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NOTES

This Product is a Vinyl Tilt-Turn Window, Dry-Glazed with Steel Reinforcement and Laminated Insulated Glazing.

This Product Has Been Designed and Manufactured to Comply with the Requirements of the Florida Building Code, including the High Velocity Hurricane Zone (HVHZ).

This Product Meets the Requirements for Large Missile Impact Resistance up to the Design Pressures Specified Herein: Hurricane Shutters Are Not Required.

This Approval Applies to Single or Double Units, or Combinations of Units Installed Either Side of Product-Approved Mullions Meeting the Site-Specific Design Pressure Requirements. Such Mullions Shall be Subject to the Limitations of their Specific Product Approval Documents.

Wood Buck Design by Others: Wood Bucks Shall Adequately Transfer Imposed Loads to the Surrounding Structure.

A Load Duration Increase in Allowable Stress (Cd=1.33) Has Been Used in the Design of Anchors into Wood Only.

Anchors Shall be As Listed, As Shown on Details Herein. Anchor Embedment into Base Substrate Shall be Beyond Wall

Dressing or Stucco. Anchor Conditions Not Described Herein are Not Part of This Approval Document, and Shall Require a Site Specific Design Signed and Sealed by A Florida-Registered Professional Engineer.

Dissimilar Metals that Contact One Another Shall be Painted, Plated, or Otherwise Galvanically Isolated in Accordance with the Florida Building Code.

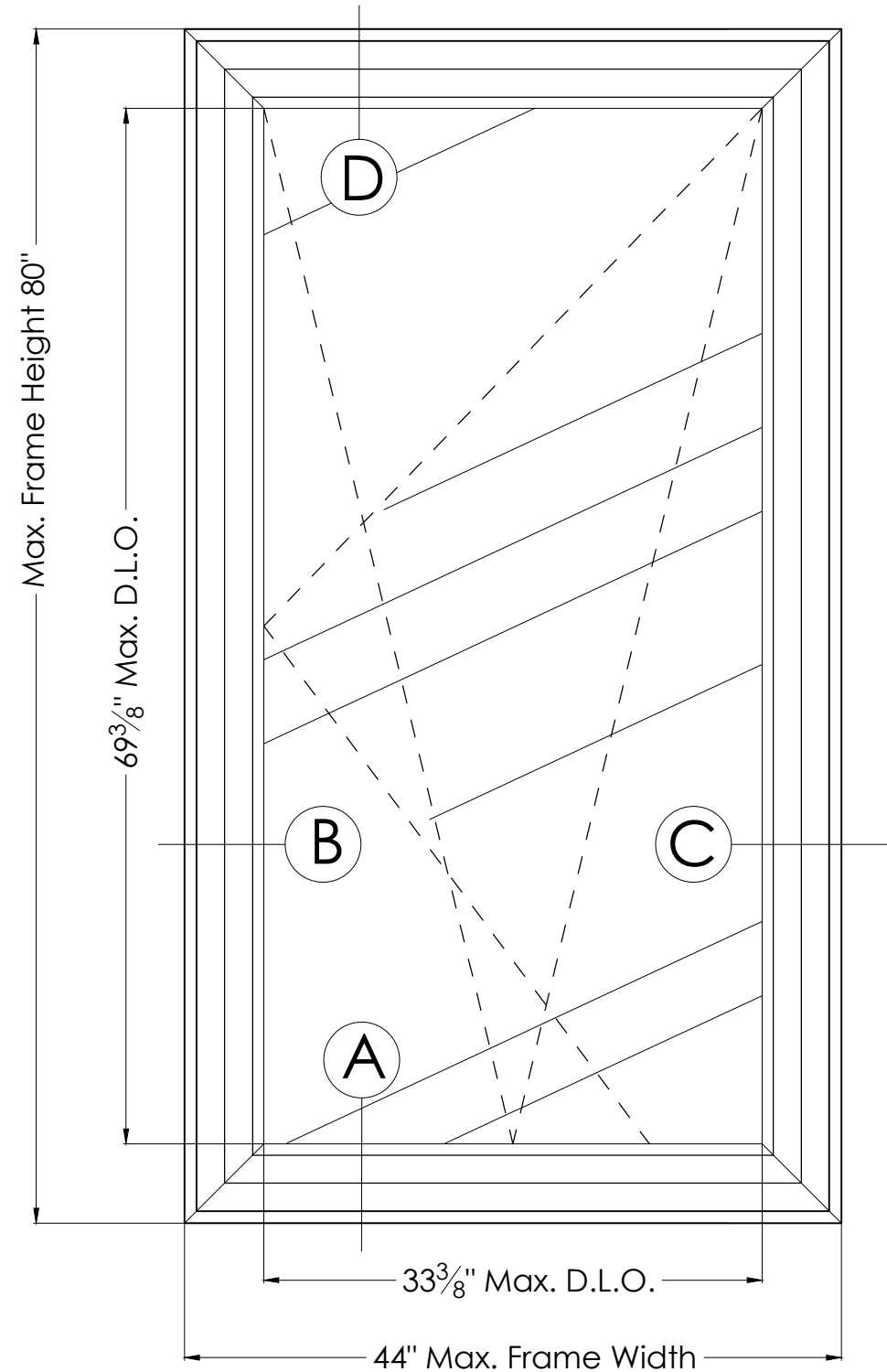
It Shall be the Responsibility of the Contractor, Engineer of Record, or End User to Determine that the Host Structure is Capable of Supporting the Loads Imposed Upon it, including Wind Loads, and the Suitability of this Product for the Specific Project.

Maximum Frame Size: 44" x 80"
Maximum Daylight Opening: 33³/₈" x 69³/₈".

MATERIALS

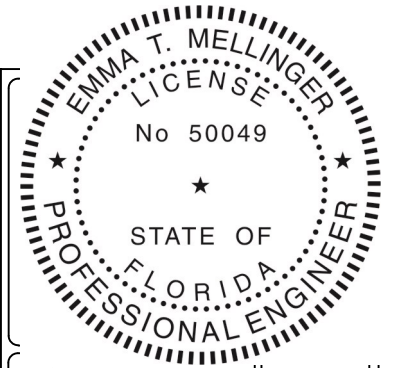
Rigid PVC Extrusions Manufactured by Rehau, Inc. Hold a Current Miami-Dade County NOA

Glazing Interlayer, Manufactured by E.I DuPont De Nemours, & Co. Holds a Current Miami-Dade County NOA



4500-SERIES TILT-TURN WINDOW (Dry Glazed)
Exterior View

DESIGN PRESSURE RATING	MISSILE IMPACT RATING
+65 psf, -65 psf	Large Missile Impact



CATEGORY 5
Engineering Services, Inc.

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Pompano Beach, FL 33062
(954) 784-6991 • CA #25854

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FL PE #50049

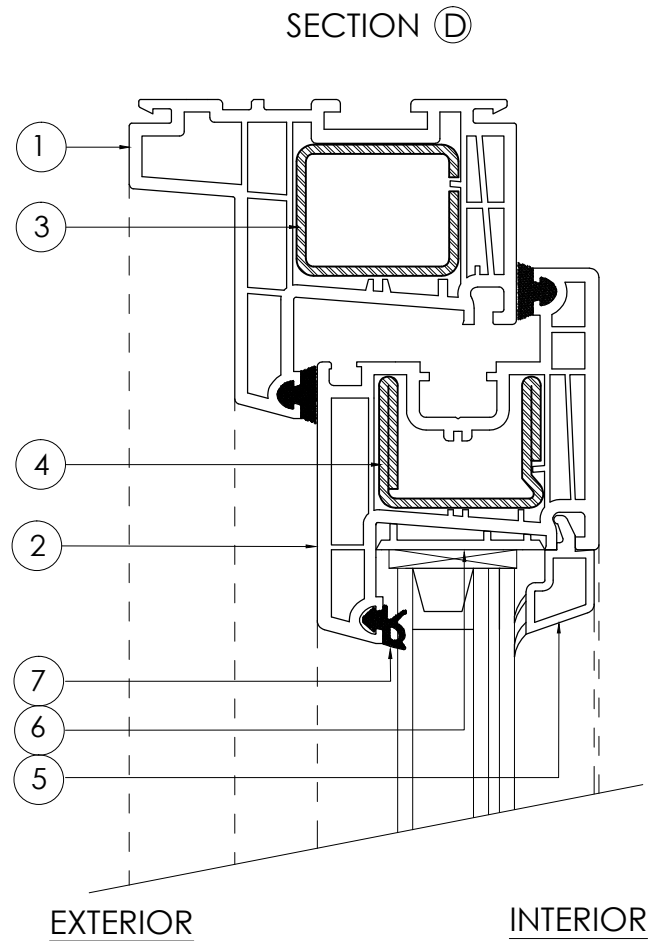
4500-SERIES TILT-TURN WINDOW
(Dry-Glazed)

Large Missile Impact Resistant

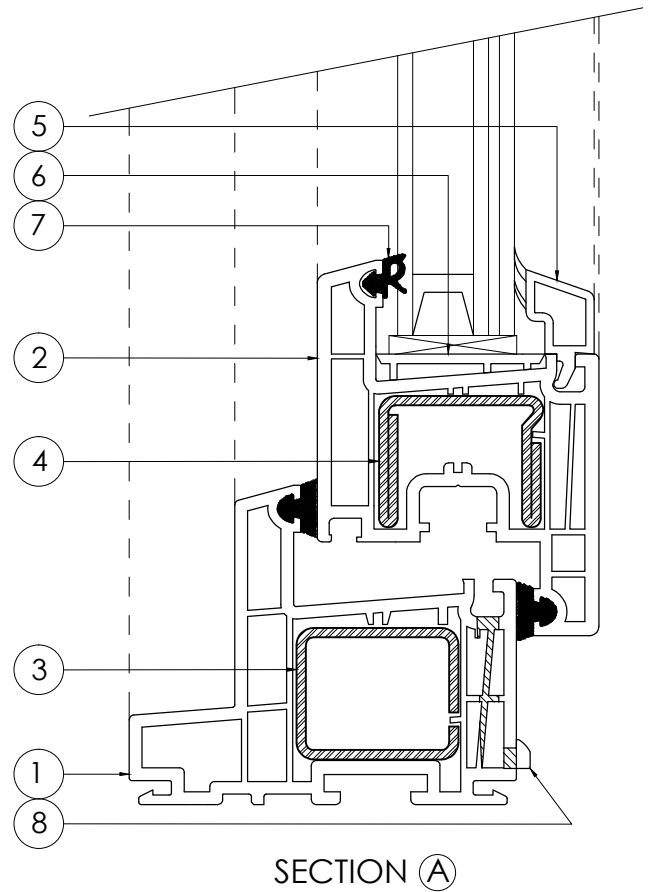
EUROSTYLE
IMPACT WINDOWS & DOORS
217 NW 4th Ave., Hallandale Beach, FL 33009

DATE: 04 / 22 / 13	SCALE: AS NOTED	BY: ETM	REVISIONS	NO. DATE BY DESCRIPTION
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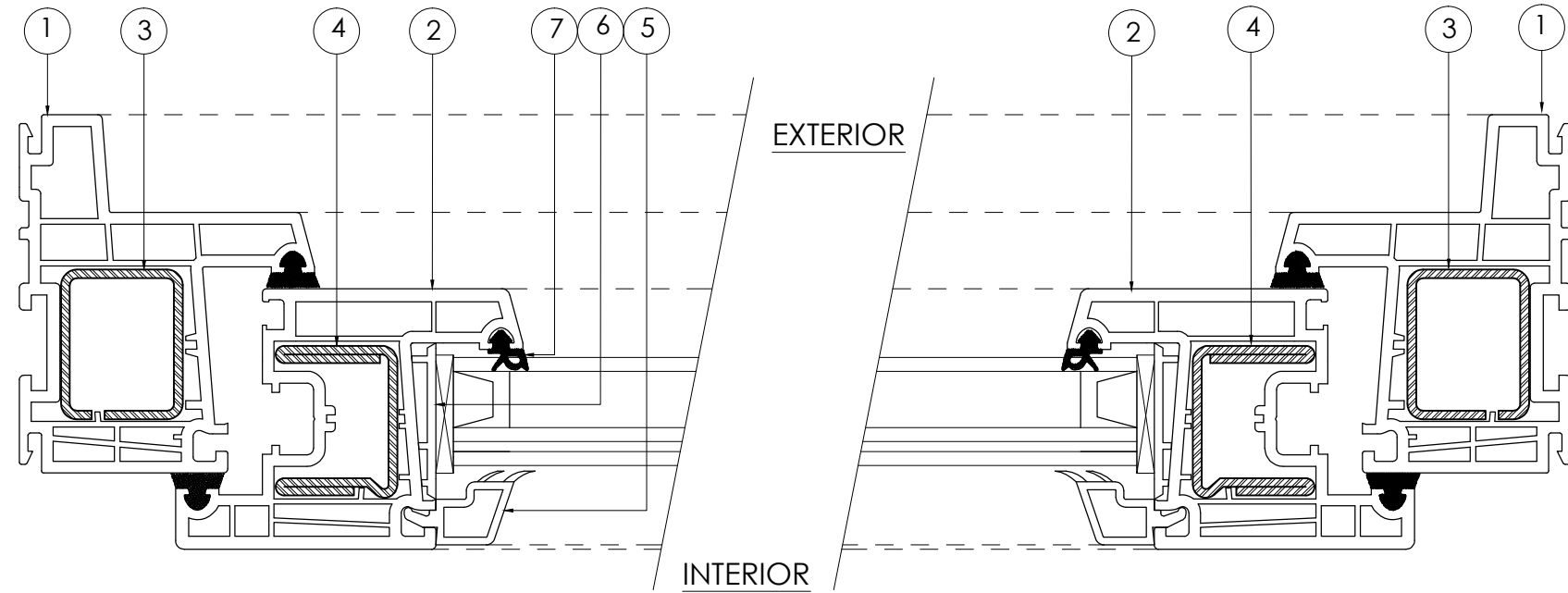
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EXTERIOR INTERIOR

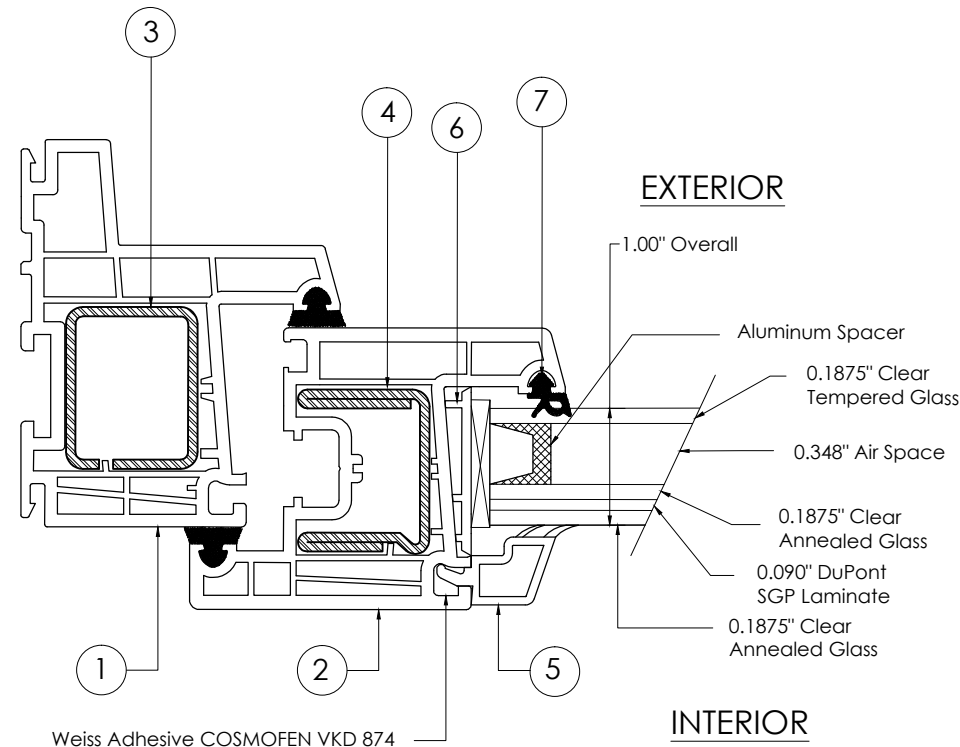


SECTION A

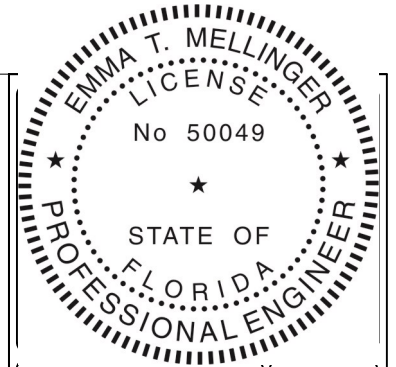
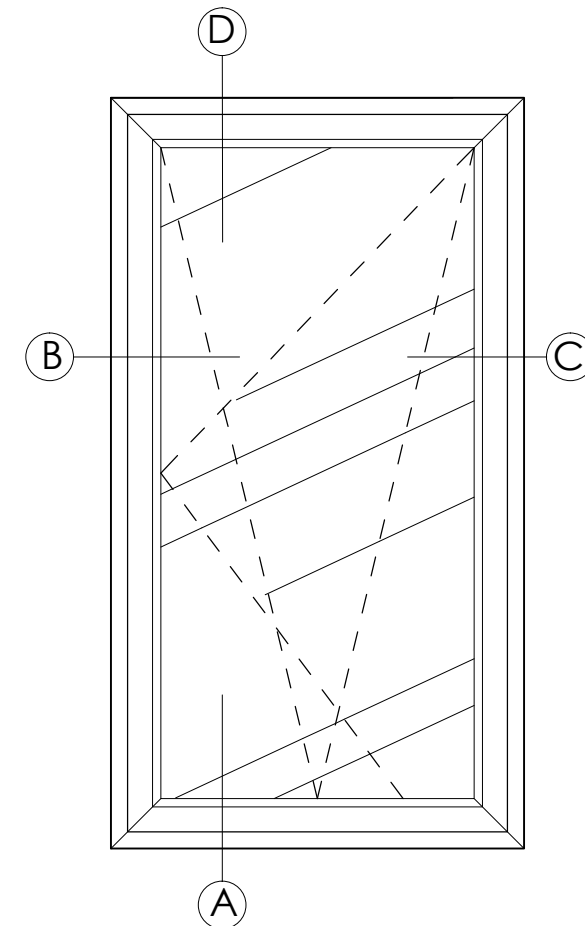


SECTION B

SECTION C



Weiss Adhesive COSMOFEN VKD 874



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Large Missile Impact Resistant

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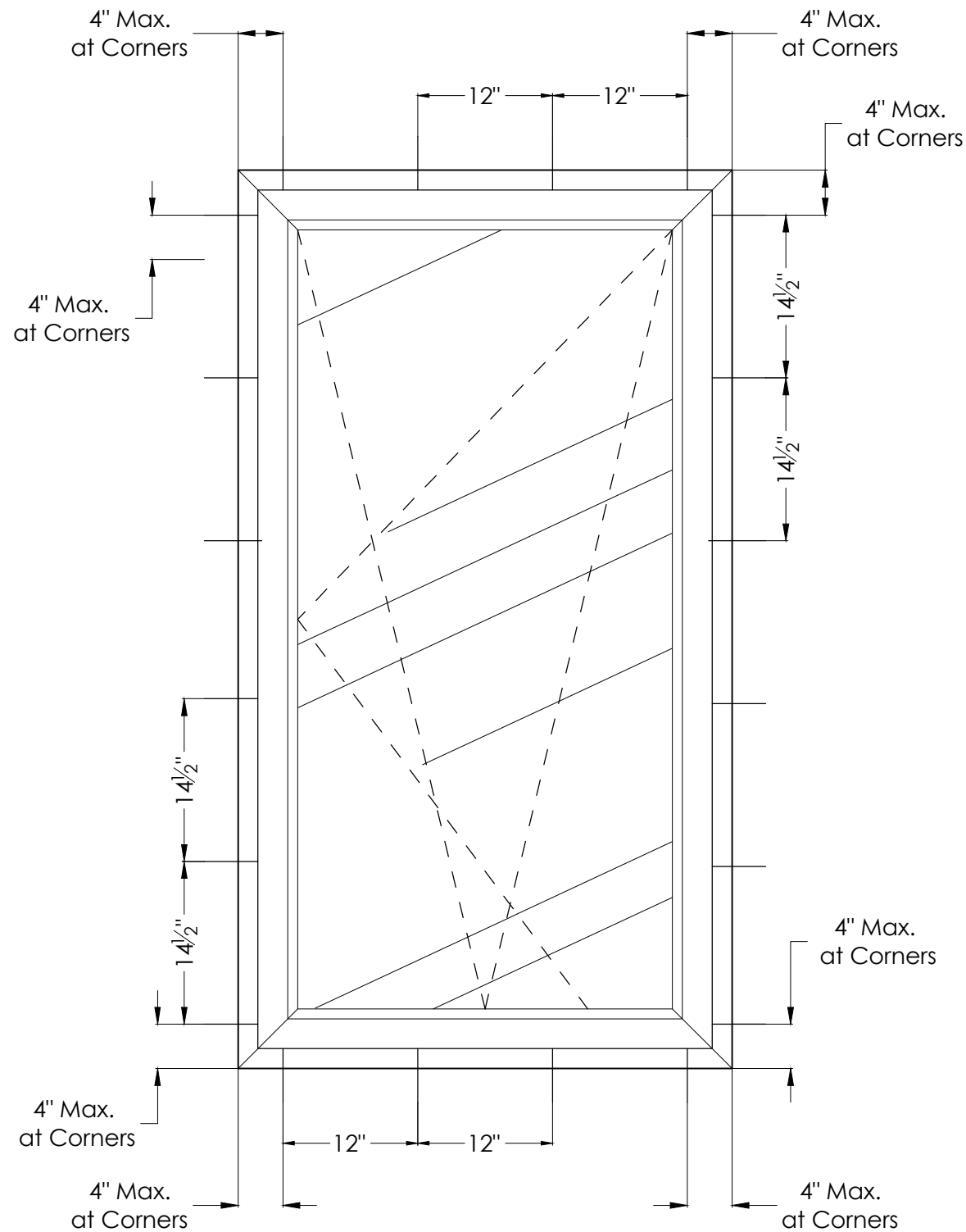
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Sheet 2 of 5

Anchor Types and Spacings Referenced in This Elevation Correspond to the Anchor Schedule on Sheet 3. Spacings Provided are Maximums and Shall Not be Exceeded.



4500-SERIES TILT-TURN WINDOW (Dry Glazed)
Exterior View

INSTALLATION NOTES

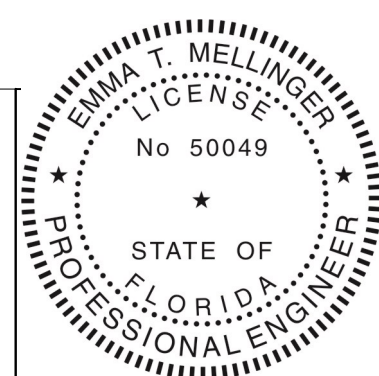
- Anchors Shall be of a Type Listed on This Sheet, Depending on the Substrate.
- Manufacturer's Vinyl Block Shall be Secured with Caulking at Each Anchor Location So That the Fastener Penetrates the Block, and No Portion of the Fastener is Exposed or Unsupported.
- Anchors Shall be Located a Maximum of 3" From Corners.
- The Balance of Anchors at the Head and Sill and Side Jambs Shall be Spaced at a Maximum of 14" o/c.
- Wood Bucks Shall Fully Back the Window Frame, Supporting its Entire Depth.
- A 1" x Wood Buck Shall be a Wood Buck Having a Thickness of Less Than 1 1/2". 1" x Wood Bucks Shall be Optional if the Window Can be installed Directly to the Substrate.
- The Installation of 2" x Wood Bucks Shall be Engineered by Others, as Approved by the Authority Having Jurisdiction.
- A Structural Shim Shall be Used at Each Anchor Location Where a Gap of 1/8-inch or More Exists Between the Window Frame and the Substrate. Such Shims Shall Extend the Entire Depth of the Frame, and be No More than 1/4-inch

in Thickness, Unless Otherwise Specified.

- Anchor Embedments and Edge Distances Indicated Shall be Beyond Wall Dressing or Stucco, into Structural Substrate.

ANCHORS SHALL BE OF THE FOLLOWING TYPES:

- **TYPE I:** For Installation into **Concrete Substrates** (*f_c min. = 2730 psi*), Use Approved 1/4" ELCO Ultracons of Sufficient Length to Achieve at Least 1 3/4" Embedment.
- **TYPE II:** For Installation into **CMU Substrates** (Hollow or Grout-Filled; *f_c min. = 1924 psi*), Use Approved 1/4" ELCO Ultracons of Sufficient Length to Achieve at Least 1 1/4" Embedment.
- **TYPE III:** For Installation into **Wood Substrates**, Use #12 Self-Drilling Screws (Hilti Kwik-Flex or Eq.), of Sufficient Length to Achieve at Least 1 1/2" Embedment.
- **TYPE IV:** For Installation into **Metal Substrates**, at Least 1/8" Thick, Use #12 Self-Drilling Screws (Hilti Kwik-Flex or Eq.), of Sufficient Length to Achieve a Minimum Penetration through the Metal of Three Full Thread Pitches. No Shim Space is Permitted.



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Large Missile Impact Resistant

EUROSTYLE

IMPACT WINDOWS & DOORS

217 NW 4th Ave., Hallandale Beach, FL 33009

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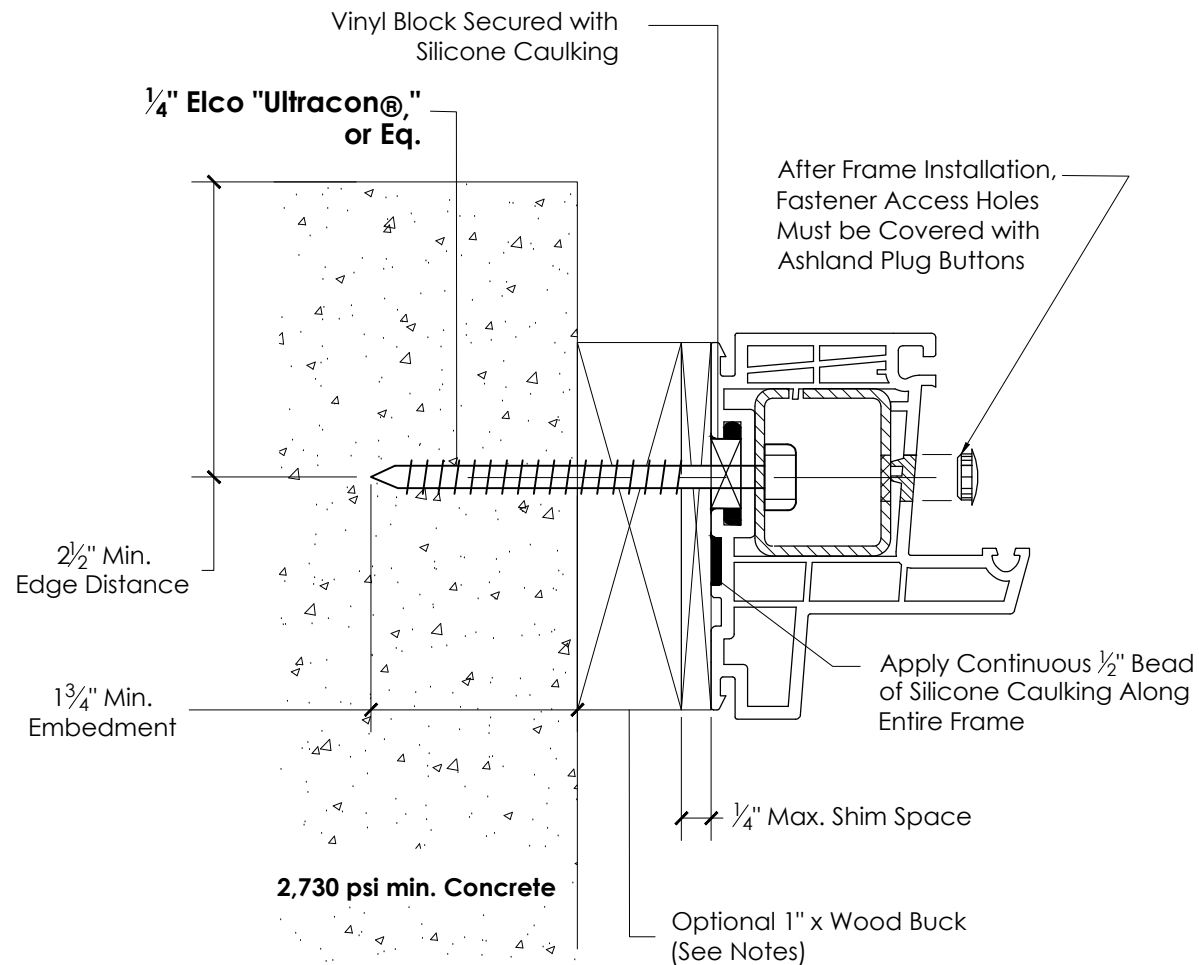
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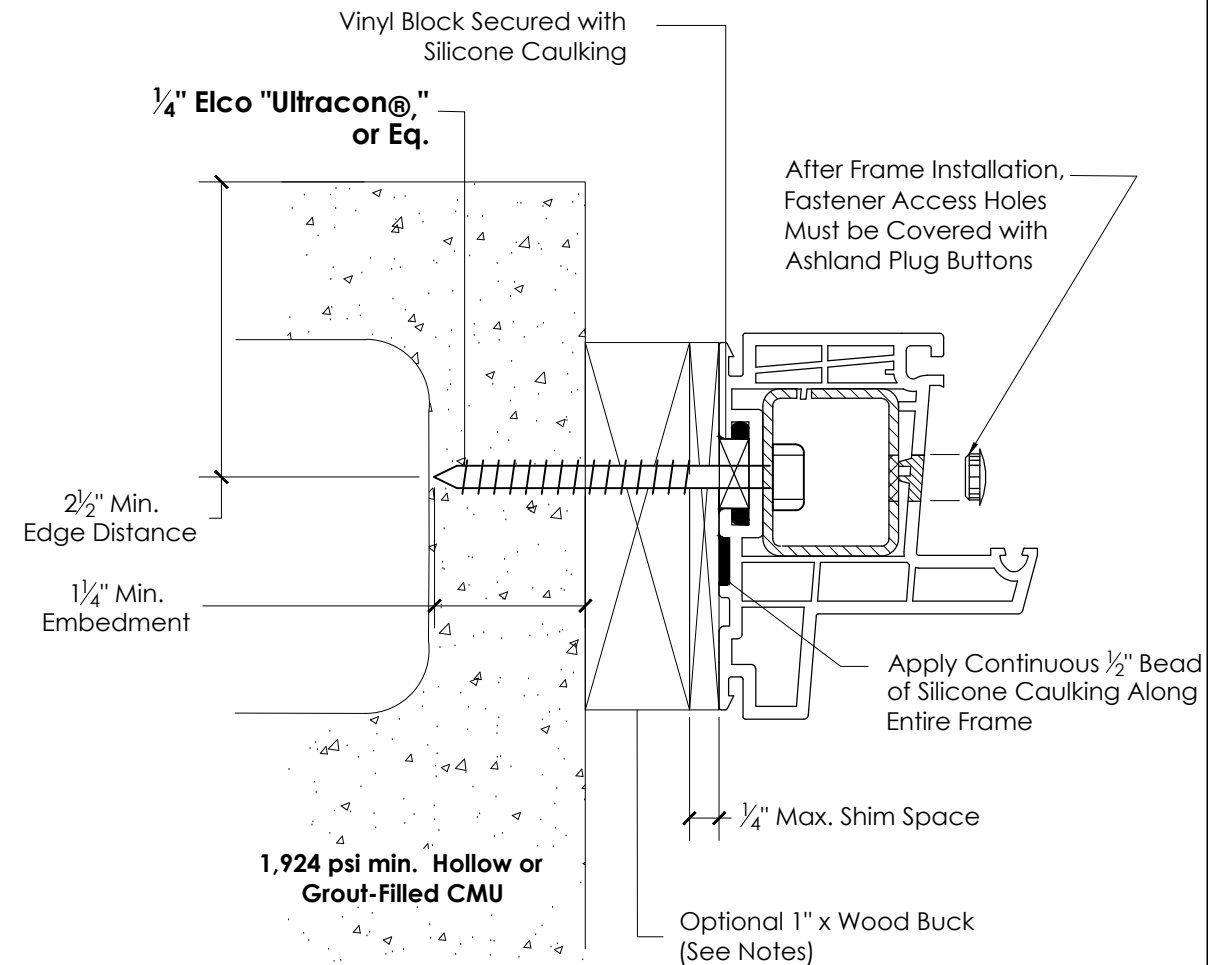
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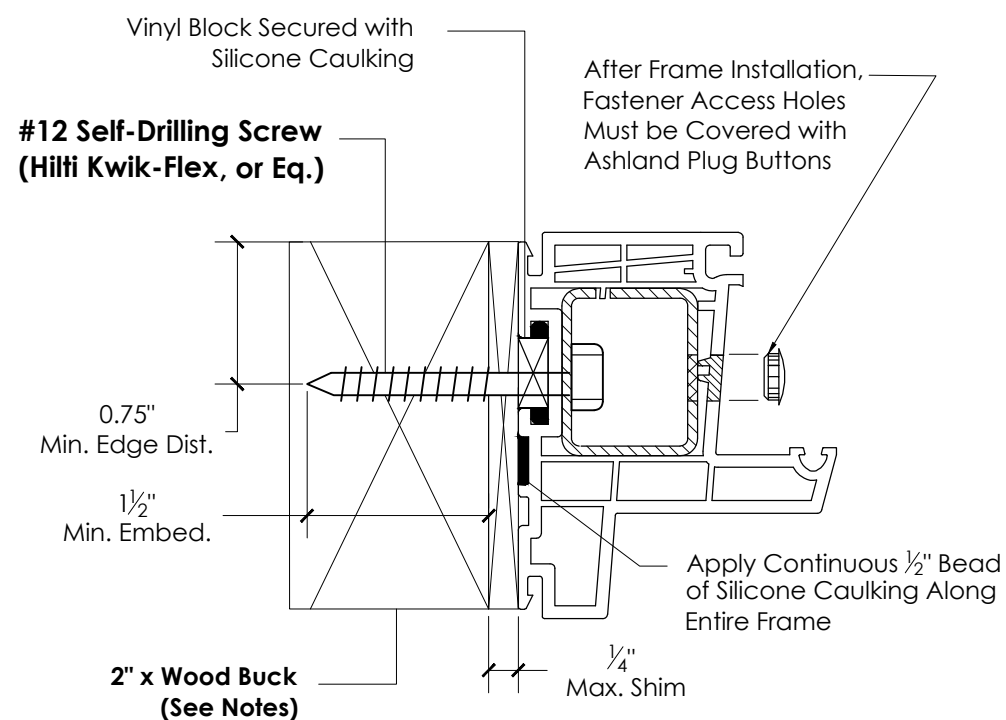
Sheet 3 of 5



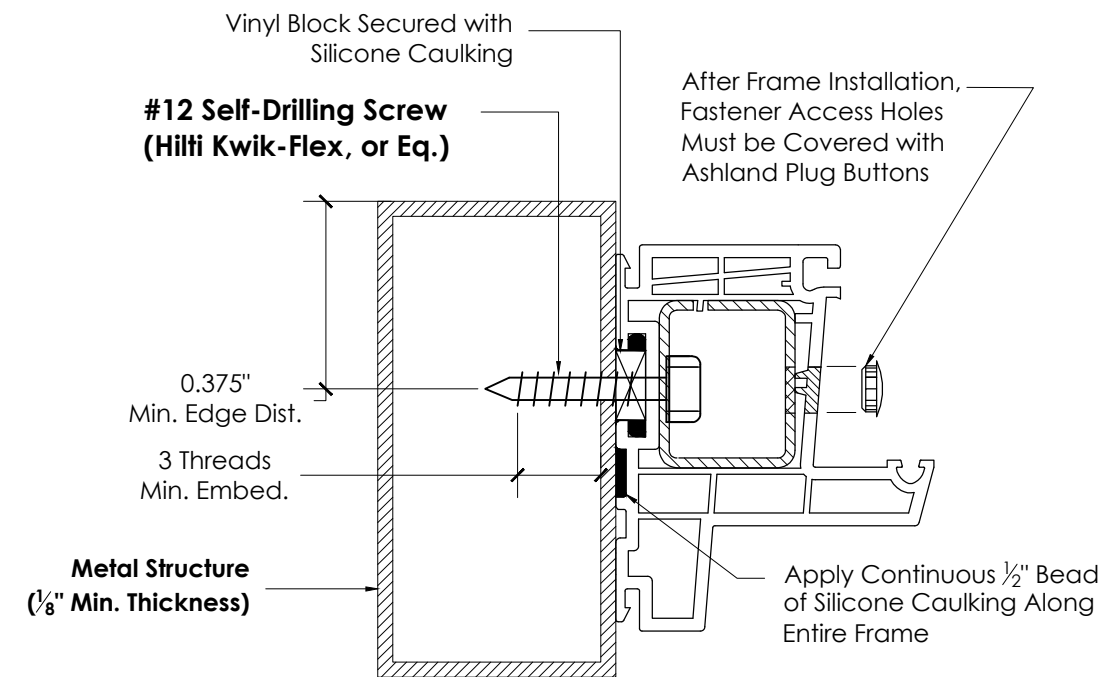
ANCHOR TYPE I



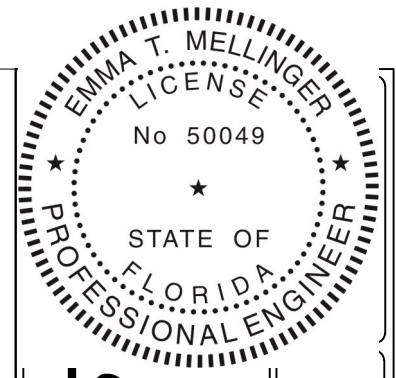
ANCHOR TYPE II



ANCHOR TYPE III



ANCHOR TYPE IV



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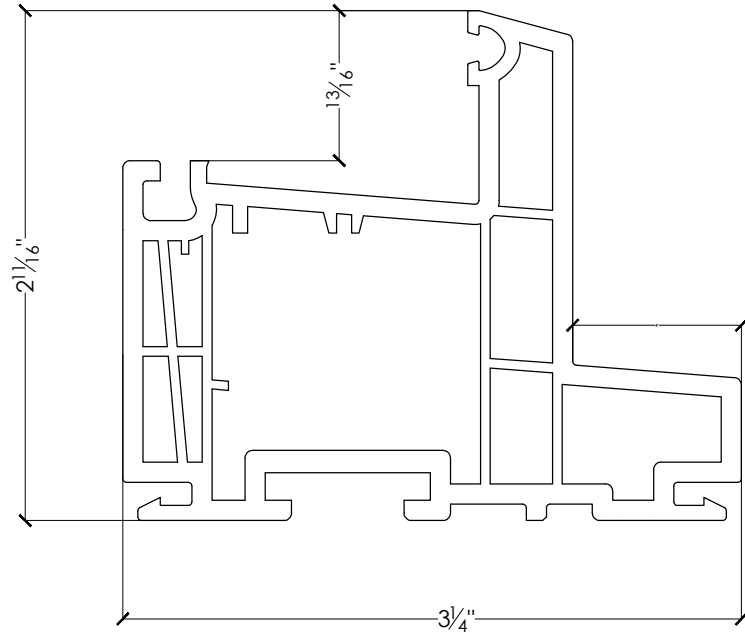
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DATE: 04 /22 /13		SCALE: AS NOTED		BY: ETM	
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Add Anchor Type IV Edge Dist. and Embed.		NO.		DESCRIPTION	

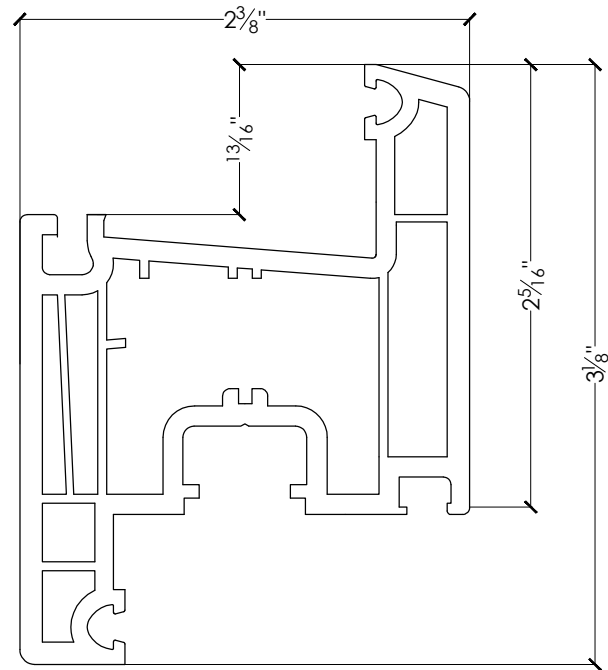
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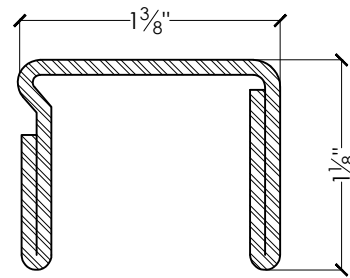
1 4500-Series Frame

Bill of Materials

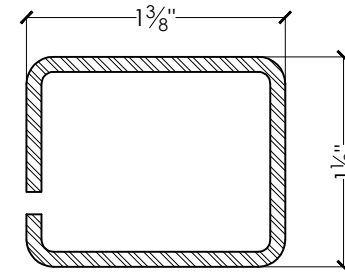
Item #	Part #	Description	Material	Vendor
1	601205	Frame	Vinyl	Rehau
2	554051	Sash	Vinyl	Rehau
3	237091	Reinforcement - Frame	Galv. Steel	Rehau
4	244536	Reinforcement - Sash	Galv. Steel	Rehau
5	560600	Glazing Stop	Vinyl	Rehau
6	268651	Shim Support	Vinyl	Rehau
7	864952	Glazing Gasket	EPDM	Rehau
8	261528	Drain Cover Caps	Vinyl	Rehau
9	-	Roto T&T Hardware	Steel	Roto
10	13856	Plug Buttons	Vinyl	Ashland



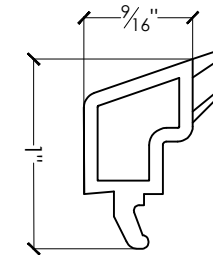
2 4500-Series Sash



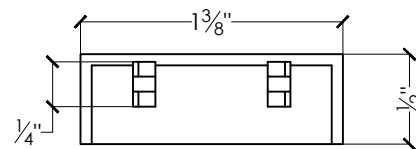
3 4500-Series Frame Reinforcement



4 4500-Series Sash Reinforcement



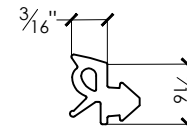
5 Glazing Stop



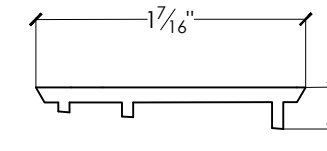
8 Drain Cover Cap



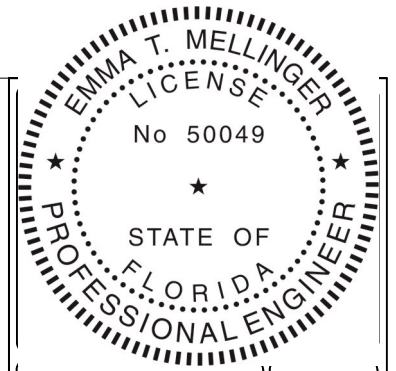
10 Plug Button



7 Glazing Gasket



6 Shim Support



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