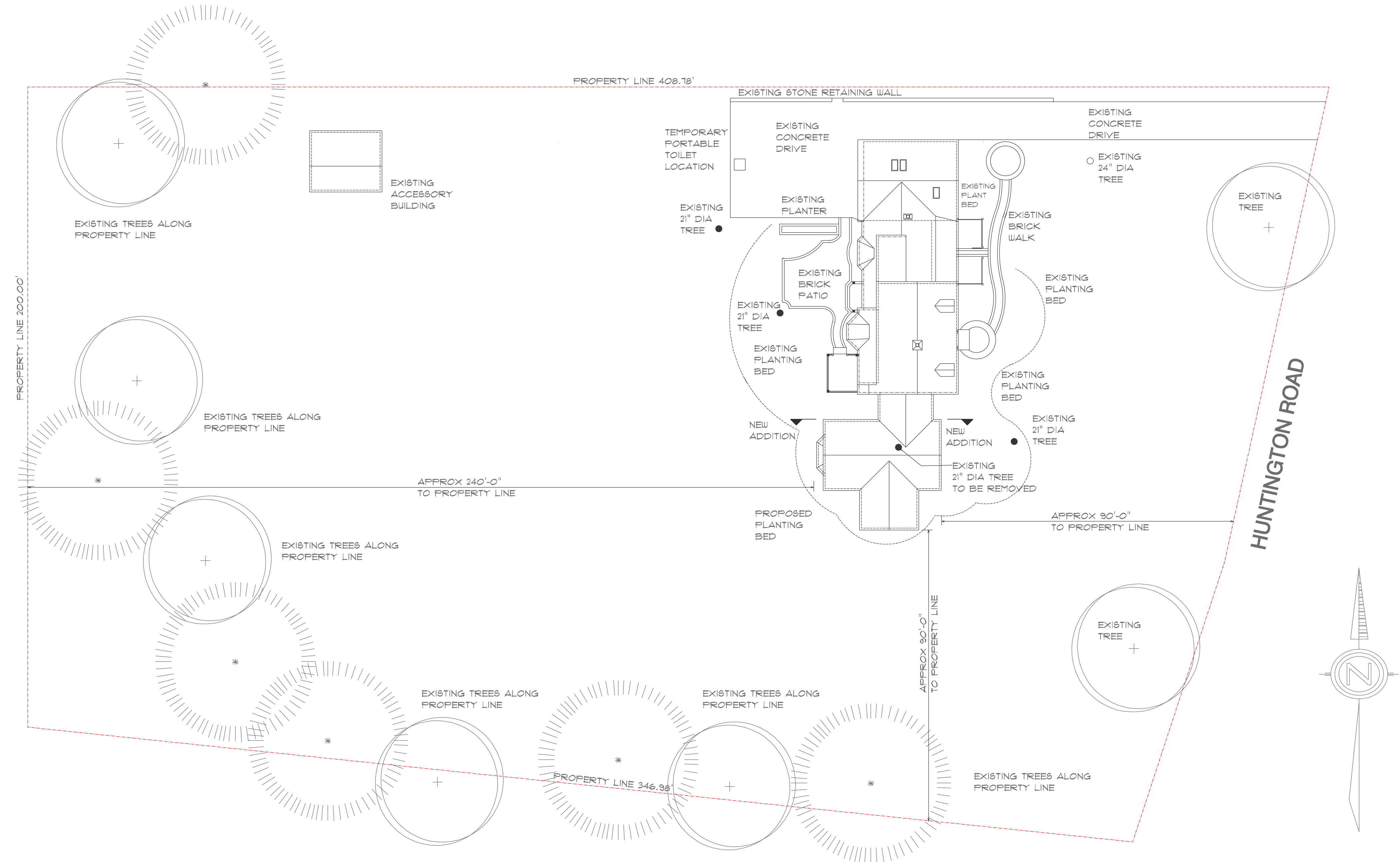


[illegible]

EXTERIOR MATERIAL SPECIFICATIONS	
ROOFING	CERTAINTEE 30 YEAR NICKEL GREY ASPHALT SHINGLES
GUTTERS	5" ALUMINUM WHITE GUTTERS AND DOWNSPOUTS
SIDING	6" SMOOTH CEDAR PAINTED WHITE W/ 4" EXPOSURE
WINDOWS	PELLA ARCHITECTURAL SERIES ALUMINUM CLAD WHITE DOUBLE HUNG W/ GRILLES BETWEEN THE GLASS
BRICK	BRICK AT NEW FOUNDATION TO MATCH EXISTING BRICK AT DECK



**SCALE: 1" = 20'-0"**

REVIEWS	DATE	DRAWING
	JUNE 18, 2017 01:43 PM	A1

7566 HUNTINGTON DRIVE  
HUDSON, OHIO

 **CRASI, HOMES, INC.**  
**DESIGNERS AND BUILDERS OF FINE HOMES**

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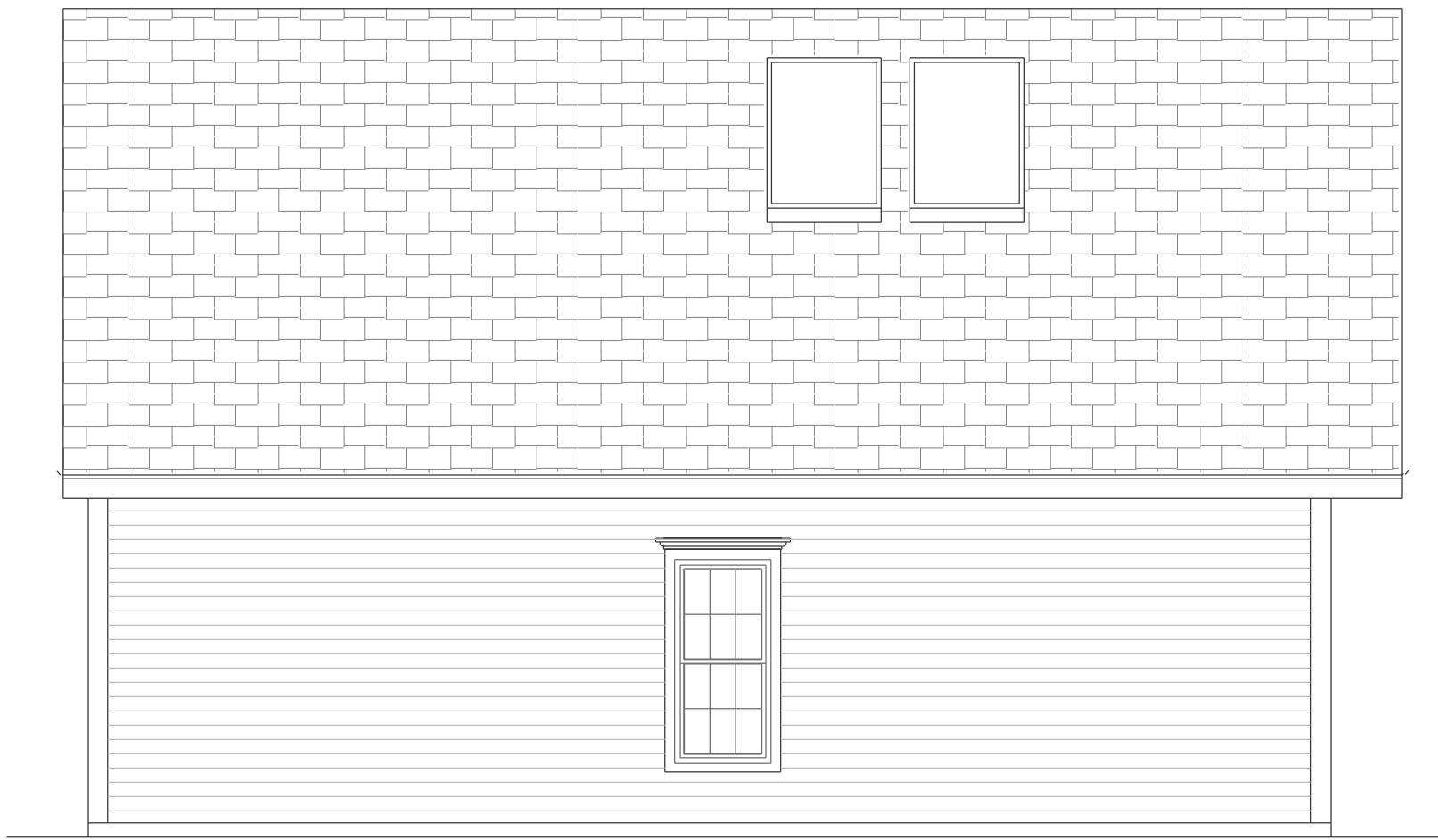
1212 PORTAGE TRAIL SUITE 4 CUYAHOGA FALLS, OHIO 44223 330-923-9905





EXISTING FRONT ELEVATION

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



EXISTING GARAGE SIDE ELEVATION

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



EXISTING REAR ELEVATION

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



EXISTING LEFT SIDE ELEVATION

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



EXISTING FRONT ELEVATION

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



EXISTING FRONT LEFT CORNER ELEVATION

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



EXISTING REAR ELEVATION

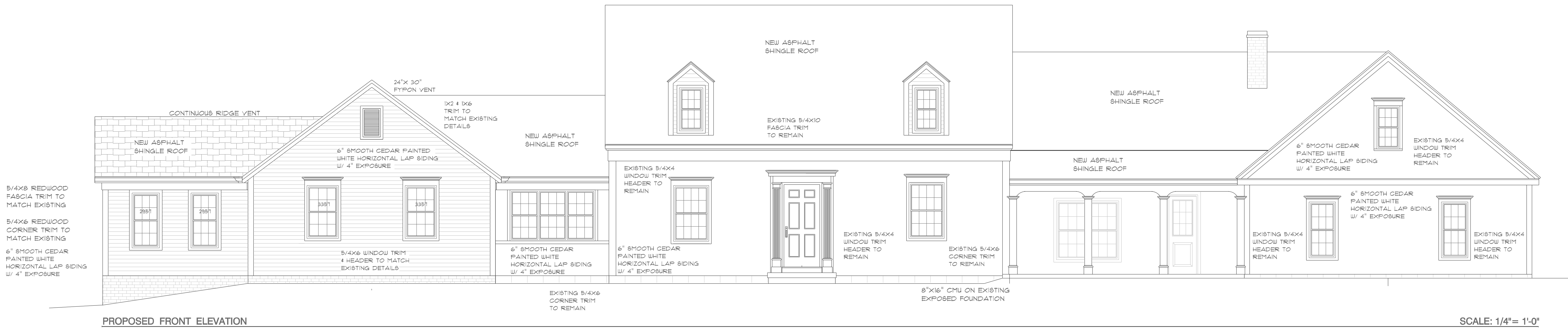
SCALE: 1/4"= 1'-0"



EXISTING REAR RIGHT CORNER ELEVATION

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





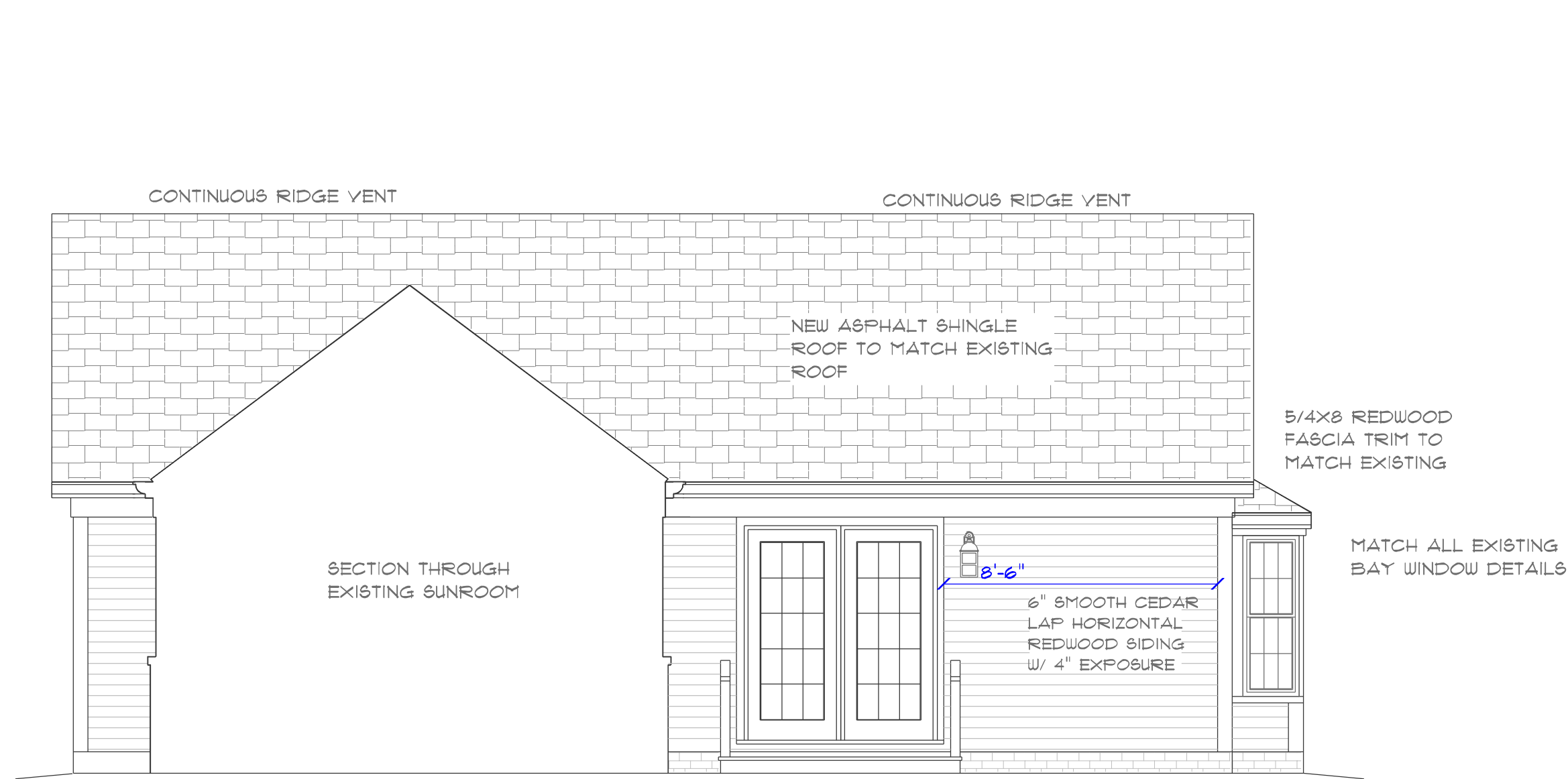
PROPOSED FRONT ELEVATION

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



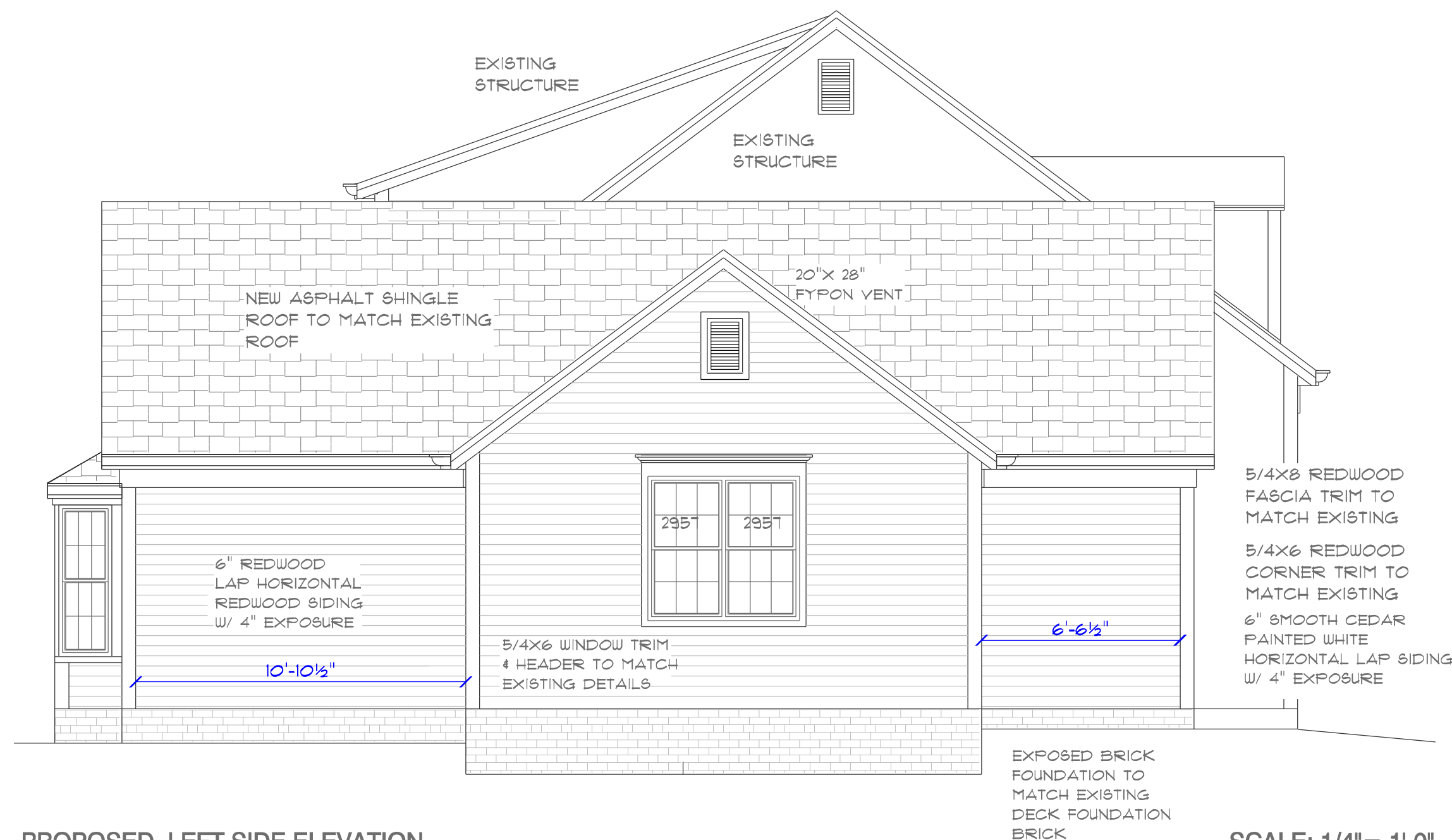
PROPOSED REAR ELEVATION

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



PROPOSED MASTER SUITE ELEVATION

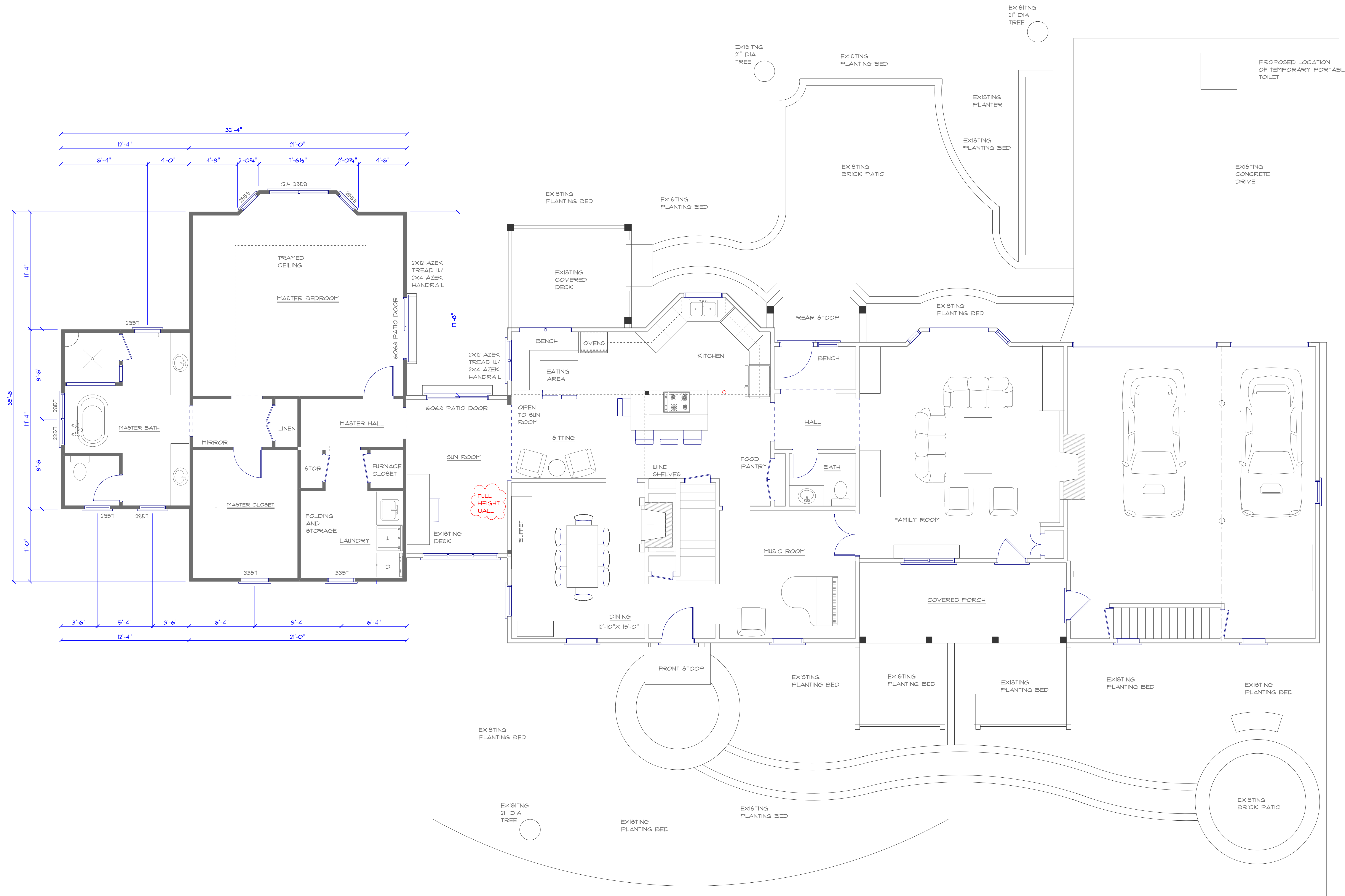
SCALE: 1/4"= 1'-0"



PROPOSED LEFT SIDE ELEVATION

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





PROPOSED FIRST FLOOR PLAN

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

DRAWING	A2	
	DATE	JUNE 18, 2017 01:06 PM
REVISIONS		
RENOVATION FOR DON AND SHELLY CHADWICK 7566 HUNTINGTON DRIVE HUDSON, OHIO		
CRASI, HOMES, INC DESIGNERS AND BUILDERS OF FINE HOMES 1212 PORTAGE TRAIL SUITE 4 CUYAHOGA FALLS, OHIO 44223 330-923-9905		





## GRILLE TYPES

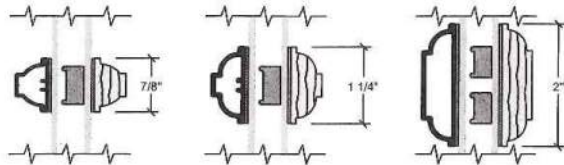
Typical Grille Profiles



### Integral Light Technology® Grilles

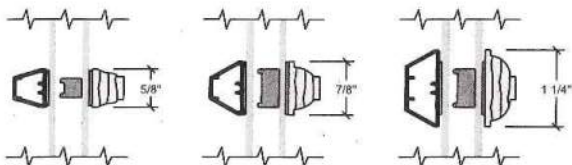
#### Ogee Grilles

##### Clad Exterior - Wood Interior



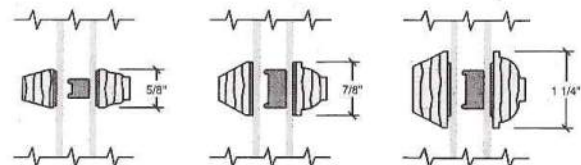
#### Putty Glaze and Ogee Grilles

##### Clad Exterior - Wood Interior

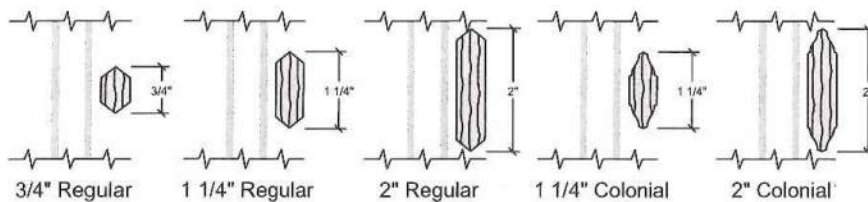


#### Putty Glaze and Ogee Grilles

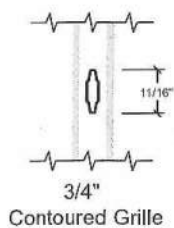
##### Wood Exterior - Wood Interior



### Roomside Removable Grilles



### Grilles-Between-the-Glass



7566 Hunter

←  
GRILLES  
BETWEEN  
GLASS.

Interior wood ILT grilles available in Pine, Mahogany or Douglas Fir

Exterior wood ILT grilles available in Pine or Mahogany to match complete unit.



## DETAILED PRODUCT DESCRIPTIONS

### Aluminum-Clad Exterior

### LX and SE Double-, Single- and Simulated-Hung



#### 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 [LX: [clear pine] [mahogany] [douglas fir]] [SE: clear pine].
- 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 4-9/16" (116mm) and 7-3/16" (183mm) wall depths.
- Vinyl jamb liner [LX includes 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 [LX: [clear pine] [mahogany] [douglas fir]] [SE: clear pine]. Any curved member may have visible finger-jointed surfaces.
- Exterior surfaces are clad with aluminum and sealed.
- Corners mortised and tenoned, glued and secured with metal fasteners.
- Sash thickness is 1-7/8" (47mm).
- Sash exterior and interior profile is ogee.
- Double-Hung: Upper sash has surface-mounted wash locks [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.
- Sashes tilt for easy cleaning.
- Simulated-Hung units have non-operable upper and lower sashes.

#### 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 11/16" dual-seal insulating glass [(annealed) [tempered]] [(clear) [(Advanced Low-E) [SunDefense™ Low-E] [Advanced Comfort] [Natural Sun 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].
- 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].

#### INTERIOR

- [Unfinished, ready for site finishing] [factory primed with one coat acrylic latex] [factory prefinished [White] [Linen White] [Bright White] [stain 1]].

#### 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

##### Grilles

- Integral Light Technology® grilles
  - Interior grilles are [5/8"] [7/8"] [1-1/4"] [2"] ogee profile that are solid [LX: [pine] [mahogany] [douglas fir]] [SE: pine]. Interior surfaces are [unfinished, ready for site finishing] [factory primed] [pine: factory prefinished [White] [Linen White] [Bright White] [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.
- Grilles-Between-the-Glass<sub>2</sub>
  - 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] [Tan 1] [Brown 1] [Putty 1] [Ivory] [Brickstone] [Harvest] [Cordovan].
  - Exterior colors is [standard].

- or -

- or -

##### Roomside Removable grilles

- [(3/4") [1-1/4"] [2"] regular] [(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 [White] [Linen White] [Bright White] [stain 1]].
- Exterior [unfinished, ready for site finishing] [factory primed] [finish color matched to exterior claddings].

##### Screens

- InView™ screens
  - [Half-Size] [Full-Size<sub>4</sub>] black vinyl-coated 18/18 mesh fiberglass screen cloth complying with the performance requirements of SMA 1201, set in 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 baked enamel, color to match window cladding.
- Vivid View® screens
  - [Half-Size] [Full-Size<sub>4</sub>] PVDF 21 / 17 mesh, minimum 78 percent light transmissive screen, set in 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 baked enamel, color to match window cladding.

- or -

##### 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 available. 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.

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

(2) Available in clear or Low-E insulating glass only. White exterior grille color is the only option for clear insulating glass.

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

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





HUNG

## DETAILED PRODUCT DESCRIPTIONS

### Wood Exterior

### LX Double-, Single- and Simulated-Hung



#### 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] (standard rectangular windows only). Any curved member may have visible finger-jointed surfaces.
- Exterior surfaces are [pine] [mahogany].
- Overall frame depth is 4-3/8" (111mm) for a wall depth of 4-3/16" (106mm).
- Vinyl Jamb liner includes wood / clad inserts.
- Optional factory applied jamb extensions available for 4-9/16" (116mm) and 7-3/16" (183mm) wall depths, with Pella's standard wood 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] (standard rectangular windows only). Any curved member may have visible finger-jointed surfaces.
- Exterior surfaces are [pine] [mahogany].
- Corners [mortised and tenoned on rectangular units] [mitered on arch head units], glued and secured with metal fasteners.
- Sash thickness is 1-7/8" (47mm).
- Sash exterior profile is putty glaze, interior profile is ogee.
- [Double-Hung: Upper sash has surface-mounted wash locks] [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.
- Sashes tilt for easy cleaning.
- Simulated-Hung units have non-operable upper and lower sashes.

#### WEATHERSTRIPPING

- Water-stop santoprene-wrapped foam at head and sill.
- Thermoplastic elastomer bulb with slip coating set into Low-E 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 11/16" dual-seal insulating glass [[annealed] [tempered]] [[clear] [Advanced Low-E] [SunDefense™ Low-E] [Advanced Comfort Low-E] [Natural Sun Low-E] with argon]] [[bronze] [gray] [green] Advanced Low-E with argon].

#### EXTERIOR

- [Pine: factory primed with one coat acrylic latex] [Mahogany: factory primed with one coat acrylic latex] [Unfinished, ready for site finishing].

#### INTERIOR

- [Unfinished, ready for site finishing] [factory primed with one coat acrylic latex] [factory prefinished [White] [Linen White] [Bright White] [stain<sub>1</sub>]].

#### 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

##### Grilles

- Integral Light Technology® grilles
  - Interior grilles are [5/8"] [7/8"] [1-1/4"] ogee profile that are solid [pine] [mahogany]. Interior surfaces are [unfinished, ready for site finishing] [factory primed] [pine: factory prefinished [White] [Linen White] [Bright White] [stain<sub>1</sub>]].
  - Exterior grilles are solid [5/8"] [7/8"] [1-1/4"] putty glaze profile that are [pine] [mahogany]. Exterior surfaces are water repellent, preservative-treated in accordance with WDMA I.S.-4, and are [unfinished, ready for site finishing] [factory primed].
  - 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-Glass<sub>2</sub>

- Insulating glass contains 3/4" contoured aluminum grilles permanently installed between two panes of glass.
- Patterns are [Traditional] [Prairie] [Cross] [Top Row]
- Interior color is [White] [Tan<sub>3</sub>] [Brown<sub>3</sub>] [Putty<sub>3</sub>] [Ivory] [Brickstone] [Harvest] [Cordovan].
- Exterior colors is [standard]<sub>3</sub>.

- or -

##### Roomside Removable grilles

- [[3/4"] [1-1/4"] [2"] regular] [[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 [White] [Linen White] [Bright White] [stain<sub>1</sub>]].
- Exterior [unfinished, ready for site finishing] [factory primed] [factory prefinished, finish color matched to exterior claddings].

##### Screens (for Double- and Single-Hung)

###### InView™ Screens

- [Half-Size] [Full-Size<sub>4</sub>] black vinyl-coated 18/18 mesh fiberglass screen cloth complying with the performance requirements of SMA 1201, set in 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 [baked enamel, White] [feature<sub>3</sub>].

- or -

###### Vivid View® Screens

- [Half-Size] [Full-Size<sub>4</sub>] PVDF 21/17 mesh, minimum 78 percent light transmissive screen, set in 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 [baked enamel, White] [feature<sub>3</sub>].
- Arch head units have half-size screen only.

##### 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 available. 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.

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

(2) Available in clear or Low-E insulating glass only. White exterior grille color is the only option for clear insulating glass.

(3) Tan, Brown or 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.

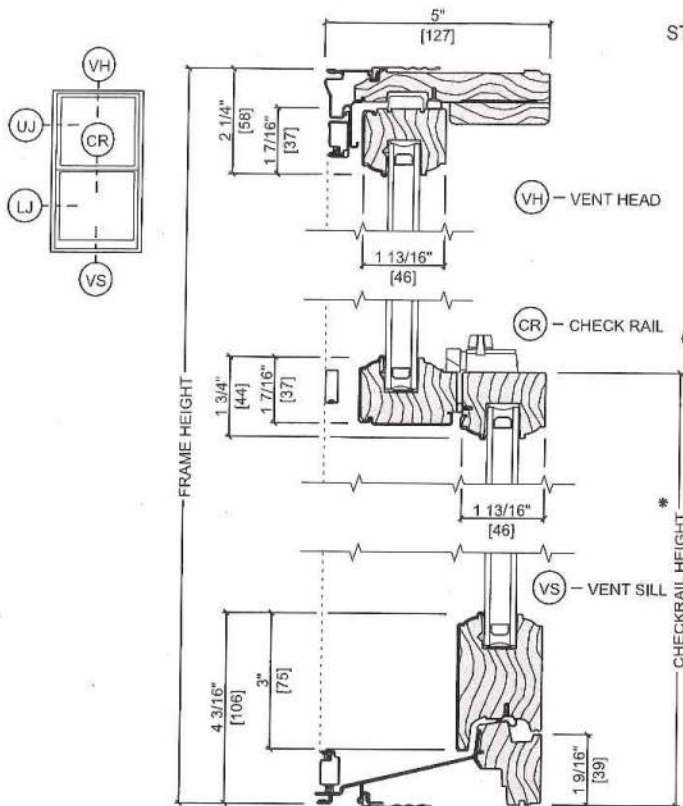
(4) Full screens are available on units ≤ 96" height.

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

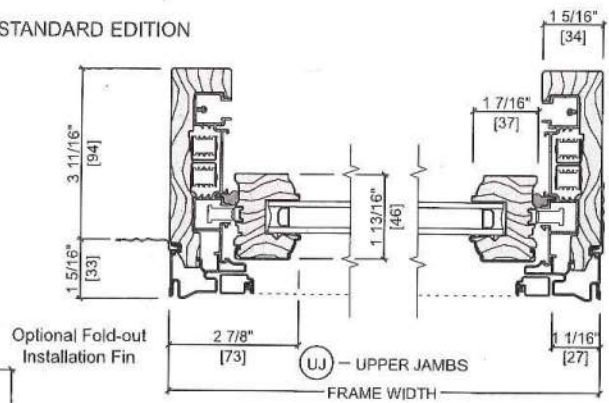




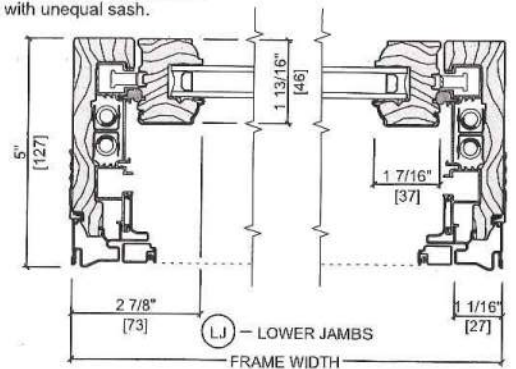
# UNIT SECTIONS Aluminum-Clad Exterior SE Double-Hung



## STANDARD EDITION



\* Dimension required for ordering units with unequal sash.



Scale 3" = 1' 0"

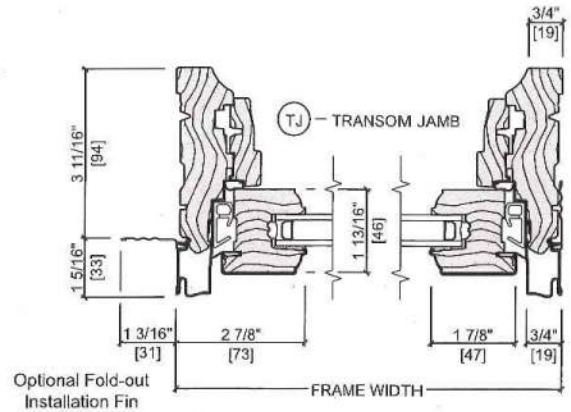
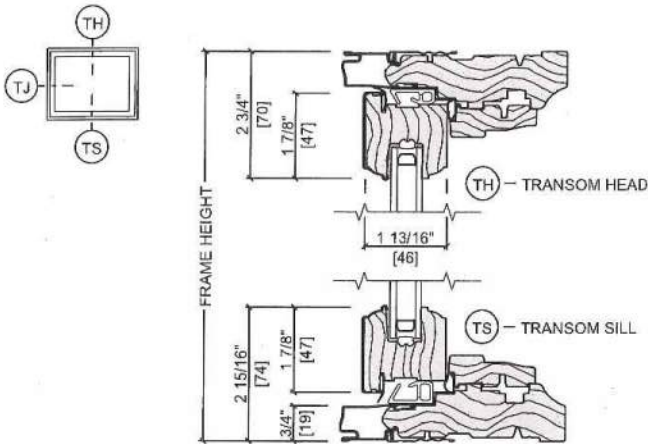
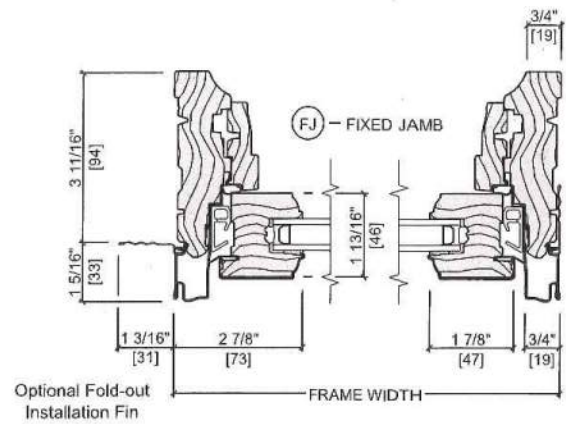
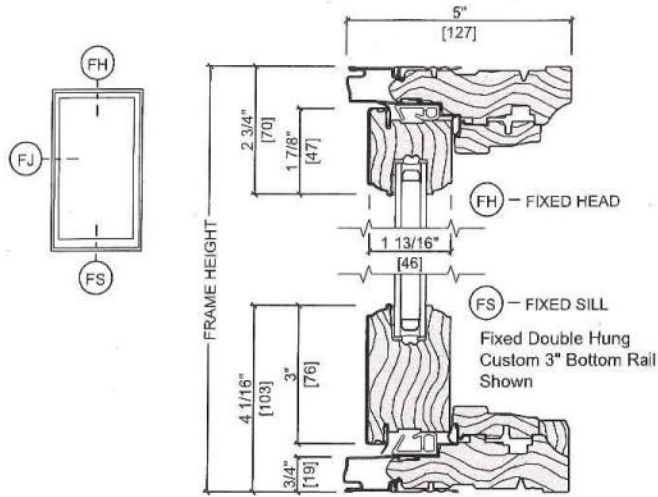
All dimensions are approximate.



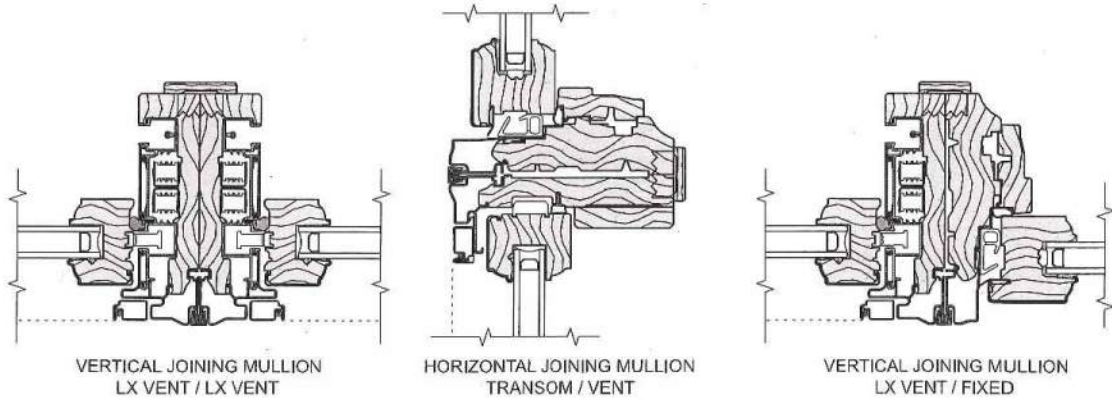


## UNIT SECTIONS

Aluminum-Clad Exterior  
LX and SE Fixed and Transoms



## TYPICAL JOINING MULLIONS



Scale 3" = 1' 0"

All dimensions are approximate.

See [www.PellaADM.com](http://www.PellaADM.com) for mullion limitations and reinforcing requirements.





CASEMENT

## DETAILED PRODUCT DESCRIPTIONS

### 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]. Any curved member may have visible finger-jointed surfaces.
- 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 4-9/16" (116mm) and 7-3/16" (183mm) wall depths.
- 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 aluminum and sealed.
- Corners mortised and tenoned, glued and secured with metal fasteners.
- Sash thickness is [1-13/16" (46mm) for 11/16"] [2-1/8" (54mm) for 1"] glazing.
- Sash exterior and interior profile is ogee.

#### WEATHERSTRIPPING

- Dual weatherstripping.
  - Flexible santoprene material compressed between frame and sash for positive seal on all four sides.
  - Secondary thermoplastic vulcanizate (TPV) leaf-type weatherstrip between edge of sash and frame.

#### GLAZING SYSTEM

- Quality float glass complying with ASTM C 1036.
- Custom and high altitude [with argon] glazing available for 11/16" glazing only.
- Silicone-glazed 11/16" dual-seal insulating glass [[annealed] [tempered]] [[clear] [[Advanced Low-E] [SunDefense™ Low-E] [NaturalSun Low-E] [Advanced Comfort Low-E] with argon]] [[bronze] [gray] [green] Advanced Low-E with argon]].
  - or -
- Silicone-glazed 1" triple-pane, dual seal insulating glass [[annealed] [tempered]] [[Advanced Low-E] [SunDefense™] [NaturalSun Low-E] with argon] [krypton]].
  - or -
- Impact-Resistant
  - Silicone-glazed 1" dual-seal impact-resistant insulating glass<sup>1</sup> [PVB] [SGP]. [[tempered] [annealed]] exterior light is [[Advanced Low-E with argon] [clear] [bronze] [gray] [green]]. Laminated clear interior light.
  - or -
  - Silicone-glazed 11/16" dual-seal impact-resistant insulating glass<sup>1</sup> [PVB]. [[tempered] [annealed]] exterior light is [[Advanced Low-E with argon] [clear]]. Laminated [clear] interior light, or [[tempered] [annealed]] exterior light is [[Advanced Low-E with argon] [clear]]. Laminated [[bronze] [gray] [green]] interior light.

#### EXTERIOR

- Aluminum-clad exteriors shall be finished with EnduraClad® protective finish, in a multi-step, baked-on finish.
  - Color is [standard] [custom].
- 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].

#### INTERIOR

- [Unfinished, ready for site finishing] [factory primed with one coat acrylic latex] [factory prefinished [White] [Linen White] [Bright White] [stain<sub>2</sub>]].

#### HARDWARE

- Roto operator assembly
  - Steel worm gear sash operator with hardened gears.
  - Operator base is zinc die cast with painted finish.
  - Operator linkage, hinge slide, and hinge arms are stainless steel.
  - Exposed fasteners are stainless steel.
  - Hardware shall exceed 1,000 hours salt spray exposure per ASTM B 117.
- All vent units are available with left- or right-hand hinging.
- SureLock® System—A single handle locking system operates positive-acting arms that reach out and pull the sash into a locked position: one operating lock installed on units with frame height 29" and less, two unison operating locks installed on units with frame height over 29".
- Style of hardware is [Standard integrated fold-away crank and standard lock handle with [baked enamel [Champagne] [White] [Brown] [Matte Black]] [bright brass] [satin nickel] [oil-rubbed bronze] hardware finish] [Antiek fold-away crank and Antiek lock handle with [baked enamel [Champagne] [White] [Brown] [Matte Black]] [Bright Brass] [Satin Nickel] [Oil-rubbed Bronze] [Antique Brass] [Distressed Bronze] [Distressed Nickel] hardware finish].

#### OPTIONAL PRODUCTS

##### 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 [White] [Linen White] [Bright White] [stain<sub>2</sub>]].
  - 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] [Cross] [New England] [Victorian] [Simulated French].
  - 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-Glass<sub>3</sub>
  - Insulating glass contains 3/4" contoured aluminum grilles permanently installed between two panes of glass (exterior air-space on triple-pane insulating glass).
  - Patterns are [Traditional] [Prairie] [Cross] [Top Row] [Custom - Equally Divided].
  - Interior color is [White] [Tan<sub>4</sub>] [Brown<sub>4</sub>] [Putty<sub>4</sub>] [Ivory] [Brickstone] [Harvest] [Cordovan].
  - Exterior colors is [standard].
- or -
- Roomside Removable Grilles
  - [3/4"] [1-1/4"] [2"] Regular] [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 [White] [Linen White] [Bright White] [stain<sub>2</sub>]].
  - Exterior [unfinished, ready for site finishing] [Factory Primed] [finish color matched to exterior claddings].

##### Screens

- InView™ Screens
  - Vinyl-coated 18/18 mesh fiberglass screen cloth complying with the performance requirements of SMA 1201, set in aluminum frame fitted to inside of window, supplied complete with all necessary hardware.
  - Screen frame finish is [baked enamel [Champagne] [White] [Brown] [Black]] [Wrapped in wood veneer, finished to match interior finish].
- or -
- Vivid View® Screens
  - PVDF 21/17 mesh, minimum 78 percent light transmissive screen, set in aluminum frame fitted to inside of window, supplied complete with all necessary hardware.
  - Screen frame finish is [baked enamel [Champagne] [White] [Brown] [Black]] [Wrapped in wood veneer, finished to match interior finish].
- or -
- Rolscreen® Retractable Screen (for rectangular units only)
  - InView™ Screen cloth, self-storing, rolling, black vinyl-coated 18/18 mesh fiberglass screen cloth complying with ASTM D 3656 and the performance requirements of SMA 1201 mounted behind overhead cover.
  - Cover finish is [factory prefinished paint] [[pine] [mahogany] [douglas fir] veneer wrapped over extruded aluminum with factory prefinished [stain<sub>2</sub>] [paint<sub>2</sub>]].
  - Guides are aluminum extrusion with [[pine] [mahogany] [douglas fir] veneer wrapped over extruded aluminum with factory prefinished [stain<sub>2</sub>] [paint<sub>2</sub>]].

##### Hardware

- Optional factory applied limited opening hardware available for vent units in stainless steel; nominal 3" opening.
- Optional factory applied window opening control device available. 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.

(1) Low-E coated insulating glass is argon-filled (except high altitude). All other insulating glass (including high altitude Low-E) is air-filled.

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

(3) Available in clear or Low-E insulating glass only with argon, clear insulated glass and obscure insulated glass. White exterior grille color and traditional patterns are the only options available for clear insulating glass.

(4) 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.

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





CASEMENT

## DETAILED PRODUCT DESCRIPTIONS

### Wood 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]. Any curved member may have visible finger-jointed surfaces.
- Exterior surfaces are [pine: Factory Primed] [mahogany: factory primed] [ready-to-stain].
- Overall frame depth is 4-3/8" (111mm) for a wall depth of 4-3/16" (106mm).
- Optional factory-applied jamb extensions available between 4-9/16" (116mm) and 7-3/16" (183mm) wall depths, with Pella's standard wood 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]. Any curved member may have visible finger-jointed surfaces.
- Exterior surfaces are [pine: Factory Primed] [mahogany: factory primed] [ready-to-stain]. Any curved member may have visible finger-jointed surfaces.
- Corners mortised and tenoned, glued and secured with metal fasteners.
- Sash thickness is [1-13/16" (46mm) for 11/16"] [2-1/8" (54mm) for 1"] glazing.
- Sash exterior profile is putty glaze, interior profile is ogee.

#### WEATHERSTRIPPING

- Dual weatherstripping.
  - Flexible santoprene material compressed between frame and sash for positive seal on all four sides.
  - Secondary thermoplastic vulcanizate (TPV) leaf-type weatherstrip between edge of sash and frame.

#### GLAZING SYSTEM

- Quality float glass complying with ASTM C 1036.
- Custom and high altitude [with argon] glazing available.
- Silicone-glazed 11/16" dual-seal insulating glass [[annealed] [tempered]] [[clear] [[Advanced Low-E] [SunDefense™ Low-E] [NaturalSun Low-E] [Advanced Comfort Low-E] with argon]] [[bronze] [gray] [green] Advanced Low-E with argon]].
- Silicone-glazed 1" triple-pane insulating glass [[annealed] [tempered]] [[Advanced Low-E] [SunDefense™] [NaturalSun Low-E] with argon] [krypton]].

#### INTERIOR

- [Unfinished, ready for site finishing] [factory primed with one coat acrylic latex] [factory prefinished [White] [Linen White] [Bright White] [stain]].

#### HARDWARE

- Roto operator assembly
  - Steel worm gear sash operator with hardened gears.
  - Operator base is zinc die cast with painted finish.
  - Operator linkage, hinge slide, and hinge arms are stainless steel.
  - Exposed fasteners are stainless steel.
  - Hardware will exceed 1,000 hours salt spray exposure per ASTM B 117.
- All vent units are available with left- or right-hand hinging.
- SureLock® System—A single handle locking system operates positive-acting arms that reach out and pull the sash into a locked position: one operating lock installed on units with frame height 29" or less, two unison operating locks installed on units with frame height over 29".
- Style of hardware is [Standard integrated fold-away crank and standard lock handle with [baked enamel] [Champagne] [White] [Brown] [Matte Black]] [bright brass] [satin nickel] [oil-rubbed bronze] hardware finish] [Antiek fold-away crank and Antiek lock handle with [baked enamel] [Champagne] [White] [Brown] [Matte Black]] [Bright Brass] [Satin Nickel] [Oil-rubbed Bronze] [Antique Brass] [Distressed Bronze] [Distressed Nickel] hardware finish].

#### OPTIONAL PRODUCTS

##### Grilles

- Integral Light Technology® grilles
  - Interior grilles are [5/8"] [7/8"] [1-1/4"] ogee profile that are solid [pine] [mahogany]. Interior surfaces are [unfinished, ready for site finishing] [factory primed] [pine: factory prefinished [White] [Linen White] [Bright White] [stain]].
  - Exterior grilles are solid [5/8"] [7/8"] [1-1/4"] putty glaze profile that are [pine] [mahogany]. Exterior surfaces are water repellent, preservative-treated in accordance with WDMA I.S.-4, and are [unfinished, ready for site finishing] [factory primed].
  - Patterns are [Traditional] [Prairie] [Top Row] [Cross] [New England] [Victorian] [Simulated French].
  - 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-Glass<sup>2</sup>
  - Insulating glass contains 3/4" contoured aluminum grilles permanently installed between two panes of glass (exterior air-space on triple-pane insulating glass).
  - Patterns are [Traditional] [Prairie] [Cross] [Top Row] [Custom - Equally Divided].
  - Interior color is [White] [Tan<sup>4</sup>] [Brown<sup>4</sup>] [Putty<sup>4</sup>] [Ivory] [Brickstone] [Harvest] [Cordovan].
  - Exterior color is [standard]<sup>5</sup>

- or -

- Roomsides Removable Grilles
  - [[3/4"] [1-1/4"] [2"] Regular] [[1-1/4"] [2"] 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 [White] [Linen White] [Bright White] [stain]].
  - Exterior [unfinished, ready for site finishing] [Factory Primed] [finish color matched to exterior].
  - When the unit exterior is mahogany then removable grilles is not an option.

##### Screens

- InView™ Screens
  - Vinyl-coated 18/18 mesh fiberglass screen cloth complying with the performance requirements of SMA 1201, set in aluminum frame fitted to inside of window, supplied complete with all necessary hardware.
  - Screen frame finish is [baked enamel] [Champagne] [White] [Brown] [Black]] [Wrapped in wood veneer, finished to match interior finish].
- Vivid View® Screens
  - PVDF 21/17 mesh, minimum 78 percent light transmissive screen, set in aluminum frame fitted to inside of window, supplied complete with all necessary hardware.
  - Screen frame finish is [baked enamel] [Champagne] [White] [Brown] [Black]] [Wrapped in wood veneer, finished to match interior finish].

- or -

- Rolscreen® Retractable Screen (for rectangular units only)
  - InView™ Screen cloth, self-storing, rolling, black vinyl-coated 18/18 mesh fiberglass screen cloth complying with ASTM D 3656 and the performance requirements of SMA 1201 mounted behind overhead cover.
  - Cover finish is [factory prefinished paint] [[pine] [mahogany] [douglas fir] veneer wrapped over extruded aluminum with factory prefinished [stain]] [paint]].
  - Guides are aluminum extrusion with [[pine] [mahogany] [douglas fir] veneer wrapped over extruded aluminum with factory prefinished [stain]] [paint]].

##### Hardware

- Optional factory applied limited opening hardware available for vent units in stainless steel; nominal 3" opening.
- Optional factory applied window opening control device available. 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.

(1) Low-E coated insulating glass is argon-filled (except high altitude). All other insulating glass (including high altitude Low-E) is air-filled.

(2) Available in clear or Low-E insulating glass only with argon, clear insulated glass and obscure insulated glass. White exterior grille color and traditional patterns are the only options available for clear insulating glass.

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

(4) Tan, Brown or 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.

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





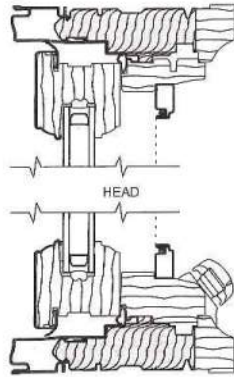
CASEMENT

## UNIT SECTIONS – WOOD COLLECTION

### Aluminum-Clad Exterior

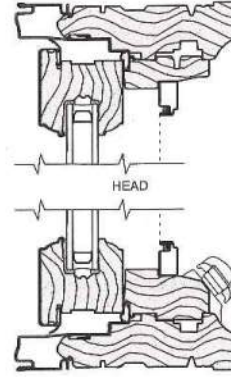


#### Douglas Fir Interior

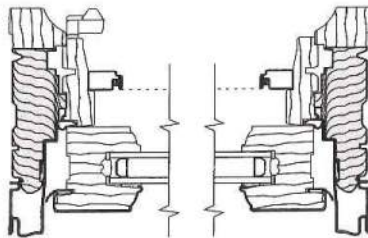


SILL

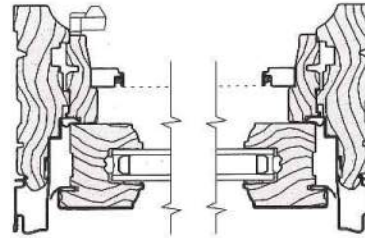
#### Pine or Mahogany Interior



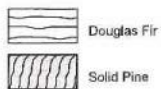
SILL



JAMBS



JAMBS



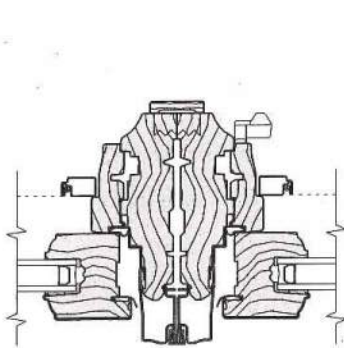
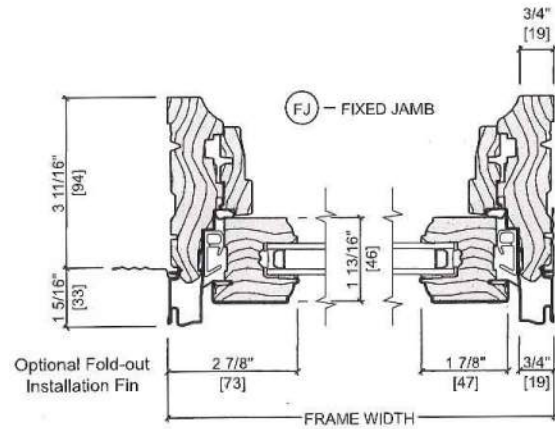
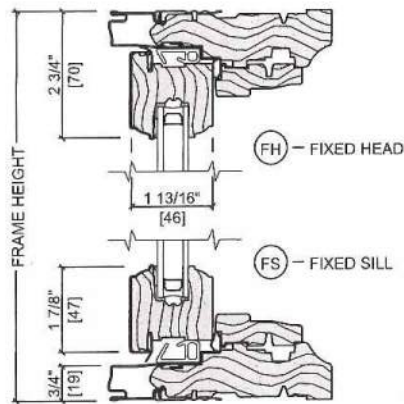
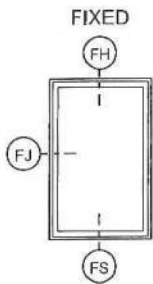
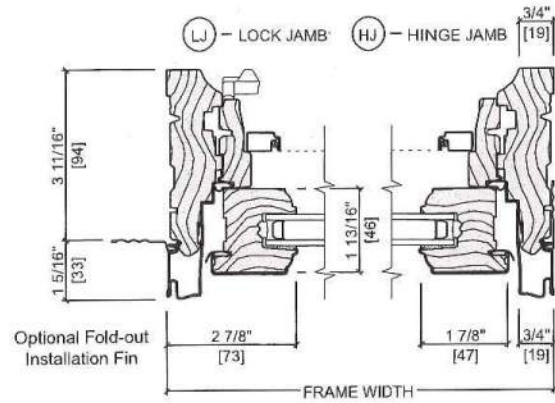
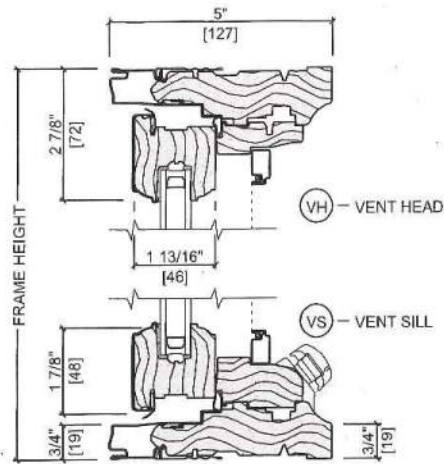
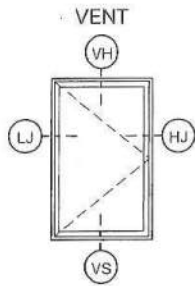
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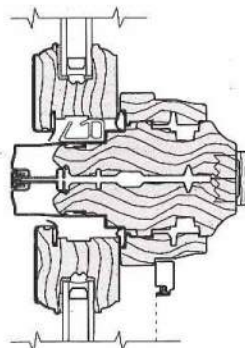


## UNIT SECTIONS

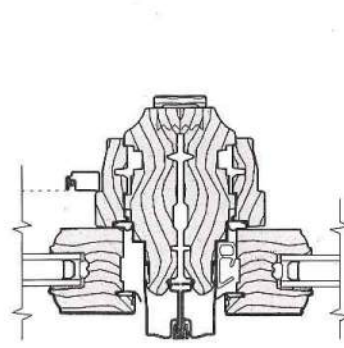
### Aluminum-Clad Exterior



VERTICAL JOINING MULLION  
VENT / VENT



HORIZONTAL JOINING MULLION  
TRANSOM / VENT



VERTICAL JOINING MULLION  
VENT / FIXED

Scale 3" = 1' 0"

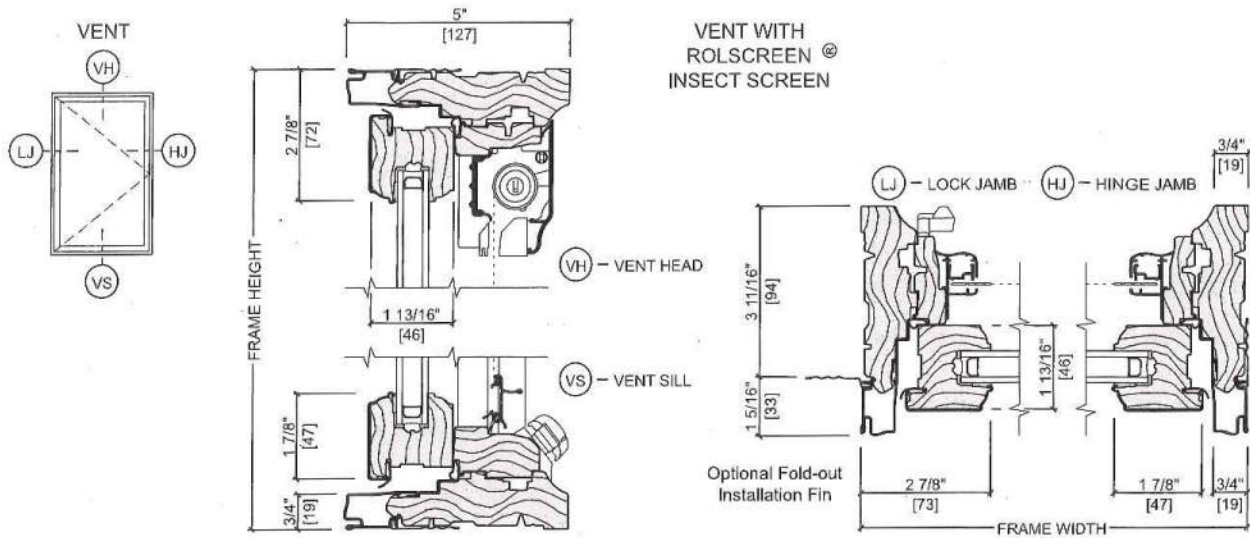
All dimensions are approximate.





## UNIT SECTIONS

### Aluminum-Clad Exterior



Scale 3" = 1' 0"

See Installation and Performance at [www.PellaADM.com](http://www.PellaADM.com) for mullion limitations and reinforcing requirements.



7566 Huntington Road  
Hudson, Ohio 44236



LEFT SIDE ELEVATION



PROPOSED PROJECT AREA



7566 Huntington Road  
Hudson, Ohio 44236



FRONT ELEVATION



REAR ELEVATION