STAFF REPORT: 04-14-2021 MEETING APPLICATION NUMBER: 21-7159 **ADDRESS: 757 W. BETHUNE AVENUE** HISTORIC DISTRICT: NEW CENTER APPLICANT: KEITH AND MELISSA JOHNSON, OWNERS; BRYAN COOK, ARCHITECT **PROPERTY OWNER: KEITH AND MELISSA JOHNSON** DATE OF PROVISIONALLY COMPLETE APPLICATION: 03-22-2021 DATE OF STAFF SITE VISIT: 03-26-2021

SCOPE: ERECT NEW ADDITION AT REAR OF HOUSE

EXISTING CONDITIONS

The construction date for the house at 757 W. Bethune (original address number was 171) is not known. The first Sanborn map of this area was published in 1910 and the house is shown on the southeast corner of W. Bethune Avenue and Third Avenue. The map shows the structure almost straddles the east property line due to the narrowness of the 35' x 114' lot, however the parcel offers a deep rear yard.

The two and one-half story brick veneered frame house offers a distinct hierarchy of elevations. The front facade is dominated by mostly grouped window openings as seen on the two-story bay, front facing gable and hip roof dormer. The elevation facing Third Avenue offers a dichotomy in its articulation with the northern half of the facade faced fully in brick, while a narrow (compared to the front elevation) two-story bay window and two single window openings comprise the southern half of the elevation. Continuous stone stills and headers on the front elevation bay reduce to individual stone headers and sills on the side elevation bay. The rear and east elevations have just a few single window openings (and one door on the rear) which only have stone sills. Similarly, the basement window openings on the front and west elevations have stone sills and headers, while the rear and east basement openings have only stone sills.

Contrasting the unadorned masonry walls and use of stone, decorative wood brackets affixed to the soffit of the hip roof creates a rhythmic pattern that ties the four elevations together and offers a bit of Victorian/Queen Anne detailing. The existing windows on the house are predominately one-over-one wood, double-hung windows. Leaded glass upper sash is present on the front elevation middle bay windows. Due to the size of the side elevation gable, the single window opening is either a fixed or awning unit.

The front entry porch fills the remaining width of the first floor's front elevation and counterbalances the gable-topped bay windows with its own gable roof. The wood porch columns, balustrades and balusters are rectangular and relatively unadorned. The concrete porch deck is supported by CMU which is somewhat disguised as it is painted the same color as the masonry walls. Adding in the poured concrete stairs, this lends staff to believe the existing porch may be a replacement of the original. A small raised rear open porch is of similar design and materials to the front porch.

The date of construction for the detached garage at the southeast corner of the lot facing the alley is also not known (it was not present in 1910), but its massing, wood siding and identical design to the neighboring garage suggests it may be from the early-to-mid 20th century. A wood privacy fence runs the perimeter of the rear yard.



Sanborn Map Company, Vol. 6, 1910



Google Aerial, 2021



Left: Designation Photo of neighboring house (which staff partially cut off in order to zoom in on 757 Bethune), HDAB, 1982 Below: HDC Staff Photo, March 2021



PROPOSAL

Per the applicant's narrative and staff review of the submitted drawings, the scope of work is as follows:

- Erection of a 614 square foot, single-story rear addition with a second-floor walkout porch above. The addition will extend from the south elevation of the existing two-story, single family residence.
- The addition will require the removal of three existing wood double-hung (one-over-one) windows, one non-original rear entry door with metal screen door, and a small, open concrete raised porch with wood railing.
- The removed windows and door will be repaired and installed within the addition.
- The existing rear yard concrete walk will be removed and a new concrete walk, of similar angular design, will be poured to reconnect the detached garage and the house.

Materials

Roof:

IKO, Cambridge asphalt dimensional shingle, color: Harvard Slate (matching house)

Walls:

Belden Brick, Modular -3-5/8" x 2-1/4" x 7-5/8", running bond pattern, color: Belcrest 560. New masonry walls to be painted Rookwood Red to match the existing painted masonry walls.

Fascia:

Wood fascia, brackets profile, cadence, size and color (Birdseye Maple) to match existing

Windows:

The three existing windows on the rear elevation will be reused in the proposed addition.

New windows: Pella, Reserve Traditional - The exterior sash finish will match existing (wood exterior), and will be painted the color "Birdseye Maple: to match the remaining windows.

The one small window (W2) is a 2'-9"x2'-9" awning unit

The one double-hung (W1) is 2'-9"x5'-9" unit

The storm windows haven't been selected but will match the existing storms in material, frame dimension, operation, and color.

Stone sills, matching existing window sills in dimension and placement, will be placed below window openings. Gutters/Downspouts:

Gutters, K-style 5-inch, color: white

Downspouts, 3" x 4", color: white

Walk-out Porch Deck:

TPO, a single-ply membrane roofing, color: not selected, but applicant is considering black.

Rear Entry Porch:

Base: CMU, color: Rookwood Red

Stairs: Poured concrete, natural finish

Railing: Pressure-treated wood, colors: Rookwood Red, Birdseye Maple, Renwick Olive

STAFF OBSERVATIONS AND RESEARCH

- The New Center Historic District was established in 1982.
- The addition has a footprint that is only 25% smaller than the house (House 830 square feet, Addition 614 square feet), however its single-story construction on a deep lot keeps it from overwhelming the historic structure.
- The combined square footage of the house and addition is in keeping with the district's Elements of Design, which state lot coverage for single-family dwellings range from 20% to 45%. Staff calculates the coverage of the lot with the addition will be 37%.
- The hip roof allows the addition to have a traditional roof form from the public views (Third Avenue and the alley), while the interior view from the east side of the lot offers a shed roof profile. The lower roof pitch defers to the main roof structure.
- The asymmetrical rear elevation will be visually obscured from Third Avenue due to the distance between the rear wall of the bedroom and the walk-out porch, as well as from the alley due to the southeast location of the garage (which opens onto the alley) and perimeter privacy fence.

- The sizes of the retained windows are all different, per the applicant's window analysis (page B301). As two of the retained windows differ in height by 8-inches, and will be located within the same room (but on opposite walls), the head height of the smaller double-hung on the south elevation is lower to allow the sill heights of the three double-hung windows to be the same.
- The asymmetrical window arrangement on the addition's west elevation, both in placement and use of an almostsquare awning window that is similar to the window in the west elevation gable, follows the architectural design of the house but with more simplified detail (through the use of only stone sills), underscoring its contemporary construction.
- The material specified for the walk-out porch roof, TPO, stands for thermoplastic polyolefin and is a three layer/single-ply roofing membrane. This is a newer roofing material and can be used in place of EPDM and PVC roofs.
- The drawings do not state the exterior finish of the two walls facing the walk-out porch. The architect confirmed they will be finished to match the other exterior walls (brick, painted Rookwood Red).
- The rear elevation notes the a/c unit will be relocated, but its new placement is not shown on the site plan. The architect confirmed it will be relocated on a new concrete pad on the exterior south of Closet (26).
- The design, materials and colors of the rear porch is similar to the existing front entry porch. Both porches have CMU bases, concrete slab landings, poured concrete stairs, wood columns/balusters/balustrades. The rear porch is to have a three color scheme, pulling in all of the colors on the house, while the front porch uses two colors, with the exception of the white at-grade baluster.
- The designation photo of this house is not available, but the house can be seen in the designation photo of the neighboring house. Although the quality of the photograph is a bit grainy, the uniformity of brick color suggests it may have been painted at the time of designation.

ISSUES

- The site plan also shows the existing setback of the house from the east side property line is 2'-2". It isn't clear if the addition can be constructed so close to the property line.
- The site plan shows the addition inset from the east elevation, but the floor plans show the new walls extending directly from the existing walls. The architect confirmed the new walls will align with the existing walls. It is staff's opinion having the new walls inset a few inches on both sides will let the addition clearly read as new construction and may reduce long-term maintenance issues related to bricks and mortar of two different densities/composition being joined by one vertical mortar joint.
- The existing brackets under the soffit of the hip roof are a character-defining feature of the historic house in their design and placement. It is staff's opinion, adding brackets to the new addition creates a conflicting visual (as they would be located on the first floor) and a false sense of history. The addition should read as new construction and the soffits for the west and south elevation should not have applied ornament per staff's interpretation of Standard #9, "...new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment".
- The standard colors of TPO roofing are white, gray and black, but some manufacturers offer an array of color choices. Due to the reflective nature of this product and its placement so close to the neighboring house, staff believes black should be selected.
- The plan shows the rear downspout from the hip roof draining onto the walk-out porch. The slope of the porch floor is shown as 1/4"/1'0". Staff questions if the slope is enough to allow for adequate drainage.
- The exterior paint (beyond the color) has not been selected. A fully waterproof paint, such as latex, must be avoided. A vapor-permeable masonry paint must be selected to allow the brick to "breathe".

RECOMMENDATION

Section 21-2-78, Certificate of Appropriateness

It is staff's opinion the construction of a single-story rear addition and second floor walk-out porch will not will alter the features and spaces that characterize the property. Staff therefore recommends the Commission issue a Certificate of

Appropriateness for the work as proposed because it meets the Secretary of the Interior Standards for Rehabilitation and the Elements of Design for this district.

Staff recommends the Certificate of Appropriateness be issued with the following conditions:

- The decorative brackets will be removed from the addition.
- The color of the TPO membrane roofing will be submitted to staff for review.
- A catalog cut confirming design, material and color of the door leading to the porch will be submitted for review.
- A revised site plan will be submitted to show the location of the a/c unit.
- Paint specifications will be submitted to staff to confirm that a vapor-permeable masonry paint will be used on the historic house.
- Should BSEED require a 3'-0" setback from the side property line, staff requests authority to review the revised footprint of the addition.

The following photos were taken by HDC staff on March 26, 2021.



East Elevation





West Elevations





South Elevations





Front Porch

Scope of work for 757 Bethune is adding 600sqft at the 1st floor with a second-floor walkout balcony along the south façade of an existing two-story single-family residence within the New Center Historic District.

The existing home exterior finishes are:

- Brick throughout the exterior painted Rookwood Red
- Stone sills at windows,
- Brackets on fascia running round the entire home
- Primarily a hip style roof with asphalt shingles.

The addition will require the removal of three existing windows, a door with a metal screen door, and a concrete porch with rotting wood posts and railings. All windows and doors removed will be refurbished and reinstalled in the addition. New windows and doors beyond the refurbished windows and door will match the existing style and color.

The exterior of the addition to continue with the following finishes:

- Brick exterior in a running bond pattern, painted Rookwood Red
- Stone sills at windows
- Hip roof style along the west and south with matching asphalt shingles
- Facia size, brackets profile, cadence, size, and colors to match existing.

Building Description:

THE BUILDING IS A TWO-STORY SINGLE FAMILY HOME WITHIN A HISTORIC DISTRICT OF THE CITY OF DETROIT WITH PRIMARY BRICK EXTERIOR.

Project Description:

THE PROJECT IS ADDING A 614SQFT FIRST FLOOR ADDITION TO THE SOUTH END OF THE BUILDING AND A WALK OUT BALCONY ON THE SCEOND FLOOR.

location map





EXISTING SITE 1'' = 60' - 0''PLAN

owner: THE JOHNSONS Detroit, MI architect: developARCHITECTURE Southfield, Michigan

contractor: T.B.D. City, State



PRELIMINARY 1/8'' = 1'-0''SITE PLAN

Johnson Expansion 757 BETHUNE DETROIT, MI

DESIGN DEVELOPMENT

SYMBOLS



ABBREVIATIONS

Ø A F.F. A A.F.U.S. A A.F.U.S. A A.D.U. A ALUM. A ALUM. A ALUM. A B.C. B BORM. B BORM. B BORM. B BORM. B BORM. B BORM. B BORM. B BO. B B.O. B B.D. B B.O. B B.D. B B.O. B B.D. C.C.B. C.C. C.C. C.C. C.C. C.C. C.C	ę	DIAMETER ABOVE FINISHED FLOOR ACOUSTICAL CEILING TLE ADOUSTICAL CEILING TLE ADOUSTICAL CEILING TLE ADOUSTICAL CEILING TLE ADOUSTICAL CEILING TLE ADOUSTICAL CEILING EXARTIG BEARING BEOROM BLOOKNG BLOOKNG BLOOKNG BLOOKNG BLOOKNG BLOOKNG BLOOKNG BOTTOM OF BUILDING CATCH BASIN CEILING CEILING CEILING CEILING CEILING CEILING CEILING CEILING CEILING CEILING CEILING CEILING CEILING CEILING CEILING CEILING CEILING CEILING COLD WATER COLD WATER COLD WATER COLD WATER COLD WATER CONCRETE MASONRY UNIT CONRETE MASONRY UN	HORIZ INSULU INT. INT. INT. INT. INT. INT. INT. INT.
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COVER SHEET

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DEMOLITION PLAN 1/4'' = 1'-0''

demolition general notes

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A Description

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EXISTING EXTERIOR PHOTOS

B300

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INSIDE WINDOW CONDITION

EXISTING WINDOW IMAGES (EX-W1)

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EXISTING DOOR IMAGES (EX-D1)

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EXISTING CONDITIONS

B301

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25500 Larkins Southfield, MI 48034 P: 248-514-0253

EXTERIOR DOOR CONDITION





1/4" = 1'-0"



1ST FLOOR PLAN

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CODED NOTES - FLOOR PLANS NOT IN CONTRACT EXTENT OF WORK

KEYNOTES

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DATE: PROJECT #: 3-21-21 19006

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Date

FIRST FLOOR PLAN



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SW 2802 Rookwood Red

SW 2834 Birdseye Maple

SW 2815 Renwick Olive

EXISTING EXTERIOR PAINT COLORS

ROOF

CODED NOTES - EXTERIOR ...

BRICK - RUNNING BOND - PAINTED "ROOKWOOD RED" ASPHALT SHINGLES - ESTATE GREY 6° ALLWINUM GUTTER - PROFILE K 6° ALLWINUM DOWNSPOUT WOOD FASCIA WITH BRACKETS STONE SILL

1ST FLOOR 107' - 7"

PROJECT GRADE

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DESIGN DEVELOPMENT

DATE: PROJECT #: 3-21-21 19006

A Description

Date

EXTERIOR **ELEVATIONS**



develop ARCHITECTURE



Size and Performance Data

Air/Water/Structural Performance	
Meets or Exceeds AAMA/WDMA Ratings	H-CW30 - CW50 Hallmark Certified
Air Infiltration $(cfm/ft^2 of frame @ 1.57 psf wind pressure)_2$	0.11
Water Resistance	4.6-7.5 psf
Design Pressure	30-50 psf

Other Performance Criteria					
Forced Entry Resistance Level (Minimum Security Grade)₃	10				
Operating Force (lb) Initiate Motion / Maintain Motion (of Hallmark tested size and glazing)₄	40/45				

Sound Transmission Class / Outdoor-Indoor Transmission Class

Product	Frame Size Tested ₅	Overall Glazing Thickness	Exterior Glass Thickness	Interior Glass Thickness	Third Pane Thickness	STC Rating	OITC Rating
Reserve	WITH INTEGRA	L GRILLES					
Clad Double-Hung Window	45" x 65"	11/16"	2.5mm	2.5mm	-	29	26
WIIIdow	45" x 65"	11/16"	3mm	5mm	-	34	30
	45" x 65"	11/16"	3mm	6mm Laminated	-	35	30
	WITH REMOVA	BLE OR NO GR	RILLES				
	45" x 65"	11/16"	2.5mm	2.5mm	-	28	24
	45" x 65"	11/16"	3mm	5mm	_	32	28
	45" x 65"	11/16"	3mm	6mm Laminated	_	33	28

(-) = Not Available

(2) Published performance data for air infiltration is determined by testing a minimum of four (4) products of NFRC model size. Testing is conducted in accordance with ASTM E283. Air infiltration ratings for products will differ by size. The performance data does not apply to combination assemblies unless noted. Actual product performance may vary for a number of reasons including installation and product care.

(4) Glazing configurations may result in higher operational forces

Pella 2021 Architectural Design Manual | Division 08 - Openings | Windows and Doors | www.Pella.com

⁽¹⁾ Maximum performance for single unit when glazed with the appropriate glass thickness. See Design Data pages in this section for specific product performance class and grade values.

⁽³⁾ The higher the level, the greater the product's ability to resist forced entry.

⁽⁵⁾ ASTM E 1425 defines standard sizes for acoustical testing. Ratings achieved at that size are representative of all sizes of the same configuration.



Features and Options

Standard	Options / Upgrades
Glazing	
Glazing Type	
Dual-Pane Insulating Glass	-
Insulated Glass Options/Low-E Type	s
	SunDefense™ Low-E
	AdvancedComfort Low-E
Advanced Low-E	NaturalSun Low-E
	Clear (no Low-E coating)
Additional Glass Options	
	Tempered Glass
	Obscure Glass 1
Annealed Glass	Low-E Tinted Glass (Bronze, Gray and Green)
	Non-Impact Laminated Dual-Pane Insulating Glass
Gas Fill/High Altitude	
Argon	High altitude
Exterior	
Exterior Sash Profile	
Ogee	Putty Glaze
Exterior Finish	
EnduraClad [®] aluminum-clad exterior	EnduraClad Plus protective finish, Factory Primed Pine wood exterior, Unfinished Mahogany wood exterior
Cladding Colors	
27 Standard colors 1	Custom Colors 1
Interior	
	Factory primed
Unfinished wood	Factory prefinished paint1
	Factory prefinished stain 1
Wood Types	
Pine	Mahogany, Douglas Fir
Hardware	
Hardware Types	
	Simulated lock
Sash lifts, Cam-action lock	Air conditioner lock
	Historical spoon-style lock (surface mounted)
Hardware Finishes	
Champagne, White, Brown or Matte Black	Bright Brass, Satin Nickel, Oil-Rubbed Bronze, Antique Brass, Distressed Bronze, Distressed Nickel 4
Tilt-Wash Cleaning	
Tilt to interior on both sashes	-
Grilles	
Integral Light Technology® Grilles	
-	Traditional, Prairie, Top Row, Cross, New England, Victorian, Diamond, Custom
Roomside Removable Grilles	
-	Traditional, Prairie, Custom
Grilles-Between-the-Glass	
-	Traditional, Prairie, Top Row1, Cross, Custom-Equally Divided
Screens	
-	Integrated Rolscreen® - retractable screen, InView™ screens, Vivid View® screens, in standard roll- form or premium extruded aluminum frame

(–) = Not Available

(1) Contact your local Pella sales representative for current designs and color options.

(2) Only available for Pella Reserve products with triple glazing. Not available with high altitude glazing.

(3) Available with Low-E argon-insulated glass only.

(4) Antique Brass, Distressed Nickel, Distressed Bronze finishes available for Historical spoon-style lock only.



Grille Profiles

Integral Light Technology® Grilles

Ogee Grilles Clad Exterior - Wood Interior

Putty Glaze and Ogee Grilles Clad Exterior - Wood Interior





Putty Glaze and Ogee Grilles Wood Exterior - Wood Interior



Roomside Removable Grilles



Grilles-Between-the-Glass



Interior wood ILT grilles available in Pine, Mahogany or Douglas Fir to match complete unit. Exterior wood ILT grilles available in Pine or Mahogany to match complete unit.



Special Sizes and Dimensions

Special Size Frame Dimensions*

Sash configuration	Vent-Equal	Cottage	Fixed
Sash Glass Ratio Top % : Bottom %	50 : 50	40 : 60	NA
Shortest Unit	24-3/8"	40-1/4"	17"
Frame Size	(619)	(1 022)	(432)
Tallest Unit	96"	81"	71"
Frame Size	(2 438)	(2 057)	(1 803)
Unit Frame	14" to 48"	14" to 48"	17" to 59"
Width Range	(356 to 1 219)	(356 to 1 219)	(432 to 1 499)

Opening Dimensions

Clad Exterior Units:

Dimensions shown in standard size tables are rough opening dimensions.

Wood Exterior Units:

Use frame dimension plus dimensions below. This dimension includes the use of standard 1-1/8" wood subsill.

Frame	Rou	ıgh	Masonry		
Brickmould	Width	Height	Width	Height	
STD	+ 3/4"	+1-7/8"	+ 3-1/8"	+ 3-1/8"	
3-1/2"	+ 3/4"	+1-7/8"	+ 6-3/8"	+ 4-3/4"	

For clad and wood units with impact-resistant glass, see the product installation instructions or refer to local

Lund Lund

CLEAR OPENING WIDTH





Shaded portion shows vent area.

building code requirements.

Equal Sash Only

		Vent Units	Fixed and Transom Units
	Visible	Width = Frame - 5.647"	Width = Frame - 5.75"
	Glass	Height = (Frame - 8.681")÷2	Height = Frame - 5.75"
	Actual Glass	Width = Frame - 4.375"	Width = Frame - 4.375"
		Height = (Frame - 5.983")÷2	Height = Frame - 4.375"
	Clear	COW = Frame Width - 3.4375"	
	Opening*	COH = (Frame Height÷2) - 4.4375"	
	Vent Area Ft²	(COW x COH) ÷ 144	

* Some units with custom glazing may have limited travel. Integrated Rolscreen® is only available on sizes greater than or equal to 34" tall and 21" wide and less than or equal to 84" tall and 48" wide.

See your local Pella sales representative for specific size information.

Traditional grille patterns shown. Refer to Grille Types section for additional patterns and profiles.



Detailed Product Description - Aluminum-Clad Exterior

Frame

- Select softwood, immersion treated with Pella's EnduraGuard[®] wood protection formula in accordance with WDMA I.S.-4. The EnduraGuard formula includes three active ingredients for protection against the effects of moisture, decay, stains from mold and mildew. Plus, an additional ingredient adds protection against termite damage.
- Interior exposed surfaces are [clear pine] [mahogany] [douglas fir].
- Exterior surfaces are clad with aluminum.
- Components are assembled with screws, staples and concealed corner locks.
- Overall frame depth is 5" (127mm) for a wall depth of 3-11/16" (94mm).
- Optional factory applied jamb extensions available between 3-13/16" (97mm) and 9-3/16" (233mm).
- Vinyl jamb liner with wood / clad inserts.
- Optional factory installed fold-out installation fins with flexible fin corners.
- Optional factory-applied EnduraClad* exterior trim.

Sash

- Select softwood, immersion treated with Pella's EnduraGuard[®] wood protection formula in accordance with WDMA I.S.-4. The EnduraGuard formula includes three active ingredients for protection against the effects of moisture, decay, stains from mold and mildew. Plus, an additional ingredient adds protection against termite damage.
- Interior exposed surfaces are [clear pine] [mahogany] [douglas fir]. Any curved member may have visible finger-jointed surfaces.
- Exterior surfaces are clad with extruded aluminum butt-jointed at all corners of the sash with through-stile construction and sealed.
- Corners mortised and tenoned, glued and secured with metal fasteners.
- Sash thickness is 1-7/8" (47mm).
- Double-Hung: Upper sash has surface-mounted wash locks for easy tilt-in cleaning] [Single-Hung: Fixed upper sash has surface-mounted wash locks] [Arch Head units have no wash locks].
- Lower sash has concealed wash locks in lower check rail allowing sash to tilt in for easy cleaning.
- Simulated-Hung units have non-operable upper and lower sashes.
- Sash exterior profile is [ogee] [putty glaze], interior profile is ogee.

Weatherstripping

- · Water-stop santoprene-wrapped foam at head and sill.
- Thermoplastic elastomer bulb with slip-coating set into lower sash for tight contact at check rail.
- Vinyl-wrapped foam inserted into jamb liner to seal against sides of sash.

Glazing System

- Quality float glass complying with ASTM C 1036.
 Custom and high altitude glazing available.
 Silicone-glazed dual-pane 13/16" dual-seal insulating glass [[annealed] [tempered]], [[clear] [[Advanced Low-E] [SunDefense™ Low-E] [NaturalSun Low-E] [AdvancedComfort Low-E] with argon]] [[bronze] [gray] [green] Advanced Low-E [with Argon]] [obscure] [Reflective Bronze]. - or -
- Silicone-glazed dual-pane 13/16" dual-seal [[annealed] [tempered]] non-impact laminated glass [[clear] [[Advanced Low-E] [SunDefense Low-E] with Argon]] [[bronze] [gray] [green] Advanced Low-E [with argon]].

Exterior

- Aluminum-clad exteriors shall be finished with EnduraClad[®] protective finish, in a multi-step, baked-on finish.
 - Color is [standard] [custom]1.
- or Aluminum-clad exteriors shall be finished with EnduraClad Plus protective finish with 70% fluoropolymer resin in a multi-step, baked-on finish. Color is [standard] [custom]1.

Interior

• [Unfinished, ready for site finishing] [factory primed with one coat acrylic latex] [pine: factory prefinished [paint] [stain]1].

(1) Contact your local Pella sales representative for current designs and color options.

(2) Available in clear or Low-E insulating glass only.

(3) Tan, Brown and Putty Interior GBG colors are available in single-tone (Brown/Brown, Tan/Tan or Putty/Putty). Other interior colors are also available with Tan or Brown exterior.

(4) Appearance of exterior grille color will vary depending on Low-E coating on glass.

(5) Full screens are available on units ≤ 96" height.

(6) Integrated Rolscreen only available on sizes \geq 34" tall and 21" wide, and \leq 84" tall and 48" wide

(7) Vivid View screen is not available when frame height is > 84" or when both frame width and frame height are > 48"

Hardware

- Galvanized block-and-tackle balances are connected to self-locking balance shoes which are connected to the sashes using zinc die cast terminals and concealed within the frame.
- Sash lock is [standard (cam-action)] [historic spoon-style] [air-conditioner lock] [simulated lock (Single-piece lock ties upper and lower sash together. When removed lower sash becomes operable)]. Two sash locks on units with frame width 37" and greater.
- Optional sash lift furnished for field installation. Two lifts on units with frame width 37" and greater.
- Hardware finish is [baked enamel [Champagne] [White] [Brown] [Matte Black]] [Bright Brass] [Satin Nickel] [Oil-rubbed Bronze] [Antique Brass] [Distressed Bronze] [Distressed Nickel].

Optional Products

Sash

Exterior sash lugs

 Optional factory applied accessory. Exterior finish is [Standard 1] [Custom 1]. Grilles

- Integral Light Technology* grilles
 Interior grilles are [5/8"] [7/8"] [1-1/4"] [2"] ogee profile that are solid [pine] [mahogany] [douglas fir]. Interior surfaces are [unfinished, ready for site
 - finishing] [factory primed] [pine: factory prefinished [paint] [stain] 1]. Exterior grilles are [5/8" putty glaze profile] [7/8" [putty glaze] [ogee] profile] [1-1/4" [putty glaze] [ogee] profile] [2" ogee profile] that are extruded aluminum.
 - Patterns are [Traditional] [Prairie] [Top Row] [New England] [Victorian].
 - Insulating glass contains non-glare spacer between the panes of glass.
 Grilles are adhered to both sides of the insulating glass with VHB acrylic
 - adhesive tape and aligned with the non-glare spacer. - or -
- Grilles-Between-the-Glass₂
 - Insulating glass contains 3/4" contoured aluminum grilles permanently installed between two panes of glass.Patterns are [Traditional] [9-Lite Prairie] [Cross] [Top Row]

 - Interior color is [White] [Tan₃] [Brown₃] [Putty₃] [Black] [Morning Sky Gray] [Ivory] [Sand Dune] [Harvest] [Cordovan] [Brickstone].
 - Exterior color₄ is [standard]₁.
 - or -
- Roomside Removable grilles
 [[3/4"] [1-1/4"] [2"] traditional] [[1-1/4"] [2"] colonial] profile, with [Traditional] [Prairie] patterns that are removable solid pine wood bars steel-pinned at joints and fitted to sash with steel clips and tacks.
 - Interior [unfinished, ready for site finishing] [factory primed] [pine: factory prefinished [paint] [stain] 1]
 - Exterior [unfinished, ready for site finishing] [factory primed] [finish color matched to exterior cladding 4].

Screens

- Integrated Rolscreen[®] (for rectangular units only)₆
 - Retractable screen integrated into [lower sash] [both upper and lower sash]. Screen rollers are fixed and concealed within the frame, screen is held to the sash by magnets which release when the bottom sash is tilted for cleaning, and when the upper sash is opened past 18"
 - InView Screen cloth, black vinyl-coated 18/18 mesh fiberglass screen cloth complying with ASTM D 3656 and the performance requirements of SMA 1201. - or -
- InView[™] screens
 - [Half-Size] [Full-Size 4] black vinyl-coated 18/18 mesh fiberglass screen cloth complying with the performance requirements of SMA 1201, set in a [standard roll-form] [premium extruded] aluminum frame fitted to outside of window, supplied complete with all necessary hardware. Full screen spreader bar placed on units > 37" width or > 65" height.
 - Screen frame finish is [standard screen: baked enamel] [premium extruded:
 - [baked enamel] [anodized]], color to match window cladding. - or -
- Vivid View[®] screens₇
 - [Half-Size] [Full-Size] PVDF 21 / 17 mesh, minimum 78 percent light transmissive screen, set in a [standard roll-form] [premium extruded] aluminum frame fitted to outside of window, supplied complete with all necessary hardware.
 - Full screen spreader bar placed on units > 37" width or > 65" height.
 - Screen frame finish is [standard screen: baked enamel] [premium extruded: [baked enamel] [anodized]], color to match window cladding.

Hardware

- Optional factory applied limited opening device available for vent units in
- stainless steel; nominal 3-3/4" opening. Limiting device concealed from view. Optional factory applied window opening control device. Device allows window
- to open less than 4" with normal operation, with a release mechanism that allows the sash to open completely. Complies with ASTM F2090-10.

Sensors

Optional factory installed integrated security sensors available in vent units.



TruDefinition® **DURATION FLEX**® Shingles with Detented SureNail® Techn

Shingles with Patented SureNail® Technology

Your shingles need to help protect your home on a daily basis. Duration FLEX® shingles are more flexible than standard shingles, for enhanced durability and performance in all environmental conditions, including storms and cold weather installation. And they're the only SBS modified polymer shingle that also comes with the advanced performance of patented SureNail® Technology for added confidence in windy conditions.

Duration FLEX[®] shingles include:

- Patented SureNail® Technology for exceptional wind resistance
- Limited Lifetime Warranty**/##
- 130-MPH Wind Resistance Limited Warranty**
- StreakGuard[™] Protection with a 10-year Algae Resistance Limited Warranty**
- Popular color options, ranging from rich and subtle to lively and vibrant.



HELP PROTECT WITH THE POWER OF FLEX

Made with a proprietary blend of SBS polymer modified asphalt

The rubberizing effect of our uniquely blended SBS modified asphalt makes the shingles pliable and gives them greater flexibility than standard shingles. The result is a premium architectural asphalt shingle with enhanced durability and toughness, especially under intense storm conditions, to help deliver lasting protection for your home.

Duration FLEX® Shingles

- Feature SureNail® Technology which gives a 42% better nail-pull resistance against the wind versus standard shingles.
- Have built-in flexibility to help resist cracking and tearing, in all-weather installation conditions – over 10% stronger tear strength than traditional shingles.
- · Lays flat faster than standard shingles.

- Offer rubber-like flexibility to withstand expansion and contraction stresses and helps **minimize loss of granules** which help to protect the shingle against UV.
- Help absorb the energy of the impact of hail or storm debris; have the highest impact rating possible; UL 2218 Class 4 and may qualify for a homeowner insurance discount*.

LAYS FLAT FASTER

Duration FLEX[®] shingles are specifically formulated to lay flat more quickly than standard shingles in all weather conditions for a clean, finished look.





UL 2218, Class 4 Highest rating possible for impact resistance.

Flexible Shingles

Withstands shingle expansion and contraction; helps resist cracking and tearing.

THE ONLY SBS SHINGLE WITH SURENAIL® TECHNOLOGY

When performance is your priority, choose the shingle that offers you a material difference.

Duration FLEX® shingles are the only SBS modified polymer shingle with the added confidence of patented SureNail® Technology for exceptional wind resistance.



Excellent Adhesive Power

Helps keep the shingle layers laminated.

Outstanding Grip o

The SureNail® strip enhances the already amazing grip of our proprietary Tru-Bond®[‡] sealant for exceptional wind resistance of a 130-MPH wind warranty.^{**}



- Breakthrough Design

Patented SureNail® Technology is the first and only reinforced nailing zone on the face of the shingle.

-• "No Guess" Wide Nailing Zone

This tough, engineered woven-fabric strip is embedded in the shingle to create an easy-tosee strong, durable fastener zone.



Triple Layer Protection^{®††}

A unique "triple layer" of reinforcement occurs when the fabric overlays the two shingle layers, providing increased protection against "nail pull" from the wind.

Double the Common Bond

SureNail[®] features up to a 200% wider bond between the shingle layers in the nailing zone over standard shingles.

TRUDEFINITION® DURATION FLEX® SHINGLES

Add style to your home with premium color blends in a continuum of choices from subtle to vibrant.

Rich, sophisticated classic hues



Brownwood⁺



Estate Gray⁺



SEE HOW YOUR SELECTED SHINGLE COLOR WILL LOOK ON YOUR HOME.

Try it out at owenscorning.com/DEQ



Driftwood⁺



Onyx Black⁺



Teak⁺







ARTIC CLEAR



ALAMO BLEND



ST. ANNE BLEND



WINEWOOD BLEND



BELCREST 170



1			-		
100		12			
			3.00		
			4		

POLAR WHITE CLEAR



BRIDGEPORT BLEND

ST. ANNE CLEAR

ROSEWOOD CLEAR

BELCREST 310







KINGSPORT



ROSEWOOD BLEND



BELCREST 360

BELCREST 730



BAYPORT



MEADOW BLEND



QUEENSPORT BLEND



GARNET BLEND



BELCREST 500



BELCREST 760





Sizes

BRICK UNIT	APPROX. WT.	SIZE / INCHES	FACE / M.B.E.	UNITS PER SQ. FT. WALL	SIZE (MM)
MODULAR	4.3 #	3-5/8" x 2-1/4" x 7-5/8"	1	6.86	92 x 57 x 194
STANDARD	4.5 #	3-5/8" x 2-1/4" x 8"	1.05	6.55	92 x 57 x 203
JUMBO MODULAR	5.1 #	3-5/8" x 2-3/4" x 7-5/8"	1.22	5.76	92 x 70 x 194
QUEEN	5.6 #	3-1/8" x 2-3/4" x 9-5/8"	1.54	4.61	70 x 70 x 244
ROMAN	4.7 #	3-5/8" x 1-5/8" x 11-5/8"	1.10	6.00	92 x 41 x 295
NORMAN	6.3 #	3-5/8" x 2-1/4" x 11-5/8"	1.52	4.57	92 x 57 x 295
JUMBO NORMAN	7.8 #	3-5/8" x 2-3/4" x 11-5/8"	1.86	3.84	92 x 70 x 295
AMBASSADOR	8.4 #	3-5/8" x 2-1/4" x 15-5/8"	2.05	3.43	92 x 57 x 397
ECONOMO MODULAR	6.6 #	3-5/8" x 3-5/8" x 7-5/8"	1.61	4.50	92 x 92 x 194
UTILITY	10.5 #	3-5/8" x 3-5/8" x 11-5/8"	2.46	3.00	92 x 92 x 295
MONARCH	13.5 #	3-5/8" x 3-5/8" x 15-5/8"	3.30	2.25	92 x 92 x 397
QUAD	13.5 #	3-5/8" x 7-5/8" x 7-5/8"	3.39	2.25	92 x 194 x 194
DOUBLE UTILITY	21.0 #	3-5/8" x 7-5/8" x 11-5/8"	5.17	1.50	92 x 194 x 295
DOUBLE MONARCH	29.0 #	3-5/8" x 7-5/8" x 15-5/8"	6.94	1.13	92 x 194 x 397



QUALITY BRICK FOR MORE THAN 120 YEARS

TECHNICAL SUPPORT AND CONSULTATION

Our staff is available at all times to answer technical questions or consult with you on any aspect of your interest in brick. Call any one of our authorized distributors or call Bob Belden at our main office: (330) 456-0031.

GUIDE TO SPECIFYING DIVISION 4 SECTION 04210 PART II PRODUCTS 2.01 BRICK

- A. Facing Brick: All brick specified and shown on drawing shall be (product name)
 - as manufactured by The Belden Brick Company, Canton, Ohio.
 - 1. ASTM C-216 _____, Grade SW Type _____,
 - 2. Dimensions ______ X _____ X _____ X _____
 - 3. Minimum Compressive Strength: _____ Maximum IRA.
 - Provide brick similar in texture, color and all physical properties to those available for inspection at the Architect/Engineer's office and/or as supplied on the approved sample panel.
 - 5. Shapes: All special shapes are to be used per architectural detail(s) #_____ as supplied to The Belden Brick Company.
- B. Mortar: Conventional mortar shall conform with ASTM C-270 under the guidelines provided in BIA Technical Notes, Series 8.

PART III EXECUTION

- A. Bonding: Lay masonry in _____bond pattern as indicated. Reference BIA Technical Note #30 for further recommendations.
- B. Tooling: Tooling shall conform to the guidelines provided in BIA Technical Notes 7B revised.
- C. Cleaning: Cleaning shall be as per guidelines in BIA Technical Note #20, Revised II.
- All cleaning practices and product use shall also be in accordance with cleaning agent manufacturers printed instructions.

NOTES TO SPECIFIER:

ASTM DESIGNATION C-216-XX (with the last number being the year of the last update). All A grade Belden Brick complies with ASTM C-216-XX, grade SW (severe weathering).

- A Type FBS Brick for general use in masonry.
- B Type FBX Brick for general use in masonry where a higher degree of precision and lower permissible variation in size than permitted for type FBS is required.
- *C* Type FBA Brick for general use in masonry selected to produce characteristic architectural effects resulting from non-uniformity in size and texture of the individual units.

When the type is not specified the requirements for the type FBS shall govern.

The above is per ASTM Designation C-216-XX Standard Specification for Facing Brick (Solid Masonry Units Made From Clay or Shale).



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A SAMPLING OF BELDEN BRICK AT WORK

Alice H. Cook House Cornell University Ithaca, NY Kieran Timberlake Associates, LLP

American Airlines Center Dallas, TX David M. Schwarz Architectural Services

AT&T Offices Monmouth County, NJ CUH2A

Boston College Sports Complex Chestnut Hill, MA Sasaki Associates, Inc.

Busch Stadium St. Louis, MO HOK Architects

Central Mutual Insurance Co. Van Wert, OH Flad & Associates

Clarion North Medical Center Carmel, IN HKS, Inc.

Crocker Park Westlake, OH Bialosky + Partners Architects

David Letterman Communication & Media Bldg. Muncie, IN MSKTD & Associates, Inc.

Earth Sciences Building & Museum of Natural History Amherst, MA Payette

First Friends Church North Canton, OH Harris-Day Architects Inc.

Grand Valley State University DeVos Center Grand Rapids, MI Design Plus Inc.

Good Samaritan North Hospital Englewood, OH Earl Swensson Associates

Harry London's Candies Canton, OH Lawrence, Dykes, Goodenberger, Vandegrift & Clancy

Holy Angels Church Chagrin Falls, OH Zarzycki – Malik Architects

Jordan Hall of Science at the University of Notre Dame South Bend, IN The S/L/A/M Collaborative

Leazar Hall at NC State University Raleigh, NC Cannon Architects Mayfaire Town Center Wilmington, NC Cooper Carry, Inc.

Midwest Express Center Milwaukee, WI Thompson, Ventulett, Stainbach & Associates

Miller Park Milwaukee, WI HKS, Inc. / NBBJ / Eppstein Uhen Architects

Myrtle Wycoff Station Complex Brooklyn, NY Dattner Architects

Northern Kentucky Convention Center Covington, KY Sherman Carter Barnhart

River House New York, NY Polshek Partnership Ismael Leyva Architects

Seaport Hotel World Trade Center Boston, MA The Stubbins Associates, Inc.

Taconic Hills School Hillsdale, NY Rhinebeck Architectural & Planning

The Eye Center Columbus, OH Gil Sass–AMB Development Group

The Millennium Building Canton, OH Wilson Architectural Group

The Ohio State University Fisher School of Business Columbus, OH Karlsberger Co.

University of Cincinnati Mary Emory Hall Cincinnati, OH I. M. Pei

University of Pittsburgh Convocation Center Oakland, PA Apostolou & Associates

Whole Foods Market Washington, DC Mushinsky Voelzke Associates

Womack Replacement Hospital Fort Bragg –Fayetteville, N.C. The Smith Group, Inc.



Amerimax 5.5-in x 120-in White K Style Gutter Item #11551 Model #2600600120

- The Amerimax 5-in aluminum gutter is used to control runoff, protect walls, and help prevent...
- Manufactured from durable aluminum with a factory baked-on white finish
- This gutter is a convenient, do-it-yourself 10-ft length





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View Q&A

Amerimax 120-in White Aluminum Downspout

Item #82573 Model #4601100120

- Use this 3-in x 4-in downspout to connect to rain gutters to guide roof run-off down the exterior wall
- Best to use this size downspout with oversized or steep roofs in areas with heavy rainfall, drains 46...
- Attach to the wall with downspout bands, sickle hooks, or rack and key, using 2 attachments per 1...

