



HISTORIC DISTRICT COMMISSION APPLICATION FOR WORK APPROVAL

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

APPLICATION ID

HDC2026-00106

PROPERTY INFORMATION

ADDRESS(ES): 264 Watson

HISTORIC DISTRICT: Brush Park

SCOPE OF WORK: (Check ALL that apply)

- | | | | | | |
|---|---|--|---|---|--------------------------------|
| <input checked="" type="checkbox"/> Windows/
Doors | <input type="checkbox"/> Walls/
Siding | <input type="checkbox"/> Painting | <input type="checkbox"/> Roof/Gutters/
Chimney | <input type="checkbox"/> Porch/Deck/Balcony | <input type="checkbox"/> Other |
| <input checked="" type="checkbox"/> Demolition | <input type="checkbox"/> Signage | <input type="checkbox"/> New
Building | <input type="checkbox"/> Addition | <input type="checkbox"/> Site Improvements
(landscape, trees, fences,
patios, etc.) | |

BRIEF PROJECT DESCRIPTION:

Request to modify COA for reusing and repairing existing wood windows with new aluminum clad wood windows.

APPLICANT IDENTIFICATION

TYPE OF APPLICANT: Architect/Engineer/Consultant

NAME: John Biggar

COMPANY NAME: studiozONE

ADDRESS: 350 MADISON ST FL 4TH

CITY: DETROIT

STATE: MI

ZIP:
48226

PHONE: +1 (313) 549-2790

EMAIL: jpb@ware-house.com

I AGREE TO AND AFFIRM THE FOLLOWING:

- | | |
|-------------------------------------|--|
| <input checked="" type="checkbox"/> | I understand that the failure to upload all required documentation may result in extended review times for my project and/or a denied application. |
| <input checked="" type="checkbox"/> | 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. |
| <input checked="" type="checkbox"/> | 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. |
| <input checked="" type="checkbox"/> | 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 |

DocuSigned by:

John Biggar

817F1A42B12D40D

03/14/2026

SIGNATURE

DATE





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)	BLD2025-01627
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GENERAL

<p>1. DESCRIPTION OF EXISTING CONDITION <i>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.")</i></p> <p>Under the previous COA, we identified a number of wood windows which were to be repaired. After an exhaustive and extensive investigation by a window contractor, it has been determined many of these windows are beyond repair. The windows beyond repair are 7, 8, 9, 14, 15, 16, 17, 18, 19, 20, 21, 23, 24, 30, 31.</p> <p>Our intent is to remove these existing wood windows which have been destroyed and replace with new aluminum clad wood windows.</p>	
<p>2. PHOTOGRAPHS <i>Help us understand your project. Please attach photographs of all areas where work is proposed.</i></p>	
<p>3. DESCRIPTION OF PROJECT <i>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.)</i></p> <p>This is an alteration request to the previous COA to remove the existing wood windows and replace with the new aluminum clad wood windows. The window proposed for the replacement of the wood windows is the Marvin Ultimate Series G2 Double Hung window which is the same window being used for the replacement of the vinyl and aluminum windows currently on the house.</p>	
<p>4. DETAILED SCOPE OF WORK <i>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.")</i></p> <p>The Contractor has indicated none of the existing wood windows identified in his survey can be restored and he has provided a detailed documentation of their condition. The window proposed for the replacement of the wood windows is the Marvin Ultimate Series G2 Double Hung window which is the same window being used for the replacement of the vinyl and aluminum windows currently on the house. I have identified the particular windows on the Elevation A5.10 and updated the window Schedule A9.00 by highlighting the windows which are badly damaged.</p>	
<p>5. BROCHURES/CUT SHEETS <i>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.</i></p>	

ADDITIONAL DETAILS

<p>6. WINDOWS/DOORS <i>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)</i></p>	
<p>7. DEMOLITION <i>If demolition is proposed for reasons of structural failure or catastrophic damage, please provide illustrated report from structural engineer or licensed architect.</i></p>	

Project: Contractor: Holcomb Development

Fenestrationpro@gmail.com

313-757-1226

Project Inspection Report

Date: 3-12-2026

PROJECT: 264 Watson , Detroit MI

Page: 1 of 2

1

Window condition report for existing wood windows that were requested to be rehabilitation.

Inspector : Paul Bekemeyer

Location and/or line (mark) #	Frame and Exterior casing Integrity, Water tight condition	Sash Integrity / Glass condition	Recommendation
Windows 14 and 15 at the kitchen	Frames and exterior casings are dry-rotted to a point where any repair will not be a lasting repair.	Structurally the sash have lost their structural integrity; any repair attempt is unlikely to have lasting effect.	Recommend repair of framing, blocking up the opening to accept a new insert window. Replace rotted casing.
Window 18 @ Office	This frame and exterior flat casing is rotted at the bottom corners, which is allowing water, animals, and insects to penetrate the home.	Structurally the sash is broken/damaged—and—is missing part of its divided lite component. Even with the storm it is unlikely this window will have lasting effect.	Recommend repair of framing, blocking up the opening to accept a new insert window. Replace rotted casing.
Window 21 in stairs	This frame and exterior flat casing is rotted at the bottom corners, which is allowing water, animals, and insects to penetrate the home. The sill itself is gone was repaired with a piece of brake metal.	These sashes are in the best condition in entire home— however the due to frame and casing being literally dry rotted—recommend replace.	Recommend repair of framing, blocking up the opening to accept a new insert window. Replace rotted casing.
Window 7, 8, and 9	The center window has no existing sashes; the frame and exterior casing has been somewhat protected and isn't as bad as all the others. But since there is nothing to repair/restore @ 8.	Window #8 is missing sashes. Nothing to repair/restore.	Recommend repair of framing, blocking up the opening to accept a new insert window for all 3 openings.
Widow 23B @ Dining	This window is badly damaged — frames and casings. It is well beyond repair—and will directly adjacent to a window replacement @ 29 (currentl a vinyl window).	Structurally the sash have lost their structural integrity; any repair attempt is unlikely to have lasting effect, plus the missing sash (currently plywood-ed over.	Recommend repair of framing, blocking up the opening to accept a new insert window for all 3 openings.

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Project Inspection Report

Date: 3-12-2026

PROJECT: 264 Watson , Detroit MI

Page: 2 of 2

Window condition report for existing wood windows that were requested to be rehabilitation.

Inspector : Paul Bekemeyer

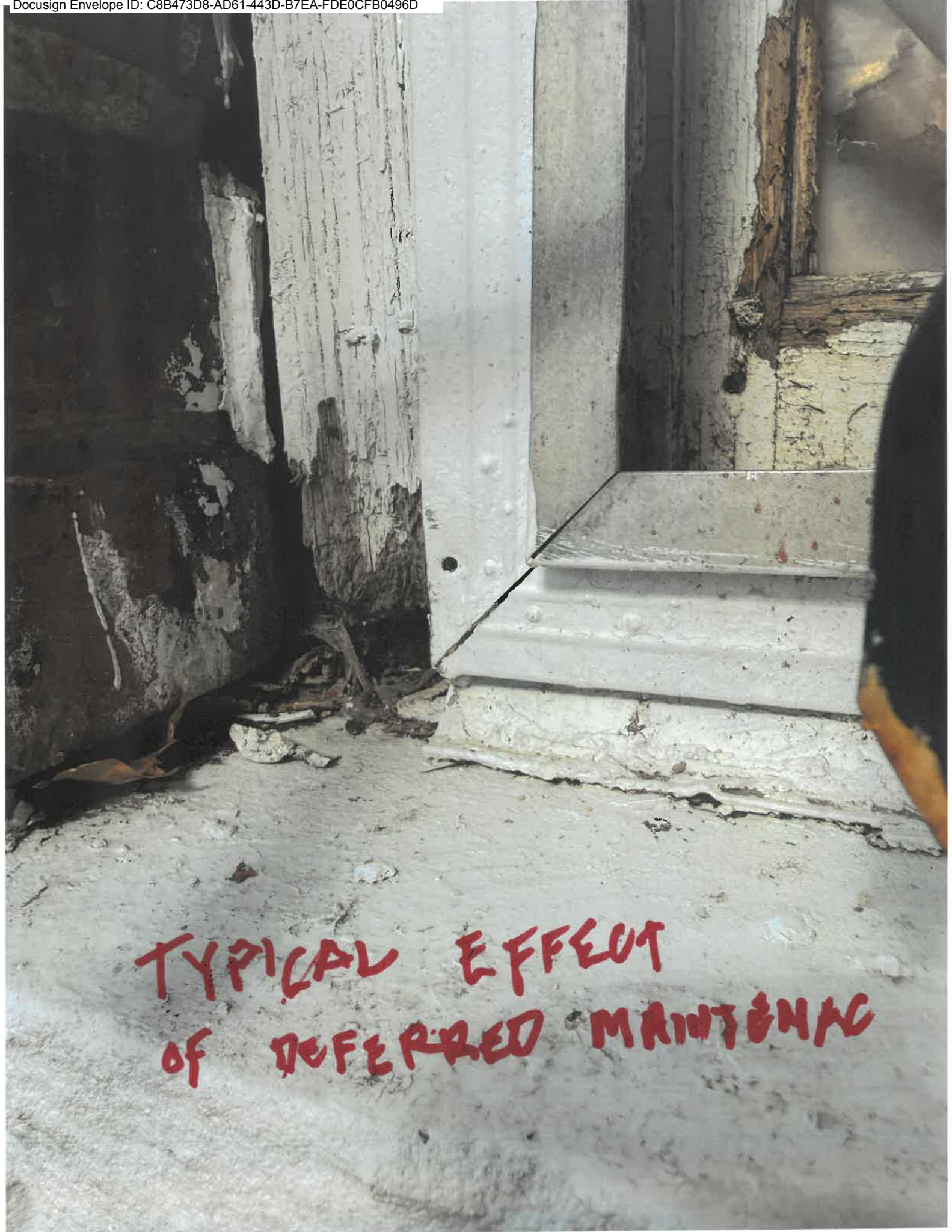
Location and/or line (mark) #	Frame and Exterior casing Integrity, Water tight condition	Sash Integrity / Glass condition	Recommendation
Windows 19 and 20 in E BR	Frames and casings are dry-rotted to a point where any repair will not be a lasting repair. The sills are literally gone.	Structurally the sash have lost their structural integrity; the jointery is failed—any repair attempt is unlikely to have lasting effect.	Recommend repair of framing, blocking up the opening to accept a new insert window. Replace rotted casing.
Windows 16 and 17	These frames and exterior flat casing is rotted at the bottom corners, which is allowing water, animals, and insects to penetrate the home. The sill itself is gone was repaired with a piece of brake metal. Sills are also dry rotted/failed.	These sashes are in the best condition in entire home—however the due to frame and casing being literally dry rotted—recommend replace.	Recommend repair of framing, blocking up the opening to accept a new insert window. Replace rotted casing.
Windows 10,11,12,13,28, 23A, 27 in basement	Appears that these units haven't been painted in decades. Due to being grade they are in a failed condition, completely dry rotted.	Appears that these units haven't been painted in decades. Due to being grade they are in a failed condition, completely dry rotted.	Recommend repair of framing, blocking up the opening to accept a new insert window for all 7 openings.

As part of this general condition report, other findings about the windows in this historic home is that all of these windows were likely painted with lead paint many times over—the toxic dust of which we all know not to consume - however, the owner does have small children.

Thus—the absolute failed state of the window frames and other issues—is why the owner is requesting the courtesy to fix all of these things with insert replacement and labor to waterproof the exterior casings.

There is precedent for allowing these to be replaced; the commercial building at 110 E Ferry Street virtually had the entire building got new insert windows a few years back for its repurposed use.

TYPICAL EFFECT
OF DEFERRED MAINTENANCE



442





TYPICALLY . ALL
EXISTING WOOD WITH DOORS



→
SILL IS
GONE

30



→ FAILED!
BROKEN

18

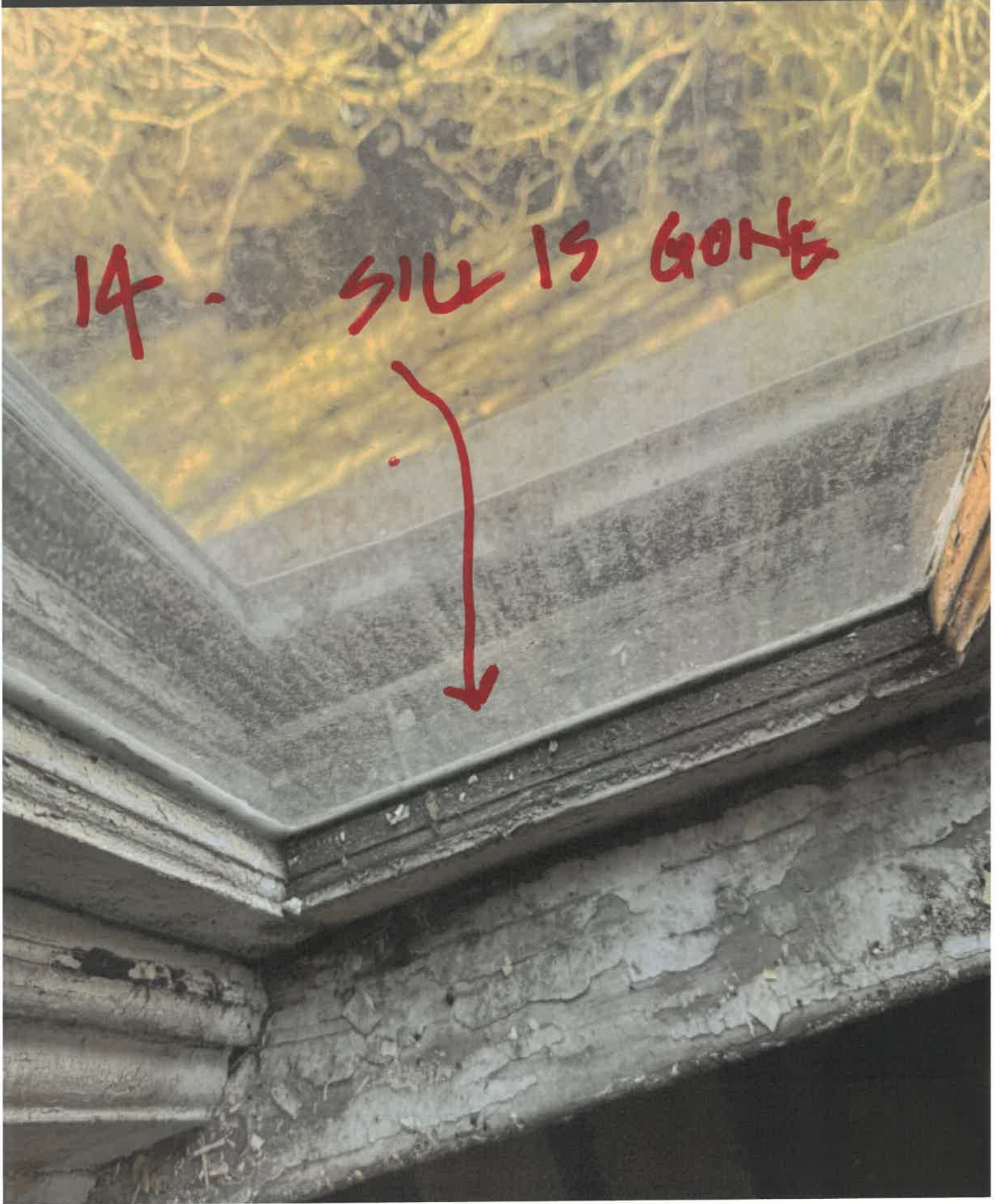


7 8 9

15



14



14 - SILL IS GONE

19

11



28



21







TYPICAL EFFECT
OF DEFERRED MAINTENANCE

442





TYPICAL. ALL
EXISTING WOOD WINDOW



→
SILL IS
GONE

30



→ FAILED!
BROKEN

18

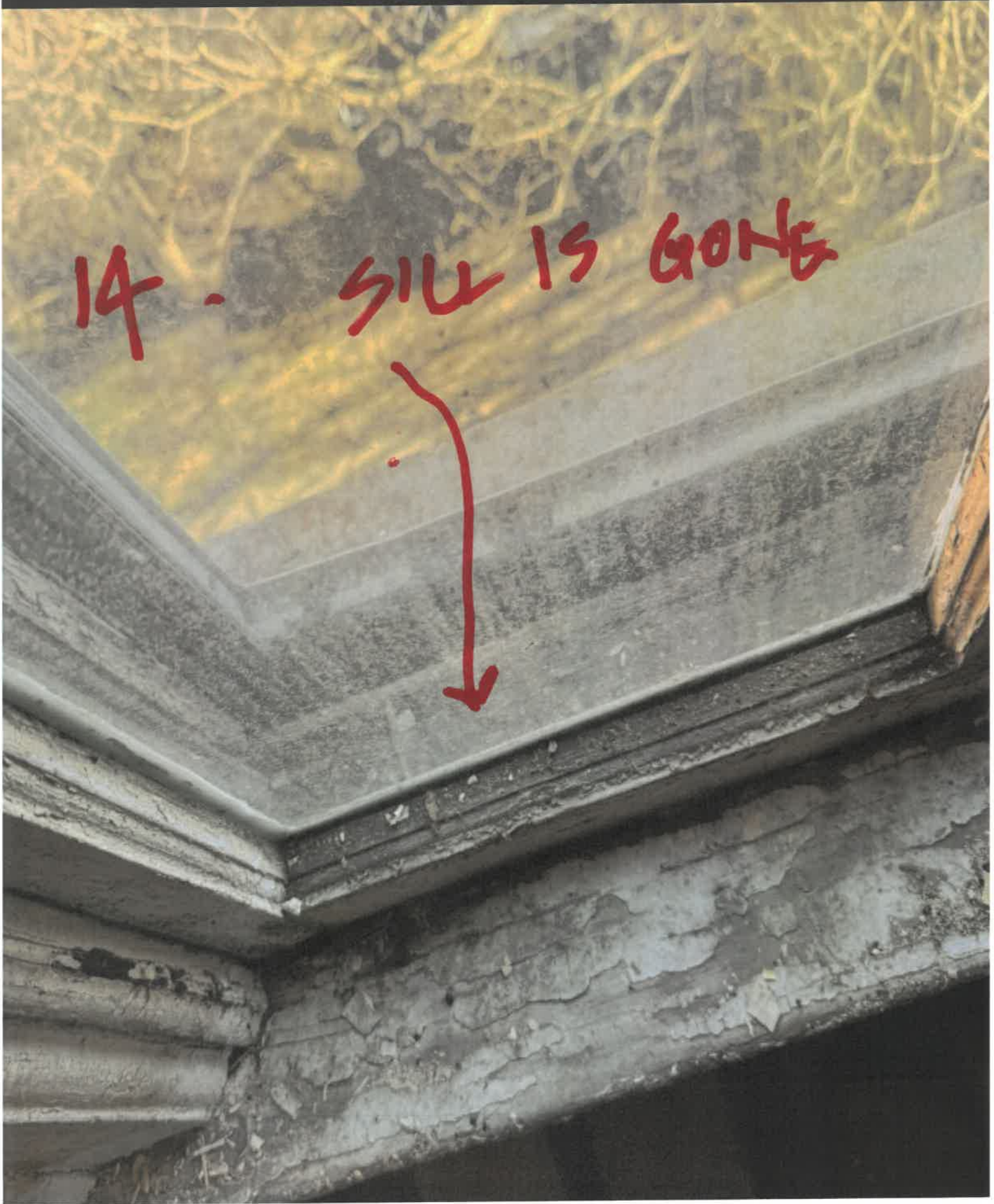


789

15



14



19

11



28



21





WINDOW SCHEDULE					
WINDOW No.	SIZE	TYPE	EXISTING MATERIAL	NEW WINDOW MATERIAL	NOTES
1	24" x 72"	DOUBLE-HUNG	ALUMINUM	ALUMINUM CLAD WOOD	REMOVE ALUMINUM WINDOW AND REPLACE W/ NEW ALUMINUM CLAD WINDOW
2	24" x 72"	DOUBLE-HUNG	ALUMINUM	ALUMINUM CLAD WOOD	REMOVE ALUMINUM WINDOW AND REPLACE W/ NEW ALUMINUM CLAD WINDOW
3	24" x 72"	DOUBLE-HUNG	ALUMINUM	ALUMINUM CLAD WOOD	REMOVE ALUMINUM WINDOW AND REPLACE W/ NEW ALUMINUM CLAD WINDOW
4	24" x 72"	DOUBLE-HUNG	ALUMINUM	ALUMINUM CLAD WOOD	REMOVE ALUMINUM WINDOW AND REPLACE W/ NEW ALUMINUM CLAD WINDOW
5	24" x 72"	DOUBLE-HUNG	ALUMINUM	ALUMINUM CLAD WOOD	REMOVE ALUMINUM WINDOW AND REPLACE W/ NEW ALUMINUM CLAD WINDOW
6	24" x 72"	DOUBLE-HUNG	ALUMINUM	ALUMINUM CLAD WOOD	REMOVE ALUMINUM WINDOW AND REPLACE W/ NEW ALUMINUM CLAD WINDOW
7	12" x 24"	DOUBLE-HUNG	WOOD	ALUMINUM CLAD WOOD	REMOVE WOOD WINDOW AND REPLACE W/ NEW ALUMINUM CLAD WINDOW
8	12" x 24"	DOUBLE-HUNG	WOOD	ALUMINUM CLAD WOOD	REMOVE WOOD WINDOW AND REPLACE W/ NEW ALUMINUM CLAD WINDOW
9	12" x 24"	DOUBLE-HUNG	WOOD	ALUMINUM CLAD WOOD	REMOVE WOOD WINDOW AND REPLACE W/ NEW ALUMINUM CLAD WINDOW
10	24" x 24"	FIXED	WOOD	WOOD	REFURBISH AND REPAIR EXISTING WOOD WINDOW
11	24" x 24"	FIXED	WOOD	WOOD	REFURBISH AND REPAIR EXISTING WOOD WINDOW
12	24" x 24"	FIXED	WOOD	WOOD	REFURBISH AND REPAIR EXISTING WOOD WINDOW
13	24" x 24"	FIXED	WOOD	WOOD	REFURBISH AND REPAIR EXISTING WOOD WINDOW
14	24" x 68"	DOUBLE-HUNG	WOOD	ALUMINUM CLAD WOOD	REMOVE WOOD WINDOW AND REPLACE W/ NEW ALUMINUM CLAD WINDOW
15	24" x 68"	DOUBLE-HUNG	WOOD	ALUMINUM CLAD WOOD	REMOVE WOOD WINDOW AND REPLACE W/ NEW ALUMINUM CLAD WINDOW
16	24" x 68"	DOUBLE-HUNG	WOOD	ALUMINUM CLAD WOOD	REMOVE WOOD WINDOW AND REPLACE W/ NEW ALUMINUM CLAD WINDOW
17	24" x 68"	DOUBLE-HUNG	WOOD	ALUMINUM CLAD WOOD	REMOVE WOOD WINDOW AND REPLACE W/ NEW ALUMINUM CLAD WINDOW
18	24" x 68"	DOUBLE-HUNG	WOOD	ALUMINUM CLAD WOOD	REMOVE WOOD WINDOW AND REPLACE W/ NEW ALUMINUM CLAD WINDOW
19	24" x 68"	DOUBLE-HUNG	WOOD	ALUMINUM CLAD WOOD	REMOVE WOOD WINDOW AND REPLACE W/ NEW ALUMINUM CLAD WINDOW
20	24" x 68"	DOUBLE-HUNG	WOOD	ALUMINUM CLAD WOOD	REMOVE WOOD WINDOW AND REPLACE W/ NEW ALUMINUM CLAD WINDOW
21	24" x 68"	DOUBLE-HUNG	WOOD	ALUMINUM CLAD WOOD	REMOVE WOOD WINDOW AND REPLACE W/ NEW ALUMINUM CLAD WINDOW
22	12" x 24"	FIXED	NO WINDOW	ALUMINUM CLAD WOOD	NEW ALUMINIUM CLAD WOOD WINDOW IN NEW MASONRY OPENING
23	24" x 68"	DOUBLE-HUNG	WOOD	ALUMINUM CLAD WOOD	REMOVE WOOD WINDOW AND REPLACE W/ NEW ALUMINUM CLAD WINDOW
24	30" x 80"	DOUBLE-HUNG	WOOD	ALUMINUM CLAD WOOD	REMOVE WOOD WINDOW AND REPLACE W/ NEW ALUMINUM CLAD WINDOW
25	30" x 80"	DOUBLE-HUNG	NO WINDOW	ALUMINUM CLAD WOOD	NEW ALUMINUM CLADD WOOD, FIXED WINDOW IN NEW OPENING
26	SEE ELEVATION	FIXED	NO WINDOW	WOOD	NEW WOOD, FIXED TRANSOM & SIDELITES AT FRONT DOOR
27	24" x 24"	FIXED	WOOD	WOOD	REFURBISH AND REPAIR EXISTING WOOD WINDOW
28	24" x 24"	FIXED	WOOD	WOOD	REFURBISH AND REPAIR EXISTING WOOD WINDOW
29	24" x 68"	DOUBLE-HUNG	VINYL	ALUMINUM CLAD WOOD	REMOVE ALUMINUM WINDOW AND REPLACE W/ NEW ALUMINUM CLAD WINDOW
30	24" x 68"	DOUBLE-HUNG	WOOD	ALUMINUM CLAD WOOD	REMOVE WOOD WINDOW AND REPLACE W/ NEW ALUMINUM CLAD WINDOW
31	24" x 68"	DOUBLE-HUNG	WOOD	ALUMINUM CLAD WOOD	REMOVE WOOD WINDOW AND REPLACE W/ NEW ALUMINUM CLAD WINDOW
32	24" x 68"	DOUBLE-HUNG	VINYL	ALUMINUM CLAD WOOD	REMOVE ALUMINUM WINDOW AND REPLACE W/ NEW ALUMINUM CLAD WINDOW
33	24" X 56"	DOUBLE-HUNG	NO WINDOW	ALUMINUM CLAD WOOD	NEW FIXED ALUMINUM CLAD WOOD WINDOW IN NEW OPENING
34	24" X 56"	DOUBLE-HUNG	NO WINDOW	ALUMINUM CLAD WOOD	NEW FIXED ALUMINUM CLAD WOOD WINDOW IN NEW OPENING
35	24" x 24"	FIXED	WOOD	WOOD	REFURBISH AND REPAIR EXISTING WOOD WINDOW

SIDE PORCH OPTION A:
1. EXISTING SIDE PORCH REMAINS AS IS KEEPING HISTORIC ELEMENTS.
2. UNSAFE STRUCTURAL ELEMENTS AT THE FLOOR STRUCTURE AND SUPPORT PIERS ARE CORRECTED
3. THE EXISTING STEPS ARE REMOVED AND A NEW STAIR WITH HANDRAIL ARE INSTALLED. STAIR HANDRAIL PROFILE/APPEARANCE TO MATCH THE EXISTING HANDRAIL

GENERAL NOTES:

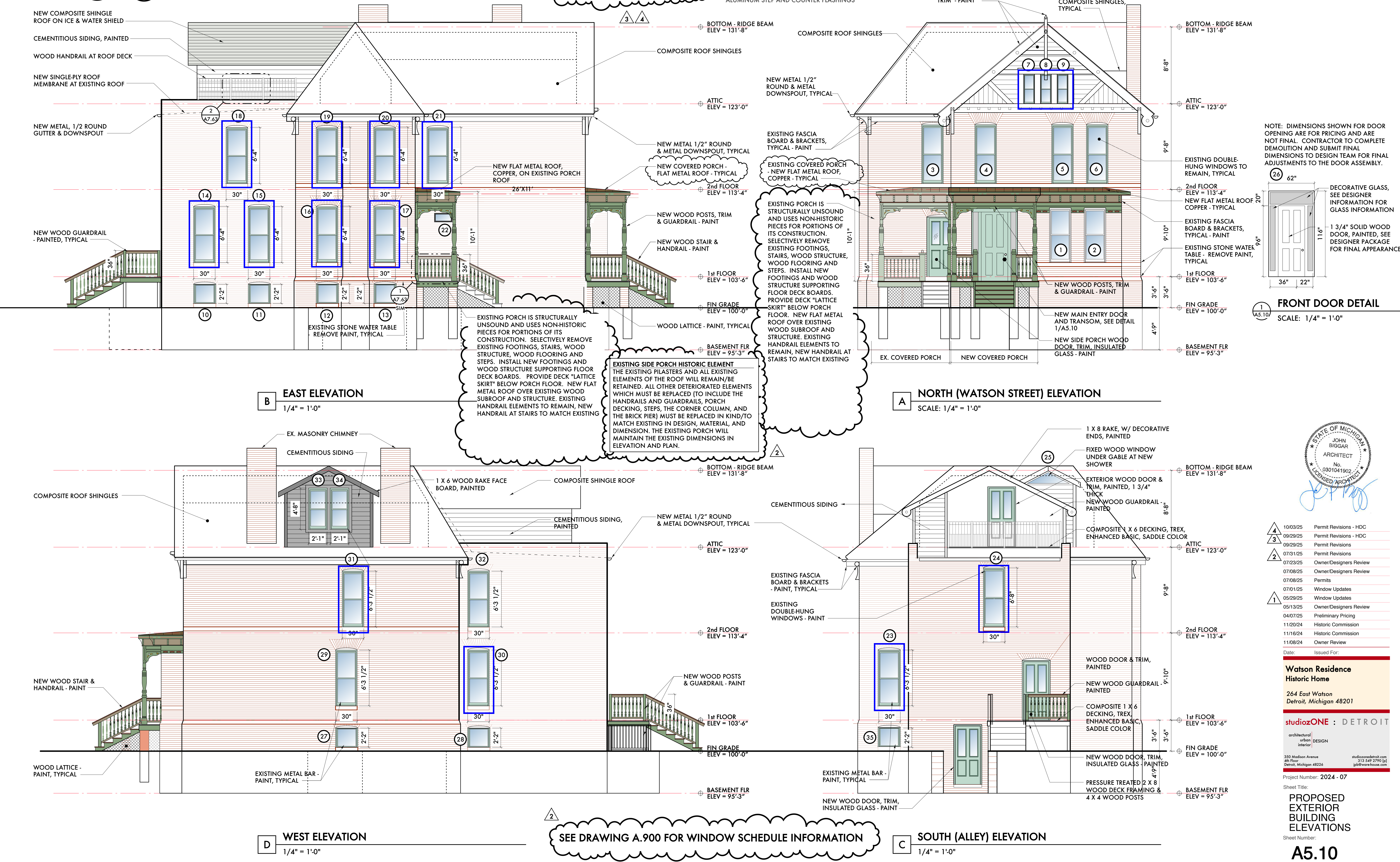
9. MASONRY REPAIR - THOROUGHLY INSPECT THE MASONRY SURFACE PRIOR TO PROVIDING A PRICE DETAILING THE AMOUNT OF JOINTS TO BE TUCKED AND POINTED. REMOVE ANY LOOSE MORTAR OR DAMAGED MORTAR. REPLACE ANY CRACKED OR DAMAGED BRICKS W/ BRICKS SALVAGED FROM OTHER LOCATIONS. TUCKPOINT THE EXISTING BRICK WHERE REQUIRED. MATCH THE EXISTING MORTAR COLOR AND TEXTURE W/ THE NEW MORTAR MIX. USE A "TRADITIONAL" MORTAR MIX OF SAND AND LIME PUTTY OR HYDRATED LIME. ALTERNATIVELY A MIX OF PORTLAND CEMENT, HYDRATED LIME AND SAND CAN BE USED. ANY "BAG" MIXES OF HIGH-STRENGTH PORTLAND CEMENT IS NOT TO BE USED AS IT IS TOO HARD AND BRITTLE FOR THE EXISTING MASONRY.

7. THE FINAL COLOR SCHEME IS TO BE PROVIDED BY THE OWNER/DESIGN TEAM. ALL COLORS SELECTED ARE TO COLOR MATCH THE DETROIT HISTORIC COMMISSION COLOR INDEX SYSTEM. ONLY APPROVED HISTORIC COLORS ARE PERMITTED.
 8. ALL EXISTING WOOD WINDOWS ARE TO REMAIN AND BE REFURBISHED / REPAIRED. ALL SASHES ARE TO BE MADE OPERABLE AGAIN. ANY HISTORIC BRICK MOLD AND DECORATIVE ELEMENTS ARE THE EXTERIOR ARE TO REMAIN. IF MISSING, REPLACE W/ LIKE KIND. INTERIOR COLOR OF SASH AND FRAME TO BE SELECTED BY OWNER. ALL VINYL AND ALUMINUM WINDOWS ARE TO BE REPLACED W/ NEW ALUMINUM CLAD WOOD WINDOWS, ANDERSEN E SERIES. SEE DRAWING A.900 FOR WINDOW SCHEDULE DEPICTING WINDOW TO REMAIN AND BE REFURBISHED AND WHICH OPENINGS HAVE VINYL OR ALUMINUM TO BE REPLACED.

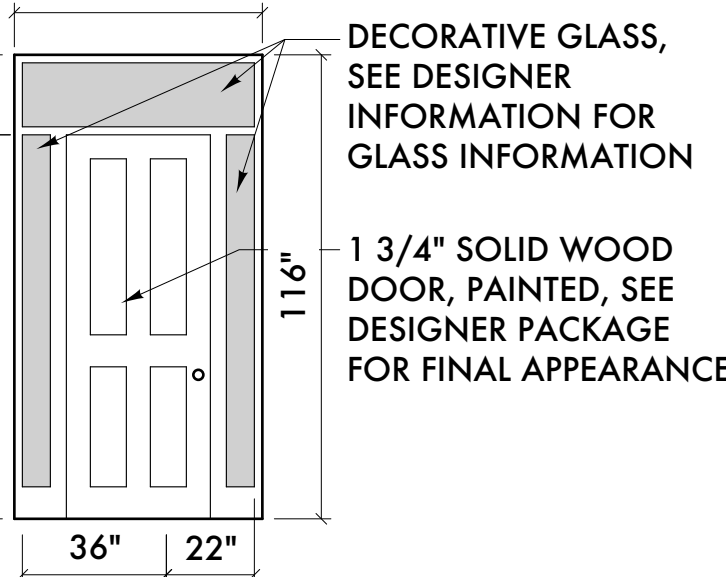
6. MAIN ROOF UPGRADE OPTION - IN LIEU OF ADDING TO AND PATCHING EXISTING ASPHALT SHINGLE ROOF, PROVIDE THE OWNER AN UPGRADE OPTION OF A DAVINCI COMPOSITE SHINGLE ROOF, "EUROPEAN COLOR", 12" SINGLE WIDTH W/ 8" EXPOSURE, RUNNING BOND PATTERN. WORK IS TO INCLUDE: REMOVE EXISTING SHINGLES DOWN TO DECK. RE-NAIL ANY LOOSE WOOD. IF BAD OR ROTTEN WOOD IS DISCOVERED, REPLACE WITH LIKE THICKNESS / TYPE, PROVIDE UNIT COSTS FOR SUB-ROOF REPAIRS. INSTALL 1 1/2" WIDE FACED DRIP EDGE TO ALL EAVE AND RAKE EDGES. INSTALL 6' OF ICE & WATER SHIELD AT ALL EAVES, RAKE EDGES, AND VALLEYS. INSTALL SYNTHETIC UNDERLAYMENT TO REMAINDER OF EXPOSED ROOF DECK. INSTALL TILES W/ 1.75" HOT DIPPED ROOFING NAILS- INSTALL ALL HIP AND RIDGE SHINGLES WHERE APPLICABLE. INSTALL RIDGE VENT. INSTALL NEW PREFINISHED ALUMINUM PIPE AND CHIMNEY FLASHINGS. INSTALL NEW PREFINISHED ALUMINUM STEP AND COUNTER FLASHINGS

4. PORCH ROOF - STANDING SEAM METAL ROOF, MINIMUM 26 GAUGE METAL. SUBMIT INFORMATION ON MANUFACTURER SELECTED FOR REVIEW AND APPROVAL. COLOR TO BE SELECTED FROM MANUFACTURER'S STANDARD COLOR. INCLUDE DETAILS FROM MANUFACTURER FOR ROOF EDGE/GUTTER TRANSITION AND TRANSITION WHERE ROOF MEETS BRICK MASONRY.
 5. MAIN ROOF BASE PRICE - INCLUDE IN THE BASE PRICE NEW SHINGLES TO MATCH EXISTING SHINGLE COLOR AND STYLE AT THE NEW ROOF AREAS. PROVIDE ICE AND WATER SHIELD AT THE 6' AT THE ROOF EDGE, 20# ASPHALT PAPER OR OTHER APPROVED UNDERLAYMENT FOR THE BALANCE OF THE ROOF AREAS. PROVIDE HALF-ROUND, PREFINISHED ALUMINUM GUTTERS AND DOWNSPOUTS FOR THE ENTIRE ROOF. ROOF UPGRADE:

2. ALL WOOD WINDOWS ANY DAMAGED SASHES. NEW 1/2" INSULATED GLA REPAIR. REMOVE EXISTING WOOD. RECONSTRUCTION W/ AND EPOXY TO PROVIDE " REPAINTING.
 3. ALL NEW WOOD PORCH BASE ON THE EXISTING S WHERE REMAINING, E.G. I POSTS/COLUMNS, THE DEE BEAMS" BETWEEN THE COI ROOF EDGE. PROVIDE EXA HANDRAIL AND SPINDLES I PROFILE APPROPRIATE TO I STYLE OF ARCHITECTURE FOR SELECTION.



NOTE: DIMENSIONS SHOWN FOR DOOR OPENING ARE FOR PRICING AND ARE NOT FINAL. CONTRACTOR TO COMPLETE DEMOLITION AND SUBMIT FINAL DIMENSIONS TO DESIGN TEAM FOR FINAL ADJUSTMENTS TO THE DOOR ASSEMBLY.



SEE DRAWING A.900 FOR WINDOW SCHEDULE INFORMATION



10/03/25	Permit Revisions - HDC
09/29/25	Permit Revisions - HDC
09/29/25	Permit Revisions
07/31/25	Permit Revisions
07/23/25	Owner/Designers Review
07/08/25	Owner/Designers Review
07/08/25	Permits
07/01/25	Window Updates
05/13/25	Owner/Designers Review
04/07/25	Preliminary Pricing
11/20/24	Historic Commission
11/16/24	Historic Commission
11/08/24	Owner Review

Date: Issued For:
Watson Residence
Historic Home
 264 East Watson
 Detroit, Michigan 48201

studiozONE : DETROIT
 architectural urban interior DESIGN
 330 Madison Avenue
 4th Floor
 Detroit, Michigan 48226
 studiozonedetroit.com
 313.447.2760 (t)
 jgb@watsonhome.com

Section 08560 – Premium Clad Wood Windows for Historic Homes

1. GENERAL

1.1 SUMMARY

A. This section includes factory-fabricated, high-performance wood windows with durable composite or metal-clad exteriors, suitable for use in historic residential applications.

B. Work includes:

- Window units (casement, double-hung, fixed, or shaped windows)
- Divided lite grille configurations
- Screens
- Interior/exterior trim accessories
- Installation components

1.2 REFERENCES

- ASTM E283 – Air Infiltration
- ASTM E330 – Structural Performance
- ASTM E547 – Water Penetration
- NFRC 100/200 – Thermal Performance
- ENERGY STAR® – Northern Climate Zone
- NPS Preservation Brief #9 – Historic Windows
- Michigan Residential Code
- Detroit Historic District Commission (HDC) Guidelines

1.3 SUBMITTALS

- A. Product data for each specified window.
- B. Shop drawings indicating operation, size, frame profile, and grille configuration.
- C. Color and finish samples for interior and exterior.
- D. Certification of compliance with applicable historic district guidelines.
- E. Sample window or corner mock-up upon request.

1.4 QUALITY ASSURANCE

- A. Manufacturer must have minimum (20) years experience producing premium fenestration systems.
- B. Installer must be licensed and experienced with historic home retrofits.
- C. Units must meet the requirements of the Detroit Historic District Commission (HDC) as applicable.

2. PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

Subject to compliance with specifications, the following manufacturers are acceptable:

- 1. Andersen Windows & Doors
 - o E-Series (Aluminum-clad wood)

No substitutions allowed without prior written approval.

2.2 MATERIALS AND CONSTRUCTION

A. Frame and Sash

- Interior: Solid wood (pine, maple, oak, or species as approved)
- Exterior Cladding:
 - o Andersen A-Series: Fibrex® composite and fiberglass
 - o Andersen E-Series: Extruded aluminum
 - o Marvin Ultimate: Extruded aluminum
- Cladding Finish: High-performance baked-on coating (AAMA 2605 for aluminum)

B. Glazing

- Dual-pane insulating glass with Low-E coating and argon gas fill
- U-Factor: ≤ 0.29
- SHGC: ≤ 0.30
- Laminated or tempered glass as required

C. Grilles / Divided Lites

- Simulated Divided Lite (SDL) with spacer bars
- Optional: Full Divided Lite (FDL) or True Divided Lite (TDL) for strict historic compliance where divided lites are required.
- Grille patterns, where indicated, must replicate original window configuration

D. Insect Screens

- Aluminum frame with fiberglass mesh
- Wood-framed screens optional for visible elevations, if required by HDC

2.3 COLORS AND FINISHES

Exterior

- Andersen E-Series and Marvin Ultimate: Kynar®-based fluoropolymer coatings (AAMA 2605 compliant)
- Andersen A-Series: UV-stable composite finish
- Colors must match HDC-approved historic palette (e.g., terratone, black, bronze, forest green)

Interior

- Factory-primed, stained, or natural finish available
- Match to historic trim/millwork color or finish

3. EXECUTION

3.1 PREPARATION

- Dimensions provided on the drawings and in the schedule are for pricing information only.
- Complete the demolition of the existing windows and openings. Field-verify window dimensions for each opening after demolition, before ordering.
- Protect existing interior and exterior finishes during installation
- Coordinate with preservation architect where applicable

3.2 INSTALLATION

- Install per manufacturer's instructions and best practices
- Do not alter existing opening size unless approved by HDC
- Install level, plumb, and square with appropriate shims and sealants
- Use concealed fasteners when possible
- Provide all necessary components for a complete window installation
 - o Brick molding
 - o Window casing
 - o Window sills
 - o Jamb extensions
- Caulk all gaps between window frame assembly and surrounding rough opening
- Caulk all windows with an approved sealant for the use

3.3 CLEANING AND PROTECTION

- Clean glazing and frame materials per manufacturer's recommendation
- Remove labels and construction residue
- Protect finished surfaces during remaining construction activities

4. HISTORIC COMPLIANCE REQUIREMENTS

- Match original sash dimensions, grille configurations where occurring, and profiles
- Nail fins, flange extensions, or modern detailing must not be visible on primary façades
- Submit final selections and shop drawings to the Owner for pre-approval

END OF SECTION

WE HAVE HIGHLIGHTED THE WOOD WINDOWS BEING PROPOSED TO BE REPLACED WITH ALUMINUM CLAD WOOD WINDOWS

WINDOW SCHEDULE					
WINDOW No.	SIZE	TYPE	EXISTING MATERIAL	NEW WINDOW MATERIAL	NOTES
1	24" x 72"	DOUBLE-HUNG	ALUMINUM	ALUMINUM CLAD WOOD	REMOVE ALUMINUM WINDOW AND REPLACE W/ NEW ALUMINUM CLAD WINDOW
2	24" x 72"	DOUBLE-HUNG	ALUMINUM	ALUMINUM CLAD WOOD	REMOVE ALUMINUM WINDOW AND REPLACE W/ NEW ALUMINUM CLAD WINDOW
3	24" x 72"	DOUBLE-HUNG	ALUMINUM	ALUMINUM CLAD WOOD	REMOVE ALUMINUM WINDOW AND REPLACE W/ NEW ALUMINUM CLAD WINDOW
4	24" x 72"	DOUBLE-HUNG	ALUMINUM	ALUMINUM CLAD WOOD	REMOVE ALUMINUM WINDOW AND REPLACE W/ NEW ALUMINUM CLAD WINDOW
5	24" x 72"	DOUBLE-HUNG	ALUMINUM	ALUMINUM CLAD WOOD	REMOVE ALUMINUM WINDOW AND REPLACE W/ NEW ALUMINUM CLAD WINDOW
6	24" x 72"	DOUBLE-HUNG	ALUMINUM	ALUMINUM CLAD WOOD	REMOVE ALUMINUM WINDOW AND REPLACE W/ NEW ALUMINUM CLAD WINDOW
7	12" x 24"	DOUBLE-HUNG	WOOD	ALUMINUM CLAD WOOD	REMOVE WOOD WINDOW AND REPLACE W/ NEW ALUMINUM CLAD WINDOW
8	12" x 24"	DOUBLE-HUNG	WOOD	ALUMINUM CLAD WOOD	REMOVE WOOD WINDOW AND REPLACE W/ NEW ALUMINUM CLAD WINDOW
9	12" x 24"	DOUBLE-HUNG	WOOD	ALUMINUM CLAD WOOD	REMOVE WOOD WINDOW AND REPLACE W/ NEW ALUMINUM CLAD WINDOW
10	24" x 24"	FIXED	WOOD	WOOD	REFURBISH AND REPAIR EXISTING WOOD WINDOW
11	24" x 24"	FIXED	WOOD	WOOD	REFURBISH AND REPAIR EXISTING WOOD WINDOW
12	24" x 24"	FIXED	WOOD	WOOD	REFURBISH AND REPAIR EXISTING WOOD WINDOW
13	24" x 24"	FIXED	WOOD	WOOD	REFURBISH AND REPAIR EXISTING WOOD WINDOW
14	24" x 68"	DOUBLE-HUNG	WOOD	ALUMINUM CLAD WOOD	REMOVE WOOD WINDOW AND REPLACE W/ NEW ALUMINUM CLAD WINDOW
15	24" x 68"	DOUBLE-HUNG	WOOD	ALUMINUM CLAD WOOD	REMOVE WOOD WINDOW AND REPLACE W/ NEW ALUMINUM CLAD WINDOW
16	24" x 68"	DOUBLE-HUNG	WOOD	ALUMINUM CLAD WOOD	REMOVE WOOD WINDOW AND REPLACE W/ NEW ALUMINUM CLAD WINDOW
17	24" x 68"	DOUBLE-HUNG	WOOD	ALUMINUM CLAD WOOD	REMOVE WOOD WINDOW AND REPLACE W/ NEW ALUMINUM CLAD WINDOW
18	24" x 68"	DOUBLE-HUNG	WOOD	ALUMINUM CLAD WOOD	REMOVE WOOD WINDOW AND REPLACE W/ NEW ALUMINUM CLAD WINDOW
19	24" x 68"	DOUBLE-HUNG	WOOD	ALUMINUM CLAD WOOD	REMOVE WOOD WINDOW AND REPLACE W/ NEW ALUMINUM CLAD WINDOW
20	24" x 68"	DOUBLE-HUNG	WOOD	ALUMINUM CLAD WOOD	REMOVE WOOD WINDOW AND REPLACE W/ NEW ALUMINUM CLAD WINDOW
21	24" x 68"	DOUBLE-HUNG	WOOD	ALUMINUM CLAD WOOD	REMOVE WOOD WINDOW AND REPLACE W/ NEW ALUMINUM CLAD WINDOW
22	12" x 24"	FIXED	NO WINDOW	ALUMINUM CLAD WOOD	NEW ALUMINIUM CLAD WOOD WINDOW IN NEW MASONRY OPENING
23	24" x 68"	DOUBLE-HUNG	WOOD	ALUMINUM CLAD WOOD	REMOVE WOOD WINDOW AND REPLACE W/ NEW ALUMINUM CLAD WINDOW
24	30" x 80"	DOUBLE-HUNG	WOOD	ALUMINUM CLAD WOOD	REMOVE WOOD WINDOW AND REPLACE W/ NEW ALUMINUM CLAD WINDOW
25	30" x 80"	DOUBLE-HUNG	NO WINDOW	ALUMINUM CLAD WOOD	NEW ALUMINUM CLADD WOOD, FIXED WINDOW IN NEW OPENING
26	SEE ELEVATION	FIXED	NO WINDOW	WOOD	NEW WOOD, FIXED TRANSOM & SIDELITES AT FRONT DOOR
27	24" x 24"	FIXED	WOOD	WOOD	REFURBISH AND REPAIR EXISTING WOOD WINDOW
28	24" x 24"	FIXED	WOOD	WOOD	REFURBISH AND REPAIR EXISTING WOOD WINDOW
29	24" x 68"	DOUBLE-HUNG	VINYL	ALUMINUM CLAD WOOD	REMOVE ALUMINUM WINDOW AND REPLACE W/ NEW ALUMINUM CLAD WINDOW
30	24" x 68"	DOUBLE-HUNG	WOOD	ALUMINUM CLAD WOOD	REMOVE WOOD WINDOW AND REPLACE W/ NEW ALUMINUM CLAD WINDOW
31	24" x 68"	DOUBLE-HUNG	WOOD	ALUMINUM CLAD WOOD	REMOVE WOOD WINDOW AND REPLACE W/ NEW ALUMINUM CLAD WINDOW
32	24" x 68"	DOUBLE-HUNG	VINYL	ALUMINUM CLAD WOOD	REMOVE ALUMINUM WINDOW AND REPLACE W/ NEW ALUMINUM CLAD WINDOW
33	24" X 56"	DOUBLE-HUNG	NO WINDOW	ALUMINUM CLAD WOOD	NEW FIXED ALUMINUM CLAD WOOD WINDOW IN NEW OPENING
34	24" X 56"	DOUBLE-HUNG	NO WINDOW	ALUMINUM CLAD WOOD	NEW FIXED ALUMINUM CLAD WOOD WINDOW IN NEW OPENING
35	24" x 24"	FIXED	WOOD	WOOD	REFURBISH AND REPAIR EXISTING WOOD WINDOW

WINDOW GENERAL NOTES:

1. INTERIOR TRIM - SEE INTERIOR DESIGNER INFORMATION FOR CASING AND TRIM INFORMATION ON INTERIOR OF WINDOW.
2. NEW WINDOWS - REMOVE EXISTING WINDOWS AND REPLACE W/ ANDERSEN E-SERIES ALUMINUM CLAD WOOD WINDOW. EXTERIOR COLOR TO MATCH COLOR SYSTEM B, B19, BLACK OF THE DETROIT HISTORIC COMMISSION COLORS
3. EXTERIOR SURROUND - ANY EXISTING HISTORIC BRICK MOLD IS / EXTERIOR HISTORIC CASING IS TO REMAIN. IF A PORTION OF THE BRICK MOLD IS MISSING, PROVIDE NEW BRICK MOLD MATCHING EXISTING PROFILE.
4. WEATHERSTOPPING - PROVIDE CAULKING/SEALANTS TO MATCH THE WINDOW FRAME AND SASH COLOR AT EXTERIOR
5. PRESERVE EXISTING ARCHED WINDOW HEADS WHERE OCCURRING
6. WHERE OCCURRING ON SELECT WINDOWS WHERE INDICATED, MATCH EXISTING MUNTIN PROFILES AND PATTERN



3	03/13/25	HDC Revisions
2	09/29/25	Historic Commission
2	09/10/25	Permit Revisions
1	05/29/25	Window Updates

Date: Issued For:

Watson Residence
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 Detroit, Michigan 48201

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Project Number: 2024 - 02

Sheet Title:

WINDOW SCHEDULE

Sheet Number:

A9.00

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Ultimate Wood Double Hung

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Unit Features

Ultimate Double Hung: UWDH

Ultimate Double Hung Transom: UWDH TR

Ultimate Double Hung Picture: UWDH P

Operating Hardware:

- Sash lock and keeper: Open style crescent cam lock with sash release lever, surface mounted. Color: Satin Taupe.
 - Optional Colors: White, Brass, Satin chrome, Antique Brass, Bronze, Oil Rubbed Bronze, Satin Nickel, Matte Black.
- Balance System: Block and tackle balance system.
- Optional Sash lift: same colors as offered in locks.
- Optional window opening control device field applied.

Glass and Glazing:

- Glazing seal: Silicone glazed
- Standard glass is Insulating Low E2 Argon or air
- Dual-pane insulating glass thickness: 11/16"
- Triple-pane insulating glass thickness: 7/8"
- Insulating Glass Coatings:
 - Low E1
 - Low E2
 - Low E3
 - Low ERS
 - Low ELR
- Gas Fill: Air or Argon
- Available glass types:
 - Laminated
 - Tempered
 - Obscure
 - Clear
- Tints
 - Bronze
 - Gray
 - Green
 - Reflective Bronze
- Decorative glass options:
 - Frost
 - Reed
 - Narrow Reed
 - Rain
 - Sandblasted
 - Glue Chip
- Glazing will be altitude adjusted for higher elevations with capillary tubes. Argon gas not included
- IZ3 has annealed exterior pane is default with the option to temper
- Egress may be affected when selecting specialty glass, please contact your Marvin representative
- For additional specialty glazing options, please contact your Marvin representatives.

Egress and Vent Openings: Standard Sill

CN	Opening Width		Opening Height Std. Sill Liner		Egress Opening		CN	Opening Width		Opening Height Std. Sill Liner		Egress Opening	
	ft - in	mm	ft - in	mm	ft ²	m ²		ft - in	mm	ft - in	mm	ft ²	m ²
1612	1-5 55/64	(454)	0-10 9/64	(257)	1.26	(0.12)	2612	2-3 55/64	(708)	0-10 9/64	(257)	1.96	(0.18)
1614	1-5 55/64	(454)	1-0 9/64	(308)	1.51	(0.14)	2614	2-3 55/64	(708)	1-0 9/64	(308)	2.35	(0.22)
1616	1-5 55/64	(454)	1-2 9/64	(359)	1.75	(0.16)	2616	2-3 55/64	(708)	1-2 9/64	(359)	2.74	(0.25)
1618	1-5 55/64	(454)	1-4 9/64	(410)	2.00	(0.19)	2618	2-3 55/64	(708)	1-4 9/64	(410)	3.12	(0.29)
1620	1-5 55/64	(454)	1-6 9/64	(461)	2.25	(0.21)	2620	2-3 55/64	(708)	1-6 9/64	(461)	3.51	(0.33)
1622	1-5 55/64	(454)	1-8 9/64	(511)	2.50	(0.23)	2622	2-3 55/64	(708)	1-8 9/64	(511)	3.90	(0.36)
1624	1-5 55/64	(454)	1-10 9/64	(562)	2.75	(0.26)	2624	2-3 55/64	(708)	1-10 9/64	(562)	4.28	(0.40)
1626	1-5 55/64	(454)	2-0 9/64	(613)	2.99	(0.28)	2626	2-3 55/64	(708)	2-0 9/64	(613)	4.67	(0.43)
1628	1-5 55/64	(454)	2-2 9/64	(664)	3.24	(0.30)	2628	2-3 55/64	(708)	2-2 9/64	(664)	5.06	(0.47)
1630	1-5 55/64	(454)	2-4 9/64	(715)	3.49	(0.32)	2630	2-3 55/64	(708)	2-4 9/64	(715)	5.44	(0.51)
1632	1-5 55/64	(454)	2-6 9/64	(765)	3.74	(0.35)	2632 E	2-3 55/64	(708)	2-6 9/64	(765)	5.83	(0.54)
1634	1-5 55/64	(454)	2-8 9/64	(816)	3.99	(0.37)	2634 E	2-3 55/64	(708)	2-8 9/64	(816)	6.22	(0.58)
1636	1-5 55/64	(454)	2-10 9/64	(867)	4.24	(0.39)	2636 E	2-3 55/64	(708)	2-10 9/64	(867)	6.61	(0.61)
1640	1-5 55/64	(454)	3-2 9/64	(969)	4.73	(0.44)	2640 E	2-3 55/64	(708)	3-2 9/64	(969)	7.38	(0.69)
1642	1-5 55/64	(454)	3-4 9/64	(1019)	4.98	(0.46)	2642 E	2-3 55/64	(708)	3-4 9/64	(1019)	7.77	(0.72)
2012	1-9 55/64	(555)	0-10 9/64	(257)	1.54	(0.14)	2812	2-5 55/64	(759)	0-10 9/64	(257)	2.10	(0.20)
2014	1-9 55/64	(555)	1-0 9/64	(308)	1.84	(0.17)	2814	2-5 55/64	(759)	1-0 9/64	(308)	2.52	(0.23)
2016	1-9 55/64	(555)	1-2 9/64	(359)	2.15	(0.20)	2816	2-5 55/64	(759)	1-2 9/64	(359)	2.93	(0.27)
2018	1-9 55/64	(555)	1-4 9/64	(410)	2.45	(0.23)	2818	2-5 55/64	(759)	1-4 9/64	(410)	3.35	(0.31)
2020	1-9 55/64	(555)	1-6 9/64	(461)	2.75	(0.26)	2820	2-5 55/64	(759)	1-6 9/64	(461)	3.76	(0.35)
2022	1-9 55/64	(555)	1-8 9/64	(511)	3.06	(0.28)	2822	2-5 55/64	(759)	1-8 9/64	(511)	4.18	(0.39)
2024	1-9 55/64	(555)	1-10 9/64	(562)	3.36	(0.31)	2824	2-5 55/64	(759)	1-10 9/64	(562)	4.59	(0.43)
2026	1-9 55/64	(555)	2-0 9/64	(613)	3.67	(0.34)	2826	2-5 55/64	(759)	2-0 9/64	(613)	5.01	(0.47)
2028	1-9 55/64	(555)	2-2 9/64	(664)	3.97	(0.37)	2828	2-5 55/64	(759)	2-2 9/64	(664)	5.42	(0.50)
2030	1-9 55/64	(555)	2-4 9/64	(715)	4.27	(0.40)	2830 E	2-5 55/64	(759)	2-4 9/64	(715)	5.84	(0.54)
2032	1-9 55/64	(555)	2-6 9/64	(765)	4.58	(0.43)	2832 E	2-5 55/64	(759)	2-6 9/64	(765)	6.25	(0.58)
2034	1-9 55/64	(555)	2-8 9/64	(816)	4.88	(0.45)	2834 E	2-5 55/64	(759)	2-8 9/64	(816)	6.67	(0.62)
2036	1-9 55/64	(555)	2-10 9/64	(867)	5.18	(0.48)	2836 E	2-5 55/64	(759)	2-10 9/64	(867)	7.08	(0.66)
2040 E	1-9 55/64	(555)	3-2 9/64	(969)	5.79	(0.54)	2840 E	2-5 55/64	(759)	3-2 9/64	(969)	7.91	(0.73)
2042 E	1-9 55/64	(555)	3-4 9/64	(1019)	6.09	(0.57)	2842 E	2-5 55/64	(759)	3-4 9/64	(1019)	8.32	(0.77)
2412	2-1 55/64	(657)	0-10 9/64	(257)	1.82	(0.17)	3012	2-7 55/64	(809)	0-10 9/64	(257)	2.24	(0.21)
2414	2-1 55/64	(657)	1-0 9/64	(308)	2.18	(0.20)	3014	2-7 55/64	(809)	1-0 9/64	(308)	2.69	(0.25)
2416	2-1 55/64	(657)	1-2 9/64	(359)	2.54	(0.24)	3016	2-7 55/64	(809)	1-2 9/64	(359)	3.13	(0.29)
2418	2-1 55/64	(657)	1-4 9/64	(410)	2.90	(0.27)	3018	2-7 55/64	(809)	1-4 9/64	(410)	3.57	(0.33)
2420	2-1 55/64	(657)	1-6 9/64	(461)	3.26	(0.30)	3020	2-7 55/64	(809)	1-6 9/64	(461)	4.01	(0.37)
2422	2-1 55/64	(657)	1-8 9/64	(511)	3.62	(0.34)	3022	2-7 55/64	(809)	1-8 9/64	(511)	4.46	(0.41)
2424	2-1 55/64	(657)	1-10 9/64	(562)	3.98	(0.37)	3024	2-7 55/64	(809)	1-10 9/64	(562)	4.90	(0.46)
2426	2-1 55/64	(657)	2-0 9/64	(613)	4.34	(0.40)	3026	2-7 55/64	(809)	2-0 9/64	(613)	5.34	(0.50)
2428	2-1 55/64	(657)	2-2 9/64	(664)	4.69	(0.44)	3028 E	2-7 55/64	(809)	2-2 9/64	(664)	5.78	(0.54)
2430	2-1 55/64	(657)	2-4 9/64	(715)	5.05	(0.47)	3030 E	2-7 55/64	(809)	2-4 9/64	(715)	6.23	(0.58)
2432	2-1 55/64	(657)	2-6 9/64	(765)	5.41	(0.50)	3032 E	2-7 55/64	(809)	2-6 9/64	(765)	6.67	(0.62)
2434 E	2-1 55/64	(657)	2-8 9/64	(816)	5.77	(0.54)	3034 E	2-7 55/64	(809)	2-8 9/64	(816)	7.11	(0.66)
2436 E	2-1 55/64	(657)	2-10 9/64	(867)	6.13	(0.57)	3036 E	2-7 55/64	(809)	2-10 9/64	(867)	7.55	(0.70)
2440 E	2-1 55/64	(657)	3-2 9/64	(969)	6.85	(0.64)	3040 E	2-7 55/64	(809)	3-2 9/64	(969)	8.44	(0.78)
2442 E	2-1 55/64	(657)	3-4 9/64	(1019)	7.21	(0.67)	3042 E	2-7 55/64	(809)	3-4 9/64	(1019)	8.88	(0.83)

NOTE: Refer to Product Performance Chapter for International Building Code. Net Clear Opening drawings are pictured with the conversion tables.

Egress and Vent Openings: Standard Sill Liner

CN	Opening Width		Opening Height Std. Sill Liner		Egress Opening	
	ft - in	mm	ft - in	mm	ft ²	m ²
3212	2-9 55/64	(860)	0-10 9/64	(257)	2.38	(0.22)
3214	2-9 55/64	(860)	1-0 9/64	(308)	2.85	(0.27)
3216	2-9 55/64	(860)	1-2 9/64	(359)	3.32	(0.31)
3218	2-9 55/64	(860)	1-4 9/64	(410)	3.79	(0.35)
3220	2-9 55/64	(860)	1-6 9/64	(461)	4.27	(0.40)
3222	2-9 55/64	(860)	1-8 9/64	(511)	4.74	(0.44)
3224	2-9 55/64	(860)	1-10 9/64	(562)	5.21	(0.48)
3226	2-9 55/64	(860)	2-0 9/64	(613)	5.68	(0.53)
3228	E 2-9 55/64	(860)	2-2 9/64	(664)	6.15	(0.57)
3230	E 2-9 55/64	(860)	2-4 9/64	(715)	6.62	(0.61)
3232	E 2-9 55/64	(860)	2-6 9/64	(765)	7.09	(0.66)
3234	E 2-9 55/64	(860)	2-8 9/64	(816)	7.56	(0.70)
3236	E 2-9 55/64	(860)	2-10 9/64	(867)	8.03	(0.75)
3240	E 2-9 55/64	(860)	3-2 9/64	(969)	8.97	(0.83)
3242	E 2-9 55/64	(860)	3-4 9/64	(1019)	9.44	(0.88)
3612	3-1 55/64	(962)	0-10 9/64	(257)	2.67	(0.25)
3614	3-1 55/64	(962)	1-0 9/64	(308)	3.19	(0.30)
3616	3-1 55/64	(962)	1-2 9/64	(359)	3.72	(0.35)
3618	3-1 55/64	(962)	1-4 9/64	(410)	4.24	(0.39)
3620	3-1 55/64	(962)	1-6 9/64	(461)	4.77	(0.44)
3622	3-1 55/64	(962)	1-8 9/64	(511)	5.30	(0.49)
3624	3-1 55/64	(962)	1-10 9/64	(562)	5.82	(0.54)
3626	E 3-1 55/64	(962)	2-0 9/64	(613)	6.35	(0.59)
3628	E 3-1 55/64	(962)	2-2 9/64	(664)	6.87	(0.64)
3630	E 3-1 55/64	(962)	2-4 9/64	(715)	7.40	(0.69)
3632	E 3-1 55/64	(962)	2-6 9/64	(765)	7.92	(0.74)
3634	E 3-1 55/64	(962)	2-8 9/64	(816)	8.45	(0.79)
3636	E 3-1 55/64	(962)	2-10 9/64	(867)	8.98	(0.83)
3640	E 3-1 55/64	(962)	3-2 9/64	(969)	10.03	(0.93)
3642	E 3-1 55/64	(962)	3-4 9/64	(1019)	10.55	(0.98)
4012	3-5 55/64	(1063)	0-10 9/64	(257)	2.95	(0.27)
4014	3-5 55/64	(1063)	1-0 9/64	(308)	3.53	(0.33)
4016	3-5 55/64	(1063)	1-2 9/64	(359)	4.11	(0.38)
4018	3-5 55/64	(1063)	1-4 9/64	(410)	4.69	(0.44)
4020	3-5 55/64	(1063)	1-6 9/64	(461)	5.27	(0.49)
4022	3-5 55/64	(1063)	1-8 9/64	(511)	5.85	(0.54)
4024	3-5 55/64	(1063)	1-10 9/64	(562)	6.44	(0.60)
4026	E 3-5 55/64	(1063)	2-0 9/64	(613)	7.02	(0.65)
4028	E 3-5 55/64	(1063)	2-2 9/64	(664)	7.60	(0.71)
4030	E 3-5 55/64	(1063)	2-4 9/64	(715)	8.18	(0.76)
4032	E 3-5 55/64	(1063)	2-6 9/64	(765)	8.76	(0.81)
4034	E 3-5 55/64	(1063)	2-8 9/64	(816)	9.34	(0.87)
4036	E 3-5 55/64	(1063)	2-10 9/64	(867)	9.92	(0.92)

NOTE: Refer to Product Performance Chapter for International Building Code. Net Clear Opening drawings are pictured with the conversion tables.

Egress and Vent Openings: High Performance Sill Liner

CN	Opening Width		Opening Height HP Sill Liner		Egress Opening		CN	Opening Width		Opening Height HP Sill Liner		Egress Opening	
	ft - in	mm	ft - in	mm	ft ²	m ²		ft - in	mm	ft - in	mm	ft ²	m ²
1612	1-5 55/64	(454)	0-9 17/64	(235)	1.15	(0.11)	2612	2-3 55/64	(708)	0-9 17/64	(235)	1.79	(0.17)
1614	1-5 55/64	(454)	0-11 17/64	(286)	1.40	(0.13)	2614	2-3 55/64	(708)	0-11 17/64	(286)	2.18	(0.20)
1616	1-5 55/64	(454)	1-1 17/64	(337)	1.65	(0.15)	2616	2-3 55/64	(708)	1-1 17/64	(337)	2.57	(0.24)
1618	1-5 55/64	(454)	1-3 17/64	(388)	1.89	(0.18)	2618	2-3 55/64	(708)	1-3 17/64	(388)	2.95	(0.27)
1620	1-5 55/64	(454)	1-5 17/64	(438)	2.14	(0.20)	2620	2-3 55/64	(708)	1-5 17/64	(438)	3.34	(0.31)
1622	1-5 55/64	(454)	1-7 17/64	(489)	2.39	(0.22)	2622	2-3 55/64	(708)	1-7 17/64	(489)	3.73	(0.35)
1624	1-5 55/64	(454)	1-9 17/64	(540)	2.64	(0.25)	2624	2-3 55/64	(708)	1-9 17/64	(540)	4.11	(0.38)
1626	1-5 55/64	(454)	1-11 17/64	(591)	2.89	(0.27)	2626	2-3 55/64	(708)	1-11 17/64	(591)	4.50	(0.42)
1628	1-5 55/64	(454)	2-1 17/64	(642)	3.13	(0.29)	2628	2-3 55/64	(708)	2-1 17/64	(642)	4.89	(0.45)
1630	1-5 55/64	(454)	2-3 17/64	(692)	3.38	(0.31)	2630	2-3 55/64	(708)	2-3 17/64	(692)	5.28	(0.49)
1632	1-5 55/64	(454)	2-5 17/64	(743)	3.63	(0.34)	2632	2-3 55/64	(708)	2-5 17/64	(743)	5.66	(0.53)
1634	1-5 55/64	(454)	2-7 17/64	(794)	3.88	(0.36)	2634 E	2-3 55/64	(708)	2-7 17/64	(794)	6.05	(0.56)
1636	1-5 55/64	(454)	2-9 17/64	(845)	4.13	(0.38)	2636 E	2-3 55/64	(708)	2-9 17/64	(845)	6.44	(0.60)
1640	1-5 55/64	(454)	3-1 17/64	(946)	4.62	(0.43)	2640 E	2-3 55/64	(708)	3-1 17/64	(946)	7.21	(0.67)
1642	1-5 55/64	(454)	3-3 17/64	(997)	4.87	(0.45)	2642 E	2-3 55/64	(708)	3-3 17/64	(997)	7.60	(0.71)
2012	1-9 55/64	(555)	0-9 17/64	(235)	1.41	(0.13)	2812	2-5 55/64	(759)	0-9 17/64	(235)	1.92	(0.18)
2014	1-9 55/64	(555)	0-11 17/64	(286)	1.71	(0.16)	2814	2-5 55/64	(759)	0-11 17/64	(286)	2.34	(0.22)
2016	1-9 55/64	(555)	1-1 17/64	(337)	2.01	(0.19)	2816	2-5 55/64	(759)	1-1 17/64	(337)	2.75	(0.26)
2018	1-9 55/64	(555)	1-3 17/64	(388)	2.32	(0.22)	2818	2-5 55/64	(759)	1-3 17/64	(388)	3.17	(0.29)
2020	1-9 55/64	(555)	1-5 17/64	(438)	2.62	(0.24)	2820	2-5 55/64	(759)	1-5 17/64	(438)	3.58	(0.33)
2022	1-9 55/64	(555)	1-7 17/64	(489)	2.92	(0.27)	2822	2-5 55/64	(759)	1-7 17/64	(489)	3.99	(0.37)
2024	1-9 55/64	(555)	1-9 17/64	(540)	3.23	(0.30)	2824	2-5 55/64	(759)	1-9 17/64	(540)	4.41	(0.41)
2026	1-9 55/64	(555)	1-11 17/64	(591)	3.53	(0.33)	2826	2-5 55/64	(759)	1-11 17/64	(591)	4.82	(0.45)
2028	1-9 55/64	(555)	2-1 17/64	(642)	3.84	(0.36)	2828	2-5 55/64	(759)	2-1 17/64	(642)	5.24	(0.49)
2030	1-9 55/64	(555)	2-3 17/64	(692)	4.14	(0.38)	2830	2-5 55/64	(759)	2-3 17/64	(692)	5.65	(0.53)
2032	1-9 55/64	(555)	2-5 17/64	(743)	4.44	(0.41)	2832 E	2-5 55/64	(759)	2-5 17/64	(743)	6.07	(0.56)
2034	1-9 55/64	(555)	2-7 17/64	(794)	4.75	(0.44)	2834 E	2-5 55/64	(759)	2-7 17/64	(794)	6.48	(0.60)
2036	1-9 55/64	(555)	2-9 17/64	(845)	5.05	(0.47)	2836 E	2-5 55/64	(759)	2-9 17/64	(845)	6.90	(0.64)
2040	1-9 55/64	(555)	3-1 17/64	(946)	5.66	(0.53)	2840 E	2-5 55/64	(759)	3-1 17/64	(946)	7.73	(0.72)
2042 E	1-9 55/64	(555)	3-3 17/64	(997)	5.96	(0.55)	2842 E	2-5 55/64	(759)	3-3 17/64	(997)	8.14	(0.76)
2412	2-1 55/64	(657)	0-9 17/64	(235)	1.66	(0.15)	3012	2-7 55/64	(809)	0-9 17/64	(235)	2.05	(0.19)
2414	2-1 55/64	(657)	0-11 17/64	(286)	2.02	(0.19)	3014	2-7 55/64	(809)	0-11 17/64	(286)	2.49	(0.23)
2416	2-1 55/64	(657)	1-1 17/64	(337)	2.38	(0.22)	3016	2-7 55/64	(809)	1-1 17/64	(337)	2.93	(0.27)
2418	2-1 55/64	(657)	1-3 17/64	(388)	2.74	(0.25)	3018	2-7 55/64	(809)	1-3 17/64	(388)	3.38	(0.31)
2420	2-1 55/64	(657)	1-5 17/64	(438)	3.10	(0.29)	3020	2-7 55/64	(809)	1-5 17/64	(438)	3.82	(0.35)
2422	2-1 55/64	(657)	1-7 17/64	(489)	3.46	(0.32)	3022	2-7 55/64	(809)	1-7 17/64	(489)	4.26	(0.40)
2424	2-1 55/64	(657)	1-9 17/64	(540)	3.82	(0.35)	3024	2-7 55/64	(809)	1-9 17/64	(540)	4.70	(0.44)
2426	2-1 55/64	(657)	1-11 17/64	(591)	4.18	(0.39)	3026	2-7 55/64	(809)	1-11 17/64	(591)	5.15	(0.48)
2428	2-1 55/64	(657)	2-1 17/64	(642)	4.54	(0.42)	3028	2-7 55/64	(809)	2-1 17/64	(642)	5.59	(0.52)
2430	2-1 55/64	(657)	2-3 17/64	(692)	4.90	(0.45)	3030 E	2-7 55/64	(809)	2-3 17/64	(692)	6.03	(0.56)
2432	2-1 55/64	(657)	2-5 17/64	(743)	5.26	(0.49)	3032 E	2-7 55/64	(809)	2-5 17/64	(743)	6.48	(0.60)
2434	2-1 55/64	(657)	2-7 17/64	(794)	5.62	(0.52)	3034 E	2-7 55/64	(809)	2-7 17/64	(794)	6.92	(0.64)
2436 E	2-1 55/64	(657)	2-9 17/64	(845)	5.97	(0.56)	3036 E	2-7 55/64	(809)	2-9 17/64	(845)	7.36	(0.68)
2440 E	2-1 55/64	(657)	3-1 17/64	(946)	6.69	(0.62)	3040 E	2-7 55/64	(809)	3-1 17/64	(946)	8.25	(0.77)
2442 E	2-1 55/64	(657)	3-3 17/64	(997)	7.05	(0.66)	3042 E	2-7 55/64	(809)	3-3 17/64	(997)	8.69	(0.81)

NOTE: Refer to Product Performance Chapter for International Building Code. Net Clear Opening drawings are pictured with the conversion tables.

Egress and Vent Openings: High Performance Sill Liner

CN	Opening Width		Opening Height HP Sill Liner		Egress Opening	
	ft - in	mm	ft - in	mm	ft ²	m ²
3212	2-9 55/64	(860)	0-9 17/64	(235)	2.18	(0.20)
3214	2-9 55/64	(860)	0-11 17/64	(286)	2.65	(0.25)
3216	2-9 55/64	(860)	1-1 17/64	(337)	3.12	(0.29)
3218	2-9 55/64	(860)	1-3 17/64	(388)	3.59	(0.33)
3220	2-9 55/64	(860)	1-5 17/64	(438)	4.06	(0.38)
3222	2-9 55/64	(860)	1-7 17/64	(489)	4.53	(0.42)
3224	2-9 55/64	(860)	1-9 17/64	(540)	5.00	(0.46)
3226	2-9 55/64	(860)	1-11 17/64	(591)	5.47	(0.51)
3228 E	2-9 55/64	(860)	2-1 17/64	(642)	5.94	(0.55)
3230 E	2-9 55/64	(860)	2-3 17/64	(692)	6.41	(0.60)
3232 E	2-9 55/64	(860)	2-5 17/64	(743)	6.88	(0.64)
3234 E	2-9 55/64	(860)	2-7 17/64	(794)	7.35	(0.68)
3236 E	2-9 55/64	(860)	2-9 17/64	(845)	7.82	(0.73)
3240 E	2-9 55/64	(860)	3-1 17/64	(946)	8.76	(0.81)
3242 E	2-9 55/64	(860)	3-3 17/64	(997)	9.23	(0.86)
3612	3-1 55/64	(962)	0-9 17/64	(235)	2.44	(0.23)
3614	3-1 55/64	(962)	0-11 17/64	(286)	2.96	(0.28)
3616	3-1 55/64	(962)	1-1 17/64	(337)	3.49	(0.32)
3618	3-1 55/64	(962)	1-3 17/64	(388)	4.01	(0.37)
3620	3-1 55/64	(962)	1-5 17/64	(438)	4.54	(0.42)
3622	3-1 55/64	(962)	1-7 17/64	(489)	5.06	(0.47)
3624	3-1 55/64	(962)	1-9 17/64	(540)	5.59	(0.52)
3626	3-1 55/64	(962)	1-11 17/64	(591)	6.12	(0.57)
3628 E	3-1 55/64	(962)	2-1 17/64	(642)	6.64	(0.62)
3630 E	3-1 55/64	(962)	2-3 17/64	(692)	7.17	(0.67)
3632 E	3-1 55/64	(962)	2-5 17/64	(743)	7.69	(0.71)
3634 E	3-1 55/64	(962)	2-7 17/64	(794)	8.22	(0.76)
3636 E	3-1 55/64	(962)	2-9 17/64	(845)	8.75	(0.81)
3640 E	3-1 55/64	(962)	3-1 17/64	(946)	9.80	(0.91)
3642 E	3-1 55/64	(962)	3-3 17/64	(997)	10.32	(0.96)
4012	3-5 55/64	(1063)	0-9 17/64	(235)	2.69	(0.25)
4014	3-5 55/64	(1063)	0-11 17/64	(286)	3.27	(0.30)
4016	3-5 55/64	(1063)	1-1 17/64	(337)	3.86	(0.36)
4018	3-5 55/64	(1063)	1-3 17/64	(388)	4.44	(0.41)
4020	3-5 55/64	(1063)	1-5 17/64	(438)	5.02	(0.47)
4022	3-5 55/64	(1063)	1-7 17/64	(489)	5.60	(0.52)
4024	3-5 55/64	(1063)	1-9 17/64	(540)	6.18	(0.57)
4026	3-5 55/64	(1063)	1-11 17/64	(591)	6.76	(0.63)
4028 E	3-5 55/64	(1063)	2-1 17/64	(642)	7.34	(0.68)
4030 E	3-5 55/64	(1063)	2-3 17/64	(692)	7.93	(0.74)
4032 E	3-5 55/64	(1063)	2-5 17/64	(743)	8.51	(0.79)
4034 E	3-5 55/64	(1063)	2-7 17/64	(794)	9.09	(0.84)
4036 E	3-5 55/64	(1063)	2-9 17/64	(845)	9.67	(0.90)

NOTE: Refer to Product Performance Chapter for International Building Code. Net Clear Opening drawings are pictured with the conversion tables.

Daylight Measurements: Double Hung

Ultimate Wood Double Hung Daylight Measurements			Width										
			CN	16		20		24		26		28	
			DLO	1-2 15/16	(379)	1-6 15/16	(481)	1-10 15/16	(583)	2-0 15/16	(633)	2-2 15/16	(684)
CN	DLO Height		Square Feet (Square Meters)										
12	0-10 15/16	(278)	1.13	(0.11)	1.44	(0.13)	1.74	(0.16)	1.89	(0.18)	2.05	(0.19)	
14	1-0 15/16	(329)	1.34	(0.12)	1.70	(0.16)	2.06	(0.19)	2.24	(0.21)	2.42	(0.22)	
16	1-2 15/16	(379)	1.55	(0.14)	1.96	(0.18)	2.38	(0.22)	2.59	(0.24)	2.79	(0.26)	
18	1-4 15/16	(430)	1.76	(0.16)	2.23	(0.21)	2.70	(0.25)	2.93	(0.27)	3.17	(0.29)	
20	1-6 15/16	(481)	1.96	(0.18)	2.49	(0.23)	3.02	(0.28)	3.28	(0.30)	3.54	(0.33)	
22	1-8 15/16	(532)	2.17	(0.20)	2.75	(0.26)	3.33	(0.31)	3.63	(0.34)	3.92	(0.36)	
24	1-10 15/16	(583)	2.38	(0.22)	3.02	(0.28)	3.65	(0.34)	3.97	(0.37)	4.29	(0.40)	
26	2-0 15/16	(633)	2.59	(0.24)	3.28	(0.30)	3.97	(0.37)	4.32	(0.40)	4.66	(0.43)	
28	2-2 15/16	(684)	2.79	(0.26)	3.54	(0.33)	4.29	(0.40)	4.66	(0.43)	5.04	(0.47)	
30	2-4 15/16	(735)	3.00	(0.28)	3.81	(0.35)	4.61	(0.43)	5.01	(0.47)	5.41	(0.50)	
32	2-6 15/16	(786)	3.21	(0.30)	4.07	(0.38)	4.93	(0.46)	5.36	(0.50)	5.79	(0.54)	
34	2-8 15/16	(837)	3.42	(0.32)	4.33	(0.40)	5.25	(0.49)	5.70	(0.53)	6.16	(0.57)	
36	2-10 15/16	(887)	3.62	(0.34)	4.59	(0.43)	5.57	(0.52)	6.05	(0.56)	6.54	(0.61)	
40	3-2 15/16	(989)	4.04	(0.38)	5.12	(0.48)	6.20	(0.58)	6.74	(0.63)	7.28	(0.68)	
42	3-4 15/16	(1040)	4.25	(0.39)	5.38	(0.50)	6.52	(0.61)	7.09	(0.66)	7.66	(0.71)	

Ultimate Wood Double Hung Daylight Measurements			Width								
			CN	30		32		36		40	
			DLO	2-4 15/16	(735)	2-6 15/16	(786)	2-10 15/16	(887)	3-2 15/16	(989)
CN	DLO Height		Square Feet (Square Meters)								
12	0-10 15/16	(278)	2.20	(0.20)	2.35	(0.22)	2.65	(0.25)	2.96	(0.27)	
14	1-0 15/16	(329)	2.60	(0.24)	2.78	(0.26)	3.14	(0.29)	3.50	(0.32)	
16	1-2 15/16	(379)	3.00	(0.28)	3.21	(0.30)	3.62	(0.34)	4.04	(0.38)	
18	1-4 15/16	(430)	3.40	(0.32)	3.64	(0.34)	4.11	(0.38)	4.58	(0.43)	
20	1-6 15/16	(481)	3.81	(0.35)	4.07	(0.38)	4.59	(0.43)	5.12	(0.48)	
22	1-8 15/16	(532)	4.21	(0.39)	4.50	(0.42)	5.08	(0.47)	5.66	(0.53)	
24	1-10 15/16	(583)	4.61	(0.43)	4.93	(0.46)	5.56	(0.52)	6.20	(0.58)	
26	2-0 15/16	(633)	5.01	(0.47)	5.36	(0.50)	6.05	(0.56)	6.74	(0.63)	
28	2-2 15/16	(684)	5.41	(0.50)	5.79	(0.54)	6.54	(0.61)	7.28	(0.68)	
30	2-4 15/16	(735)	5.81	(0.54)	6.22	(0.58)	7.02	(0.65)	7.82	(0.73)	
32	2-6 15/16	(786)	6.22	(0.58)	6.65	(0.62)	7.51	(0.70)	8.37	(0.78)	
34	2-8 15/16	(837)	6.62	(0.61)	7.08	(0.66)	7.99	(0.74)	8.91	(0.83)	
36	2-10 15/16	(887)	7.02	(0.65)	7.51	(0.70)	8.48	(0.79)	9.45	(0.88)	
40	3-2 15/16	(989)	7.82	(0.73)	8.37	(0.78)	9.45	(0.88)	N/A		
42	3-4 15/16	(1040)	8.23	(0.76)	8.79	(0.82)	9.93	(0.92)	N/A		

NOTE: Daylight Opening square footage values are "per sash."

Daylight Measurements: Transom and Pictures

Ultimate Wood Double Hung Transom Daylight Measurements			Width						
			CN	16		20		24	
			DLO	1-2 15/16 (379)		1-6 15/16 (481)		1-10 15/16 (583)	
CN	DLO Height		Square Feet (Square Meters)						
12	0-10 15/16 (278)		1.13 (0.11)	1.44 (0.13)	1.74 (0.16)				
20	1-6 15/16 (481)		1.96 (0.18)	2.49 (0.23)	3.02 (0.28)				

Ultimate Wood Double Double Hung Transom Daylight Measurements			Width						
			CN	26		28		30	
			DLO	2-0 15/16 (633)		2-2 15/16 (684)		2-4 15/16 (735)	
CN	DLO Height		Square Feet (Square Meters)						
12	0-10 15/16 (278)		1.89 (0.18)	2.05 (0.19)	2.20 (0.20)				
20	1-6 15/16 (481)		3.28 (0.30)	3.54 (0.33)	3.81 (0.35)				

Ultimate Wood Double Double Hung Transom Daylight Measurements			Width						
			CN	32		36		40	
			DLO	2-6 15/16 (786)		2-10 15/16 (887)		3-2 15/16 (989)	
CN	DLO Height		Square Feet (Square Meters)						
12	0-10 15/16 (278)		2.35 (0.22)	2.65 (0.25)	2.96 (0.27)				
20	1-6 15/16 (481)		4.07 (0.38)	4.59 (0.43)	5.12 (0.48)				

Ultimate Wood Double Hung Picture Daylight Measurements			Width											
			CN	40		48		52		60		68		
			DLO	2-10 15/16 (887)		3-6 15/16 (1091)		3-10 15/16 (1192)		4-6 15/16 (1395)		5-2 15/16 (1599)		
CN	DLO Height		Square Feet (Square Meters)											
38	2-8 1/4 (819)		7.82 (0.73)	9.62 (0.89)	10.51 (0.98)	12.30 (1.14)	14.10 (1.31)							
42	3-0 1/4 (921)		8.80 (0.82)	10.81 (1.00)	11.82 (1.10)	13.83 (1.28)	15.84 (1.47)							
46	3-4 1/4 (1022)		9.77 (0.91)	12.00 (1.12)	13.12 (1.22)	15.36 (1.43)	17.59 (1.63)							
50	3-8 1/4 (1124)		10.74 (1.00)	13.19 (1.23)	14.42 (1.34)	16.88 (1.57)	19.34 (1.80)							
54	4-0 1/4 (1226)		11.71 (1.09)	14.39 (1.34)	15.73 (1.46)	18.41 (1.71)	21.09 (1.96)							
58	4-4 1/4 (1327)		12.68 (1.18)	15.58 (1.45)	17.03 (1.58)	19.93 (1.85)	22.84 (2.12)							
62	4-8 1/4 (1429)		13.65 (1.27)	16.77 (1.56)	18.34 (1.70)	21.46 (1.99)	24.59 (2.28)							
66	5-0 1/4 (1530)		14.62 (1.36)	17.97 (1.67)	19.64 (1.82)	22.99 (2.14)	26.33 (2.45)							
70	5-4 1/4 (1632)		15.59 (1.45)	19.16 (1.78)	20.94 (1.95)	24.51 (2.28)	28.08 (2.61)							
74	5-8 1/4 (1734)		16.56 (1.54)	20.35 (1.89)	22.25 (2.07)	26.04 (2.42)	29.83 (2.77)							
78	6-0 1/4 (1835)		17.53 (1.63)	21.54 (2.00)	23.55 (2.19)	27.56 (2.56)	31.58 (2.93)							
86	6-8 1/4 (2038)		19.47 (1.81)	23.93 (2.22)	26.16 (2.43)	30.62 (2.84)	35.07 (3.26)							
90	7-0 1/4 (2140)		20.44 (1.90)	25.12 (2.33)	27.46 (2.55)	32.14 (2.99)	36.82 (3.42)							



Minimum and Maximum Guidelines: Double Hung Units

Minimum and Maximum Guidelines											
Unit Type		Min Frame Size				Max Frame Size				Max Glass Size	
		Width		Height		Width		Height			
		in	mm	in	mm	in	mm	in	mm	Sq. Feet	Sq. Meters
UWDH	11/16" (18) IG	13 3/8	(340)	25	(635)	45 3/8	(1153)	97	(2464)	11	1.022
UWDH	7/8" (22) Tripane	13 3/8	(340)	25	(635)	45 3/8	(1153)	97	(2464)	7	0.650
UWDHTR	11/16" (18) IG	13 3/8	(340)	13 3/8	(340)	104	(2642)	59 1/2	(1511)	25	2.323
UWDHP	1" (25) IG	13 3/8	(340)	15 9/16	(395)	120	(3048)	120	(3048)	49	4.552



Certified Sizes and Ratings: Double Hung Units

Product	Air Tested to psf	Water Tested to psf	Structural Tested to psf	Certification Rating	Design Pressure (DP)	Overall Width		Overall Height	
						in	mm	in	mm
UWDH 3036	1.57	6	60	LC-PG40-H	40	35 3/8	(899)	81	(2057)
UWDH 3644	1.57	6	60	LC-PG40-H	40	41 3/8	(1051)	97	(2464)
UWDH HP3644	1.57	8.25	60	LC-PG40-H	40	41 3/8	(1051)	97	(2464)
UWDH 4026	1.57	6	60	LC-PG40-H	40	45 3/8	(1153)	61	(1549)
UWDH 4036	1.57	6	45	LC-PG40-H	40	45 3/8	(1153)	81	(2057)
UWDHHP 4036	1.57	8.25	60	LC-PG40-H	40	45 3/8	(1153)	81	(2057)
UWDHHP 2830	1.57	7.5	75	LC-PG50-H	50	33 3/8	(848)	69	(1753)



IZ3 - Minimum and Maximum Guidelines, Certified Sizes and Ratings

Product	Air Tested to psf	Water Tested to psf	Structural Tested to psf	Certification Rating	Design Pressure (DP)	Overall Width		Overall Height	
						in	mm	in	mm
UWDHIZ3 3234	1.57	8.25	82.5	LC-PG55-H	+55/-65	37 3/8	(949)	77	(1956)
UWDHIZ3 4026	1.57	8.25	82.5	LC-PG55-H	+55/-65	45 3/8	(1153)	61	(1549)
UWDHPIZ3	1.57	8.25	82.5	CW-PG55-FW	+55/-65	60	(1524)	106 15/16	(2716)

Impact Zone 3 - Minimum and Maximum Guidelines, Certified Sizes and Ratings

Impact Glazing Zone 3 (IZ3):

Frame:

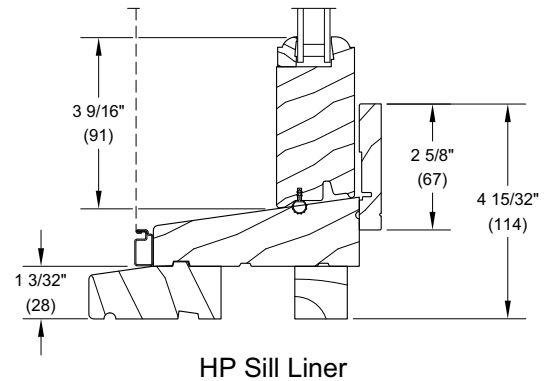
- Sealant added at sill liner
- Sill brackets added for bottom sash retention
- Screws through the jamb liner to reinforce the frame

Sash:

- Top check rail has different profile for interlock
- Bottom check rail has profile for interlock
- Painted stainless steel stamped interlock for top sash for sash retention
- Mil finish stainless steel stamped interlock for bottom sash retention
- End plate with over molded stainless steel tilt latch blade
- Long cladding clip screws through it at check rail to reinforce stiles
- Stainless steel tilt pins for sash retention
- Different check rail cladding connector profile for interlock
- Keeper insert to keep lock from disengaging during impact

Glazing:

- PVC tube in check rail to reinforce check rail and to protect tilt cord from sealant
- Backfilled with Dow 995 silicone sealant
- Interior glass used is laminated with a PVB inner layer
- Exterior glass is standard annealed. All CUDH operator sizes certified are OK with annealed glass. Optional tempered glass is available
- Simulated Divided Lites are available on IZ3 products
- Grilles Between the Glass are not available in IZ3 unit



Measurement Conversions

Double Hung Operating Unit						
Unit Measurements		Width		Height		
From	To					
Rough Opening		in	mm		in	mm
OM of Frame	Rough Opening	+ 1	(25)		+ 1/2	(13)
Masonry Opening w/BMC	Rough Opening	-2 1/8	(54)		-1 1/16	(27)
Top Sash		in	mm		in	mm
OM of Frame	OM of Top Sash	-2 29/32	(74)	+ 2	-1 11/16	(43)
Bottom Sash		in	mm		in	mm
OM of Frame	OM of Bottom Sash	-2 29/32	(74)	+ 2	+ 1/8	(03)
Glass		in	mm		in	mm
Daylight Opening	Glass	+ 1 1/16	(27)		+ 1 1/16	(27)
Screen		in	mm		in	mm
OM of Frame	OM of Screen	-1 1/2	(38)		-1 7/8	(48)
Daylight Opening	OM of Screen	+ 4 15/16	(125)	× 2	+ 9 9/32	(236)
Half Screen		in	mm		in	mm
OM of Frame	OM of Screen	-1 1/2	(38)	+ 2	+ 1/4	(06)
Daylight Opening	OM of Screen	+ 4 15/16	(125)		+ 5 13/16	(148)
Combination		in	mm		in	mm
OM of Frame	OM of Combination	-1 1/2	(38)		-1 11/16	(43)
Daylight Opening	OM of Combination	+ 4 15/16	(125)	× 2	+ 9 7/16	(240)

NOTE: The following formula will properly size a standard cottage style double hung:

Formula

1. Select the standard size double hung that will fit the rough opening
2. Add the top and the bottom glass heights together
3. Divide the total glass height by the ration of the top sash
4. Round to the nearest standard glass height
5. Subtract from the total glass height

Example

1. UWDH with a 2/5 - 3/5 cottage style. If the rough opening is 2'-6 3/8" x 4'-8 7/8" (RO for a UWDH 2424)
2. 24" + 24" = 48"
3. 48" divide by 2/5 (0.4) = 19 13/64 (20)
4. 48" - 20" = 28"

The top sash will be a 2420 and the bottom sash will be a 2428. The call number for the example is: UWDH 2420/28.

Measurement Conversions

Double Hung Transoms with Subsill					
Unit Measurements		Width		Height	
From	To				
Rough Opening		in	mm	in	mm
OM of Frame	Rough Opening	+ 1	(25)	+ 1/2	(13)
Masonry Opening w/BMC	Rough Opening	-2 1/8	(54)	-1 1/16	(27)
Sash		in	mm	in	mm
OM of Frame	OM of Sash	-2 29/32	(74)	-2 1/8	(54)
Daylight Opening	OM of Sash	+ 3 17/32	(90)	+ 4 11/32	(110)
Glass		in	mm	in	mm
Daylight Opening	Glass	+ 1 1/16	(27)	+ 1 1/16	(27)

Double Hung Picture					
Unit Measurements		Width		Height	
From	To				
Rough Opening		in	mm	in	mm
OM of Frame	Rough Opening	+ 1	(25)	+ 1/2	(13)
Masonry Opening w/BMC	Rough Opening	-2 1/8	(54)	-1 1/16	(27)
Sash		in	mm	in	mm
OM of Frame	OM of Sash	-1 9/16	(40)	-3 3/32	(79)
Daylight Opening	OM of Sash	+ 4 7/8	(124)	+ 5 21/32	(144)
Glass		in	mm	in	mm
Daylight Opening	Glass	+ 1 1/16	(27)	+ 1 1/16	(27)

Egress Formulas for Double Hung

Clear Opening:

- Clear Opening Width = Frame OM Width - 5 1/2" (140)

Units with Standard Sill Liner

- Clear Opening Height = (Frame OM Height* / 2) - 6 3/8" (162)

Units with High Performance Sill Liner

- Clear Opening Height = (Frame OM Height* / 2) - 7 1/4" (184)

*including subsill

Vent Opening

- Vent Opening Width = Jamb to Jamb Width
- Vent Opening Height = Top of sill liner to btm of btm sash fully opened
- Vent Width * Vent Height / 144



Standard Unit Measurements: Double Hung

Standard Double Hung Unit Measurements								
Width								
CN	Masonry Opening		Rough Opening		Frame Size		Daylight Opening	
	ft - in	mm	ft - in	mm	ft - in	mm	ft - in	mm
16	2-0 1/2	(622)	1-10 3/8	(568)	1-9 3/8	(543)	1-2 15/16	(379)
20	2-4 1/2	(724)	2-2 3/8	(670)	2-1 3/8	(645)	1-6 15/16	(481)
24	2-8 1/2	(826)	2-6 3/8	(772)	2-5 3/8	(746)	1-10 15/16	(583)
26	2-10 1/2	(876)	2-8 3/8	(822)	2-7 3/8	(797)	2-0 15/16	(633)
28	3-0 1/2	(927)	2-10 3/8	(873)	2-9 3/8	(848)	2-2 15/16	(684)
30	3-2 1/2	(978)	3-0 3/8	(924)	2-11 3/8	(899)	2-4 15/16	(735)
32	3-4 1/2	(1029)	3-2 3/8	(975)	3-1 3/8	(949)	2-6 15/16	(786)
36	3-8 1/2	(1130)	3-6 3/8	(1076)	3-5 3/8	(1051)	2-10 15/16	(887)
40	4-0 1/2	(1232)	3-10 3/8	(1178)	3-9 3/8	(1153)	3-2 15/16	(989)

Standard Double Hung Unit Measurements								
Height								
CN	Masonry Opening		Rough Opening		Frame Size (w/subsill)		Daylight Opening	
	ft - in	mm	ft - in	mm	ft-in	mm	ft - in	mm
12	2-10 9/16	(878)	2-9 1/2	(851)	2-9	(838)	0-10 15/16	(278)
14	3-2 9/16	(980)	3-1 1/2	(953)	3-1	(940)	1-0 15/16	(329)
16	3-6 9/16	(1081)	3-5 1/2	(1054)	3-5	(1041)	1-2 15/16	(379)
18	3-10 9/16	(1183)	3-9 1/2	(1156)	3-9	(1143)	1-4 15/16	(430)
20	4-2 9/16	(1284)	4-1 1/2	(1257)	4-1	(1245)	1-6 15/16	(481)
22	4-6 9/16	(1386)	4-5 1/2	(1359)	4-5	(1346)	1-8 15/16	(532)
24	4-10 9/16	(1488)	4-9 1/2	(1461)	4-9	(1448)	1-10 15/16	(583)
26	5-2 9/16	(1589)	5-1 1/2	(1562)	5-1	(1549)	2-0 15/16	(633)
28	5-6 9/16	(1691)	5-5 1/2	(1664)	5-5	(1651)	2-2 15/16	(684)
30	5-10 9/16	(1792)	5-9 1/2	(1765)	5-9	(1753)	2-4 15/16	(735)
32	6-2 9/16	(1894)	6-1 1/2	(1867)	6-1	(1854)	2-6 15/16	(786)
34	6-6 9/16	(1996)	6-5 1/2	(1969)	6-5	(1956)	2-8 15/16	(837)
36	6-10 9/16	(2097)	6-9 1/2	(2070)	6-9	(2057)	2-10 15/16	(887)
40	7-6 9/16	(2300)	7-5 1/2	(2273)	7-5	(2261)	3-2 15/16	(989)
42	7-10 9/16	(2402)	7-9 1/2	(2375)	7-9	(2362)	3-4 15/16	(1040)



Standard Unit Measurements: Transom/Picture

Standard Double Hung Transom Unit Measurements								
Width								
CN	Masonry Opening		Rough Opening		Frame Size		Daylight Opening	
	ft - in	mm	ft - in	mm	ft - in	mm	ft - in	mm
16	2-0 1/2	(622)	1-10 3/8	(568)	1-9 3/8	(543)	1-2 15/16	(379)
20	2-4 1/2	(724)	2-2 3/8	(670)	2-1 3/8	(645)	1-6 15/16	(481)
24	2-8 1/2	(826)	2-6 3/8	(772)	2-5 3/8	(746)	1-10 15/16	(583)
26	2-10 1/2	(876)	2-8 3/8	(822)	2-7 3/8	(797)	2-0 15/16	(633)
28	3-0 1/2	(927)	2-10 3/8	(873)	2-9 3/8	(848)	2-2 15/16	(684)
30	3-2 1/2	(978)	3-0 3/8	(924)	2-11 3/8	(899)	2-4 15/16	(735)
32	3-4 1/2	(1029)	3-2 3/8	(975)	3-1 3/8	(949)	2-6 15/16	(786)
36	3-8 1/2	(1130)	3-6 3/8	(1076)	3-5 3/8	(1051)	2-10 15/16	(887)
40	4-0 1/2	(1232)	3-10 3/8	(1178)	3-9 3/8	(1153)	3-2 15/16	(989)

Standard Double Hung Transom Unit Measurements								
Height								
CN	Masonry Opening		Rough Opening		Frame Size (no subsill)		Daylight Opening	
	ft - in	mm	ft - in	mm	ft - in	mm	ft - in	mm
12	1-6 15/16	(481)	1-5 7/8	(454)	1-5 3/8	(441)	0-10 15/16	(278)
20	2-2 15/16	(684)	2-1 7/8	(657)	2-1 3/8	(645)	1-6 15/16	(481)

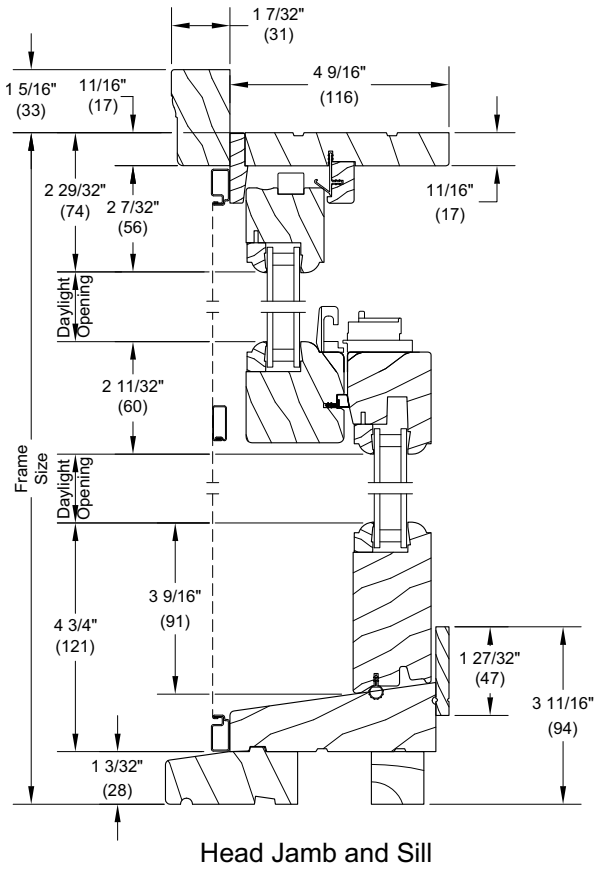
Standard Double Hung Picture Unit Measurements								
Width								
CN	Masonry Opening		Rough Opening		Frame Size		Daylight Opening	
	ft - in	mm	ft - in	mm	ft - in	mm	ft - in	mm
40	3-8 1/2	(1130)	3-6 3/8	(1076)	3-5 3/8	(1051)	2-10 15/16	(887)
48	4-4 1/2	(1334)	4-2 3/8	(1280)	4-1 3/8	(1254)	3-6 15/16	(1091)
52	4-8 1/2	(1435)	4-6 3/8	(1381)	4-5 3/8	(1356)	3-10 15/16	(1192)
60	5-4 1/2	(1638)	5-2 3/8	(1584)	5-1 3/8	(1559)	4-6 15/16	(1395)
68	6-0 1/2	(1842)	5-10 3/8	(1788)	5-9 3/8	(1762)	5-2 15/16	(1599)

Standard Double Hung Picture Unit Measurements								
Height								
CN	Masonry Opening		Rough Opening		Frame Size (w/subsill)		Daylight Opening	
	ft - in	mm	ft - in	mm	ft - in	mm	ft - in	mm
38	3-6 9/16	(1081)	3-5 1/2	(1054)	3-5	(1041)	2-8 1/4	(819)
42	3-10 9/16	(1183)	3-9 1/2	(1156)	3-9	(1143)	3-0 1/4	(921)
46	4-2 9/16	(1284)	4-1 1/2	(1257)	4-1	(1245)	3-4 1/4	(1022)
50	4-6 9/16	(1386)	4-5 1/2	(1359)	4-5	(1346)	3-8 1/4	(1124)
54	4-10 9/16	(1488)	4-9 1/2	(1461)	4-9	(1448)	4-0 1/4	(1226)
58	5-2 9/16	(1589)	5-1 1/2	(1562)	5-1	(1549)	4-4 1/4	(1327)
62	5-6 9/16	(1691)	5-5 1/2	(1664)	5-5	(1651)	4-8 1/4	(1429)
66	5-10 9/16	(1792)	5-9 1/2	(1765)	5-9	(1753)	5-0 1/4	(1530)
70	6-2 9/16	(1894)	6-1 1/2	(1867)	6-1	(1854)	5-4 1/4	(1632)
74	6-6 9/16	(1996)	6-5 1/2	(1969)	6-5	(1956)	5-8 1/4	(1734)
78	6-10 9/16	(2097)	6-9 1/2	(2070)	6-9	(2057)	6-0 1/4	(1835)
86	7-6 9/16	(2300)	7-5 1/2	(2273)	7-5	(2261)	6-8 1/4	(2038)
90	7-10 9/16	(2402)	7-9 1/2	(2375)	7-9	(2362)	7-0 1/4	(2140)

Section Details: Operating

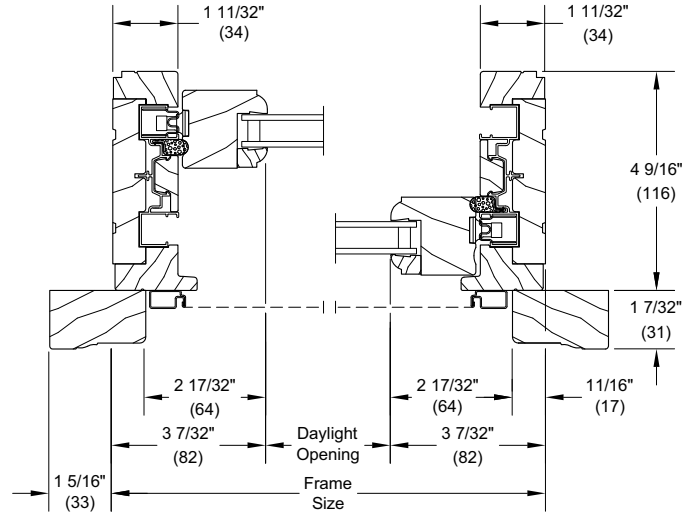
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Double Hung



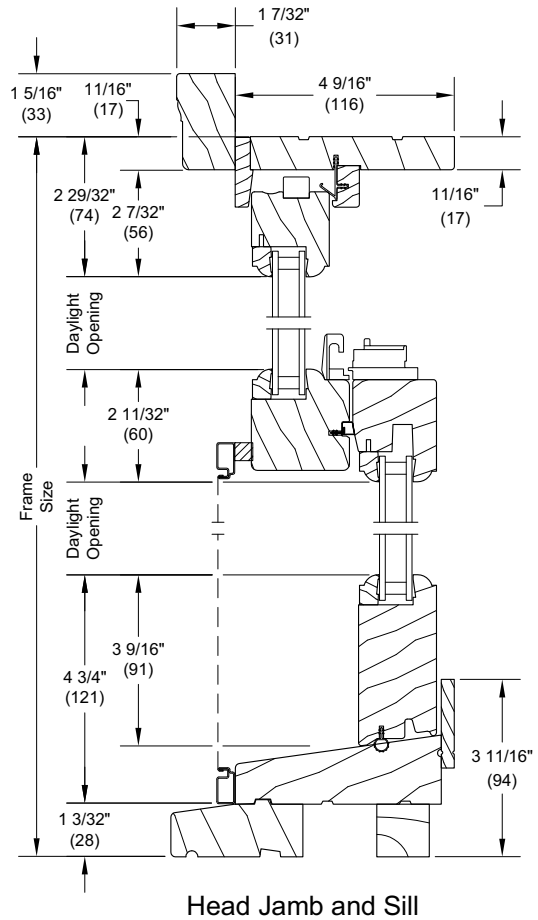
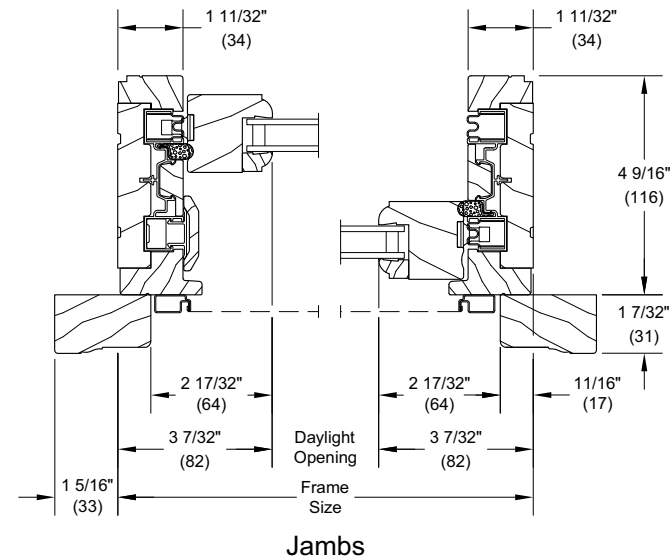
Lower Sash

Upper Sash



Jamb

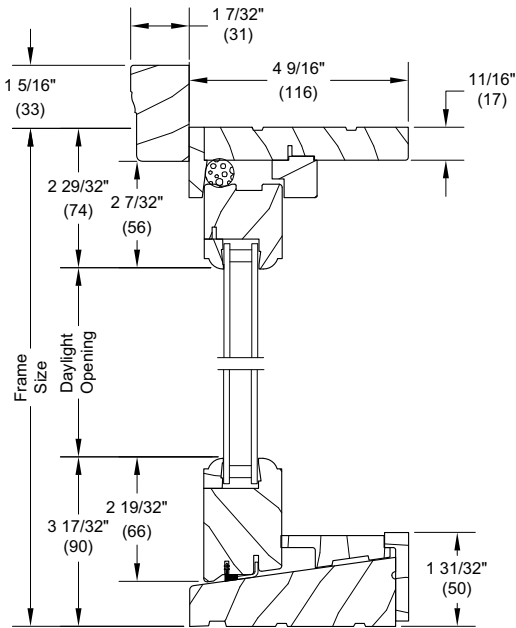
Single Hung



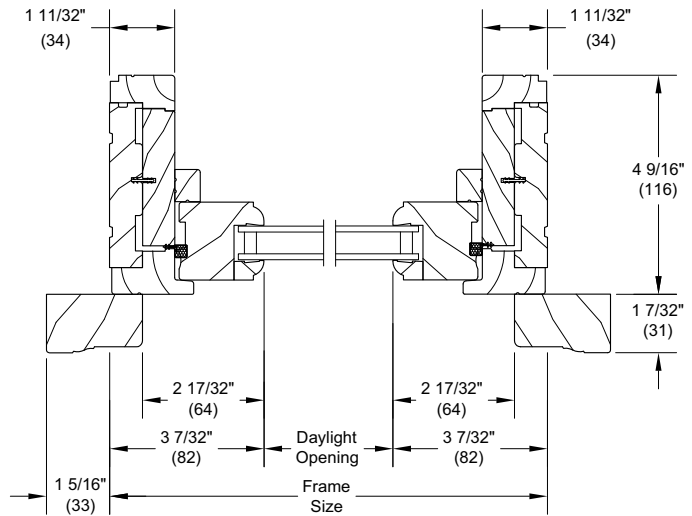
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Scale: 3" = 1' 0"

1 5/8" Transom

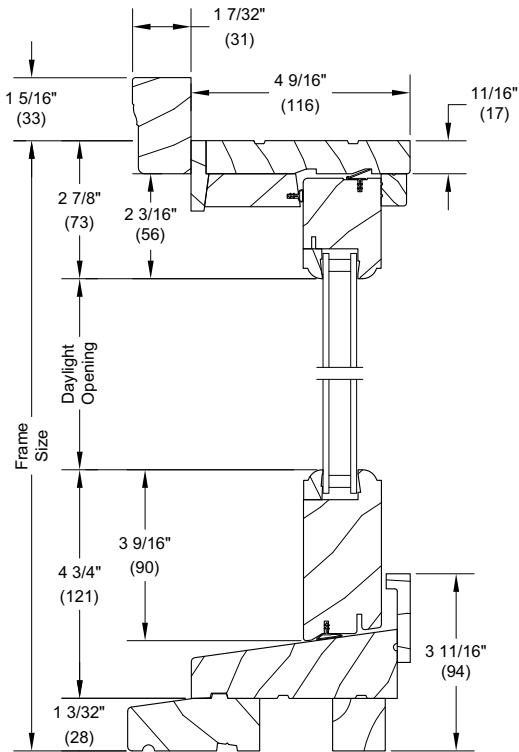


Head Jamb and Sill

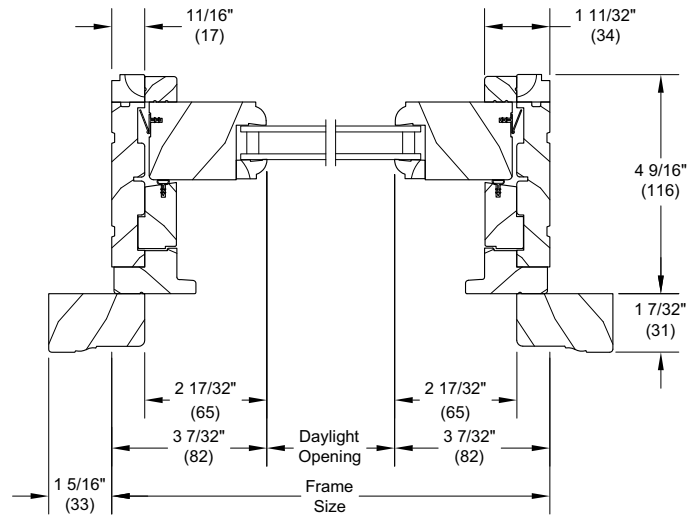


Jamb

1 5/8" Picture



Head Jamb and Sill

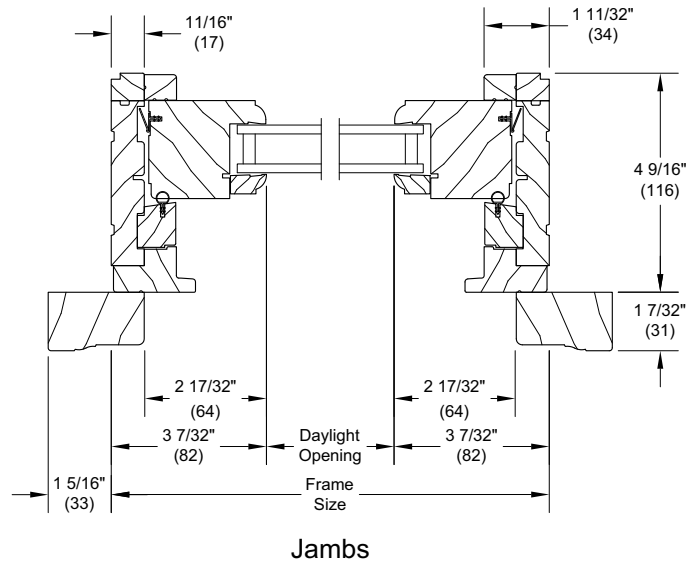
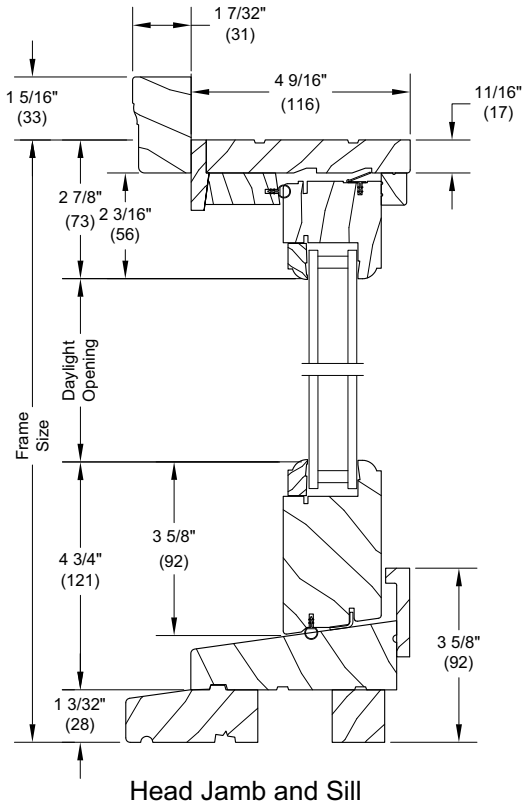


Jamb

Section Details: 2" Picture

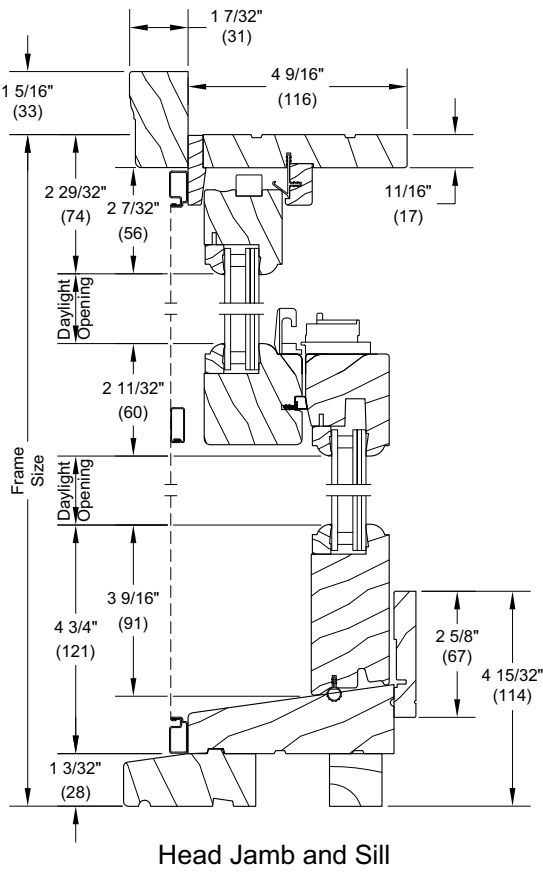
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2" Picture

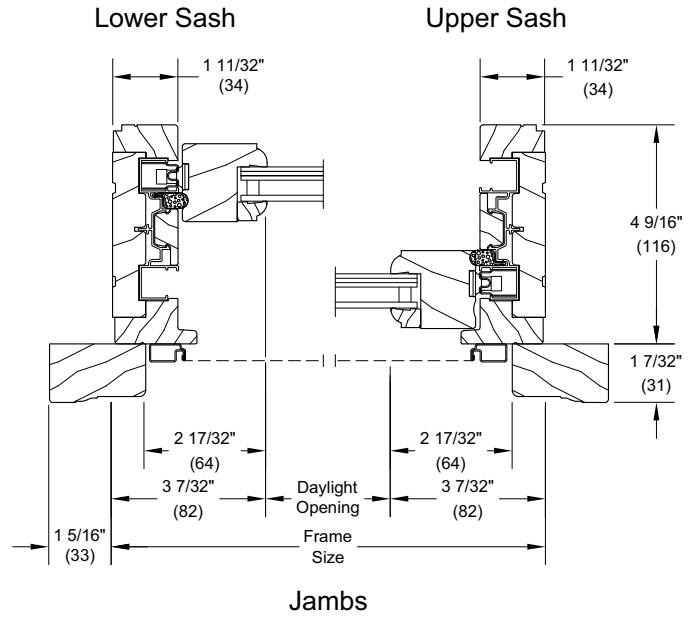


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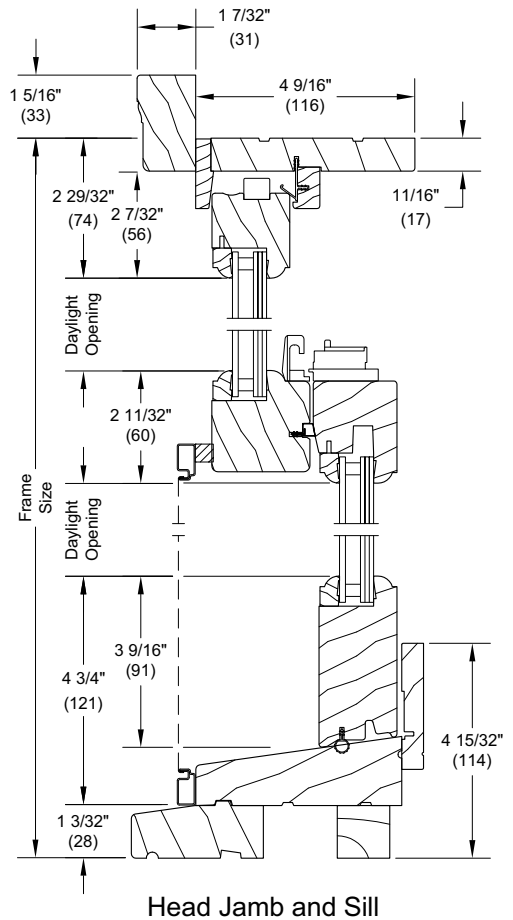
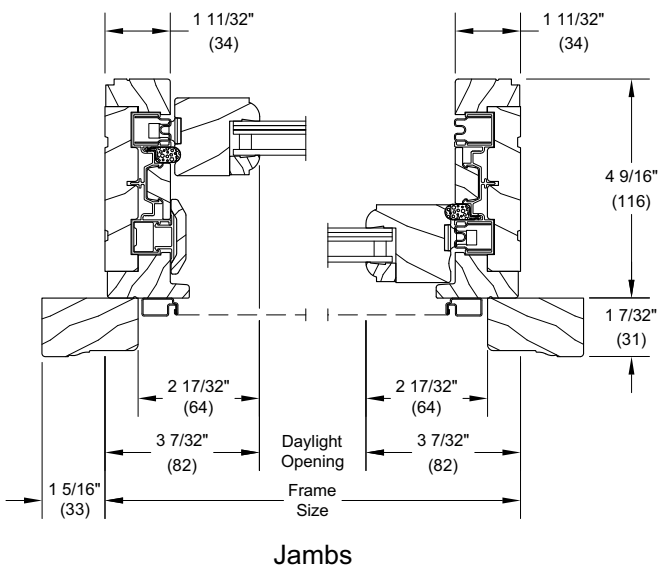
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Double Hung



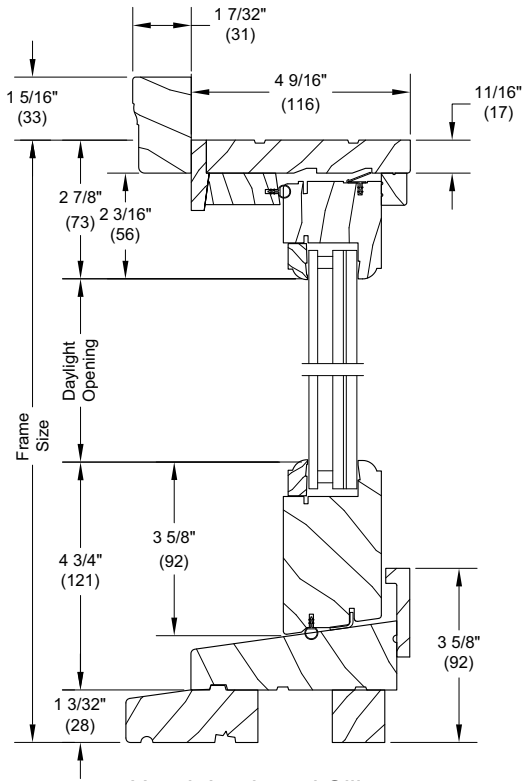
Single Hung



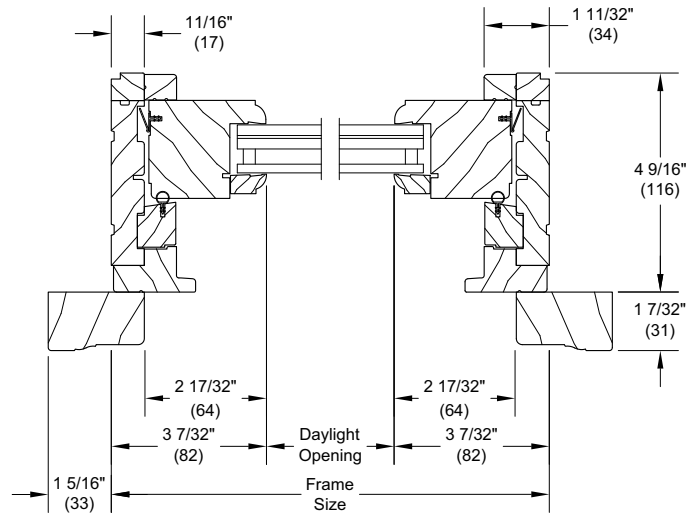
Section Details: Picture IZ3

Scale: 3" = 1' 0"

2" Picture



Head Jamb and Sill

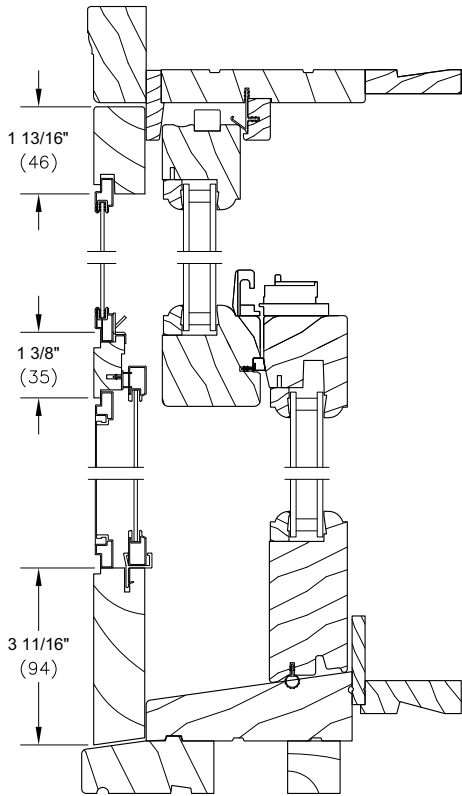


Jamb

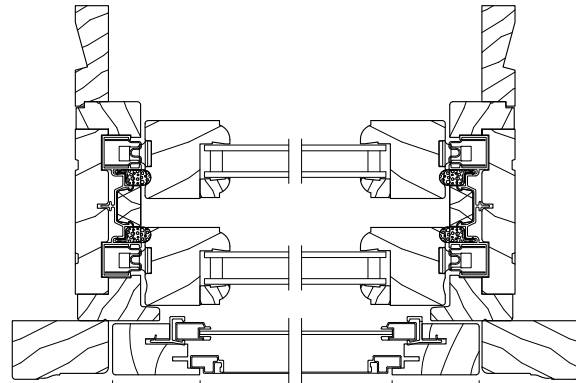
Section Details: Combination/Storm Sash

Scale: 3" = 1' 0"

Combination w/ 6 9/16"

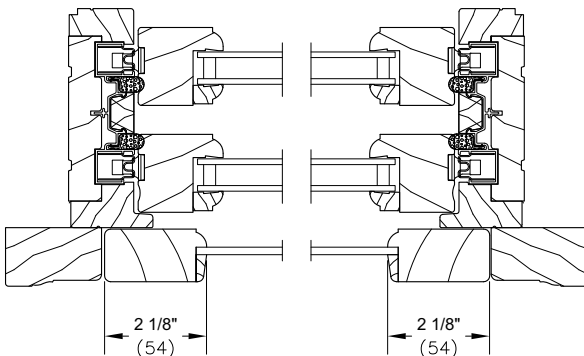


Head Jamb and Sill

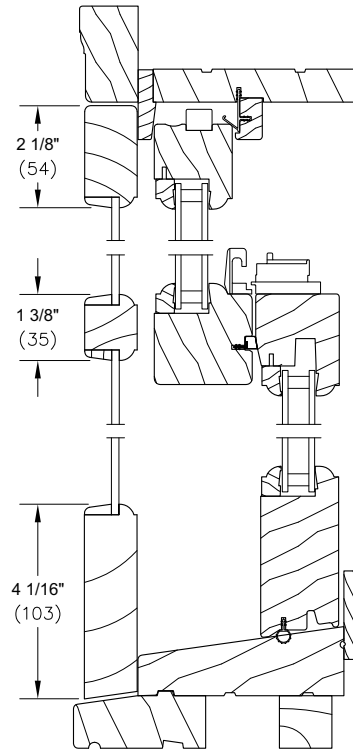


Jambs

Storm Sash



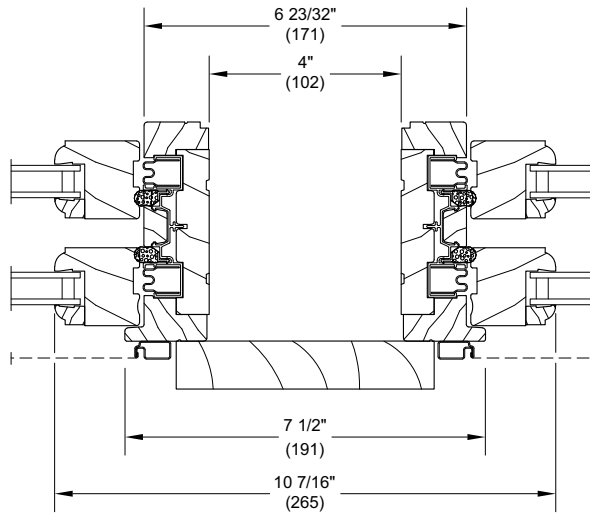
Jambs



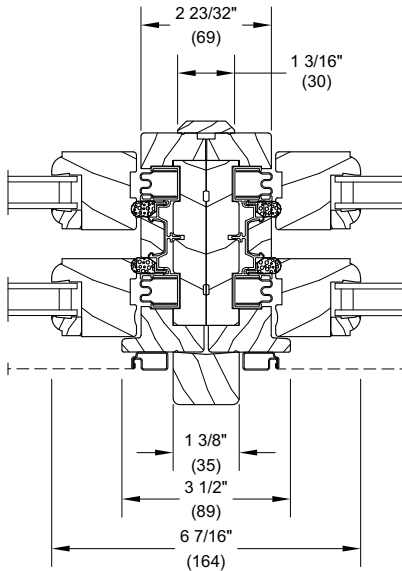
Head Jamb and Sill

Section Details: Mullions

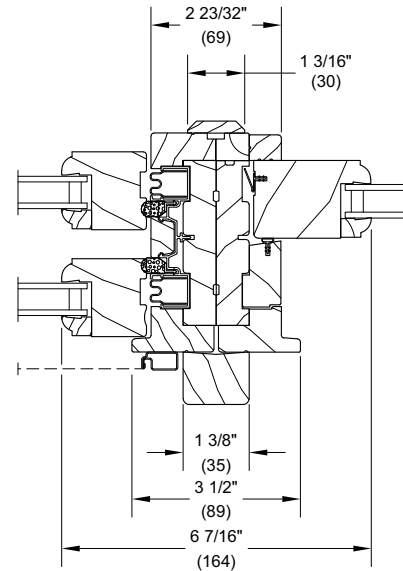
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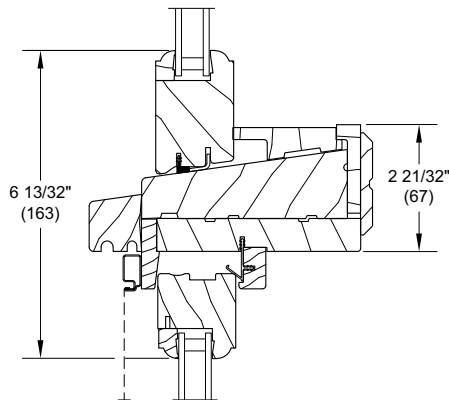
Vertical Mullion - with 4" Space Mull
Operator/Operator



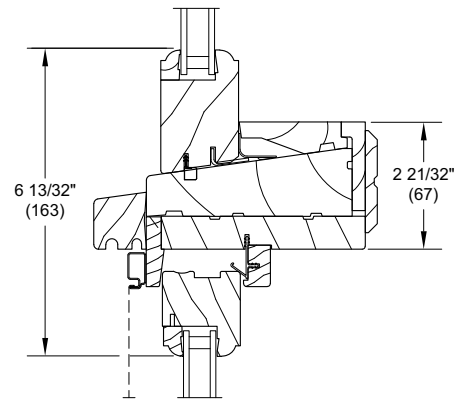
Vertical Mullion
Operator/Operator/Direct Mull



Vertical Mullion
Operator/Picture/Direct Mull



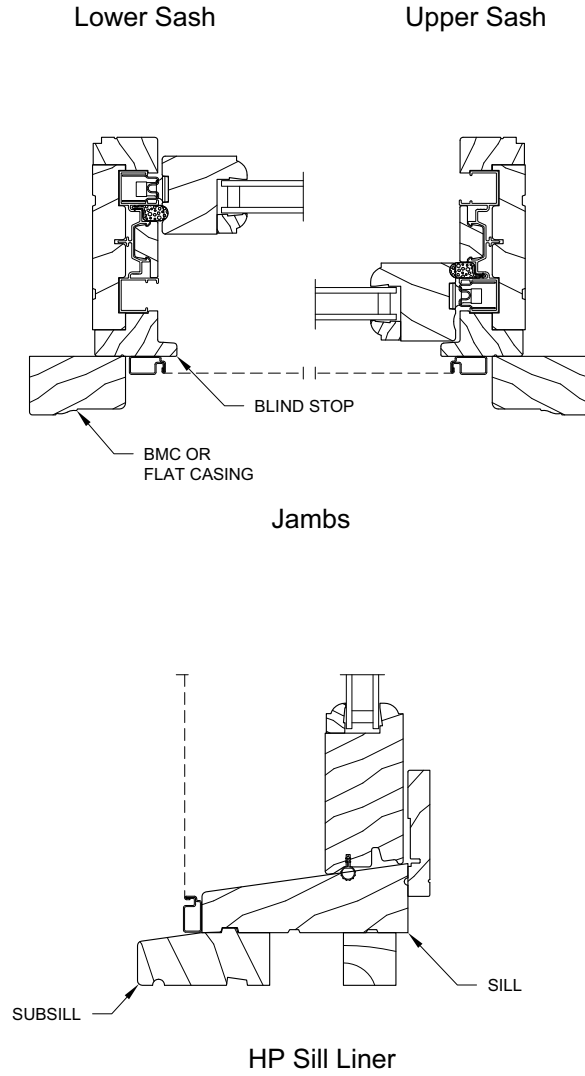
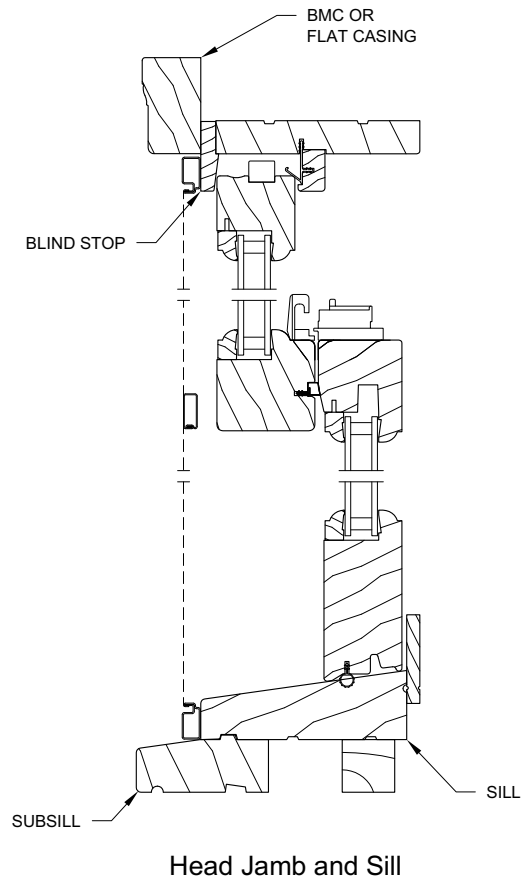
Transom milled over UWDH



RT Transom milled over UWDH

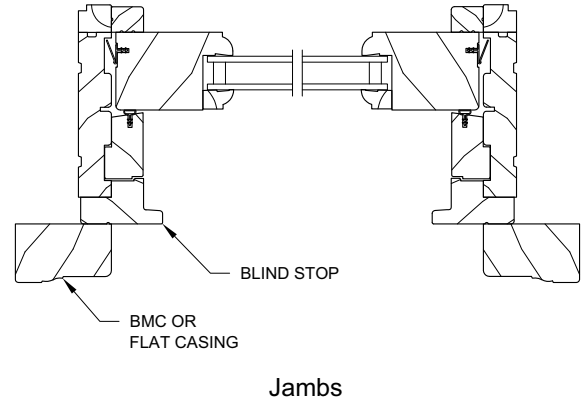
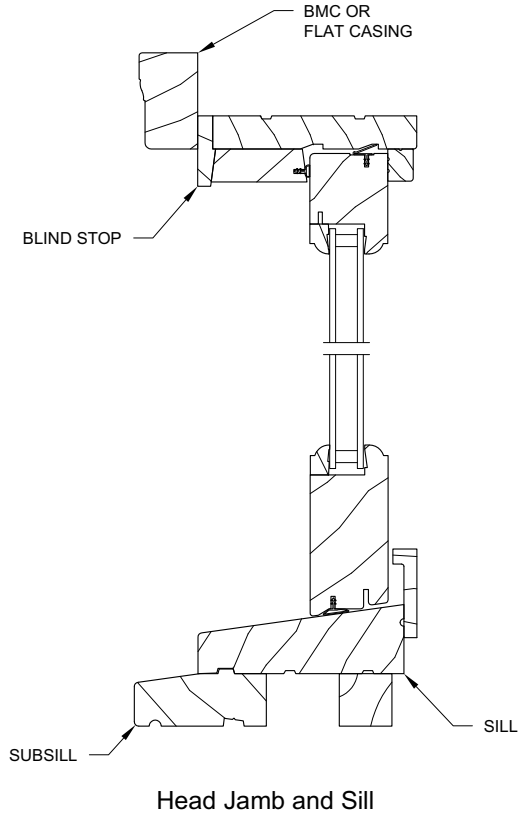
Section Details: Operator with Cedar Dress Option

Scale: 3" - 1' 0"



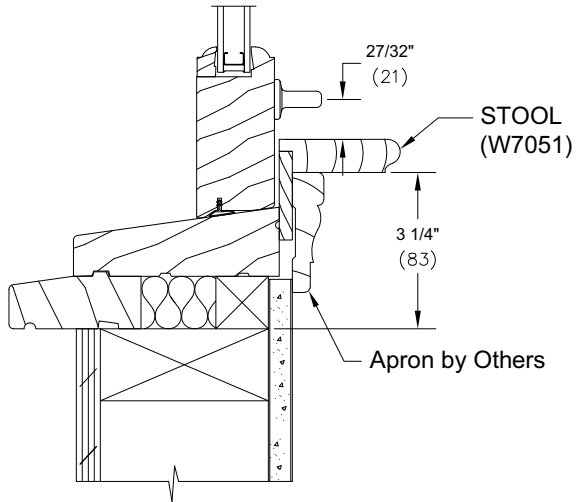
Section Details: Picture with Cedar Dress Option

Scale: 3" - 1' 0"

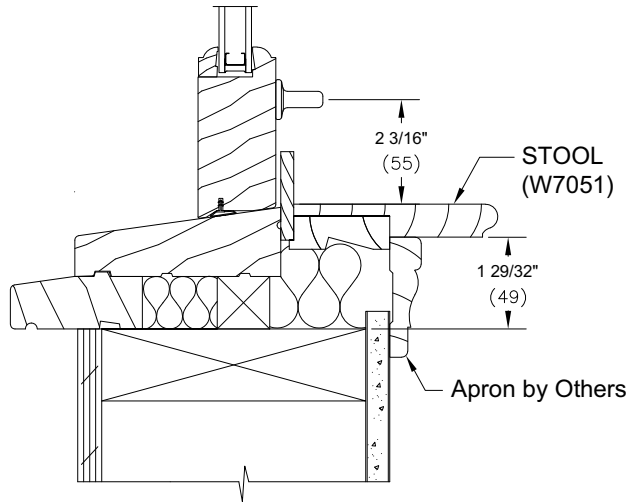


Ultimate Wood Double Hung Stool and Apron Details

Scale: 3" = 1' 0"



UWDH W/4 9/16" Jambs



UWDH W/6 9/16" Jambs

NOTE: Stool is Field-Applied only.

ULTIMATE






MARVIN SIGNATURE® COLLECTION



THE MARVIN PORTFOLIO

The Marvin portfolio consists of five product lines organized into three distinct collections defined by the degree of design detail and customization opportunities.

Marvin windows and doors offer exceptional performance, energy efficiency, low maintenance, and quality you can see, feel, and touch to help bring your vision to life.

					
	ULTIMATE Most extensive selection of features, options, and product types	MODERN Design flexibility in a purely modern aesthetic available exclusively at Marvin Modern dealers	COASTLINE Custom windows and doors for high velocity hurricane zones in the coastal Southeast	ELEVATE Wide range of options and product types	ESSENTIAL Curated options and product types
	MARVIN SIGNATURE® COLLECTION			MARVIN ELEVATE® COLLECTION	MARVIN ESSENTIAL™ COLLECTION
INTERIORS	WOOD 6 species options + custom 2 painted or primed options 6 stains + clear coat	EXTRUDED ALUMINUM 5 color options	EXTRUDED ALUMINUM 6 solid colors, 4 woodgrain finishes	WOOD Bare pine, painted Designer Black, painted White, or clear coat	FIBERGLASS 3 color options
EXTERIORS	EXTRUDED ALUMINUM 19 colors + custom OR WOOD 3 species + custom	FIBERGLASS 5 color options	EXTRUDED ALUMINUM 6 solid colors, 4 woodgrain finishes	FIBERGLASS 5 color options	FIBERGLASS 5 color options
SIZING	Standard + custom sizing for replacement, remodeling, or new construction	Custom sizing for remodeling or new construction	Custom sizing for replacement, remodeling, or new construction	Standard + custom sizing for replacement, remodeling, or new construction	Standard + custom sizing for replacement, remodeling, or new construction
HARDWARE	Extensive selection including Marvin Gallery Hardware	Minimalist hardware for modern design aesthetic	Available in multiple styles, sizes, and finishes to complement the window + door aesthetics	Available in 6 finish options with 2 door handle styles	Available in 6 finish options with 1 door handle style
COASTAL + WATERFRONT	Hurricane Impact Zones 3 and 4, + PG 50 Products		All products rated for High Velocity Hurricane Zone (IZ4)	Hurricane Impact Zone 3, + PG 50 Products	

Marvin Signature® collection

REDEFINING THE STANDARD

The Ultimate product line, part of the Marvin Signature collection, unites beautiful design with exceptional craftsmanship. Add character to almost any space with our most extensive selection of shapes, styles, sizes, and options—including wood interiors protected by tough wood or aluminum exteriors. With nearly limitless opportunities for customization, Ultimate can match your vision—and give it room to grow.

About Us

At Marvin, we're driven to imagine and create better ways of living, helping people feel happier and healthier inside their homes. We believe that our work isn't just about designing better windows and doors—it's about opening new possibilities for the people who use them.





ULTIMATE PICTURE NARROW FRAME CORNER WINDOW IN EBONY

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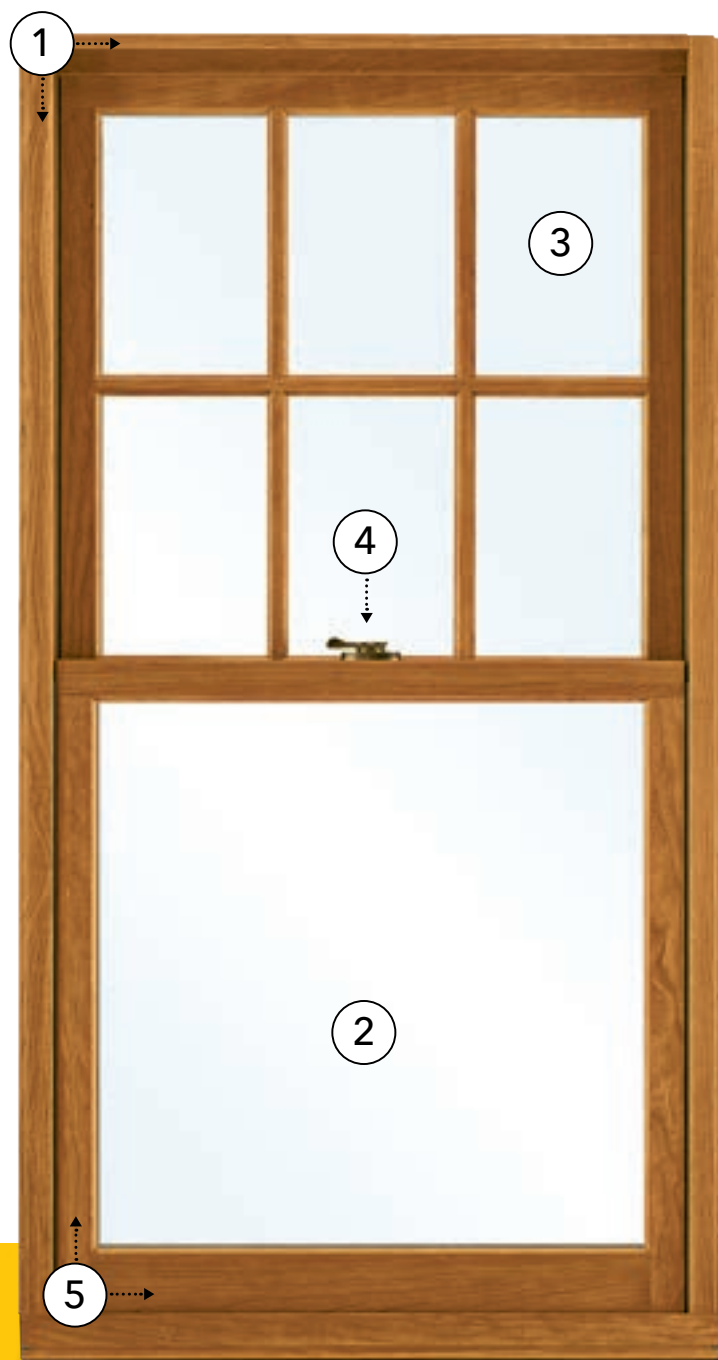
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WINDOWS



ULTIMATE CASEMENT WINDOW

WINDOW TERMS + DEFINITIONS



1. FRAME

There are three components to the frame: the header across the top, the jambs down each side, and the sill across the bottom. Marvin frames are built strong with a variety of high-quality wood species.

2. GLAZING

The glass in a window is called glazing. Marvin's broad range of glazing options can meet both high-performance and refined aesthetic requirements.

3. LITE

Each area of glass is called a lite. Marvin offers divided lite patterns for whatever look you wish to create.

4. HARDWARE

Marvin uses only the highest quality locks, handles, lifts, pulls, and hinges in a wide variety of durable finishes.

5. SASH

The sash—operating or stationary—is comprised of horizontal rails, vertical stiles, and glazing. Marvin's large solid sash offer precise fit and ease of operation.

WINDOW OPERATING STYLES



DOUBLE HUNG

Double hung windows have two movable sashes which operate vertically.



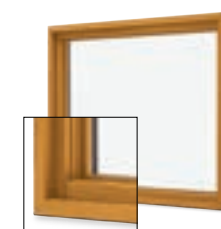
CASEMENT

A window that is hinged to its frame at the side and opens like a door.



FIXED OR PICTURE

An inoperable window with direct glaze or in-sash configurations. Available in a wide range of polygon and radius shapes.



IN-SASH PICTURE

- Fixed window designed to match the profiles of operable windows like casement, awning, or double hung

- Available in large sizes up to 8' wide x 8' high



AWNING

An awning is hinged to the frame at the top and opens outward. If hinged on the bottom, it's called a hopper.



GLIDER

A window with a sash that slides horizontally to open and close.



DIRECT GLAZE PICTURE

- Fixed window with no sash—the glass is glazed directly into the frame

- Available in stunningly large sizes with widths or heights up to 12'

MORE FLEXIBILITY TO MEET ANY DESIGN CHALLENGE.

Marvin has an extensive selection of styles, sizes, shapes, and options.

DOUBLE HUNG WINDOWS

Ultimate Double Hung windows combine state-of-the-art design with classic style. Advanced engineering and high-quality construction make our double hung windows incredibly durable, versatile, and easy to use.



ULTIMATE DOUBLE HUNG G2 WINDOW IN EBONY

ULTIMATE DOUBLE HUNG G2



ULTIMATE DOUBLE HUNG G2 WINDOW IN DESIGNER BLACK



Photo: Laurey W. Glenn

ULTIMATE DOUBLE HUNG G2 WINDOW IN WHITE WITH OIL RUBBED BRONZE HARDWARE

ULTIMATE DOUBLE HUNG G2

The Ultimate Double Hung G2 window is an embodiment of our dedication to the craft of creating windows and doors. Influenced by the rich, historical significance of this window style and inspired by innovative design, each feature is thoughtfully added and every detail is carefully considered. This is all in service of shaping a window that deserves to be in the unique homes our customers desire.



INTERIOR



EXTERIOR



UNIQUE WASH MODE ALLOWS CLEANING OF BOTH SIDES OF GLASS FROM INDOORS

ULTIMATE DOUBLE HUNG G2

Engineered for performance and designed to inspire, each aspect of the Ultimate Double Hung G2 window was made with purpose. Our engineers consider every detail from the most innovative features to the most minute subtleties, all because the windows in your home help illuminate the most important parts of your life.

INTERIOR FEATURES AND PERFORMANCE

RICH WOOD INTERIOR

Offers beauty and warmth with six wood species and ten interior finish options.

NARROW CHECKRAIL

Provides a sleek aesthetic at 1 5/16 inches to maximize daylight opening while maintaining historical accuracy.

TILT WASH MODE

Allows easy access to exterior glass for cleaning and maintenance.



EXCLUSIVE AUTOLOCK

Activates when the sashes are closed, locking the window.

ENERGY EFFICIENCY

Multiple glass options for meeting ENERGY STAR® standards in energy efficiency for various regions and climates.

SASH BALANCE SYSTEMS

Enables smooth operation at the largest sizes.

EXTERIOR FEATURES AND PERFORMANCE

DURABLE CLADDING

Extruded aluminum exterior cladding with an AAMA verified 2605 finish and backed by a 20-year warranty against chalking and fading.

EXPANSIVE SIZES

Larger than 5 feet wide by 10 feet high.

TRADITIONAL SILL BEVEL

The 14-degree bevel provides optimal water management while maintaining a classic look.



SUPERIOR WEATHER PERFORMANCE

LC-PG50 on most sizes. Optional commercial (CW) performance and IZ3 certified coastal performance on most sizes.

DESIGN VERSATILITY

An array of simulated divided lite patterns, interior and exterior color options, ten hardware finishes, and archtop models.

ALUMINUM INTER-LOCK

Eliminates drafts and improves the window's overall structural integrity.

ULTIMATE DOUBLE HUNG ROUND TOP G2



ULTIMATE DOUBLE HUNG ROUND TOP G2 WINDOW IN EBONY



EYEBROW RADIUS

HALF CIRCLE TRANSOM

EYEBROW TRANSOM

HALF CIRCLE RADIUS

HALF EYEBROW SINGLE HUNG*

ULTIMATE DOUBLE HUNG ROUND TOP G2

The Ultimate Double Hung Round Top G2 window will add traditional arching and elegant lines to your home or historic preservation project. With the same features and grace of the Ultimate Double Hung G2 window, this window offers design flexibility with numerous variations of radius shapes. Choose from multiple divided lite patterns to further enhance the arch of the window. These versatile windows—available in a wide range of sizes—can provide a subtle accent or a dramatic focal point to enhance your home design.

ROUND TOP VARIATIONS

EYEBROW AND HALF EYEBROW RADIUS OPERATING DOUBLE HUNG

A classic look with a gentle eyebrow radius. Beautiful as a stand alone window or as part of an assembly.

HALF CIRCLE TRANSOM

This simulated half circle transom window can be sized to stand alone or easily fit above a double hung window.

EYEBROW TRANSOM AND PICTURE

This stationary window is available as a transom or picture window. These windows are designed to complement the Ultimate Double Hung G2 window with correlating sizes and matching springline.

HALF CIRCLE RADIUS OPERATING DOUBLE HUNG

A dramatic window with a true half circle arch. The look gives a beautifully smooth transition from jamb to header. Both sashes are operable.

HALF EYEBROW SINGLE HUNG

This striking window style adds elegant curve to a two-wide window assembly (not shown)

*Available on Single Hung only.

ULTIMATE DOUBLE HUNG INSERT G2



ULTIMATE DOUBLE HUNG INSERT G2 WINDOW IN SATIN NICKEL



ULTIMATE DOUBLE HUNG INSERT G2 WINDOW IN SATIN NICKEL

ULTIMATE DOUBLE HUNG INSERT G2

The Ultimate Double Hung Insert G2 window adds quality craftsmanship, beauty, and energy efficiency to your home without compromising architectural integrity. Its frame-in-frame design is built precisely to seamlessly fit into your unique window opening, so there's no need to remove the existing frame or disturb the exterior or interior trim of your house.



INTERIOR



EXTERIOR



SASH LOCK IN SATIN NICKEL

SCREENS



ULTIMATE DOUBLE HUNG INSERT G2 WINDOW IN STONE WHITE WITH FULL SCREENS

SCREENS

Choose from an aluminum surround in three finishes or a wood interior surround that complements warm wood interiors. Marvin screens come standard with Marvin Bright View™ - a fiberglass screen mesh that provides improved airflow and more natural light while keeping insects out. Bright View repels water and resists dirt and grime for a sharp, vivid view.

CASEMENT SCREEN OPTIONS

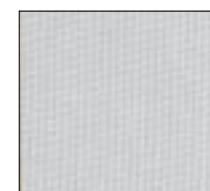


WOOD SCREEN SURROUND
The patented wood screen surround with wood interior and aluminum exterior features Marvin Bright View™ screen mesh. Aluminum screen mesh options also available.

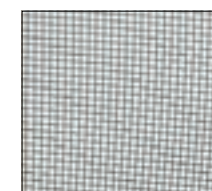


INSWING CASEMENT SCREEN
The beautifully crafted inswing screen adds a classic touch and allows access to operate push-out casement and awning windows.

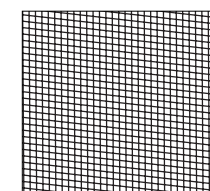
SCREEN MESH OPTIONS



MARVIN BRIGHT VIEW™



CHARCOAL ALUMINUM WIRE



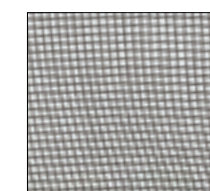
BLACK ALUMINUM WIRE



BRIGHT ALUMINUM WIRE



BRIGHT BRONZE WIRE



CHARCOAL FIBERGLASS

DOUBLE HUNG SCREEN OPTIONS



FULL OR HALF SCREEN

Exterior aluminum screen with an aluminum surround. The full screen covers both the top and bottom sash. The half screen only covers the bottom sash.



DOUBLE HUNG STORM OPTIONS



TWO-LITE WOOD STORM SASH OR SCREEN

A wood frame containing non-removable glass. The storm sash can be removed during the summer and replaced with a wood-framed screen. Available only for wood windows.



STORM AND SCREEN COMBINATIONS

A combination unit is composed of two glass panels and one screen panel that can be easily removed from the interior for cleaning. Available with a wood (bare or primed) or aluminum surround, panels can be configured multiple ways, glass above screen, screen above glass, or glass above glass.



ENERGY PANEL

Often confused with storm windows, an energy panel is technically a glazing option. It is a removable, exterior glass panel finished on the edges by a surround. Energy panels cover the exposed glass surface of each sash and offer added energy efficiency for wood windows with single glazing.

DOOR SCREEN OPTIONS



SCENIC DOOR SLIDING SCREEN

The Marvin Ultimate Sliding Screen operates with ease and conceals when not in use. The screen is unobtrusive even in large sizes measuring up to 15 feet wide and up to 10 feet high uni-directional or up to 29.5 feet wide bi-parting.



ULTIMATE SWINGING SCREEN DOOR

With profiles that complement the aesthetics of the door, swinging door screens feature robust, durable extruded aluminum surrounds and concealed hinges.



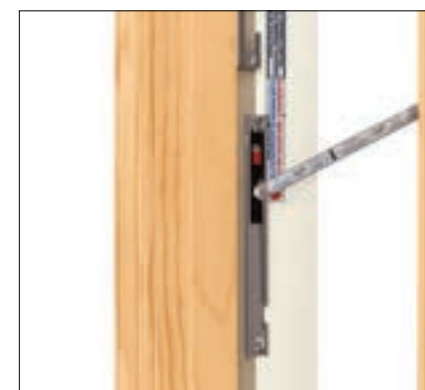
ULTIMATE SLIDING SCREEN DOOR

Aluminum top hung sliding screen with roller bar, adjustable rollers and unmatched sliding operation.

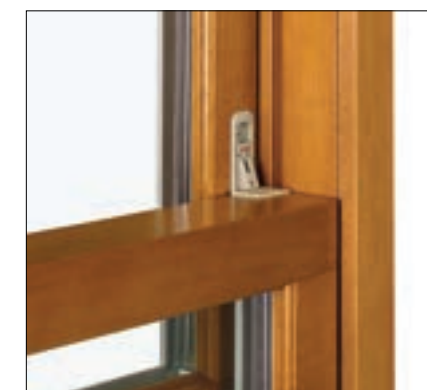
Marvin window and door screens come standard with Marvin Bright View™ - a fiberglass screen mesh that provides improved airflow and more natural light while keeping insects out. Bright View repels water and resists dirt and grime for a sharp, vivid view.

WINDOW OPENING CONTROL DEVICES

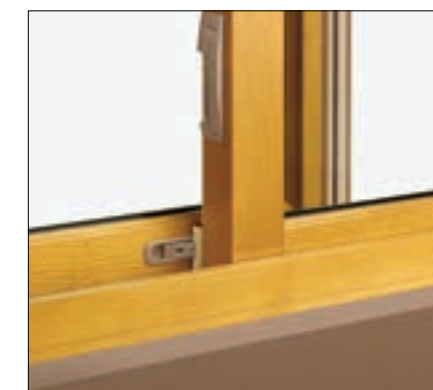
Marvin Window Opening Control Devices (WOCD) meet the ASTM F2090-21 standard, created to assist in the prevention of window falls. To meet the standard, our devices limit the window's net clear opening to less than 4 inches (when the sash is open) and have a release function allowing the window to open completely. In order to meet the safety standard, WOCD disengagement takes two independent actions, which helps prevent accidental release. Devices will then automatically reengage once the window is closed and again limit the window opening to less than 4 inches upon re-opening.



ULTIMATE CASEMENT



ULTIMATE DOUBLE HUNG G2



ULTIMATE GLIDER

WINDOW HARDWARE



ULTIMATE DOUBLE HUNG G2 WINDOW WITH AUTO-LOCKING SASH LOCK IN SATIN NICKEL

WINDOW HARDWARE

Ultimate's durable and elegant hardware is engineered for reliability and to harmonize with any décor. Choose a finish to complement your architectural style. Durable painted finishes in Matte Black, Satin Taupe, Bronze, and White mimic the look of metal. Satin Nickel, Brass, Antique Brass, Polished Chrome, Oil Rubbed Bronze, and Satin Chrome offer the rich appearance and durability of authentic metal finishes.



AUTO-LOCKING HARDWARE SYSTEM

PRODUCTS:
Ultimate Double Hung G2
Ultimate Single Hung G2

AVAILABLE FINISHES:
Matte Black • Brass • Satin Taupe
Satin Nickel • Bronze • White
Antique Brass • Oil Rubbed Bronze
Polished Chrome • Satin Chrome



TRADITIONAL LIFT LOCK

PRODUCTS:
Ultimate Single Hung G2

AVAILABLE FINISHES:
Matte Black • Brass • Satin Taupe
Satin Nickel • Bronze • White
Antique Brass • Oil Rubbed Bronze
Polished Chrome • Satin Chrome



CONTEMPORARY LIFT LOCK

PRODUCTS:
Ultimate Single Hung G2

AVAILABLE FINISHES:
Matte Black • Brass • Satin Taupe
Satin Nickel • Bronze • White
Antique Brass • Oil Rubbed Bronze
Polished Chrome • Satin Chrome



FOLDING HANDLE

PRODUCTS:
Ultimate Casement • Ultimate Awning
Ultimate Casement Narrow Frame
Ultimate Awning Narrow Frame

AVAILABLE FINISHES:
Matte Black • Brass • Satin Taupe
Satin Nickel • Bronze • White
Antique Brass • Oil Rubbed Bronze
Polished Chrome • Satin Chrome



PUSH OUT HANDLE

PRODUCTS:
Ultimate Casement • Ultimate Awning
Ultimate Casement Narrow Frame
Ultimate Awning Narrow Frame

AVAILABLE FINISHES:
Matte Black • Brass • White
Antique Brass • Oil Rubbed Bronze
Satin Nickel



FOLDING HANDLE

PRODUCTS:
Ultimate Glider

AVAILABLE FINISHES:
Matte Black • Brass • Satin Taupe
Satin Nickel • Bronze • White
Antique Brass • Oil Rubbed Bronze
Polished Chrome • Satin Chrome

FINISHES

MATTE BLACK

BRONZE

OIL RUBBED
BRONZE

ANTIQUE BRASS

SATIN TAUPE

SATIN NICKEL

BRASS

POLISHED
CHROME

SATIN CHROME

WHITE

Project: Contractor: Holcomb Development

Fenestrationpro@gmail.com

313-757-1226

Project Inspection Report

Date: 3-12-2026

PROJECT: 264 Watson , Detroit MI

Page: 1 of 2

1

Window condition report for existing wood windows that were requested to be rehabilitation.

Inspector : Paul Bekemeyer

Location and/or line (mark) #	Frame and Exterior casing Integrity, Water tight condition	Sash Integrity / Glass condition	Recommendation
Windows 14 and 15 at the kitchen	Frames and exterior casings are dry-rotted to a point where any repair will not be a lasting repair.	Structurally the sash have lost their structural integrity; any repair attempt is unlikely to have lasting effect.	Recommend repair of framing, blocking up the opening to accept a new insert window. Replace rotted casing.
Window 18 @ Office	This frame and exterior flat casing is rotted at the bottom corners, which is allowing water, animals, and insects to penetrate the home.	Structurally the sash is broken/damaged—and—is missing part of its divided lite component. Even with the storm it is unlikely this window will have lasting effect.	Recommend repair of framing, blocking up the opening to accept a new insert window. Replace rotted casing.
Window 21 in stairs	This frame and exterior flat casing is rotted at the bottom corners, which is allowing water, animals, and insects to penetrate the home. The sill itself is gone was repaired with a piece of brake metal.	These sashes are in the best condition in entire home— however the due to frame and casing being literally dry rotted—recommend replace.	Recommend repair of framing, blocking up the opening to accept a new insert window. Replace rotted casing.
Window 7, 8, and 9	The center window has no existing sashes; the frame and exterior casing has been somewhat protected and isn't as bad as all the others. But since there is nothing to repair/restore @ 8.	Window #8 is missing sashes. Nothing to repair/restore.	Recommend repair of framing, blocking up the opening to accept a new insert window for all 3 openings.
Widow 23B @ Dining	This window is badly damaged — frames and casings. It is well beyond repair—and will directly adjacent to a window replacement @ 29 (currentl a vinyl window).	Structurally the sash have lost their structural integrity; any repair attempt is unlikely to have lasting effect, plus the missing sash (currently plywood-ed over.	Recommend repair of framing, blocking up the opening to accept a new insert window for all 3 openings.

Project: Contractor: Holcomb Development

Fenestrationpro@gmail.com

313-757-1226

Project Inspection Report

Date: 3-12-2026

PROJECT: 264 Watson , Detroit MI

Page: 2 of 2

Window condition report for existing wood windows that were requested to be rehabilitation.

Inspector : Paul Bekemeyer

Location and/or line (mark) #	Frame and Exterior casing Integrity, Water tight condition	Sash Integrity / Glass condition	Recommendation
Windows 19 and 20 in E BR	Frames and casings are dry-rotted to a point where any repair will not be a lasting repair. The sills are literally gone.	Structurally the sash have lost their structural integrity; the jointery is failed—any repair attempt is unlikely to have lasting effect.	Recommend repair of framing, blocking up the opening to accept a new insert window. Replace rotted casing.
Windows 16 and 17	These rames and exterior flat casing is rotted at the bottom corners, which is allowing water, animals, and insects to penetrate the home. The sill itself is gone was repaired with a piece of brake metal. Sills are also dry rotted/failed.	These sashes are in the best condition in entire home— however the due to frame and casing being literally dry rotted—recommend replace.	Recommend repair of framing, blocking up the opening to accept a new insert window. Replace rotted casing.
Windows 10,11,12,13,28, 23A, 27 in basement	Appears that these units haven't been painted in decades. Due to being grade they are in a failed condition, completely dry rotted.	Appears that these units haven't been painted in decades. Due to being grade they are in a failed condition, completely dry rotted.	Recommend repair of framing, blocking up the opening to accept a new insert window for all 7 openings.

As part of this general condition report, other findings about the windows in this historic home is that all of these windows were likely painted with lead paint many times over—the toxic dust of which we all know not to consume - however, the owner does have small children.

Thus—the absolute failed state of the window frames and other issues—is why the owner is requesting the courtesy to fix all of these things with insert replacement and labor to waterproof the exterior casings.

There is precedent for allowing these to be replaced; the commercial building at 110 E Ferry Street virtually had the entire building got new insert windows a few years back for its repurposed use.



TYPICAL EFFECT
OF DEFERRED MAINTENANCE

442





TYPICAL. ALL
EXISTING WOOD WINDOW



→
SILL IS
GONE

30



→ FAILED!
BROKEN

18

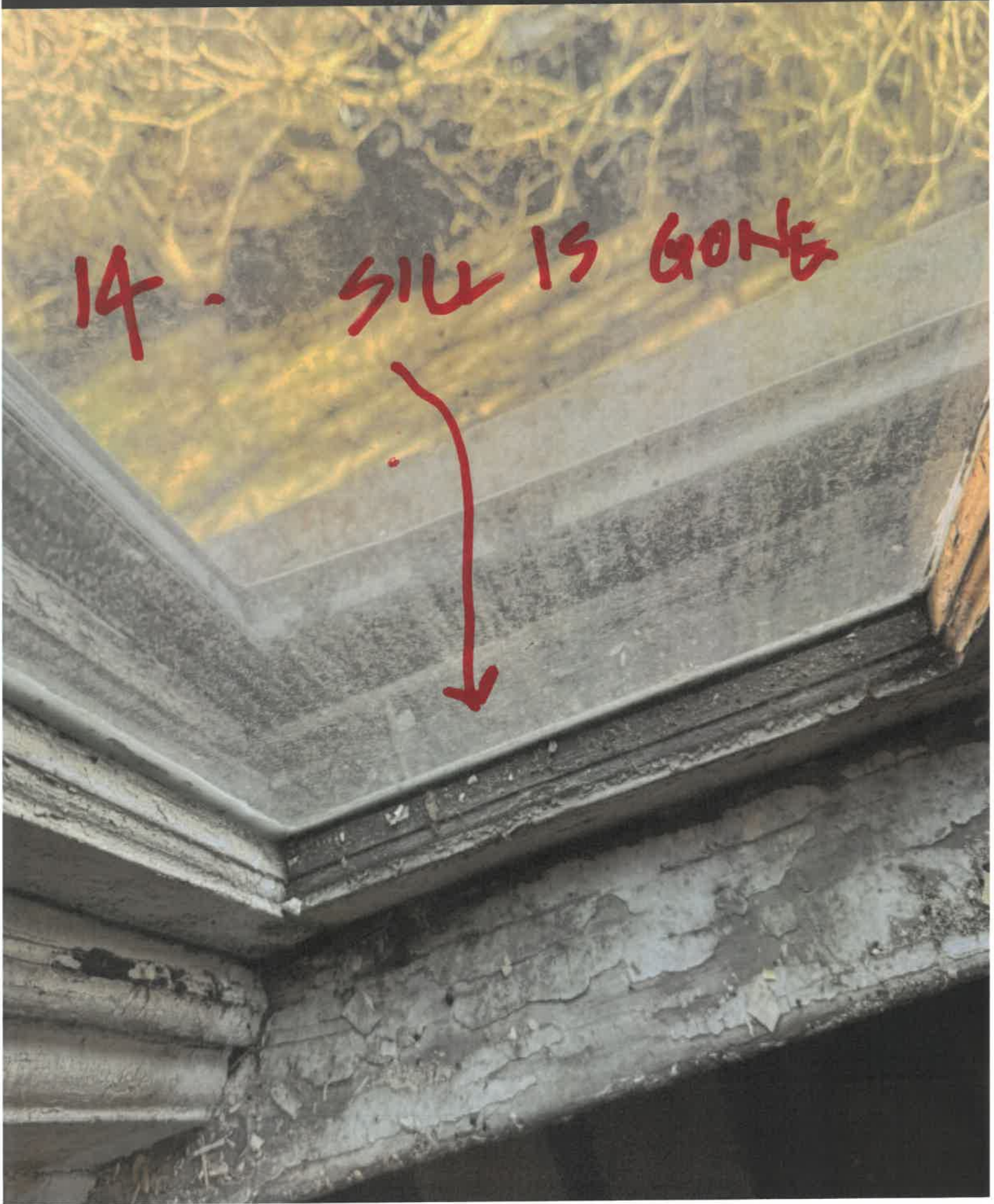


789

15



14



14 - SILL IS GONE



19

11



28



21



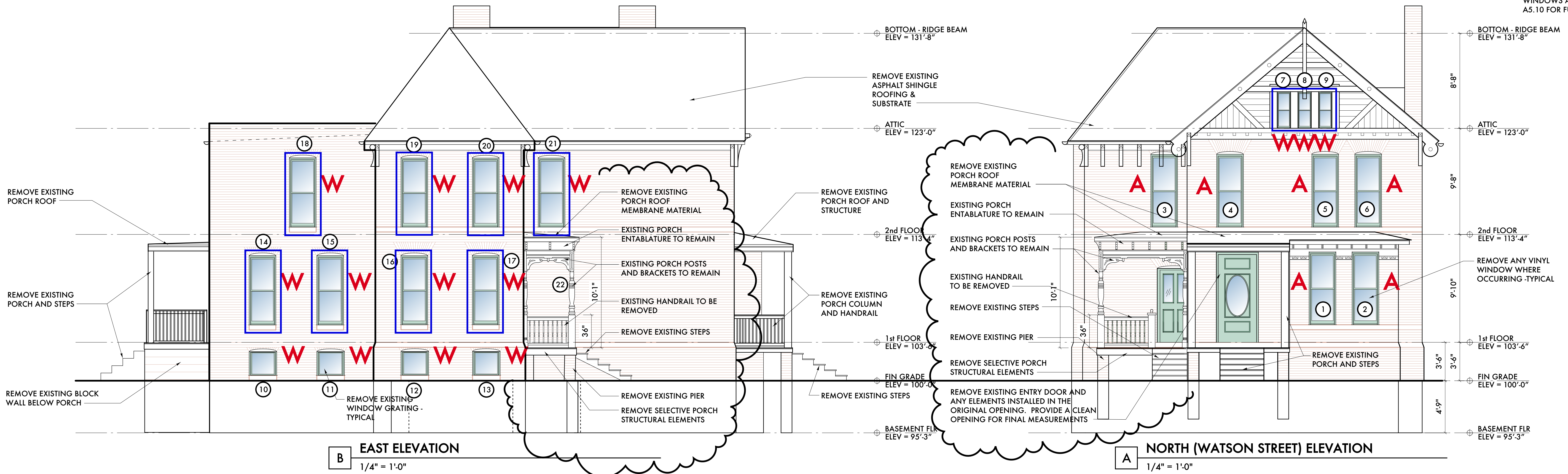


INDICATES A WOOD WINDOW W/ SUCH EXTENSIVE DAMAGE IT CAN NOT BE REPAIRED

EXISTING WINDOW INVENTORY SYMBOL LEGEND
A = ALUMINUM
V = VINYL
W = WOOD

GENERAL NOTES:

- 5. REMOVE ANY STEEL GRATINGS OR PROTECTION OVER WINDOWS AND DOORS. SAVE FOR POSSIBLE REUSE.
- 6. THE PIECES AND ELEMENTS OF THE HISTORIC SIDE PORCH ARE TO BECOME TEMPLATES FOR THE NEW FRONT PORCH ELEMENTS.
- 1. ALL BRICK MASONRY SURFACES ARE TO BE CLEANED W/ SOAP AND WATER, LOW PRESSURE ONLY. DO NOT USE A PRESSURE WHICH DAMAGES THE SURFACE OF THE BRICK. APPLY PAINT REMOVING PRODUCT ON EXISTING PAINTED, BRICK MASONRY SURFACES TO INCREASE AMOUNT OF PAINT REMOVAL.
- 2. APPLY PAINT REMOVER TO ALL STONE "BAND COURSES" ON THE BUILDING. POWER WASH PAINT REMOVER MATERIAL OFF AND THEN POWERWASH CLEAN.
- 3. THE AREAS OF DEMOLITION ARE INTENDED TO SHOW THE GENERAL AREA AND SCOPE OF THE WORK. SEE THE PROPOSED FLOOR PLANS FOR THE FINAL CONDITION TO DETERMINE THE DEMOLITION ITEMS NEEDED.
- 4. THE EXISTING WINDOWS SHOWN ARE OF (3) TYPES, WOOD, VINYL AND ALUMINIUM. ALL VINYL AND ALUMINIUM WINDOWS ARE TO BE REMOVED. ALL WOOD WINDOWS ARE TO REMAIN. SEE THE FINAL ELEVATIONS A5.10 FOR FURTHER INFORMATION ON THE WINDOWS.



03/13/26	HDC Revisions
09/29/25	Permit Revisions - HDC
07/08/25	Permits
05/13/25	Owner/Designer Review
04/07/25	Preliminary Pricing
11/08/24	Historic Commission
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Sheet Title:

EXTERIOR BUILDING ELEVATIONS

Sheet Number:

A5.00 (E)