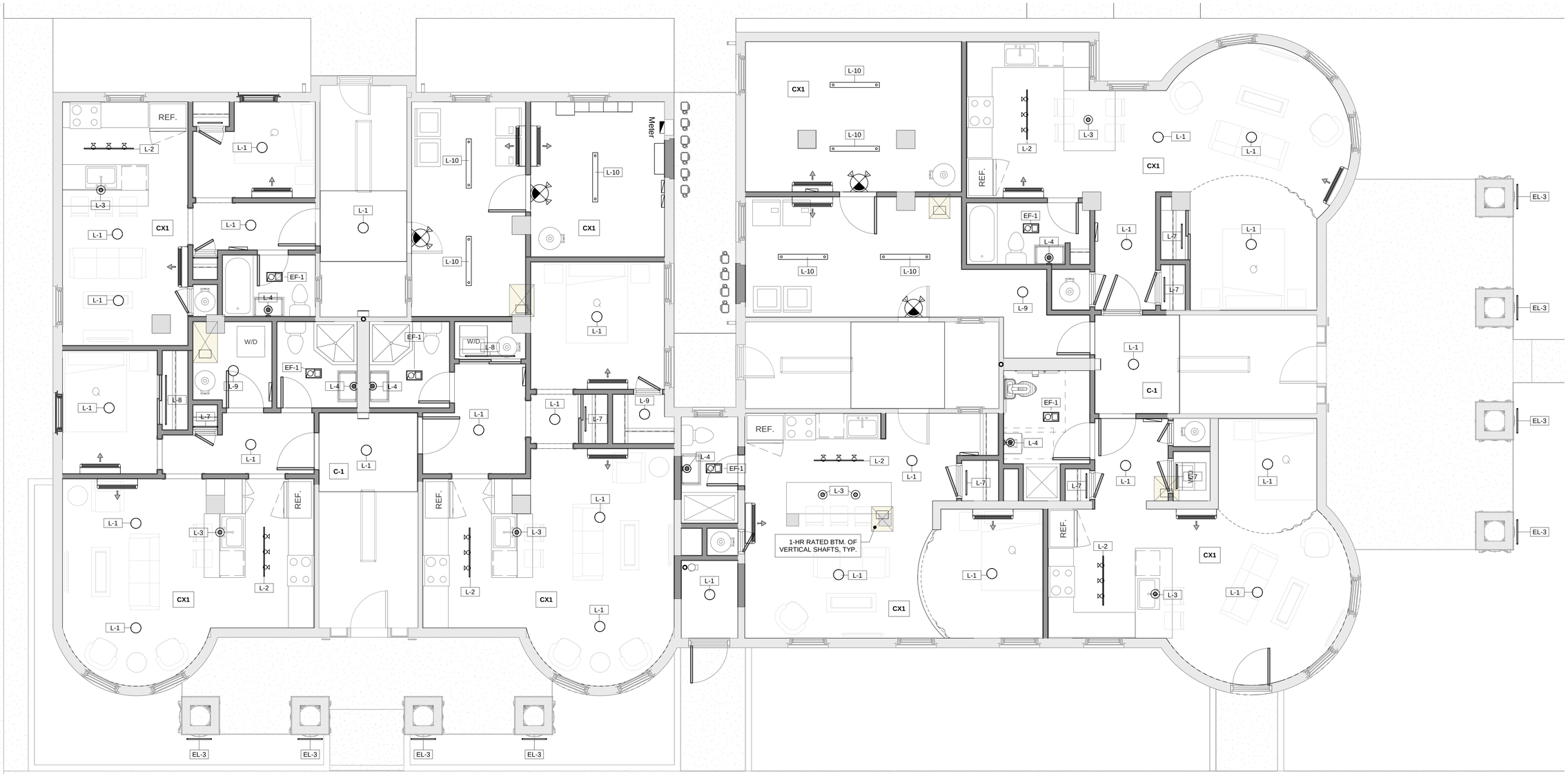
LIGHTING FIXTURE SCHEDULE			
Type Mark	Count	Description	Comments
CF-1	8	CEILING FAN W/ LIGHT	
EF-1	19	BATHROOM FAN W/ LIGHT	
EL-1	6	EXTERIOR SCONCE	
EL-2	2	EXTERIOR DECORATIVE PENDANT	
EL-3	12	EXTERIOR UPLIGHTING	
EL-4	3	EXTERIOR SPOT LIGHTING	
ES-1	4	EMERGENCY EXIT SIGN	
L-1	91	FLUSH MOUNT FIXTURE	
L-2	22	TRACK LIGHTING	
L-3	27	PENDANT	
L-4	18	BATHROOM SCONCE	
L-5	4	SEMI-FLUSH MOUNT FIXTURE	
L-6	4	INTERIOR DECORATIVE PENDANT	
L-7	26	24" STRIP LIGHT	
L-8	4	48" STRIP LIGHT	
L-9	8	UTILITARIAN FLUSH MOUNT FIXTURE	
L-10	7	48" LINEAR FLUSH MOUNT FIXTURE	
Grand total	265		



1. FLOOR COVERING MATERIAL (THICKNESS VARIES BY PRODUCT), MIN. 1x4 T&G LUMBER PERPENDICULAR TO JOISTS OR 7/8"x2" WOOD STRUCTURAL PANEL FINISH FLOOR
2. MIN. 1x6 T&G DIAGONAL LUMBER, 15/32" PLYWOOD, OR 7/16" OSB WOOD STRUCTURAL PANEL SUBFLOOR
3. MIN. 2x10 WOOD JOISTS 16" O.C.
4. CEILING DAMPER AND GRILLE (OPTIONAL)
5. 5/8" TYPE SHIELD GYPSUM BOARD (FSW, FSW-C, FSW-6, FSW-C, FSK-C, eXP-C)
6. PARTITION INTERSECTION WITH 5/8" GOLD BOND FIRE-SHIELD GYPSUM BOARD (FSW, FSW-C, FSW-6, eXP-C, FSLX, SBVB, FSK, FSK-C) EACH SIDE (2018 IBC 714.4.2 EXCEPTION 7)
7. TAPE AND JOINT COMPOUND
8. BLOCKING AS REQUIRED FOR ATTACHMENT OF GYPSUM BOARD

CEILING SCHEDULE				
Type Mark	Area	Description	Fire Rating	Comments
C-1	999 SF	5/8" GYP. BD. ON EXISTING WOOD JOISTS		
C-2	2533 SF	5/8" GYP. BD. ON 2X4 WOOD FRAMING @ 16" O.C.		
CX1	11618 SF	5/8" TYPE X GYP. BD. ON EXISTING 2X10 WOOD JOISTS - UL DESIGN # L501 OR APPROVED EQUAL	1-HR	
EC-1	606 SF	EXISTING BEADBOARD CEILING - REPAIR/REPLACE AS REQ'D.		
Grand total	15756 SF			

KEYNOTE LEGEND



1 A-1.2 **LOWER FLOOR REFLECTED CEILING PLAN**
1/4" = 1'-0"

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Revision Schedule

#	Description	Date
1	Preliminary Pricing Set	05.07.2026
2	Pricing Set	07.31.2026
3	HDC Set	08.14.2026

SEAL

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DATE SEALED

W. GRAND BLVD. APARTMENTS

PROJECT NUMBER 22040
347 WEST GRAND BLVD
DETROIT, MI 48209

HUBBARD FARMS LOFTS LLC

SHEET TITLE
PROPOSED REFLECTED CEILING PLAN

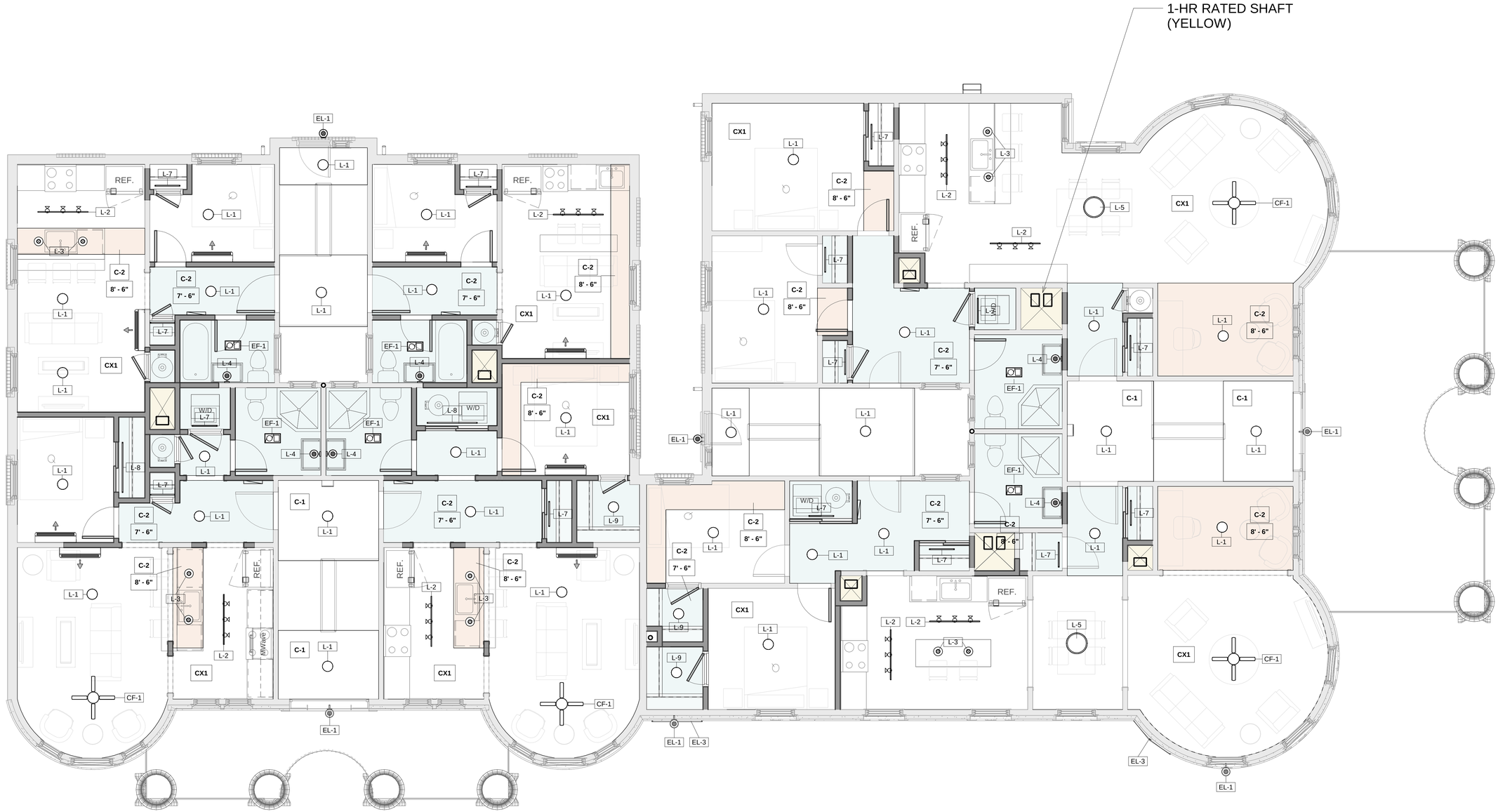
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KEYNOTE LEGEND



1 A-1.2 **FIRST FLOOR REFLECTED CEILING PLAN**
1/4" = 1'-0"

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3	HDC Set	08.14.2026

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W. GRAND BLVD. APARTMENTS

PROJECT NUMBER: 2250A0

347 WEST GRAND BLVD
DETROIT, MI 48209

HUBBARD FARMS LOFTS LLC

SHEET TITLE
PROPOSED REFLECTED CEILING PLAN

SHEET NUMBER
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KEYNOTE LEGEND



1 A-1.2 **SECOND FLOOR REFLECTED CEILING PLAN**

1/4" = 1'-0"

infuz Ltd
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W. GRAND BLVD. APARTMENTS

PROJECT NUMBER: 2250A0

347 WEST GRAND BLVD
DETROIT, MI 48209

HUBBARD FARMS LOFTS LLC

SHEET TITLE

PROPOSED REFLECTED CEILING PLAN

SHEET NUMBER

A-5.2

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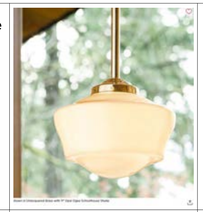
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Docusign Envelope ID: 123CBD13-CC93-86BE-82D4-881916C1066A

LIGHTING FIXTURE SELECTIONS

Type Mark	Count	Description	Basis of Design	Image	Comments
CF-1	8	CEILING FAN W/ LIGHT	Hunter Studio Series with 4 Lights 52 inch Antique Brass- Walnut		
EF-1	19	BATHROOM FAN W/ LIGHT	Panasonic or approved equal (CFM per Mech)		
EL-1	6	EXTERIOR SCONCE	Visual Comfort & Co. Mini Wall Lantern - Warren		
EL-2	2	EXTERIOR DECORATIVE PENDANT	Visual Comfort & Co. Carrington Large Lantern		
EL-3	12	EXTERIOR UPLIGHTING	Lumenpulse Lumenfacade Nano		
EL-4	3	EXTERIOR SPOT LIGHTING	Lumenpulse Lumenbeam Small		
ES-1	4	EMERGENCY EXIT SIGN	Lithonia or approved equal		
L-1	91	FLUSH MOUNT FIXTURE	Rejuvenation Cambridge LED Flush Mount - Aged Brass		
L-2	22	TRACK LIGHTING	Vidalite 4-Light Brushed Brass Integrated LED Track Light with Rotatable Heads		

LIGHTING FIXTURE SELECTIONS

Type Mark	Count	Description	Basis of Design	Image	Comments
L-3	27	PENDANT	Rejuvenation Rose City 4" Fitter Rod Pendant - Aged Brass w/ 11" Opal Ogee Schoolhouse Shade		
L-4	18	BATHROOM SCONCE	Rejuvenation Allenglade Triple Sconce - Aged Brass		
L-5	4	SEMI-FLUSH MOUNT FIXTURE	Rejuvenation Eastmoreland 8" Fitter Semi-Flush Mount - Aged Brass w/ 16" Opal Eastmoreland Shade		
L-6	4	INTERIOR DECORATIVE PENDANT	Rejuvenation Rose City 8" Fitter Chain Pendant - Aged Brass w/ Eastmoreland Opal Shade		
L-7	26	24" STRIP LIGHT	Lithonia ZL1D		
L-8	4	48" STRIP LIGHT	Lithonia ZL1D		
L-9	8	UTILITARIAN FLUSH MOUNT FIXTURE	Lithonia LED Low Profile Round		
L-10	7	48" LINEAR FLUSH MOUNT FIXTURE	Lithonia FML4W		
Grand total	265				

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W. GRAND BLVD. APARTMENTS

PROJECT NUMBER 23540

347 WEST GRAND BLVD
DETROIT, MI 48209

HUBBARD FARMS LOFTS LLC

SHEET TITLE

LIGHT FIXTURE SCHEDULE

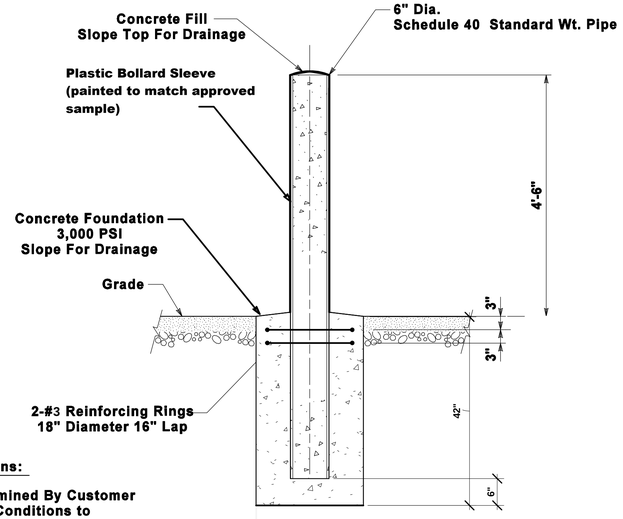
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A-5.3

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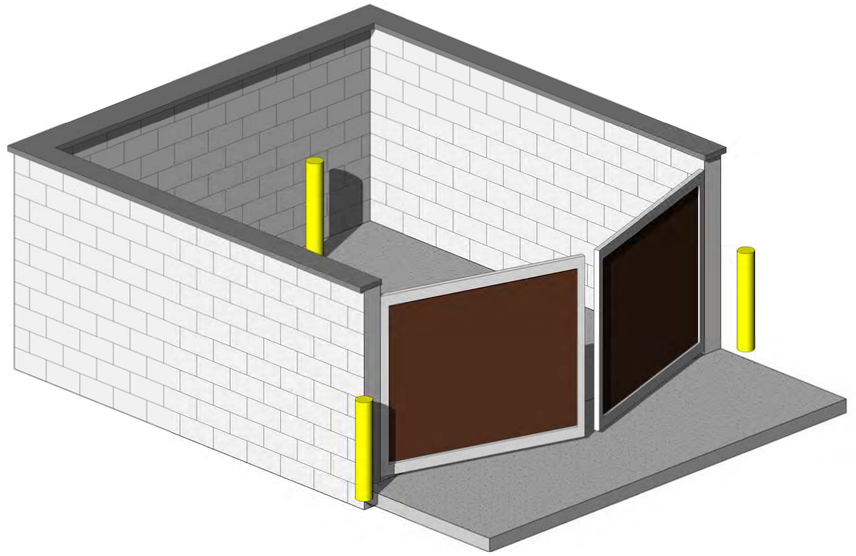
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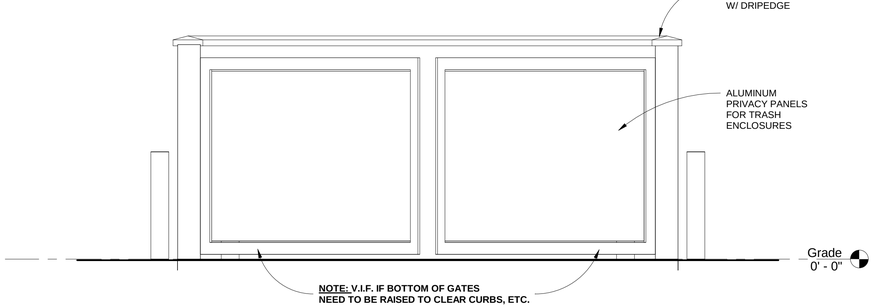
Bollard Locations:

- **Location Determined By Customer Based on Site Conditions to Protect Installation.**
- **Location of Bollards Should Not Interfere with Any Access Gates (Prevent Gates From Opening Fully).**
- **Typical Distance Between Bollards is 5'-0".**

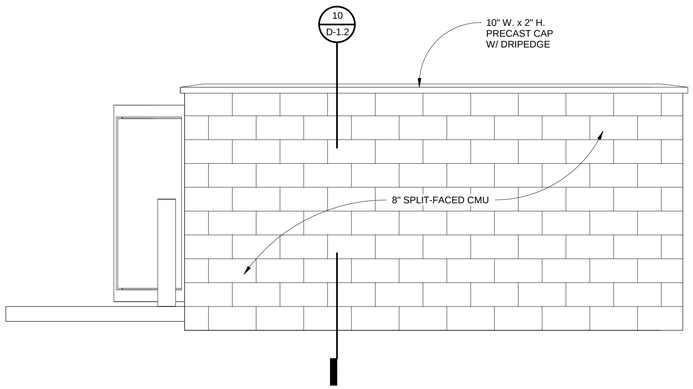
7 **SECURITY BOLLARD**
3/4" = 1'-0"



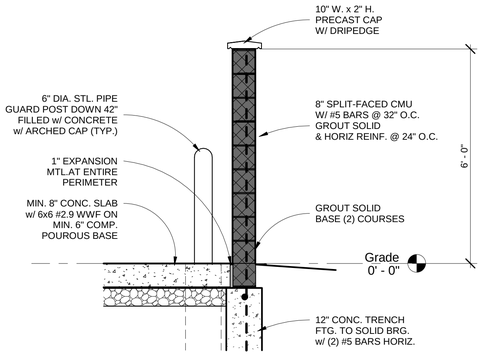
9 **DUMPSTER ENCLOSURE AXON**



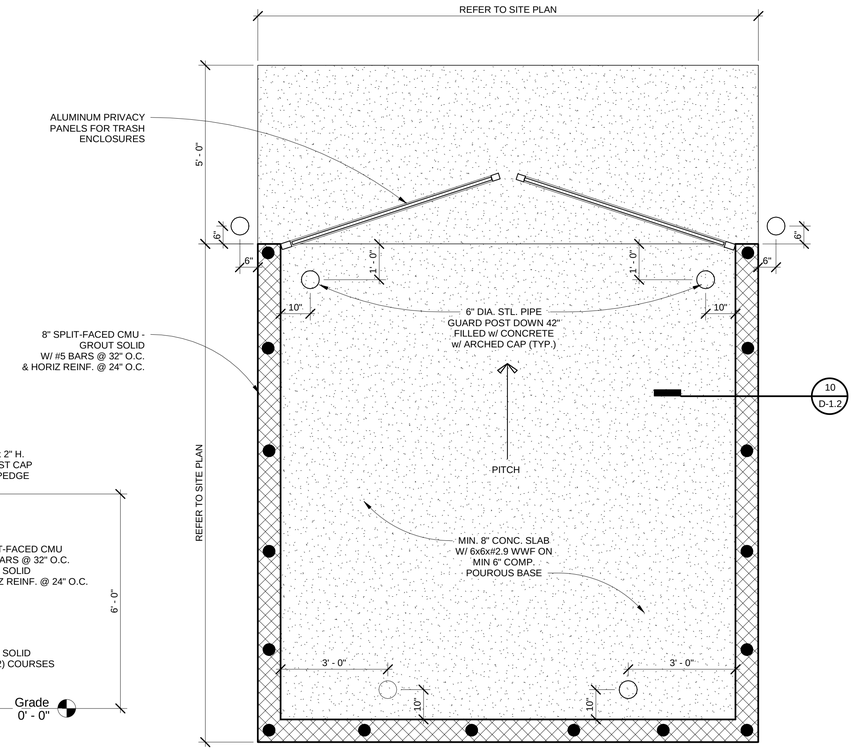
11 **DUMPSTER ENCLOSURE FRONT ELEVATION**
1/2" = 1'-0"



12 **DUMPSTER ENCLOSURE SIDE ELEVATION**
1/2" = 1'-0"



10 D-1.2 **DUMPSTER ENCLOSURE SECTION**
1/2" = 1'-0"



13 D-1.2 **DUMPSTER ENCLOSURE PLAN**
1/2" = 1'-0"

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Revision Schedule

#	Description	Date
1	Preliminary Pricing Set	05.07.2026
2	Pricing Set	07.31.2026
3	HDC Set	08.14.2026

SEAL

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DATE SEALED

W. GRAND BLVD. APARTMENTS
PROJECT NUMBER: 22040
347 WEST GRAND BLVD
DETROIT, MI 48209
HUBBARD FARMS LOFTS LLC
SHEET TITLE
SITE DETAILS - DUMPSTER ENCLOSURE

SHEET NUMBER
D-1.2

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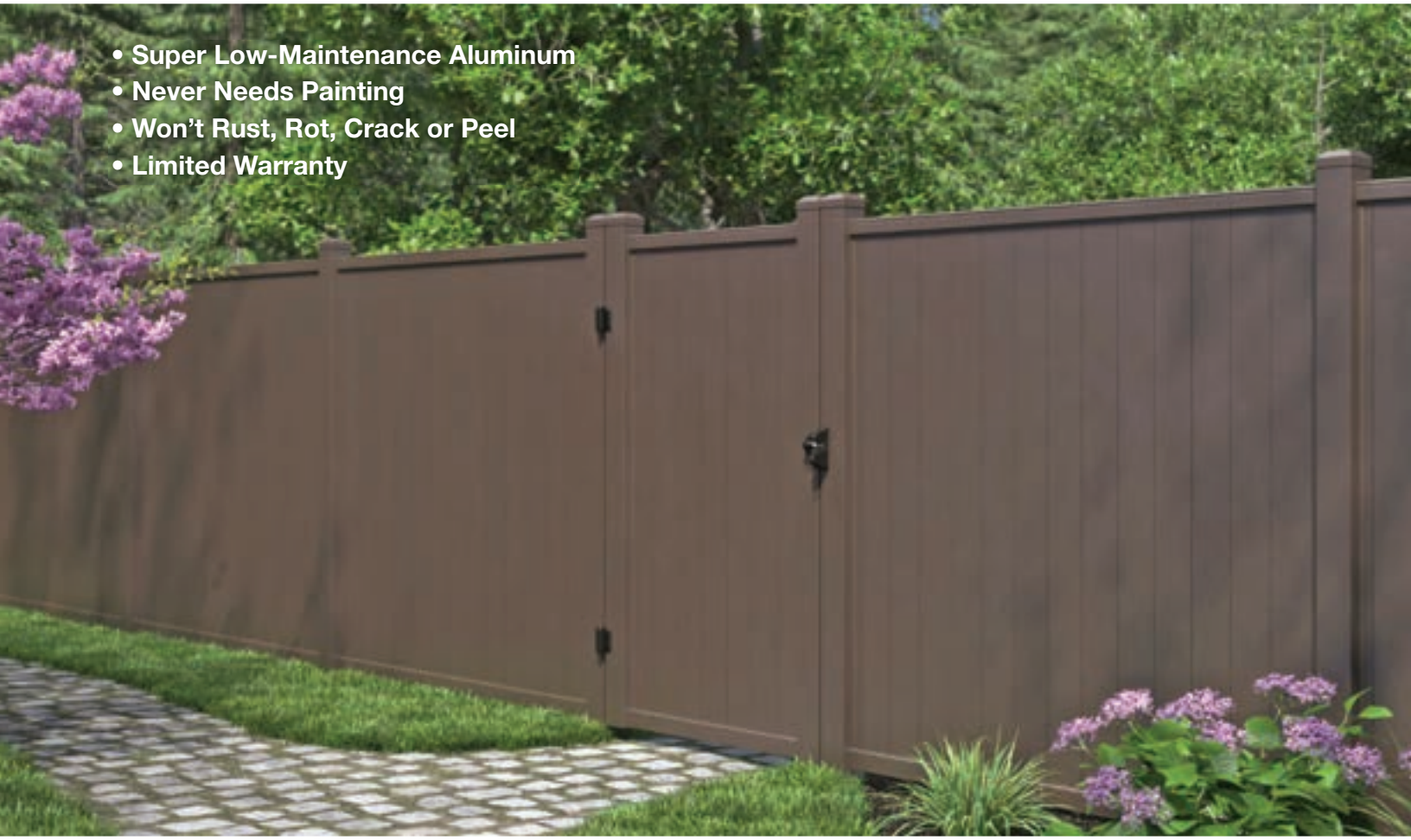
ULTRA® FENCING•RAILING

Ultra Aluminum™ Privacy Panels

Privacy fencing now comes in extra-strength aluminum.

Strong. Beautiful. Low Maintenance.

As strong as steel, but will never rust, Ultra Aluminum™ Privacy is supported with the Ultra Aluminum™ Limited Warranty. You won't find many all-aluminum privacy fence panel systems with this amazing combination of attributes. You can't get it with wood, plain vinyl or steel. It must be Ultra Aluminum™

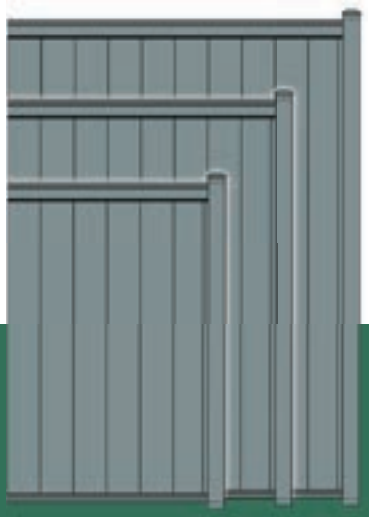


Ultra Aluminum™ Privacy Panels are offered in sections that are 6′ wide and available in heights of 4′, 5′ and 6′. Manufactured with Ultra's high strength, aluminum alloy, with a minimum strength of 35,000 psi.

The Ultra Aluminum™ Privacy System:
¾" x 5" x .080

Powder coated aluminum T&G boards

Post are available 3" or 4" square, along with top and bottom rails and matching caps



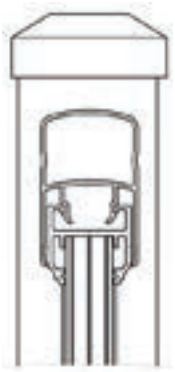
ULTRA® FENCING•RAILING ULTRA**FENCE**.COM

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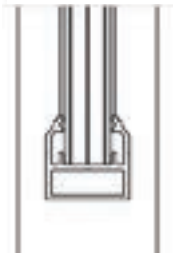
Ultra Aluminum™ Privacy Panels





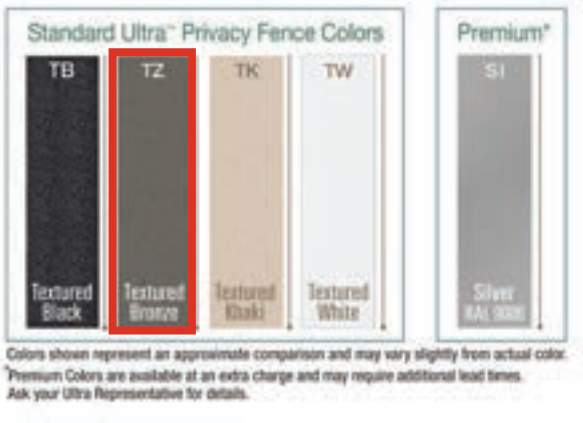


2-Rail System





Ultra Aluminum™ Privacy features strength and durability that you just can't get from a typical vinyl or wood fencing systems. The ideal privacy panel for a residential, commercial or industrial application, to contain or shield air conditioning equipment, dumpsters, pipes, and electrical systems. Ultra Aluminum™ Privacy won't rack and wobble. It is designed to last for years and years without the worry of ongoing maintenance.



Ultra Aluminum™ Warranty

Ultra Aluminum™ fencing products are warranted against defects in workmanship and/or materials. The Ultra powder coat finish is guaranteed against cracking, peeling or chipping.

Ultra Aluminum Alloys



Ultra's high strength, aluminum alloy is as strong as steel, but will never rust. Our 6005-T5 alloy has a minimum strength of 35,000 psi.

Environmentally Responsible

Ultra Aluminum™ is proud to use recycled aluminum in our products, and our powder coat coating process is environmentally friendly and virtually pollution-free.

Textured Finishes

Our advanced powder coat finish meets AAMA 2604 allowing us to produce a high-quality, long-lasting finish.

Visit our website for more information and a copy of the warranty.

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UA EA 11-23

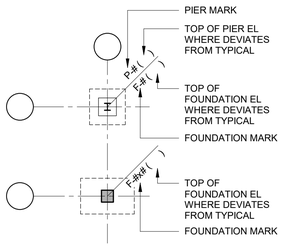
Ultra and the picket caps logo is a registered trademark of Ultra Aluminum Manufacturing Inc.

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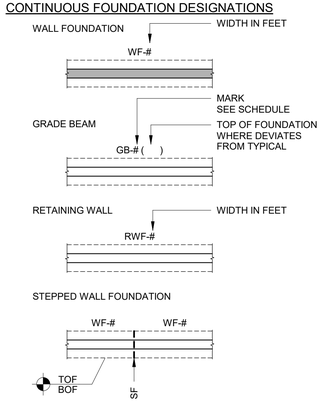
ABBREVIATIONS

ADD	ADDITIONAL
AP	AUGER CAST PILE
APPROX	APPROXIMATE
ARCH	ARCHITECTURAL DRAWINGS AND SPECIFICATIONS
BF	BRACED FRAME
BOF	BOTTOM OF FOUNDATION
BOS	BOTTOM OF STEEL
BP	BEARING PLATE
BRG	BEARING
CANT	CANTILEVERED
CB	CONCRETE BEAM
CFMF	COLD FORMED METAL FRAMING
CIP	CAST IN PLACE
CJ	CONTROL OR CONSTRUCTION JOINT
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION
CONT	CONTINUOUS OR CONTINUATION
CONTR	CONTRACTOR
COORD	COORDINATE
CFW	COLD FORMED METAL FRAMING WALL
CS	COMPOSITE SLAB
CW	CONCRETE WALL
DIA	DIAMETER
DIAG	DIAGONAL
DIM	DIMENSIONS
DP	DRILLED PIER
DPB	DRILLED PIER WITH BELL
DPC	DRILLED PIER CAP
EF	EACH FACE
EJ	EXPANSION JOINT
EL	ELEVATION
EQ	EQUAL
EW	EACH WAY
EX	EXISTING
EXP	EXPANSION
EXT	EXTERIOR
F	FOUNDATION
FDN	FOUNDATION
FF	FINISH FLOOR
FS	SLAB ON FORMED DECK
FTG	FOOTING
GALV	GALVANIZED
GB	GRADE BEAM
HORIZ	HORIZONTAL
HP	STEEL H PILE
HP	HIGH POINT
INT	INTERIOR
JT	JOINT
LLBB	LONG LEGS BACK TO BACK
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LP	LOW POINT
LSH	LONG SIDE HORIZONTAL
LSV	LONG SIDE VERTICAL
MAX	MAXIMUM
MECH	MECHANICAL
MEP	MECHANICAL, ELECTICAL, PLUMBING DRAWINGS AND SPECIFICATIONS
MIN	MINIMUM
MP	MASONRY PIER
MW	MASONRY WALL
NIC	NOT IN CONTRACT
OC	ON CENTER
OD	OUTSIDE DIAMETER
OFD	OVERFLOW ROOF DRAIN
OH	OPPOSITE HAND
OPNG	OPENING
P	PIER
PC	PRECAST
PERIM	PERIMETER
PL	PLATE
PT	POST TENSIONED
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
RD	ROOF DECK
REF	REFERENCE
REINF	REINFORCEMENT
REQD	REQUIRED
RTU	ROOF TOP UNIT
RW	RETAINING WALL
SB	SOIL BORING
SC	STEEL COLUMN
SEOR	STRUCTURAL ENGINEER OF RECORD
SF	STEP FOUNDATION
SIM	SIMILAR
SLBB	SHORT LEG BACK TO BACK
SOG	SLAB ON GRADE
SP	SPACING
SW	SHEAR WALL
TB	TEST BORING
TBR	TO BE REINFORCED
TOC	TOP OF CONCRETE
TOF	TOP OF FOUNDATION
TOS	TOP OF STEEL
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
VERT	VERTICAL
VIF	VERIFY IN FIELD
WF	WALL FOUNDATION
WW	WOOD WALL
WWF	WELDED WIRE FABRIC

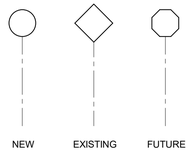
FOUNDATION DESIGNATIONS



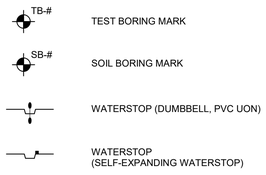
CONTINUOUS FOUNDATION DESIGNATIONS



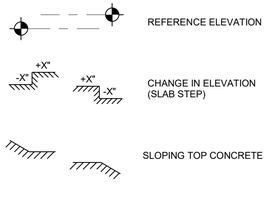
GRID DESIGNATIONS



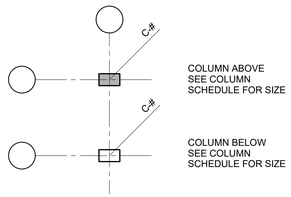
MISCELLANEOUS SYMBOLS



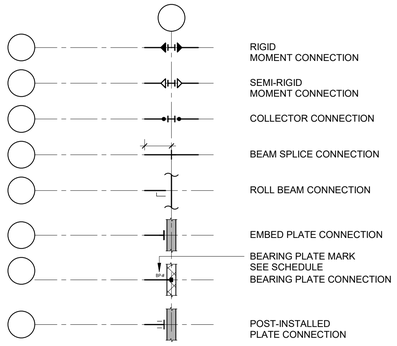
ELEVATION SYMBOLS



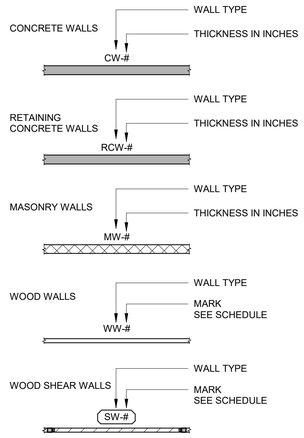
CONCRETE COLUMN DESIGNATIONS



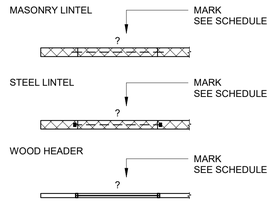
STEEL CONNECTION SYMBOLS AND DESIGNATIONS



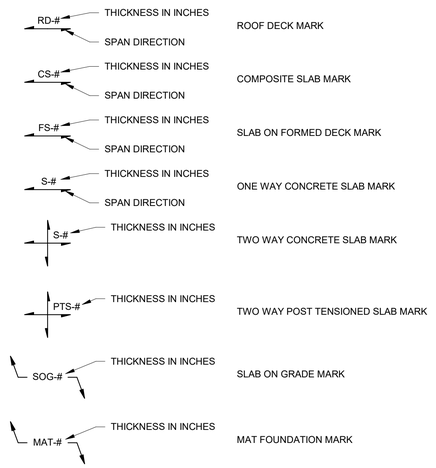
BEARING WALL DESIGNATIONS



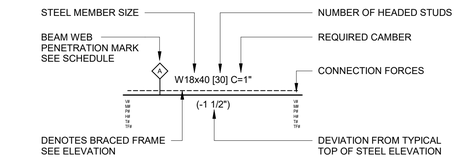
LINTEL AND HEADER DESIGNATIONS



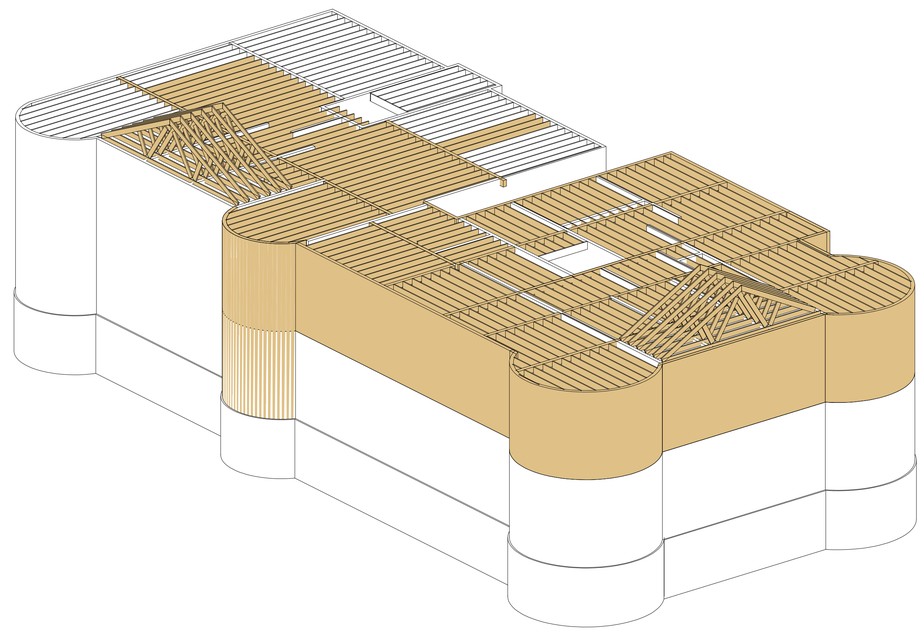
DECK AND SLAB SYMBOLS AND DESIGNATIONS



STEEL BEAM DESIGNATIONS



V#	FACTORED (LRFD) BEAM DESIGN SHEAR FORCE (KIPS)
M#	FACTORED (LRFD) BEAM DESIGN END MOMENT (FOOT-KIPS)
P#	FACTORED (LRFD) BEAM DESIGN AXIAL FORCE (KIPS)
H#	FACTORED (LRFD) BEAM DESIGN HORIZONTAL FORCE (KIPS)
T#	FACTORED (LRFD) BEAM DESIGN TORSIONAL MOMENT (FOOT-KIPS)
TF#	FACTORED (LRFD) AXIAL FORCE TRANSFERRED THROUGH THE CONNECTION JOINT (KIPS)



REFERENCE ELEVATION SCHEDULE

LEVEL	ELEVATION
BASEMENT	92' - 0"
FLOOR	99' - 2"
SECOND FLOOR	109' - 10"
ROOF	120' - 6"

DRAWING LIST

SHEET #	SHEET TITLE
S.001	SYMBOLS AND DESIGNATIONS
S.002	GENERAL NOTES
S.003	SPECIAL INSPECTIONS
S.100	FIRST FLOOR FRAMING PLAN
S.110	SECOND FLOOR FRAMING PLAN
S.120	ROOF FRAMING PLAN
S.501	STEEL COLUMN SCHEDULE AND BASE PLATE DETAILS
S.502	STEEL SHEAR CONNECTION DETAILS
SD.100	FIRST FLOOR FRAMING DEMOLITION PLAN
SD.110	SECOND FLOOR FRAMING DEMOLITION PLAN
SD.120	ROOF FRAMING DEMOLITION PLAN
X.1000	LIVE SCHEDULES

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Revision Schedule

#	Description	Date

SEAL

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Project Status

Project Name

PROJECT NUMBER Project Number
Enter address here

Owner

SHEET TITLE
SYMBOLS AND DESIGNATIONS

SHEET NUMBER
S.001

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WOOD

1. Framing Lumber: Spruce Pine Fir No. 2 or better or as noted otherwise.
2. Glued Laminated Timber (Glulam): Visually graded Western Species DF/DF combination symbol 24F-V4 for simple span beams, 24F-V8 for continuous and/or cantilever beams, and DF combination symbol #9 for columns, unless noted otherwise.
3. TimberStrand (LSL): All LSL members shall have the following minimum properties: Fb = 1700 psi, Fc^ = 635 psi, E = 1300 ksi.
4. Parallam (PSL): All PSL posts shall have the following minimum properties: Fb = 2400 psi, Fc parallel to grain = 2500 psi, E = 1800 ksi
5. Wolmanized Parallam (WPSL): All exterior exposed posts shall be WPSL posts shall have the following minimum properties: Fb = 1728 psi, Fc parallel to grain = 1450 psi, E = 1566 ksi.
6. Wood Structural Panel Sheathing: All panels shall be and rated by the American Plywood Association (APA).
7. All members (studs, headers and plywood) in exterior walls and as noted on architectural drawings shall be Fire Retarded Treated Wood (FRTW) to match properties listed above.
8. Nails: Standard Common with the following minimum penetrations into support member:
   - 6d (diameter 0.113") with 1.25" penetration
   - 8d (diameter 0.131") with 1.50" penetration
   - 10d (diameter 0.148") with 1.63" penetration
   - 16d (diameter 0.162") with 1.75" penetration
9. Bolts for connections: ASTM A307 with ASTM A563 heavy hex nuts and hardened washers, Grade A, unless noted otherwise.
10. Special Treatments (American Wood Preservers Institute Standards): All wood in contact with concrete, masonry or soil: Pressure treated with Wolman CCA preservative or equal.
11. Minimum Nailing Requirements (See drawings for areas with greater requirements):
    A. Roof: Nail all sheathing panels with 8d common nails at 6" o.c. at all supported edges and at 12" o.c. at all intermediate supports. Use two plyclips between each support for spans of 48" o.c. and one plyclip between each support for lesser spans at all unsupported panel edges.
    B. Floor: Nail all sheathing panels with 8d common nails at 6" o.c. at all supported edges and 8d at 10" o.c. at all intermediate supports.
    C. Walls: Nail all sheathing panels with 8d common nails at 6" o.c. at all edges and at 12" o.c. at all intermediate supports (3/8" or 7/16" panels on studs spaced at 24" o.c. requires 6" spacing at all intermediate supports). Solid block all panel edges.
12. General Framing and Carpentry: Connect all items as per NDS "Fastening Schedule", unless noted otherwise.
13. Framing Connections
    A. All Framing connections not shown or otherwise indicated on the drawings shall be connected in a manner similar to the connections shown in the drawings or with approved Simpson Strong-Tie Connectors or Equal. The following notations refer to Simpson Strong-Tie Connectors:
       - Joist and Rafters: "U" or "F" hangers as required.
       - Beams: "EG" Hangers and "HGLB" Beam Seats.
       - Hinge connectors: "HCCT."
       - Columns: "CC" Caps and "CB" Column Bases.
       - Hold Down Anchors: "HDA" and "FTA."
14. Blocking, Bridging, and Bracing: Provide solid shaped blocking at least 2" (nominal) thick and full depth of joist at ends and at each support of joist. Provide approved bridging at 8'-0" o.c. maximum between joist end supports. Solid blocking between joists shall be nailed to the wood plate at the top of the wall with one Simpson "ASS" framing anchor per each piece of blocking. Fill all holes in the framing anchors with 8-d short nails.
15. Where gypsum wallboard sheathed shear walls are used, as indicated on the framing plans, they shall be nailed with 6d cooler nails at 4" o.c. to all studs, plates, and blocking. All edges, horizontal and vertical, shall be blocked.
16. Pre-fabricated Steel Plate Wood Trusses:
    A. Design Loading: The truss manufacturer is responsible for design and fabrication of the trusses. They shall be designed to support the concentrated and other distributed loads as shown on the framing plans in addition to the following uniform loads:
       - Floor Trusses:
         - Dead Load (Top Chord) = 20 psf
         - Dead Load (Bottom Chord) = 15 psf
         - Live Load (Top Chord) = 40 psf
         - Partition Load (Top Chord) = 15psf
         - Total load deflection limit = span/360
         - Live load deflection limit = span/480
       - Roof Trusses:
         - Dead Load (Top Chord) = 10 psf
         - Dead Load (Bottom Chord) = 15 psf
         - Live Load (Top Chord) = 20 psf
         - Wind loading per load maps
         - Total load deflection limit = span/240
         - Live load deflection limit = span/360
    B. Correlate the design with all mechanical equipment, fire sprinkling systems and hanging walls supported by the trusses. Provide extra trusses where required.
    C. Submittals: Complete calculations and shop drawings indicating all member forces, stresses, lumber grades, dimensions, steel truss plate sizes and locations shall be submitted and reviewed by the engineer before fabrication. Each connector shall be dimensioned on the shop drawings as to its exact location at the joint. Shop drawings and calculations shall bear the seal of a professional engineer licensed in the State of Florida. After truss installation, the fabricator shall certify in writing that the trusses have been installed according to his specifications.
    D. Steel Connector Plates: Use only galvanized steel connector plates that comply with the Truss Plate Institute publication, TPI 1-1995. All steel connector plates must be approved by the International Conference of Building Officials Evaluation Services. Submit a copy of the ICBO Report for the connector plate used. Values established by this committee must be indicated on the shop drawings.
       - The minimum size for any connector shall be 15 square inches.
       - All steel gusset plates shall be located on the joint as the stresses require and shall provide a minimum bite of 2.5" length on all tension members.
       - Plates shall be pressed or rolled into member to obtain full penetration without crushing the outer surfaces of wood.
       - Steel plates at compression web members shall be designed to resist 100% of the compression force without considering wood to wood bearing.
       - All steel plate dimensions shall be increased by 10% above that required by analysis. Stress increases for steel connector plate values for duration of load are not allowed.
    E. Wood Members: All wood members of the truss shall be constructed of kiln dried lumber. The trusses shall be handled and stored in a manner to prevent moisture from being absorbed by the wood. Grade stamps shall be visible on framing members. Splices in chords shall occur at 1/4 of the panel span from a joint.
    F. The trusses shall be designed by the truss supplier according to the following criteria:
       - Bending moments in the top and bottom chords shall be based on the following moment coefficients:
         - 1/8 for one and two continuous span conditions.
         - 1/10 for three or more continuous span conditions.
       - Web members shall be designed using an effective length factor: K = 1.0
    G. Lateral Bracing: Lateral bracing and bridging may be required by the design of the pre-fabricated wood roof truss to reduce the buckling length of individual truss members and provide stability during erection. This bracing or bridging may be in the form of 2 x 4 horizontal bracing or bridging with 2 x 4 cross-bracing spaced at 24'-0" o.c. maximum and at each end of the bracing or bridging. The 2 x 4 cross bridging shall be connected to the truss top chord and the horizontal bridging with Simpson A35 each end. Locations of the lateral bracing and truss bridging is to be supplied and installed at the location specified on the pre-fabricated wood roof truss design drawings by the General Contractor.
    H. Other requirements for truss stability and erection shall comply with the Truss Plate Institute publications entitled "Commentary and Recommendations for Bracing Wood Trusses" and "Commentary and Recommendations for Handling and Erecting Wood Trusses." The contractor shall have copies of these publications on site and shall be familiar with their contents.
    I. Prior to the fabrication of the pre-fabricated wood trusses, the contractor shall submit, in writing, proof of compliance of in-plant inspection by an ICBO approved independent inspection agency. The in-plant inspections shall comply with section 1704.2 of the International Building Code.
    J. The truss manufacturer's identification stamp shall be clearly visible.

STRUCTURAL STEEL

1. Structural steel design fabrication and erection shall be in accordance with American Institute of Steel Construction, AISC 360 – Specification for Structural Steel Building and Steel Construction Manual, UON
2. All structural steel shall conform to the following:
   A. Structural steel rolled shapes:
      - ASTM A992, Fy= 50 ksi, Typical UON;
   B. Structural steel channels and angles:
      - ASTM A36, Fy= 36 ksi, UON
   C. Structural steel plates and bars:
      - ASTM A572 Grade 50, Fy= 50 ksi, UON
   D. Square or rectangular steel tubes: ASTM A500, Grade C, Fy=50ksi.
   E. Round steel tubes: ASTM A500, Grade C, Fy=46ksi.
3. Structural Steel Fabricator shall be AISC Certified or have a AISC equivalent Quality Assurance program certified by a qualified independent testing agency. Non-Certified Fabricators shall comply with additional Special Inspection requirements per CODE.
4. Detailing of connections and framing shall be performed using rational engineering principles in accordance with Contract Documents. Typical details shown do not indicate the correct number of bolts, weld or plate sizes unless specifically noted.
5. Connections shall be designed by a Professional Engineer registered in the State in which the project is Constructed, for connections not specifically detailed on drawings. Submit signed and sealed calculations for review.
6. Shop drawings detailing fabrication and field erection details shall be submitted and reviewed by the architect/engineer prior to fabrication.
7. The contractor shall be responsible for the following:
   A. Coordination of selection of optional details shown on the structural drawings.
   B. All erection aids, including but not limited to: erection angles, lift holes, and other aids.
8. Shear connections shall be detailed on the shop drawings in conformance with the details shown on the structural drawings.
9. Shear connections shall be AISC approved connections and capable of end rotation.
10. Non-composite beams shall be designed to support minimum of 50% of the Maximum Total Uniform Load per AISC Steel Construction Manual unless noted otherwise on drawings.
11. All structural and architectural steel exposed to weather shall be painted per specifications.
12. Dimensional tolerances for built up members shall be per AWS D1.1.
13. Steel beams are equally spaced between dimensioned points, UON
14. Where AESS is indicated on drawings, detail and finish steel in conformance with the "AESS" section of the general notes and specifications.
15. Fabrication and erection tolerance of brick frames shall conform to AISC 303, Section 10 – Architecturally Exposed Structural Steel.
16. Reference Architectural and MEP drawings for miscellaneous members and plates not shown on Structural Drawings.
17. Beams shall be fabricated with natural camber up. Provide additional camber as noted on drawings.
18. Field verify all existing condition before submitting shop drawing for review.
19. Thoroughly clean existing steel surfaces to review weld.
20. Comply with the following cleaning and painting requirements, UON:
    A. SSPC-SP3 and one coat of shop primer for all interior steel. Omit paint at holes for slip critical connections, steel to be fire-proofed, encased in concrete and on top flange of beams with shear connectors.
    B. SSPC-SP6 and hot dipped Galvanized G90 for exterior steel exposed to exterior conditions.
    C. SSPC-SP6 and one coat of shop primer minimum for AESS.
21. Anchor rods, base plates and bearing plates shall be pre-set prior to concrete or grout placement.
22. Provide adjustable channel slots for masonry anchors at steel columns and lintels at 24" o.c. when encased in masonry.
23. The contractor shall provide minimum 4" concrete cover around all steel members or components adjacent to and exposed to soil. Minimum reinforcement in concrete cover shall be #3 at 12" o.c.
24. Non-shrink grout shall meet the requirements of ASTM Standard C1107, and shall attain a minimum 28 day compressive strength of 8000 psi.
25. Provide temporary bracing and/or shoring as required to stabilized framing until lateral load system in complete.
26. Account for temperature differentials in erection procedures.

SHEATHING

1. All sheathing shall be plywood or OSB unless otherwise noted. All plywood sheathing including floor/roof diaphragms and shear wall panels shall conform to US product standards PS-1-07 with exterior glue. All SB sheathing including floor/roof diaphragms and shear wall panels shall conform to US product standards PS-2-04.
2. Sheathing sheets shall be placed with long dimension perpendicular to the support framing.
3. For shear wall sheathing fastening requirements refer to shear wall schedule.
4. Wall sheathing shall be 7/16" exterior grade (span rating 24/16) unless otherwise noted in shear wall schedule. All sheathing other than at shear walls shall be fastened with 8d nails at 6" on center at all edges and 8d nails at 12" on center in panel field. Provide 2x4 blocking at all panel edges in shear walls. Shear wall nailing patterns shall be as indicated on shear wall schedule.
5. Wood roof sheathing shall be 3/4" exterior grade (span rating 40/20) and shall be fastened with 8d nails at 6" on center at all edges and 8d nails at 12" on center in panel field. Provide 2x4 blocking or clips at mid span and at all panel edges.
6. Plywood floor sheathing shall be 3/4" exposure 1 tongue and groove (span rating 48/24) and shall be glued and fastened with #10 x 2-1/2" SD screws at 6" on center at all edges and #10 x 2-1/2" SD screws at 12" on center in panel field.
7. Prepare sheathing per gypcrete manufacturer's requirements before casting gypcrete.
8. Where fire rating is required comply with fire retarded treated (such as pyro-guard) plywood.

EXISTING CONSTRUCTION

1. Before submitting a proposal for work, and/or preparing shop drawings for this work each Bidder, Contractor and Sub-Contractor shall visit the site and become fully acquainted with the existing conditions, temporary construction required, type of equipment required to perform the work.
2. Field verify all existing dimensions, conditions, members sizes and elevations with the information provided on the drawings. Information provided on drawings is based on limited field observations and available existing drawings which may not reflect actual conditions. Discrepancies to be noted and immediately brought to the attention of the Structural Engineer.
3. Provide temporary shoring and bracing as required before, during and after construction as required until all materials have reached the required strength and stability.
4. Existing construction not undergoing alteration is to remain undisturbed. Where such construction is disturbed as a result of the operations of this contract, Contractor shall repair or replace as required and to the satisfaction of the Architect/Structural Engineer and Owner's Representative.
5. Verify the existence, location and elevation of existing utilities, sewers, drains, etc. in demolition areas and adjacent to new work before proceeding with the work. All discrepancies shall be documented and reported, do not proceed with work until discrepancies have been resolved.
6. Provide fire safety precautions during field cutting and welding operations, meeting the Owner's requirements.
7. Provide temporary protection of existing equipment during execution of work, satisfying the Owner's requirements.
8. Provide temporary protection to prevent damage from the weather and vandalism.
9. Coordinate work with the Owner's personnel to avoid any interference in their operations.
10. Refer to "SHORING AND BRACING" notes for additional requirements.

CONCRETE

1. Mixing, batching, transporting, and placing of all concrete and selection of concrete materials shall conform to ACI 301 specification for structural concrete for buildings, UON.
2. Each mix design listed below shall be submitted, with current supporting data, and be approved by architect/structural engineer and the testing laboratory prior to use. Concrete mix designs shall be stamped and signed by a civil or structural engineer licensed in the state of Michigan. Submittal shall include the following:
   A. Cement type and source.
   B. Cement content in pounds per cubic yard.
   C. Course and fine aggregate source and grading.
   D. Admixture data sheets.
3. Use of calcium chloride, chloride ions or other salts in concrete mix is prohibited.
4. The schedule below indicates the minimum concrete design mix requirements. Some design mix properties may need to exceed minimum requirements in order to make other properties meet minimum requirements.
   A. Interior Foundations: Footings, Grade Beams, Pile Caps, Drilled Piers, Slabs on Grade
      - Normal weight concrete (150 pcf)
      - Strength - f'c = 4000 psi, code minimum (at 28 days)
   B. Exterior Foundations: Footings, Grade Beams, Pile Caps, Drilled Piers
      - Normal weight concrete (150 pcf)
      - Strength - f'c = 4000 psi, code minimum (at 28 days)
      - Concrete exposed to freeze/thaw cycles including foundation walls shall be air-entrained 6% +/- 1%.
   C. Exterior Foundations Exposed to Deicing Chemicals: Footings, Grade Beams, Pile Caps, Drilled Piers
      - Normal weight concrete (150 pcf)
      - Strength - f'c = 5000 psi, code minimum (at 28 days)
      - Concrete exposed to freeze/thaw cycles including foundation walls shall be air-entrained 6% +/- 1%.
   D. Walls, Columns, Beams, Suspended Slabs
      - Normal weight concrete (150 pcf)
      - Strength - f'c = 5000 psi (at 28 days)
      - Shrinkage limit = 0.040%
   E. Slab-on-grade (including curbs and pads)
      - Normal weight concrete (150 pcf)
      - Strength - f'c = 4000 psi, code minimum (at 28 days)
      - Concrete exposed to freeze/thaw cycles including foundation walls shall be air-entrained 6% +/- 1%.
   F. Concrete Slab on Steel Deck
      - Normal weight concrete (150 pcf)
      - Strength - f'c = 3500 psi, code minimum (at 28 days)
   G. Lean Concrete Fill (beneath footings and conduit encasement)
      - Normal weight concrete (150 pcf)
      - Strength - f'c = 500 psi (at 28 days)
5. Exterior concrete within frost depth is considered exposed to freeze/thaw cycles. This includes perimeter foundations, piers, columns, walls, and slabs. Basement walls with waterproofing are not considered exposed to freeze/thaw cycles.
6. Cement replacement ratios shall be limited to the percentages listed below.
   A. Foundations and Slab on Grade: 50%
   B. Walls and Columns: 50%
   C. Suspended Slabs and Beams: 25%
   D. Concrete Slab on Steel Deck: 50%
   E. Lean Concrete Fill: no limit
7. Minimum concrete cover over reinforcing steel shall be as follows (UON):
   A. Concrete Steel Deck – 1" clear from top of slab
   B. Slabs and Walls
      - Interior Faces – ¾" (#11 and smaller)
      - Exposed to Weather – 1.5" (#5 and smaller) and 2" (#6 and larger)
      - Exposed to earth – 2"
   C. Column / Pilasters
      - Interior Faces – 1.5"
      - Exposed to Weather – 1.5" (#5 and smaller) and 2" (#6 and larger
      - Exposed to earth – 2"
   D. Footings or Grade Beams
      - Not exposed to Earth – 2"
      - Exposed to Earth – 2"
      - Cast Against Earth – 3"
   E. Slab on Grade – 2" from bottom
   F. Notify the SEOR if cover provided exceeds the minimum value by more than ½"
8. The contractor shall provide minimum 3" concrete cover around all steel members or components (WF, TS, plates, bolts, etc.) adjacent to and exposed to soil.
9. Do not place conduits or other elements exceeding 25% of the depth of the concrete slab or wall. No conduit is allowed in columns or beams unless reviewed and approved by Structural Engineer.
10. Anchor rods, leveling plates, bearing plates and other structural steel embeds shall be secured in place within a 1/8" tolerance in any direction prior to placing concrete.
11. Aluminum products are prohibited to embed to, or directly attach to, or directly contact concrete.
12. Slab on grade to be placed on min 15mil class A vapor retarder with lapped and taped joints. Coordinate vapor retarder requirements with architectural selected floor finishes.

REINFORCED HOLLOW CONCRETE MASONRY BLOCK

1. Masonry construction shall be in accordance with TMS 402 and TMS 602-16, referred to as CODE.
2. Compressive strength of grouted CMU construction f'm shall be 2000 psi.
3. All hollow concrete masonry units shall conform to ASTM C90, moisture controlled block; normal weight classification, compression strength of block shall be 2000 psi to achieve f'm of 2000 psi; 13% maximum absorption for exposed to weather units. Use open ended bond beam units where possible.
4. Compressive strength of the grout shall be 2000 psi. Maximum size of aggregate in grout shall be per CODE.
   A. Reinforcement: ASTM A 615 GRADE 60.
5. 5. Mortar shall conform to CODE proportional mix design procedure.
   A. Mortar for concrete masonry shall be type M for all below grade units and type S at above grade units.
6. F'm shall be justified by CODE compliant method.
7. In addition to prism testing, material testing shall be conducted on the block, grout, and mortar to check for compliance with minimum specified strength.
8. All cells with vertical reinforcement or as noted on drawings shall be grouted solid.
   A. Horizontal bond beam and vertical reinforcement shall be continuous U.O.N.
   B. Lap splice horizontal reinforcement per typical details or provide mechanical bar couplers. stagger splice locations.
9. Lay all units in running bond with mortared head joints
10. Horizontal joint reinforcing shall be "ladder type" with W1.7 diameter longitudinal bars, galvanized. Provide 3/16 diameter eyelet bars at walls be brick veneer.
11. Provide minimum #5 vertical bars at 48" o.c. and horizontal joint reinforcing at 16" o.c. in load bearing walls unless indicated otherwise on drawings.
    A. Walls shall be reinforced vertically at wall ends, corners, and all around door and window openings with (2) #5 bars, unless noted otherwise.
12. Provided minimum (1)#5 vertical bars additional at each side of openings or control joint UON.
13. Bond beam reinforcing shall be continuous unless noted otherwise.
14. Multiple course bond beams shall be grout at the same time.
15. Provide minimum lap and splice lengths per CODE.
16. Reinforcing shall be held in place with approved spacing system embed in mortar joints.
17. Provide control joints in wall at a maximum spacing of 25' feet on center per detail provided on the drawings. See structural drawings for control joint locations. See architectural drawings for control joint locations in masonry veneer. Location of CMU (structural) and those in the veneer (architectural) may not be in the same location.
18. Pipes and conduits shall not be embedded in any masonry unless approved by architect and structural engineer.
19. Grouting of cores shall be in accordance with CODE.
20. Grout lifts shall be keyed 1/2" into lower masonry course.
21. High lift grouting shall be in conformance with the CODE. Contractor shall submit a high lift grout procedure for review and approval by the architect/engineer and Testing Lab.
22. Grout solid all masonry below finish floor and/or finish grade.
23. Provide temporary shoring to support walls above lintels until:
    A. The masonry units have reached the required strength, f'm.
    B. The floor/roof above is installed.
24. Masonry walls are to be adequately braced during construction until floor and wall systems are complete. See "Standard Practice for Bracing Masonry Walls Under Construction" by the Council for Masonry Wall Bracing, and also NCMA TEK 3-4B "Bracing Concrete Masonry Walls During Construction" for recommendations regarding bracing. Construction bracing shall be designed by the contractor and sealed by a PE licensed in the state that has jurisdiction over the project.

SHORING AND BRACING

1. Contractor shall provide temporary shoring and bracing of existing construction, new construction and underground utilities as follows:
   A. Where shown or noted on the Drawings.
   B. Where existing construction is to be altered or disturbed until permanent support is in place.
   C. Where existing construction is not undergoing alteration and is to remain undisturbed but is disturbed as a result of the work of this contract.
   D. As required for safe erection, installation of new construction, equipment, etc.
   E. When needed for Contractor's "means and methods" of construction, and other safety related issues.
2. Shoring and bracing shown on the Drawings is conceptual. Contractor shall be responsible for verifying existing conditions, shoring and bracing calculations, methods of installation, transfer of loads through to final load support, and work sequence phasing with new construction.
3. Shoring and bracing shall be performed by a Contractor with minimum 5 years demonstrated experience in similar size and scope of shoring and bracing projects.
4. Shoring and bracing shall be designed by a Professional Engineer registered in the State of the Project with minimum 5 years demonstrated experience in similar size and scope of shoring and bracing projects. Design loads and methods shall conform to applicable codes. Soil and material strengths shall be verified by tests, unless conservative estimates that do not affect deflections and deformations are approved by the Architect/Structural Engineer.
5. Contractor shall submit drawings and calculations sealed and signed by the Contractor's Professional Engineer showing complete design including temporary conditions, final conditions and sequence of work.
6. Before starting work, Contractor shall perform condition survey of the existing building structure, exterior façade and interior finishes, including photographic documentation and submit survey to the Owner for record.
7. During the shoring and bracing operations, Contractor shall:
   A. Keep the existing and new construction in a safe condition.
   B. Monitor existing and new construction to detect any signs of distress or deformation.
   C. Take immediate steps to prevent distress, deformation or damage.
8. Contractor shall continuously monitor the shoring and bracing system. Contractor shall review and ascertain that all field connections are completed according to the Contractor's design and issue approval for inspection of the work by the Testing Agency.
9. After completion of shoring and bracing and completion of work requiring shoring and bracing, Contractor shall repair any damage to the existing and new construction, without any cost to the Owner, and to the satisfaction of the Owner and Architect/Structural Engineer.

FOUNDATIONS AND BASEMENT WALLS

1. Foundations have been designed using the findings & recommendations, and criteria provided in the geotechnical report titled: "**XXXXXXXXXX** dated **XXXXX** by **XXXXX**". Refer to these documents, and subsequent addenda, for information on generalized subsurface profiles, soil properties, existing site features, and conditions affecting foundation installation.
2. Foundations have been designed with the following bearing pressures:
   A. Net Allowable Bearing Capacity: **XXXX** PSF
   B. Lateral Equivalent Earth Pressure: **XX** PSF Active, **XX** PSF Passive
   C. Lateral earth pressure is based upon drained soil. Refer to drawings for foundation drainage.
3. See the geotechnical report for site preparation and elevation of suitable in-situ soils to obtain minimum allowable bearing capacity used for design. In addition to the removal of unsuitable soils and replacement with Engineered fill is an option in lieu of extending the bottom of foundation elevations to bearing elevation.
4. See the geotechnical report for over excavation requirements below structural foundations. All excavations shall be inspected and approved by the geotechnical engineer before placing concrete.
5. Geotechnical Engineer or testing agency under their review shall inspect and test all subgrades, fills and backfills to meet requirements of Contract Documents.
6. Foundation bearing elevations shown on drawings are minimums. Foundation bearing elevation shall be below minimum local frost depth requirements, bearing on undisturbed natural soils or engineered fill having a minimum allowable bearing as indicated.
7. Any temporary shoring needed for excavation shall be designed by licensed engineer working for the contractor. Temporary shoring designs shall be submitted to Architect for record only (not for review or approval).
8. Earth forms: Side forms for foundations may be omitted and concrete placed against soil if it can be shown that the soil excavations are suitable for such use and will not cave prior to or during the concrete pour. If the vertical excavated soil surfaces are deemed to be unsatisfactory for use as a foundation side form, then the contractor shall provide standard concrete side forms at no extra cost to the owner. Exterior sides of elevation shall be smooth and vertical from grade elevation to minimum frost depth.
9. Extend all footing and grade beam reinforcing continuous through intersecting footings and grade beams. The contractor shall adjust the concrete cover at reinforcing bars to avoid interference.
10. Pad foundation area are centered on columns unless noted otherwise.
11. Do not place concrete on or adjacent to saturated sub-grade, sub-grade with standing water, sub-grade with organic content, frost or ice.
12. Contractor responsible for de-watering of site and excavations as required.
13. Do not undermine existing foundation without approved underpinning design.
14. Thoroughly clean and roughen construction joints between foundations and walls and columns per "CONCRETE FORMWORK AND JOINTS".
15. Side forms shall be used for all basement walls. Remove forms prior to backfill.
16. Basement walls retaining have been designed to span vertically between structural slabs. Therefore, contractor shall not backfill behind basement walls until the following has occurred:
    A. All perimeter basement walls are in-place and have attained full compressive strength
    B. Slab on grade and suspended slabs are in-place and have attained full compressive strength
17. In lieu the requirements in note above, the contractor can design a temporary bracing system for the basement walls so that backfill can proceed once wall has attained full compressive strength. Wall bracing system shall be designed by a licensed professional engineer working for the Contractor. Temporary wall bracing design shall be submitted to Architect for record only (not for review or approval).
18. Balance backfill adjacent to foundation walls to eliminate excessive lateral load pressures.
19. Backfill and engineered fill shall consist of clean, well graded soils, free of organic material, silt or clay or meet the requirements of the project specification manual.
20. Backfill shall be compacted to 95% of maximum density, as determined by the Modified Proctor Method (ASTM D1557), in maximum lifts of 6".

UNDERPINNING

1. Underpinning shown on the drawings is conceptual. Contractor shall be responsible for the final design, including methods of construction, transfer of loads through to foundation, sequence of work and phasing with the existing structure reinforcement and new construction.
2. Underpinning shall be performed by a Contractor with minimum 5 years demonstrated experience in similar size and scope of shoring, bracing and underpinning projects.
3. Underpinning shall be designed by a Professional Engineer registered in the State of the Project with minimum 5 years demonstrated experience in similar size and scope of shoring, bracing and underpinning projects. Design loads and methods shall conform to applicable codes. Soil strengths shall be verified by tests.
4. Contractor shall submit drawings and calculations sealed and signed by the Contractor's Professional Engineer showing complete design including temporary conditions, final conditions and sequence of work.
5. Before starting work, Contractor shall perform condition survey of the existing building structure, exterior façade and interior finishes, including photographic documentation and submit survey to the Owner for record.
6. During the underpinning operations, Contractor shall:
   A. Keep the existing and new construction in a safe condition.
   B. Provide necessary shoring, bracing and underpinning.
   C. Continuously monitor existing and new construction to detect any signs of distress or deformation.
   D. Take immediate steps to prevent distress, deformation or damage.
7. After completion of shoring bracing and underpinning operations, Contractor shall repair any damage to the existing and new construction, without any cost to the Owner and to the satisfaction of the Owner and Architect/Structural Engineer.

ARCHITECTURAL SLAB PLANS

1. See Architectural Slab Plans that show the following information:
   A. Locations of the edge of slab at perimeter and interior openings
   B. Slab elevations
   C. Slab depressions (elevations and locations of depression)
   D. Slab slopes
   E. Concrete curbs (width, height, location)

SPECIAL INSPECTIONS

1. Special inspections shall be provided by the Owner's Testing Lab in according to the code and the project specifications. The special inspector shall observe the work for conformance with the construction documents. The special inspector shall send reports to the inspector of record, architect, engineer, contractor and Owner. All discrepancies shall be brought to the attention of the contractor for correction. When work is done to the satisfaction of the inspector, then the special inspector shall submit a final signed report stating that, to the best of their knowledge, the work was competed in conformance with the plans, specifications, and the applicable workmanship provisions of the CODE.
2. Refer to Special Inspection tables and notes for specific requirements.

STRUCTURAL OBSERVATIONS

1. Resurget Engineering shall provide Structural Observation of the structural systems for general conformance to the drawings and specifications at significant stages of construction and at completion of the primary structural system as defined in Code.
2. Structural Observation does not include or waive any of the responsibilities of the Special Inspector as required per the Section "Special Inspections".
3. At the conclusion of work included in permit, the structural observer will submit to the building official a written statement that the structural observations have been completed and that to the best of their knowledge the work is in conformation with the construction documents.
4. Structural Observation on this project shall be conducted on the following structural elements:
   A. Spread Footings
   B. Concrete Shear Walls
   C. Concrete Slabs
   D. Concrete Columns
   E. Structural steel erection
   F. Stick Built Wood Construction

CONSTRUCTION LOADING ON SUPPORTED SLABS

Contractor shall provide documentation including calculations certifying that the equipment utilized for erection and construction, which rests on supported slabs, adheres to the loading capacity specifications of the corresponding slabs during usage. The compliance documentation must include a comprehensive list of the equipment employed and explicitly affirm that a thorough assessment of all loading conditions has been conducted and shall be signed and sealed by a Professional Engineer registered in the State of Michigan.

DELEGATED DESIGN ITEMS:

1. For structural systems which have been designated as delegated design or design-build components per the drawings and/or project specification, the Contractor is required to submit documents (stamped and signed by a licensed engineer in the state where the project is located) for all such components to the Building Official, upon request and Structural Engineer of Record (SEOR) for approval. Delegated design items shall not be installed until the submittal items have been approved by the Building Official, upon request, and the SEOR.
2. The delegated design engineer shall be responsible for that component's conformance to the Code and all design criteria indicated in the construction documents and all necessary connections not specifically show in the structural and architectural drawings.
3. Prior to submittal to the Building Official, all delegated design submittal items shall be submitted to the design team for review of general conformance with design criteria. Submittals to design team shall be stamped and signed by a licensed engineer and shall include the following:
   A. Drawings which indicate the magnitude, direction, and location of all loads imposed on the primary structure.
   B. Connection details that show how the component is connected to the primary structure.
   C. Design calculation demonstrating conformance with code requirements and design criteria. Calculations shall clearly indicate a complete load path for both the vertical and lateral loads to the primary structure.
4. Delegated Design Structural Submittal Components include, but are not limited to the following:
   A. Exterior cladding (including curtain wall and exterior metal studs)
   B. Interior Metal Stud Systems
   C. Metal Stairs in Buildings
   D. Precast concrete elements
   E. Cold Formed Steel Trusses
   F. Interior metal stud partitions
   G. Interior glazing walls
   H. Attachment of interior stone to metal stud partitions and concrete walls.
   I. Handrails and balustrades
   J. Elevators (cabs, rails brackets, hoist system, etc.)
   K. Support and bracing of ducts, pipes, conduit, cable tray, etc.
   L. Window washing tieback or davit systems
   M. Modular systems
   N. Architectural ornamentation (flagpoles, banners, masts, etc.)
   O. MEP platforms
   P. Skylights

GENERAL NOTES

1. Governing Design Code: 2021 Michigan Building Code with local jurisdiction amendments (hereafter referred to as "CODE")
2. All construction shall be in accordance with the following:
   A. CODE
   B. Drawings and Specifications
3. The structural drawing notes are intended to work together and be complementary with the project specifications. Consult the specifications for additional requirements in each section. Information provided on structural drawings shall take precedence over the specifications. Information shown on specific details shall take precedence over typical details and structural notes.
4. Typical details and general notes shall apply, UON.
5. The structural drawings shall be used in conjunction with the architectural drawings. See architectural drawings for information not shown, including but not limited to the following:
   A. Setting out dimensions and angles of all grid lines
   B. Setting out dimensions of concrete walls and wall openings that are not shown on the structural drawings.
   C. Slab geometry that includes the following:
      - Edge of slab locations at building perimeter
      - Edge of slab location at interior openings
      - Location and geometry of slab depressions and slopes (depressions and slopes in structural slabs that are not shown diagrammatically on the structural drawings shall be reviewed by SEOR)
      - Concrete curb locations, height and width
   D. Interior partitions and ceilings including
      - Interior metal stud partitions (size, location and detailing)
      - Interior glazed walls (location and detailing)
      - Interior CMU partition (locations and openings)
   E. Exterior non-bearing wall construction. This includes:
      - Exterior metal studs (size, location, and detailing)
      - Curtain wall and louver details
      - Aluminum trellises (sizes and detailing)
   F. Anchorage and bracing of building contents
   G. Concrete chamfers, grooves, inserts, embeddments, etc.
   H. Architectural (non-structural) topping slabs – location and detailing
   I. Concrete finishes
   J. Dimensions not shown on the structural drawings
   K. All fireproofing requirements including fireproofing requirements for structural steel elements
   L. Misc steel required for support of architectural elements
   M. Waterproofing system and details
6. See the mechanical, electrical and plumbing drawings for information not shown, including but not limited to:
   A. Wall and slab openings for services, pipe sleeves, hangers, trenches, except as shown
   B. Electrical conduit runs, boxes, outlets in walls and slabs
   C. Concrete inserts for electrical, mechanical, or plumbing
   D. Size and location of equipment pads and equipment anchor bolts (typical concrete pad detail are provided on the Structural Drawings)
   E. Locations for beam penetrations for pipes and ducts, except as shown (typical steel penetrations are provided on the Structural Drawings)
7. Contractor is responsible for the coordinating all equipment pad sizes and locations with the actual layout provided in the shop drawings.
8. Drawing scales noted on structural drawings are for reference only. Do NOT scale drawings. The contractor shall verify dimensions not provided with the architect prior to proceeding with work.

SHOP DRAWINGS

1. Verify all existing dimension before submitting shop drawings for review.
2. Review all shop drawings for accuracy and compliance with shop drawing before submitting for review. Review of shop drawings does not relieve the Contractor of any responsibility or errors and omissions.
3. Use of 2D Drawing or 3D REVIT model does not relieve the Contractor of any responsibility specified in the contract documents.
4. Allow a minimum of 10 working days for review by Structural Engineer of each set of submitted contract drawing. Submit shop drawings in reasonable quantities with at least 10 working days between submittals. Review time stated is for Structural Engineer only, add additional time to schedule as required for review by other disciplines.
5. Contractor shall coordinate work between multiple trades before submitting shop drawings. Dimensions and elevations specific to equipment installation shall be provided and coordinated prior to submittal for review. Failure to provide these dimensions shall result in return of shop drawings without review.
6. Structural Engineer is not responsible for coordination of work marked as "by others" on shop drawings.

ERECTION

1. The drawings indicate the structure in its final condition. The contractor is fully responsible for all temporary measures necessary for erection prior to the structure's final condition.
2. The contractor is responsible for means and methods, scheduling, sequencing of construction or compliance with OSHA provisions.
3. The contractor shall coordinate with other trades in determining the erection sequence so that the erection sequence and associated site conditions will not adversely impact or damage work by other trades or previously erected structure.
4. Deflection and movement of structure
   A. Floor beams, trusses, transfer girders, and cantilevers will continue to deflect as additional loads are applied during construction. Although camber may be shown to account for the theoretical dead load deflection, this may not occur until all dead load is on the member.
   B. The contractor shall coordinate the attachment of any items to the structure so that typical lateral movements of adjacent floors in any direction are accommodated by the attachments. The lateral movement of adjacent floors is 1/180 the floor height.

DESIGN CRITERIA

Design is in accordance with CODE		CODE REFERENCE
Risk Category	II	IBC Table 1604.5 ASCE Table 1.3-1
LIVE LOADS		CODE REFERENCE
RESIDENTIAL	40 PSF + PARTITIONS	ASCE Table 4.3-1
BALCONY	60 PSF	ASCE Table 4.3-1
ROOF	20 PSF	ASCE Table 4.3-1
SNOW LOADS		CODE REFERENCE
Ground Snow Load	Pg = 20 PSF	ASCE Figure 7-1
Flat Roof Snow Load	Pf = 20 PSF (minimum)	ASCE Section 7.3
Exposure Factor	Ce = 1.0	ASCE Table 7-2
Importance Factor	I = 1.0	ASCE Table 1.5-2
Thermal Factor	Ct = 1.0	ASCE Table 7-3
Snow loads adjacent to vertical projections, on lower roofs adjacent to high roofs, or sloped roofs are increased for the effects of snow drift.		
WIND LOADS		CODE REFERENCE
Ultimate Design Wind Speed (3 sec. gust)	V(ULTIMATE) = 108 MPH	ASCE Figure 26.5-1B
Nominal Design Wind Speed	V(ASD) = 84 MPH	IBC Section 1609.3.1
Exposure Category	B	ASC

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STATEMENT OF SPECIAL INSPECTIONS - STRUCTURAL STEEL

INSPECTION TASK	INSPECTION FREQUENCY		REFERENCED STANDARD	IBC REFERENCE	RESPONSIBLE AGENT
	CONTINUOUS	PERIODIC			
1. INSPECTION OF STEEL FABRICATED ITEMS SHALL BE PERFORMED ON PREMISES DURING FABRICATION.		X	AISC QUALITY CERTIFICATION	1704.2.5	SI
A. EXCEPTIONS: SPECIAL INSPECTIONS DURING FABRICATION NOT REQUIRED WHERE THE FABRICATOR IS REGISTERED AND APPROVED IN ACCORANCE WITH SECTION 1704.2.5.1.					
2. SPECIAL INSPECTION AND NONDESTRUCTIVE TESTING OF STRUCTURAL STEEL ELEMENTS IN BUILDINGS, STRUCTURE AND PORTIONS THEREOF SHALL BE IN ACCORDANCE WITH THE QUALITY ASSURANCE INSPECTION REQUIREMENTS OF AISC 360.	X	X	AISC QUALITY CERTIFICATION	1705.2.1	SI
A. SPECIAL INSPECTION OF RAILING SYSTEMS COMPOSED OF STRUCTURAL STEEL ELEMENTS SHALL BE LIMITED TO WELDING INSPECTION OF WELDS AT THE BASE OF CANTILEVERED RAIL POSTS.		X	AISC QUALITY CERTIFICATION	1705.2.1	SI

INSPECTION TASK	INSPECTION TYPE		REFERENCED STANDARD	IBC REFERENCE	RESPONSIBLE AGENT
	QC	QA			
INSPECTION OF BOLTING			AISC 360, SECTION N5, TABLE N5.6-1	1705.2	SI/TA
1. INSPECTION TASKS PRIOR TO BOLTING:					
A. MANUFACTURER'S CERTIFICATIONS AVAILABLE FOR FASTENER MATERIALS.	O	P			
B. FASTENERS MARKED IN ACCORDANCE WITH ASTM REQUIREMENTS.	O	O			
C. CORRECT FASTENERS SELECTED FOR THE JOINT DETAIL (GRADE, TYPE, BOLT LENGTH IF THREADS ARE TO BE EXCLUDED FROM SHEAR PLANE).	O	O			
D. CORRECT BOLTING PROCEDURE SELECTED FOR JOINT DETAIL.	O	O			
E. CONNECTING ELEMENTS, INCLUDING THE APPROPRIATE FAYING SURFACE CONDITION AND HOLE PREPARATION, IF SPECIFIED, MEET APPLICABLE REQUIREMENTS.	O	O			
F. PRE-INSTALLATION VERIFICATION TESTING BY INSTALLATION PERSONNEL OBSERVED AND DOCUMENTED FOR FASTENER ASSEMBLIES AND METHODS USED.	P	O			
G. PROTECTED STORAGE PROVIDED FOR BOLTS, NUTS, WASHERS AND OTHER FASTENER COMPONENTS.	O	O			
2. INSPECTION TASKS DURING BOLTING:			AISC 360, SECTION N5, TABLE N5.6-2	1705.2	SI/TA
A. FASTENER ASSEMBLIES, PLACED IN ALL HOLES AND WASHERS ARE POSITIONED AS REQUIRED.	O	O			
B. JOINT BROUGHT TO THE SNUG-TIGHT CONDITION PRIOR TO THE PRETENSIONING OPERATION.	O	O			
C. FASTENER COMPONENT NOT TURNED BY THE WRENCH PREVENTING FROM ROTATING.	O	O			
D. FASTENERS ARE PRETENSIONED IN ACCORDANCE WITH THE RCSC SPECIFICATION, PROGRESSING SYSTEMATICALLY FROM THE MOST RIGID POINT TOWARD THE FREE EDGES.	O	O			
3. INSPECTION TASKS AFTER BOLTING:			AISC 360, SECTION N5, TABLE N5.6-3	1705.2	SI/TA
A. DOCUMENT ACCEPTANCE OR REJECTION OF BOLTED CONNECTIONS.	P	P			
INSPECTION OF WELDING			AISC 360, SECTION N5, TABLE N5.4-1	1705.2	SI/TA
1. INSPECTION TASKS PRIOR TO WELDING:					
A. WELDER QUALIFICATION RECORDS AND CONTINUITY RECORDS	P	O			
B. WELDING PROCEDURE SPECIFICATIONS (WPSs) AVAILABLE.	P	P			
C. MANUFACTURER CERTIFICATIONS FOR WELDING CONSUMABLES AVAILABLE.	P	P			
D. MATERIAL IDENTIFICATION (TYPE/GRADE).	O	O			
E. WELDER IDENTIFICATION SYSTEM. THE FABRICATOR OR ERECTOR, AS APPLICALBLE, SHALL MAINTAIN A SYSTEM BY WHICH A WELDER WHO HAS WELDED A JOINT OR MEMBER CAN BE IDENTIFIED. STAMPS, IF USED, SHALL BE LOW-STRESS TYPE.	O	O			
F. FIT-UP OF GROOVE WELDS OF HSS T-, T- AND K-JOINTS WITHOUT BACKING (INCLUDING JOINT GEOMETRY): - JOINT PREPARATION - DIMENSIONS (ALIGNMENT, ROOT OPENING, ROOT FACE, BEVEL). - TAKING (TACK WELD QUALITY AND LOCATION). - BACKING TYPE AND FIT (IF AVAILABLE).	O	O			
G. FIT-UP OF CJP GROOVE WELDS (INCLUDING JOINT GEOMETRY): - JOINT PREPARATION. - DIMENSIONS (ALIGNMENT, ROOT OPENING, ROOT FACE, BEVEL). - CLEANLINESS (CONDITION OF STEEL SURFACES). - TACKING (TACK WELD QUALITY AND LOCATION). - BACKING TYPE AND FIT (IF AVAILABLE).					
H. CONFIGURATION OF FINISH AND ACCESS HOLES.	O	O			
I. FIT-UP OF FILLET WELDS: - DIMENSIONS (ALIGNMENT, GAPS AT ROOT). - CLEANLINESS (CONDITION OF STEEL SURFACES). - TACKING (TACK WELD QUALITY AND LOCATION).	O	O			
J. CHECK WELDING EQUIPMENT.	O	-			
2. INSPECTION TASKS DURING WELDING:			AISC 360, SECTION N5, TABLE N5.4-2	1705.2	SI/TA
A. USE OF QUALIFIED WELDERS.	O	O			
B. CONTROL AND HANDLING OF WELDING CONSUMABLES: - PACKAGING. - EXPOSURE CONTROL.	O	O			
C. NO WELDING OVER CRACKED TACK WELDS.	O	O			
D. WPS FOLLOWED: - SETTINGS ON WELDING EQUIPMENT. - TRAVEL SPEED. - SELECTED WELDING MATERIALS. - SHIELDING GAS TYPE/FLOW RATE. - PREHEAT APPLIED. - INTERPASS TEMPERATURE MAINTAINED (MIN./MAX.) - PROPER POSITION (F, V, H, OH).	O	O			
E. WELDING TECHNIQUES: - INTERPASS AND FINAL CLEANING. - EACH PASS WITHIN PROFILE LIMITATIONS. - EACH PASS MEETS QUALITY REQUIREMENTS.	O	O			
3. INSPECTION TASKS AFTER WELDING:			AISC 360, SECTION N5, TABLE N5.4-3	1705.2	SI/TA
A. WELDS CLEANED.	O	O			
B. SIZE, LENGTH, AND LOCATION OF WELDS.	P	P			
C. WELDS MEET VISUAL ACCEPTANCE CRITERIA: - CRACK PROHIBITION. - WELD/BASE-METAL FUSION. - CRATER CROSS SECTION. - WELD PROFILES. - WELD SIZE. - UNDERCUT. - POROSITY.	P	P			
D. ARC STRIKES.	P	P			
E. K-AREA. WHEN WELDING OF DOUBLER PLATES, CONTINUITY PLATES OR STIFFENERS HAVE BEEN PERFORMED IN THE K-AREA, VISUALLY INSPECT THE WEB K-AREA OF CRACKS WITHIN 3 INCHES OF THE WELD.	P	P			
F. WELD ACCESS HOLES IN ROLLED HEAVY SHAPES AND BUILT-UP HEAVY SHAPES. AFTER ROLLED HEAVY SHAPES AND BUILT UP HEAVY SHAPES ARE WELDED, VISUALLY INSPECT THE WELD ACCESS HOLES FOR CRACKS.	P	P			
G. BACKING REMOVED AND WELD TABS REMOVED (IF REQUIRED).	P	P			
H. REPAIR ACTIVITY.	P	P			
I. DOCUMENT ACCEPTANCE OR REJECTION OF WELDED JOINT OR MEMBER.	P	P			

QUALITY CONTROL (QC) SHALL BE PROVIDED BY THE FABRICATOR AND ERECTOR.
QUALITY ASSURANCE (QA) SHALL BE PROVIDED BY OTHERS WHEN REQUIRED BY THE AUTHORITY HAVING JURISDICTION, APPLICABLE BUILDING CODE, PURCHASER, OWNER, OR ENGINEER OF RECORD.

O: OBSERVE THESE ITEMS ON A RANDOM BASIS. OPERATIONS NEED NOT BE DELAYED PENDING THESE INSPECTIONS.
P: PERFORM THESE TASKS FOR EACH STEEL ELEMENT.

MBC TABLE 1705.3
REQUIRED SPECIAL INSPECTIONS AND TESTS OF CONCRETE CONSTRUCTION

TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION	REFERENCED STANDARD (a)	MBC REFERENCE
1. INSPECT REINFORCEMENT, INCLUDING PRESTRESSING TENDONS, AND VERIFY PLACEMENT.	—	X	ACI 318: Ch. 20, 25.2, 25.3, 26.6.1-26.6.3	—
2. REINFORCING BAR WELDING:				
A. VERIFY WELDABILITY OF REINFORCING BARS OTHER THAN ASTM A706;	—	X	AWS D1.4	—
B. INSPECT SINGLE-PASS FILLET WELDS, MAXIMUM 5/16"; AND	—	X	ACI 318: 26.6.4	
C. INSPECT ALL OTHER WELDS.	X	—		
3. INSPECT ANCHORS CAST IN CONCRETE.	—	X	ACI 318: 26.13.3.3	—
4. INSPECT ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS.(B)				
A. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS.	X	—	ACI 318: 26.13.3.2	—
B. MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN 4.A.	—	X	ACI 318: 26.13.3	
5. VERIFY USE OF REQUIRED DESIGN MIX.	—	X	ACI 318: Ch. 19, 26.4.3, 26.4.4	1904.1, 1904.2
6. PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	X	—	ASTM C31, ASTM C172, ACI 318: 26.5, 26.12	—
7. INSPECT CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	X	—	ACI 318: 26.5	—
8. VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	—	X	ACI 318: 26.5.3-26.5.5	—
9. INSPECT PRESTRESSED CONCRETE FOR:				
A. APPLICATION OF PRESTRESSING FORCES; AND	X	—	ACI 318: 26.10	—
B. GROUTING OF BONDED PRESTRESSING TENDONS.	X	—		
10. INSPECT ERECTION OF PRECAST CONCRETE MEMBERS.	—	X	ACI 318: 26.9	—
11. FOR PRECAST CONCRETE DIAPHRAGM CONNECTIONS OR REINFORCEMENT AT JOINTS CLASSIFIED AS MODERATE OR HIGH DEFORMABILITY ELEMENTS (MDE OR HDE) IN STRUCTURES ASSIGNED TO SEISMIC DESIGN CATEGORY C, D, E OR F, INSPECT SUCH CONNECTIONS AND REINFORCEMENT IN THE FIELD FOR:			ACI 318: 26.13.1.3	—
A. INSTALLATION OF THE EMBEDDED PARTS	X	—	ACI 550.5	
B. COMPLETION OF THE CONTINUITY OF REINFORCEMENT ACROSS JOINTS.	X	—		
C. COMPLETION OF CONNECTIONS IN THE FIELD.	X	—		
12. INSPECT INSTALLATION TOLERANCES OF PRECAST CONCRETE DIAPHRAGM CONNECTIONS FOR COMPLIANCE WITH ACI 550.5.	—	X	ACI 318: 26.13.1.3	—
13. VERIFY IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POST-TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS.	—	X	ACI 318: 26.11.2	—
14. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	—	X	ACI 318: 26.11.1.2(b)	—

A. WHERE APPLICABLE, SEE SECTION 1705.13.

B. SPECIFIC REQUIREMENTS FOR SPECIAL INSPECTION SHALL BE INCLUDED IN THE RESEARCH REPORT FOR THE ANCHOR ISSUED BY AN APPROVED SOURCE IN ACCORDANCE WITH 26.13 IN ACI 318, OR OTHER QUALIFICATION PROCEDURES. WHERE SPECIFIC REQUIREMENTS ARE NOT PROVIDED, SPECIAL INSPECTION REQUIREMENTS SHALL BE SPECIFIED BY THE REGISTERED DESIGN PROFESSIONAL AND SHALL BE APPROVED BY THE BUILDING OFFICIAL PRIOR TO THE COMMENCEMENT OF THE WORK.

MBC TABLE 1705.6
REQUIRED SPECIAL INSPECTIONS AND TESTS OF SOILS AND SHALLOW FOUNDATIONS

TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION
1. VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY	—	X
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL	—	X
3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS	—	X
4. DURING FILL PLACEMENT, VERIFY USE OF PROPER MATERIALS AND PROCEDURES IN ACCORDANCE WITH THE PROVISIONS OF THE APPROVED GEOTECHNICAL REPORT. VERIFY DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	X	—
5. PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	—	X

1705.5 - STATEMENT OF SPECIAL INSPECTIONS - WOOD CONSTRUCTION

INSPECTION TASK	INSPECTION FREQUENCY		REFERENCED STANDARD	IBC REFERENCE	RESPONSIBLE AGENT
	CONTINUOUS	PERIODIC			
1. PRE-FABRICATED WOOD			MANUFACTURER'S FABRICATION AND QUALITY CONTROL PROCEDURES	1704.2.5, 1705.5	SI
A. INSPECTION OF FABRICATION PROCESS OF PRE-FABRICATED WOOD STRUCTURAL ELEMENTS.	-	X			
2. FRAMING			MANUFACTURER'S SPECIFICATIONS	1705.5	SI
A. INSPECTION OF FIELD GLUING OPERATIONS.	X	-			
B. INSPECTION OF NAILING, BOLTING, ANCHORING, AND OTHER FASTENING OF COMPONENTS WITHIN THE LATERAL-FORCE-RESISTING SYSTEM INCLUDING DRAG STRUTS, BRACES, AND TIE-DOWNS.	X	-			
C. INSPECTION FOR WOOD SHEAR WALLS, SHEAR PANELS, AND DIAPHRAGMS THAT ARE INCLUDED IN THE LATERAL-FORCE-RESISTING SYSTEM AND FOR WHICH THE PROVISIONS REQUIRE THE SPACING OF NAILS, SCREWS, OR FASTENERS FOR WOOD SHEATHING TO BE 6 INCHES OR LESS ON CENTER.	X	-			
3. HIGH LOAD DIAPHRAGMS			-	SECTION 1705.5.1, 1704.2	SI
A. INSPECTION OF DIAPHRAGMS DESIGNED IN ACCORDANCE WITH SECTION 2306.2	X	-			
4. METAL PLATE CONNECTED WOOD TRUSSES SPANNING 60FT OR GREATER			-	1705.5.2	SI
A. VERIFY TEMPORARY INSTALLATION OF RESTRAINT/BRACING AND THE PERMANENT INDIVIDUAL TRUSS MEMBER BRACING ARE INSTALLED IN ACCORDANCE WITH APPROVED TRUSS SUBMITTAL PACKAGE.	X	-			

SPECIAL INSPECTIONS

1. PERFORM SPECIAL INSPECTIONS IN ACCORDANCE WITH THE 2021 MICHIGAN (INTERNATIONAL) BUILDING CODE CHAPTER 17 AND AS MODIFIED IN THE MATERIAL SPECIFIC STATEMENTS OF SPECIAL INSPECTION.
2. DESIGNATION OF RESPONSIBLE AGENT AND THEIR QUALIFICATIONS
   - SI — SPECIAL INSPECTOR QUALIFIED WITH DEMONSTRATED COMPETENCE DOCUMENTED BY CERTIFICATIONS FROM RECOGNIZED AGENCIES SUCH AS AWS, ACI, MASONRY INSTITUTE OF MICHIGAN (MIM), ETC., AS SUBMITTED AND APPROVED BY THE BUILDING OFFICIAL. SPECIAL INSPECTOR MAY BE A FIRM WITH MULTIPLE SPECIALISTS AND A PROJECT MANAGER PROVIDING REPORTS.
   - TA — TESTING AGENCY QUALIFIED TO TEST AND INSPECT MATERIALS AND ASSEMBLIES. TESTING AGENCY SHALL BE UNDER THE SUPERVISION OF THE SPECIAL INSPECTOR.
   - GE — GEOTECHNICAL ENGINEER WHO PROVIDED THE ORIGINAL PROJECT GEOTECHNICAL SOILS INVESTIGATION REPORT.
   - SE — SPECIALTY ENGINEER RESPONSIBLE FOR DESIGNING ASSEMBLIES SUCH AS PRECAST CONCRETE, STEEL JOISTS, COLD FORMED FRAMING ASSEMBLIES, ETC. SPECIALTY ENGINEER SHALL PROVIDE OBSERVATION OF FABRICATED AND INSTALLED ITEMS OF THEIR DESIGN IN ADDITION TO THE SPECIAL INSPECTION.
3. TA, GE AND SE SHALL SUBMIT RECORDS OF THE INSPECTION RESULTS TO THE SI. THE SI SHALL COMPILE AND SUBMIT INSPECTION RECORDS TO THE ARCHITECT/ENGINEER AND BUILDING OFFICIAL. RECORDS SHALL INCLUDE STATEMENTS OF TESTS, WHETHER INSTALLED/FABRICATED ITEM COMPLIES WITH CONTRACT DOCUMENTS, REMEDIAL WORK PERFORMED, RETESTS.
4. SI SHALL PROVIDE A DAILY REPORT OF ANY DISCREPANCIES FROM THE CONTRACT DOCUMENTS FOUND ON THE SAME DAY OF THE INSPECTION TO THE ENGINEER OF RECORD. FORMAL REPORTS OF COMPLIANCE CAN FOLLOW BY A MAXIMUM OF 2 WEEKS. SI SHALL PROVIDE AND SIGN FINAL REPORT WITH A SUMMARY OF ALL TESTS PERFORMED AND RESULTS TO THE ENGINEER OF RECORD AND BUILDING OFFICIAL, IN ACCORDANCE WITH SECTION 1704.2.4.
5. SI, TA & GE SHALL BE PAID BY THE OWNER IN COMPLIANCE WITH THE MICHIGAN (INTERNATIONAL) BUILDING CODE.
6. WHERE FABRICATION OF STRUCTURAL, LOAD-BEARING OR LATERAL LOAD-RESISTING MEMBERS OR ASSEMBLIES IS BEING CONDUCTED ON THE PREMISES OF A FABRICATOR'S SHOP, SPECIAL INSPECTIONS OF THE FABRICATED ITEMS SHALL BE PERFORMED DURING FABRICATION. SPECIAL INSPECTIONS DURING FABRICATION ARE NOT REQUIRED WHERE THE FABRICATOR MAINTAINS APPROVED DETAILED FABRICATION AND QUALITY CONTROL PROCEDURES THAT PROVIDE A BASIS FOR CONTROL OF THE WORKMANSHIP AND THE FABRICATOR'S ABILITY TO CONFORM TO APPROVED CONSTRUCTION DOCUMENTS AND THE GOVERNING BUILDING CODE. APPROVAL SHALL BE BASED UPON REVIEW OF FABRICATION AND QUALITY CONTROL PROCEDURES AND PERIODIC INSPECTION OF FABRICATION PRACTICES BY THE BUILDING OFFICIAL. SPECIAL INSPECTIONS ARE NOT REQUIRED WHERE THE FABRICATOR IS REGISTERED AND APPROVED IN ACCORDANCE WITH SECTION 1704.2.5.1.
7. REFER TO MATERIAL SPECIFIC STATEMENTS OF SPECIAL INSPECTION AND GENERAL STRUCTURAL NOTES FOR ADDITIONAL QUALITY CONTROL TESTING AND INSPECTIONS.

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Revision Schedule

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SEAL

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SPECIAL INSPECTIONS

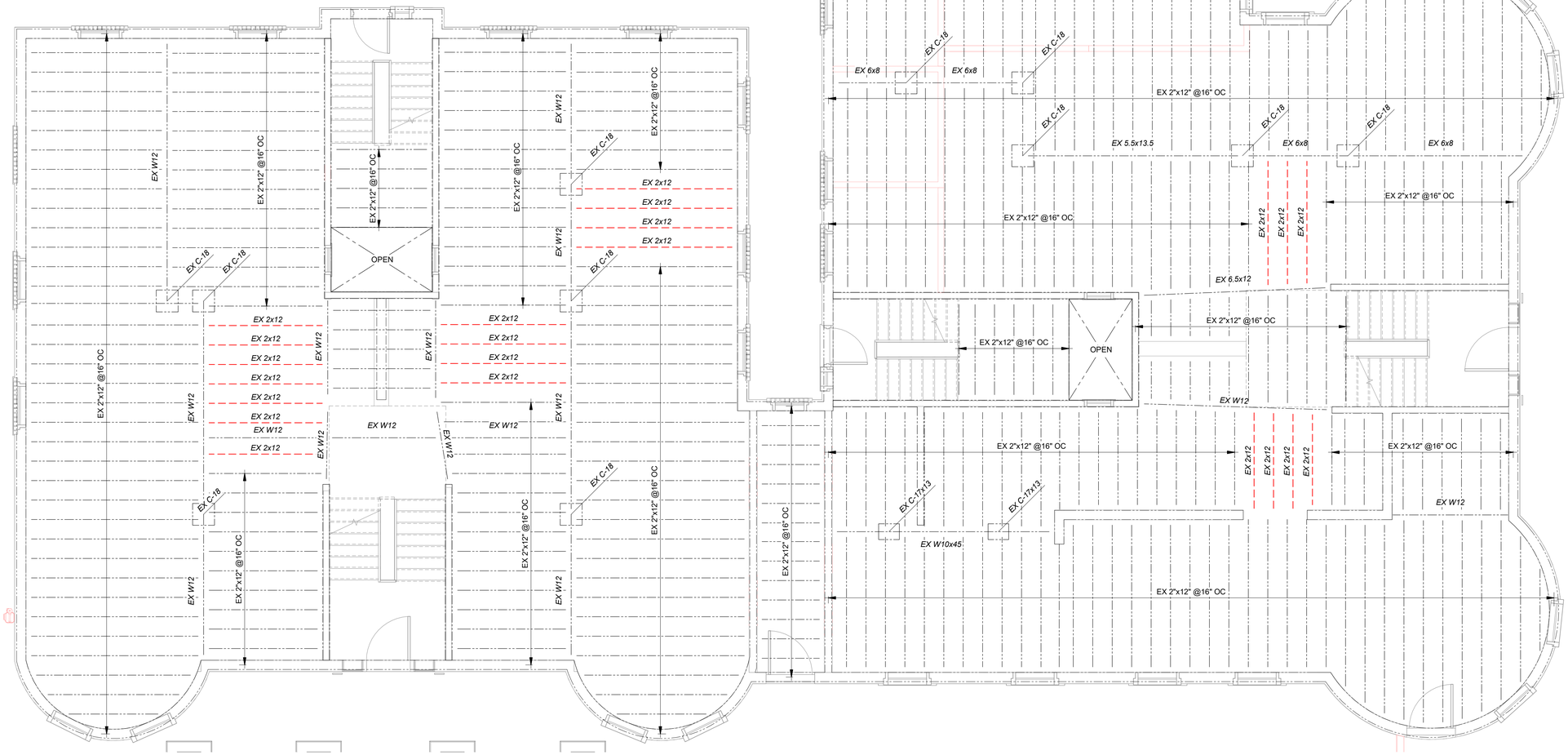
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FIRST FLOOR FRAMING DEMOLITION PLAN

SCALE: 1/4" = 1'-0"

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FIRST FLOOR FRAMING DEMOLITION PLAN

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SECOND FLOOR FRAMING DEMOLITION PLAN
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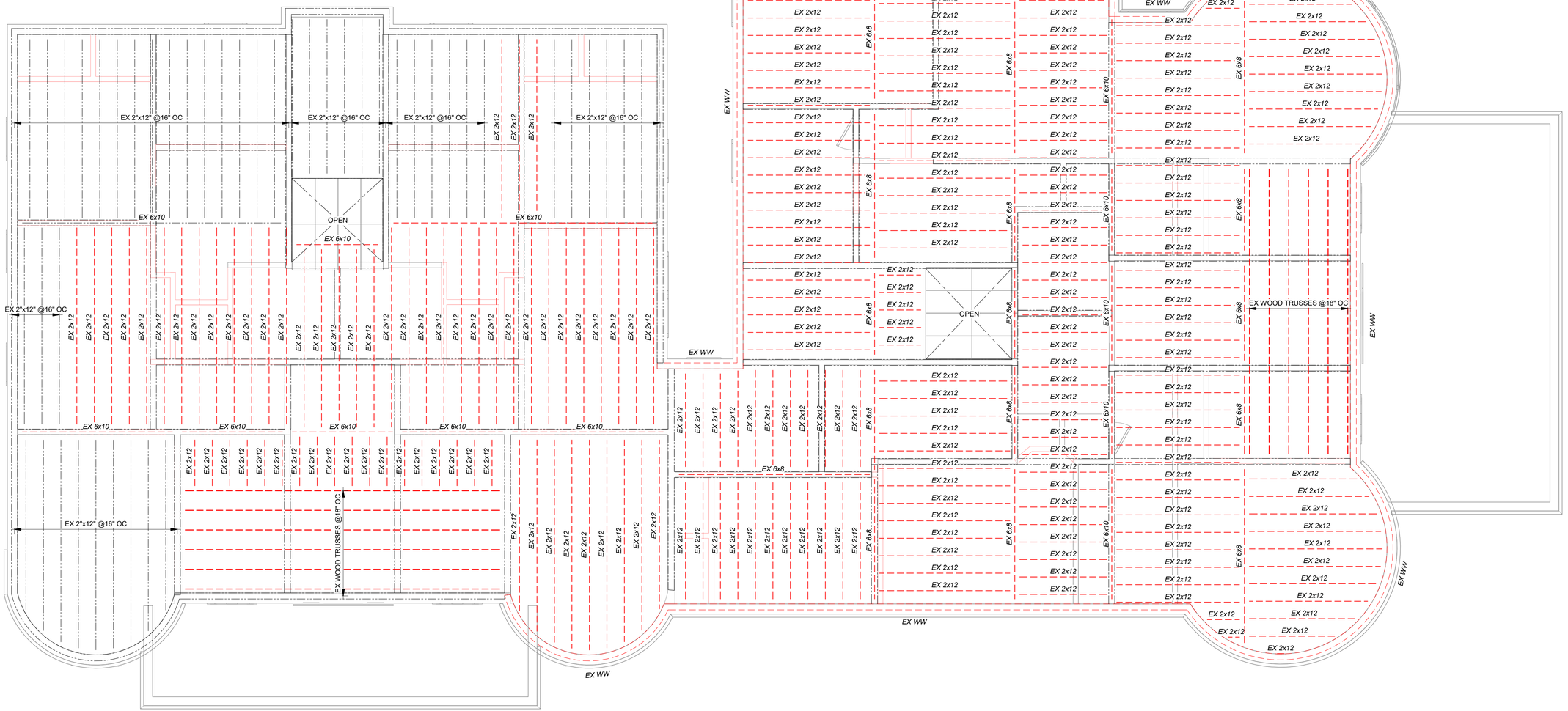
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SECOND FLOOR FRAMING DEMOLITION PLAN

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ROOF FRAMING DEMOLITION PLAN
SCALE: 1/4" = 1'-0"

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CONSULTING STRUCTURAL ENGINEERS
WWW.RESURGET.ENGINEERING
RE PROJECT NO:: 25395

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Revision Schedule

#	Description	Date

SEAL

NOT FOR CONSTRUCTION

Project Status

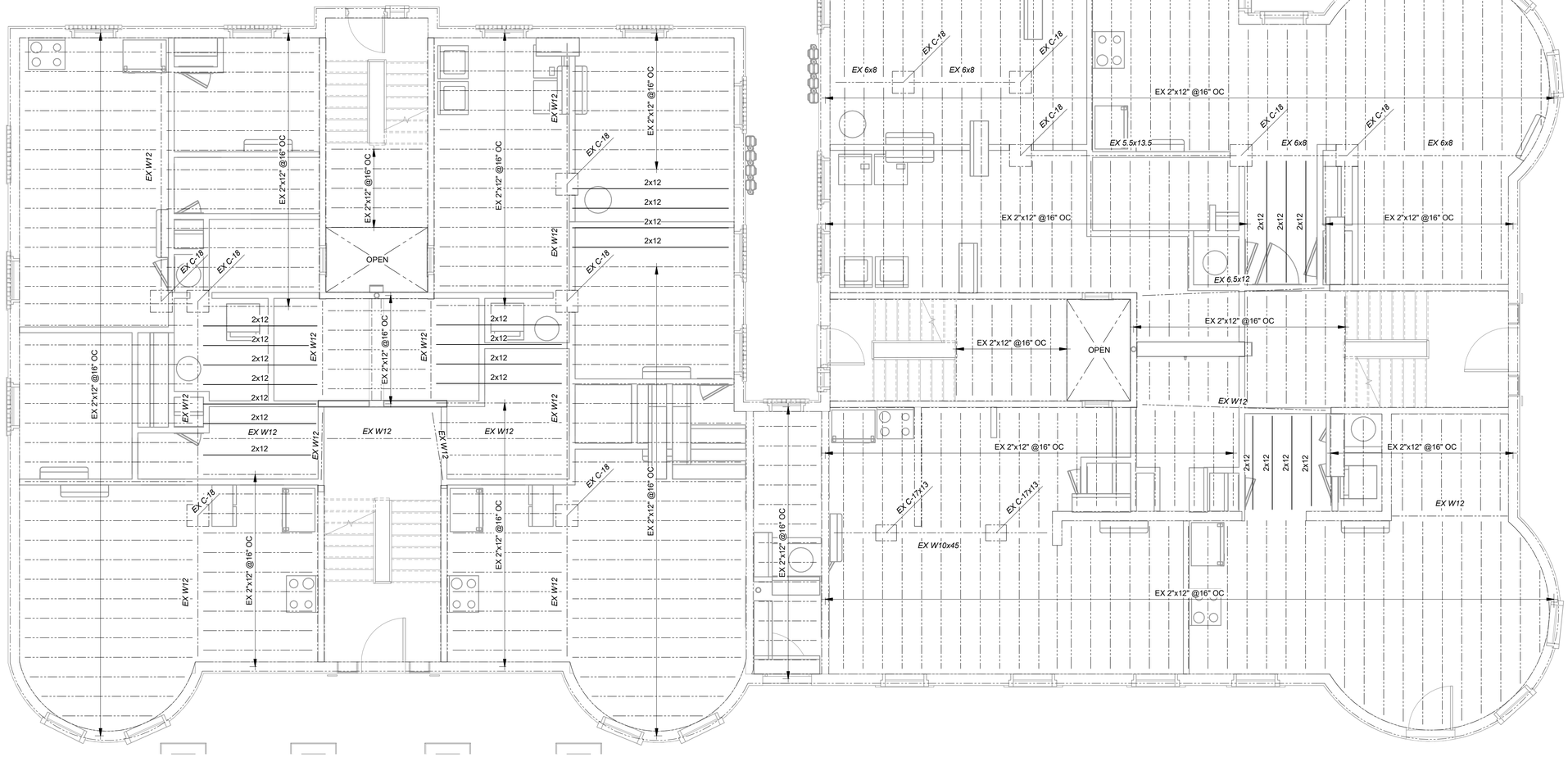
Project Name
PROJECT NUMBER Project Number
Enter address here
Owner
SHEET TITLE
ROOF FRAMING DEMOLITION PLAN

SHEET NUMBER
SD.120

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FIRST FLOOR FRAMING PLAN
SCALE: 1/4" = 1'-0"

NORTH

infuz Ltd
ARCHITECTS + INNOVATORS

Port Huron Office
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Phone: 313.332.1299

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Web: infuzarchitects.com

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DETROIT • SAN FRANCISCO
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SEAL

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Project Status

Project Name
PROJECT NUMBER Project Number
Enter address here

Owner

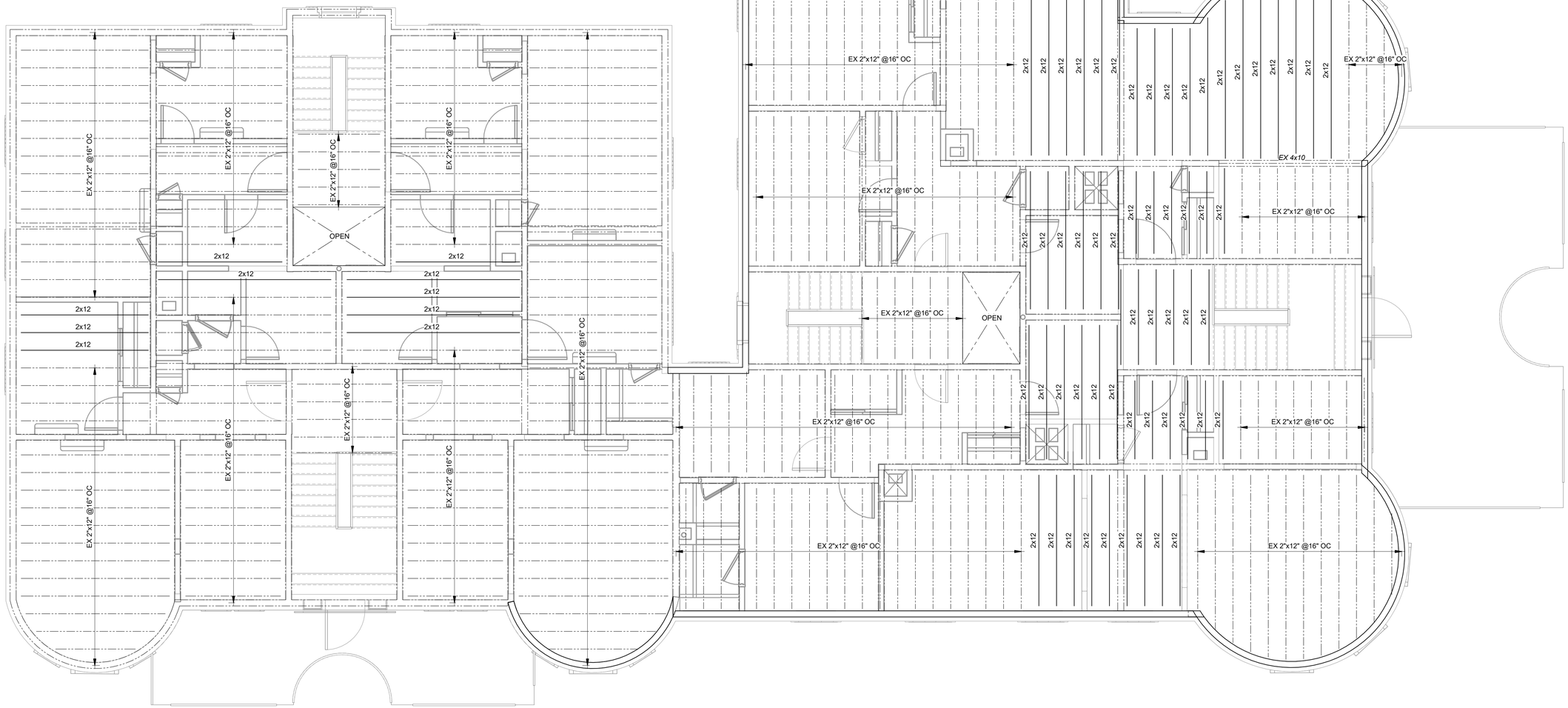
SHEET TITLE
FIRST FLOOR FRAMING PLAN

SHEET NUMBER
S.100

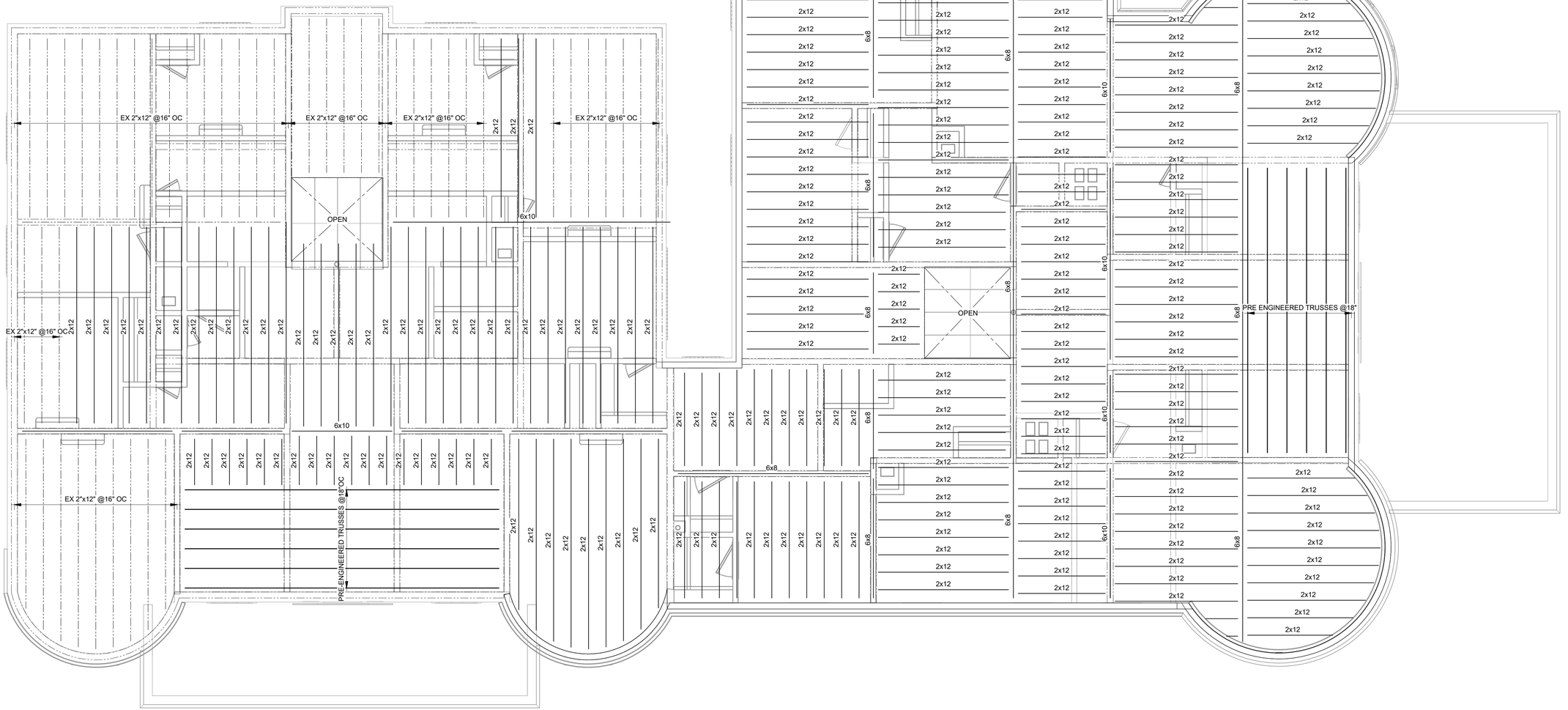
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EX 2"x12" @16" OC
EX 2"x12" @16" OC
EX 2"x12" @16" OC

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EX 2"x12" @16" OC
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SITE IMPROVEMENT PLANS

FOR

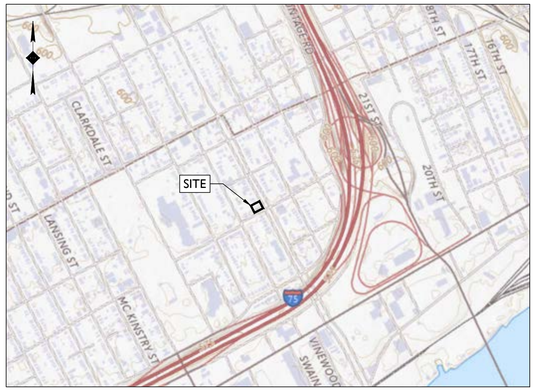
HUBBARD FARMS LOFTS

PROPOSED PARKING LOT ADDITION

PARCEL ID: 14008339 & 14008340
355 WEST GRAND BOULEVARD
CITY OF DETROIT, WAYNE COUNTY, MICHIGAN

OWNER

HUBBARD FARMS LOFTS LLC
4300 NORTH VERNOR HIGHWAY
DETROIT, MI 48209



SOURCE: USGS TOPOGRAPHICAL MAPPER

LOCATION MAP

SCALE: 1" = 1,000'±



SOURCE: NEARMAP ONLINE MAPPING SYSTEM

AERIAL MAP

SCALE: 1" = 80'±



SOURCE: DETROIT ZONING MAP INDEX

ZONING MAP

SCALE: 1" = 80'±

PLANS PREPARED BY:

STONEFIELD
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www.stonefieldeng.com

555 S. Old Woodward Avenue, Suite 12L, Birmingham, MI 48009
Phone 248.247.1115

811 Know what's **below** **Call** before you dig.

PLAN REFERENCE MATERIALS:

1. THIS PLAN SET REFERENCES THE FOLLOWING DOCUMENTS INCLUDING, BUT NOT LIMITED TO:
   - BOUNDARY & TOPOGRAPHIC SURVEY PREPARED BY STONEFIELD ENGINEERING & DESIGN, DATED 02/23/2026
   - ARCHITECTURAL PLANS PREPARED BY INFUZ ARCHITECTS
   - AERIAL MAP OBTAINED FROM NEARMAP ONLINE MAPPING SYSTEM, DATE RETRIEVED 04/20/2026
   - LOCATION MAP OBTAINED FROM USGS TOPOGRAPHICAL MAPPER, DATE RETRIEVED 04/20/2026
2. ALL REFERENCE MATERIAL LISTED ABOVE SHALL BE CONSIDERED A PART OF THIS PLAN SET AND ALL INFORMATION CONTAINED WITHIN THESE MATERIALS SHALL BE UTILIZED IN CONJUNCTION WITH THIS PLAN SET. THE CONTRACTOR IS RESPONSIBLE TO OBTAIN A COPY OF EACH REFERENCE AND REVIEW IT THOROUGHLY PRIOR TO THE START OF CONSTRUCTION.

SHEET INDEX

DRAWING TITLE	SHEET #
COVER SHEET	C-1
DEMOLITION PLAN	C-2
SITE PLAN	C-3
GRADING & UTILITY PLAN	C-4
LANDSCAPING PLAN	C-5
LANDSCAPING DETAILS	C-6
CONSTRUCTION DETAILS	C-7

ADDITIONAL SHEETS

DRAWING TITLE	SHEET #
BOUNDARY & TOPOGRAPHIC SURVEY	1 OF 1

ISSUE	DATE	BY	DESCRIPTION
2	04/27/2026	KG	FOR CLIENT REVIEW
1	03/20/2026	JB	FOR CLIENT REVIEW

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SITE IMPROVEMENT PLANS
HUBBARD FARMS LOFTS
PROPOSED PARKING LOT ADDITION
PID: 14008339 & 14008340
355 WEST GRAND BOULEVARD
CITY OF DETROIT
WAYNE COUNTY, MI

STONEFIELD engineering & design

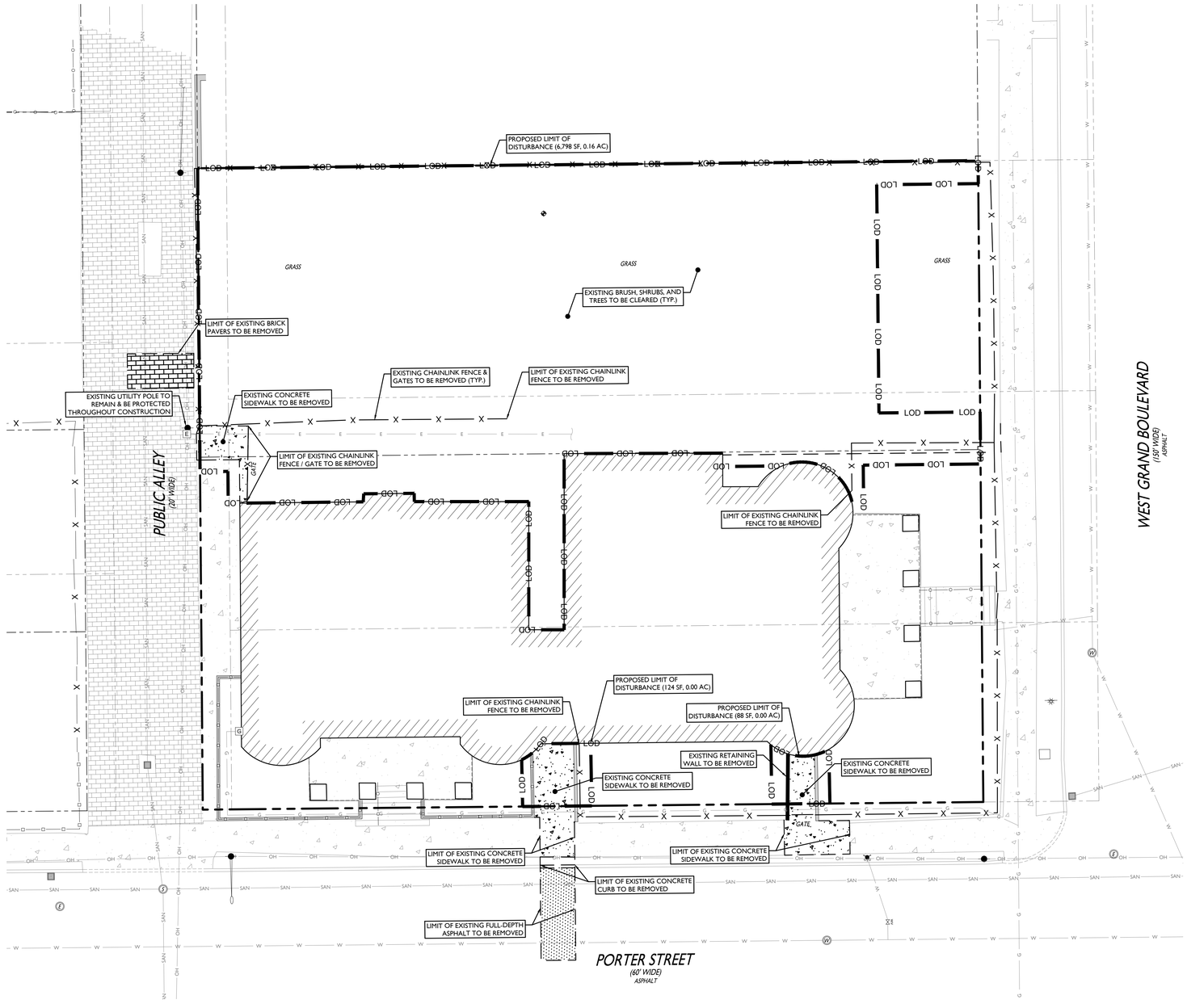
SCALE: AS SHOWN | PROJECT ID: DET-250575

TITLE: COVER SHEET

DRAWING: C-1

V:\DET\2025\DET-250575 HUBBARD FARMS LOFTS - 355 WEST GRAND BOULEVARD, DETROIT, MI\CAD\PLOT\SP-01-COVER.DWG

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SYMBOL	DESCRIPTION
– – – – –	FEATURE TO BE REMOVED / DEMOLISHED
LOD	LIMIT OF DISTURBANCE

ALL SITE FEATURES WITHIN THE LIMIT OF DISTURBANCE INDICATED ON THIS PLAN ARE TO REMAIN & BE PROTECTED THROUGHOUT CONSTRUCTION UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. IF SIGNIFICANT DISCREPANCIES ARE DISCERNED BETWEEN THIS PLAN AND FIELD CONDITIONS

811 Know what's **below** **Call** before you dig.

DEMOLITION NOTES

1. THE WORK REFLECTED ON THE DEMOLITION PLAN IS TO PROVIDE GENERAL INFORMATION TOWARDS THE EXISTING ITEMS TO BE DEMOLISHED AND/OR REMOVED. THE CONTRACTOR IS RESPONSIBLE TO REVIEW THE ENTIRE PLAN SET AND ASSOCIATED REPORTS/REFERENCE DOCUMENTS INCLUDING ALL DEMOLITION ACTIVITIES AND INCIDENTAL TASKS NECESSARY TO COMPLETE THE SITE IMPROVEMENTS.
2. THE CONTRACTOR IS RESPONSIBLE TO DETERMINE THE MEANS AND METHODS OF DEMOLITION ACTIVITIES.
3. EXPLOSIVES SHALL NOT BE USED UNLESS WRITTEN CONSENT FROM BOTH THE OWNER AND ANY APPLICABLE GOVERNING AGENCY IS OBTAINED. BEFORE THE START OF ANY EXPLOSIVE PROGRAM, THE CONTRACTOR IS RESPONSIBLE TO OBTAIN ALL LOCAL, STATE, AND FEDERAL PERMITS. ADDITIONALLY, THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL SEISMIC TESTING AS REQUIRED AND ANY DAMAGES AS THE RESULT OF SAID DEMOLITION PRACTICES.
4. ALL DEMOLITION ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL CODES. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING ALL UTILITIES ARE DISCONNECTED IN ACCORDANCE WITH THE UTILITY AUTHORITY'S REQUIREMENTS PRIOR TO STARTING THE DEMOLITION OF ANY STRUCTURE. ALL EXCAVATIONS ASSOCIATED WITH DEMOLISHED STRUCTURES OR REMOVED TANKS SHALL BE BACKFILLED WITH SUITABLE MATERIAL AND COMPACTED TO SUPPORT SITE AND BUILDING IMPROVEMENTS. A GEOTECHNICAL ENGINEER SHOULD BE PRESENT DURING BACKFILLING ACTIVITIES TO OBSERVE AND CERTIFY THAT BACKFILL MATERIAL WAS COMPACTED TO A SUITABLE CONDITION.
5. DEMOLISHED DEBRIS SHALL NOT BE BURIED ON SITE. ALL WASTE/DEBRIS GENERATED FROM DEMOLITION ACTIVITIES SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REQUIREMENTS. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN ALL RECORDS OF THE DISPOSAL TO DEMONSTRATE COMPLIANCE WITH THE ABOVE REGULATIONS.

10' 0' 10' 20'
GRAPHIC SCALE IN FEET
1" = 10'

ISSUE	DATE	BY	DESCRIPTION
2	04/27/2026	KG	FOR CLIENT REVIEW
1	03/20/2026	JB	FOR CLIENT REVIEW

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Phone 248.247.1115

SITE IMPROVEMENT PLANS

HUBBARD FARMS LOFTS

PROPOSED PARKING LOT ADDITION

PID: 14008339 & 14008340
315 WEST GRAND BOULEVARD
CITY OF DETROIT
WAYNE COUNTY, MI

STONEFIELD engineering & design

SCALE: 1" = 10' | PROJECT ID: DET-250575

TITLE: **DEMOLITION PLAN**

DRAWING: **C-2**

V:\DET\2025\DET-250575 HUBBARD FARMS LOFTS - 315 WEST GRAND BOULEVARD, DETROIT, MI\CAD\PLOT\TOPO-DEMO.DWG

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LAND USE AND ZONING

PARCEL ID: 14008339 & 14008340

MEDIUM DENSITY RESIDENTIAL DISTRICT (R-5)

PROPOSED USE		
PARKING LOT	PERMITTED USE	
MULTI-FAMILY DWELLING	EXISTING USE	
ZONING REQUIREMENT	**REQUIRED**	**PROPOSED**
MINIMUM LOT AREA	N/A	14,985 SF (0.34 AC.)
MINIMUM LOT WIDTH	N/A	111.0 FT
MINIMUM LOT DEPTH	N/A	135.0 FT
MINIMUM R.O.W. LANDSCAPE BUFFER	5 FT	5.0 FT
MINIMUM SIDE YARD PARKING SETBACK	10 FT	7.0 FT (V)
MINIMUM FRONT YARD PARKING SETBACK	20 FT	20.0 FT

(V) VARIANCE

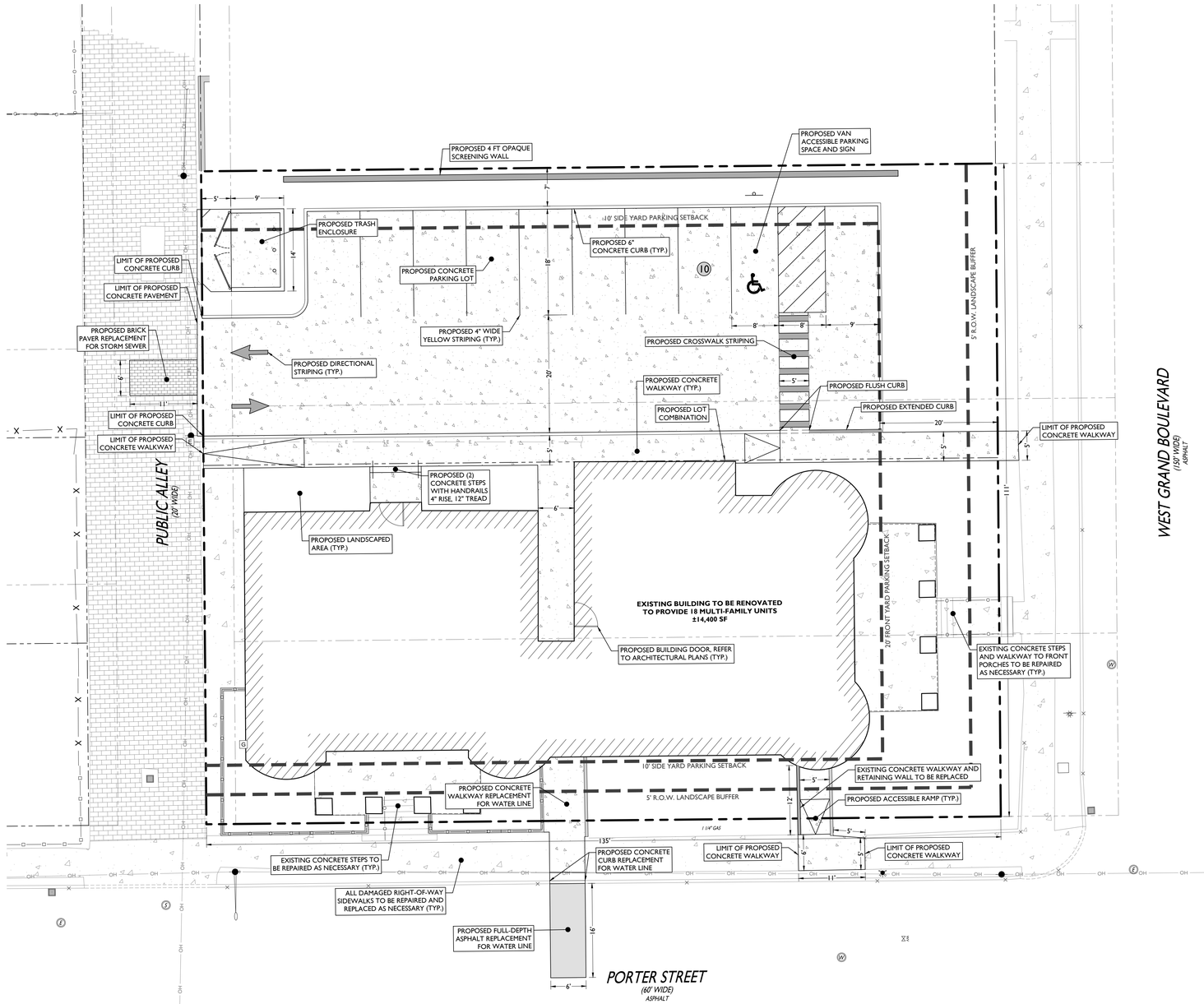
OFF-STREET PARKING REQUIREMENTS

CODE SECTION	REQUIRED	PROPOSED
§ 50-14-34	EXISTING PARKING REQUIRED (MULTI-FAMILY DWELLING):	10 SPACES
	0.75 SPACES PER DWELLING UNIT(1)	
	(0.75 SPACES / 1 DWELLING UNIT)(12 UNITS) = 9 SPACES	
	PROPOSED PARKING REQUIRED (MULTI-FAMILY DWELLING):	
	0.75 SPACES PER DWELLING UNIT(1)	
	(0.75 SPACES / 1 DWELLING UNIT)(18 UNITS) = 14 SPACES	
	PARKING REQUIRED(2) = PROPOSED - EXISTING REQUIRED	
	14 SPACES - 9 SPACES = **5 SPACES**	
§ 50-14-232	90° PARKING	9 FT X 18 FT
	9 FT X 20 FT(3) W/ 20 FT AISLE	20 FT AISLE

(1) § 50-14-34 - WHERE LOCATED WITHIN 0.50 MILES OF A BUS RAPID TRANSIT: 0.75 SPACES PER DWELLING UNIT

(2) REQUIRED PARKING FOR THE EXISTING HISTORIC USE SHALL BE SUBTRACTED FROM THE REQUIRED PARKING FOR THE PROPOSED USE

(3) § 50-14-231(b) - WHERE A PARKING SPACE ABUTS A LANDSCAPE ISLAND OR PLANTER, 2 FEET OF THE REQUIRED PARKING SPACE LENGTH MAY OVERHANG, PROVIDED THAT WHEEL STOPS OR 6" CURBING IS PROVIDED



SYMBOL / DESCRIPTION

- PROPERTY LINE
- SETBACK LINE
- SAWCUT LINE
- PROPOSED CURB
- PROPOSED EXTENDED CURB
- PROPOSED FLUSH CURB
- PROPOSED SIGNS / BOLLARDS
- PROPOSED CONCRETE
- PROPOSED FULL-DEPTH ASPHALT
- PROPOSED BRICK PAVER
- PROPOSED SCREENING / RETAINING WALL

GENERAL NOTES

1. THE CONTRACTOR SHALL VERIFY AND FAMILIARIZE THEMSELVES WITH THE EXISTING SITE CONDITIONS AND THE PROPOSED SCOPE OF WORK (INCLUDING DIMENSIONS, LAYOUT, ETC.) PRIOR TO INITIATING THE IMPROVEMENTS IDENTIFIED WITHIN THESE DOCUMENTS. SHOULD ANY DISCREPANCY BE FOUND BETWEEN THE EXISTING SITE CONDITIONS AND THE PROPOSED WORK THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. PRIOR TO THE START OF CONSTRUCTION.
2. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND ENSURE THAT ALL REQUIRED APPROVALS HAVE BEEN OBTAINED PRIOR TO THE START OF CONSTRUCTION. COPIES OF ALL REQUIRED PERMITS AND APPROVALS SHALL BE KEPT ON SITE AT ALL TIMES DURING CONSTRUCTION.
3. ALL CONTRACTORS WILL, TO THE FULLEST EXTENT PERMITTED BY LAW, INDEMNIFY AND HOLD HARMLESS STONEFIELD ENGINEERING & DESIGN, LLC. AND IT'S SUB-CONSULTANTS FROM AND AGAINST ANY DAMAGES AND LIABILITIES INCLUDING ATTORNEY'S FEES ARISING OUT OF CLAIMS BY EMPLOYEES OF THE CONTRACTOR IN ADDITION TO CLAIMS CONNECTED TO THE PROJECT AS A RESULT OF NOT CARRYING THE PROPER INSURANCE FOR WORKERS COMPENSATION, LIABILITY INSURANCE, AND LIMITS OF COMMERCIAL GENERAL LIABILITY INSURANCE.
4. THE CONTRACTOR SHALL NOT DEVIATE FROM THE PROPOSED IMPROVEMENTS IDENTIFIED WITHIN THIS PLAN SET UNLESS APPROVAL IS PROVIDED IN WRITING BY STONEFIELD ENGINEERING & DESIGN, LLC.
5. THE CONTRACTOR IS RESPONSIBLE TO DETERMINE THE MEANS AND METHODS OF CONSTRUCTION.
6. THE CONTRACTOR SHALL NOT PERFORM ANY WORK OR CAUSE DISTURBANCE ON A PRIVATE PROPERTY NOT CONTROLLED BY THE PERSON OR ENTITY WHO HAS AUTHORIZED THE WORK WITHOUT PRIOR WRITTEN CONSENT FROM THE OWNER OF THE PRIVATE PROPERTY.
7. THE CONTRACTOR IS RESPONSIBLE TO RESTORE ANY DAMAGED OR UNDERMINED STRUCTURE OR SITE FEATURE THAT IS IDENTIFIED TO REMAIN ON THE PLAN SET. ALL REPAIRS SHALL USE NEW MATERIALS TO RESTORE THE FEATURE TO ITS EXISTING CONDITION AT THE CONTRACTORS EXPENSE.
8. CONTRACTOR IS RESPONSIBLE TO PROVIDE THE APPROPRIATE SHOP DRAWINGS, PRODUCT DATA, AND OTHER REQUIRED SUBMITTALS FOR REVIEW. STONEFIELD ENGINEERING & DESIGN, LLC. WILL REVIEW THE SUBMITTALS IN ACCORDANCE WITH THE DESIGN INTENT AS REFLECTED WITHIN THE PLAN SET.
9. THE CONTRACTOR IS RESPONSIBLE FOR TRAFFIC CONTROL IN ACCORDANCE WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
10. THE CONTRACTOR IS REQUIRED TO PERFORM ALL WORK IN THE PUBLIC RIGHT-OF-WAY IN ACCORDANCE WITH THE APPROPRIATE GOVERNING AUTHORITY AND SHALL BE RESPONSIBLE FOR THE PROCUREMENT OF STREET OPENING PERMITS.
11. THE CONTRACTOR IS REQUIRED TO RETAIN AN OSHA CERTIFIED SAFETY INSPECTOR TO BE PRESENT ON SITE AT ALL TIMES DURING CONSTRUCTION & DEMOLITION ACTIVITIES.
12. SHOULD AN EMPLOYEE OF STONEFIELD ENGINEERING & DESIGN, LLC. BE PRESENT ON SITE AT ANY TIME DURING CONSTRUCTION, IT DOES NOT RELIEVE THE CONTRACTOR OF ANY OF THE RESPONSIBILITIES AND REQUIREMENTS LISTED IN THE NOTES WITHIN THIS PLAN SET.

10' 0' 10' 20'

GRAPHIC SCALE IN FEET
1" = 10'

ISSUE	DATE	BY	DESCRIPTION
2	04/27/2026	KG	FOR CLIENT REVIEW
1	03/20/2026	JB	FOR CLIENT REVIEW

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Phone 248.247.1115

SITE IMPROVEMENT PLANS

HUBBARD FARMS LOFTS

PROPOSED PARKING LOT ADDITION

PID: 14008339 & 14008340
355 WEST GRAND BOULEVARD
CITY OF DETROIT
WAYNE COUNTY, MI

STONEFIELD engineering & design

SCALE: 1" = 10' | PROJECT ID: DET-250575

TITLE: SITE PLAN

DRAWING: C-3

V:\DET\2025\DET-250575 HUBBARD FARMS LOFTS - 355 WEST GRAND BOULEVARD, DETROIT, MI\CAD\PLOT\SP-03 SITE.DWG

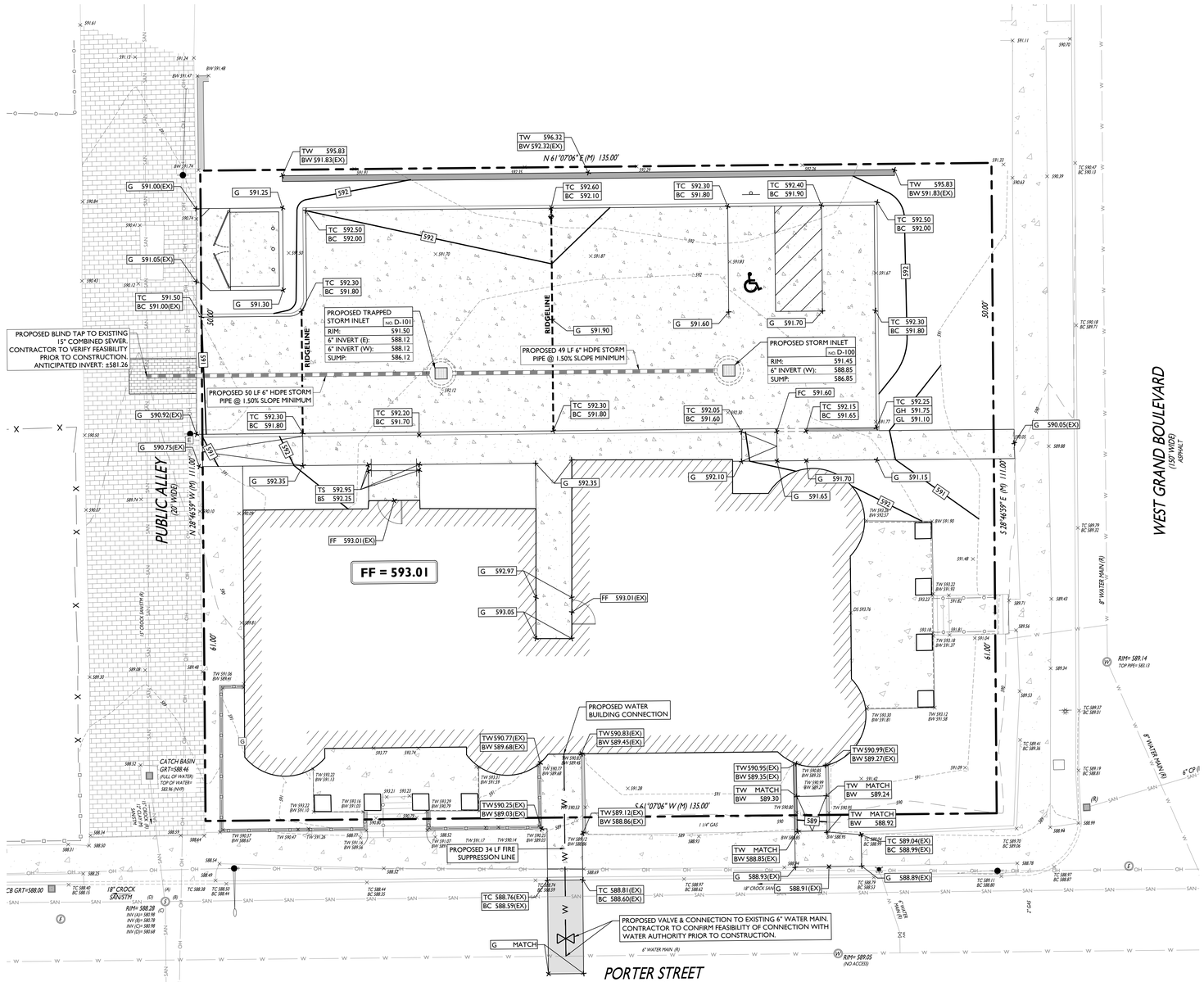
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BENCHMARKS

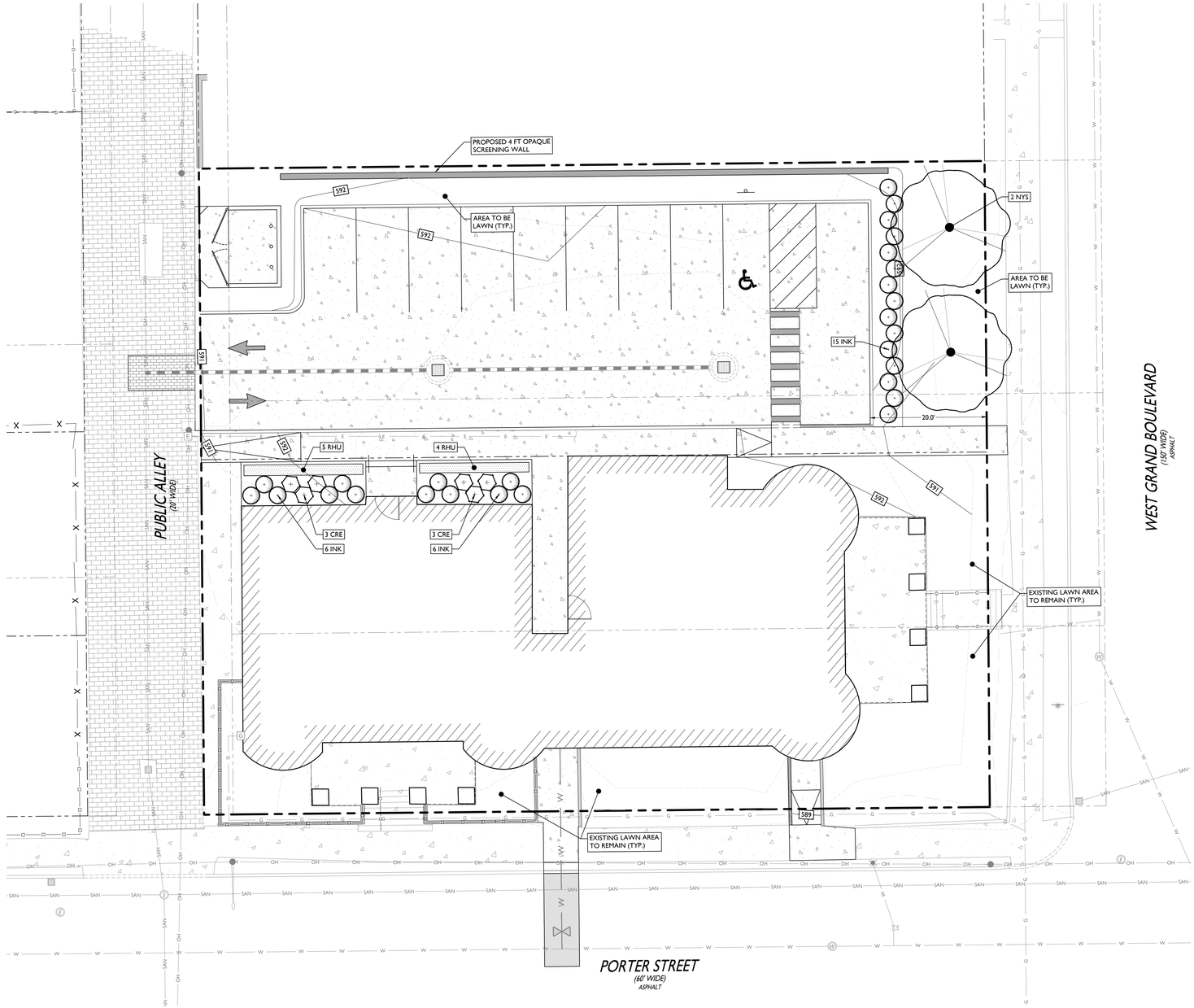
1. BENCHMARK #1: ARROW ON FIRE HYDRANT NORTHERLY LINE OF PORTER STREET ELEVATION: 588.85
2. BENCHMARK #2: SET TRAVERSE NAIL MIDDLE OF NORTHERLY LINE OF PARCEL 14008339 ELEVATION: 592.05

UTILITY NOTE:

ALL EXISTING UTILITIES ARE TO REMAIN, BE PROTECTED, & REUSED AS PART OF THIS DEVELOPMENT.


N 61°07'06" E (M) 135.00'
S 61°07'06" W (M) 135.00'
N 28°46'59" W (M) 111.00'
S 28°46'59" E (M) 111.00'
PUBLIC ALLEY (20' WIDE)
WEST GRAND BOULEVARD (150' WIDE) ASPHALT
PORTER STREET (60' WIDE) ASPHALT
RIDGELINE
50.00'
61.00'
FF = 593.01
PROPOSED BLIND TAP TO EXISTING 15" COMBINED SEWER. CONTRACTOR TO VERIFY FEASIBILITY PRIOR TO CONSTRUCTION. ANTICIPATED INVERT: ±581.26
PROPOSED TRAPPED STORM INLET NO. D-101 RIM: 591.50 6" INVERT (E): 588.12 6" INVERT (W): 588.12 SUMP: 586.12
PROPOSED 49 LF 6" HDPE STORM PIPE @ 1.50% SLOPE MINIMUM
PROPOSED STORM INLET NO. D-100 RIM: 591.45 6" INVERT (W): 588.85 SUMP: 586.85
PROPOSED 50 LF 6" HDPE STORM PIPE @ 1.50% SLOPE MINIMUM
PROPOSED WATER BUILDING CONNECTION
PROPOSED 34 LF FIRE SUPPRESSION LINE
PROPOSED VALVE & CONNECTION TO EXISTING 6" WATER MAIN. CONTRACTOR TO CONFIRM FEASIBILITY OF CONNECTION WITH WATER AUTHORITY PRIOR TO CONSTRUCTION.
CATCH BASIN GRT=588.46 (FULL OF WATER) TOP OF WATER= 583.96 (NVP)
18" CROCK SANISTH RIM= 588.28 INV (A)= 580.98 INV (B)= 581.78 INV (C)= 580.98 INV (D)= 580.68
8" WATER MAIN (R)
6" CP
1" GAS
2" GAS
RIM= 589.14 TOP PIPE= 583.13
RIM= 589.05 (NO ACCESS)
TW 595.83 BW 591.83(EX)
TW 596.32 BW 592.32(EX)
G 591.00(EX)
G 591.25
G 591.05(EX)
G 591.30
TC 591.50 BC 591.00(EX)
G 590.92(EX)
G 590.75(EX)
G 592.35
TS 592.95 BS 592.25
FF 593.01(EX)
G 592.97
G 593.05
TC 592.60 BC 592.10
TC 592.30 BC 591.80
TC 592.40 BC 591.90
TC 592.50 BC 592.00
TC 592.30 BC 591.80
TC 592.30 BC 591.70
TC 592.30 BC 591.80
TC 592.05 BC 591.60
G 591.90
G 591.60
G 591.70
FC 591.60
TC 592.15 BC 591.65
TC 592.25 GH 591.75 GL 591.10
G 590.05(EX)
G 592.10
G 591.70
G 591.65
G 591.15
TW 590.77(EX) BW 589.68(EX)
TW 590.83(EX) BW 589.45(EX)
TW 590.99(EX) BW 589.27(EX)
TW 590.95(EX) BW 589.35(EX)
TW 590.25(EX) BW 589.03(EX)
TW 589.12(EX) BW 588.86(EX)
TW MATCH BW 589.30
TW MATCH BW 588.85(EX)
TW MATCH BW 589.24
TW MATCH BW 588.92
TC 589.04(EX) BC 588.99(EX)
G 588.93(EX)
G 588.91(EX)
G 588.89(EX)
TC 588.81(EX) BC 588.60(EX)
TC 588.76(EX) BC 588.59(EX)
G MATCH
TW 591.06 BW 589.41
TW 590.47 BC 590.13
TW 590.18 BC 589.71
TW 589.79 BC 589.32
TW 589.37 BC 589.01
TW 589.19 BC 588.81
TW 589.41 BC 589.36
TW 589.22 BW 591.92
TW 591.18 BW 591.37
TW 591.22 BW 591.13
TW 591.16 BW 591.03
TW 591.29 BW 590.79
TW 590.85 BW 589.25
TW 590.99 BW 589.27
TW 590.85 BW 589.45
TW 590.77 BW 589.68
TW 590.53
TW 591.42 BW 589.24
TW 590.98 BW 588.92
TW 589.12 BW 588.86
TW 589.22 BW 589.03
TW 590.37 BW 588.67
TW 590.47
TW 591.26
TW 591.16 BW 589.56
TW 591.17
TW 590.14
TW 589.22 BW 589.03
TW 589.12 BW 588.86
TW 589.02 BW 588.80
TW 589.02 BW 589.03
TW 588.95
TC 588.99
TC 588.97 BC 588.87
TC 589.11 BC 588.80
TC 589.70 BC 589.06
TC 588.74 BC 588.59
TC 588.44 BC 588.35
TC 588.38
TC 588.50 BC 588.44
TC 588.40 BC 588.13
TW 591.30 BW 591.81
TW 593.12 BW 591.58
TW 591.18 BW 591.37
TW 591.22 BW 591.92
TW 591.24
TW 591.90
TW 592.22 BW 591.93
TW 592.37 BW 592.07
TW 592.37 BW 592.07
TW 592.37 BW 592.07

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LANDSCAPING AND BUFFER REQUIREMENTS

CODE SECTION	REQUIRED	PROPOSED
	GROUND TREAMENT	
§ 50-14-326	ALL UNPACED AREAS SHALL BE LANDSCAPED USING GROUNDCOVER, MULCH, GRASS SEED AND SOD, OR COBBLESTONE, PAVERS, OR ROCKS	COMPLIES
	RIGHT-OF-WAY SCREENING	
§ 50-14-341.(1)	BUFFER REQUIRED TO SCREEN OFF STREET PARKING AREAS FROM RIGHT-OF-WAY	
	MINIMUM WIDTH = 5 FT	20.0 FT
§ 50-14-341.(1).a	1 TREE FOR EVERY 30 LF	
	(45 LF) * (1 TREE / 30 LF) = 2 TREES	2 TREES
§ 50-14-341.(1).b	VEGETATION, BERM, OR MASONRY WALL REQUIRED WITHIN LANDSCAPE BUFFER ADJACENT TO PARKING AREA	CONTINUOUS HEDGE PROPOSED

PLANT SCHEDULE

SYMBOL	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER
DECIDUOUS TREES						
	NYS	2	NYSSA SYLVATICA	SOUR GUM	2" - 2.5" CAL	B&B
SHRUBS						
	CRE	6	CORNUS SERICEA	RED TWIG DOGWOOD	18" - 24" HT	POT
EVERGREEN SHRUBS						
	INK	27	ILEX GLABRA 'COMPACTA'	COMPACT INKBERRY	18" - 24" HT	POT
GROUND COVERS						
	RHU	9	RHUS AROMATICA 'GRO-LOW'	GRO-LOW FRAGRANT SUMAC	1 GAL., 36" O.C.	POT

NOTE: IF ANY DISCREPANCIES OCCUR BETWEEN AMOUNTS SHOWN ON THE LANDSCAPE PLAN AND WITHIN THE PLANT LIST, THE PLAN SHALL DICTATE.

Know what's **below**
Call before you dig.

IRRIGATION NOTE:

IRRIGATION CONTRACTOR TO PROVIDE A DESIGN FOR AN IRRIGATION SYSTEM SEPARATING PLANTING BEDS FROM LAWN AREA, PRIOR TO CONSTRUCTION. DESIGN IS TO BE SUBMITTED TO THE PROJECT LANDSCAPE DESIGNER FOR REVIEW AND APPROVAL. WHERE POSSIBLE, DRIP IRRIGATION AND OTHER WATER CONSERVATION TECHNIQUES SUCH AS RAIN SENSORS SHALL BE IMPLEMENTED. CONTRACTOR TO VERIFY MAXIMUM ON SITE DYNAMIC WATER PRESSURE AVAILABLE MEASURED IN PSI. PRESSURE REDUCING DEVICES OR BOOSTER PUMPS SHALL BE PROVIDED TO MEET SYSTEM PRESSURE REQUIREMENTS. DESIGN TO SHOW ALL VALVES, PIPING, HEADS, BACKFLOW PREVENTION, METERS, CONTROLLERS, AND SLEEVES WITHIN HARDSCAPE AREAS.

LANDSCAPING NOTES

1. THE CONTRACTOR SHALL RESTORE ALL DISTURBED GRASS AND LANDSCAPED AREAS TO MATCH EXISTING CONDITIONS UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET.
2. THE CONTRACTOR SHALL RESTORE ALL DISTURBED LAWN AREAS WITH A MINIMUM 4 INCH LAYER OF TOPSOIL AND SEED.
3. THE CONTRACTOR SHALL RESTORE MULCH AREAS WITH A MINIMUM 3 INCH LAYER OF MULCH .
4. THE MAXIMUM SLOPE ALLOWABLE IN LANDSCAPE RESTORATION AREAS SHALL BE 3 FEET HORIZONTAL TO 1 FOOT VERTICAL (3:1 SLOPE) UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET.
5. THE CONTRACTOR IS REQUIRED TO LOCATE ALL SPRINKLER HEADS IN AREA OF LANDSCAPING DISTURBANCE PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL RELOCATE SPRINKLER HEADS AND LINES IN ACCORDANCE WITH OWNER'S DIRECTION WITHIN AREAS OF DISTURBANCE.
6. THE CONTRACTOR SHALL ENSURE THAT ALL DISTURBED LANDSCAPED AREAS ARE GRADED TO MEET FLUSH AT THE ELEVATION OF WALKWAYS AND TOP OF CURB ELEVATIONS EXCEPT UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET. NO ABRUPT CHANGES IN GRADE ARE PERMITTED IN DISTURBED LANDSCAPING AREAS.

10' 0' 10' 20'
GRAPHIC SCALE IN FEET
1" = 10'

ISSUE	DATE	BY	DESCRIPTION
2	04/27/2026	KG	FOR CLIENT REVIEW
1	03/20/2026	JB	FOR CLIENT REVIEW

NOT APPROVED FOR CONSTRUCTION

STONEFIELD engineering & design
Birmingham, MI · New York, NY · Salem, MA
Princeton, NJ · Tampa, FL · Rutherford, NJ
www.stonefieldeng.com
555 S. Old Woodward Avenue, Suite 12L, Birmingham, MI 48009
Phone 248.247.1115

SITE IMPROVEMENT PLANS

HUBBARD FARMS LOFTS

PROPOSED PARKING LOT ADDITION

PID: 14008338 & 14008340
335 \ 345 WEST GRAND BOULEVARD
CITY OF DETROIT
WAYNE COUNTY, MI

STONEFIELD engineering & design

SCALE: 1" = 10' | PROJECT ID: DET-250575

TITLE:

LANDSCAPING PLAN

DRAWING:

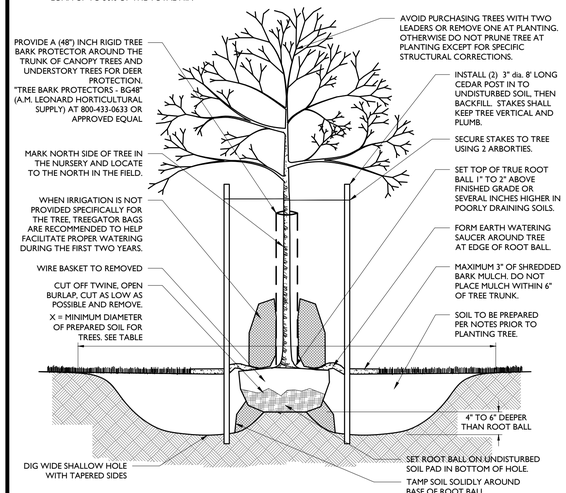
C-5

V:\DET\2025\DET-250575 HUBBARD FARMS LOFTS - 335 WEST GRAND BOULEVARD, DETROIT, MI\CAD\SHEETS\DP-05-04-LANDSCAPING

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NOTES:

1. FOR CONTAINER-GROWN TREES, USE FINGERS OR SMALL HAND TOOLS TO PULL THE ROOTS OUT OF THE OUTER LAYER OF POTTING SOIL; THEN CUT OR PULL APART ANY ROOTS CIRCLING THE PERIMETER OF THE CONTAINER.
2. THOROUGHLY SOAK THE TREE ROOT BALL AND ADJACENT PREPARED SOIL SEVERAL TIMES DURING THE FIRST MONTH AFTER PLANTING AND REGULARLY THROUGHOUT THE FOLLOWING TWO SUMMERS.
3. SOIL AMENDMENTS:
   - MODIFY HEAVY CLAY OR SILT SOILS (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) OR GYPSUM
   - MODIFY EXTREMELY SANDY SOILDS (MORE THAN 85% SAND) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX



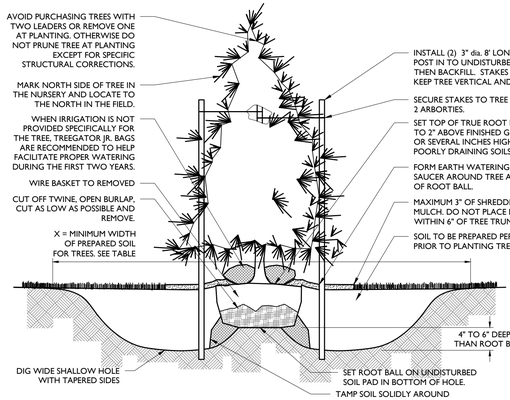
DECIDUOUS TREE PLANTING DETAIL

NOT TO SCALE

1

NOTES:

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CONIFEROUS TREE PLANTING DETAIL

NOT TO SCALE

2

GENERAL LANDSCAPING NOTES:

1. THE LANDSCAPE CONTRACTOR SHALL FURNISH ALL MATERIALS AND PERFORM ALL WORK IN ACCORDANCE WITH THESE SPECIFICATIONS, APPROVED OR FINAL DRAWINGS, AND INSTRUCTIONS PROVIDED BY THE PROJECT LANDSCAPE DESIGNER, MUNICIPAL OFFICIALS, OR OWNER/OWNER'S REPRESENTATIVE. ALL WORK COMPLETED AND MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH THE INTENTION OF THE SPECIFICATIONS, DRAWINGS, AND INSTRUCTIONS AND EXECUTED WITH THE STANDARD LEVEL OF CARE FOR THE LANDSCAPE INDUSTRY.
2. WORK MUST BE CARRIED OUT ONLY DURING WEATHER CONDITIONS FAVORABLE TO LANDSCAPE CONSTRUCTION AND TO THE HEALTH AND WELFARE OF PLANTS. THE SUITABILITY OF SUCH WEATHER CONDITIONS SHALL BE DETERMINED BY THE PROJECT LANDSCAPE DESIGNER OR GOVERNING MUNICIPAL OFFICIAL.
3. IT IS THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR, BEFORE ORDERING OR PURCHASING MATERIALS, TO PROVIDE SAMPLES OF THOSE MATERIALS TO THE PROJECT LANDSCAPE DESIGNER OR GOVERNING MUNICIPAL OFFICIAL FOR APPROVAL, IF SO REQUESTED.
4. IF SAMPLES ARE REQUESTED, THE LANDSCAPE CONTRACTOR IS TO SUBMIT CERTIFICATION TAGS FROM TREES, SHRUBS AND SEED VERIFYING TYPE AND PURITY.
5. UNLESS OTHERWISE AUTHORIZED BY THE PROJECT LANDSCAPE DESIGNER OR GOVERNING MUNICIPAL OFFICIAL, THE LANDSCAPE CONTRACTOR SHALL PROVIDE NOTICE AT LEAST FORTY-EIGHT HOURS (48 HRS.) IN ADVANCE OF THE ANTICIPATED DELIVERY DATE OF ANY PLANT MATERIALS TO THE PROJECT SITE. A LEGIBLE COPY OF THE INVOICE, SHOWING VARIETIES AND SIZES OF MATERIALS INCLUDED FOR EACH SHIPMENT SHALL BE FURNISHED TO THE PROJECT LANDSCAPE DESIGNER, OR GOVERNING MUNICIPAL OFFICIAL.
6. THE PROJECT LANDSCAPE DESIGNER OR GOVERNING MUNICIPAL OFFICIAL RESERVES THE RIGHT TO INSPECT AND REJECT PLANTS AT ANY TIME AND AT ANY PLACE.

PROTECTION OF EXISTING VEGETATION NOTES:

1. BEFORE COMMENCING WORK, ALL EXISTING VEGETATION WHICH COULD BE IMPACTED AS A RESULT OF THE PROPOSED CONSTRUCTION ACTIVITIES MUST BE PROTECTED FROM DAMAGE BY THE INSTALLATION OF TREE PROTECTION FENCING. FENCING SHALL BE LOCATED AT THE DRIP-LINE OR LIMIT OF DISTURBANCE AS DEPICTED WITHIN THE APPROVED OR FINAL PLAN SET, ESTABLISHING THE TREE PROTECTION ZONE. INSTALLATION SHALL BE IN ACCORDANCE WITH THE PROVIDED "TREE PROTECTION FENCE DETAIL." NO WORK MAY BEGIN UNTIL THIS REQUIREMENT IS FULFILLED. THE FENCING SHALL BE INSPECTED REGULARLY BY THE LANDSCAPE CONTRACTOR AND MAINTAINED UNTIL ALL CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED.
2. IN ORDER TO AVOID DAMAGE TO ROOTS, BARK OR LOWER BRANCHES, NO VEHICLE, EQUIPMENT, DEBRIS, OR OTHER MATERIALS SHALL BE DRIVEN, PARKED OR PLACED WITHIN THE TREE PROTECTION ZONE. ALL ON-SITE CONTRACTORS SHALL USE ANY AND ALL PRECAUTIONARY MEASURES WHEN PERFORMING WORK AROUND TREES, WALKS, PAVEMENTS, UTILITIES, AND ANY OTHER FEATURES EITHER EXISTING OR PREVIOUSLY INSTALLED UNDER THIS CONTRACT.
3. IN RARE INSTANCES WHERE EXCAVATING, FILL, OR GRADING IS REQUIRED WITHIN THE DRIP-LINE OF TREES TO REMAIN, THE WORK SHALL BE PERFORMED AS FOLLOWS:
   - TRENCHING: WHEN TRENCHING OCCURS AROUND TREES TO REMAIN, THE TREE ROOTS SHALL NOT BE CUT, BUT THE TRENCH SHALL BE TUNNELED UNDER OR AROUND THE ROOTS BY CAREFUL HAND DIGGING AND WITHOUT INJURY TO THE ROOTS. NO ROOTS, LIMBS, OR WOODS ARE TO HAVE ANY PAINT OR MATERIAL APPLIED TO ANY SURFACE.
   - RAISING GRADES: WHEN THE GRADE AT AN EXISTING TREE IS BELOW THE NEW FINISHED GRADE, AND FILL NOT EXCEEDING 6 INCHES (6") IS REQUIRED, CLEAN, WASHED GRAVEL FROM ONE TO TWO INCHES (1" - 2") IN SIZE SHALL BE PLACED DIRECTLY AROUND THE TREE TRUNK. THE GRAVEL SHALL EXTEND OUT FROM THE TRUNK ON ALL SIDES A MINIMUM OF 18 INCHES (18") AND FINISH APPROXIMATELY TWO INCHES (2") ABOVE THE FINISH GRADE AT TREE. INSTALL GRAVEL BEFORE ANY EARTH FILL IS PLACED. NEW EARTH FILL SHALL NOT BE LEFT IN CONTACT WITH THE TRUNK OF ANY TREE REQUIRING FILL. WHERE FILL EXCEEDING 6 INCHES (6") IS REQUIRED, A DRY LAID TREE WELL SHALL BE CONSTRUCTED. IF APPLICABLE, THESE WELL INSTALLATION SHALL BE IN ACCORDANCE WITH THE PROVIDED "TREE WELL DETAIL."
   - LOWERING GRADES: EXISTING TREES LOCATED IN AREAS WHERE THE NEW FINISHED GRADE IS TO BE LOWERED, SHALL HAVE RE-GRADING WORK DONE BY HAND TO THE INDICATED ELEVATION, NO GREATER THAN SIX INCHES (6"). ROOTS SHALL BE CUT CLEANLY THREE INCHES (3") BELOW FINISHED GRADE UNDER THE DIRECTION OF A LICENSED ARBORIST. WHERE CUT EXCEEDING 6 INCHES (6") IS REQUIRED, A DRY LAID RETAINING WALL SHALL BE CONSTRUCTED. IF APPLICABLE, THE RETAINING WALL INSTALLATION SHALL BE IN ACCORDANCE WITH THE PROVIDED "TREE RETAINING WALL DETAIL."

SOIL PREPARATION AND MULCH NOTES:

1. LANDSCAPE CONTRACTOR SHALL OBTAIN A SOIL TEST OF THE IN-SITU TOPSOIL BY A CERTIFIED SOIL LABORATORY PRIOR TO PLANTING. LANDSCAPE CONTRACTOR SHALL ALLOW FOR A TWO WEEK TURNAROUND TIME FROM SUBMITTAL OF SAMPLE TO NOTIFICATION OF RESULTS.
2. BASED ON SOIL TEST RESULTS, ADJUST THE RATES OF LIME AND FERTILIZER THAT SHALL BE MIXED INTO THE TOP SIX INCHES (6") OF TOPSOIL. THE LIME AND FERTILIZER RATES PROVIDED WITHIN THE "SEED SPECIFICATION" OR "SOD SPECIFICATION" IS APPROXIMATE AND FOR BIDDING PURPOSES ONLY. IF ADDITIONAL AMENDMENTS ARE NECESSARY, ADJUST THE TOPSOIL AS FOLLOWS:
   - MODIFY HEAVY CLAY OR SILT SOILS (MORE THAN 40% CLAY OR SILT) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX.
3. TOPSOIL SHALL BE FERTILE, FRIABLE, NATURAL TOPSOIL OF LOAMING CHARACTER, WITHOUT ADMIXTURE OF SUBSOIL MATERIAL OBTAINED FROM A WELL-DRAINED ARABLE SITE, FREE FROM ALL CLAY, LUMPS, COARSE SANDS, STONES, PLANTS, ROOTS, STICKS, AND OTHER FOREIGN MATERIAL GREATER THAN ONE INCH (1").
4. TOPSOIL SHALL HAVE A PH RANGE OF 5.0-7.0 AND SHALL NOT CONTAIN LESS THAN 6% ORGANIC MATTER BY WEIGHT.
5. OBTAIN TOPSOIL ONLY FROM LOCAL SOURCES OR FROM AREAS HAVING SIMILAR SOIL CHARACTERISTICS TO THAT FOUND AT THE PROJECT SITE.
6. CONTRACTOR SHALL PROVIDE A SIX INCH (6") DEEP LAYER OF TOPSOIL IN ALL PLANTING AREAS. TOPSOIL SHALL BE SPREAD OVER A PREPARED SURFACE IN A UNIFORM LAYER TO ACHIEVE THE DESIRED COMPACTED THICKNESS. THE SPREADING OF TOPSOIL SHALL NOT BE CONDUCTED UNDER MUDDY OR FROZEN SOIL CONDITIONS.
7. UNLESS OTHERWISE NOTED IN THE CONTRACT, THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF TOPSOIL AND THE ESTABLISHMENT OF FINE-GRADING WITHIN THE DISTURBED AREA OF THE SITE.
8. LANDSCAPE CONTRACTOR SHALL VERIFY THAT THE SUB-GRADE ELEVATION MEETS THE FINISHED GRADE ELEVATION (LESS THE REQUIRED TOPSOIL) IN ACCORDANCE WITH THE APPROVED OR FINAL GRADING PLAN.
9. ALL LAWN AND PLANTING AREAS SHALL BE GRADED TO A SMOOTH, EVEN AND UNIFORM PLANE WITH NO ABRUPT CHANGE OF SURFACE AS DEPICTED WITHIN THE APPROVED OR FINAL CONSTRUCTION SET UNLESS OTHERWISE DIRECTED BY THE PROJECT LANDSCAPE DESIGNER OR MUNICIPAL OFFICIAL.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER SURFACE AND SUBSURFACE PLANT BED DRAINAGE PRIOR TO THE INSTALLATION OF PLANTINGS. IF POOR DRAINAGE CONDITIONS EXIST, CORRECTIVE ACTION SHALL BE TAKEN PRIOR TO INSTALLATION. ALL PLANTING AND LAWN AREAS SHALL BE GRADED AND MAINTAINED TO ALLOW A FREE FLOW OF SURFACE WATER.
11. DOUBLE SHREDDED HARDWOOD MULCH OR APPROVED EQUAL SHALL BE USED AS A THREE INCH (3") TOP DRESSING IN ALL SHRUB PLANTING BEDS AND AROUND ALL TREES PLANTED BY LANDSCAPE CONTRACTOR. GROUND COVER, PERENNIAL, AND ANNUAL PLANTING BEDS SHALL BE MULCHED WITH A TWO INCH (2") TOP DRESSING. SINGLE TREES OR SHRUBS SHALL BE MULCHED TO AVOID CONTACT WITH TRUNK OR PLANT STEM. MULCH SHALL BE OF SUFFICIENT CHARACTER AS NOT TO BE EASILY DISPLACED BY WIND OR WATER RUNOFF.
12. WHENEVER POSSIBLE, THE SOIL PREPARATION AREA SHALL BE CONNECTED FROM PLANTING TO PLANTING.
13. SOIL SHALL BE LOOSENED WITH A BACKHOE OR OTHER LARGE COARSE-TILING EQUIPMENT UNLESS THE SOIL IS FROZEN OR EXCESSIVELY WET. TILING THAT PRODUCES LARGE CLUMPS OF SOIL IS PREFERABLE TO TILING THAT RESULTS IN FINE GRAINS UNIFORM IN TEXTURE. AFTER THE AREA IS LOOSENED IT SHALL NOT BE DRIVEN OVER BY ANY VEHICLE.
14. APPLY PRE-EMERGENT WEED CONTROL TO ALL PLANT BEDS PRIOR TO MULCHING. ENSURE COMPATIBILITY BETWEEN PRODUCT AND PLANT MATERIAL.
15. ALL PLANTING SOIL SHALL BE AMENDED WITH THE FOLLOWING:

MYCRO® TREE SAVER - A DRY GRANULAR MYCORRHIZAL FUNGI INOCULANT THAT IS MIXED IN THE BACKFILL WHEN PLANTING TREES AND SHRUBS. IT CONTAINS SPORES OF BOTH ECTOMYCORRHIZAL AND VA MYCORRHIZAL FUNGI (VAM), BENEFICIAL RHIZOSPHERE BACTERIA, TERRA-SORB SUPERABSORBENT HYDROGEL TO REDUCE WATER LEACHING, AND SELECTED ORGANIC MICROBIAL NUTRIENTS.

- DIRECTIONS FOR USE: USE 3-OZ PER EACH FOOT DIAMETER OF THE ROOT BALL, OR 3-OZ PER INCH CALIPER. MIX INTO THE BACKFILL WHEN TRANSPLANTING TREES AND SHRUBS. MIX PRODUCT IN A RING-SHAPED VOLUME OF SOIL AROUND THE UPPER PORTION OF THE ROOT BALL, EXTENDING FROM THE SOIL SURFACE TO A DEPTH OF ABOUT 8 INCHES, AND EXTENDING OUT FROM THE ROOT BALL ABOUT 8 INCHES INTO THE BACKFILL. APPLY WATER TO SOIL SATURATION.
- MYCOR® TREE SAVER® IS EFFECTIVE FOR ALL TREE AND SHRUB SPECIES EXCEPT RHODODENDRONS, AZALEAS, AND MOUNTAIN LAUREL, WHICH REQUIRE ERICOID MYCORRHIZAE.
- SOIL PH: THE FUNGI IN THIS PRODUCT WERE CHOSEN BASED ON THEIR ABILITY TO SURVIVE AND COLONIZE PLANT ROOTS IN A PH RANGE OF 3 TO 9.
- FUNGICIDES: THE USE OF CERTAIN FUNGICIDES CAN HAVE A DETRIMENTAL EFFECT ON THE INOCULATION PROGRAM. SOIL APPLICATION OF ANY FUNGICIDE IS NOT RECOMMENDED FOR TWO WEEKS AFTER APPLICATION.
- OTHER PESTICIDES: HERBICIDES AND INSECTICIDES DO NOT NORMALLY INTERFERE WITH MYCORRHIZAL FUNGAL DEVELOPMENT, BUT MAY INHIBIT THE GROWTH OF SOME TREE AND SHRUB SPECIES IF NOT USED PROPERLY.

HEALTHY START MACRO TABS 12-8-8

- FERTILIZER TABLETS ARE PLACED IN THE UPPER 4 INCHES OF BACKFILL SOIL WHEN PLANTING TREES AND SHRUBS.
- TABLETS ARE FORMULATED FOR LONG-TERM RELEASE BY SLOW BIODEGRADATION, AND LAST UP TO 2 YEARS AFTER PLANTING. TABLETS CONTAIN 12-8-8 NPK FERTILIZER, AS WELL AS A MINIMUM OF SEVEN PERCENT (7%) HUMIC ACID BY WEIGHT, MICROBIAL NUTRIENTS DERIVED FROM SEA KELP, PROTEIN BYPRODUCTS, AND YUCCA SCHIDIGERA, AND A COMPLEMENT OF BENEFICIAL RHIZOSPHERE BACTERIA. THE STANDARD 21 GRAM TABLET IS SPECIFIED HERE. DIRECTIONS FOR USE: FOR PLANTING BALLED & BURLAPPED (B&B) TREES AND SHRUBS, MEASURE THE THICKNESS OF THE TRUNK, AND USE ABOUT 1 TABLET (21-G) PER HALF-INCH. PLACE THE TABLETS DIRECTLY NEXT TO THE ROOT BALL, EVENLY DISTRIBUTED AROUND ITS PERIMETER, AT A DEPTH OF ABOUT 4 INCHES.

PLANT QUALITY AND HANDLING NOTES:

1. ALL PLANT MATERIAL SHALL CONFORM TO THE AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1-2004) OR LATEST REVISION AS PUBLISHED BY THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION.
2. IN ALL CASES, BOTANICAL NAMES LISTED WITHIN THE APPROVED OR FINAL PLANT LIST SHALL TAKE PRECEDENCE OVER COMMON NAMES.
3. ALL PLANTS SHALL BE OF SELECTED SPECIMEN QUALITY, EXCEPTIONALLY HEAVY, TIGHTLY KNIT, SO TRAINED OR FAVORED IN THEIR DEVELOPMENT AND APPEARANCE AS TO BE SUPERIOR IN FORM, NUMBER OF BRANCHES, COMPACTNESS AND SYMMETRY. ALL PLANTS SHALL HAVE A NORMAL HABIT OR SOUND, HEALTHY, VIGOROUS PLANTS WITH WELL DEVELOPED ROOT SYSTEM. PLANTS SHALL BE FREE OF DISEASE, INSECT PESTS, EGGS OR LARVAE.
4. PLANTS SHALL NOT BE PRUNED BEFORE DELIVERY. TREES WITH ABRASION OF THE BARK, SUNSCALDS, DISFIGURING KNOTS OR FRESH CUTS OF LIMBS OVER ONE AND ONE-FOURTH INCHES (1-1/4") WHICH HAVE NOT COMPLETELY CALLOUSED SHALL BE REJECTED.
5. ALL PLANTS SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY AND SHALL HAVE A NORMAL HABIT OF GROWTH AND BE LEGIBLY TAGGED WITH THE PROPER NAME AND SIZE.
6. THE ROOT SYSTEM OF EACH PLANT SHALL BE WELL PROVIDED WITH FIBROUS ROOTS. ALL PARTS SHALL BE SOUND, HEALTHY, VIGOROUS, WELL-BRANCHED AND DENSELY FOLIATED WHEN IN LEAF.
7. ALL PLANTS DESIGNATED BALL AND BURLAP (B&B) MUST BE MOVED WITH THE ROOT SYSTEM AS SOLID UNITS WITH BALLS OF EARTH FIRMLY WRAPPED WITH BURLAP. THE DIAMETER AND DEPTH OF THE BALLS OF EARTH MUST BE SUFFICIENT TO ENCOMPASS THE FIBROUS ROOT FEEDING SYSTEMS NECESSARY FOR THE HEALTHY DEVELOPMENT OF THE PLANT. NO PLANT SHALL BE ACCEPTED WHEN THE BALL OF EARTH SURROUNDING ITS ROOTS HAS BEEN BADLY CRACKED OR BROKEN PREPARATORY TO OR DURING THE PROCESS OF PLANTING. THE BALLS SHALL REMAIN INTACT DURING ALL OPERATIONS. ALL PLANTS THAT CANNOT BE PLANTED AT ONCE MUST BE HEELED-IN BY SETTING IN THE GROUND AND COVERING THE BALLS WITH SOIL OR MULCH AND THEN WATERING. HEMP BURLAP AND TWINE IS PREFERABLE TO TREATED. IF TREATED BURLAP IS USED, ALL TWINE IS TO BE CUT FROM AROUND THE TRUNK AND ALL BURLAP IS TO BE REMOVED.
8. PLANTS TRANSPORTED TO THE PROJECT IN OPEN VEHICLES SHALL BE COVERED WITH TARPS OR OTHER SUITABLE COVERS SECURELY FASTENED TO THE BODY OF THE VEHICLE TO PREVENT INJURY TO THE PLANTS. CLOSED VEHICLES SHALL BE ADEQUATELY VENTILATED TO PREVENT OVERHEATING OF THE PLANTS. EVIDENCE OF INADEQUATE PROTECTION FOLLOWING DIGGING, CARELESSNESS WHILE IN TRANSIT OR STORAGE SHALL BE CAUSE FOR REJECTION OF PLANT MATERIAL. ALL PLANTS SHALL BE KEPT MOIST, FRESH, AND PROTECTED. SUCH PROTECTION SHALL ENCOMPASS THE ENTIRE PERIOD DURING WHICH THE PLANTS ARE IN TRANSIT, BEING HANDLED, OR ARE IN TEMPORARY STORAGE.
9. ALL PLANT MATERIAL SHALL BE INSTALLED IN ACCORDANCE WITH THE CORRESPONDING LANDSCAPE PLAN AND PLANTING DETAILS.
10. LANDSCAPE CONTRACTOR SHALL MAKE BEST EFFORT TO INSTALL PLANTINGS ON THE SAME DAY AS DELIVERY. IF PLANTS ARE NOT PLANTED IMMEDIATELY ON SITE, PROPER CARE SHALL BE TAKEN TO PLACE THE PLANTINGS IN PARTIAL SHADE WHEN POSSIBLE. THE ROOT BALL SHALL BE KEPT MOIST AT ALL TIMES AND COVERED WITH MOISTENED MULCH OR ADDED WOODCHIPS. PROPER IRRIGATION SHALL BE SUPPLIED SO AS TO NOT ALLOW THE ROOT BALL TO DRY OUT. PLANTINGS SHALL BE UNTIED AND PROPER SPACING SHALL BE ALLOTTED FOR AIR CIRCULATION AND TO PREVENT DISEASE, WILTING, AND LEAF LOSS. PLANTS THAT REMAIN UNPLANTED FOR A PERIOD OF TIME GREATER THAN THREE (3) DAYS SHALL BE HEALED IN WITH TOPSOIL OR MULCH AND WATERED AS REQUIRED TO PRESERVE ROOT MOISTURE.
11. NO PLANT MATERIAL SHALL BE PLANTED IN MUDDY OR FROZEN SOIL.
12. PLANTS WITH INJURED ROOTS OR BRANCHES SHALL BE PRUNED PRIOR TO PLANTING UTILIZING CLEAN, SHARP TOOLS. ONLY DISEASED OR INJURED PLANTS SHALL BE REMOVED.
13. IF ROCK OR OTHER UNDERGROUND OBSTRUCTION IS ENCOUNTERED, THE LANDSCAPE DESIGNER RESERVES THE RIGHT TO RELOCATE OR ENLARGE PLANTING PITS OR DELETE PLANT MATERIAL FROM THE CONTRACT.
14. IF PLANTS ARE PROPOSED WITHIN SIGHT TRIANGLES, TREES SHALL BE LIMBED AND MAINTAINED TO A HEIGHT OF EIGHT FEET (8') ABOVE GRADE, AND SHRUBS, GROUND COVER, PERENNIALS, AND ANNUALS SHALL BE MAINTAINED TO A HEIGHT NOT TO EXCEED TWO FEET (2') ABOVE GRADE UNLESS OTHERWISE NOTED OR SPECIFIED BY THE GOVERNING MUNICIPALITY OR AGENCY.
15. INSTALLATION SHALL OCCUR DURING THE FOLLOWING SEASONS:
    PLANTS (MARCH 15 - DECEMBER 15)
    LAWNS (MARCH 15 - JUNE 15 OR SEPTEMBER 1 - DECEMBER 1)
16. THE FOLLOWING TREES ARE SUSCEPTIBLE TO TRANSPLANT SHOCK AND SHALL NOT BE PLANTED DURING THE FALL SEASON (STARTING SEPTEMBER 15):

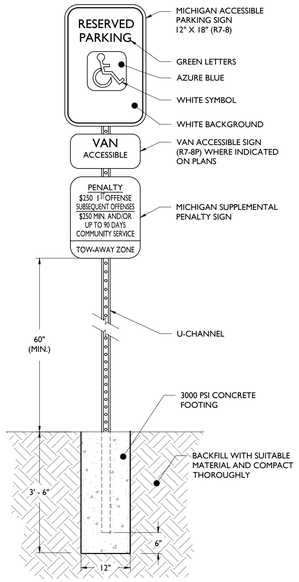
ABIES CONCOLOR	CORNUS VARIETIES	OSTRYA VIRGINIANA
ACER BUERGERIANUM	CRATAEGUS VARIETIES	PINUS NIGRA
ACER FREEMANII	CUPRESSOCYPARIS LEYLANDII	PLATANUS VARIETIES
ACER RUBRUM	FAGUS VARIETIES	POPULUS VARIETIES
ACER SACCHARINUM	HALESIA VARIETIES	PRUNUS VARIETIES
BETULA VARIETIES	ILEX X FOSTERII	PYRUS VARIETIES
CARPINUS VARIETIES	ILEX NELLIE STEVENS	QUERCUS VARIETIES (NOT Q. PALUSTRIS)
CEDRUS DEODARA	ILEX OPACA	SALIX WEEPING VARIETIES
CELTIS VARIETIES	JUNIPERUS VIRGINIANA	SORBUS VARIETIES
CERCIDIPHYLLUM VARIETIES	KOELREUTERIA PANICULATA	TAXODIUM VARIETIES
CERCIS CANADENSIS	LIQUIDAMBAR VARIETIES	TAXUX B REPANDENS
CORNUS VARIETIES	LIRIODENDRON VARIETIES	TILIA TOMENTOSA VARIETIES
CRATAEGUS VARIETIES	MALUS IN LEAF	ULMUS PARVIFOLIA VARIETIES
	NYSSA SYLVATICA	ZELKOVA VARIETIES

17. IF A PROPOSED PLANT IS UNATTAINABLE OR ON THE FALL DIGGING HAZARD LIST, AN EQUIVALENT SPECIES OF THE SAME SIZE MAY BE REQUESTED FOR SUBSTITUTION OF THE ORIGINAL PLANT. ALL SUBSTITUTIONS SHALL BE APPROVED BY THE PROJECT LANDSCAPE DESIGNER OR MUNICIPAL OFFICIAL PRIOR TO ORDERING AND INSTALLATION.
18. DURING THE COURSE OF CONSTRUCTION/PLANT INSTALLATION, EXCESS AND WASTE MATERIALS SHALL BE CONTINUOUSLY AND PROMPTLY REMOVED AT THE END OF EACH WORK DAY. ALL DEBRIS, MATERIALS, AND TOOLS SHALL BE PROPERLY STORED, STOCKPILED OR DISPOSED OF AND ALL PAVED AREAS SHALL BE CLEANED.
19. THE LANDSCAPE CONTRACTOR SHALL DISPOSE OF ALL RUBBISH AND EXCESS SOIL AT HIS EXPENSE TO AN OFF-SITE LOCATION AS APPROVED BY THE LOCAL MUNICIPALITY.
20. A 90-DAY MAINTENANCE PERIOD SHALL BEGIN IMMEDIATELY AFTER ALL PLANTS HAVE BEEN SATISFACTORILY INSTALLED.
21. MAINTENANCE SHALL INCLUDE, BUT NOT BE LIMITED TO, REPLACING MULCH THAT HAS BEEN DISPLACED BY EROSION OR OTHER MEANS, REPAIRING AND RESHAPING WATER RINGS OR SAUCERS, MAINTAINING STAKES AND GUYS IF ORIGINALLY REQUIRED, WATERING WHEN NEEDED OR DIRECTED, WEEDING, PRUNING, SPRAYING, FERTILIZING, MOWING THE LAWN, AND PERFORMING ANY OTHER WORK REQUIRED TO KEEP THE PLANTS IN A HEALTHY CONDITION.
22. MOW ALL GRASS AREAS AT REGULAR INTERVALS TO KEEP THE GRASS HEIGHT FROM EXCEEDING THREE INCHES (3"). MOWING SHALL BE PERFORMED ONLY WHEN GRASS IS DRY. MOWER BLADE SHALL BE SET TO REMOVE NO MORE THAN ONE THIRD (1/3) OF THE GRASS LENGTH. WHEN THE AMOUNT OF GRASS IS HEAVY, IT SHALL BE REMOVED TO PREVENT DESTRUCTION OF THE UNDERLYING TURF. MOW GRASS AREAS IN SUCH A MANNER AS TO PREVENT CLIPPINGS FROM BLOWING ON PAVED AREAS, AND SIDEWALKS. CLEANUP AFTER MOWING SHALL INCLUDE SWEEPING OR BLOWING OF PAVED AREAS AND SIDEWALKS TO CLEAR THEM FROM MOWING DEBRIS.
23. GRASSED AREAS DAMAGED DURING THE PROCESS OF THE WORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, WHO SHALL RESTORE THE DISTURBED AREAS TO A CONDITION SATISFACTORY TO THE PROJECT LANDSCAPE DESIGNER, MUNICIPAL OFFICIAL, OR OWNER/OWNER'S REPRESENTATIVE. THIS MAY INCLUDE FILLING TO GRADE, FERTILIZING, SEEDING, AND MULCHING.
24. SHOULD THE OWNER REQUIRE MAINTENANCE BEYOND THE STANDARD 90-DAY MAINTENANCE PERIOD, A SEPARATE CONTRACT SHALL BE ESTABLISHED.
25. LANDSCAPE CONTRACTOR SHALL WATER NEW PLANTINGS FROM TIME OF INSTALL AND THROUGHOUT REQUIRED 90-DAY MAINTENANCE PERIOD UNTIL PLANTS ARE ESTABLISHED. IF ON-SITE WATER IS NOT AVAILABLE AT THE PROJECT LOCATION, THE LANDSCAPE CONTRACTOR SHALL FINISH IT BY MEANS OR A WATERING TRUCK OR OTHER ACCEPTABLE MANNER.
26. THE QUANTITY OF WATER APPLIED AT ONE TIME SHALL BE SUFFICIENT TO PENETRATE THE SOIL TO A MINIMUM OF EIGHT INCHES (8") IN SHRUB BEDS AND SIX INCHES (6") IN TURF AREAS AT A RATE WHICH WILL PREVENT SATURATION OF THE SOIL.
27. IF AN AUTOMATIC IRRIGATION SYSTEM HAS BEEN INSTALLED, IT CAN BE USED FOR WATERING PLANT MATERIAL. HOWEVER, FAILURE OF THE SYSTEM DOES NOT ELIMINATE THE LANDSCAPE CONTRACTOR'S RESPONSIBILITY OF PLANT HEALTH AND ESTABLISHMENT.

PLANT MATERIAL GUARANTEE NOTES:

1. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE YEAR (1 YR.) FROM APPROVAL OF LANDSCAPE INSTALLATION BY THE PROJECT LANDSCAPE DESIGNER, MUNICIPAL OFFICIAL, OR OWNER/OWNER'S REPRESENTATIVE.
2. THE LANDSCAPE CONTRACTOR SHALL REMOVE AND REPLACE DYING, DEAD, OR DEFECTIVE PLANT MATERIAL AT HIS EXPENSE. THE LANDSCAPE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR ANY DAMAGES CAUSED BY HIS COMPANY'S OPERATIONS.
3. ALL REPLACEMENT PLANTS SHALL BE OF THE SAME SPECIES AND SIZE AS SPECIFIED ON THE APPROVED OR FINAL PLANT LIST. REPLACEMENTS RESULTING FROM REMOVAL, LOSS, OR DAMAGE D

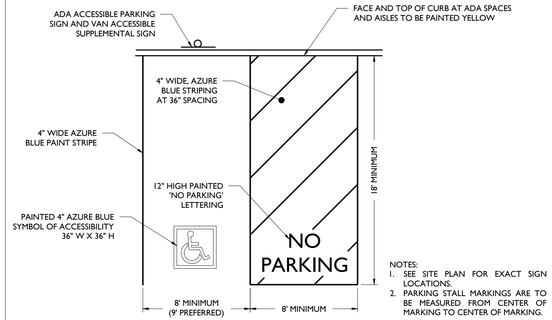
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ACCESSIBLE PARKING SIGN DETAIL

NOT TO SCALE

1

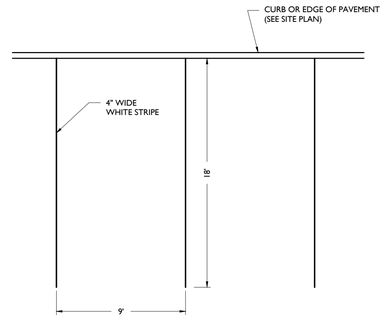


NOTES:
1. SEE SITE PLAN FOR EXACT SIGN LOCATIONS.
2. PARKING STALL MARKINGS ARE TO BE MEASURED FROM CENTER OF MARKING TO CENTER OF MARKING.

ACCESSIBLE PARKING STALL MARKINGS

NOT TO SCALE

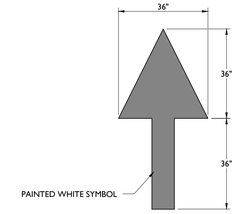
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PARKING STALL MARKINGS

NOT TO SCALE

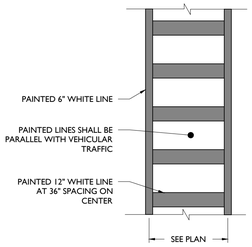
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DIRECTIONAL ARROW DETAIL

NOT TO SCALE

4



CROSSWALK DETAIL

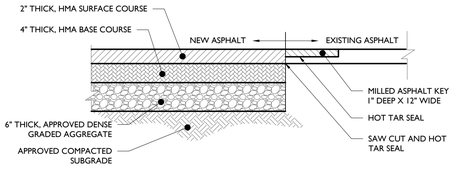
NOT TO SCALE

5

PAVEMENT STRIPING & MARKINGS NOTES:

1. ALL SIGNING AND STRIPING IN EXISTING CONDITION IN CONFLICT WITH THE PROPOSED DESIGN PLAN SHALL BE REMOVED.
2. ALL PROPOSED SIGNING AND STRIPING SHALL CONFORM TO THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION.
3. PAVEMENT STRIPING AND MARKINGS SHALL BE INSTALLED IN CONFORMANCE WITH ALL APPLICABLE LOCAL, COUNTY AND STATE REQUIREMENTS.
4. UNLESS OTHERWISE SPECIFIED, ALL STRIPING AND MARKINGS IN THE PUBLIC RIGHT-OF-WAY SHALL BE OF THERMOPLASTIC PAINT OR PREFORMED THERMOPLASTIC MARKINGS.
5. UNLESS OTHERWISE SPECIFIED, ON SITE PARKING STALL STRIPING, FIRE LANE STRIPING AND DIRECTIONAL ARROWS SHALL BE EPOXY PAINT. ON SITE STOP BARS, "DO NOT ENTER" BARS, AND ASSOCIATED LETTERING SHALL BE THERMOPLASTIC PAINT OR PREFORMED THERMOPLASTIC MARKINGS.

6

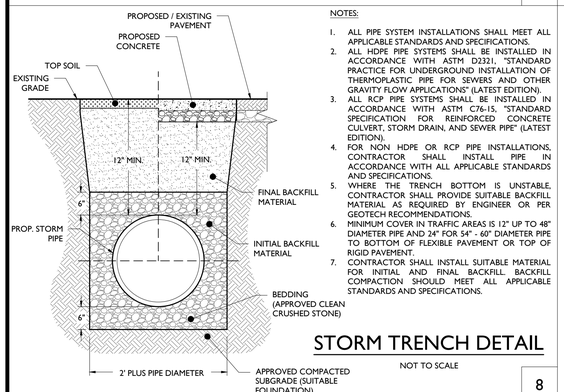


FULL DEPTH ASPHALT PAVEMENT DETAIL

NOT TO SCALE

NOTE:
HMA MIX AND DENSE GRADED AGGREGATE SHALL CONFORM TO STATE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS.

7



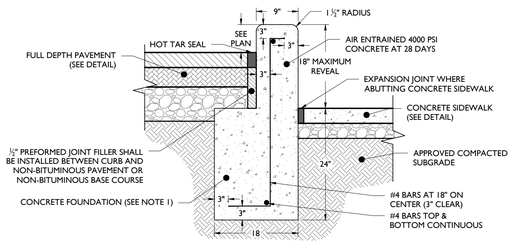
NOTES:

1. ALL PIPE SYSTEM INSTALLATIONS SHALL MEET ALL APPLICABLE STANDARDS AND SPECIFICATIONS.
2. ALL HDPE PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS" (LATEST EDITION).
3. ALL RCP PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM C76-15, "STANDARD SPECIFICATION FOR REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE" (LATEST EDITION).
4. FOR NON HDPE OR RCP PIPE INSTALLATIONS, CONTRACTOR SHALL INSTALL PIPE IN ACCORDANCE WITH ALL APPLICABLE STANDARDS AND SPECIFICATIONS.
5. WHERE THE TRENCH BOTTOM IS UNSTABLE, CONTRACTOR SHALL PROVIDE SUITABLE BACKFILL MATERIAL AS REQUIRED BY ENGINEER OR PER GEOTECH RECOMMENDATIONS.
6. MINIMUM COVER IN TRAFFIC AREAS IS 12" UP TO 48" DIAMETER PIPE AND 24" FOR 54" - 60" DIAMETER PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TOP OF RIGID PAVEMENT.
7. CONTRACTOR SHALL INSTALL SUITABLE MATERIAL FOR INITIAL AND FINAL BACKFILL. BACKFILL COMPACTION SHOULD MEET ALL APPLICABLE STANDARDS AND SPECIFICATIONS.

STORM TRENCH DETAIL

NOT TO SCALE

8

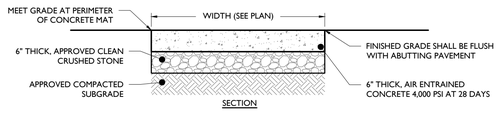


EXTENDED CONCRETE CURB DETAIL

NOT TO SCALE

NOTES:
1. CONCRETE SHALL BE 4000 PSI AT 28 DAYS, AIR-ENTRAINED.
2. ½" EXPANSION JOINTS WITH WATER SEAL SHALL BE PROVIDED AT 50 FOOT INTERVALS WITH PRE-MOLDED, BITUMINOUS JOINT FILLER, RECESSED ½" FROM SURFACE. LONGITUDINAL REBAR TO BE CUT AT EXPANSION JOINTS.
3. 1" DEEP AND ½" WIDE TOOLED CONTRACTION JOINTS SHALL BE PROVIDED AT MID-POINT BETWEEN EXPANSION JOINTS, OR 30 FOOT MAX.

9

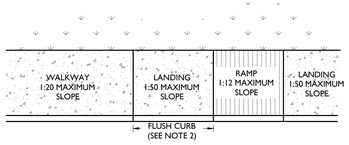


6" CONCRETE PAVEMENT

NOT TO SCALE

NOTES:
1. ½" EXPANSION JOINTS WITH WATER SEAL SHALL BE PROVIDED AT 12' INTERVALS WITH PRE-MOLDED, BITUMINOUS JOINT FILLER, RECESSED ¼" FROM THE SURFACE. LONGITUDINAL REBAR TO BE CUT AT EXPANSION JOINTS.
2. 1" DEEP BY ½" WIDE, TOOLED CONTRACTION JOINTS SHALL BE PROVIDED AT MID-POINT BETWEEN EXPANSION JOINTS OR 6' INTERVALS MAX.
3. CONCRETE SHALL RECEIVE BROOM FINISH.
4. ALL EXPOSED CORNERS TO HAVE 12" CHAMFER.

10



TRANSITION RAMP DETAIL

NOT TO SCALE

NOTES:
1. CROSS SLOPE ON RAMP SHALL NOT EXCEED 2%
2. A FLUSH CURB SHALL HAVE A MINIMUM WIDTH OF 36". SEE PLAN FOR EXACT WIDTH.
3. RAMP SHALL HAVE A MAXIMUM RISE OF 6" WITHOUT A HANDRAIL

11

V:\DET\DOCS\DET-250575 HUBBARD FARMS LOFTS - 335 WEST GRAND BOULEVARD, DETROIT, MI\CAD\DWG\TOP 08 DETS.DWG

ISSUE	DATE	BY	DESCRIPTION
2	04/27/2026	KG	FOR CLIENT REVIEW
1	03/20/2026	JB	FOR CLIENT REVIEW

NOT APPROVED FOR CONSTRUCTION

STONEFIELD engineering & design
Birmingham, MI · New York, NY · Salem, MA
Princeton, NJ · Tampa, FL · Rutherford, NJ
www.stonefieldeng.com
555 S. Old Woodward Avenue, Suite 12L, Birmingham, MI 48009
Phone 248.247.1115

SITE IMPROVEMENT PLANS

HUBBARD FARMS LOFTS

PROPOSED PARKING LOT ADDITION

PID: 14008238 & 14008240
335 WEST GRAND BOULEVARD
CITY OF DETROIT
WAYNE COUNTY, MI

STONEFIELD engineering & design

SCALE: AS SHOWN | PROJECT ID: DET-250575

TITLE: CONSTRUCTION DETAILS

DRAWING: C-7

Docusign Envelope ID: 123CBD13-CC93-86BE-82D4-881916C1066A

General Note

1. SEE SCHEDULE FOR LUMINAIRE MOUNTING HEIGHT.
2. SEE LUMINAIRE SCHEDULE FOR LIGHT LOSS FACTOR.
3. CALCULATIONS ARE SHOWN IN FOOTCANDLES AT: GRADE, ENTRANCES, BALCONIES, & BUILDING FACADE

THE ENGINEER AND/OR ARCHITECT MUST DETERMINE APPLICABILITY OF THE LAYOUT TO EXISTING / FUTURE FIELD CONDITIONS. THIS LIGHTING LAYOUT REPRESENTS ILLUMINATION LEVELS CALCULATED FROM LABORATORY DATA TAKEN UNDER CONTROLLED CONDITIONS IN ACCORDANCE WITH ILLUMINATING ENGINEERING SOCIETY APPROVED METHODS. ACTUAL PERFORMANCE OF ANY MANUFACTURER'S LUMINAIRE MAY VARY DUE TO VARIATION IN ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, AND OTHER VARIABLE FIELD CONDITIONS. MOUNTING HEIGHTS INDICATED ARE FROM GRADE AND/OR FLOOR UP.

THESE LIGHTING CALCULATIONS ARE NOT A SUBSTITUTE FOR INDEPENDENT ENGINEERING ANALYSIS OF LIGHTING SYSTEM SUITABILITY AND SAFETY. THE ENGINEER AND/OR ARCHITECT IS RESPONSIBLE TO REVIEW FOR MICHIGAN ENERGY CODE AND LIGHTING QUALITY COMPLIANCE.

UNLESS EXEMPT, PROJECT MUST COMPLY WITH LIGHTING CONTROLS REQUIRMENTS DEFINED IN ASHRAE 90.1 2019. FOR SPECIFIC INFORMATION CONTACT GBA CONTROLS GROUP AT CONTROLS@GASSERBUSH.COM OR 734-266-6705.

Alternates Note

THE USE OF FIXTURE ALTERNATES MUST BE RESUBMITTED TO THE CITY FOR APPROVAL.

Ordering Note

FOR INQUIRIES CONTACT GASSER BUSH AT QUOTES@GASSERBUSH.COM OR 734-266-6705.

Drawing Note

THIS DRAWING WAS GENERATED FROM AN ELECTRONIC IMAGE FOR ESTIMATION PURPOSE ONLY. LAYOUT TO BE VERIFIED IN FIELD BY OTHERS.

Mounting Height Note

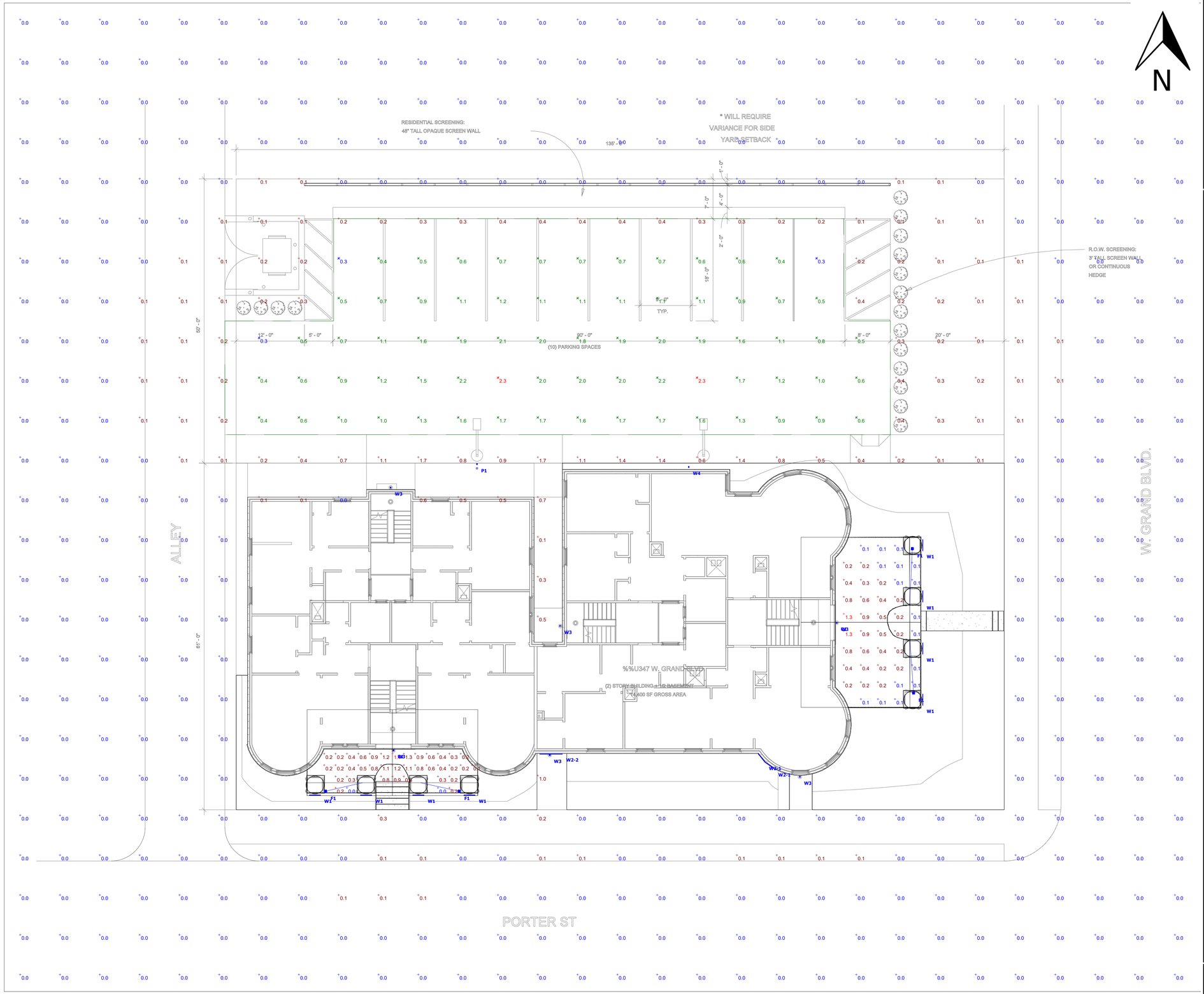
MOUNTING HEIGHT IS MEASURED FROM GRADE TO FACE OF FIXTURE. POLE HEIGHT SHOULD BE CALCULATED AS THE MOUNTING HEIGHT LESS BASE HEIGHT.

Schedule

Symbol	Label	QTY	Manufacturer	Catalog Number	Description	Lumens per Lamp	LLF	Wattage	Mounting Height
◯	F1	4	Lumenpulse	LBS-120-30K-M-XX-XX	Lumenbeam Small	1200	0.9	12.6	29'-5"
▫ ▫	P1	1	Cyclone	HUDT44-GAC-T4HS-P30-30K-MA222(Mounting Arm)	Hudson Post Top	3710	0.9	43.8	15'-0"
|	W1	8	LUMENPULSE LIGHTING LONGUEUIL, QUEBEC	LOGN-4W-48V-24-40K-80-10x10-CL-XX-SI RUN AT 48 VDC		727	0.9	8.2	6'-0"
|	W2-1	2	LUMENPULSE LIGHTING LONGUEUIL, QUEBEC	LOGN-4W-48V-24-40K-80-WW-HFR-XX-SI RUN AT 48 VDC 2FT		758	1.8	8.2	9'-3"
|	W2-2	1	LUMENPULSE LIGHTING LONGUEUIL, QUEBEC	LOGN-4W-48V-24-40K-80-WW-HFR-XX-SI RUN AT 48 VDC 4FT		758	1.8	8.2	9'-3"
▢	W3	6	Visual Comfort & Co.	OL15400TXB	Mini Wall Lantern	616	0.9	5.7	7'-2",10'-6", 10'-4"
▢	W4	1	Cyclone	HUDT44-GAC-T4HS-P30-30K-MA222(Mounting Arm)	Hudson Post Top	3710	0.9	43.8	

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Grand Blvd Entrance	+	0.3 fc	1.3 fc	0.1 fc	13.0:1	3.0:1
Overall/Grade	+	0.2 fc	2.3 fc	0.0 fc	N/A	N/A
Parking & Drive Lanes	✳	1.1 fc	2.3 fc	0.3 fc	7.7:1	3.7:1
Porter St. Entrance	+	0.5 fc	1.4 fc	0.0 fc	N/A	N/A



Plan View

Scale - 1" = 8ft

WEST GRAND BLVD. APARTMENTS
EXTERIOR PHOTOMETRIC PLAN
GASSER BUSH ASSOCIATES
WWW.GASSERBUSH.COM

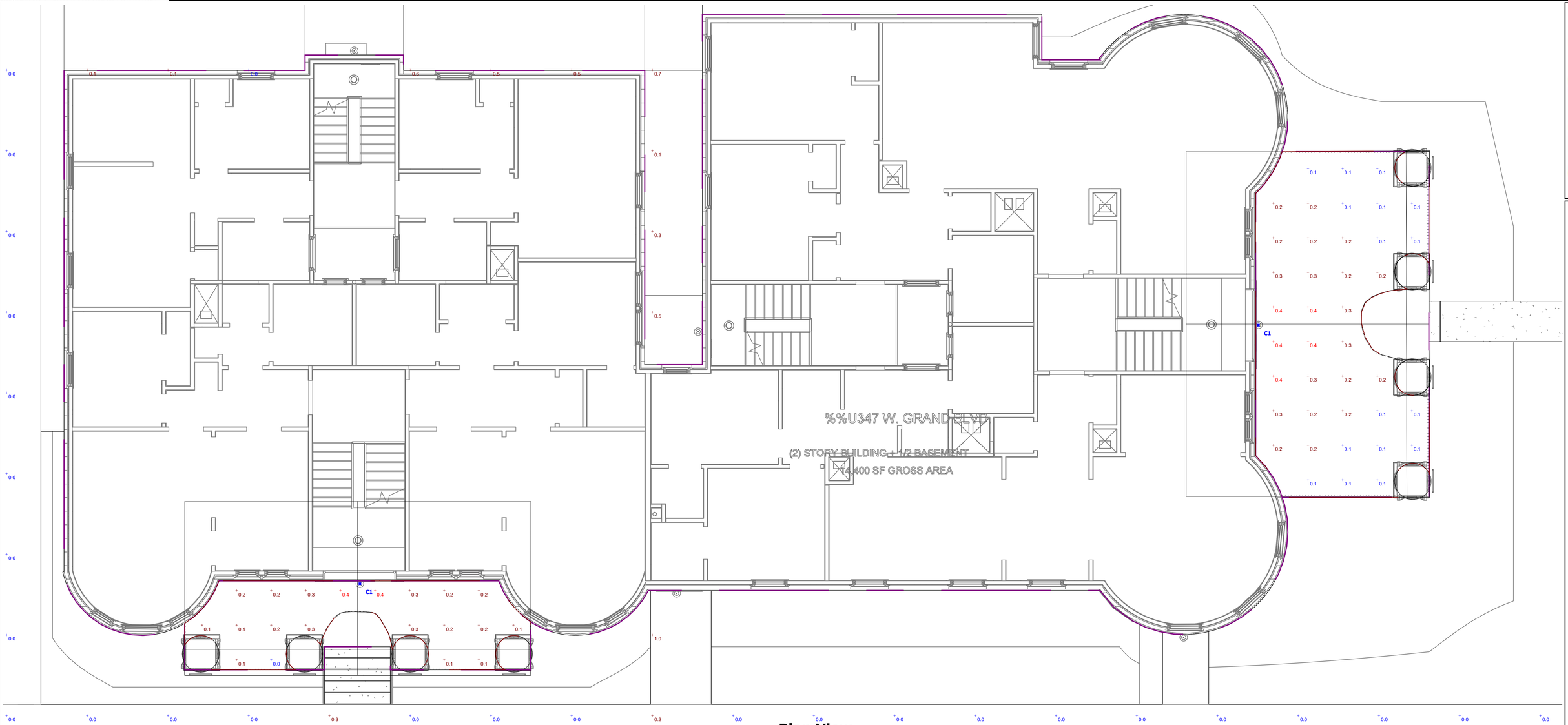
Designer
BK

Date
04/16/2026
REV 05/07/2026
REV 05/15/2026

Scale
Not to Scale

Drawing No.
#26-57305 V3

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Plan View - Balconies
Scale - 1" = 4ft

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Grand Blvd. Balcony	+	0.2 fc	0.4 fc	0.1 fc	4.0:1	2.0:1
Overall/Grade	+	0.2 fc	2.3 fc	0.0 fc	N/A	N/A
Porter St. Balcony	+	0.2 fc	0.4 fc	0.0 fc	N/A	N/A

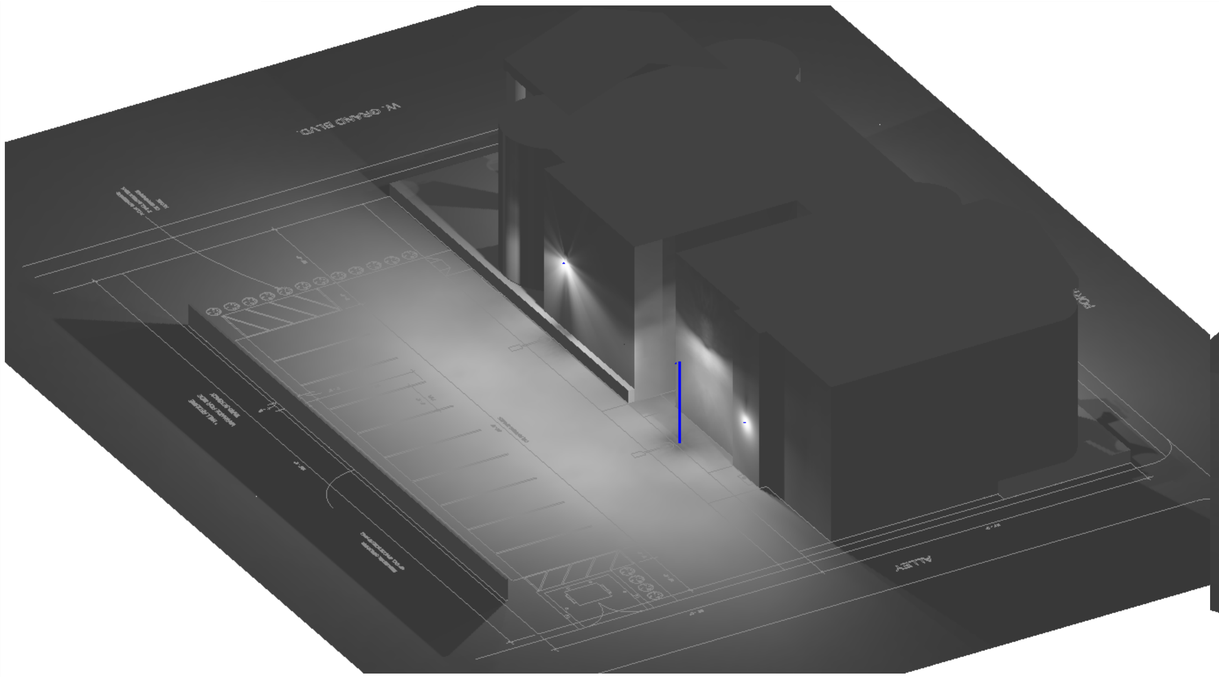
Schedule

Symbol	Label	QTY	Manufacturer	Catalog Number	Description	Lumens per Lamp	LLF	Wattage	Mounting Height
	C1	2	Visual Comfort & Co.	RL5735WVG-CG	Carrington Large Lantern	450	0.9	5	27'-0"
	W4	1	Cyclone	HUDT4A-GAC-T4HS-P30-30K-MA222(Mounting Arm)	Hudson Post Top	3710	0.9	43.8	

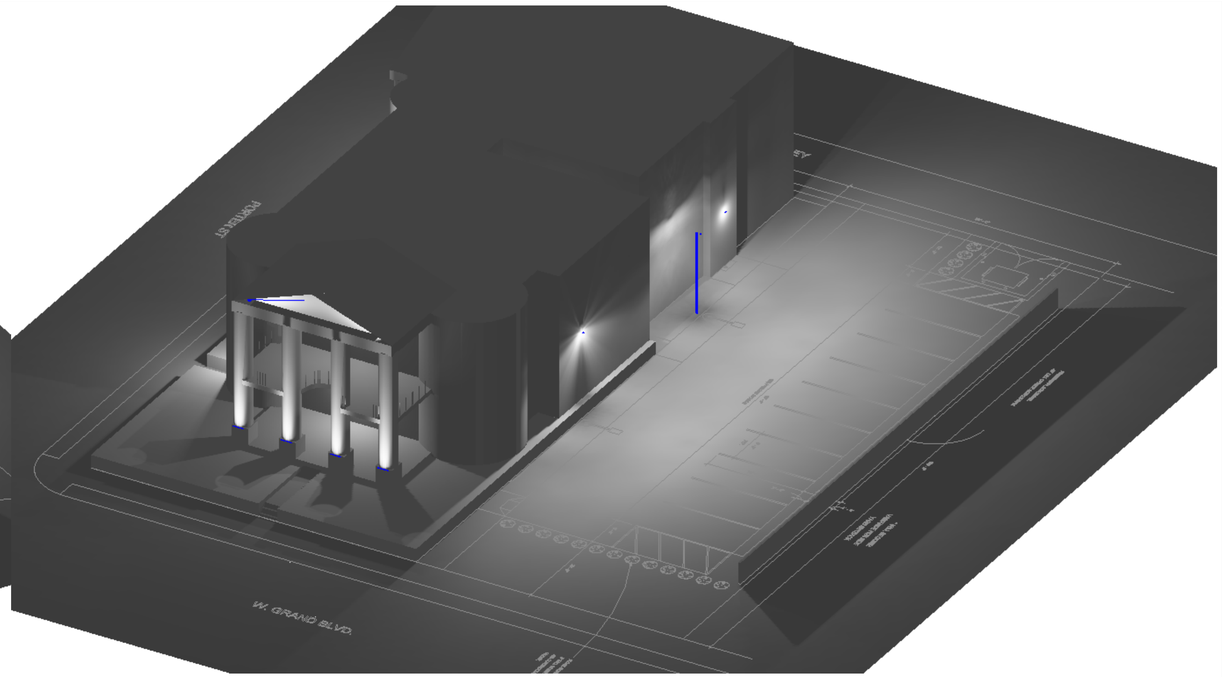
WEST GRAND BLVD. APARTMENTS
EXTERIOR PHOTOMETRIC PLAN
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04/16/2026
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#26-57305 V3

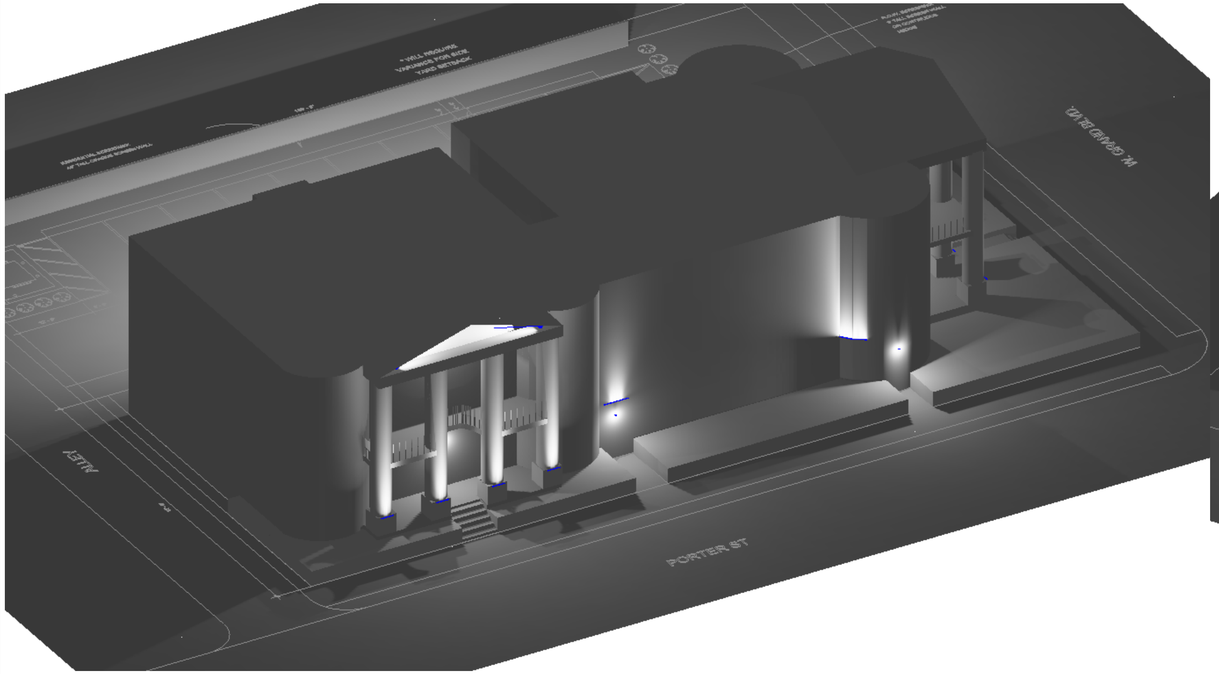
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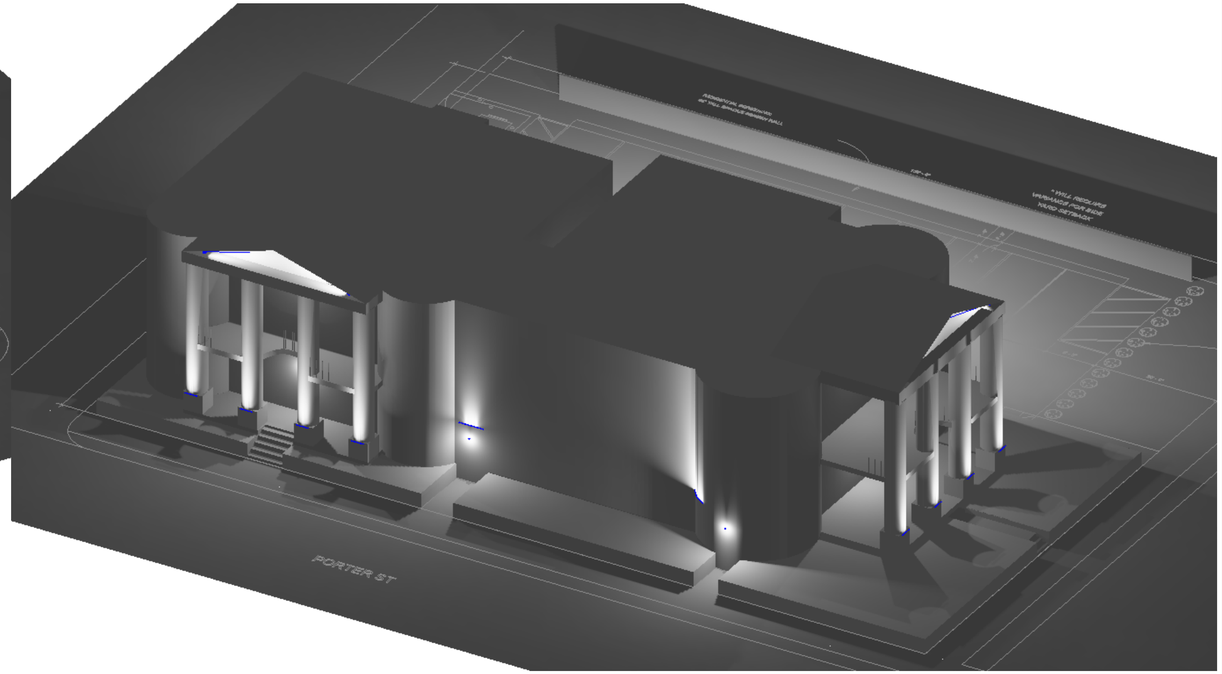
NW Rendered



NE Rendered



SW Rendered



SE Rendered

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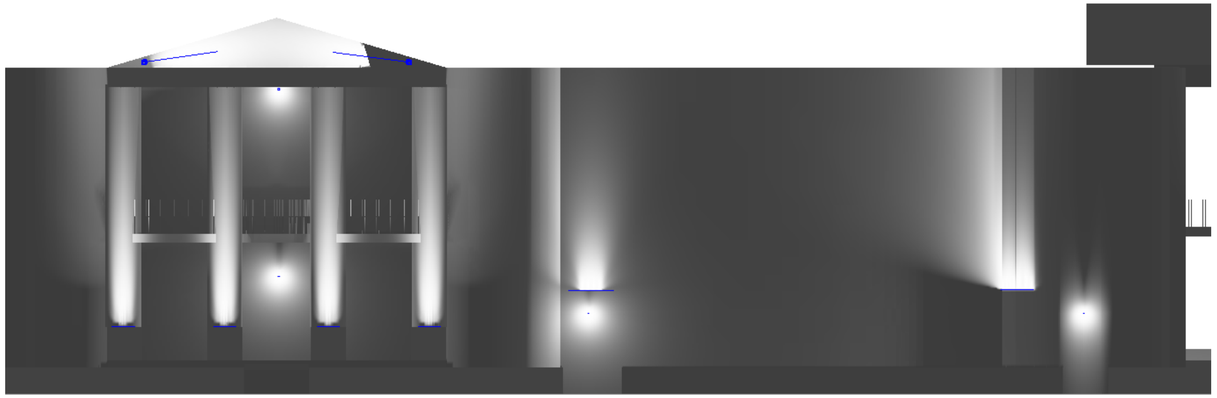
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REV 05/15/2026

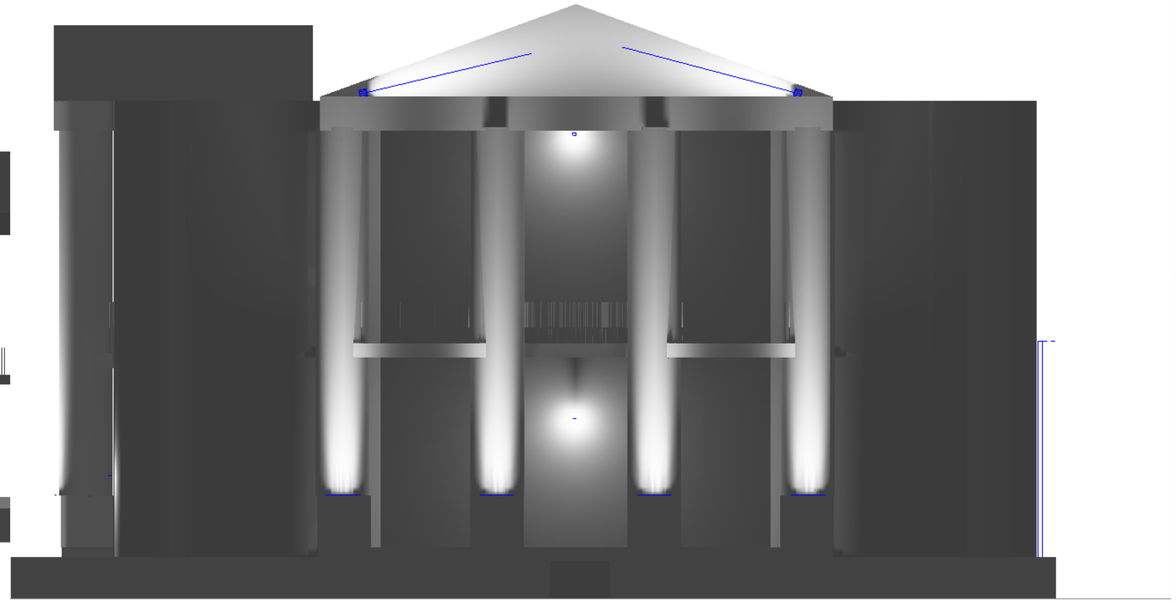
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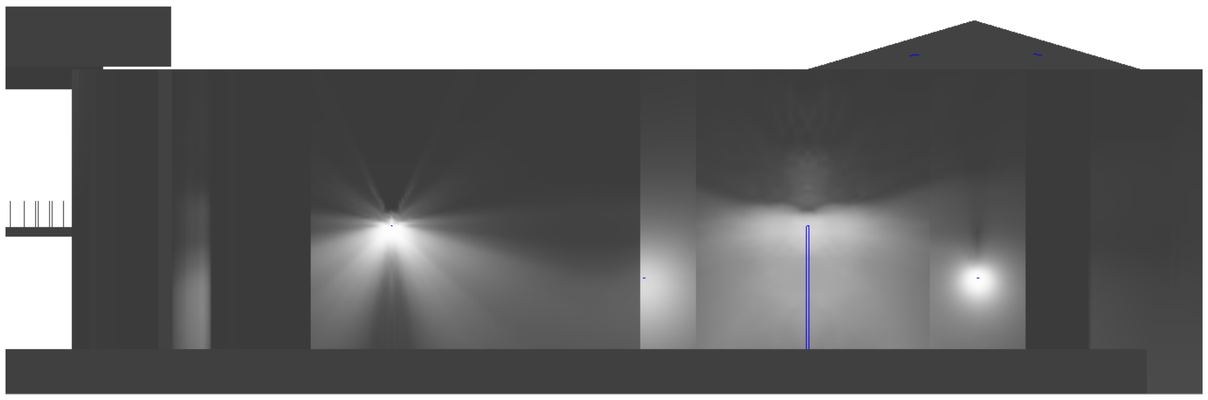
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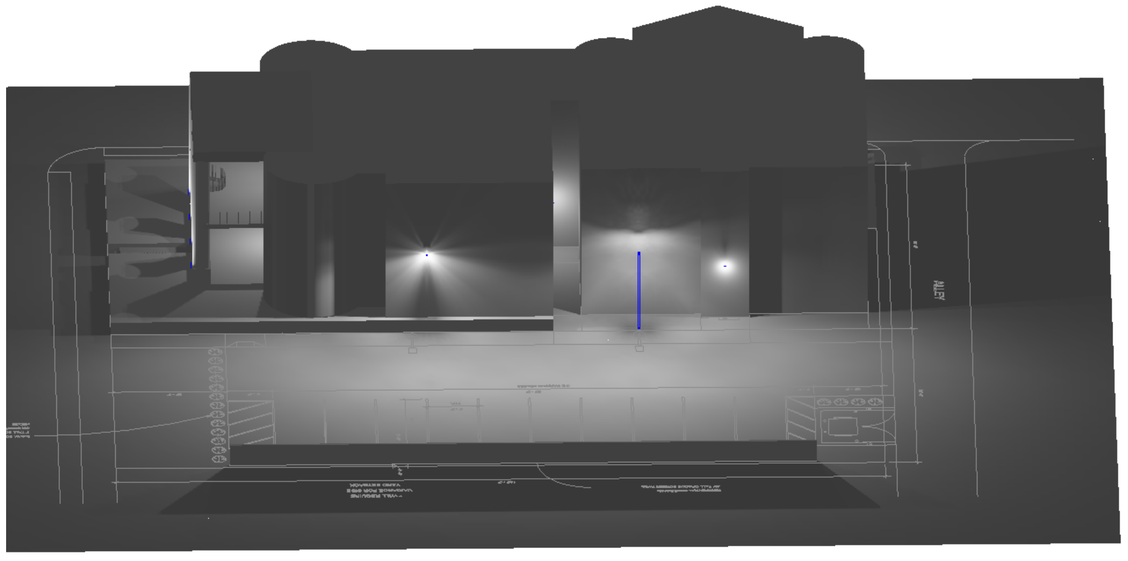
South Rendered



East Rendered



North Rendered



Rendered View

WEST GRAND BLVD. APARTMENTS
EXTERIOR PHOTOMETRIC PLAN
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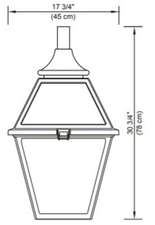
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Drawing No.
#26-57305 V3

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cyclone

Hudson HUDP1A
Approval – Specification

Project: **Order:**
Qty: **Luminaire:** **Type:**



EPA: 1.31 ft² **Weight:** 27 lbs / 12 kg

Roof module: Square shaped classic lantern style housing made from die cast A360 aluminum. The roof module is mechanical assembled to the cage module by two hinges, and a latch that allows tool-free access to the driver. A cast A356 aluminum decorative element is mechanically attached to the roof module. Fitted with a vertical tenon of 1.9" (4.8cm) O.D. by 4" (10.2cm) long with a 0.2" (0.5cm) wall. The luminaire is suspended from a 2 3/8" (6cm) Ø outside diameter by 5 1/2" (14cm) minimum length, and 0.156" (0.4cm) wall tenon by means of pressure screws. The roof module is mechanical assembled to the cage module by two hinges, and a latch that allows tool-free access to the driver.

Cage module: The die cast A360 aluminum cage module is mechanically assembled to the optical module for easy replacement. The luminaire is without a lens or with a flat lens attached to the optical module.

Optical module: The die cast A380 aluminum heat sink is designed to minimize the temperature of the LEDs, increasing their longevity and efficiency. The optical module is mechanically assembled to the heat-sink for easy replacement. The optical module is sealed with a molded silicone gasket, achieving an IP66 weatherproof protection. The high efficiency Orion LED optical engine is mechanically assembled on the heat sink. The lifetime of the LEDs is 100,000 hours. It is based on the LM-80 test and extrapolated with TM-21. This data is calculated when 50% of the LEDs produce 70% of their initial luminous flux (L70). The minimum color rendering index (CRI) is 70. The optical acrylic lenses are sealed on the LED board and are designed to illuminate only where needed while achieving excellent uniformity with maximum spacing. The available light distribution types are T1, T1A, T1AHS, T2, T2HS, T2M, T2MHS, T3, T3HS, T3M, T3MHS, T4, T4HS, T5. A white decorative acrylic protection plate is mechanically assembled under the optical module. The combination of two distribution types (backward optics) is also available in the same optical module as well as the integration of crosswalk optics (TCWR and TCWL) for pedestrian crossing.

Driver module: Class 1 (P70 and P80) or Class 2 (P10 to P60). Primary tension is of 120 to 480VAC Volts, 50/60Hz, THD max 20% with a high-power factor of 90%. Operating temperature is -40°F (-40°C) to 131°F (55°C). The regulator offers an output of 0-10 Volts and is ROHS compliant. Assembled with pull-out connectors. Complete with 10kV/5kA or 20kV/10kA tripolar surge protection for live-MALT, live-neutral and neutral-MALT lines according to IEEE/ANSI C62.41 2002 C.

Wiring / Hardware: Type TEWT 14-7 AWG, 12" (30.5cm) minimum exceeding luminaire. All electrical connections between the modules are provided with quick-disconnect connectors for easy maintenance. All outside accessible hardware is made of 304 stainless steel.

Color: All Cyclone colors are available in textured (TX) or smooth (SM) finish, unless otherwise specified. A durable polyester powder coating is applied and meets the AAMA 2604 requirements (5 years exposure to all weather conditions). The finish meets the ASTM G7, B117, D1654 and D2247 requirements relative to salt spray and humidity resistance. **Cyclone recommends a textured finish for this product**.

cULus: According to standard C22.2 / UL1598

Warranty: 5-year limited warranty. Complete warranty terms located at:
www.cyclonelighting.com/assets/Legal/Cyclone-Sales-TermsConditions-en.pdf

Stamp/Approval:	Name:
Name: Date:	Date:

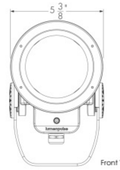
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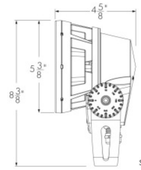
Cyclone Lighting: 2175 Des Entreprises Blvd, Terrebonne (QC) Canada J6Y 1W9 www.cyclonelighting.com
Phone: 1-866-436-5500 - info@cyclonelighting.com © 2025 Acuity Brands Lighting Inc. All Rights Reserved. Rev. 2026/12

Specification Sheet **Lumenbeam** Small LBS
WHITE AND STATIC COLORS

Project Name _____ **Qty** _____
Type _____ **Catalog / Part Number** _____







Photometric Summary

Symmetric

	Delivered output (lm)	Intensity (peak cd)
XN (3°)	1,342	186,978
VN (6°)	906	47,949
NS (10°)	1,419	20,764
NF (20°)	1,238	12,472
M (30°)	1,297	7,185
FL (40°)	1,163	2,960
WFL (60°)	977	762
VWFL (90°)	946	470
Asymmetric		
NAS	947	14,011 (@2.5°)
WW	1,106	3,013(@5°)

[1] Based on 4000K.
[2] Photometric performance is measured in compliance with IESNA LM-79-24.
[3] Refer to the Lumenbeam White and Static Colors Photometric Guide on Lumenpulse website for information on other color temperatures.

Description

The Lumenbeam Small is a compact, IP66-rated luminaire for lighting landscapes, trees, columns, monuments, and architectural details. It has numerous options, including optics for flood or accent lighting, a choice of color temperatures and colors, as well as various accessories, spread lenses, and controls. The luminaire also has an anti-corrosion option for use in harsh, chemical, or coastal environments.

Features

Color and Color Temperature	**22K:** 2200K, **27K:** 2700K, **30K:** 3000K, **35K:** 3500K, **40K:** 4000K, **57K:** 5700K, **RD:** Red, **GR:** Green, **BL:** Blue
Optics (Nominal Distribution)	**XN:** XN (3°), **VN:** VN (6°), **NS:** NS (10°), **NF:** NF (20°), **M:** M (30°), **FL:** FL (40°), **WFL:** WFL (60°), **VWFL:** VWFL (90°), **NAS:** NAS (Narrow Asymmetric), **WW:** WW (Asymmetric Wallwash)
Optical Option	**LSLH:** Linear Spread Lens Horizontal Distribution, **LSLV:** Linear Spread Lens Vertical Distribution
Mounting Option	**SK:** Stake Mounting, **KN:** Knuckle Mounting, **CN:** Canopy Mounting Option (for Mounting on a Standard Round Junction Box)
Option	**RY:** Rotational Yoke, **3GV:** 3G ANSI C136.31-2010 Vibration Rating for Bridge Applications, **CRC:** Corrosion-Resistant Coating for Hostile Environments
Cable Color	**BK:** Black, **WH:** White
Power Consumption	14 W
Warranty	5-year limited warranty

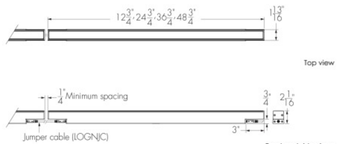
Performance

Maximum Delivered Output	1,419 lm (4000K, NS 10°)
Maximum Delivered Intensity	186,978 cd at nadir (4000K, XN 3°)
Illuminance at Distance	Minimum 1 fc at 434 ft (4000K, XN 3°)

Specification Sheet **Lumenfacade Nano** LOGN
WHITE AND STATIC COLORS

Project Name _____ **Qty** _____
Type _____ **Catalog / Part Number** _____





Photometric Summary (7 W/ft)

	Delivered output (lm)	Intensity (peak cd)
8"x8"	2,173	58,720
10"x10"	2,102	45,812
10"x30"	2,038	12,959
10"x60"	2,026	6,911
10"x90"	2,031	3,622
30"x10"	2,043	12,919
30"x30"	2,986	6,894
30"x60"	2,895	4,362
60"x10"	2,025	8,019
60"x60"	2,924	2,162
60"x90"	2,905	2,603
90"x90"	2,856	1,766
W (120°)	1,225	602
WW	2,164	10,498

[1] Based on 4000K full output, 4 ft. UCTS, control configuration.
[2] Photometric performance is measured in compliance with IESNA LM-79-24.

Description

The Lumenfacade Nano White and Static Colors is a high-efficiency linear LED luminaire that goes where no facade lighting has gone before. Available in 12 in, 24 in, 36 in or 48 in sections, the Lumenfacade Nano is the right fit for general urban structures, historical buildings and those hardest to reach places. The Lumenfacade Nano packs all the bells and whistles of the larger members of the Lumenfacade family and can be configured with a wide number of options, including: optics for grazing, floodlighting or wall washing; a choice of outputs; various color temperatures or static colors; various mounting options, finishes, accessories and controls. Now with 3G vibration-rating options, this little fixture can really go anywhere.

Features

Color and Color Temperature	2200K, 2700K, 3000K, 3500K, 4000K, Red, Green, Blue
Optics	8" x 8", 10" x 10", 10" x 30", 10" x 60", 10" x 90", 30" x 10", 30" x 30", 30" x 60", 60" x 10", 60" x 60", 60" x 90", 90" x 90", Wide 120°, Asymmetric Wallwash
Option	Corrosion-Resistant Coating for Hostile Environments 3G ANSI C136.31-2010 Vibration Rating for Bridge Applications
Power Consumption	2 W/ft, 4 W/ft, 7 W/ft
Warranty	5-year limited warranty

Performance

Maximum Delivered Output	884 lm (2 W/ft, 48 in fixture, 4000K CRI 80+, 30° x 30°, NO control) 1,767 lm (4 W/ft, 48 in fixture, 4000K CRI 80+, 30° x 30°, NO control) 2,986 lm (7 W/ft, 48 in fixture, 4000K CRI 80+, 30° x 30°, NO control)

VISUAL COMFORT & CO.

OL15400TXB: Mini Wall Lantern



Collection: Warren

Featured in the decorative Warren collection

1 A19 Medium 75 watt light bulb

clear glass panels

Made from a unique composite material which is engineered to withstand the harshest environmental conditions and backed by a 5-year warranty.

ETL listed for wet locations

UPC #:014817590531

Finish: Textured Black (TXB)

Dimensions:

Width: 6.5"
Height: 14.38"
Weight: 3.52 lbs.

Extends: 7.5'
Wire: 8" (color:Black/White)
Mounting Proc.: Wall / Bath
Connection: Mounted To Box

Bulbs:

1 - Medium A19 75.0w Max. 120v Not included

Features:

- Made from a unique composite material which is engineered to withstand the harshest environmental conditions and backed by a 5-year warranty.

Material List:

1 Body - StoneStrong - Textured Black

Safety Listing:

Safety Listed for Wet Locations
Safety Listed for Wet Locations

Instruction Sheets:

Trilingual (English, Spanish, and French) (ol15400 ol15401 ol15402 ol15403 ol15404)

Shade / Glass / Diffuser Details:

Part	Material	Finish	Quantity	Item Number	Length	Width	Height	Diameter	Fitter Diameter	Shade Top Length	Shade Top Width	Shade Top Diameter
Panel	Glass	Clear	4			4.75	7.0					

Backplate / Canopy Details:

Type	Height / Length	Width	Depth	Diameter	Outlet Box Up	Outlet Box Down
Back Plate	5.88	5.0	0.75		8.12	

Shipping Information:

Package Type	Product #	Quantity	UPC	Length	Width	Height	Cube	Weight	Frt. Class	UPS Ship
Individual	OL15400TXB	1	014817590531	10.5	10.0	18.0	1.09	4.9	0	Yes
Master Pack	OL15400TXB	0	10014817590538							No
NJ Pallet		70		48.0	40.0	71.5	79.44	343.0		No
NV Pallet		70		48.0	40.0	71.5	79.44	343.0		No

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GB

WEST GRAND BLVD. APARTMENTS
EXTERIOR PHOTOMETRIC PLAN
GASSER BUSH ASSOCIATES
WWW.GASSERBUSH.COM

Designer
BK
Date
04/16/2026
REV 05/07/2026
REV 05/15/2026
Scale
Not to Scale
Drawing No.
#26-57305 V3

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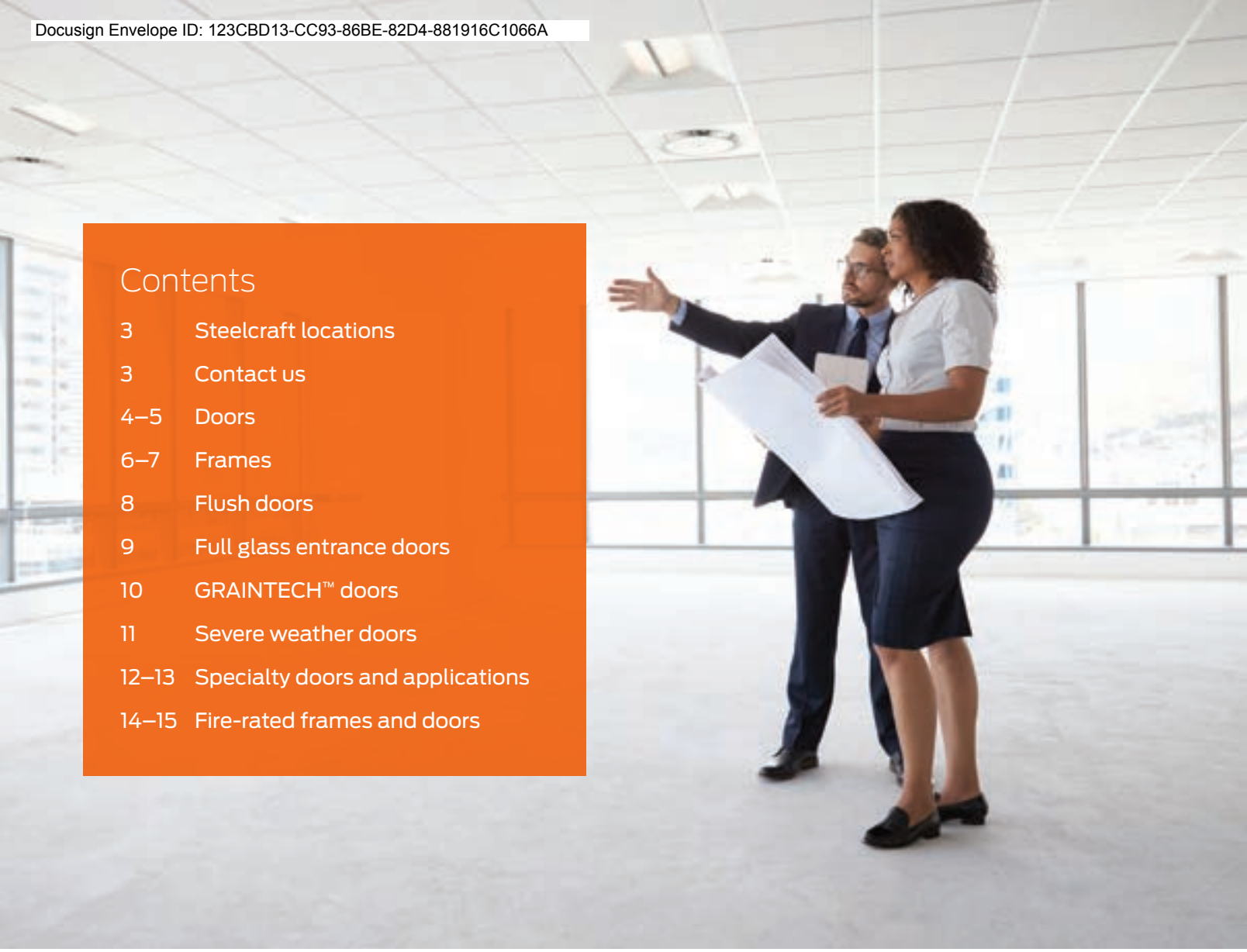
ALLEGION™

STEELCRAFT®

Hollow metal doors and frames



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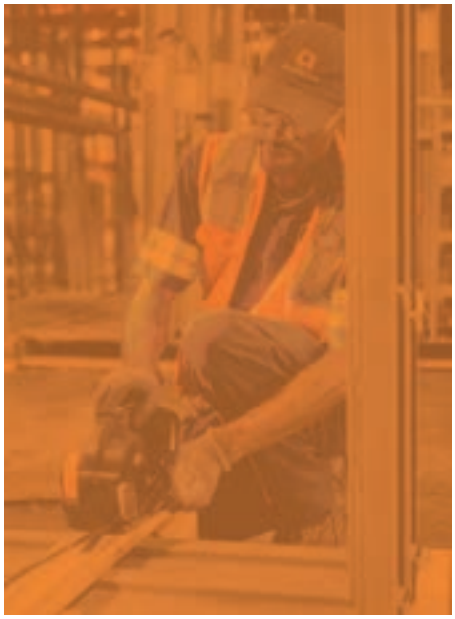
STEELCRAFT®

Steel doors and frames that set the industry standard

No other manufacturer offers as robust a selection of steel doors and frames as Steelcraft. Our emphasis on design, performance, and quality makes us stand out as an industry leader. Whether your application is institutional, commercial, or industrial Steelcraft is ready to meet your needs with a full portfolio of trusted, reliable doors and frames.

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Steelcraft locations



Main factory

Steelcraft operates a main factory, boasting over 550,000 sq ft in Blue Ash, OH. This facility includes most of the Steelcraft Customer Care, Operations, Engineering teams and supplies a complete portfolio of doors and frames, with a full set of service capabilities, to reliably meet the requirements of your projects.

Regional Centers

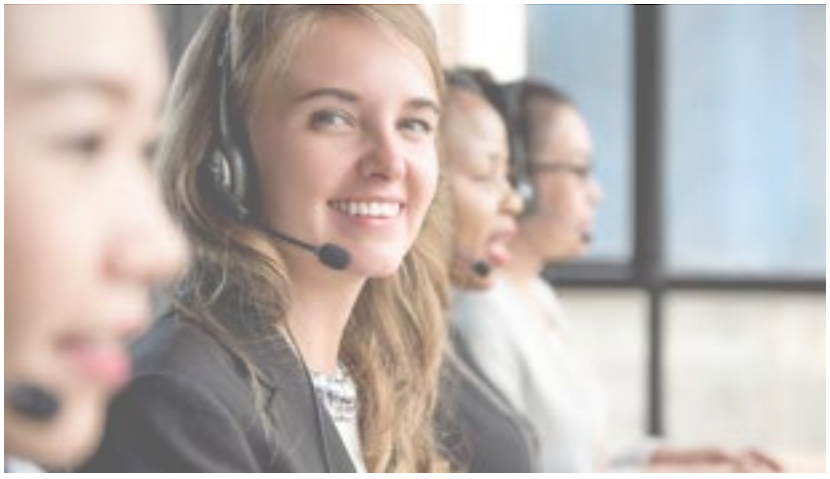
In addition to the main facility, Steelcraft operates regional centers in California and Kansas to serve local clients with prompt service and dedicated support. Steelcraft's Regional Centers are stocked with a wide variety of doors and frames for your regional market needs. The experienced staff at our Regional Centers have onsite modification capabilities to pull from existing stock and quickly fulfill orders. Each center has stock and capabilities tailored to regional market preferences.

- **West Coast Regional Manufacturing Center** offers custom frame manufacturing
- **Kansas City Service Center** stocks Tornado resistant frames for fast-turn applications

All orders can be picked up at the service center or shipped directly to your site, resulting in lower freight costs. Each center is backed by the factory in Blue Ash to ensure that all the known, trusted Steelcraft benefits are available to you.

Visit www.steelcraft.com for details and a full list of capabilities by regional center.





Contact us

Customer care and project inquiries

- (877) 671-7011
- Contactus@allegion.com

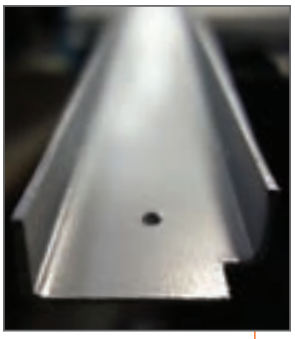
Technical product support

- (877) 671-7011
- Doors_frames_techprodsupport@allegion.com

NOTE: Reach out to your local Allegion sales representative for information on Order Entry Works (OEW) electronic ordering.

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The only door good enough to be called Steelcraft



Heavy 14-gauge top and bottom channels



Recessed Dezigner™ glass trim



- Factory installed screw-in flush top and bottom caps
- Optional seamless vertical edges

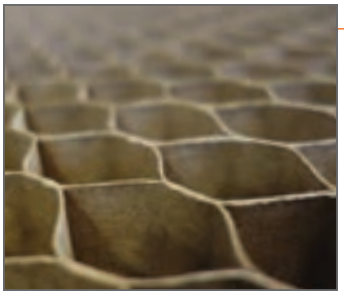




Universal hinge preparations with true 7-gauge reinforcements



Mortise lock body stabilizers



Structural honeycomb core design

Optional cores:

- Polystyrene
- Polyurethane
- Steel stiffened - fiberglass batts
- Temp rise mineral fiber board



- Beveled hinge and lock edges
- Full height, epoxy-filled mechanical interlock edges



61L cylindrical lock and many other standard hardware preps

Docusign Envelope ID: 123CBD13-CC93-86BE-82D4-881916C1066A

Standard door construction features and benefits

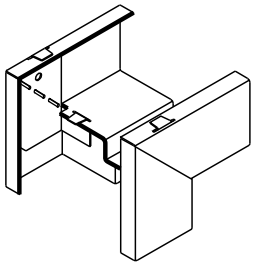
- **Beveled hinge and lock edges** Tighter tolerances and opening fit with a 3/32" gap, ensuring easier operation and eliminating binding and sticking; max allowable meeting edge gap is 3/16" (per NFPA 80 allowable gap 1/8" + 1/16" tolerance)
- **Full height, epoxy-filled mechanical interlock edges** Structural support and stability the full height of the door
- **Universal hinge preparations** Patented design creating fast and easy field conversion from the standard weight .134" to heavy weight .180" hinges
- **True 7-gauge hinge reinforcements** Strong internal support for hinges to keep the door from sagging during everyday use and abuse
- **Recessed Dezigner™ glass trim** Interior welds and fasteners, inset into a recessed perimeter channel for a clean, neat, and flush finish
- **Screwed-in top caps** Flush cap installed into top and bottom channels for additional protection from the elements, dirt and debris
- **Heavy 14-gauge top and bottom channels** Performance and stability for the top and bottom door edges
- **Seamless edge** Option creating a finished, one-piece look with clean lines
- **Mortise lock body stabilizers** Easier installation by centering the lock body in the door
- **61L cylindrical lock preparation** Universal features accommodate any cylindrical lock in the market with a 3 7/16" or larger rose
- **Structural honeycomb core design** Greater structural integrity than steel stiffened doors while reducing overall weight, successfully tested to 10,000,000 cycles including 23 twist tests using 300 pounds of applied force. Optional cores for better insulating value include polystyrene, polyurethane, steel stiffened with fiberglass batting, and temperature rise mineral fiber board.
- **Factory applied baked-on rust inhibiting primer** Provides the best possible protection against corrosion, abrasion and weather, and is an excellent base for our finish paint in standard or custom colors. In accordance with ANSI A250.10-1998 (R2004).



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Frames

Steelcraft manufactures a wide variety of frames in jamb depths for virtually any wall condition or entryway requirement.

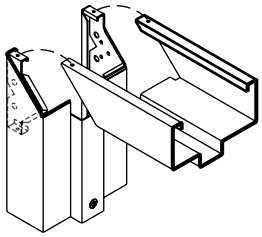


Flush frames

Flush (F, FE and FN Series) frames are designed to be installed as part of the wall framing sequence for exterior and interior walls of wood stud, steel stud and masonry construction. Frames are manufactured from 16-, 14- and 12-gauge (F only) commercial-quality carbon steel in cold-rolled, A60 galvannealed and G90 galvanized steel. Flush frame corners in 16 and 14 gauge may lock together by bending over four integral tabs, and may also be welded and ground smooth.

Multiple use frames

Multiple use (MU Series) frames have a jamb profile similar to drywall frames but are designed to be installed as part of the wall framing sequence. MU Series frames are available in 16- or 14-gauge cold-rolled, A60 galvannealed or G90 galvanized steel.



Drywall frames

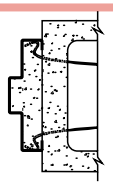
Drywall (DW, K, C and CK Series) frames are designed to be installed in rough openings after the wall is constructed. They can be installed in minutes and can be relocated without damage to the frame. Drywall frame corners lock together once the frame is assembled. The tab design prohibits the head from raising, and keeps the head and jamb members in the same plane. C and CK frames do not have backbends and are designed to have architectural trim casing applied.

Specifications

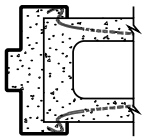
Door thickness	1 3/4"	(45mm)				
Standard heights	6'8" 8'0"	(2032mm) (2438mm)	7'0" 9'0"	(2134mm) (2743mm)	7'2" 10'0"	(2184mm) (3048mm)
Standard widths	Increments of 2" (50mm) from 1'6" (457mm) to 8'0" (2438mm)					

Custom sizes per request.

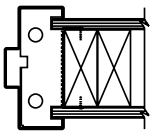
Typical wall conditions – F and FN Series



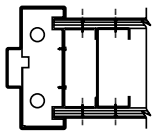
Butted masonry



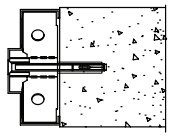
Wrap-around masonry



Wood stud



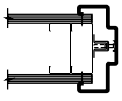
Closed steel stud wall



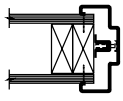
Existing wall

Typical wall conditions – DW and K Series

Drywall frames are designed for drywall construction using wood studs or steel studs. DW and K Series frames are available in 16- or 14-gauge cold-rolled, A60 galvannealed or G90 galvanized steel.



Steel stud



Wood stud

Docusign Envelope ID: 123CBD13-CC93-86BE-82D4-881916C1066A

Frames

Anchors – F and FN Series



Adjustable wire anchor for masonry



Wood stud anchor



Closed steel stud anchor



Adjustable base anchor - F, FN and C

Anchors – DW and K Series



Lock in base anchor – DW Series



Quick and easy base anchor - K and CK Series

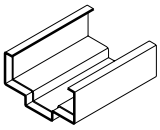


Compression anchor - DW, K and CK Series

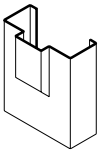


Optional security anchor

Design options

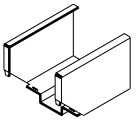


14-gauge closer reinforcing sleeve

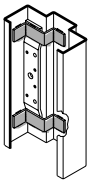


(F, FN, DW, and MU Series only)

Hospital stop



4" face head



10-gauge high frequency reinforcement (F, MU, DW and FE Series only)

High frequency hinge reinforcement

Frame profiles



F Series



MU Series



FE Series



DE Series



DW Series



C/CK Series

Relative cost

F16, 1 3/4" (45mm), 3'0" (914mm) x 7'0" (2134mm), 5 3/4" (147mm) prime painted, CRS knock down frame used as base of 100.

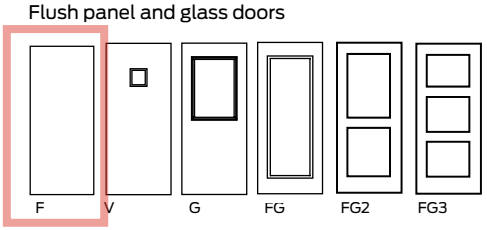
F16-4	CRS	16-gauge, 1 3/4" KD 100
F16-4	CRS 7'2"	16-gauge, 1 3/4" KD 102
F16-4	Galvannealed	16-gauge, 1 3/4" KD 114
F16-4	Label	16-gauge, 1 3/4" KD 116
FN16-4	CRS	16-gauge, 1 3/4" KD 100

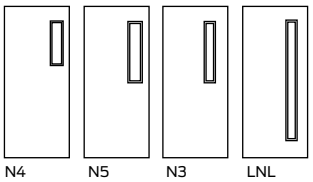
F14-4	CRS	14-gauge, 1 3/4" KD 123
F12-4	CRS	12-gauge, 1 3/4" KD 161
DW16-4	Drywall	16-gauge, 1 3/4" KD 102
MU16-4	Multi-use	16-gauge, 1 3/4" KD 102

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Typical elevations

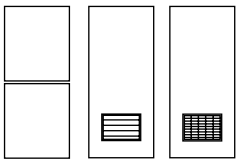
Flush panel and glass doors



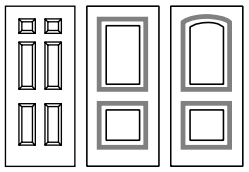


Dutch doors

Doors with louvers or grilles

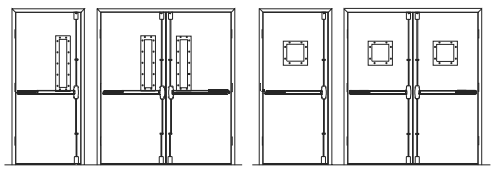


Embossed panel doors

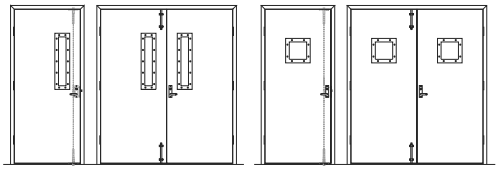




ADA Compliant PN(F) Narrow and PN(F) Vision Lights – WS98/9927, WS98/9957



PN(F) Narrow and PV(F) Vision Lights – LM 9300



Flush doors

Flush doors are defined as having no seams on the face, with seams permitted on the edges. Doors are available in commercial-quality carbon steel or A-60 galvannealed steel, G-90 galvanized steel and stainless steel (Type 304 and 316).

L Series

The L Series door has a honeycomb core, beveled hinge, and lock edge with a visible seam on both edges. Optional cores are polystyrene or polyurethane. L Series doors are available in 14-, 16-, 18- and 20-gauge steel.

B Series

The B Series door has a steel-stiffened core with visible seams on the hinge and lock edges. 20-gauge vertical steel stiffeners are welded to the inside of one face sheet and bonded to the opposite face. Void areas between the stiffeners are filled with fiber bat insulation. B Series doors are available in 14-, 16- and 18-gauge steel.

T Series

The T Series doors are designed to meet the requirements for temperature rise fire-rated applications. These doors include the same construction features of the L Series doors, yet include a mineral board core for a 250º or 450º temperature rise rating. T Series doors are available in 14-, 16-, 18- and 20-gauge steel.

CE Series

CE Series are decorative doors featuring deeply embossed panels on both sides, creating the appearance of hand-carved doors. The door includes all construction features of the L Series door and is available with a variety of glass sizes. These doors are available in 16-, 18- and 20-gauge steel.

H Series

H Series hurricane-rated doors offer the utmost in life safety solutions. Each door, frame and hardware configuration offered has been tested and certified as an assembly to meet stringent Florida Building Code, Miami Dade and Texas Department of Insurance standards. With this approach of assembly approval, Allegion offers the assurance of a turnkey solution that is certified as a whole, while also expediting project approval.

Paladin™ Series

The Paladin opening system is designed and tested to ICC 500 standards and FEMA 361/320 guidelines, and those established by the Red Cross to protect the general public from the extreme environmental effects of tornadoes. The severe storm opening system is designed for commercial and residential tornado storm shelters. Paladin options include patented factory installed ADA glass lights from Technical Glass Products (TGP).

Design options

GRAINTECH™

GRAINTECH™ doors are L,T, H or CE Series doors, produced using steel sheets that have been embossed to create a wood grain appearance. GRAINTECH™ doors are fabricated from stainable steel and available with an optional factory finish in six standard color stains, including a factory-applied clear coat with ultraviolet (UV) inhibitors. GRAINTECH™ gives you the look of wood with the durability and fire-rating of a steel door.

Specifications

Door thickness	1 3/4" (45mm)	
Standard heights L and B Series	6'8" (2032mm) 7'2" (2184mm) 9'0" (2743mm)	7'0" (2134mm) 8'0" (2438mm) 10'0" (3048mm)
Standard heights CE Series	6'8" (2032mm) 8'0" (2438mm)	7'0" (2134mm)
Standard widths L and B Series	Increments of 2" (50mm) from 1'6" (457mm) to 4'0" (1219mm) Custom dimensions available on request	
Standard widths CE Series	Increments of 2" (50mm) from 2'6" (762mm) to 3'8" (1118mm)	

Custom sizes per request.

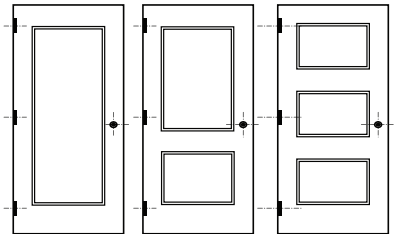
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Full glass entrance doors

Steelcraft heavy-duty A-14 Series doors provide trouble-free service and attractive styling for high traffic areas such as main entrances.

A-14 Series

The A-14 Series doors are designed to meet the architectural requirements for exterior entrance applications. It has a honeycomb core, beveled hinge and seamless edges with full height, epoxy filled with interlocked edges. The A-14 Series doors are available for high frequency openings and entrances where large full glass lights are required.



FG FG2 FG3

Specifications

Door thickness	1 3/4"	(45mm)		
Standard heights	6'8"	(2032mm)	7'0"	(2134mm)
A-14 Series	7'2"	(2184mm)	8'0"	(2438mm)
Standard widths	Increments of 2" (50mm) from 1'6" (457mm)			
A-14 Series	to 4'0" (1219mm)			

Custom sizes per request.

EXPERT TIPS

Get flexible performance with removable keyed mullions.

Mullions provide single door performance in double door openings with rim exit devices. Keyed removable mullions make removal faster and easier by a single operation of the mortise cylinder. The unit will self-lock when re-installed without the use of a cylinder key.

When ordering, specify KR before the mullion model number.



Relative cost

L18, 1 3/4" (45mm), 3'0" (914mm) x 7'0" (2134mm) flush door used as base of 100.

L18	Flush, 18-gauge	100
L20	Flush, 20-gauge	87
LF20	Flush, 20-gauge	96
L18	Galvannealed, flush, 18-gauge	113
L18	UL flush, 18-gauge	115
L18	Finished paint, flush, 18-gauge	116
LF18	Full flush, 18-gauge (edge filled)	110
LW18	Full flush, 18-gauge (edge welded)	112
T18	UL temperature rise, 18-gauge	154
L16	Flush, 16-gauge	123
LF16	Flush, 16-gauge (edge filled)	133
LW16	Flush, 16-gauge (edge welded)	139
L14	Flush, 14-gauge	148
B18	Flush, 18-gauge, steel stiffened	125
B16	Flush, 16-gauge, steel stiffened	149
BW16	Flush, 16-gauge, steel stiffened (edge welded)	161
B14	Flush, 14-gauge, steel stiffened	173
CE20	Embossed, 20-gauge	105
CE18	Embossed, 18-gauge	122
CE16	Embossed, 16-gauge	139
L16	Stainable, 16-gauge, factory finished	149
L18	Stainable, 18-gauge, factory finished	143

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GRAINTECH™ doors

Clear coat
baked on for the ultimate in UV and graffiti resistance

Multiple finishes
provide options for a variety of applications

Superior structural and insulation
qualities provide ultimate performance



Custom colors available for our GRAINTECH doors.

Dezigner™ trim
flush lite kits, stained to match the door

Patented universal hinge preps
allow for easy field conversion from standard to heavy-weight hinges

Strength and durability
L, T, H and CE Series door construction provides proven strength and reliability

The beauty of wood with the strength of steel

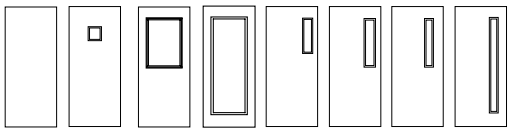
Steelcraft's GRAINTECH Series of stainable steel doors provides the beauty of wood with the features and benefits of steel. Our exclusive engraining and staining process simulates a wide variety of wood finishes, from ash to walnut, including custom finish matching.

GRAINTECH doors are available in a wide variety of options including size, glass lite designs, gauges and hardware preps, and are designed for interior and exterior applications.

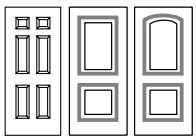
Unlike veneered or solid wood doors, GRAINTECH can be used as exterior openings with confidence, is less susceptible to damage, and will never warp, crack, peel or bow. It is also available in CE Series panel doors, L Series flush doors, T Series temperature rise doors, and H Series hurricane doors. The GRAINTECH Series is available with a full range of positive pressure fire-ratings, from 20 minutes to three hours.

Glass lite options

Flush doors (L Series and T Series)



Embossed panel doors (CE Series)



CE Series GRAINTECH doors

- Six-panel embossed design
- Available in 16-gauge heavy-duty or 18-gauge extra heavy-duty
- Available in six standard finishes, as well as custom-matched finishes
- Half-glass and top-lite available featuring Dezigner trim, a Steelcraft exclusive
- Polystyrene core system for structural integrity
- Fire-rated 20 minutes to three hours

L Series GRAINTECH Doors

- Laminated flush design
- Available in 16 or 18-gauge to fit any application from standard to extra heavy-duty
- Available in six standard finishes, as well as custom-matched finishes
- Half-glass, narrow lite, vision lite or custom size lites featuring Dezigner trim, a Steelcraft exclusive
- Available with honeycomb, polystyrene or polyurethane insulated cores

T Series GRAINTECH doors

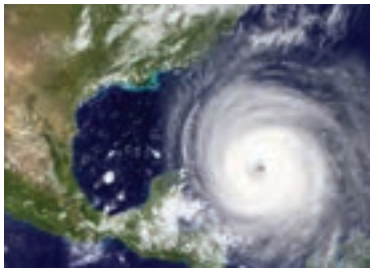
- Temperature rise-rated full-flush design
- Available in 16 or 18-gauge to fit any application from standard to extra heavy-duty
- Available in six standard finishes as well as custom matched finishes
- Mineral board core provides a 250° or 450° temperature rise-rating



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Severe weather doors

Tough weather protection

Whether you're in a coastal area subject to hurricane-force storms, or in one of the many areas across the country at risk for tornadoes, Steelcraft offers a tough, dependable solution. Our Paladin tornado doors and H Series hurricane-rated doors are built to exacting standards that provide peace of mind and protection when it's needed most.

Standard construction

- **A60 galvannealed steel for superior corrosion resistance** on exterior openings
- **Full height lock-side reinforcement channel** ensures structural stability and locking hardware functionality under extreme pressure conditions
- **Full height, epoxy-filled mechanical interlock edges** provide structural support and stability the full height of the door edges
- **Patented universal hinge preparations** allow for easy field conversion from standard-weight hinges to heavy-weight hinges
- **14-gauge top and bottom channels** provide stability and protection from abuse for the top and bottom edges
- **Beveled hinge and lock edges** allow for tighter tolerances, ensure easier operation, and eliminate binding and sticking
- **Recessed Dezigner glass trim** provides a clean, neat and flush finish with the door surface*
- **Factory-applied baked-on rust inhibiting primer** in accordance with ANSI A250.10

*Not available on Paladin

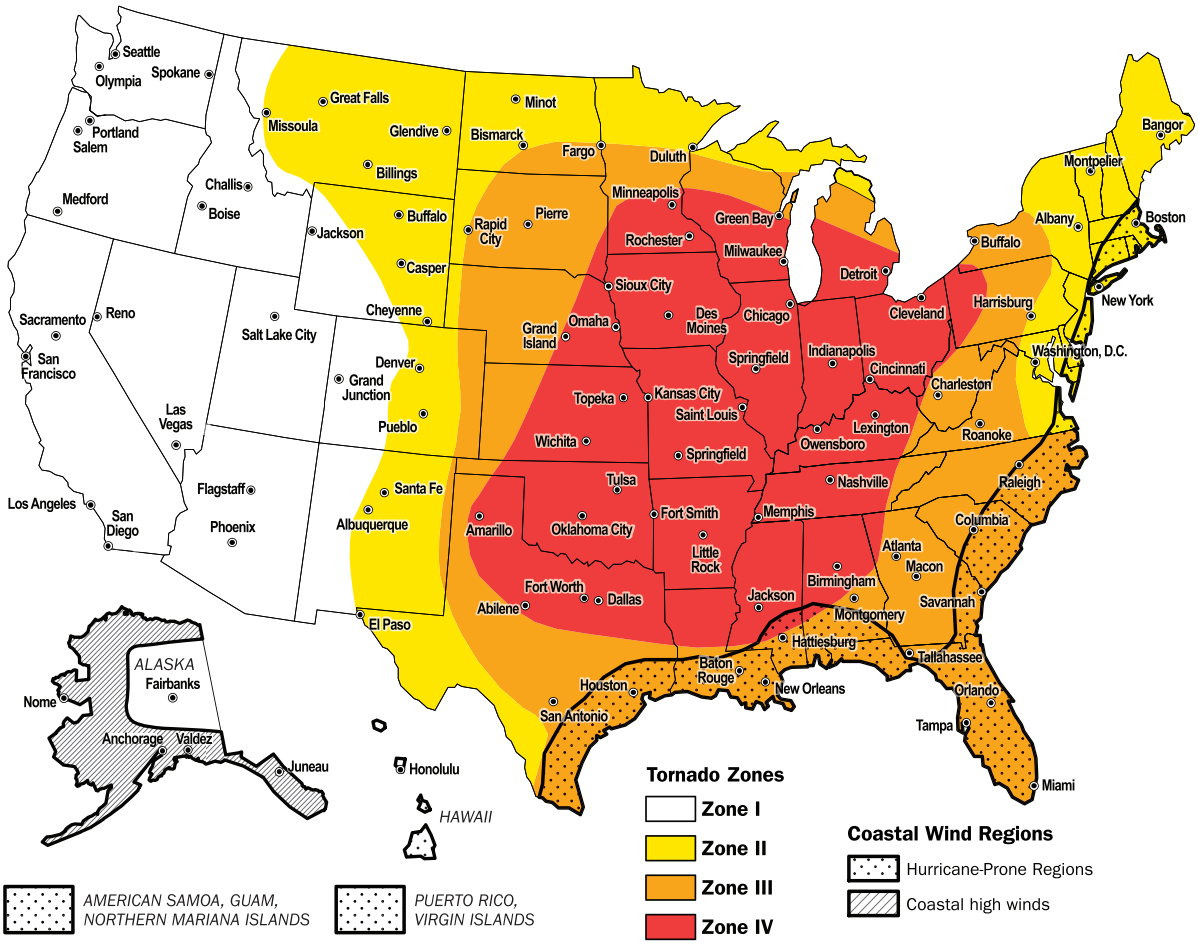


Figure 2-8: Wind hazards in the United States

Note: always reference local codes for specific jurisdiction requirements.

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Acoustical doors

Reduced noise

Steelcraft sound control doors and frames are an ideal solution for applications ranging from sound studios to school band rooms, hospitals, office complexes and museums. Control the atmosphere and ensure the privacy across your facility with these quality, specialized doors.

Note: STC ratings vary by door series and core type, please see the Specialty Section of our Technical Data Manual for a complete listing.



HD2A

HD2

High definition doors

Sophisticated style

From executive office settings to multi-family housing units to university conference facilities, the Steelcraft commercial embossed high definition two panel doors enhance any environment. Crafted detailing gives these doors a face of beauty and elegant style that's sure to upgrade the appearance of your setting. Available in standard paint or GRAINTECH finishes, these doors feature two inset panels with deep shadow detail and your choice of straight cut or arched top design.

Durable core

Steelcraft construction combines the strength and dimensional stability of steel with the structural integrity of our laminate core. Our process of continuous bonding seals the core to steel face sheets for a flat door finish, free of face welding marks. Lab studies prove this door outperforms all others in its class, meeting the requirements of fire-rated doors from 20 minutes to 3 hours.

Factory finish paint

Steelcraft's factory finish paint offers a variety of popular standard color choices along with custom match options. The finish paint is applied to our quality commercial grade doors, carefully packaged and supplied to our customer, pre-finished. Our efficient method of application and pre-finished delivery saves in money and time—without compromising quality or reliability.

Our 16 standard color options:

Rookwood brown P2807	Downing earth P2820	Downing stone P2821	Downing sand P2822	Aurora brown P2837	Weathered shingle P2841	Chelsea gray P2850	Black bean P6006	Spalding gray P6074
Blonde P6128	Mannered gold P6130	Burgundy P6300	Luxurious red P6314	Sierra redwood P7598	Poolhouse P7603	Homberg gray P7622	Cascades P7623	Raisin P7630

Docusign Envelope ID: 123CBD13-CC93-86BE-82D4-881916C1066A



Stainless steel doors and frames

LS Series doors and FS Series frames

Steelcraft stainless steel LS series doors and FS Series frames are designed and built to withstand the harshest environments. These solutions utilize all stainless steel construction, including reinforcement components and anchors. They are available in either 304 or 316 alloy for maximum durability and corrosion protection.

In addition to standard flush and panel doors, custom doors are available in a wide range of polished, embossed and etched finishes. The nearly unlimited choice of design options can provide you the performance and creative look to meet your special project needs.

Doors are seamless with interlocking edge; core options include polystyrene, honeycomb or polyurethane. Stainless steel stiffeners are epoxy-glued to eliminate surface imperfections associated with welding.

Available ratings:

- Three hour Class A fire-rated
- STC 51 sound rated
- Hurricane approved

INPACT™ integrated door system



INPACT Series L and T Series doors

INPACT door systems are designed to meet life safety and clear opening width requirements in cross corridor applications with factory installed Von Duprin 94/95 Series INPACT recessed exit devices.

This Allegion all-in-one door solution uses L and T Series doors ordered from Steelcraft through pre-configured hardware system sets for a reliable assembly of industry-leading Allegion hardware options to meet the aesthetic and functional requirements of the opening.

Pre-configured application system sets

All hardware shown below is ordered from Steelcraft and ships with the INPACT door from Steelcraft. If required hardware is not provided in system sets, they may be ordered from Steelcraft as L or T Series doors prep only, with hardware ordered separately from Allegion brands for field installation.

	System set available												A la carte
	D1-D4= "Double Egress"				P1-P4 = "Same Swing"				S1-S4 = "Single"				
	D1 90x90	D2 90x90	D3 90x90	D4 90x180	P1 90x90	P2 90x90	P3 180x180	P4 180x180	S1 90x90	S2 90x90	S3 180x180	S4 180x180	From Steelcraft
Steelcraft doors													
L Series	■	■	■	■	■	■	■	■	■	■	■	■	■
T Series	■	■	■	■	■	■	■	■	■	■	■	■	■
Von Duprin exit devices													
94/9547 Series CVR with LBR option	■	■	■	■	■	■	■	■	–	–	–	–	■
94/9575 Series Mortise exit	–	–	–	–	–	–	–	–	■	■	■	■	■
LCN closers													
4040XP Closer	–	–	–	■	–	–	■	■	–	–	■	■	■
4000T Wall mounted closer	■	■	■	■	■	■	–	–	■	■	–	–	■
LCN magnetic holders													
SEM 7850 Magnetic holder	■	■	■	■	■	■	■	■	■	■	■	■	■
IVES hinges and pivots													
700 Stainless pin and barrel continuous	■	–	–	■	–	–	■	–	■	–	■	–	■
711BSC Beveled swing clear continuous	–	■	–	–	■	–	–	■	–	■	–	■	■
91105F pocket pivot	–	–	■	–	–	■	–	–	–	–	–	–	■
224HD AL geared continuous	–	–	–	–	–	–	–	–	–	–	–	–	■
224XY AL geared continuous	–	–	–	–	–	–	–	–	–	–	–	–	■
041XY AL geared swing clear continuous	–	–	–	–	–	–	–	–	–	–	–	–	■
040XY AL geared wide throw continuous	–	–	–	■	–	–	–	–	–	–	–	–	■
5BB1HW 4.5" or 5" butt hinges	–	–	–	–	–	–	–	–	–	–	–	–	■
5BB1HWBSC 4.5" or 5" butt hinges	–	–	–	–	–	–	–	–	–	–	–	–	■
*D4 is shown with 2 different hinges to accommodate a wide throw condition using an available aluminum geared 040XY. Typically hinges should be the same material.													
Steelcraft frames													
FE Series (special profile for swing clear or pocket pivot)	■	■	■	■	–	–	–	–	–	–	–	–	■
F Series (double or single rabbet)	–	–	–	–	■	■	■	■	■	■	■	■	■

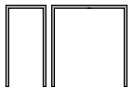
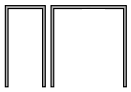
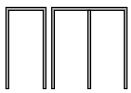
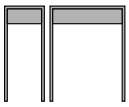
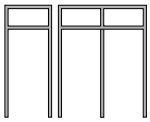
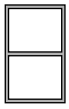
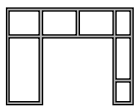
NOTES:

1 For system sets All hardware is installed or shipped with the door. Frame is ordered separately since frames are typically required earlier.

2 If ordering a la carte, changes to frames, hinges or closers may change your wall configuration, opening size and clear opening width.

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Fire-rated frames

Frame type		Frame size					
Three sided frames		**Max. overall size**	**Max. door size**	**Max. rating**	**Jamb depths**	**Max. panel size**	**Max. glass area**
	**F16, FN16 F14, FN14, F12**		4'0" x 10'0" single (1219mm x 3048mm) 8'0" x 10'0" pair (2438mm x 3048mm)	3 hour	Min. 3" (76mm) Max. 14" (350mm) Max. 20" (F16 and F14 masonry)		
Three sided frames							
	**DW16, K16 DW14, K14**		4'0" x 8'10" single (1219mm x 2692mm) 8'0" x 8'10" pair (2438mm x 3048mm	1½ hour	Min. 3 ½" (121mm) Max. 14"		
Three sided frames							
	**F14**		4'0" x 8'0" single 8'0" x 8'0" pair	3 hour	Min. 5¾" (146mm) Max. 10¾" (273mm)		
Transom frames with panel, without bar							
		4'4" single (1319mm x 3505mm) 8'4" pair (2538mm x 3505mm) 11'4" OA height	4'0" x 8'0" single (1219mm x 2438mm) 8'0" x 8'0" pair (2438mm x 2438mm)	3 hour - masonry 1½ hour - stud (10'2" OA height)	Min. 3" (121mm) Max. 14" (324mm)	8'0" x 4'0" (2438mm x 1219mm)	
Transom frames with bar							
	**F16, F14 MU16, MU14 FN16, FN14**	4'4" x 12'2" single (1319mm x 3531mm) 8'4" x 12'2" pair (2538mm x 3531mm) without mullion 8'6" x 12'2" (2590mm x 3531mm) with mullion	4'0" x 10'0" single (1219mm x 3048mm) 8'0" x 10'0" pair (2438mm x 3048mm)	1½ hour	Min. 3" (121mm) Max. 14" (324mm)	8'0" x 3'2" (2438mm x 965mm)	Per glass mfgr.
Borrowed lite frames							
	**F16, F14 MU16, MU14 FN16, FN14**	13'2" x 12'2" (4013mm x 3531mm) stud wall 13'6" x 12'2" masonry		1½ hour	Min. 3" (121mm) Max. 14" (324mm)		Per glass mfgr.
Borrowed lite frames							
	**DW16, DW14**	8'4" x 7'2" single (2540mm x 2184mm) 4'4" x 9'0" (with Loriz rem mullion)		1 hour	Min. 3 ½" (121mm) Max. 14" (324mm)		Per glass mfgr.
Transom/sidelite frames							
	**F16, F14 MU16, MU14 FN16, FN14**	13'2" x 12'2" (4013mm x 3531mm) stud wall 13'6" x 12'2" masonry	4'0" x 10'0" single (1219mm x 3048mm) 8'0" x 10'0" pair (2438mm x 3048mm)	1½ hour	Min. 3" (121mm) Max. 14" (324mm)	Transom or side panel 8'0" x 3'2" 2438mm x 965mm)	Per glass mfgr.

Interior dividing members may have a minimum 1"(25mm) face. Maximum size frame available will vary with wall construction. See Steelcraft spec sheets for exact sizes.
Approved glazing required in all fire-rated products.

Docusign Envelope ID: 123CBD13-CC93-86BE-82D4-881916C1066A

Fire-rated doors

Maximum glass area for labeled doors

Label	A	B	C	D*	E*		
Rating	3 hour	1 1/2 hour	3/4 hour	1 1/2 hour	3/4 hour	20 minutes	
Max. glass area	100 sq. in[1] (0.6 sq. m)	1850 sq. in[2] mfgr. (1.19 sq. m) list	2700 sq. in	none	2700 sq. in (1.74 sq. m)	as tested	

*Exterior rated openings [1]Firelite glass [2][1296 sq. in. (84 sq. M)] with Firelite glass.

Single doors label rating

Doors	Max. size	3 hour	1 1/2 hour	3/4 hour	1 1/2 hour	3/4 hour	20 minute
L20	3'0" x 7'2" (914mm x 2184mm)	**A**	**B**	**C**	**D**	**E**	✓
L20	3'0" x 8'0" (914mm x 2438mm)		**B**	**C**	**D**	**E**	✓
L18, L16	4'0" x 10'0" (1219mm x 3048mm)		**B**	**C**	**D**	**E**	✓
L14	4'0" x 10'0" (1219mm x 3048mm)	**A**	**B**	**C**	**D**	**E**	✓
B18, B16	4'0" x 10'0" (1219mm x 3048mm)	**A**	**B**	**C**	**D**	**E**	✓
B14	4'0" x 8'0"/10'0" (1219mm x 2438mm)	**A** - 8'0" 4'0" x 8'0"	**B** - 10'0"	**C** - 10'0"	**D** - 10'0"	**E** - 10'0"	✓- 10'0"
A14	4'0" x 8'0" (1219mm x 2438mm)		**B** - (FG2, FG3)	**C** - (FG, FG2, FG3)		**E** - (FG2, FG3)	✓ - (FG, FG2, FG3)
T20, T18 T16, T14	4'0" x 9'0" (1219mm x 2743mm)	**A** - 250° temp. rise	**B** - 250° or 450° temp. rise				
CE20, CE16	3'0" x 8'0" (914mm x 2438mm)	**A** - (3'0" x 7'0" CE20)	**B**	**C**	**D**	**E**	✓
CE18	3'8" x 8'0" (1118mm x 2438mm)	**A**	**B**	**C**	**D**	**E**	✓
PW14	4'0" x 8'0" single 8'0" x 8'0" pair	**A**	**B**	**C**			✓
H16/H14	4'0" x 8'0" single 8'0" x 8'0" pair	**A**	**B**	**C**			✓
TH16/TH14	4'0" x 8'0" single 8'0" x 8'0" pair	**A**	**B** - (100 sq in max.)				
HD16, HD18	3'8" x 7'0" single 3'0" x 8'0" single	**A**	**B**	**C**	**D**	**E**	✓
HD16, HD18	7'4" x 7'0" pair 6'0" x 8'0" pair	**A**	**B**	**C**	**D**	**E**	✓

Pair of doors label rating

Doors	Max. size	3 hour	1 1/2 hour	3/4 hour	1 1/2 hour	3/4 hour	20 minutes
L20	6'0" x 7'2" (1892mm x 2184mm)		**B**	**C**	**D**	**E**	✓
L18, L16	8'0" x 8'0" (2438mm x 2438mm)	**A**	**B**	**C**	**D**	**E**	✓
L14	8'0" x 10'0" (2438mm x 3048mm)	**A** - 8'0"	**B** - 9'0"	**C** - 9'0"	**D** - 9'0"	**E** - 9'0"	✓ - 9'0"
B18, B16	8'0" x 10'0" (2438mm x 3048mm)	**A**	**B**	**C**	**D**	**E**	✓
B14	8'0" x 8'0"/10'0" (2438mm x 2438mm)	**A** - 8'0"	**B** - 10'0"	**C** - 10'0"	**D** - 10'0"	**E** - 10'0"	✓ - 10'0"
A14	8'0" x 8'0" (2438mm x 2438mm)		**B** - (FG2, FG3)	**C** - (FG2, FG3)		**E** - (FG2, FG3)	✓ - (FG, FG2, FG3)
T20, T18 T16, T14	8'0" x 9'0" (2438mm x 2438mm)	**A** - 250° temp. rise	**B** - 250° or 450° temp. rise (FG2, FG3)				
CE20	6'0" x 7'0" (1892mm x 2134mm)		**B**	**C**	**D**	**E**	✓
CE18	7'4" x 8'0" (2235mm x 2438mm)	**A**	**B**	**C**	**D**	**E**	✓
CE16	6'0" x 8'0" (1892mm x 2438mm)	**A**	**B**	**C**	**D**	**E**	✓

L, B, T, H Series label doors are available with the seams filled or welded. Doors over 8'0" (2438mm) high require two pair of heavy-weight hinges.
Note: Consult the factory or an authorized Steelcraft distributor for specific fire-rated applications.

Docusign Envelope ID: 123CBD13-CC93-86BE-82D4-881916C1066A

About Allegion

Allegion (NYSE: ALLE) is a global pioneer in seamless access. We keep people and their assets safe, wherever they are, bringing together simple solutions, convenient access and advanced technology.

For more, visit **www.allegion.com**

KRYPTONITE ■ LCN ■ SCHLAGE ■ STEELCRAFT ■ VON DUPRIN

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ALLEGION™

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Landmark® Series

Designer Roofing Series

certainteed
SAINT-GOBAIN



Landmark, shown in Weathered Wood

SAINT-GOBAIN

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NOTE: Due to limitations of printing reproduction, CertainTeed can not guarantee the identical match of the actual product color to the graphic representations throughout this publication.

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Landmark, shown in Georgetown Gray

Trust Your Home to Landmark®

Few things in this world are as precious as the place that you call home. It is much more than just a house. It's the foundation from which you build your life. That's why having a roof that gives your home long-lasting curb appeal and protection from the elements is so important. At CertainTeed, our benchmark for success is our customers' total peace of mind. And we wouldn't have it any other way.

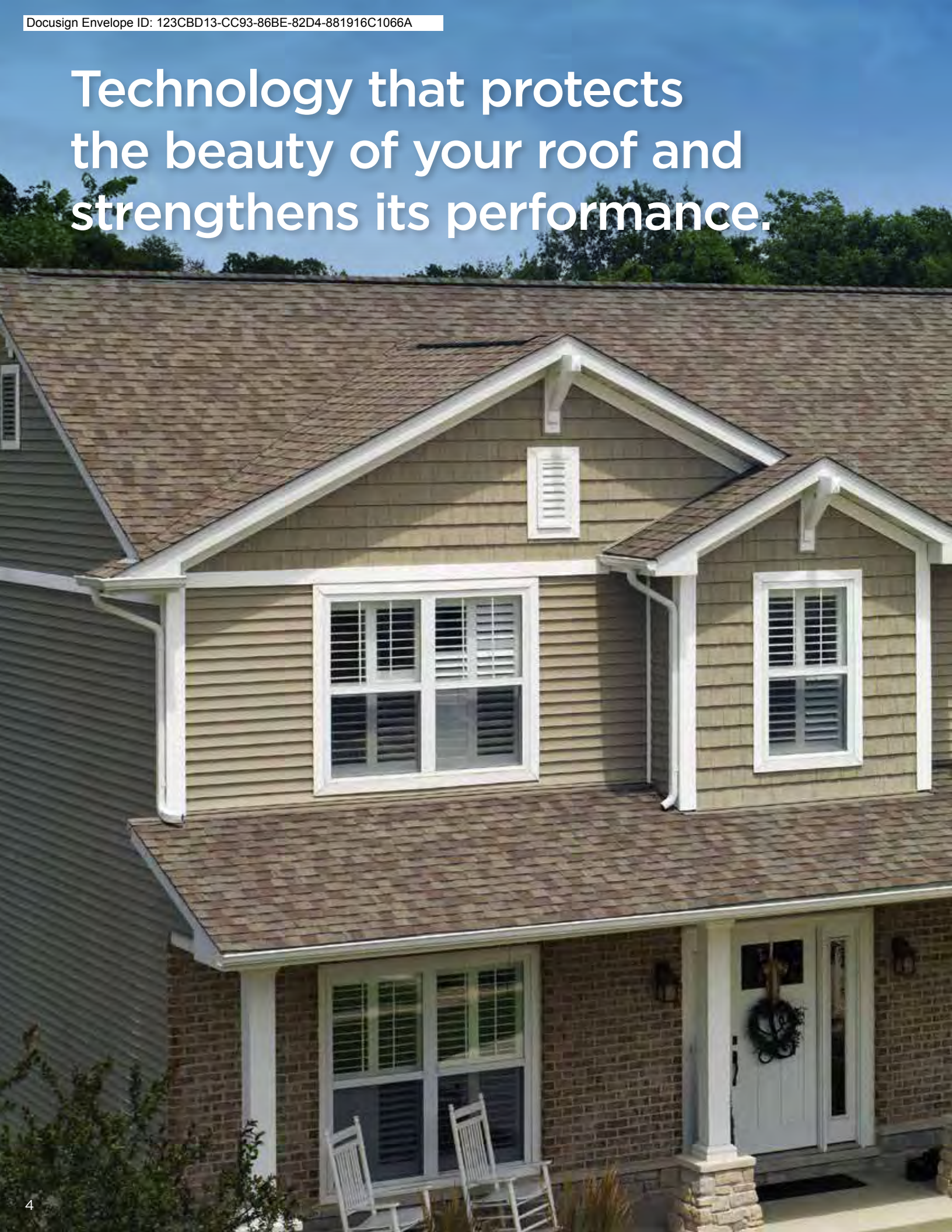
Our dedication to making the highest-quality roofing systems continues to earn the respect of top building professionals. And our product portfolio offers the widest variety of design and color options in the industry. It's no wonder that more than a million homeowners across North America choose CertainTeed each year.

And the job doesn't stop once the roof goes on. Every CertainTeed product is backed by our industry-leading manufacturer's warranty, allowing you to rest confidently and comfortably for years to come.

High-**Quality**, Reliable Choice + Industry-Best **Warranty** + SINCE 1904 Century of **Trusted** Performance = PEACE OF MIND

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Technology that protects the beauty of your roof and strengthens its performance.



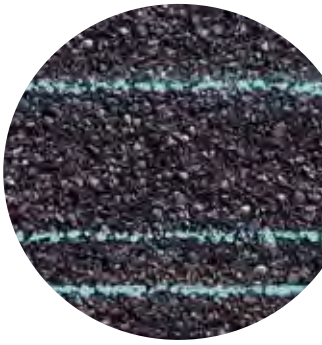
Docusign Envelope ID: 123CBD13-CC93-86BE-82D4-881916C1066A



Landmark, shown in Weathered Wood

Nail*Trak*®

Fast, Accurate, Visible



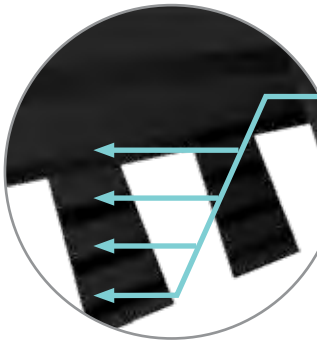
The new and improved **Nail***Trak* nailing line, a feature on CertainTeed designer shingles.

Now **Nail***Trak* is brighter than ever before, with high-visibility lines that stand out whether it's daybreak or dusk.

Nail*Trak* removes the guesswork with three separately defined lines, creating a large area to guide your nailing and a smaller area for extreme steep-slope applications.

Quadra*Bond*®

Advanced Layering



CertainTeed's specially formulated adhesive adheres shingle layers at four points, more than any other manufacturer. This superior bond provides greater protection against shingle delamination to maximize performance over the life of the shingle in any climate.

Streak*Fighter*®

Algae Resistance

Granule with Streak*Fighter* Technology

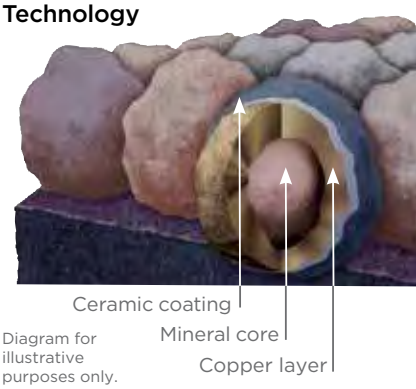


Diagram for illustrative purposes only.

The ultimate in stain protection.

Those streaks you see on other roofs in your neighborhood? That's algae, and it's a common eyesore on roofing throughout North America. CertainTeed's **Streak***Fighter* technology uses the power of science to repel algae before it can take hold and spread. **Streak***Fighter*'s granular blend includes naturally algae-resistant copper, helping your roof maintain its curb appeal and look beautiful for years to come.

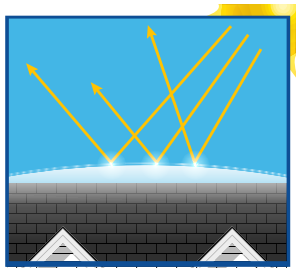
Certa*Seal*®

Uplift Protection

Certa*Seal*® is a fast-activating modified asphalt sealant with a 20-year record of proven performance. Designed to seal shingles together upon installation, it protects roofs from wind uplift and shingle blow-off so that homes stay safe and dry. It's also engineered to remain flexible after installation, unlike harder sealants that can dry out and crack over time.

Solaris® *CoolRoof*

Solar Reflectivity



Solaris® Cool Roof is a sustainable shingle granule technology that applies energy-saving cool roof performance to CertainTeed's most popular shingle brands. Available in rich and authentic colors, including dark hues and tones, Solaris Cool Roof can lower roof temperatures and allow homeowners to reduce cooling costs without sacrificing beauty, quality, or color.

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Docusign Envelope ID: 123CBD13-CC93-86BE-82D4-881916C1066A



Landmark, shown in Weathered Wood

The Trusted Classic

LANDMARK®

Owning a Landmark roof brings peace of mind. Landmark's dual-layered construction and exceptional durability provide long-lasting protection for your home.

- **Classified as UL 2218 Class 3 Impact Rated**
- Dual-layered for extra dimensionality and protection from the elements
- Offers the widest array of colors in the industry
- Independently certified as meeting the highest quality standards for roofing



Weathered Wood

Scan code for more information

See next page for full color palette.

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LANDMARK® COLOR PALETTE



Cobblestone Gray



Georgetown Gray



Weathered Wood



Moiré Black



Heather Blend



Burnt Sienna

LANDMARK® Solaris® COLOR PALETTE



Graphite

CRRC Product ID 0668-0155



Weathered Wood

CRRC Product ID 0668-0119

Docusign Envelope ID: 123CBD13-CC93-86BE-82D4-881916C1066A



Driftwood



Colonial Slate



Pewter



Resawn Shake

Docusign Envelope ID: 123CBD13-CC93-86BE-82D4-881916C1066A



Docusign Envelope ID: 123CBD13-CC93-86BE-82D4-881916C1066A

Strength with Style

LANDMARK®

- Certified to meet UL 2218 Class 3 Impact Resistance
- Dual-layer durability
- Industry-best lifetime limited warranty
- 25-year **Streak***Fighter*® algae-resistance warranty
- **Solaris**® *CoolRoof* colors have a Solar Reflectance Index greater than 20 SRI.

LANDMARK® ClimateFlex®

- Certified to meet UL 2218 Class 4 Impact Resistance
- Dual-layer, high performance
- Industry-best lifetime limited warranty
- 25-year **Streak***Fighter*® algae-resistance warranty

LANDMARK® PRO

- Certified to meet UL 2218 Class 3 Impact Resistance
- Dual-layer, high performance
- Max Def color palette
- Industry-best lifetime limited warranty
- 30-year **Streak***Fighter*® algae-resistance warranty

NORTHGATE® ClimateFlex®

- Certified to meet UL 2218 Class 4 Impact Resistance
- Dual-layer, high performance
- Max Def color palette
- Industry-best lifetime limited warranty
- 30-year **Streak***Fighter*® algae-resistance warranty

Docusign Envelope ID: 123CBD13-CC93-86BE-82D4-881916C1066A



LANDMARK SERIES

SPECIFICATIONS

- Two-piece laminated fiberglass-based construction
- Classic shades and dimensional appearance of natural wood or slate
- Solaris® *CoolRoof* colors have a Solar Reflectance Index greater than 20 SRI.

For U.S. building code compliance, see product specification sheets.

CertainTeed products are tested to ensure the highest quality and comply with the following industry standards:

Fire Resistance:
- UL Class A
- UL certified to meet ASTM D3018 Type 1

Wind Resistance:
- UL certified to meet ASTM D3018 Type 1
- ASTM D3161 Class F

Tear Resistance:
- UL certified to meet ASTM D3462
- CSA standard A123.5

Wind Driven Rain Resistance:
- Miami-Dade Product Control Acceptance: Please reference www.certainteed.com to determine approved products by manufacturing location.

Impact Resistance:
- Certified to meet UL 2218 Class 4 (Landmark ClimateFlex® and NorthGate ClimateFlex®)
- Certified to meet UL 2218 Class 3 (Landmark and Landmark PRO)

Quality Standards:
- ICC-ES-ESR-1389 & ESR-3537

WARRANTY

- Lifetime limited transferable warranty against manufacturing defects on residential applications
- 50-year limited transferable warranty against manufacturing defects on group-owned or commercial applications (Landmark PRO, NorthGate ClimateFlex®)
- 40-year limited transferable warranty against manufacturing defects on group-owned or commercial applications (Landmark and Landmark ClimateFlex®)
- StreakFighter® algae-resistance warranty (25-year – Landmark and Landmark ClimateFlex®, 30-year – Landmark PRO, NorthGate ClimateFlex®)
- 10-year SureStart™ protection
- 15-year 110 mph wind-resistance warranty
- Wind warranty upgrade to 160 mph available. CertainTeed starter and CertainTeed hip and ridge required

See actual warranty for specific details and limitations.

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The ColorView® Visualizer: Design your Dream Home with the Click of a Mouse

CertainTeed created the ColorView tool to help homeowners bring their creative vision to reality.

Just look through a photo library of homes to choose one that looks most like your own. Then click on the roof to easily switch designs and see what CertainTeed product looks best. You can choose from hundreds of different roofing design and color combinations, and even add roof accents in different colors. All before anyone raises a hammer.

Want to visualize different roofing styles on your own home? You can upload photos to ColorView and have them digitally masked by one of our design professionals, or use DIY mode to upload and mask your own photos.

Plus, you can print or share your ColorView photos with family and friends to get their feedback. Visit **colorview.certainteed.com** and get started.

COLORVIEW®



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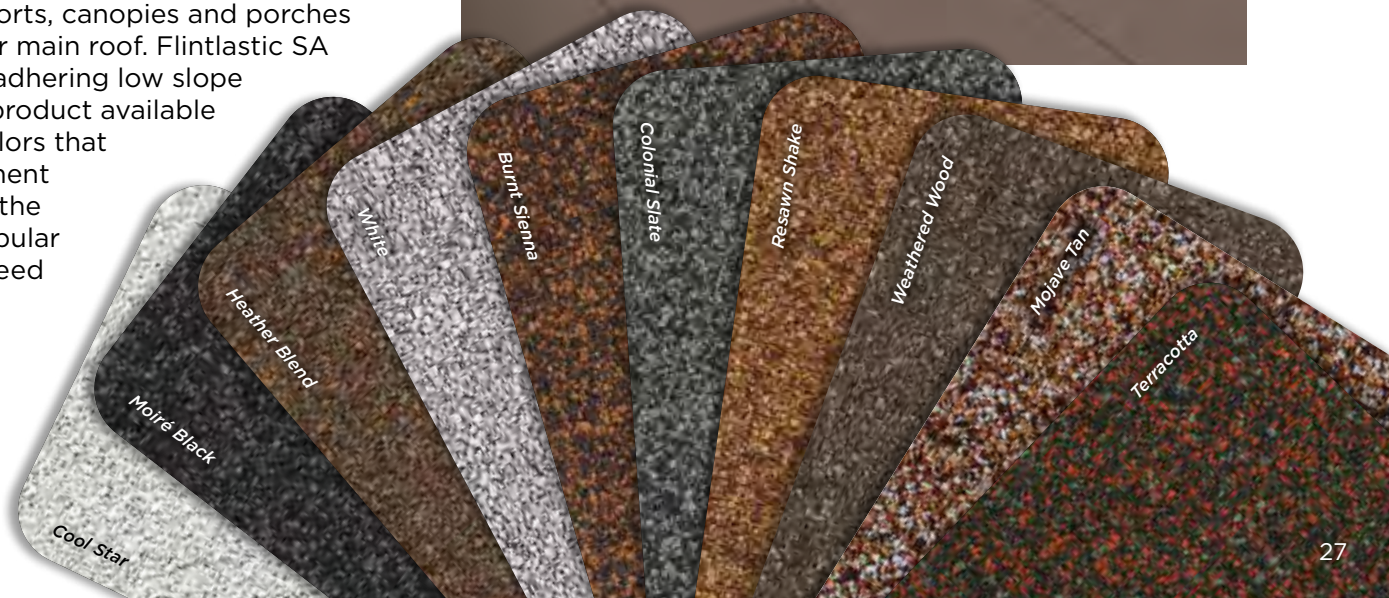
Add a Little Accent to Your Roof

The visually impactful choice for capping the hips and ridges of your roof, CertainTeed's Cedar Crest® accessory shingles will complement or match any shingle in the Landmark Series. For a low-profile hip and ridge look, CertainTeed also offers Shadow Ridge accessory shingles. Also available in **Climate***Flex* version.

Color Companion Products for Low Slope Areas

With CertainTeed Flintlastic® SA, you can coordinate low slope areas like carports, canopies and porches with your main roof. Flintlastic SA is a self-adhering low slope roofing product available in ten colors that complement some of the most popular CertainTeed shingles.





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Integrity Roof System®

PERFORMANCE ENGINEERED FOR COMPLETE PROTECTION, STRONG RESILIENCE AND LASTING BEAUTY

With as much care as you take in selecting the right contractor, choosing the right roof system is equally as important. A CertainTeed Integrity Roof System combines key elements that help ensure you have a well-built roof for long-lasting performance.

1. Waterproofing Underlayment

The first step in your defense against the elements. Self-adhering underlayment is installed at vulnerable areas of your roof to help prevent leaks from wind-driven rain and ice dams.

2. Water-Resistant Underlayment

Provides a protective layer over the roof deck and acts as a secondary barrier against leaks.

3. Shingle Starter

Shingle starter is the first course installed and designed to work in tandem with the roof shingles above for optimal shingle sealing and performance.

4. Shingles

Choose from a variety of Good-Better-Best styles to complement any roof design and fit your budget.

5. Ventilation

A roof that breathes is shown to perform better and last longer. Ridge Vents, in combination with Intake Vents, allow air to flow on the underside of your roof deck, keeping the attic cooler in the summer and drier in the winter.

6. Hip & Ridge

Available in numerous profiles, these accessories are used on the roof's hip and ridge lines for a distinctive finishing touch to your new roof.

learn more at:
certainteed.com/roofing

Landmark® Series available in areas shown



FORTIFIED ROOF
A PROGRAM OF IBHS

These products are part of CertainTeed's FORTIFIED™-Compliant Roof System for enhanced protection.

SAINT-GOBAIN

CertainTeed
Ceilings • Gypsum • Insulation • Roofing • Siding • Trim
20 Moores Road, Malvern, PA 19355 | 800-233-8990 | certainteed.com

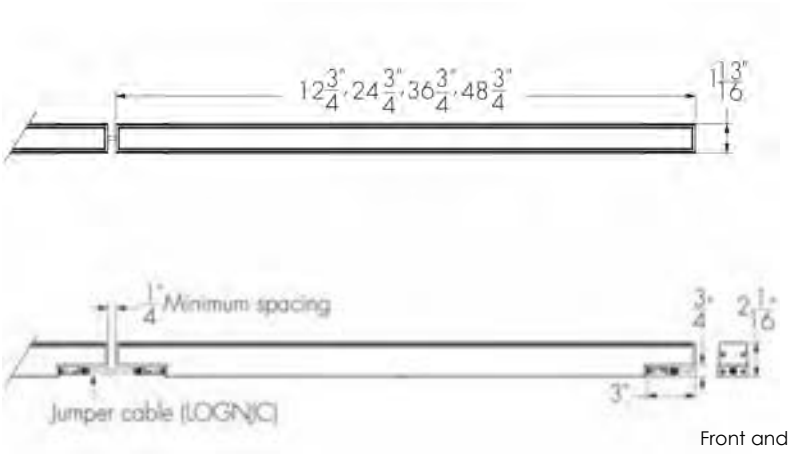
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Project Name _____ **Qty** _____

Type _____ **Catalog / Part Number** _____





Top view

Front and side views

Photometric Summary (7 W/ft)

	Delivered output (lm)	Intensity (peak cd)
8°x8°	2,173	58,720
10°x10°	2,102	45,812
10°x30°	2,038	12,959
10°x60°	2,026	6,911
10°x90°	2,031	3,622
30°x10°	2,043	12,919
30°x30°	2,986	6,894
30°x60°	2,895	4,362
60°x10°	2,025	8,019
60°x60°	2,924	2,162
60°x90°	2,905	2,603
90°x90°	2,856	1,766
W (120°)	1,225	602
WW	2,164	10,498

1. Based on 4000K full output, 4 ft, UCTL control configuration.

2. Photometric performance is measured in compliance with IESNA LM-79-24.

Description

The Lumenfacade Nano White and Static Colors is a high-efficiency linear LED luminaire that goes where no facade lighting has gone before. Available in 12 in, 24 in, 36 in or 48 in sections, the Lumenfacade Nano is the right fit for general urban structures, historical buildings and those hardest to reach places. The Lumenfacade Nano packs all the bells and whistles of the larger members of the Lumenfacade family and can be configured with a wide number of options, including: optics for grazing, floodlighting or wall washing; a choice of outputs; various color temperatures or static colors; various mounting options, finishes, accessories and controls. Now with 3G vibration-rating options, this little fixture can really go anywhere.

Features

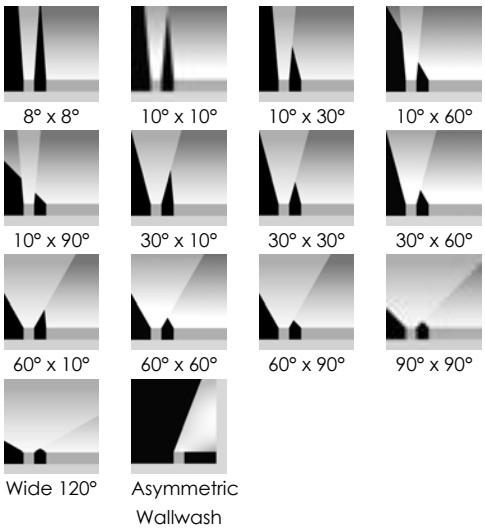
Color and Color Temperature	2200K, 2700K, 3000K, 3500K, 4000K, Red, Green, Blue
Optics	8° x 8°, 10° x 10°, 10° x 30°, 10° x 60°, 10° x 90°, 30° x 10°, 30° x 30°, 30° x 60°, 60° x 10°, 60° x 60°, 60° x 90°, 90° x 90°, Wide 120°, Asymmetric Wallwash
Option	Corrosion-Resistant Coating for Hostile Environments 3G ANSI C136.31-2010 Vibration Rating for Bridge Applications
Power Consumption	2 W/ft, 4 W/ft, 7 W/ft
Warranty	5-year limited warranty

Performance

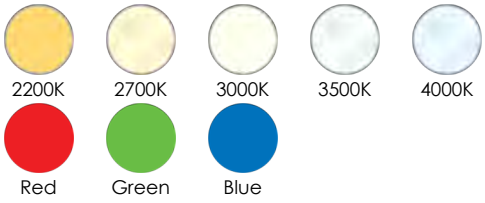
Maximum Delivered Output	884 lm (2 W/ft, 48 in fixture, 4000K CRI 80+, 30° x 30°, NO control) 1,767 lm (4 W/ft, 48 in fixture, 4000K CRI 80+, 30° x 30°, NO control) 2,986 lm (7 W/ft, 48 in fixture, 4000K CRI 80+, 30° x 30°, NO control)

LMPG Inc. reserves the right to make changes to this product at any time without prior notice and such modification shall be effective immediately.
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JC - R21

Optics



Color and Color Temperature



Control

ON/OFF UCTL

Ratings

IP66 IK08

Lumencycle™ Program

Certifications

Maximum Delivered Intensity	20,676 cd at nadir (2 W/ft, 48 in fixture, 4000K CRI 80+, 8° x 8°, NO control) 41,352 cd at nadir (4 W/ft, 48 in fixture, 4000K CRI 80+, 8° x 8°, NO control) 58,720 cd at nadir (7 W/ft, 48 in fixture, 4000K CRI 80+, 8° x 8°, NO control)
Illuminance at Distance	Minimum 1 fc at 144 ft (2 W/ft, 48 in fixture, 4000K CRI 80+, 8° x 8°, NO control) Minimum 1 fc at 203 ft (4 W/ft, 48 in fixture, 4000K CRI 80+, 8° x 8°, NO control) Minimum 1 fc at 242 ft (7 W/ft, 48 in fixture, 4000K CRI 80+, 8° x 8°, NO control)
Color Consistency	3 SDCM (2 SDCM for 8° x 8°, 10° x 10°, 10° x 30°, 10° x 60°, 10° x 90°, 30° x 10°, 60° x 10°, W and WW optics)
Color Rendering	CRI 80+ CRI 90+ (27K and 30K color temperatures only)
Lumen Maintenance	L70 >90,000 hrs

Physical

Housing Material	Low copper content extruded aluminum
Lens Material	Clear tempered glass
Hardware Material	Stainless steel
End Cap Material	Machined aluminum
Gasket Material	Silicone
Surface Finish	Electrostatically applied polyester powder coat
Weight	1.4 lbs (12 in) 2.9 lbs (24 in) 4.4 lbs (36 in) 6 lbs (48 in)

Electrical and Control

Voltage	48 VDC
Resolution (DMX/RDM)	Per fixture, 8-bit or 16-bit
Control	On/Off Control, Universal control (compatible with 0-10V, DALI or DMX/RDM systems)

Environmental

Storage Temperature	-40 °F to 185 °F (device must reach start-up temperature value before operating)
Start-up Temperature	-13 °F to 122 °F
Operating Temperature	-40 °F to 122 °F
Ingress Protection Rating	IP66
Impact Resistance Rating	IK08 (IK09 for 48 in fixtures)

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Docusign Envelope ID: 123CBD13-CC93-86BE-82D4-881916C1066A

Application Wind Speed	Luminaires were designed based on AASHTO 2013 standard to ensure highest quality and safety. Installation should be validated by a local project engineer to ensure the luminaires are suitable for the wind speed and exposure of the specific application

Accessories (Order Separately)

Cables	Lumenfacade Nano Jumper Cable (LOGNJC), Trunk Power Cable (TKPWR), Trunk Data Cable (TKDMX), Lumenfacade Nano Jumper Cable Joiner (LOGNJC-JOINER)
Control Boxes	Low-Voltage Control Box (LCBX), Low-Voltage Splitter Box (LSBX)
Remote Power Supply	Large Power Supply (LGPSU)
Optical Accessories	Lumenfacade Nano Radial Louver (LOGNRD), Lumenfacade Nano Visor (LOGNVS)
Control Systems	Pharos® Designer Lighting Control Kit (PHAROS), Pharos® Expert Control Kit (EXPERT)
Diagnostic and Addressing Tools	LumenID (LID)

Operation and Maintenance

Lumencycle™ Program	Lumencycle-enabled fixtures are designed for serviceability and circular lifecycle management. Lumenpulse will provide factory refurbishment programs, allowing luminaires to be restored and redeployed rather than replaced.

Important

Virtual Patent Marking Notice

This website (https://www.lmpg.com/patents-trademarks) is provided to satisfy the virtual patent marking provisions of applicable jurisdictions. Some products listed may be covered by additional patents not referenced here.

Lumencycle™ Program

Lumencycle is a comprehensive program designed to maximize the life of Lumenpulse fixtures while preserving their performance, quality, and design intent. Built around three pillars—Repair, Restore, and Recycle—the program provides clear pathways to maintain existing installations, restore fixtures, and responsibly manage them at end of life. For full program details, visit https://www.lumenpulse.com/lumencycle.

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JC - R21

Photometric Information

2 W/ft (3000K, CRI 80+)

	Delivered output (lm)	Intensity (peak cd)
8°x8°	711	19,229
10°x10°	688	15,002
10°x30°	668	4,244
10°x60°	664	2,264
10°x90°	665	1,187
30°x10°	669	4,231
30°x30°	822	1,897
30°x60°	796	1,201
60°x10°	663	2,626
60°x60°	804	595
60°x90°	799	716
90°x90°	786	486
W (120°)	401	197
WW	709	3,438

Based on 3000K, CRI 80+, 4 ft, NO control configuration.

4 W/ft (3000K, CRI 80+)

	Delivered output (lm)	Intensity (peak cd)
8°x8°	1,423	38,457
10°x10°	1,376	30,004
10°x30°	1,335	8,487
10°x60°	1,327	4,526
10°x90°	1,330	2,372
30°x10°	1,338	8,461
30°x30°	1,643	3,793
30°x60°	1,593	2,400
60°x10°	1,326	5,252
60°x60°	1,609	1,189
60°x90°	1,599	1,432
90°x90°	1,572	972
W (120°)	803	394
WW	1,417	6,875

Based on 3000K, CRI 80+, 4 ft, NO control configuration.

7 W/ft (3000K, CRI 80+)

	Delivered output (lm)	Intensity (peak cd)
8°x8°	2,021	54,610
10°x10°	1,955	42,605
10°x30°	1,895	12,052
10°x60°	1,884	6,427
10°x90°	1,889	3,368
30°x10°	1,900	12,015
30°x30°	2,777	6,411
30°x60°	2,692	4,057
60°x10°	1,883	7,458
60°x60°	2,719	2,011
60°x90°	2,702	2,421
90°x90°	2,656	1,642
W (120°)	1,139	560
WW	2,013	9,763

Based on 3000K, CRI 80+, 4 ft, NO control configuration.

2 W/ft (3000K, CRI 90+)

	Delivered output (lm)	Intensity (peak cd)
8°x8°	598	16,152
10°x10°	578	12,602
10°x30°	561	3,565
10°x60°	558	1,901
10°x90°	559	997
30°x10°	562	3,554
30°x30°	691	1,594
30°x60°	669	1,009
60°x10°	557	2,206
60°x60°	676	500
60°x90°	671	602
90°x90°	660	409
W (120°)	337	166
WW	595	2,888

Based on 3000K, CRI 90+, 4 ft, NO control configuration.

4 W/ft (3000K, CRI 90+)

	Delivered output (lm)	Intensity (peak cd)
8°x8°	1,195	32,304
10°x10°	1,156	25,203
10°x30°	1,121	7,129
10°x60°	1,115	3,802
10°x90°	1,117	1,993
30°x10°	1,124	7,107
30°x30°	1,380	3,187
30°x60°	1,338	2,016
60°x10°	1,114	4,411
60°x60°	1,351	999
60°x90°	1,343	1,203
90°x90°	1,320	816
W (120°)	674	331
WW	1,191	5,775

Based on 3000K, CRI 90+, 4 ft, NO control configuration.

7 W/ft (3000K, CRI 90+)

	Delivered output (lm)	Intensity (peak cd)
8°x8°	1,698	45,872
10°x10°	1,642	35,788
10°x30°	1,592	10,124
10°x60°	1,583	5,399
10°x90°	1,587	2,830
30°x10°	1,596	10,092
30°x30°	2,333	5,386
30°x60°	2,262	3,408
60°x10°	1,582	6,264
60°x60°	2,284	1,689
60°x90°	2,269	2,033
90°x90°	2,231	1380
W (120°)	957	470
WW	1,691	8,201

Based on 3000K, CRI 90+, 4 ft, NO control configuration.

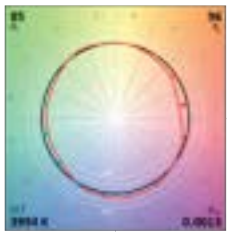
Photometric performance is measured in compliance with IESNA LM-79-24.

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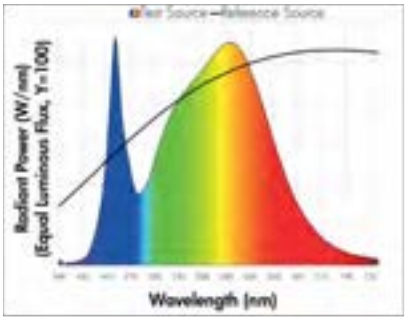
Chromaticity Data

TM-30 - 4000K

CCT	CRI		TM-30	
4000K	R_a	83	85	R_f
	R_9	14	96	R_g



Spectral Power Distribution



Optical Option Installation Details

HFR - Half-Frosted Lens



- Always position frosted side toward the wall.
- Available for 8x8, 10x10, 10x30 or WW optics only.

WW - Asymmetric Wallwash

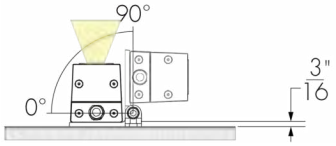
Recommended setback from wall is 1/10 of the wall height.

Example: 2 ft setback for a 20 ft wall.

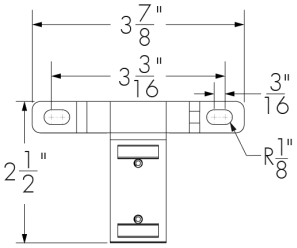
Mounting Options

One mounting bracket provided for 12 in fixtures. Two mounting brackets provided for 24 in, 36 in and 48 in fixtures. See installation instructions for details.

SAMN - Slim Adjustable Mounting Nano



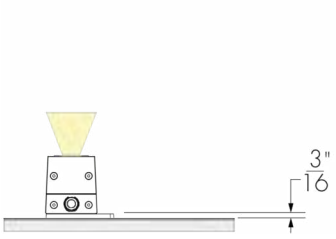
SAMN - Mounting Hole Pattern



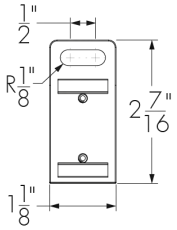
Not suitable when fixture is exposed to wind.

One mounting bracket provided for 12 in fixtures. Two mounting brackets provided for 24 in, 36 in and 48 in fixtures. See installation instructions for details.

UMPN - Fixed Mounting Nano

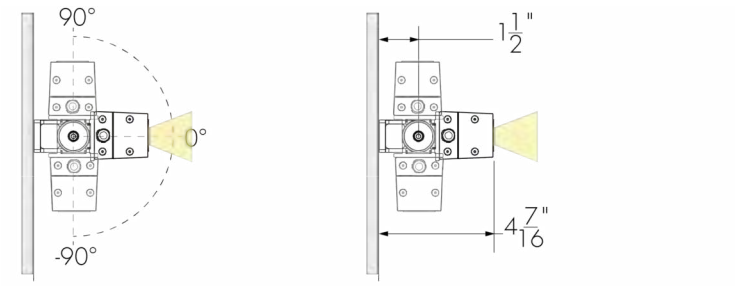


UMPN - Mounting Hole Pattern

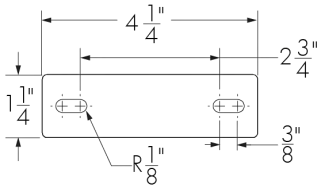


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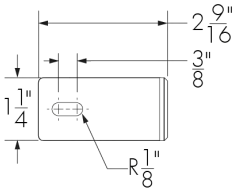
UMASN - Universal Adjustable Mounting Nano



UMASN - Mounting Hole Pattern

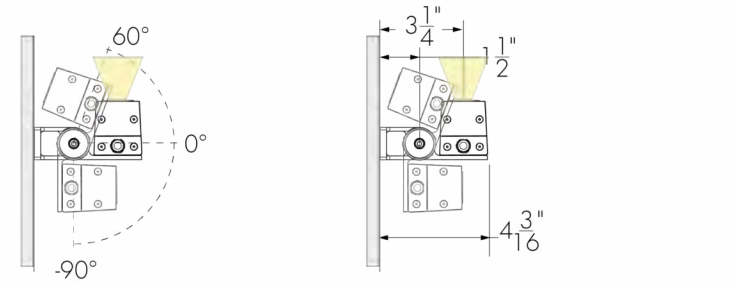


For 1 ft fixtures

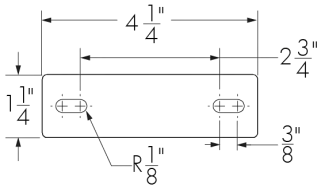


For 2 ft, 3 ft and 4 ft fixtures

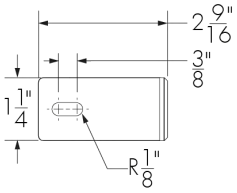
WAMN2 - Adjustable Extended Arm Mounting Nano 2 in



WAMN2 - Mounting Hole Pattern

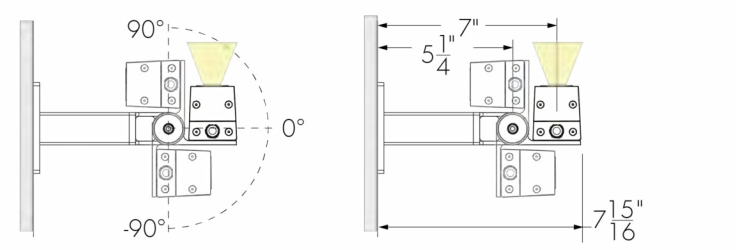


For 1 ft fixtures

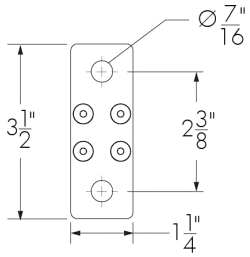


For 2 ft, 3 ft and 4 ft fixtures

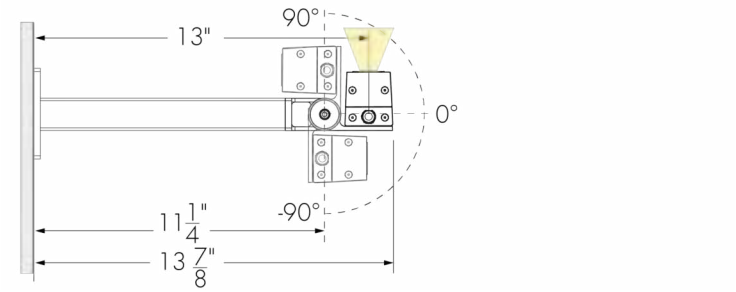
WAMN6 - Adjustable Extended Arm Mounting Nano 6 in



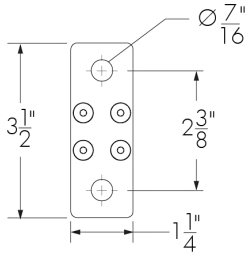
WAMN6 - Mounting Hole Pattern



WAMN12 - Adjustable Extended Arm Mounting Nano 12 in

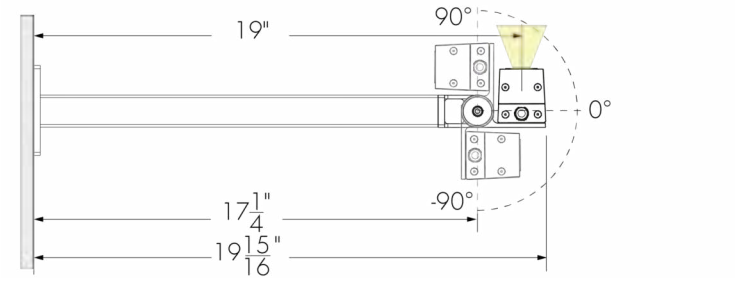


WAMN12 - Mounting Hole Pattern

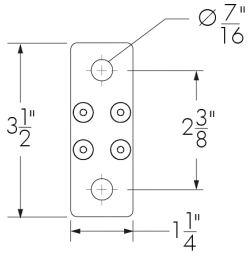


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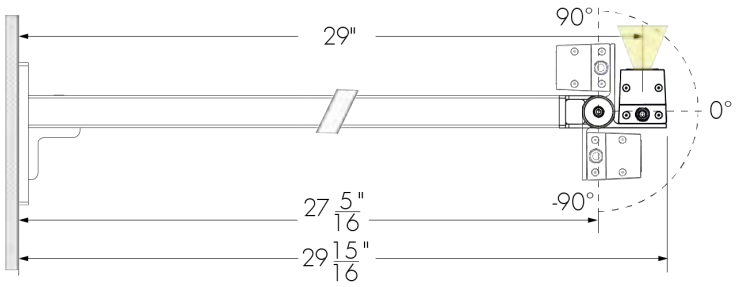
WAMN18 - Adjustable Extended Arm Mounting Nano 18 in



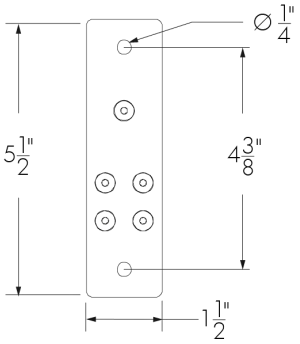
WAMN18 - Mounting Hole Pattern



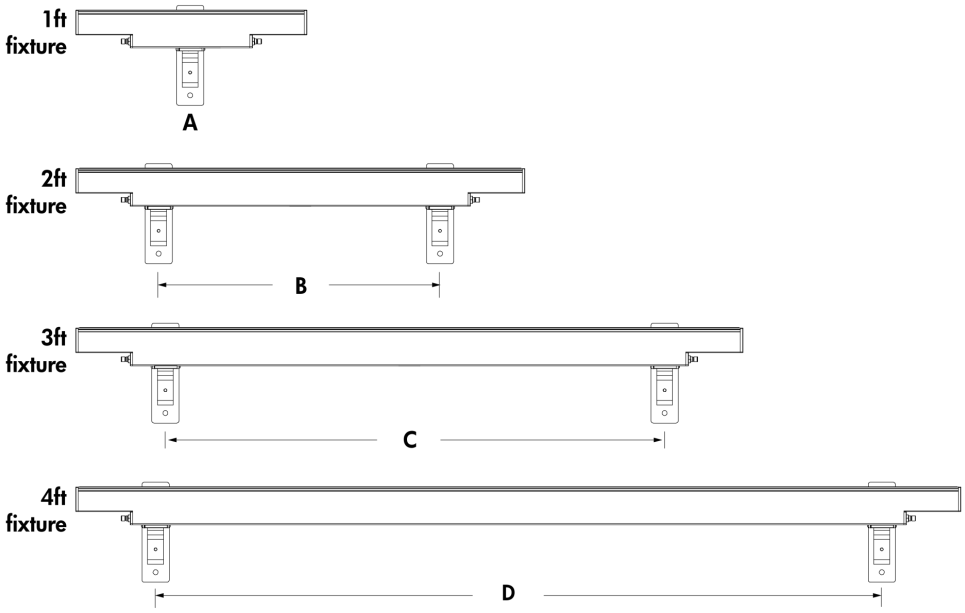
WAMN28 - Adjustable Extended Arm Mounting Nano 28 in



WAMN28 - Mounting Hole Pattern



Mounting Bracket Placement (Minimum and Maximum Distances)



FRONT VIEW

A - Bracket in the center of the fixture
B - Minimum 14 in to maximum 16 in
C - Minimum 26 in to maximum 28 in
D - Minimum 38 1/2 in to maximum 40 1/2 in

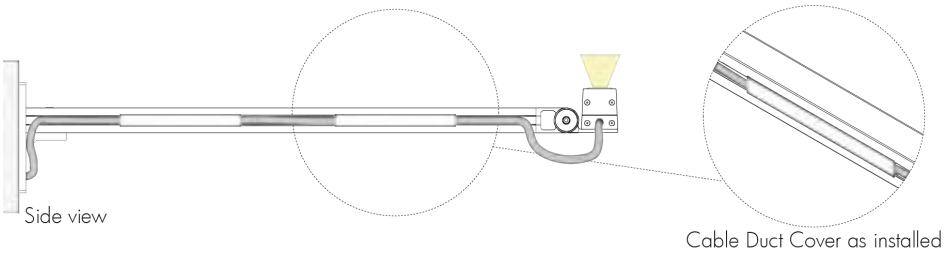
LOGN with bracket WAMN28 shown

The mounting bracket(s) to be centered on fixture and as symmetrical as possible. Distances must be respected for all installations.

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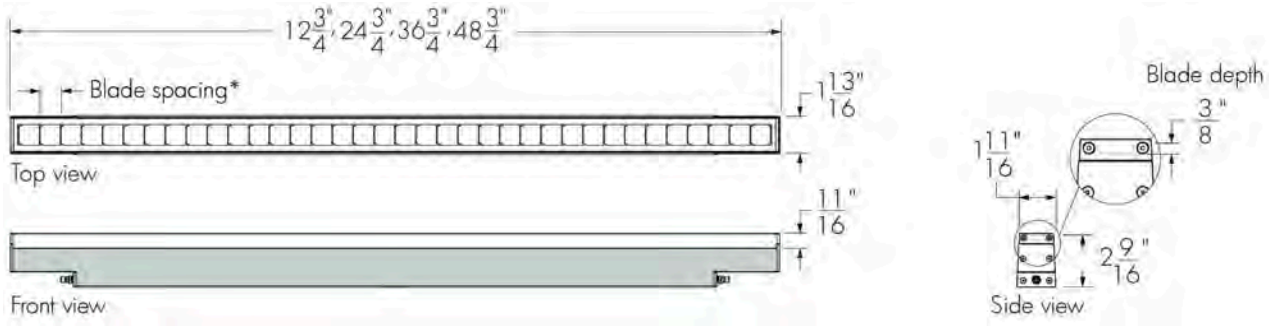
Cable Management System for Wall Mounting Brackets



- No Cable Duct Cover provided for WAMN2 and WAMN6 mounting arms.
- 1 Cable Duct Cover provided for WAMN12 mounting arm.
- 2 Cable Duct Covers provided for WAMN18 and WAMN28 mounting arms.

Optical Accessories (Order Separately)

LOGNRD - Radial Louver For Lumenfacade Nano



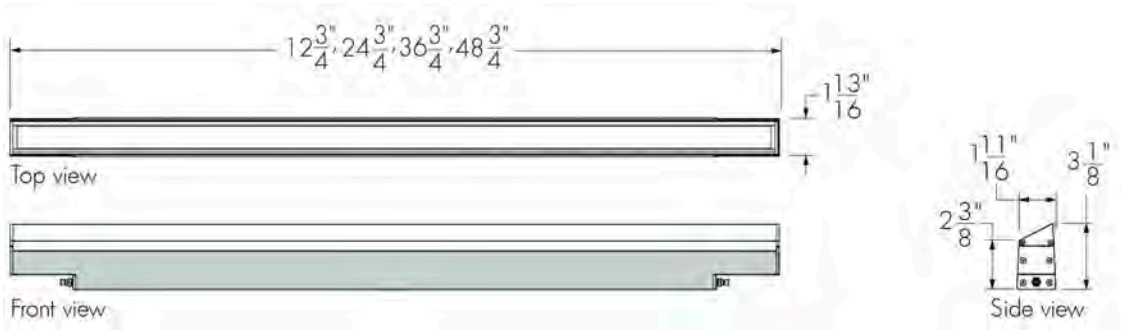
*15/16 in blade spacing for 8° x 8°, 10° x 10°, 10° x 30°, 10° x 60°, 10° x 90°, 30° x 10° and 60° x 10° optics.
*1 15/16 in blade spacing for 30° x 30°, 30° x 60°, 60° x 60°, 60° x 90° and 90° x 90° optics.

LOGNRD-**LENGTH-FINISH-OPTIONS**

Please specify:
LENGTH: 12 in, 24 in, 36 in or 48 in; **FINISH**: BK - Black Sandtex®, BRZ - Bronze Sandtex®, SI - Silver Sandtex®, WH - Smooth white or CC - custom color and finish (please specify RAL color); **OPTIONS**: CRC - Corrosion-resistant coating for hostile environments

- The addition of a louver will affect beam distribution. Consult factory for application support.
- Not suitable for wide 120° and asymmetric wallwash optics.
- Maximum one accessory per fixture. Louvers are field installable.

LOGNVS - Visor For Lumenfacade Nano



LOGNVS-**LENGTH-FINISH-OPTIONS**

Please specify:
LENGTH: 12 in, 24 in, 36 in or 48 in; **FINISH**: BK - Black Sandtex®, BRZ - Bronze Sandtex®, SI - Silver Sandtex®, WH - Smooth white or CC - custom color and finish (please specify RAL color); **OPTIONS**: CRC - Corrosion-resistant coating for hostile environments

- The addition of a visor will affect beam distribution. Consult factory for application support.
- Not suitable for wide 120° optic.
- Maximum one accessory per fixture. Visors are field installable.

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Cables (Order Separately)

LOGNJC - Jumper Cable For Lumenfacade Nano





For minimal spacing between fixtures, use a 1 ft jumper cable.

LOGNJC-**CERTIFICATION**-**LENGTH**-**CABLE COLOR**

Please specify:
CERTIFICATION: UL or CE; **LENGTH**: 1 ft to 30 ft (available in 1 ft increments) or 50 ft; **CABLE COLOR**: black or white (connectors are the same color as the specified cable color).

- Suitable for dimming/data and non-dimming applications.
- Consult Lumenfacade Nano jumper cable specification sheet for all available cable lengths and additional information.

Joiner (Order Separately)

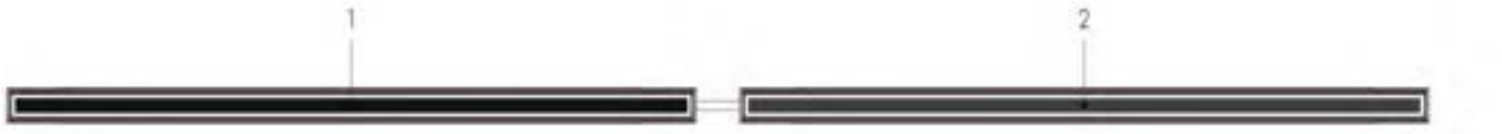
LOGNJC-JOINER - Joiner For Lumenfacade Nano Jumper Cable



- Use joiners to connect and lengthen jumper cables.
- Joiners add voltage drops. Consult factory to confirm impact on run lengh.
- Available in black.

Resolution Details

DMX/RDM Control, Resolution Per Fixture: Each Fixture is Addressed Independently
DMX Addresses:



UCTL control option

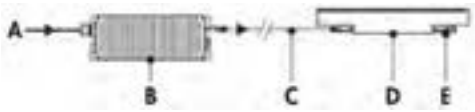
- 48 in fixtures shown.
- Applicable for UCTL control only. A DMX/RDM enabled LCBX or LSBX is required for DMX/RDM control

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Typical Wiring Diagrams

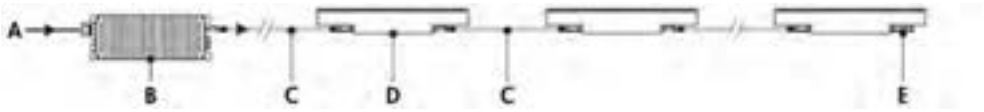
On/Off Control (NO)

Single Unit - LCBX 60W



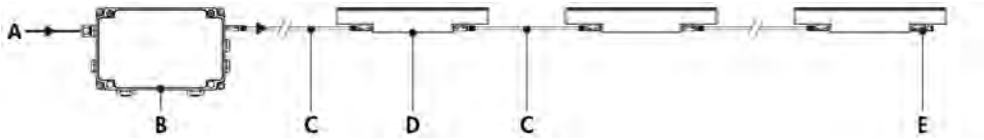
A - Power input (120-277V, wiring by others)
B - LCBX (60W)
C - Jumper cable (LOGNJC)
D - Lumenfacade Nano
E - Terminator cap

Continuous Run - LCBX 60W or 120W



A - Power input (120-277V, wiring by others)
B - LCBX (60W or 120W)
C - Jumper cable (LOGNJC)
D - Lumenfacade Nano
E - Terminator cap

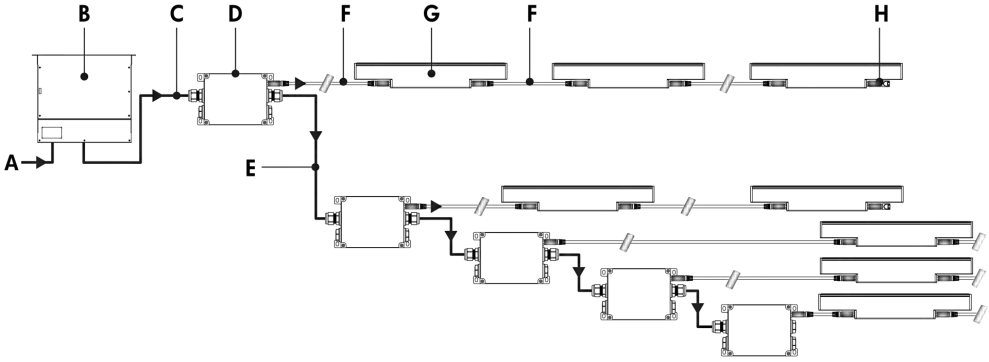
Continuous Run - LCBX 200W



A - Power input (120-277V, wiring by others)
B - LCBX (200W)
C - Jumper cable (LOGNJC)
D - Lumenfacade Nano
E - Terminator cap

- Consult factory for specific applications and maximum fixture count/run length recommendations.
- Maximum of 1 output to fixture, or fixture run, per LCBX.
- Consult the LCBX specification sheet for more information.
- 2W version: 2 W/ft; 4W version: 4 W/ft; 7W version: 7 W/ft.

Trunk System - LSBX



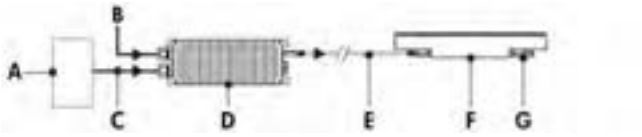
A - Power input (120-277V, wiring by others)
B - Large Power Supply (LGPSU) (order separately from Lumenpulse)
C - Power input (48V, order separately from Lumenpulse - Trunk Power Cable (TKPWR), or equivalent by others. Refer to LSBX specification sheet for details)
D - LSBX
E - Power output to next LSBX (48V, order separately from Lumenpulse - Trunk Power Cable (TKPWR), or equivalent by others. Refer to LSBX specification sheet for details)
F - Jumper cable (LOGNJC)
G - Lumenfacade Nano
H - Terminator cap

- Consult factory for specific applications and maximum fixture count/run length recommendations.
- Maximum of 1 output to fixture run per LSBX.
- The LSBX has a maximum of 200W for output to fixtures. Consult the LSBX specification sheet for more information.
- The Large Power Supply (LGPSU) has a maximum of 1000W (120V) or 1200W (277V). Consult LGPSU specification sheet for more information.
- 2W version: 2 W/ft; 4W version: 4 W/ft; 7W version: 7 W/ft.

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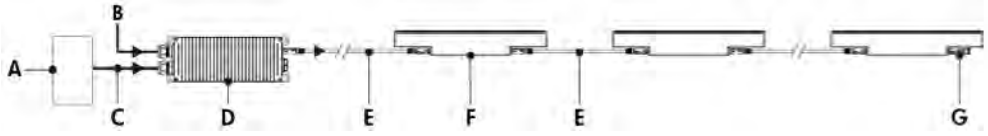
UCTL - Universal Control

Single Unit - LCBX 60W



A - Dimmer/controller (order separately from Lumenpulse, or by others)
B - Power input (120-277V, wiring by others)
C - Data input (wiring by others)
D - LCBX (60W)
E - Jumper cable (LOGNJC)
F - Lumenfacade Nano
G - Terminator cap

Continuous Run - LCBX 60W or 120W



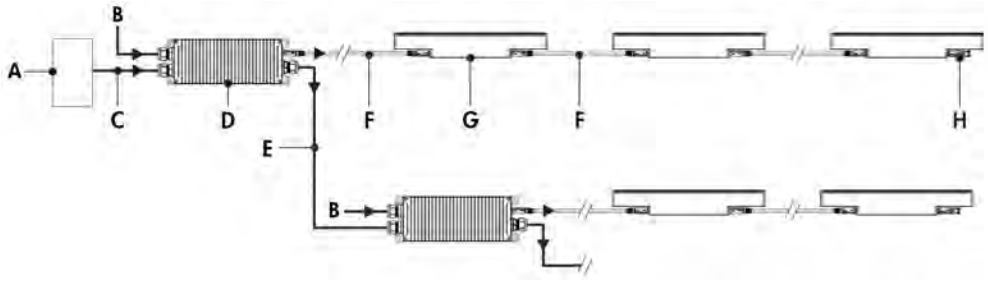
A - Dimmer/controller (order separately from Lumenpulse, or by others)
B - Power input (120-277V, wiring by others)
C - Data input (wiring by others)
D - LCBX (60W or 120W)
E - Jumper cable (LOGNJC)
F - Lumenfacade Nano
G - Terminator cap

Continuous Run - LCBX 200W



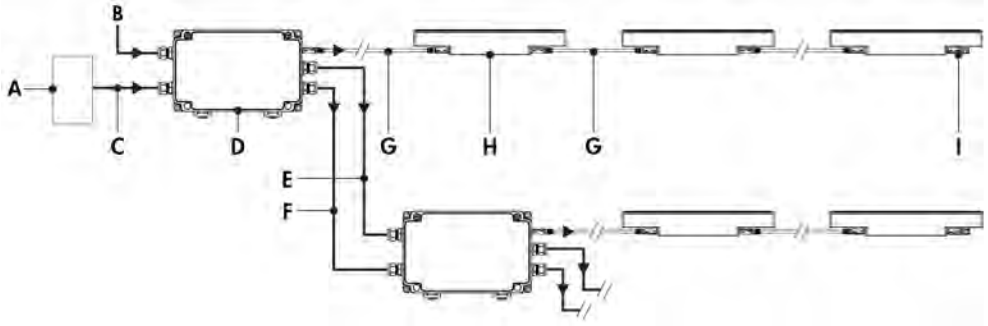
A - Dimmer/controller (order separately from Lumenpulse, or by others)
B - Power input (120-277V, wiring by others)
C - Data input (wiring by others)
D - LCBX (200W)
E - Jumper cable (LOGNJC)
F - Lumenfacade Nano
G - Terminator cap

Continuous Run - Daisy Chain
LCBX 60W or 120W



A - Dimmer/controller (order separately from Lumenpulse, or by others)
B - Power input (120-277V, wiring by others)
C - Data input (wiring by others)
D - LCBX (60W or 120W)
E - Data output to next LCBX (wiring by others)
F - Jumper cable (LOGNJC)
G - Lumenfacade Nano
H - Terminator cap

Continuous Run - Daisy Chain
LCBX 200W



A - Dimmer/controller (order separately from Lumenpulse, or by others)
B - Power input (120-277V, wiring by others)
C - Data input (wiring by others)
D - LCBX (200W)
E - Power output to next LCBX (120-277V, wiring by others)
F - Data output to next LCBX (wiring by others)
G - Jumper cable (LOGNJC)
H - Lumenfacade Nano
I - Terminator cap

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Maximum Run of Fixtures - Lumenfacade Nano® LOGN White & Static Colors

10ft Jumper Cable			
Wattage	**2W/ft**	**4W/ft**	**7W/ft**
Maximum Run of Fixtures per LCBX 60W	26ft	13ft	7ft
Maximum Run of Fixtures per LCBX 120W	52ft	25ft	15ft
Maximum Run of Fixtures per LCBX 200W	88ft*	45ft	25ft
25ft Jumper Cable			
Wattage	**2W/ft**	**4W/ft**	**7W/ft**
Maximum Run of Fixtures per LCBX 60W	26ft	13ft	7ft
Maximum Run of Fixtures per LCBX 120W	52ft	25ft	15ft
Maximum Run of Fixtures per LCBX 200W	88ft*	45ft	25ft
50ft Jumper Cable			
Wattage	**2W/ft**	**4W/ft**	**7W/ft**
Maximum Run of Fixtures per LCBX 60W	26ft	13ft	7ft
Maximum Run of Fixtures per LCBX 120W	52ft	25ft	15ft
Maximum Run of Fixtures per LCBX 200W	88ft*	45ft	25ft

*Example: 2W/ft = 88ft maximum run of end to end fixtures per LCBX 200W.
(22 fixtures maximum for 4ft LOGN 2W/ft, 88 fixtures maximum for 1ft LOGN 2W/ft).
Consult factory for system validation prior to quoting and ordering.

- Consult factory for specific applications and maximum fixture count/run length recommendations.
- Maximum of 1 output to fixture, or fixture run, per LCBX.
- Consult the LCBX specification sheet for more information.
- UCTL can be controlled via a 0-10V dimmer, DALI controller or DMX/RDM controller.
- For 0-10V dimming applications:

- 0-10V mA ratings: Current Sink Mode: 2mA per LCBX; Current Source Mode: 2mA per LCBX.

- For DALI applications:

- A maximum of 64 DALI fixtures per DALI loop.

- For DMX/RDM applications:

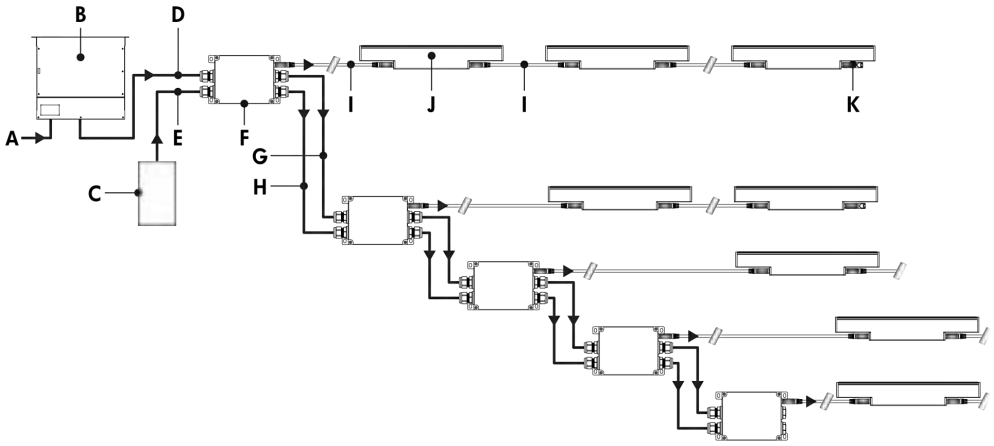
- Each fixture requires 1 DMX channel.

- 1% minimum dimming value.
- 2W version: 2 W/ft; 4W version: 4 W/ft; 7W version: 7 W/ft.

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Trunk System - LSBX

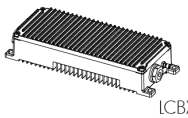


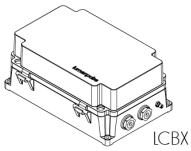
A - Power input (120-277V, wiring by others)
B - Large Power supply (LGPSU) (order separately from Lumenpulse)
C - Controller (order separately from Lumenpulse, or by others)
D - Power input (48V, order separately from Lumenpulse - Trunk Power Cable (TKPWR), or equivalent by others. Refer to LSBX specification sheet for details)
E - Data input (order separately from Lumenpulse - Trunk Data Cable (TKDMX), or equivalent by others. Refer to LSBX specification sheet for details)
F - LSBX
G - Power output to next LSBX (48V, order separately from Lumenpulse - Trunk Power Cable (TKPWR), or equivalent by others. Refer to LSBX specification sheet for details)
H - Data output to next LSBX (order separately from Lumenpulse - Trunk Data Cable (TKDMX), or equivalent by others. Refer to LSBX specification sheet for details)
I - Jumper cable (LOGNJC)
J - Lumenfacade Nano
K - Terminator cap

- Consult factory for specific applications and maximum fixture count/run length recommendations.
- Maximum of 1 output to fixture run per LSBX.
- The LSBX has a maximum of 200W for output to fixtures. Consult the LSBX specification sheet for more information.
- The Large Power Supply (LGPSU) has a maximum of 1000W (120V) or 1200W (277V). Consult LGPSU specification sheet for more information.
- Each fixture requires 1 DMX channel.
- 1% minimum dimming value.
- 2W version: 2 W/ft; 4W version: 4 W/ft; 7W version: 7 W/ft.

Control Boxes (Order Separately)

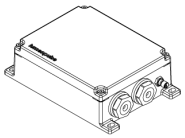
LCBX - Low-Voltage Control Box


LCBX 60W & 120W


LCBX 200W

Low-voltage control and power box. One power and data output to fixture, or fixture run. Refer to LCBX specification sheet for details.

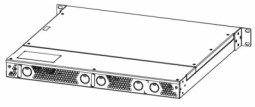
LSBX - Low-Voltage Splitter Box



Low-voltage control and power splitter box. One power and data output to fixture run. Refer to LSBX specification sheet for details.

Remote Power Supply (Order Separately)

LGPSU - Large Power Supply


Monté sur rack

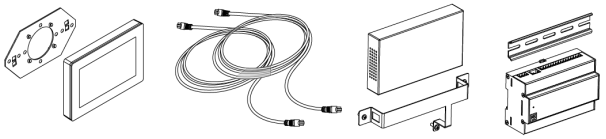
Indoor rack-mounted 1.2KW power supply allows for scalable DMX/RDM controlled Lumenfacade Nano systems. Wall Mount version coming soon, consult factory for details.

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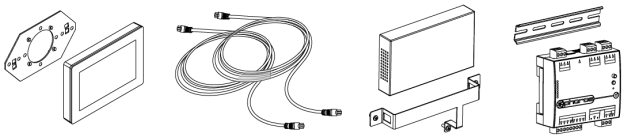
Control Systems (Order Separately)

PHAROS - Pharos® Designer Lighting Control Kit



The Pharos Designer Lighting Contol Kit, available for 1 or 2 DMX universes, allows for complete control of large lighting installations.

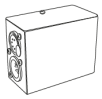
EXPERT - Pharos® Expert Control Kit



The Pharos Expert Control Kit, available for 1, 2, 4 or 6 DMX universes, allows for complete control of large lighting installations.

Diagnostic And Addressing Tools (Order Separately)

LID - LumenID



The updated LumenID (LID) is an all-in-one diagnostic and addressing solution for both DMX/RDM and Lumentalk (LT) systems. Engineered for versatility, it streamlines commissioning and troubleshooting across protocols—no need for multiple tools. Cable option may vary; please consult factory. For complete details, refer to the LID specification sheet.

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How to Order

Housing	Wattage	Voltage	Length	Color and Color Temperature [2]	Color Rendering [4]
LOGN Lumenfacade™ Nano	**2W** 2 W/ft [1] **4W** 4 W/ft **7W** 7 W/ft	**48V** 48 VDC	**12** 12 3/4 in (1.4 lbs) **24** 24 3/4 in (2.9 lbs) **36** 36 3/4 in (4.4 lbs) **48** 48 3/4 in (6 lbs)	**22K** 2200K **27K** 2700K **30K** 3000K **35K** 3500K **40K** 4000K **RD** Red [3] **GR** Green [3] **BL** Blue [3]	**80** CRI 80+ **90** CRI 90+ [5]

Notes:

1. Not available for static red, green or blue color options.
2. Consult factory for availability of static Royal Blue, and 6500K.
3. Static colors made to order 8-10 weeks.
4. Not applicable to static red, green or blue color options.
5. Available for 27K and 30K color temperatures only.

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How to Order

Optic	Lens	Mounting Options [12] [13]	Finish	Control [17]	Option	Certification	Buy America.n Act
8x8 8° x 8° **10x10** 10° x 10° **10x30** 10° x 30° **10x60** 10° x 60° **10x90** 10° x 90° **30x10** 30° x 10° **30x30** 30° x 30° **30x60** 30° x 60° **60x10** 60° x 10° **60x60** 60° x 60° **60x90** 60° x 90° **90x90** 90° x 90 **W** Wide 120° [6] **WW** Asymmetric Wallwash [7]	**CL** Clear Lens [8] [9] **FR** Frosted Lens [10] **HFR** Half-Frosted Lens [11]	**SAMN** Slim Adjustable Mounting Nano **UMPN** Fixed Mounting Nano **UMASN** Universal Adjustable Mounting Nano **WAMN2** Adjustable Wall Mounting Nano 2 in **WAMN6** Adjustable Extended Arm Mounting Nano 6 in **WAMN12** Adjustable Extended Arm Mounting Nano 12 in **WAMN18** Adjustable Extended Arm Mounting Nano 18 in **WAMN28** Adjustable Extended Arm Mounting Nano 28 in	**BK** Black Sandtex® **BRZ** Bronze Sandtex® **SI** Silver Sandtex® **WH** Smooth White **CC** Custom Color & Finish [14] [15] [16]	**NO** On/Off Control **UCTL** Universal control (compatible with 0-10V, DALI or DMX/RDM systems)	**CRC** Corrosion-Resistant Coating [18] [19] **3GV** 3G ANSI C136.31-2010 Vibration Rating for Bridge Applications [20]	**UL** UL Compliant **CE** CE Compliant	**BAA** Buy America.n [21] [22]

Notes:

6. Not compatible with louver or visor optical accessories.
7. Not compatible with louver optical accessory.
8. Not available for 10x10, W or WW optics.
9. To use only if fixture is lighting the surface perpendicularly. If the fixture is installed close to the wall, select the Half-Frosted lens to soften the beam on the wall.
10. Not available for WW optic.
11. Available for 8x8, 10x10, 10x30 or WW optics only.
12. One mounting bracket provided for 12 in fixtures. Two mounting brackets provided for 24 in, 36 in and 48 in fixtures.
13. Refer to Mounting Bracket Placement section in the specification sheet for mounting bracket distances that must be respected.
14. Lumenpulse offers a wide selection of RAL CLASSIC (K7) colors with a smooth texture and high-gloss finish. Please consult factory for a list of available K7 colors, other RAL textures and glosses, or to match alternate color charts. Final color matching results may vary.
15. Setup charges apply for RAL colors. Consult factory for details.
16. Longer lead times can be expected for custom RAL color finishes.
17. A Low-Voltage Control Box (LCBX) or Low-Voltage Splitter Box (LSBX) and LumenID (LID) must be specified.
18. Use only when exposed to salt spray. This option is not required for normal outdoor exposure.
19. Setup charges apply. Consult factory for details.
20. Not available for SAMN mounting option. Mounting bracket distances that must be respected, consult Mounting Bracket Placement section in the specification sheet for details.
21. Not available with CE certification option.
22. Contact your Lumenpulse Sales Representative for more information on order volume details.

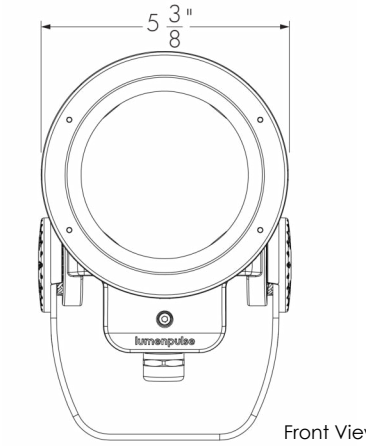
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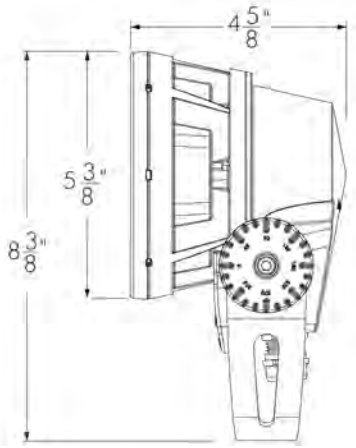
Project Name _____ **Qty** _____

Type _____ **Catalog / Part Number** _____





Front View



Side View

Photometric Summary

Symmetric

	Delivered output (lm)	Intensity (peak cd)
XN (3°)	1,342	186,978
VN (6°)	906	47,949
NS (10°)	1,419	20,764
NF (20°)	1,238	12,472
M (30°)	1,297	7,185
FL (40°)	1,163	2,960
WFL (60°)	977	762
VWFL (90°)	946	470

Asymmetric

NAS	947	14,011 (@2.5°)
WW	1,106	3,013(@5°)

1. Based on 4000K.
2. Photometric performance is measured in compliance with IESNA LM-79-24.
3. Refer to the Lumenbeam White and Static Colors Photometric Guide on Lumenpulse website for information on other color temperatures.

Description

The Lumenbeam Small is a compact, IP66-rated luminaire for lighting landscapes, trees, columns, monuments, and architectural details. It has numerous options, including optics for flood or accent lighting, a choice of color temperatures and colors, as well as various accessories, spread lenses, and controls. The luminaire also has an anti-corrosion option for use in harsh, chemical, or coastal environments.

Features

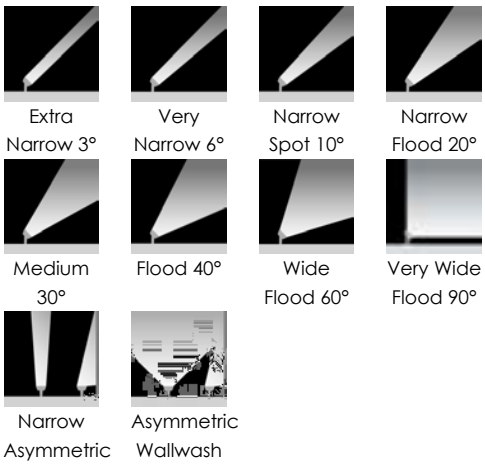
Color and Color Temperature	**22K:** 2200K, **27K:** 2700K, **30K:** 3000K, **35K:** 3500K, **40K:** 4000K, **57K:** 5700K, **RD:** Red, **GR:** Green, **BL:** Blue
Optics (Nominal Distribution)	**XN:** XN (3°), **VN:** VN (6°), **NS:** NS (10°), **NF:** NF (20°), **M:** M (30°), **FL:** FL (40°), **WFL:** WFL (60°), **VWFL:** VWFL (90°), **NAS:** NAS (Narrow Asymmetric), **WW:** WW (Asymmetric Wallwash)
Optical Option	**LSLH:** Linear Spread Lens Horizontal Distribution, **LSLV:** Linear Spread Lens Vertical Distribution
Mounting Option	**SK:** Stake Mounting, **KN:** Knuckle Mounting, **CN:** Canopy Mounting Option (for Mounting on a Standard Round Junction Box)
Option	**RY:** Rotational Yoke, **3GV:** 3G ANSI C136.31-2010 Vibration Rating for Bridge Applications, **CRC:** Corrosion-Resistant Coating for Hostile Environments
Cable Color	**BK:** Black, **WH:** White
Power Consumption	14 W
Warranty	5-year limited warranty

Performance

Maximum Delivered Output	1,419 lm (4000K, NS 10°)
Maximum Delivered Intensity	186,978 cd at nadir (4000K, XN 3°)
Illuminance at Distance	Minimum 1 fc at 434 ft (4000K, XN 3°)

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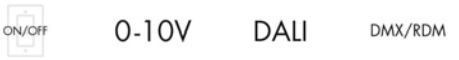
Optic



Color and Color Temperature



Control



Ratings

IP66 IK07

Lumencycle™ Program

Certifications



Color Consistency	3 SDCM
Color Rendering	Minimum CRI 80
Lumen Maintenance	L70 > 250,000 hrs (Ta 25 °C) (> 80,000 hrs for XN 3°, VN 6°, NAS optics only)

Physical

Housing Material	Low copper content high pressure die-cast aluminum
Yoke Material	Heavy aluminum
Lens Material	Clear tempered glass
Hardware Material	Stainless steel
Gasket Material	Silicone
Surface Finish	Electrostatically applied polyester powder coat
Weight	5.2 lbs
EPA	Front = 0.19 ft², Side = 0.11 ft²

Electrical and Control

Voltage	100 to 277 volts
Fixture Cable	Power and data in one cable
Conductors	3C #16-3 (NO control) 5C #16-5 (DIM, DALI control) 6C #14-3/ #24-3 (DMX/RDM control)
Control	On/Off Control, 0-10V Dimming, DALI Dimming, DMX/RDM Enabled, Lumentalk system is enabled with LDB accessory - see typical wiring diagrams for details
Resolution (DMX/RDM)	Per fixture, 8-bit or 16-bit

Environmental

Storage Temperature	-40 °F to 158 °F (device must reach start-up temperature value before operating)
Start-up Temperature	-13 °F to 122 °F
Operating Temperature	-40 °F to 122 °F
Ingress Protection Rating	IP66 Wet location rated
Impact Resistance Rating	IK07
Application Wind Speed	Luminaires were designed based on AASHTO 2013 standard to ensure highest quality and safety. Installation should be validated by a local project engineer to ensure the luminaires are suitable for the wind speed and exposure of the specific application

Accessories (Order Separately)

Optical Accessories	Lumenbeam Small Snoot, Lumenbeam Small Visor, Lumenbeam Small Linear Spread Lens Adjustable, Lumenbeam Small Wire Guard, Lumenbeam Small Dome Lens

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JC - R37

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Control Boxes	DMX/RDM enabled (Daisy Chain or Star Configuration), Ethernet enabled (Daisy Chain or Star Configuration), Lumentalk Data Bridge
Control Systems	Pharos® Designer Lighting Control Kit (PHAROS), Pharos® Expert Control Kit (EXPERT)
Diagnostic and Addressing Tools	LumenID (LID)

Operation and Maintenance

Lumencycle™ Program	Lumencycle-enabled fixtures are designed for serviceability and circular lifecycle management. Lumenpulse will provide factory refurbishment programs, allowing luminaires to be restored and redeployed rather than replaced.

Important

Virtual Patent Marking Notice

This website (https://www.lmpg.com/patents-trademarks) is provided to satisfy the virtual patent marking provisions of applicable jurisdictions. Some products listed may be covered by additional patents not referenced here.

Lumencycle™ Program

Lumencycle is a comprehensive program designed to maximize the life of Lumenpulse fixtures while preserving their performance, quality, and design intent. Built around three pillars—Repair, Restore, and Recycle—the program provides clear pathways to maintain existing installations, restore fixtures, and responsibly manage them at end of life. For full program details, visit https://www.lumenpulse.com/lumencycle.

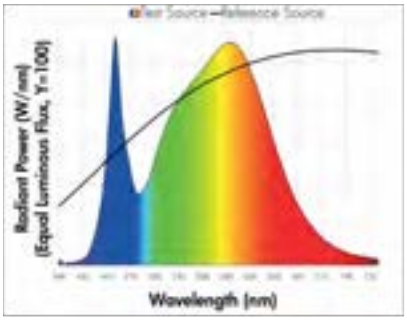
Chromaticity Data

TM-30 - 4000K

CCT	CRI		TM-30	
4000K	R_a	83	85	R_f
	R_9	14	96	R_g

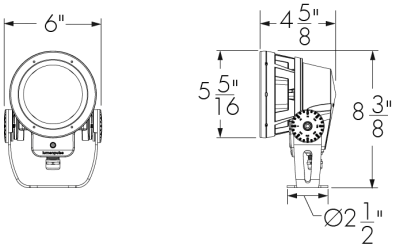


Spectral Power Distribution



Mounting Options

RY - Rotational Yoke

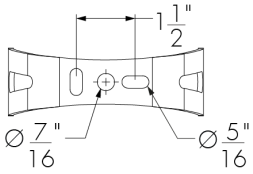


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Docusign Envelope ID: 123CBD13-CC93-86BE-82D4-881916C1066A

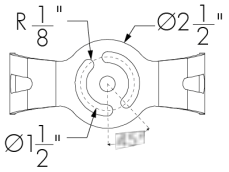
Mounting Details

Mounting Hole Pattern - Standard Yoke



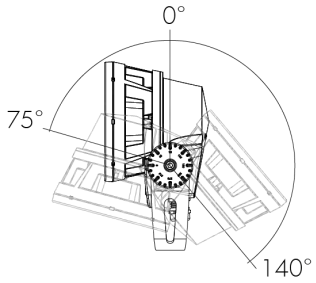
3 bolts are required for wind and vibration resistance, provided by others.

Mounting Hole Pattern - Rotational Yoke



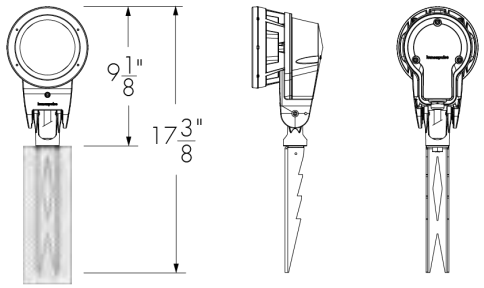
3 bolts are required for wind and vibration resistance, provided by others.

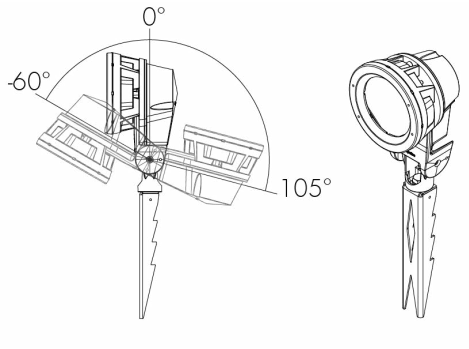
Adjustable Pivot Limits



Mounting Options

SK - Stake Mounting

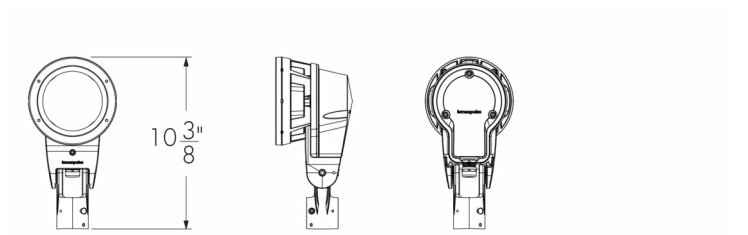




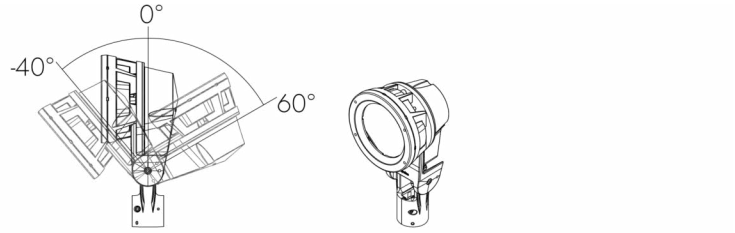
Adjustable Pivot Limits

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KN - Knuckle Mounting

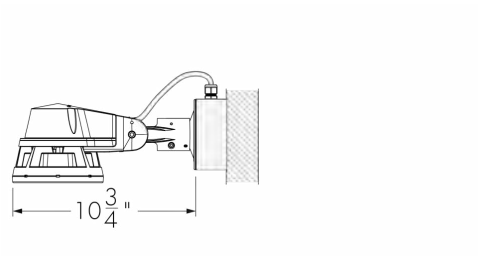


Suitable for 1/2 in, 3/4 in, and 1 in pipe diameter

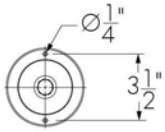


Adjustable Pivot Limits

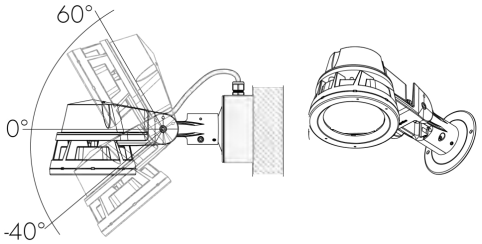
CN - Canopy Cover



Suitable for standard round junction boxes, surface mounted



Mounting Hole Pattern



Adjustable Pivot Limits

Optical Options

LSLH - Linear Spread Lens Horizontal Distribution



LSLH

LSLV - Linear Spread Lens Vertical Distribution



LSLV

Beam Angles

Optic installed in fixture	Beam angle with LSLH/LSLV
XN	5° x 60°
VN	7° x 60°
NS	13° x 66°
NF	16° x 62°
M	23° x 65°
FL	33° x 70°

LLF: 0.88*
*LLF may vary slightly by distribution chosen.

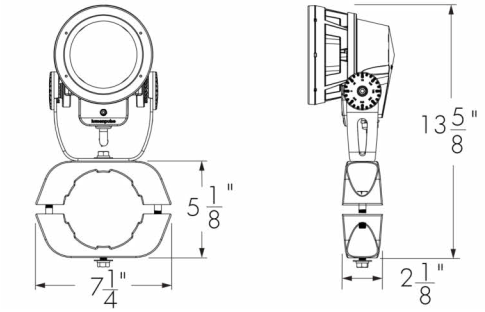
Factory installed, not adjustable on site. Not available for WFL, VWFL, NAS and WW optics.
See 'Optical Accessories' section for field adjustable spread lens (LSLA).

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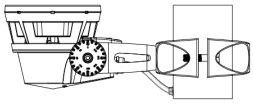
Docusign Envelope ID: 123CBD13-CC93-86BE-82D4-881916C1066A

Mounting Accessories (Order Separately)

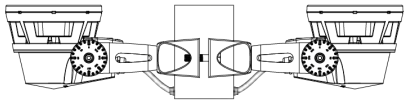
Round Pole Mounting Accessory



PM4 model shown.
Consult factory for square pole section.



PM4-1, PM4.5-1, PM5-1 - Round Pole Mounting Accessory - Single Fixture

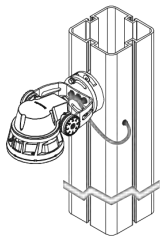


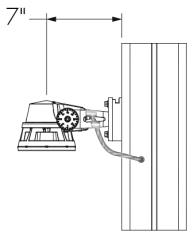
PM4-2, PM4.5-2, PM5-2 - Round Pole Mounting Accessory - Twin Fixtures
*One bracket assembly is supplied per 2 fixtures unless otherwise specified.

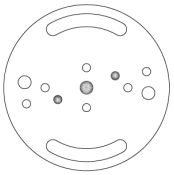
	PM4	PM4.5	PM5
For pole Ø	4" ± 1/16"	4.5" ± 1/16"	5" ± 1/16"

Consult factory for other pole diameters.

PLTU - Universal Yoke



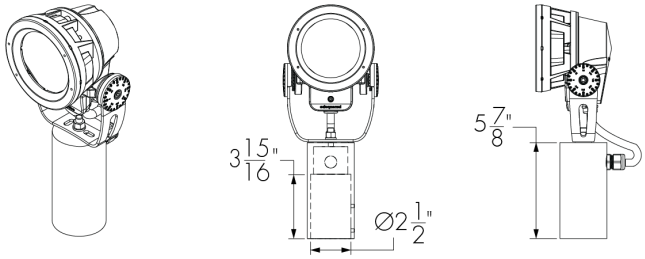




Refer to the Universal Yoke specification sheet and Pole installation instructions for more details. Square Lumentech profile shown.

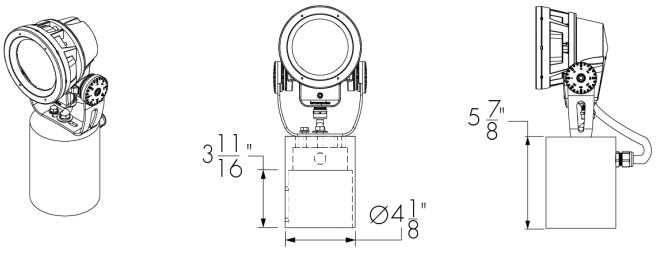
The mounting holes used for this fixture are shown in gray.

Tenon Adapter



TN2 - Tenon Adapter to Fit on 2 3/8 in O.D. Tenon

Vertical mounting only. Consult factory for horizontal mounting.



TN4 - Tenon Adpater to Fit on 4 in O.D. Tenon

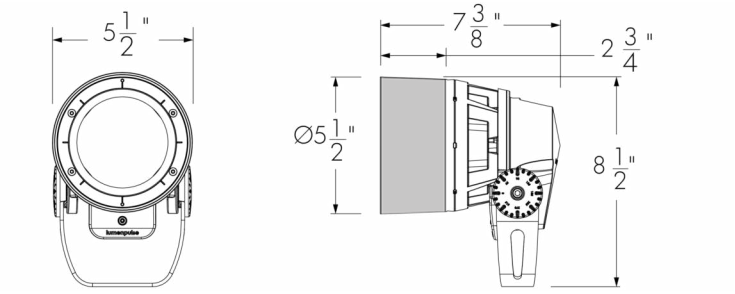
Vertical mounting only. Consult factory for horizontal mounting.

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Optical Accessories (Order Separately)

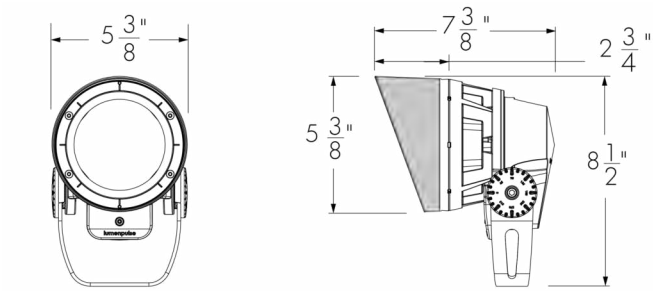
Installed optical accessories will affect the maximum pivot limits for each mounting option, consult factory for details.

SN - Snoot



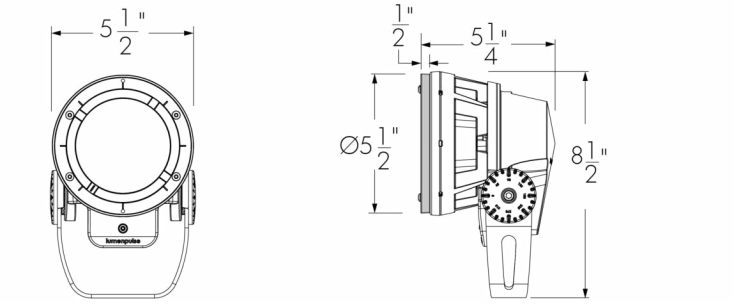
LBSSN-**FINISH**-BK-**OPTIONS** (CRC)
Interior surface painted black. Please specify the exterior **FINISH** from the list of finishes in the fixture order code.

VS - Visor



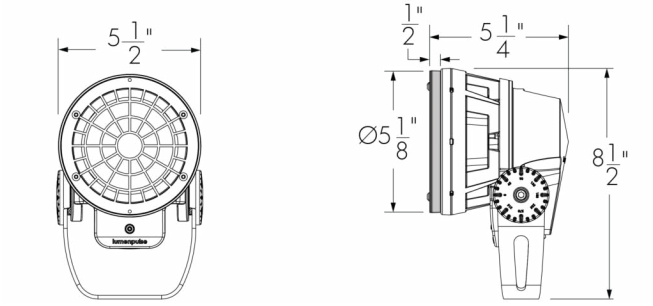
LBSVS-**FINISH**-BK-**OPTIONS** (CRC)
Interior surface painted black. Please specify the exterior **FINISH** from the list of finishes in the fixture order code.

LSLA - Linear Spread Lens Adjustable



LBSLSLA-**FINISH**-**OPTIONS** (CRC)
Please specify the exterior **FINISH** from the list of finishes in the fixture order code.

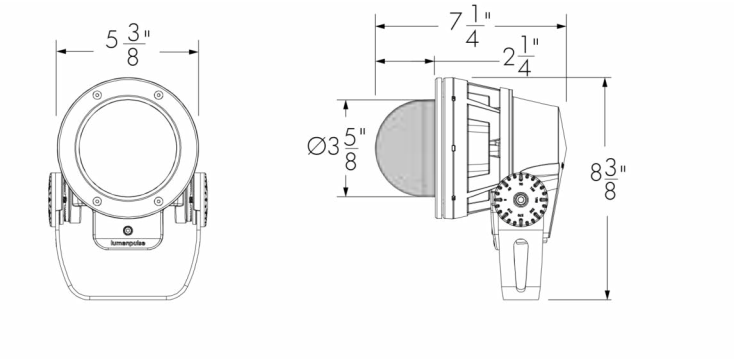
WG - Wire Guard



LBSWG-**FINISH**-**OPTIONS** (CRC)
Please specify the exterior **FINISH** from the list of finishes in the fixture order code.

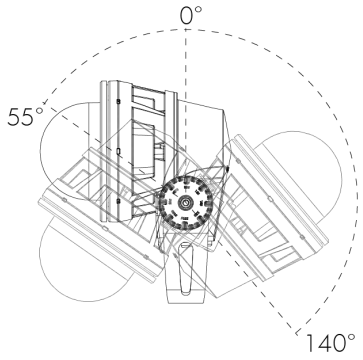
Installed optical accessories will affect the maximum pivot limits for each mounting option, consult factory for details.

DM - Dome Lens



LBSDM-**FINISH**-**OPTIONS** (CRC)
Please specify the exterior **FINISH** from the list of finishes in the fixture order code.

Dome - Standard Yoke - Pivot limits



Dome Lens is available with WFL Optic only. The WFL optic must be specified for the fixture.

Dome Lens cannot be combined with other optical accessories.

Dome Lens will affect beam distribution. Consult factory for application support and photometric performance.

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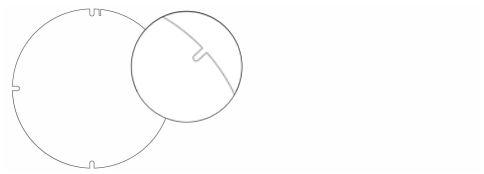
Accessory Combinations

+	Snoot	Visor
Linear spread lens adjustable	LBSSNLSLA	LBSVSLSLA
Wire guard	LBSSNWG	LBSVSWG

Accessory combinations must be ordered together on a single line. A maximum of two accessories can be combined per fixture. Ex: A snoot + wire guard combination order code is LBSSNWG-**FINISH**-BK-**OPTIONS**.

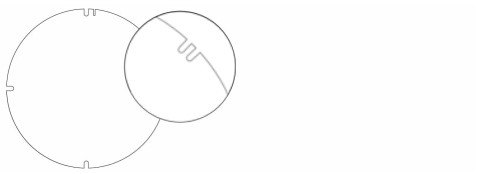
Diffuser Lenses (Intended for Mockup Purposes Only, Order Separately)

Diffuser Lens 1 (1 Notch)



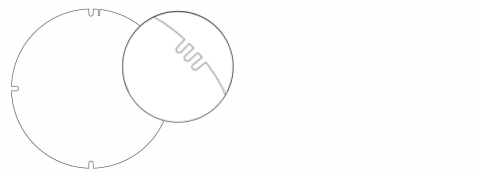
147665

Diffuser Lens 2 (2 Notches)



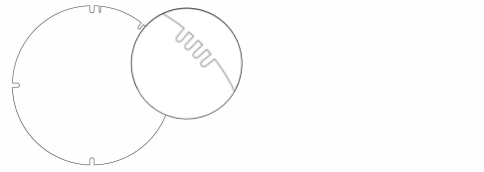
147666

Diffuser Lens 3 (3 Notches)



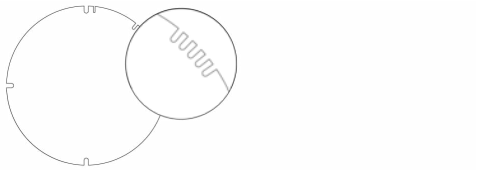
147667

Diffuser Lens 4 (4 Notches)



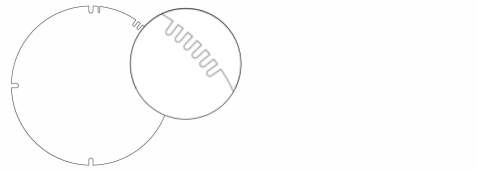
147668

Diffuser Lens 5 (5 Notches)



147669

Diffuser Lens 6 (6 Notches)



147670

Final Distribution Using Diffuser Lenses

	Final Distribution Using Diffuser Lens					
Original Distribution on Fixture	**Diffuser Lens 1 1 Notch**	**Diffuser Lens 2 2 Notches**	**Diffuser Lens 3 3 Notches**	**Diffuser Lens 4 4 Notches**	**Diffuser Lens 5 5 Notches**	**Diffuser Lens 6 6 Notches**
XN (4°/5°)	VN	NS	NF	M	FL	WFL
VN (6°)	NS					
NS (10°)						
NF (20°)						
M (30°)				FL	WFL	
FL (40°)						
WFL (60°)						VWFL
VWFL (90°)						

Choose a diffuser lens based on the desired final beam distribution. Refer to the 6-digit part numbers above to order diffuser lenses individually. To order a complete set of 6 diffuser lenses in a bag, refer to the following item names: **LBS:** LBALK-S **LBM/LBMP:** LBALK-M **LBL/LBLP**: LBALK-L **LBG/LBGP:** LBALK-G **LBX/LBXP:** LBALK-X.

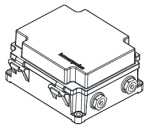
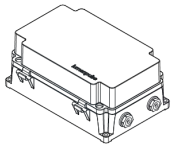
The diffuser lenses are intended for mockup purposes only. A lens holder is required to install a diffuser lens on the fixture, order separately using the following names: **LBS:** LBSLSLA-**FINISH**-LBALK **LBM/LBMP:** LBMLSLA-**FINISH**-LBALK **LBL/LBLP:** LBLLSLA-**FINISH**-LBALK **LBG/LBGP:** LBGLSLA-**FINISH**-LBALK **LBX/LBXP:** LBXLSLA-**FINISH**-LBALK

Please specify the exterior **FINISH** from the list of finishes in the fixture order code.
Refer to the Diffuser Lens Installation Instructions on the Lumenpulse website for information on installing the diffuser lenses.

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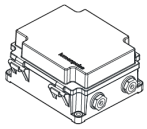
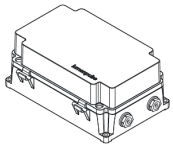
Control Boxes (Order Separately)

CBX-DMX/RDM - DMX/RDM Enabled (Daisy Chain or Star Configuration)

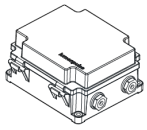
DMX/RDM control box. Up to six power and data outputs to fixtures or fixture runs. Consult CBX specification sheet and installation instructions for details. Lumenterminators provided with CBX (2x for Daisy Chain configuration, 6x for Star configuration), consult factory to order spares.

CBX-ENET - Ethernet Enabled (Daisy Chain or Star Configuration)

Ethernet control box. Up to four power and data outputs to fixture or fixture runs. Consult Ethernet CBX specification sheet and installation instructions for details.

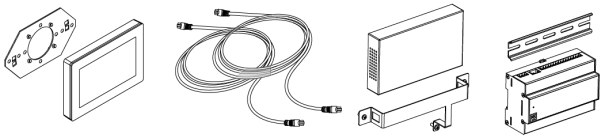
LDB - Lumentalk Data Bridge



Lumentalk Data Bridge, 0-10V or DMX output. Consult LDB specification sheet for details.

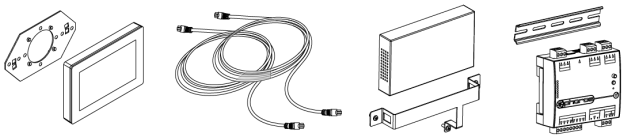
Control Systems (Order Separately)

PHAROS - Pharos® Designer Lighting Control Kit



The Pharos Designer Lighting Contol Kit, available for 1 or 2 DMX universes, allows for complete control of large lighting installations.

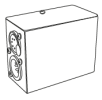
EXPERT - Pharos® Expert Control Kit



The Pharos Expert Control Kit, available for 1, 2, 4 or 6 DMX universes, allows for complete control of large lighting installations.

Diagnostic And Addressing Tools (Order Separately)

LID - LumenID



The updated LumenID (LID) is an all-in-one diagnostic and addressing solution for both DMX/RDM and Lumentalk (LT) systems. Engineered for versatility, it streamlines commissioning and troubleshooting across protocols—no need for multiple tools. Cable option may vary; please consult factory. For complete details, refer to the LID specification sheet.

EPA Guide

	LBS 	LBS with Snoot 	LBS with Visor 	LBS with Dome Lens 
EPA front (sq ft)	0.188	0.188	0.188	0.188
EPA side (sq ft)	0.113	0.186	0.176	0.133

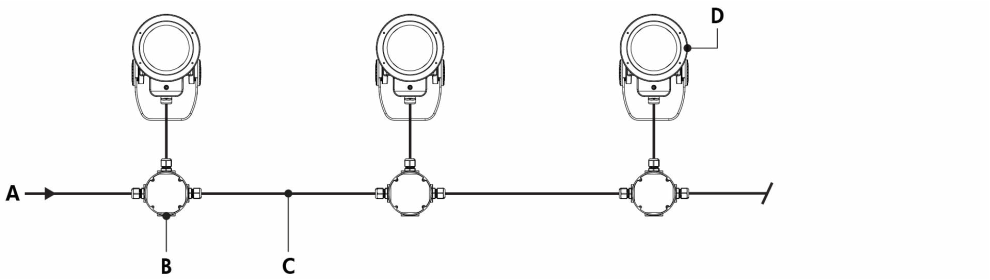
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Typical Wiring Diagrams

Wiring Color Code

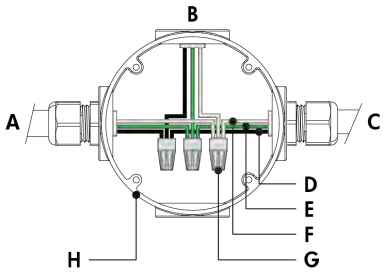
UL Color Code	USE
Green	Ground
Black	Line
White	Line/Neutral
Red or Purple	0-10V / Data +
Orange	0-10V / Data -
Gray	Signal common (DMX/RDM only)

On/Off Control (NO)



A - Power input (100-277V AC, wiring by others)
B - Junction box (by others)
C - Power wiring (by others)
D - Lumenbeam Small

On/Off Control (NO) - Wiring Detail



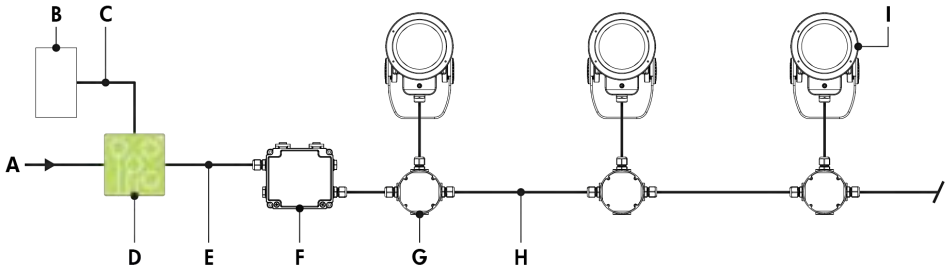
A - Power input or from previous fixture
B - To fixture
C - To next fixture
D - Line
E - Ground
F - Line/Neutral
G - Wire-nut (by others)
H - Junction box (by others)

- Consult factory for specific applications and maximum fixture count/cable length recommendations.
- 14 watts per fixture.

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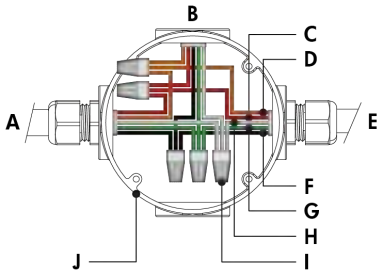
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Lumentalk (LT)



A - Power input (100-277V AC, wiring by others)
B - Dimmer/controller (order separately from Lumenpulse, or by others)
C - Data wiring (by others)
D - Lumentranslator 2 (LTL2-DIM, -DMX, -TRIAC, -DALI)
E - Power wiring (by others)
F - Lumentalk Data Bridge (LDB-DIM or LDB-DMX)
G - Junction box (by others)
H - Power and data wiring (by others)
I - Lumenbeam Small

Lumentalk (LT) - Wiring Detail Using LDB



A - From Lumentalk Data Bridge (control over power line via Lumentalk system) or from previous fixture
B - To fixture
C - 0-10 V + / Data +
D - 0-10 V - / Data -
E - To next fixture
F - Line
G - Ground
H - Line/Neutral
I - Wire-nut (by others)
J - Junction box (by others)

- Consult factory for specific applications and maximum fixture count/cable length recommendations.
- Lumentalk Data Bridge required for Lumentalk system, see LDB installation instructions for details.

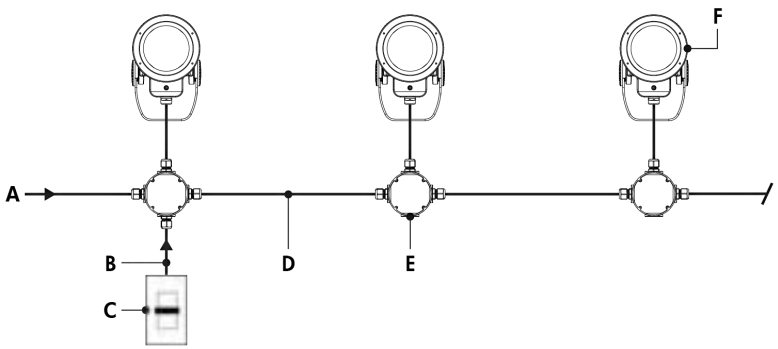
- For applications with all fixtures controlled as 1 zone: fixtures and Lumentalk Data Bridge must be specified as DIM. Maximum of 10 fixtures per LDB-DIM, consult factory for applications that require additional capabilities.
- For applications with fixtures controlled individually: fixtures and Lumentalk Data Bridge must be specified as DMX, 2-step commissioning process: 1 - DMX/RDM system using LumenID software and a LID, 2 - Lumentalk system using LumentalkID software and a LID. Maximum of 32 fixtures per LDB-DMX. Consult factory for details.

- For DMX applications: 1 DMX controller per Lumentalk network, maximum of 48 DMX channels per Lumentalk network (minimum step transition update rate is 1 second, minimum fade time between two colors is 1 minute). Consult factory for applications that require additional capabilities.
- Maximum of 1 transmitter (Lumentranslator or Lumenlink) per system.
- No third party fixtures allowed on the same circuit.
- Consult factory for DALI Lumentalk applications.
- 1% minimum dimming value.
- 14 watts per fixture.

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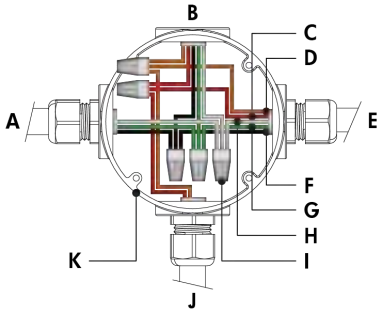
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0-10V Dimming (DIM)



A - Power input (100-277V AC, wiring by others)
B - Data wiring (by others)
C - Dimmer (by others)
D - Power and data wiring (by others)
E - Junction box (by others)
F - Lumenbeam Small

0-10V Dimming (DIM) - Wiring Detail

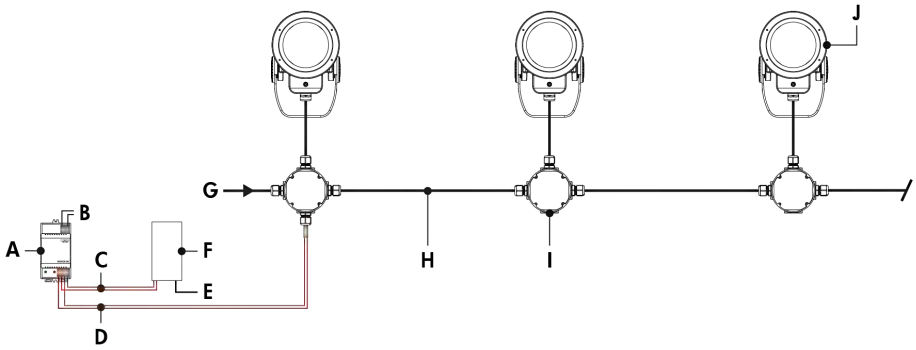


A - Power input or from previous fixture
B - To fixture
C - 0-10 V +
D - 0-10 V -
E - To next fixture
F - Line
G - Ground
H - Neutral
I - Wire-nut (by others)
J - From dimmer (by others)
K - Junction box (by others)

- Consult factory for specific applications and maximum fixture count/cable length recommendations.
- 0-10V mA ratings: passive dimmer (Current Sink): 3mA per fixture, active dimmer (Current Source): 0.5mA per fixture.
- 1% minimum dimming value.
- 14 watts per fixture.

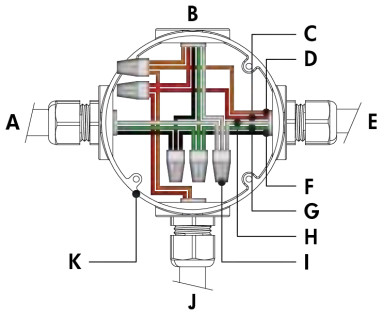
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DALI Dimming (DALI)



A - DALI bus power supply (by others)
B - Power input for DALI bus power supply (wiring by others)
C - Data output to DALI controller (wiring by others)
D - Data output to fixture (wiring by others)
E - Power input for DALI controller (if required, wiring by others)
F - DALI controller (by others)
G - Power input (100-277V AC, wiring by others)
H - Power and data wiring (by others)
I - Junction box (by others)
J - Lumenbeam Small

DALI Dimming (DALI) - Wiring Detail



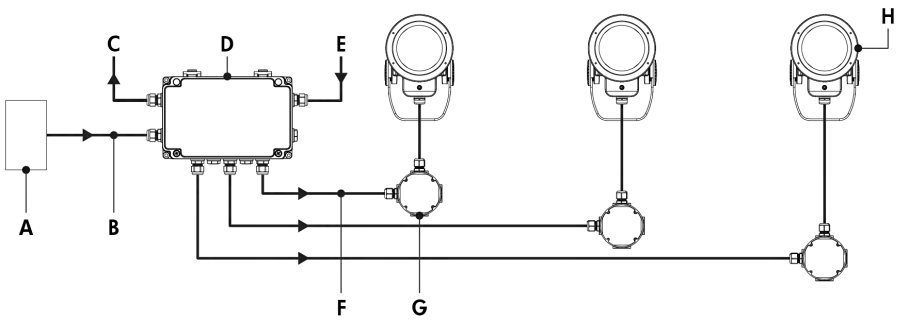
A - Power input or from previous fixture
B - To fixture
C - DA +
D - DA -
E - To next fixture
F - Line
G - Ground
H - Neutral
I - Wire-nut (by others)
J - From DALI controller (by others)
K - Junction box (by others)

- Consult factory for specific applications and maximum fixture count/cable length recommendations.
- Maximum of 64 DALI fixtures per DALI loop.
- Commissioning may be required based on the selection of 3rd party DALI controller. Controller and commissioning provided by others.
- 1% minimum dimming value.
- 14 watts per fixture.

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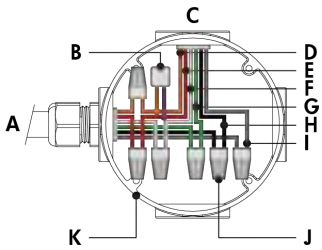
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Star Layout (DMX/RDM)



A - DMX/RDM controller (order separately from Lumenpulse, or by others)
B - Data input (Belden 9841 or equivalent, by others)
C - Data output to next CBX (optional, not isolated/not boosted)
D - CBX-ST
E - Power input (100-277V AC, wiring by others)
F - Power and data output to fixture (by others)
G - Junction box (by others)
H - Lumenbeam Small

Star Layout (DMX/RDM) - Wiring Detail



A - From CBX
B - Lumenterminator
C - To fixture
D - Data -
E - Data +
F - Neutral
G - Ground
H - Line
I - Signal common
J - Wire-nut (by others)
K - Junction box (by others)

Maximum Fixture Count Per Run

Configuration/Voltage	**120V**	**208V**	**240V**	**277V**
LBS	32	32	32	32

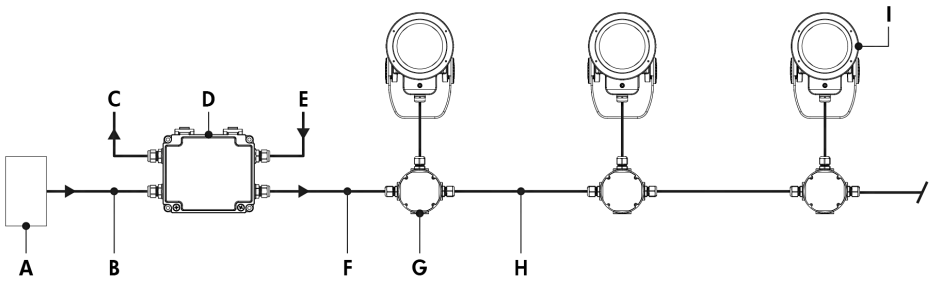
Based on 15A maximum, 16AWG cable, fixtures spaced 10 ft on center, first fixture 50 ft from CBX.

- Consult CBX installation instructions for additional wiring details.
- Consult factory for specific applications and maximum fixture count/cable length recommendations.
- The DMX/RDM protocol states a maximum of 32 DMX/RDM enabled fixtures on any single run.
- Maximum of 4 DMX/RDM repeaters/CBX cascading in line.
- Maximum of 6 outputs per CBX-ST.
- Each fixture requires 1 DMX address.
- DMX terminator is required at the end of each run to maintain data integrity. Six (6x) DMX lumenterminators included per CBX-ST. See installation instructions for details.
- 1% minimum dimming value.
- 14 watts per fixture.

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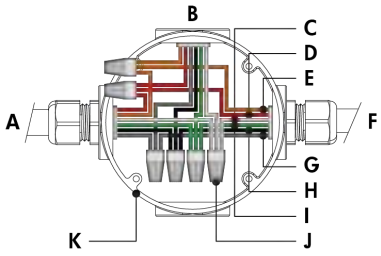
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Daisy Chain Layout (DMX/RDM)



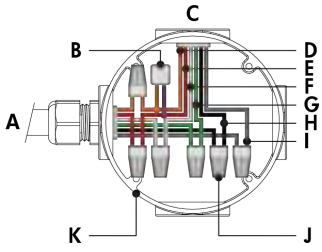
A - DMX/RDM controller (order separately from Lumenpulse, or by others)
B - Data input (Belden 9841 or equivalent, by others)
C - Data output to next CBX (optional, not isolated/not boosted)
D - CBX-DS
E - Power input (100-277V AC, wiring by others)
F - Power and data output to fixture (wiring by others)
G - Junction box (by others)
H - Power and data wiring (by others)
I - Lumenbeam Small

Daisy Chain Layout (DMX/RDM) - Wiring Detail (First or Middle of Run)



A - From CBX or previous fixture
B - To fixture
C - Neutral
D - Data +
E - Data -
F - To next fixture
G - Signal common
H - Line
I - Ground
J - Wire-nut (by others)
K - Junction box (by others)

Daisy Chain Layout (DMX/RDM) - Wiring Detail (End of Run)



A - From CBX or previous fixture
B - Lumenterminator
C - To fixture
D - Data -
E - Data +
F - Neutral
G - Ground
H - Line
I - Signal common
J - Wire-nut (by others)
K - Junction box (by others)

Maximum Fixture Count Per Run

Configuration/Voltage	**120V**	**208V**	**240V**	**277V**
LBS	32	32	32	32

Based on 15A maximum, 16AWG cable, fixtures spaced 10 ft on center, first fixture 50 ft from CBX.

- Consult CBX installation instructions for additional wiring details.
- Consult factory for specific applications and maximum fixture count/cable length recommendations.
- The DMX/RDM protocol states a maximum of 32 DMX/RDM enabled fixtures on any single run.
- Maximum of 4 DMX/RDM repeaters/CBX cascading in line.
- Maximum of 1 output per CBX-DS.
- Maximum of 3 ft cable length between fixture and next junction box for daisy chain layout.
- Each fixture requires 1 DMX address.
- DMX terminator is required at the end of each run to maintain data integrity. Two (2x) DMX lumenterminators included per CBX-DS. See installation instructions for details.
- 1% minimum dimming value.
- 14 watts per fixture.

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How to Order

Housing	Voltage	Color and Color Temperature (1)	Optic	Optical Option (6) (8)	Finish	Control (12) (13)	Mounting Option (16)	Option	Certification	Cable Length (15) (24)	Cable Color	Buy America.n Act
LBS Lumenbeam™ Small	**100** 100 Volts **120** 120 Volts **208** 208 Volts **220** 220 Volts **240** 240 Volts **277** 277 Volts	**22K** 2200K **27K** 2700K **30K** 3000K **35K** 3500K **40K** 4000K **57K** 5700K **RD** Red (2) (3) **GR** Green (2) (3) **BL** Blue (2) (3)	**XN** Extra Narrow 3° (4) **VN** Very Narrow 6° (4) **NS** Narrow Spot 10° (4) **NF** Narrow Flood 20° (4) **M** Medium 30° (4) **FL** Flood 40° (4) **WFL** Wide Flood 60° (4) (5) **VWFL** Very Wide Flood 90° (4) **NAS** Narrow Asymmetric (4) **WW** Asymmetric Wallwash (4)	**LSLH** Linear Spread Lens Horizontal Distribution (7) **LSLV** Linear Spread Lens Vertical Distribution (7)	**BK** Black Sandtex® **BRZ** Bronze Sandtex® **SI** Silver Sandtex® **WH** Smooth White **BKTX** Textured Black **BRZTX** Textured Bronze Non-Metallic **GRATX** Textured Medium Gray **GRNTX** Textured Green **WHTX** Textured White **CC** Custom Color & Finish (9) (10) (11)	**NO** On/Off Control **DIM** 0-10V Dimming **DALI** DALI Dimming **DMX/RDM** DMX/RDM Enabled Dimming (14) (15)	**SK** Stake Mounting **KN** Knuckle Mounting **CN** Canopy Mounting Option	**RY** Rotational Yoke (17) (18) **3GV** 3G ANSI C136.31-2010 Vibration Rating for Bridge Applications (19) **CRC** Corrosion-Resistant Coating (20) (21)	**UL** UL Compliant **CE** CE Compliant (22) (23) **CEII** CE Compliant Class II Double Insulated (22)	**3FT** 3 ft (15) (24) **10FT** 10 ft **20FT** 20 ft **30FT** 30 ft **50FT** 50 ft **70FT** 70 ft **100FT** 100 ft	**BK** Black **WH** White (25)	**BAA** Buy America.n (25) (26)

Notes:

1. Consult factory for availability of static Royal Blue, Amber, 6500K and 90+ CRI.
2. Static colors made to order 8-10 weeks.
3. Not available for XN optic.
4. Factory installed, not interchangeable on site.
5. A dome lens accessory is available, order separately. For compatibility, a WFL optic must be specified for the fixture.
6. Optical options are factory installed and cannot be changed in the field.
7. Field adjustable spread lens optical accessory available, order separately.
8. Not available with WFL, VWFL, NAS and WW optics.
9. Lumenpulse offers a wide selection of RAL CLASSIC (K7) colors with a smooth texture and high-gloss finish. Please consult factory for a list of available K7 colors, other RAL textures and glosses, or to match alternate color charts. Final color matching results may vary.
10. Setup charges apply for RAL colors. Consult factory for details.
11. Longer lead times can be expected for custom RAL color finishes.
12. Lumentalk system is enabled with LDB accessory, DIM or DMX/RDM must be specified in the order code. See the typical wiring diagrams in the specification sheet for details.
13. A Lumentranslator 2 (LTL2) and LumenID (LID) must be specified for Lumentalk applications. Consult Lumentranslator 2 and Lumentalk pages and specification sheets for details.
14. A control box (CBX) and LumenID (LID) must be specified.
15. Maximum of 3 ft cable length for daisy chain DMX applications with CBX-DS.
16. The standard yoke is provided unless an alternate mounting option is specified as part of the order code.
17. Consult factory for applications with 3GV requirements.
18. The Rotational Yoke cannot be combined with any other mounting option.
19. 3GV option is available for standard yoke mounting only.
20. Use only when exposed to salt spray. This option is not required for normal outdoor exposure.
21. Setup charges apply. Consult factory for details.
22. Consult European specification sheets and installation instructions for CE and CE Class II wiring information.
23. Not available with DALI control option.
24. 3 ft cable length is standard unless otherwise specified.
25. Not available with CE or CEII certification options.
26. Contact your Lumenpulse Sales Representative for more information on order volume details.

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Pella® Lifestyle Series

Aluminum-Clad Wood

#1 performing wood window and patio door for the combination of energy, sound and value.[1]

Triple-pane casement

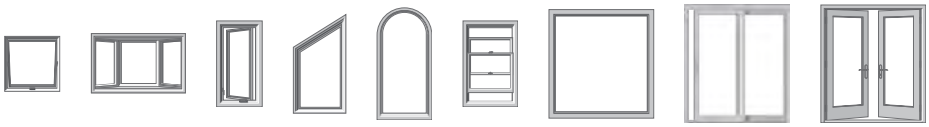


Dual-pane double-hung window with Hidden Screen



- **Easy-to-learn Pella Steady Set™ interior installation system**
  Pella Steady Set Interior Installation System is a revolutionary, award-winning and safer way to install new construction windows.[1] The simple system is the fastest, most labor efficient wood window installation system with uncompromising quality.[2] Available on select windows.
- **Performance redefined**
  You don't have to compromise on any aspect of performance. Available performance solutions offer an unbeatable combination of energy efficiency, sound control and value.[3]
- **ENERGY STAR® certified[4]**
  Pella products offer energy-efficient options that will meet or exceed ENERGY STAR guidelines in all 50 states. Pella Lifestyle Series products with triple-pane glass have been awarded ENERGY STAR Most Efficient Mark in 2023.
- **Enhanced sound control**
  Our patented, triple-pane design allows for mixed glass thickness for enhanced sound dampening resulting in an average 52% noise reduction versus single-pane windows.[5]
- **Intentional design for improved durability**
  Intentional jamb on sill design helps seal the end grain of the wood and elevates it off the rough opening, reducing the potential for moisture.
- **Durable 3-way corner joints**
  Three-way corner joints are made up of mortise-and-tenon, metal fasteners and commercial adhesive for added strength and durability.
- **Quality exterior finishes**
  EnduraClad® finish is a tough, protective aluminum finish for windows. The overlapping, watershed cladding resists chalking and fading. Our extruded aluminum-cladding delivers exceptional durability for sliding patio door exteriors.
- **Exclusive wood protection**
  Pella's exclusive EnduraGuard® wood protection is applied after the pieces have been cut and milled, but prior to final assembly. It provides advanced protection against the effects of moisture, decay, stains from mold and mildew — as well as termite damage.
- **Time-tested innovations**
  Create unique room-by-room solutions and achieve project goals with performance options and purposeful innovations like the Hidden Screen and integrated blinds and shades.
- **Best limited lifetime warranty[6]**
  Pella Lifestyle Series products are covered by the best limited lifetime warranty in the industry for wood windows and patio doors.[6]
- **Testing beyond requirements**
  At Pella, our products are tested beyond requirements to help ensure they have long-lasting performance and reduce call-backs for you.
- **Convenient & durable screens**
  The revolutionary Hidden Screen appears when you open a double-hung window and folds away when it is closed. It provides a clear view when the window is closed and improves curb appeal year-round. The heavy-duty TuffScreen® by Phifer keeps bugs out and allows more fresh air in as one of the most durable screen options on the market. Available on sliding patio doors.

Available in these window and patio door styles:[7]



Special shape windows also available.

[1, 2, 3, 4, 5, 6, 7] See back cover for disclosures.

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Product Specifications

Window & Patio Door Styles	Min. Width	Min. Height	Max. Width	Max. Height	Performance Class & Grade	Performance Values: U-Factor	Performance Values: SHGC	Performance Values: STC	Frame/Install
Awning Dual-pane vent	21"	17"	59"	59"	LC30 – LC50	0.25-0.34	0.19-0.51	25-28	Pella Steady Set™, Fold-out Fin, Block Frame, EnduraClad Exterior Trim / Brickmould
Awning Triple-pane vent	21"	17"	59"	59"	R20 - CW50	0.20-0.28	0.15-0.41	31-37	
Casement Dual-pane vent	17"	17"	35"	73"	LC30-LC50	0.25-0.34	0.19-0.58	25-31	
Casement Triple-pane vent	17"	17"	35"	73"	R20-CW50	0.20-0.25	0.17-0.46	31-37	
Fixed Casement Dual-pane	17"	17"	73"	73"	LC30-LC50	0.23-0.35	0.20-0 .57	29-32	
Fixed Casement Triple-pane	17"	17"	73"	73"	R20-CW50	0.19-0.27	0.15-0.49	33-37	
Double-Hung Dual-pane vent	21"	35"	48"	84"	LC30-LC50	0.25-0.34	0.20-0.48	27-31	
Hinged Patio Door Dual-pane single door	30"	80"	38"	96"	LC50	0.26-0.32	0.18-0.48	31	Fold-out Fin, Block Frame, EnduraClad Exterior Trim / Brickmould
Hinged Patio Door Triple-pane single door	30"	80"	38"	96"	LC55	0.23-0.28	0.12-0.34	34-36	
Hinged Patio Door Dual-pane double door	60"	80"	75"	96"	LC50	0.25-0.29	0.18-0.48	30-32	
Hinged Patio Door Triple-pane double door	60"	80"	75"	96"	LC55	0.22-0.26	0.14-0.38	34-36	
Sliding Patio Door Dual-pane double-door vent (OX or XO)	60"	80"	120"	120"	R20-LC50	0.26-0.31	0.20-0.51	28-31	
Sliding Patio Door Triple-pane double-door vent (OX or XO)	60"	80"	96"	96"	LC35-LC50	0.23-0.26	0.19-0.47	32-34	
Sliding Patio Door Dual-pane triple-door vent (OXO)	90"	80"	180"	120"	R20-LC35	0.26-0.31	0.20-0.51	–	
Sliding Patio Door Triple-pane triple-door vent (OXO)	90"	80"	144"	96"	LC35	0.23-0.26	0.19-0.47	–	
Sliding Patio Door Dual-pane quadruple-door vent (OXXO)	117"	80"	237"	120"	R20-LC35	0.26-0.31	0.20-0.51	–	
Sliding Patio Door Triple-pane quadruple-door vent (OXXO)	117"	80"	189"	96"	LC35	0.23-0.26	0.19-0.47	–	

Window sizes available in 1/4" increments
Special sizes available in dual- and triple-pane sliding patio doors. For more information regarding performance, visit pella.com/performance. For more information regarding frame and installation types, visit installpella.com.

Window Hardware

Essential Collection

Select from popular designs and finishes to suit every style.



Fold-Away Crank



Cam-Action Lock

Finishes:



Champagne

White



Brown



Matte Black



Satin Nickel



Satin Brass

Patio Door Hardware

Essential Collection

Elevate your style and transform a home with elegant selections.



Hinged Patio Door Handle



Sliding Patio Door Handle

Finishes:



Champagne

White



Brown



Matte Black



Satin Nickel



Satin Brass

Colors

Prefinished Pine Interior Colors

We can prefinish pine in your choice of several colors. Unfinished or primed and ready-to-paint are also available.

White

Bright White

Linen White



Natural



Golden Oak



Early American



Provincial



Black

Aluminum-Clad Exterior Colors

Our low-maintenance EnduraClad® exterior finish resists fading and helps protect windows and patio doors for years. Seacoast EnduraClad® delivers the same beautiful finish with extended warranty protection for projects in coastal environments with high salt exposure.



Black

White



Brown



Fossil



Iron Ore

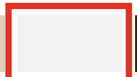


Portobello



Putty

Almond



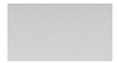
Classic White



Brick Red



Hartford Green



Wolf Gray

Integrated Blinds & Shades

Integrated Blinds[8]

Raise blinds up for an unobstructed view or tilt to let in just the right amount of light. Integrated blinds are manually operated.



White



Poplar White



Bisque



Storm



Golden



Mocha



Black

Integrated Shades[8]

Our best integrated fabric shades feature a white exterior fabric for a uniform look from the street. Integrated shades are manually operated.

Light-Filtering:



White



Silver



Maize

Room-Darkening:



Cotton



Bamboo



Ash

Haven't landed on the final blind or shade color selection? No problem. With our patented triple-pane design, you and your customer can make those decisions later in the schedule. Our triple-pane products come with all of the hardware to add a blind or shade straight from the factory or at a later time in the building or remodeling process.

Screens[9]

Hidden Screen

The Hidden Screen appears when you open a double-hung window and folds away when the window is closed. It allows 44% more natural light into your home when a window is closed than a standard screen.[10] Hidden Screen cartridge available in Black, White, Brown, Fossil and Iron Ore colors to match or complement the exterior cladding color choice.

Rolscreen®

Rolscreen soft-closing retractable screens roll out of sight when not in use. Available on casement windows.

TuffScreen® by Phifer*

The heavy-duty vinyl-coated screen is tear, puncture and damage resistant, standing up to pets, children and harsh weather. The TuffScreen® by Phifer is 2.5x stronger than a standard screen.[12] Available on sliding patio doors.

*All trademarks are property of their respective owners

InView™

InView flat screens let in 14% more light and are 8% more open for improved airflow when compared to the conventional fiberglass screen.[11]

[8, 9, 10, 11, 12]See back cover for disclosures.

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Performance Packages

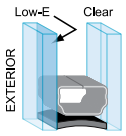
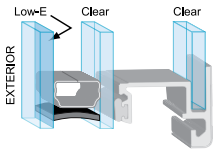
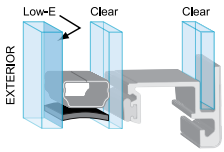
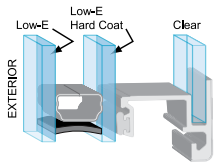
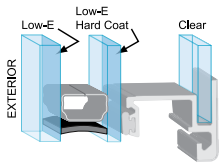
To make things easier, we've created performance packages.

Performance solutions offer an unbeatable combination of energy efficiency, sound control and value.[1] Create room-by-room solutions with the upgraded triple-pane glass design.

All values below are averages compared with single-pane windows.

ASK ABOUT ENERGY STAR

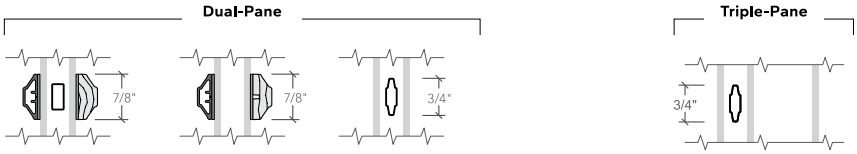
Pella® Lifestyle Series offers products awarded ENERGY STAR® Most Efficient for 2023.[4]

Base	Performance	Sound Control	Energy Efficiency	Ultimate Performance
	71% More Energy Efficient[10] + 34% Noise Reduction[5]	52% Noise Reduction[5]	83% More Energy Efficient[10]	79% More Energy Efficient[10] + 52% Noise Reduction[5]
				
Advanced Low-E, AdvancedComfort, SunDefense Low-E, NaturalSun Low-E, SunDefense+ Low-E or NaturalSun+ Low-E Two panes of insulating, energy-efficient glass and our most popular features and options.	**Advanced Low-E SunDefense Low-E, NaturalSun Low-E, SunDefense+ Low-E or NaturalSun+ Low-E** A triple-pane glass design for a combination of both improved energy efficiency and sound performance.	**Advanced Low-E, SunDefense Low-E, NaturalSun Low-E, SunDefense+ Low-E or NaturalSun+ Low-E** Triple-pane glass design featuring mixed glass thicknesses for enhanced sound dampering.	**AdvancedComfort** A triple-pane glass design with upgraded AdvancedComfort Low-E glass for enhanced energy efficiency.	**AdvancedComfort** A triple-pane glass design featuring mixed glass thicknesses with upgraded AdvancedComfort Low-E glass for enhanced energy efficiency.

Patented triple-pane glass design gives flexibility to add integrated blinds or shades without impacting performance.

Grilles

Choose the look of true divided light or make cleaning easier by selecting grilles-between-the-glass.



Simulated-Divided-Light with Spacer 7/8"

Simulated-Divided-Light without Spacer 7/8"

Contoured Aluminum Grilles-Between-the-Glass 3/4"[13]

Contoured Aluminum Grilles-Between-the-Glass 3/4"[13]

The Best Limited Lifetime Warranty in the Industry

We know your reputation matters and you stake your reputation on quality, dependable products. That's why we have the best limited lifetime warranty in the industry for wood windows and patio doors.[6]

1 Compared to leading national wood window brands recommended installation methods for new construction windows.

2 Comparing average install time and plumb/level/square measurements of leading national wood window brands when installed following the manufacturer's standard installation methods for new construction windows.

3 Performance solutions require upgrades to triple-pane, AdvancedComfort Low-E and mixed glass thickness. Based on comparing product quotes and published STC/OITC and U-Factor ratings of leading national wood window and patio door brands.

4 Some Pella products may not meet ENERGY STAR certification in Canada. For more information, contact your local Pella sales representative or go to nrcan.gc.ca/energy/products/categories/fenestration/13739.

5 Reduction in sound based on OITC ratings of Pella Lifestyle Series windows with respective performance package compared to a single-pane wood or vinyl window with an OITC of 19. Calculated by using the sound transmission loss values in the 80 to 4000 Hz range as measured in accordance with ASTM E-90(09). Actual results may vary.

6 Based on comparing written limited warranties of leading national wood window and wood patio door brands. See written limited warranty for details, including exceptions and limitations, at pella.com/warranty.

7 Double-hung windows available in dual-pane only.

8 Available with triple-pane products only.

9 Warning: Screen will not stop child or pet from falling out of window or door. Keep child or pet away from open window or door.

10 Window energy efficiency calculated in a computer simulation using RESFEN 6.0 default parameters for a 2000 sq. foot new construction single-story home when Pella Lifestyle Series windows with the respective performance package are compared to a single-pane wood or vinyl window. The energy efficiency and actual savings will vary by location. The average window energy efficiency is based on a national average of 94 modeled cities across the country and weighting based on population. For more details see pella.com/methodology.

11 Improved airflow is based on calculated screen cloth openness. Screen cloth transmittance was measured using an integrated sphere spectrophotometer.

12 Based on the composite results of a 5-panel strength analysis comparing TuffScreen and standard screening.

13 Appearance of exterior grille color may vary depending on the Low-E insulating glass selection.

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VELUX®
Commercial

Commercial Daylighting

Daylighting solutions for public, industrial and commercial buildings

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Commercial Daylighting

Skylights and daylighting systems in commercial buildings provide unique benefits that are unmatched by any other light source. From dynamic unit skylights and configurable modular skylights to stunning structural architectural applications, VELUX® Commercial North America provides various daylighting solutions designed to meet the aesthetic and performance needs of commercial, industrial, educational, and healthcare facilities.

4 Metal Framed Skylights
6 VELUX Modular Skylights (VMS)
7 Custom Pinnacle, Classic and Low Profile Systems

8 Translucent Daylighting
10 Skylights
11 Canopy Systems and Wall Systems

12 Advanced Glazing Technologies
13 Photovoltaic, Electrochromic
14 Translucent Insulated Glass, Polycarbonate with Aerogel Fill, High Performance Glass

16 Unit Skylights
18 Energy Efficient Dynamic Dome and EcoSky Series
20 Custom Domed Units, Tandem and Cluster Systems
21 Continuous Vault, Smoke Vents
22 Circular Units, Glass Units
23 Accessories

24 Sun Tunnel® Skylights
26 Flashing and Diffuser Options



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Metal-Framed Skylights

An innovative series for custom skylight designs

Designed for easy installation and stunning architectural results, metal-framed structural skylights from VELUX Commercial North America are available with a range of quality glass, glazing, and finish options for a fully customized configuration.



VELUX Modular System (VMS) Ridgelight and Step Longlight configurations, CoLaboratory, Chicago, IL



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Modular Skylights

Maximize daylighting with modular innovation

VELUX Modular Skylights (VMS) offer eight configurations to fit a multitude of commercial buildings, bringing daylight and fresh air to any space. With smart, automated control options, these modules offer integrated roller blinds and ventilation that control heat gain and glare for superior energy-efficiency.

The pretested and prefabricated modular system requires no on-site glazing, making installations three times faster for long-term watertight performance.



Siemens Building in Ballerup, Denmark

VMS Systems

A complete modular system for fast and easy installation

The unique modular design offers multiple configurations for fast on-site installation and watertight performance. More than just daylight, these skylights offer climate control, ventilation, and shading automation for healthier, beautiful buildings.



Longlight
5° - 25°



Wall-Mounted Longlight
5° - 40°



Northlight
25° - 90°



Ridgelight
25° - 40°



Atrium Longlight
5° - 25°



Atrium Ridgelight
25° - 40°



Step Longlight
5° - 25°



Step Ridgelight
5° - 25°



VMS Ridgelight, Cermak Fresh Market, Chicago, IL

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Custom Skylights

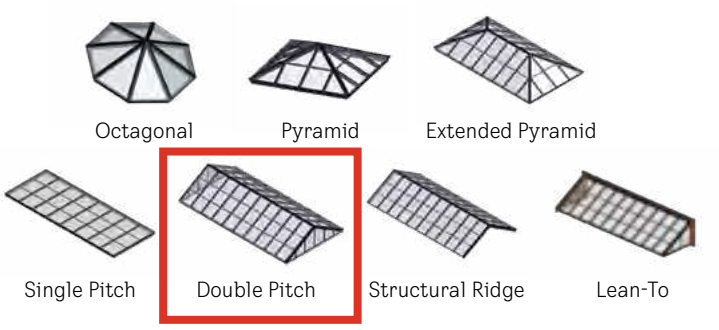
Completely customizable daylighting systems

For a dramatic look, the Custom Series offers lightweight, metal-framed structural skylights available in fully customizable configurations, finish colors, and glazing options. Custom skylights are made up of an adaptable range of versatile systems to help create stunning daylight designs for every project.

Structural

Pinnacle and Classic systems

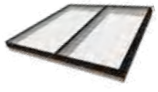
The Pinnacle Systems consist of structural skylights that are available in a variety of configurations capable of spanning up to 40 feet wide. The lightweight Classic Systems are capable of spanning up to six feet wide with three standard pitches to create just the right look for every job.



Non-Structural

Low Profile system

The Low Profile System is laid over roof rafters to create a narrow line frame for a clean, appealing look on pitched roof applications. Available in curb-mounted or self-flashing deck-mounted options.


Low Profile


Circular Hurricane Single Pitch Pinnacle 600, University of Missouri, Kansas City, MO


Two Pinnacle 350 Trapezoid Pyramids, UMass Design Building, Amherst, MA

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Translucent Daylighting

Innovative options for commercial daylighting applications

Energy-efficient polycarbonate panel skylight, wall, and canopy systems from VELUX Commercial provide superior diffused light transmission and glare control over glass systems. Each product in this series utilizes advanced, high-performance, lightweight multiwall panels that maintain high clarity while providing excellent thermal insulation, UV protection, and long-term high light transmission.





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S-Series Pinnacle 350 Square Pyramid, French Elementary School, Spring, TX

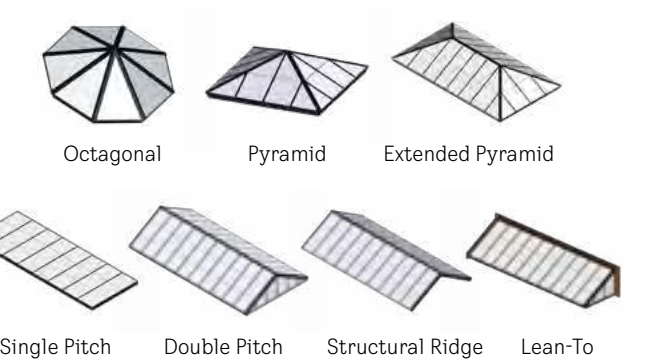
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S-Series Skylights

Creative designs for commercial daylighting applications

The Horizon S-Series consists of metal-framed translucent skylight structures, available in a wide range of configurations for unlimited design possibilities.

A dry-glazed sloped translucent single or double multiwall polycarbonate panel system, the S-Series has fewer parts for faster on-site assembly for reduced labor savings in new construction, retrofit, or renovation projects.





12-Sided Polygon Pyramid, French Elementary School, Spring, TX



Double Pitch, Highlands Oncology Group, Rogers, AR



Single Pitch, Rockaway Town Center, Rockaway, NJ

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V-Series Wall System

Superior maintenance-free translucent wall system

Made of lightweight, interlocking tongue and groove polycarbonate panels, the vertical Translucent Wall is easy to install and delivers superior light transmission, high impact resistance, and low u-values. This dry glaze system also features optional polyurethane thermal breaks for superior thermal performance.



University of Houston Indoor Football Practice Facility, Houston, TX



Pinnacle National Development Center, Kansas City, KS

C-Series and M-Series Canopies

Economical solutions for custom low-slope canopy designs

Available in various panel colors and configurations, the canopy systems are constructed of lightweight, impact-resistant, UV-protected polycarbonate panels. A top choice of design professionals, the systems are available as translucent multiwall standing seam polycarbonate (C-Series) or monolithic polycarbonate (M-Series) canopy systems.



M-Series Canopy



C-Series Canopy, Methodist Hospital, Omaha, NE

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Advanced Glazings

Customize for maximum light control, comfort, and energy efficiency

The Advanced Glazing Series lets you harness the positive benefits of natural daylight without suffering undesirable effects like excessive heat gain, glare or fading. This complete line of innovative glazing provides maximum design versatility as well as optimum daylighting for multiple applications.





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S-Series Skylight, Polycarbonate with Lumira® Aerogel Fill, St. Norbert College, De Pere, WI

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Photovoltaic Glass

Photovoltaic (PV) glass is made of a silicon-based material that improves thermal inner comfort while filtering out UV and infrared radiation. Its semi-transparency reduces the need for artificial lighting, generates power, and provides thermal and sound insulation.



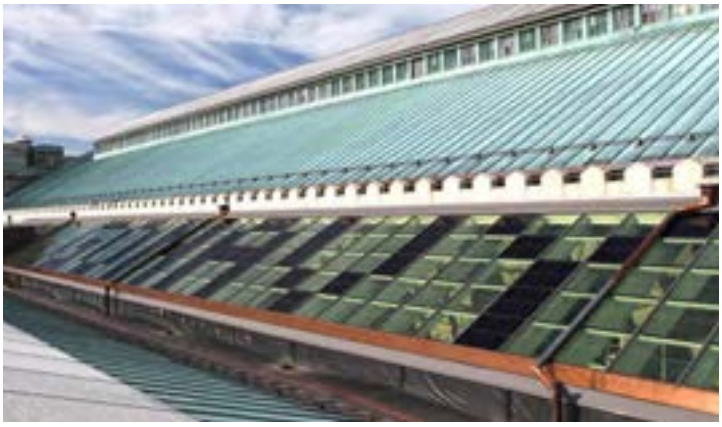
Crystalline Silicon Glass, Massachusetts State House, Boston, MA



Amorphous Silicon Glass, Massachusetts State House, Boston, MA

Electrochromic Glass

This glass is tinted electronically and can be switched from a clear to dark tint with the push of a button. It's programmable to respond to changing sunlight and heat conditions, providing the highest possible solar control without sacrificing views.



U.S. Naval Academy, Philadelphia, PA



Horseshoe Bend Swim & Tennis Club House, Roswell, GA

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Translucent Insulated Glass

For the highest quality of diffused light, translucent insulated glass converts harsh, direct-beam sunlight into softly diffused light in architectural daylighting projects. With this glass, you can design your desired light level without worrying about excessive heat gain, glare, or fading.



Jamesville-Dewitt High School, DeWitt, NY



Highlands Oncology Group, Rogers, AR

Polycarbonate with Aerogel Fill

Made up of high-performance, lightweight panels, multiwall polycarbonate maintains high clarity with an outstanding balance of impact strength and high light transmission. The Lumira® aerogel fill provides superior insulating capabilities. Made of a dry silica particulate, aerogel is a lightweight insulation that provides beautifully diffused full spectrum daylight.

High-Performance Glass

High-performance Low-E insulated glass options are available as an economical alternative to our other energy-efficient Advanced Glazings. These triple silver coated options are engineered to provide high visible light transmittance while controlling solar heat gain, which is essential for minimizing cooling costs.



Northland Workforce Training Center, Buffalo, NY

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Trusted for over 80 years for daylighting innovation, VELUX® offers an expansive commercial skylight product line to meet the aesthetic and performance specifications that transform and elevate your commercial projects.

By creating brighter, healthier, more sustainable places to live, work, learn, and play, we enable a better everyday life for people worldwide. We work globally, with sales and manufacturing operations in more than 40 countries and around 11,500 employees worldwide. The VELUX Group is owned by VKR Holding A/S, a limited company wholly owned by non-profit, charitable foundations (THE VELUX FOUNDATIONS) and family.

For more information, visit commercial.veluxusa.com.

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