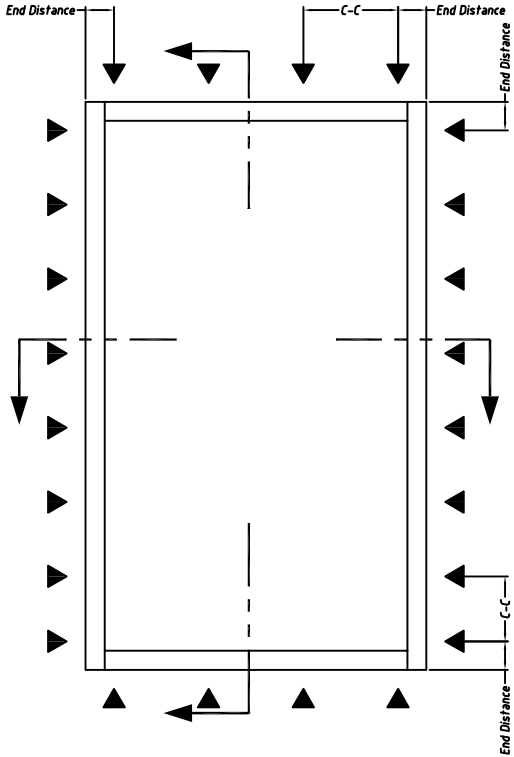


| Anchor Information                      |          |                        |                   |                    |                 |                     |
|-----------------------------------------|----------|------------------------|-------------------|--------------------|-----------------|---------------------|
| SUBSTRATE                               | LOCATION | ANCHOR (or equivalent) | C-C SPACING (max) | END DISTANCE (max) | EMBEDMENT (min) | EDGE DISTANCE (min) |
| WOOD<br>SG = 0.42<br>(As Tested)        | HEAD     | #12 Wood Lag Screw     | 3-1/2"            | 4"                 | 1-1/2"          | 1"                  |
|                                         | SILL     | #12 Wood Lag Screw     | 3-1/2"            | 4"                 | 1-1/2"          | 1"                  |
|                                         | JAMB     | #12 Wood Lag Screw     | 3-1/2"            | 4"                 | 1-1/2"          | 1"                  |
| CONCRETE<br>3000 psi                    | HEAD     | 1/4" Buildex Tapcon+   | 4"                | 4"                 | 2"              | 1-3/4"              |
|                                         | SILL     | 1/4" Buildex Tapcon+   | 4"                | 4"                 | 2"              | 1-3/4"              |
|                                         | JAMB     | 1/4" Buildex Tapcon+   | 4"                | 4"                 | 2"              | 1-3/4"              |
| CMU<br>(Grout Filled)<br>(fc = 2000psi) | HEAD     | 1/4" DeWalt Tapper+    | 2"                | 4"                 | 1-1/2"          | 3"                  |
|                                         | SILL     | 1/4" DeWalt Tapper+    | 2"                | 4"                 | 1-1/2"          | 3"                  |
|                                         | JAMB     | 1/4" DeWalt Tapper+    | 2"                | 4"                 | 1-1/2"          | 3"                  |
| STEEL STUD<br>(18 ga. 33ksi)            | HEAD     | 1/4" Elco Dril-Flex    | 2-1/2"            | 4"                 | 3 threads       | 3/8"                |
|                                         | SILL     | 1/4" Elco Dril-Flex    | 2-1/2"            | 4"                 | 3 threads       | 3/8"                |
|                                         | JAMB     | 1/4" Elco Dril-Flex    | 2-1/2"            | 4"                 | 3 threads       | 3/8"                |



1. Installations depicted comply with:  
7th ed Florida Building Code ( FBC 2020 )  
International Building Code ( IBC 2018 )  
National Design Specifications ( ANSI/AWC NDS 2018 )  
Aluminum Design Manual ( ADM 2015 )  
Cold-Formed Steel Design Manual ( AISI-S100 2016 )

2. The installation depicted in this drawing and all calculations are based on a maximum size and design wind pressure rating listed below. The products have not been proven for resistance to wind-borne debris.

Maximum Size      Design Pressure  
60" x 99"      +/- 80 psf

3. Wood screws shall be used for a wood substrate. Wood screw materials and dimensions shall meet the requirements of ANSI / ASME Standard B18.6.1

Wood buck installations are assumed 2x S-P-F (G=0.42) or denser. Buck width shall be greater than the window frame width. Tapered or partial bucks are not allowed. Wood buck shall be secured to the structure to resist all design loads.

4. Approved Self drilling screws shall be used for steel stud substrate. Screw materials and dimensions shall meet the requirements of ASTM Standard Specifications for Carbon Bolts and Studs ASTM A 307.

Steel Stud installations assume 18 gauge 33 KSI studs and follow AISI-S100 rules and procedures.

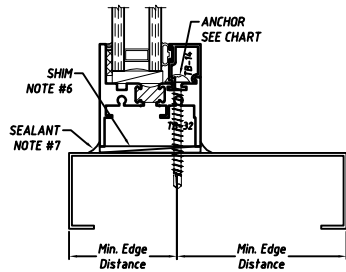
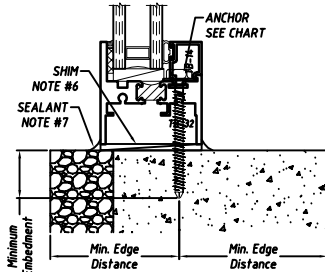
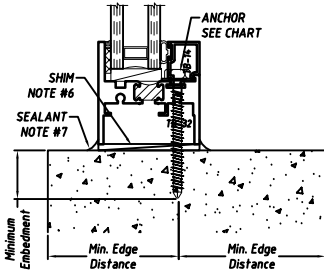
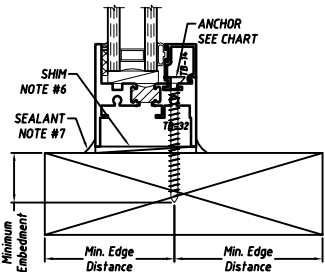
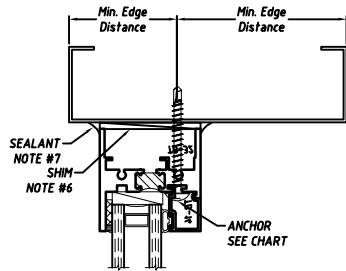
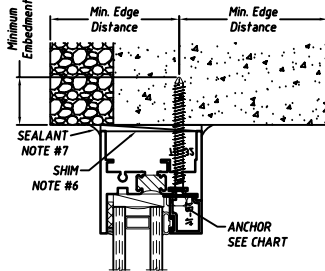
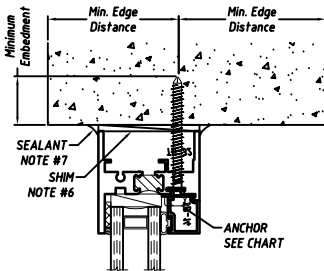
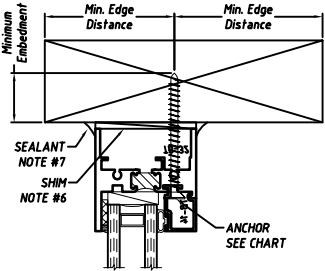
5. Approved Masonry anchors shall be used for concrete or CMU substrate. Anchor materials and dimensions shall meet the requirements of ICC-ES AC106 - Acceptance Criteria for Predrilled Fasteners (Screw Anchors) in Concrete or Masonry Elements. Anchor Length shall be sufficient to guarantee 1-1/2" of full penetration into concrete. Install concrete anchors per manufacturer's instructions.

Concrete Masonry installations are assumed at least ASTM C90 hollow masonry units with 1-1/4" wall thickness or normal weight concrete with a minimum compressive strength of fc=2,000 psi.

6. Maximum shim thickness of 1/4" permitted at each fastener location. Shims shall be non-compressible and load bearing type.

7. These drawings depict the details necessary to meet structural load requirements. They do not address the air infiltration, water penetration, intrusion or thermal performance requirements of the installation. See manufacturer's installation instructions for sealing, flashing and drainage requirements.

8. Maximum End Distance 4"

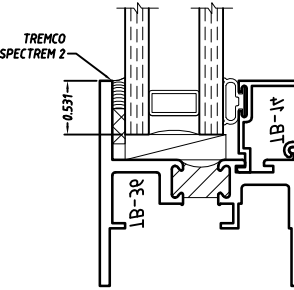
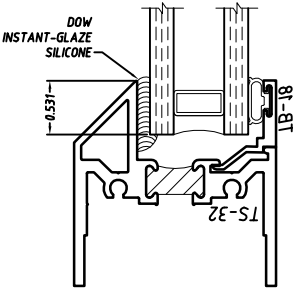


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\* Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

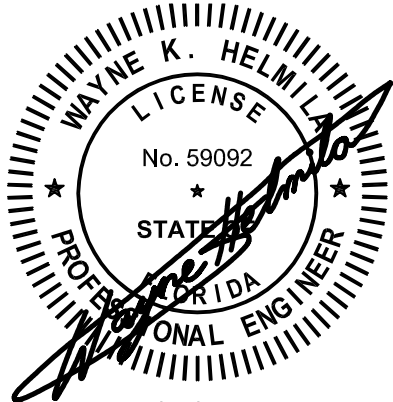
105 School Creek Trail  
Luxemburg, WI 54217  
Phone: (920)-617-1042  
Fax: (920)-617-1100  
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Certificate of Authorization: #9090  
Wayne K. Helmila  
Registration No: 59092



12/11/2020  
COA: 9090

| Rev. | Description | Date |
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Scale: 6" = 1'      Drawn by: K. Snader

Winco Window Co.  
6200 Maple Ave.  
St. Louis, Mo. 63130  
PHONE (314) 725-8088      FAX (314) 725-1419

WINCO Product: 1150-150S Fixed

Installation: Through Frame Installation

Certification: AAMA Non-Impact