



FeelSafe & FeelSafe IG
Monument Double Hung/Single Hung
Operating Window with Transom Window Stack
with 1/4" x 5" Aluminum Horizontal Plate Mull
82.63"W x 106.19"H Mull Assembly
Thru Frame & L-Clip Installation / Impact

TEST REPORT SUMMARY:	
- OVERALL BASIC UNIT FRAME SIZE: 82.63" (2099mm) x 106.19" (2697mm)	
DOUBLE HUNG/SINGLE HUNG OPERATING UNIT MAX. SIZE: 41.31" (1049mm) X 76.63" (1946mm)	
TRANSOM SASH'N FRAME OR DIRECT SET UNIT MAXIMUM SIZE: 82.63" (2099mm) X 29.31" (744mm)	
- OVERALL DESIGN PRESSURE: +65 / - 75 psf	
- RATING: +65/-75, Missile D, Wind Zone 4	
DATE: 07/29/2014	DWG. No.: HURD0016

Element Materials Technology TEST REPORT #: ESP015004P-1482

**FeelSafe Monument Clad Double Hung/Single Hung Operating with Transom Window Stack
w/ 1/4"x5" Aluminum Horizontal Plate Mull Reinforcement Thru Frame & L-Clip Install/WDMA**

SHEET: 1 OF 5

DRAWING REV. A, 4/22/21

DRAWN BY: H.W.D.

CHECKED BY: R.J.A.

THRU FRAME & L-CLIP ANCHOR REQUIREMENTS TABLE

THRU FRAME UTILIZING SCREWS & L-CLIPS

OPENING TYPE (SUBSTRATE)	JAMB TO OPENING FASTENER TYPE, FASTENER SPACING	MINIMUM EMBED	MINIMUM EDGE DIST.
2X_ WOOD FRAME OR BUCK	HEAD & SIDE JAMBS; INSTALL #10 X 2-1/2" PFH SS SCREWS SPACED MAXIMUM 6" FROM EACH CORNER AND MAXIMUM 15-18" ON CENTER THEREAFTER INTO THE FRAMING MATERIAL AT HEAD & SIDE JAMBS (SEE ELEVATIONS ON P 2 & 3). DH/SH SILL; INSTALL (4) 1-1/2" X 5" LONG, 20 GAUGE GALVANIZED HURRICANE CLIPS. EACH CLIP IS INSTALLED WITH (3) #6 X 1/2" TEK SCREWS INTO THE WINDOW UNIT SILL & (2) #8 X 1-1/4" PPH SS SCREWS INTO THE WOOD BUCK FRAMING MATERIAL 6" FROM EACH CORNER AND ONE AT MID-SPAN ON EACH DOUBLE HUNG. IN ADDITION INSTALL CLIPS A MAXIMUM 3" & 6" FROM EACH SIDE OF THE VERTICAL MULL SEAM AT THE SILL (SEE ELEVATIONS ON P 2 & 3). HORIZONTAL MULL LOCATION, JAMBS; INSTALL (6) #10 X 2-1/2" PFH SS SCREWS THRU THE JAMBS INTO THE FRAMING MATERIAL, MAXIMUM 3", 4.5" & 6" FROM EACH SIDE OF THE HORIZONTAL MULL (SEE ELEVATIONS ON PAGES 2 & 3).	1-1/4"	3/4"
		Maximum shim space	Shim Placement
		1/4" each side	Every 6-10"

ANCHORS MUST BE INTO A MIN. 2X_ WOOD MEMBER. IF SPACE BETWEEN WALL FRAME & WINDOW FRAME IS GREATER THAN THAT REQUIRED FOR A 2X_ WOOD MEMBER AND A SPACE EXISTS, THE SPACE MUST BE FILLED WITH A WOOD MEMBER OF EQUAL DEPTH TO THE WINDOW FRAME MEMBER OR BUCK AND OF LENGTH = MIN. 20". THE FRAME ANCHOR MUST THEN BE RUN THROUGH THE FRAME & WOOD SHIM AND INTO THE OPENING.

INSTALLATION NOTES:

- Fixed unit can be a transom sash'n frame or direct set unit.
- Sill may be 2 piece construction. single unit installation do not require l-clips at sill.
- Single unit installation do not require l-clips at sill. single unit installation require separate framing or the use of 2" tube mull.
- Sill must be a minimum of 7" when installing with the 1/4" vertical aluminum plate mull. Sill may be 2 piece construction.

1. Use 2" x _ pine wood buck. Sill may be 2 piece construction. Single unit installation does not require masonry clips at sill. Single unit installation requires separate framing or the use of 2" tube mull.

2. 1/4" maximum shim space at head, sill, jamb. Install wood shims every 6-10" at head, sill and jambs and where the screws are located.

3. **CAP BEAD** between the window frame and the buck, full perimeter.

4. - **HEAD & SIDE JAMBS;** Install #10 x 2-1/2" PFH SS screws spaced maximum 6" from each corner and maximum 15-18" on center thereafter into the framing material, at head, & side jambs (SEE ELEVATIONS ON PAGES 2 & 3).

- **DH/SH SILL;** Install (4) 1-1/2" x 5" Long, 20 Gauge Galvanized Hurricane L-Clips. Each clip is installed with (3) #6 x 1/2" TEK screws into the window unit sill &

(2) #8 x 1-1/4" PPH SS screws into the wood buck framing material. 6" from each corner and one (2) at mid-span on each double hung. In addition, install L-clips a maximum 3" & 6" from each side of the vertical mull seam at the sill. (SEE ELEVATIONS ON P 2 & 3).

- **HORIZONTAL MULL LOCATION, JAMBS;** install (6) #10 x 2-1/2" PFH SS screws thru the jambs into the framing material, MAXIMUM 3", 4.5" & 6" FROM EACH SIDE OF THE HORIZONTAL MULL (SEE ELEVATIONS ON PAGES 2 & 3).

- SEE ANCHOR REQUIREMENTS TABLE ABOVE AND SCREW TYPES & LOCATIONS FOR HURRICANE L-CLIPS BELOW.

5. 1-1/4" minimum fastener embedment into framing material. Silicone seal over screw heads.

6. Maximum window basic unit frame size =

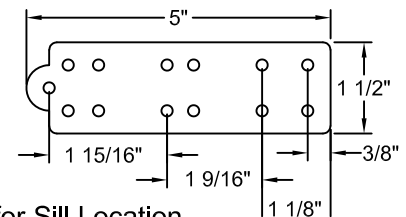
- Double Hung/Single Hung Operating Unit: **41.31" (1049mm) X 76.63" (1946mm)**
- Transom Unit: **82.63" (2099mm) X 29.31" (744mm)**

7. See sheet 3 for GLAZING SPECIFICATION.

- Check rough opening for proper size, plumb, level and square.
- Make all necessary adjustments to ensure rough opening is plumb, level & square.
- Sill must be flat, level and capable of supporting the weight of the unit.
- Opening should allow a maximum of 1/4" shim space at head, sill and jambs.
- Wood buck, framing, fasteners, sealant and all wall system materials are provided by others.

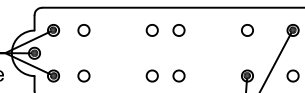
Hurricane L-Clip

1-1/2" X 5" 20 Gauge (.035") Galvanized
Steel Anchor Strap



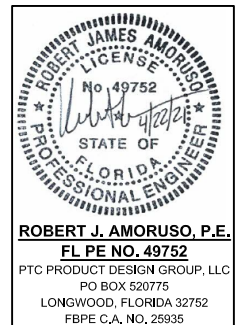
Screw types for Sill Location

(3) #6 x 1/2" Self-tapping
Tek Screws attached to the
aluminum cladding of the
window frame



(2) #8 x 1-1/4" PPH SS Screws
applied through the clip into the
wood buck framing

Installation requirements may vary in particular locations and in other types of construction. Proper installation is essential, and Hurd Windows & Doors, recommends consultation with an AAMA Certified Installer, or other qualified, registered building professional before installation of any Hurd product. Proper installation of Hurd products is the responsibility of the installer. Hurd is not responsible for proper installation. Hurd is not responsible for the design of, conditions in, or performance of building construction beyond the perimeters of the Hurd units. Hurd is not responsible for proper integration of the Hurd units with the weather-repellent systems of the building.





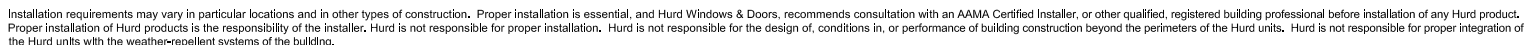
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TRANSOM SASH'N FRAME OR DIRECT SET UNIT
MAXIMUM SIZE: 82.63" (2099mm) X 29.31" (744mm)

- OVERALL DESIGN PRESSURE: +65 / - 75 psf

- RATING: +65/-75, Missile D, Wind Zone 4

NOTE:
DOUBLE HUNG SHOWN, ALSO
QUALIFIES SINGLE HUNG UNITS





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SHEET: 3 OF 5

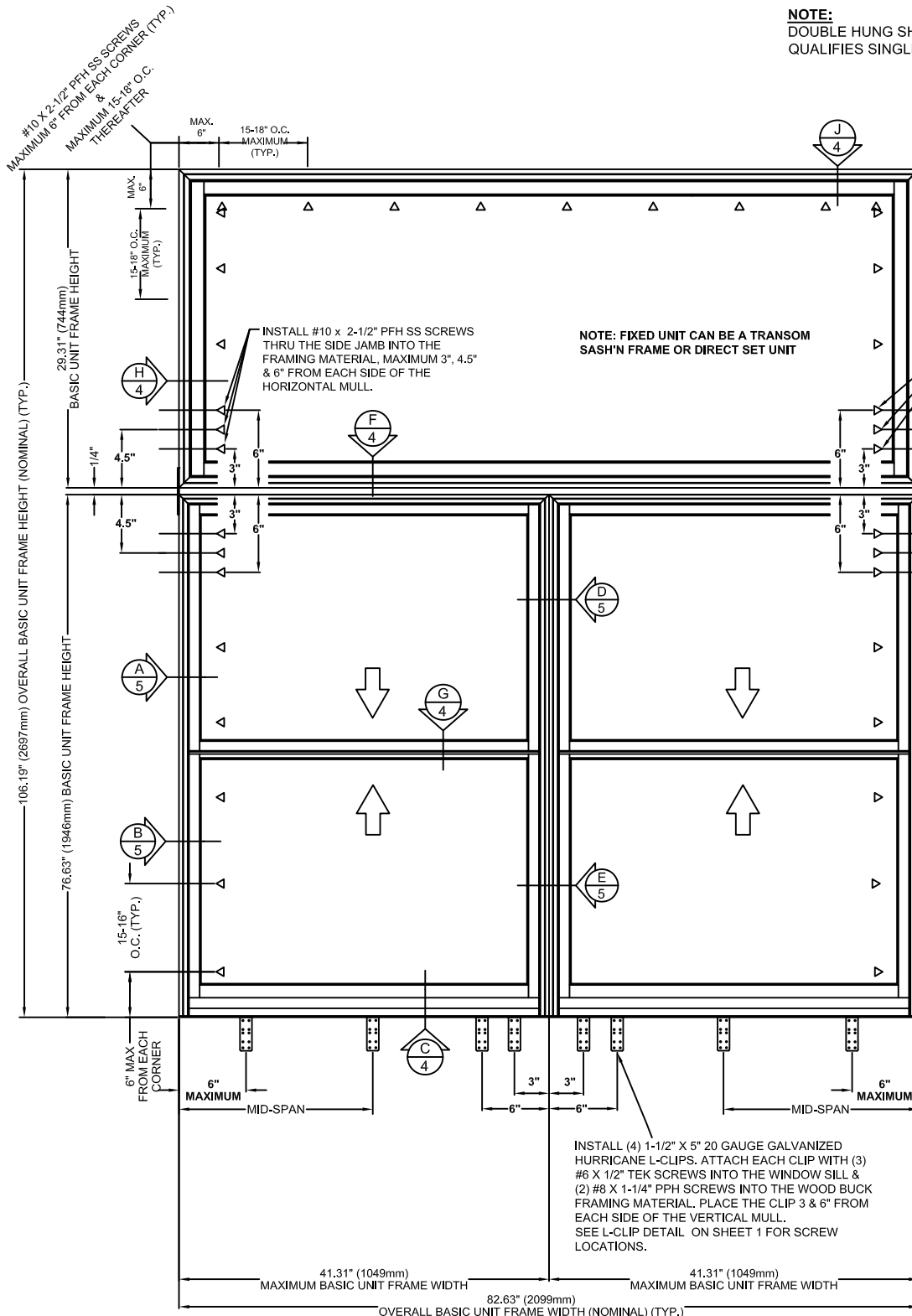
DRAWING REV. A, 4/22/21

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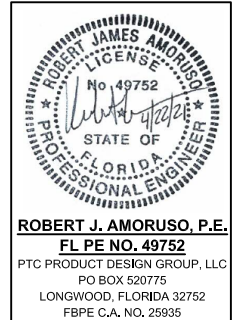
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- 1/4" SPREAD MULL FACTORY APPLIED WITH 1/4" X 5" VERTICAL ALUMINUM PLATE & SEALED TOGETHER. PLATE FASTENED TO ONE SIDE WITH #10 X 1" PFH SS SCREWS MAXIMUM 3" FROM EACH END & MAXIMUM 16" ON CENTER THEREAFTER.
- EXTERIOR ALUMINUM MULL COVER SEALED AND SNAP FITTED IN TO THE ACCESSORY GROOVES.
- GALVANIZED GUSSET PLATE INSTALLED AT THE HEAD SECURED WITH 7/16" CROWN X 1/2" LONG STAPLES ON EACH SIDE OF THE MULL JOINT.

GLAZING SPECIFICATION

Laminated Insulated Glass - DH/SH and Sash Set Transom Window

15/16" O.A. Thickness IGU Old Castle KeepSafe; consisting of 3mm tempered interior lite x .438" aluminum box spacer bar x 8.6mm lami consisting of 3mm annealed glass x .090" Saflex PVB interlayer x 3mm annealed glass

Laminated Insulated Glass - Direct Set Transom Window

1" O.A. Thickness IGU Old Castle KeepSafe; consisting of 4mm tempered interior lite x .438" aluminum box spacer bar x 10.3mm lami consisting of 4mm annealed glass x .090" Saflex PVB interlayer x 4mm annealed glass.

Monolithic Laminated Glass - DH/SH

11/32" O.A. Thickness Single Laminated Old Castle KeepSafe; consisting of 3mm annealed glass x .090" Saflex PVB interlayer x 3mm annealed glass.

Monolithic Laminated Glass - Sash Set Transom Window

9/16" O.A. Thickness Single Laminated Old Castle KeepSafe; consisting of 6mm annealed glass x .090" Saflex PVB interlayer x 4mm annealed glass.

Monolithic Laminated Glass - Direct Set Transom Window

13/32" O.A. Thickness Single Laminated Old Castle KeepSafe; consisting of 4mm annealed glass x .090" Saflex PVB interlayer x 4mm annealed glass.

MD NOA Component Approvals. Current 2020 FBC approvals shown. Later approvals may be applicable.

Saflex PVB Interlayer: NOA No. 20-0622.01

Notes:

1. A minimum of two (2) neoprene setting blocks with 70 to 90 shore a durometer hardness are required at bottom (sill) of glazing lites more than 3 feet in width.
2. As-tested single-ply laminated and IGU laminated systems shown.
3. Glazing Stop Attachment:
 - 3.1. Mechanically attached to adjacent panel member.
 - 3.2. Continuous bead of Tremco S-900 glazing compound 1/8" x 1/4" applied to the glass/exposed sash cladding with a 9/16" glass bite and backfilled.
 - 3.3. Interior glazing stops secured with 1" galvanized T-nails spaced 2" from each corner and 8" - 10" on center thereafter. 3m bump-on glass shims placed between glass and sash cladding.



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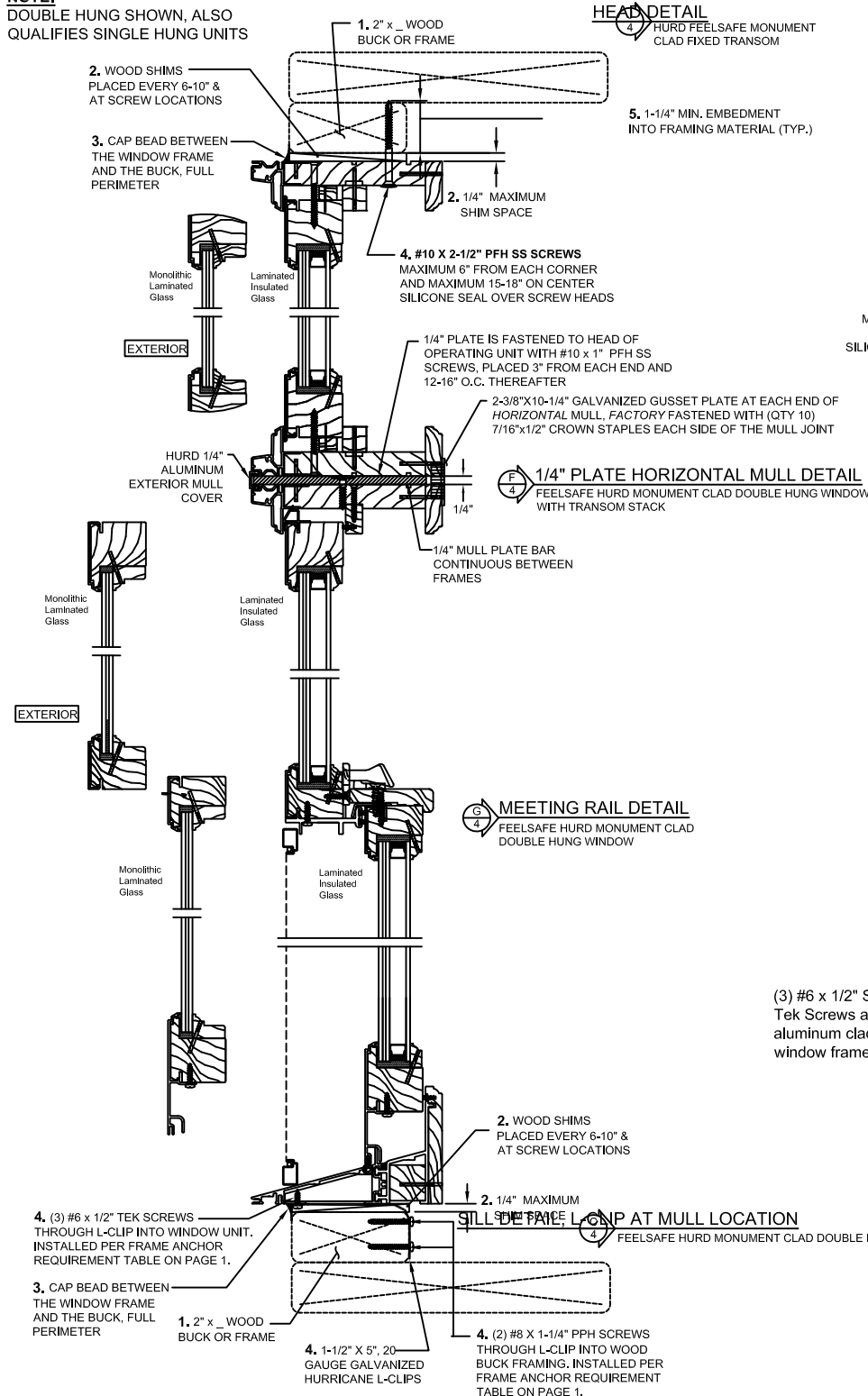
SHEET: 4 OF 5

DRAWING REV. A, 4/22/21

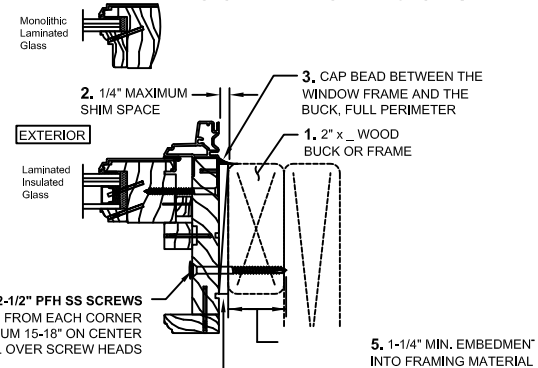
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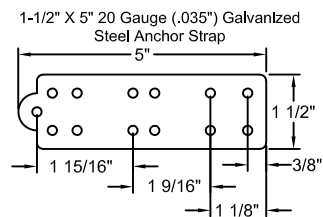
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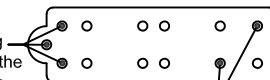


Hurricane L-Clip

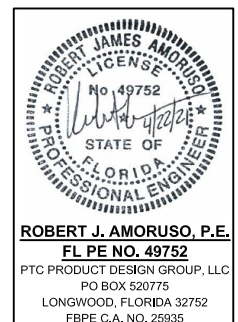


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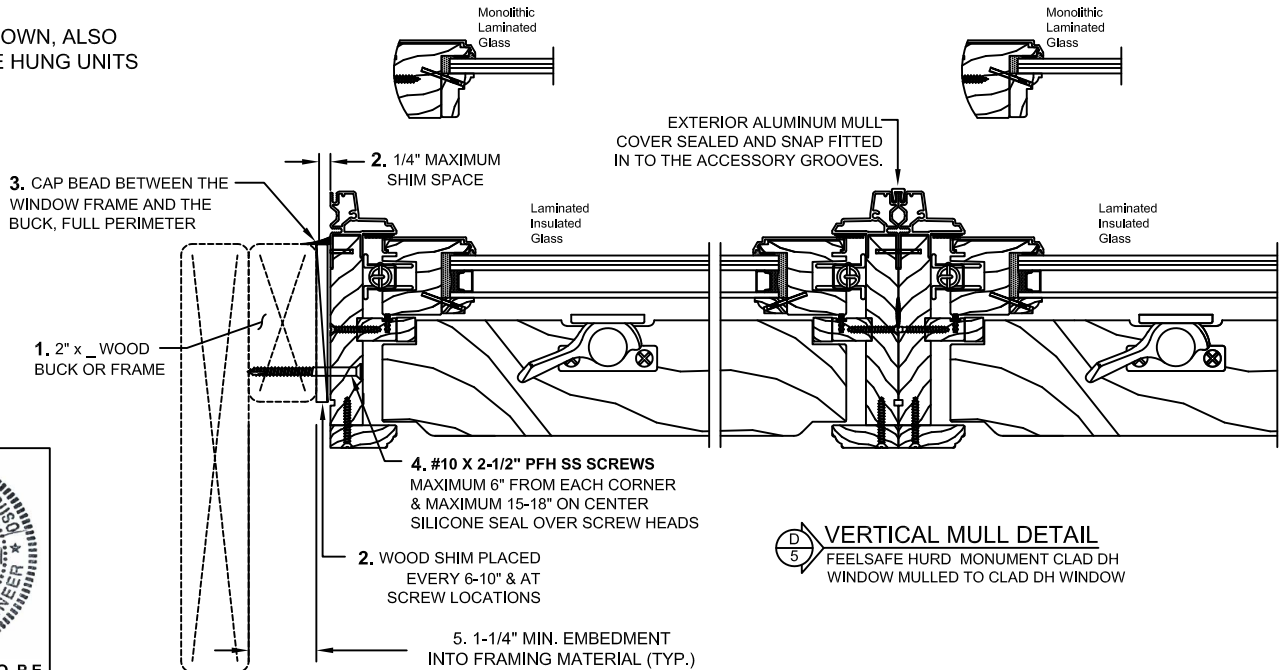
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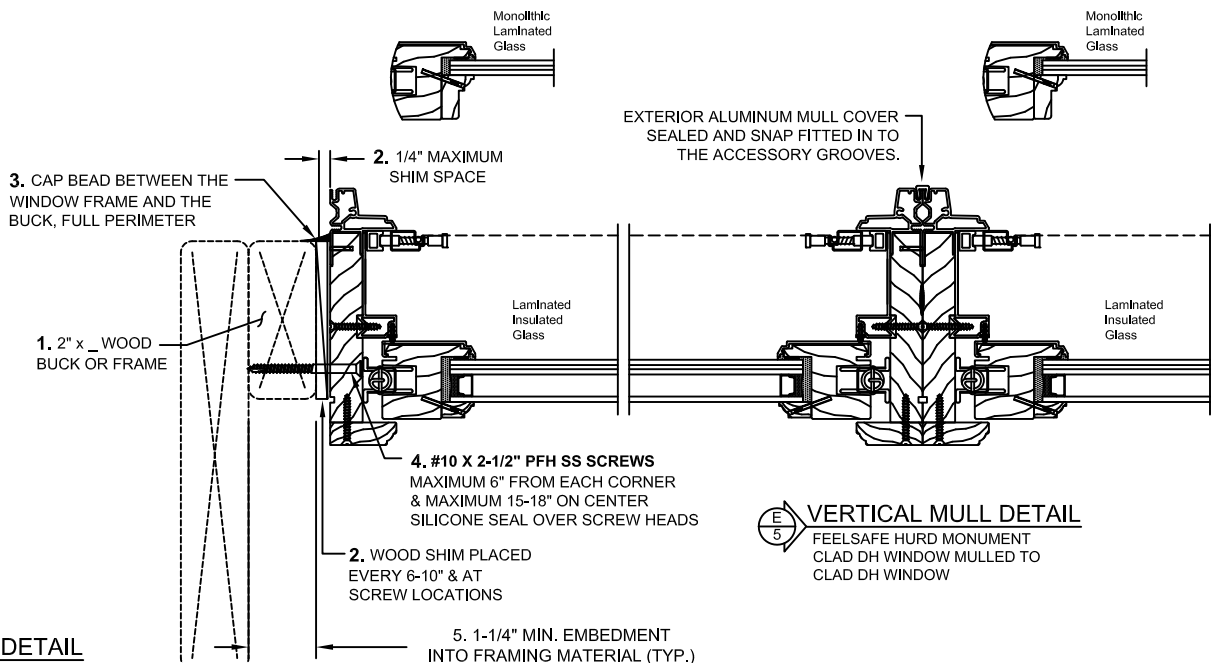
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JAMB DETAIL
FEELSAFE HURD MONUMENT
CLAD DOUBLE HUNG WINDOW

VERTICAL MULL DETAIL
FEELSAFE HURD MONUMENT CLAD DH
WINDOW MULLED TO CLAD DH WINDOW



JAMB DETAIL
FEELSAFE HURD MONUMENT
CLAD DOUBLE HUNG WINDOW

VERTICAL MULL DETAIL
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