NewSouth WINDOW SOLUTIONS



5902

# DuraGard and Sashlite Extruded Aluminum Vertical Clipped Structural Mullion

GENERAL NOTES

1. This product has been evaluated and is in compliance with the 7th Edition (2020) Florida Building Code (FBC) structural requirements, excluding the "High Velocity Hurricane Zone".

2. When used in areas requiring wind borne debris protection, this product (if mulled together with impact rated windows) does not require protection from an impact resistant covering when used in Wind Zones 1, 2 and 3 as defined by ASTM E 1996 and FBC Sections 1609.1.2.2 & R301.2.1.2.1.

3. In Wind Zone 4 as defined by ASTM E 1996, this product must be protected with an impact resistant covering complying with FBC Sections 1609.1.2 & R301.2.1.2.

4. Separate product approvals for each glazing product used with these mullions must be submitted along with this mullion product approval. The design pressure rating of the assembly shall be the lesser of the load capacity of the mullion as specified using this approval or the design pressure rating of the individual glazing products used.

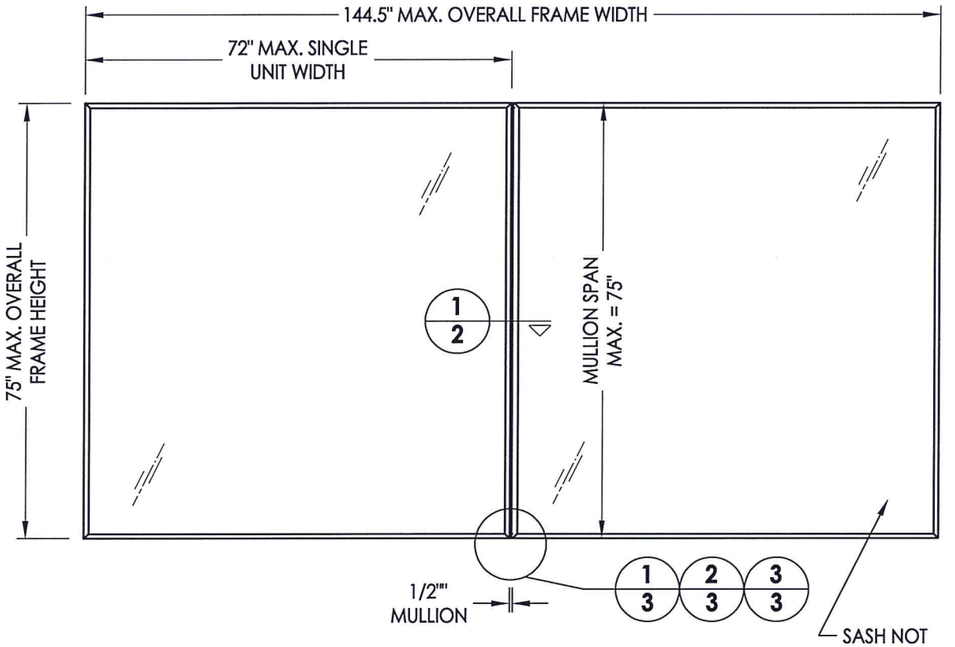
5. Anchoring of each glazing product to the mullion shall be as shown in this drawing or as shown in each individual glazing product approval, whichever is more stringent.

6. Mullion anchor embedment to base material shall be beyond wall dressing or stucco.

7. Any conditions not covered in this evaluation are subject to separate engineering evaluation.

8. For 2x stud framing construction, anchoring of these units shall be the same as that shown for 2x buck masonry construction.

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|---|---|
| SHEET # | DESCRIPTION |
| 1 | Typical elevations, design pressures & general notes |
| 2 | Mullion details & cross section |
| 3 | Anchor bracket details |
| 4 | Buck anchoring |




**MULLED WINDOW UNITS**

***(Twin unit shown, mulitples also allowed)***

| | | DESIGN PRESSURE (PSF) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MAX. OVERALL FRAME WIDTH | | | | | | | | | | |
| | | 62" | 74" | 86" | 92" | 98" | 104" | 110" | 116" | 122" | 134" | 144.5" |
| MAX. VERTICAL MULLION SPAN | 75" | 49.6 | 42.6 | 37.5 | 35.4 | 33.5 | 31.8 | 30.2 | 28.9 | 27.6 | 25.3 | 23.7 |
| | 72" | 50.0 | 50.0 | 42.6 | 40.2 | 38.0 | 36.1 | 34.3 | 32.8 | 31.3 | 28.8 | 26.8 |
| | 66" | 50.0 | 50.0 | 50.0 | 50.0 | 49.9 | 47.3 | 45.0 | 42.9 | 41.0 | 37.6 | 35.1 |
| | 60" | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 49.8 | 46.1 | 43.4 |
| | 54" | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 49.0 |
| | 48" | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 |
| | 42" | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 |

L.F. SCHMIDT LICENSE No. 43409 STATE OF FLORIDA PROFESSIONAL ENGINEER

July 30, 2020

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PRODUCT: CLIPPED MULLION

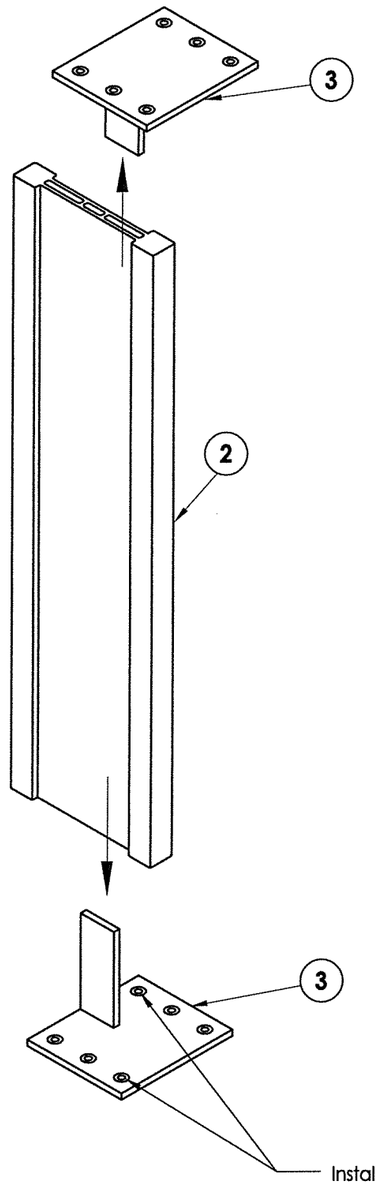
PART OR ASSEMBLY: TYPICAL ELEVATIONS, DESIGN PRESSURES & GENERAL NOTES

| NO. | DATE | REVISIONS | BY |
|---|---|---|---|
| 3 | 7/29/20 | UPDATE TO 7TH ED (2020) FBC | LFS |
| 2 | 9/26/17 | UPDATE TO 6TH ED. (2017) FBC | JK |
| 1 | 04/22/15 | UPDATE TO 5TH ED. (2014) FBC | JK |

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CHK. BY: LFS
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SHEET 1 OF 4

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Install concrete screws (2) at opposite corners only.

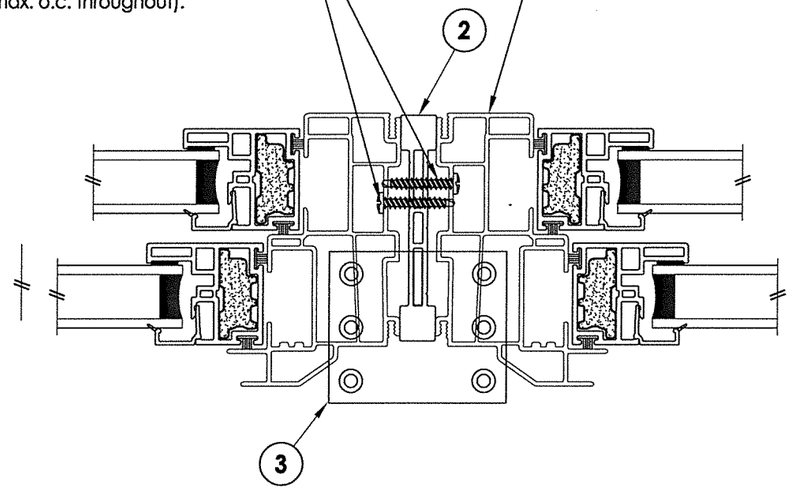
**BRACKET TO MULLION DETAIL**

Notes:

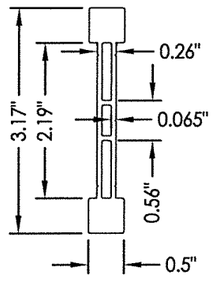
1. Refer to individual window product approval for fabrication and installation requirements, including glazing details, frame reinforcement and anchoring specifications.
2. Sheet metal screws (self-drilling) shall have a minimum of 3 threads protrude completely through the mullion frame. Maintain a min. 1/2" edge distance.

#8 X 1" PH Self-Drilling SMS (See notes below): Use the frame anchor spacing as shown on the individual window product approval (The min. required screw spacing is: 3" from each end and 24" max. o.c. throughout).

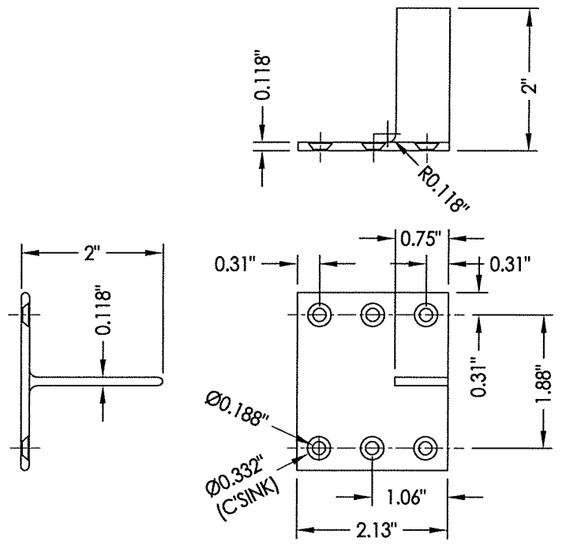
Shown with NewSouth DuraGard Series double hung frame under separate approval. Other NewSouth approved frames may be used.




**1/2 HORIZONTAL CROSS SECTION**




**2 MULLION (5902)**
6105-T5 ALUM




**3 MULLION ANCHOR BRACKET (5951)**
6063-T6 ALUM


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PRODUCT: *CLIPPED MULLION*

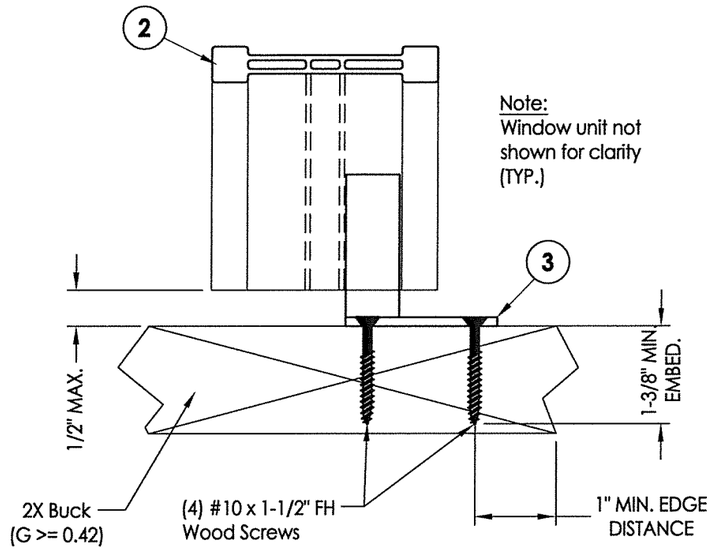
PART OR ASSEMBLY: *MULLION DETAILS & CROSS SECTION*

| NO. | DATE | REVISIONS | BY |
|---|---|---|---|
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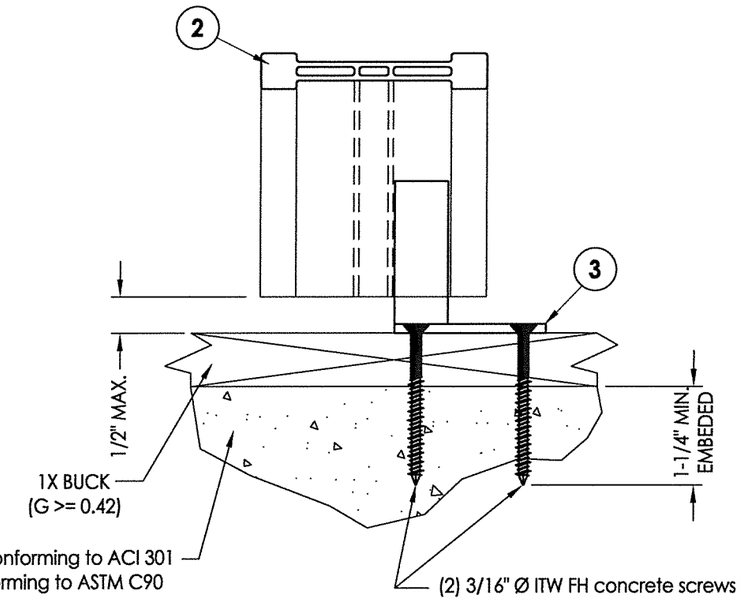
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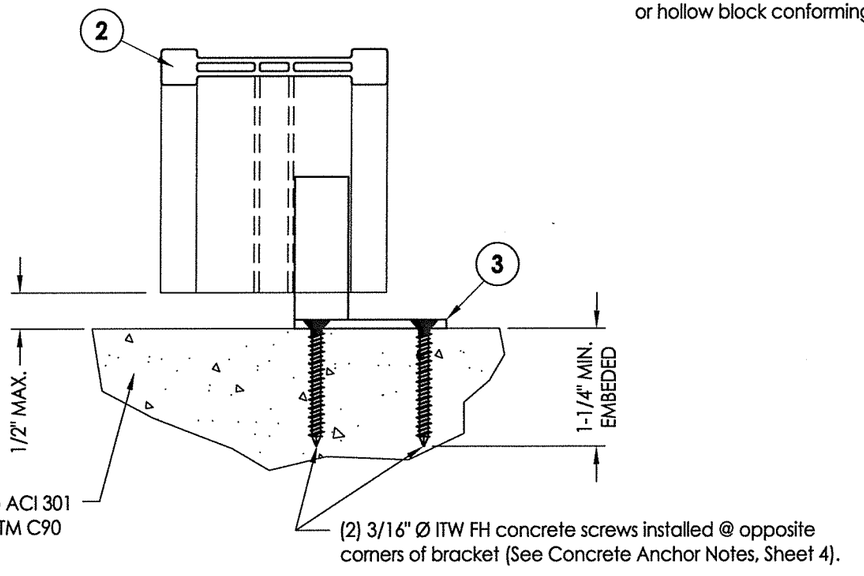
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**1/3 ANCHOR BRACKET DETAIL**
Anchor to 2x buck




**2/3 ANCHOR BRACKET DETAIL**
Anchor to masonry thru 1x buck




**3/3 ANCHOR BRACKET DETAIL**
Direct to Masonry

Notes:
1. Refer to individual window product approval for fabrication and installation requirements, including glazing details, frame reinforcement and anchor specifications.
2. Mullion bracket anchoring details shown may be used at either end of mullion.

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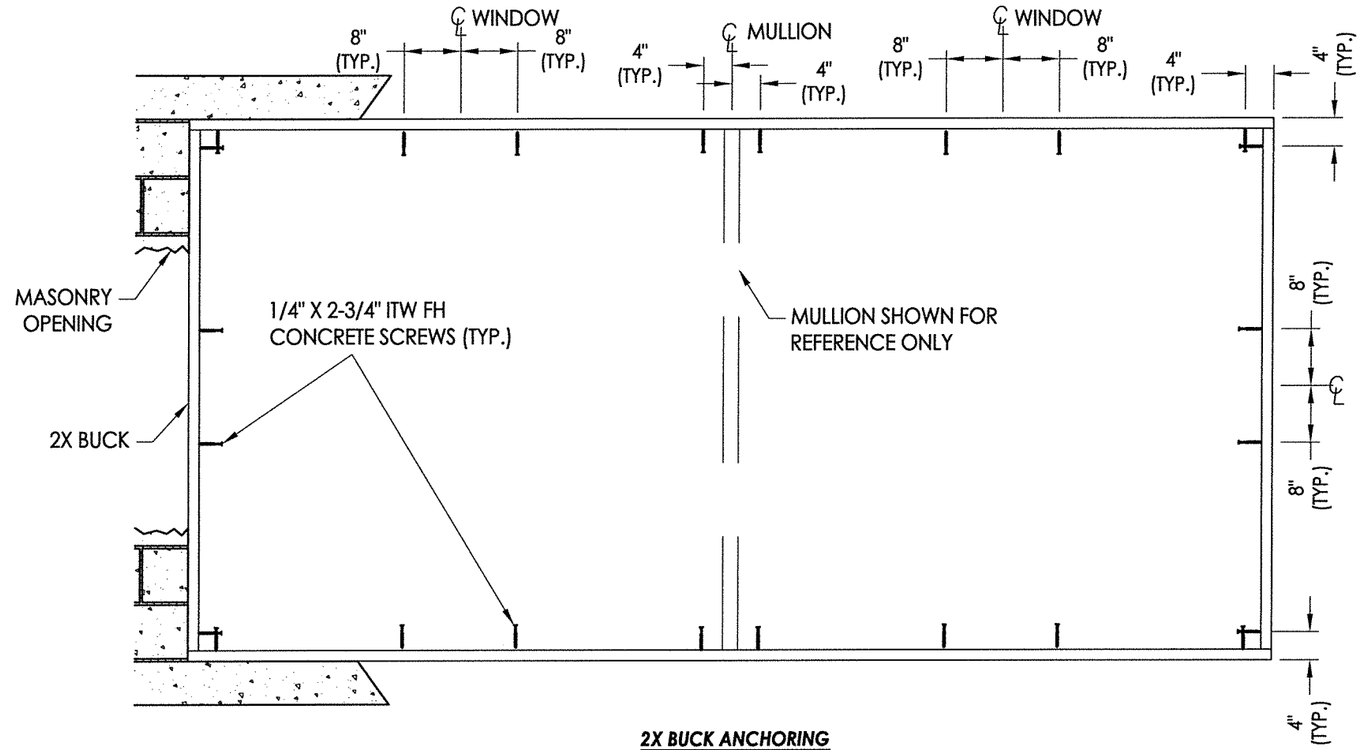
PART OR ASSEMBLY: *ANCHOR BRACKET DETAILS*

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***2X BUCK ANCHORING***

*CONCRETE ANCHOR NOTES:*

1. *Substitution of equal concrete anchors from a different supplier may have different edge distance and center distance requirements.*
2. *Concrete anchor locations at the corners may be adjusted to maintain the min. edge distance to mortar joints. If concrete anchor locations noted as "MAX. ON CENTER" must be adjusted to maintain the min. edge distance to mortar joints, additional concrete anchors may be required to ensure the "MAX. ON CENTER" dimensions are not exceeded.*
3. *Concrete anchor table:*

| ANCHOR TYPE | ANCHOR SIZE | MIN. EMBEDMENT | MIN. CLEARANCE TO MASONRY EDGE | MIN. CLEARANCE TO ADJACENT ANCHOR |
|---|---|---|---|---|
| ITW TAPCON® | 3/16" | 1-1/4" | 2" | 1-7/8" |
| ITW TAPCON® | 1/4" | 1-1/4" | 2-1/2" | 3" |

4. Concrete shall be 3,000 PSI conforming to ACI 301 or hollow block conforming to ASTM C90.


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