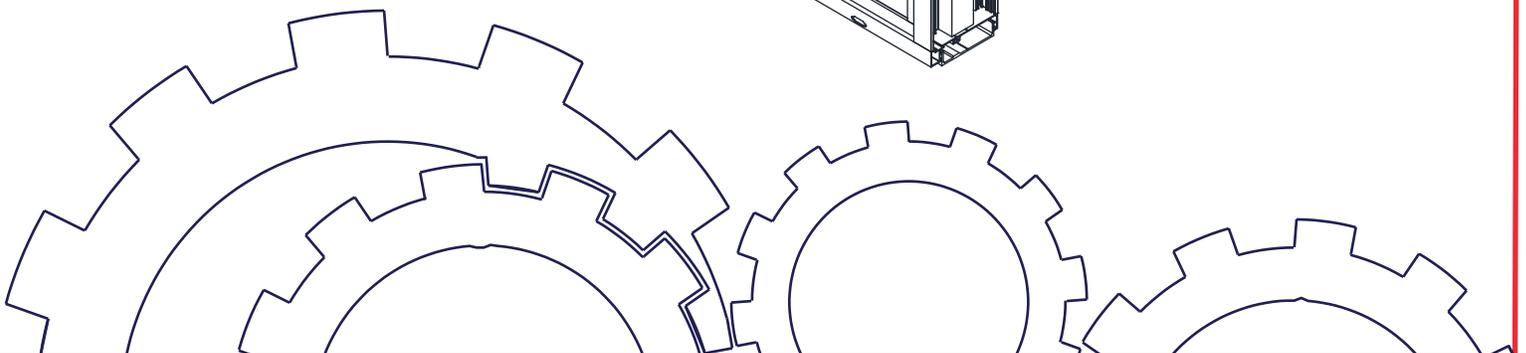
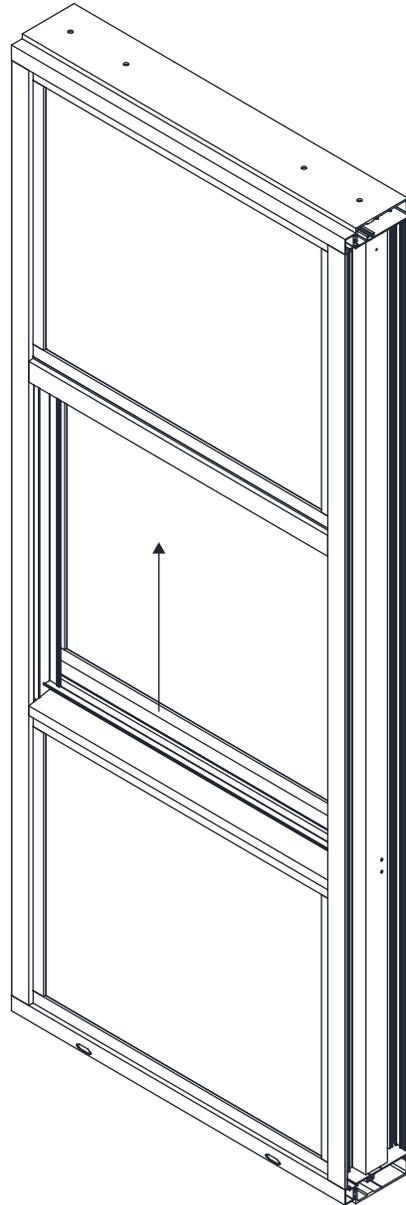




INSTALLATION MANUAL. SINGLE HUNG WINDOWS. SERIES MG250



INTRODUCTION

These instructions are provided as general guidance for installation. The Florida Approval of the product (FL32415 LMI and SMI) should be used together with these instructions.

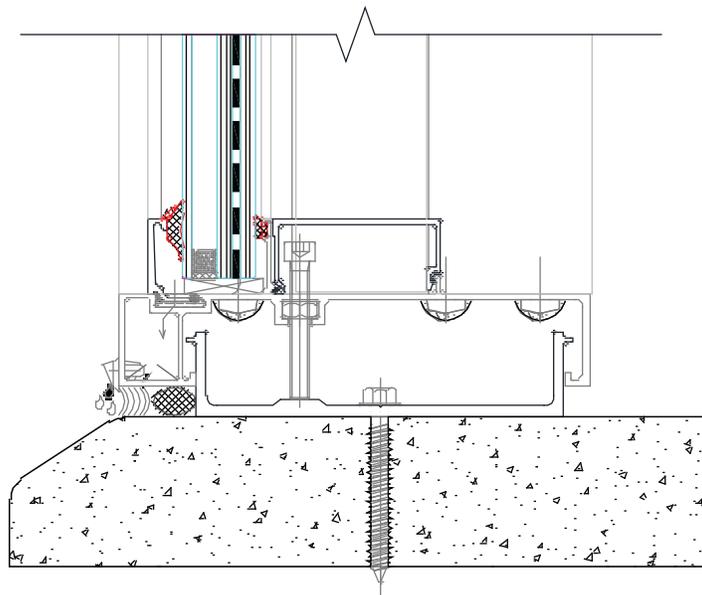
Only professionals and experienced installers should attempt to install these windows.

Read carefully all the instructions. If in doubt contact Mr. Glass Doors and Windows, we will be happy to assist.

Use the required protection gear and take all necessary safety precautions depending on the type of installation, especially those concerning working at heights.

The MG250 Series is a window wall containing a single hung window. A full view fix unit without window is also available. The MG250 can be installed as a single unit (jamb/jamb) or as part of multiple unit storefront. In that case, the verticals of the units are a combination of jamb, male or female mullions.

These vertical mullions combining the units, create a joinery that will be silicone sealed at the end of the installation.



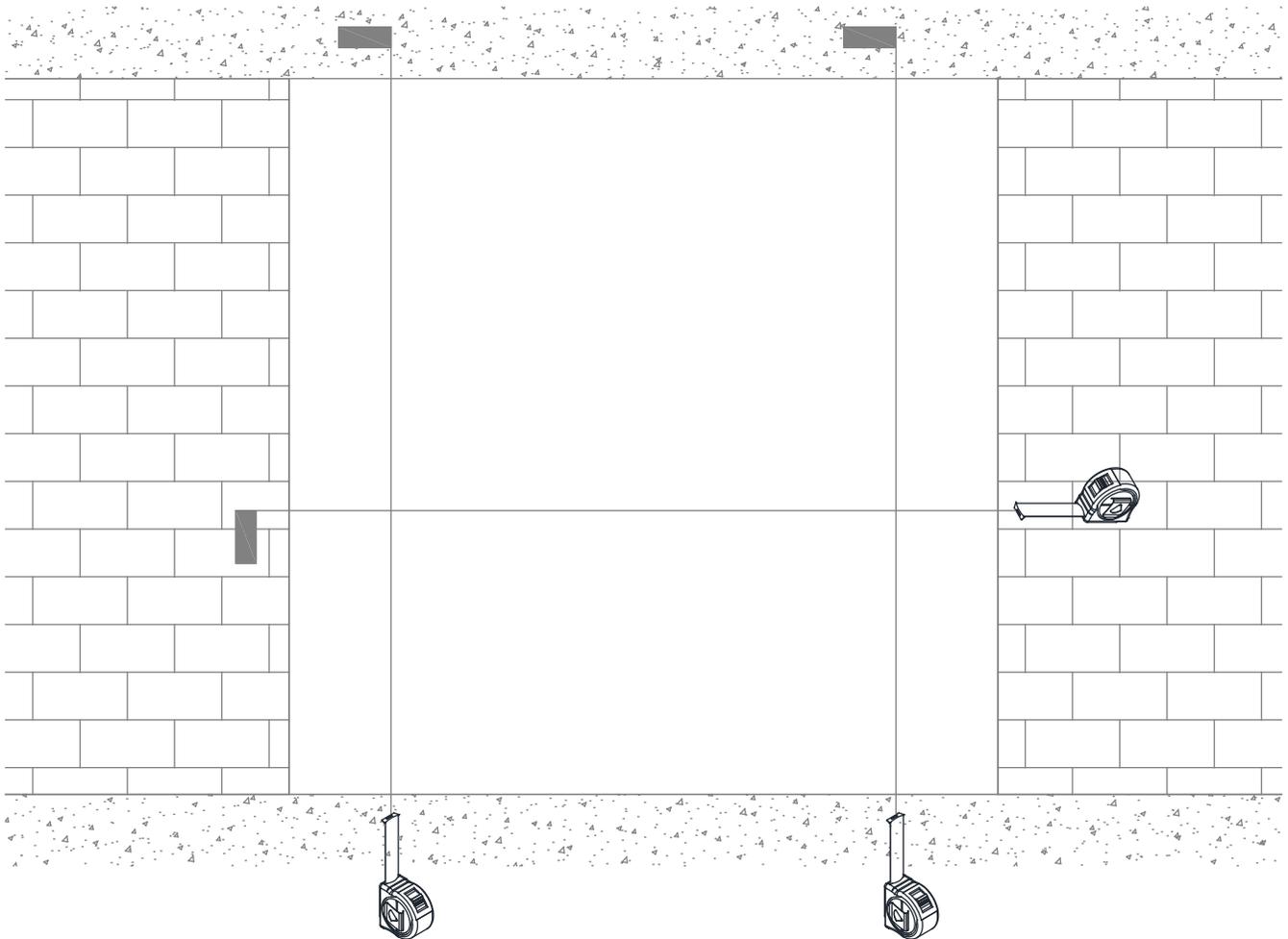
In constructions with extreme wind and water exposure, Mr. Glass recommends that masonry openings be treated with liquid flashing and sealed as per standards FMA/AAMA 200-12 and FMA/AAMA/WDMA 400-13. That is not mandatory per code and depends on the specifications of the project.



1. INSPECTION OF THE OPENING

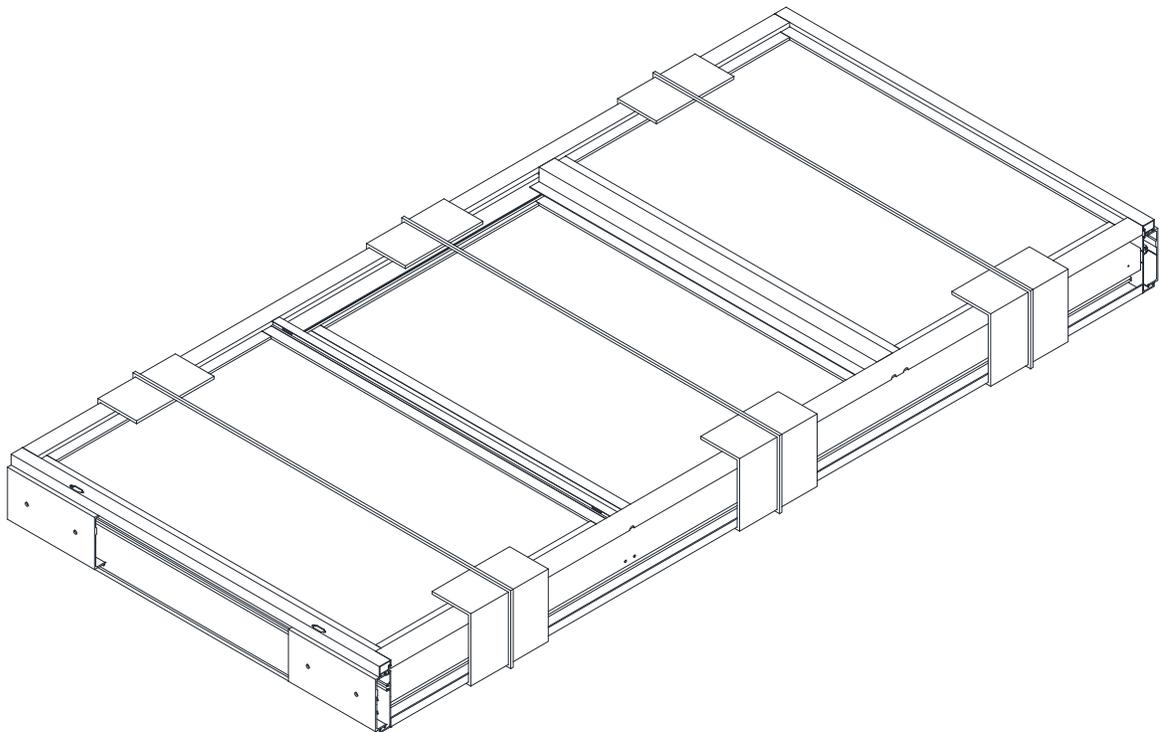
This is the very first step and will be executed regardless of the type of installation:

- a. Verify that the opening has the correct dimensions, that it is square, plumb and true. No more than 1/4" difference in square (diagonals) will be acceptable. The dimensions of height and width should be within 1/8" of the nominal opening dimension.
- b. In case of masonry openings check for cracks or missing mortar, mainly in the sill, that might eventually allow water and humidity migration. Clean any residue of mortar. Any defect should be addressed and corrected by the trade responsible for the opening.
- c. Mr. Glass recommends the sill have a slope to direct the water out of the building. No openings with inverted slope should be accepted. That will compromise the correct drainage and functioning of the window.
- d. Check the shop drawings and verify that the opening preparation follows the specifications.



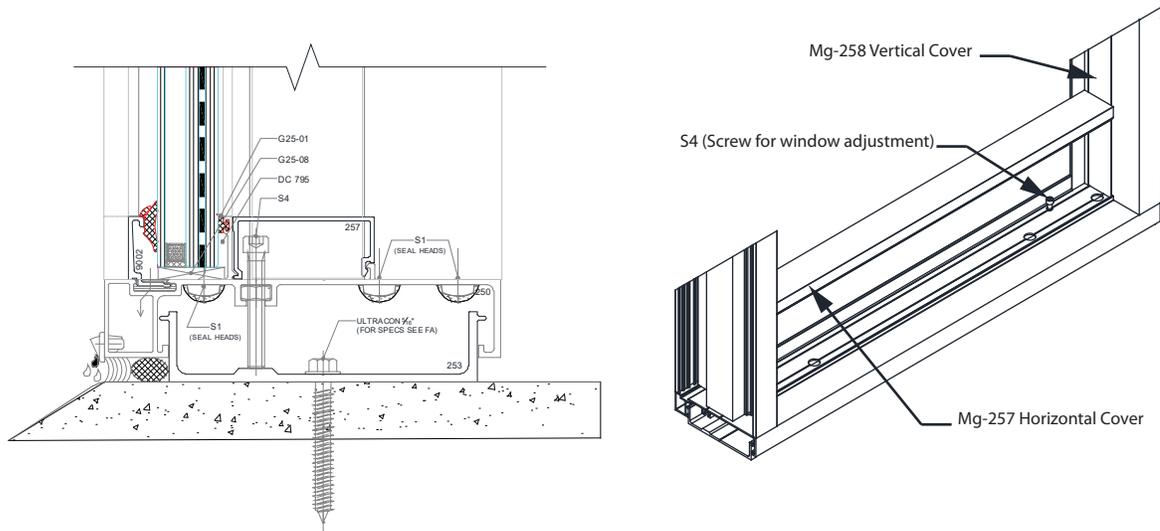
2. UNPACKING THE WINDOW

- a. In case of a retrofit: Before removing any existing window, verify that the new window corresponds to the specifications of the project in type and dimensions, and that they match the opening size.
- b. Carefully remove the straps and cardboard. Do not use sharp or puncturing objects that might damage the aluminum finish or the glass
- c. Verify the window, check that everything is correct.
- d. Remove the covers and place them in a safe location. To verify the operation of the vent, make sure that the window is standing upright. In any other position the weight of the sash will not be loading the balances, and opening the locks will trigger a sudden, violent opening of the sash, that may injure the installer and damage the window.
- e. The covers cannot be installed until the anchor installation inspection has been completed and approved by the building official.

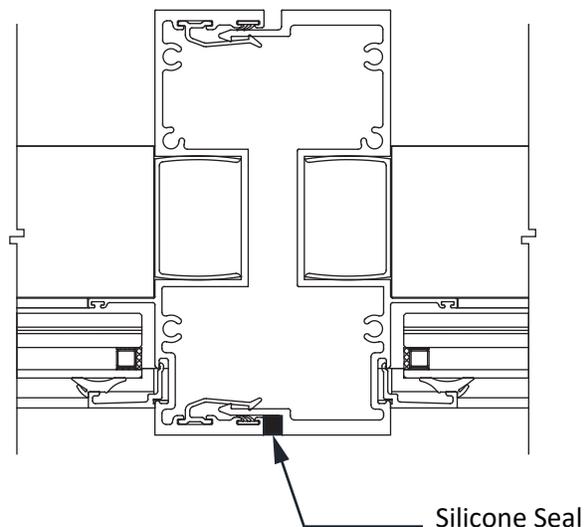


3. WINDOW INSTALLATION

- a. MG250 window wall is designed to be installed with anchors at head and sill only. The jambs are unanchored except for single units with height greater than 120"
- b. The anchor clips are continuous at head and sill.

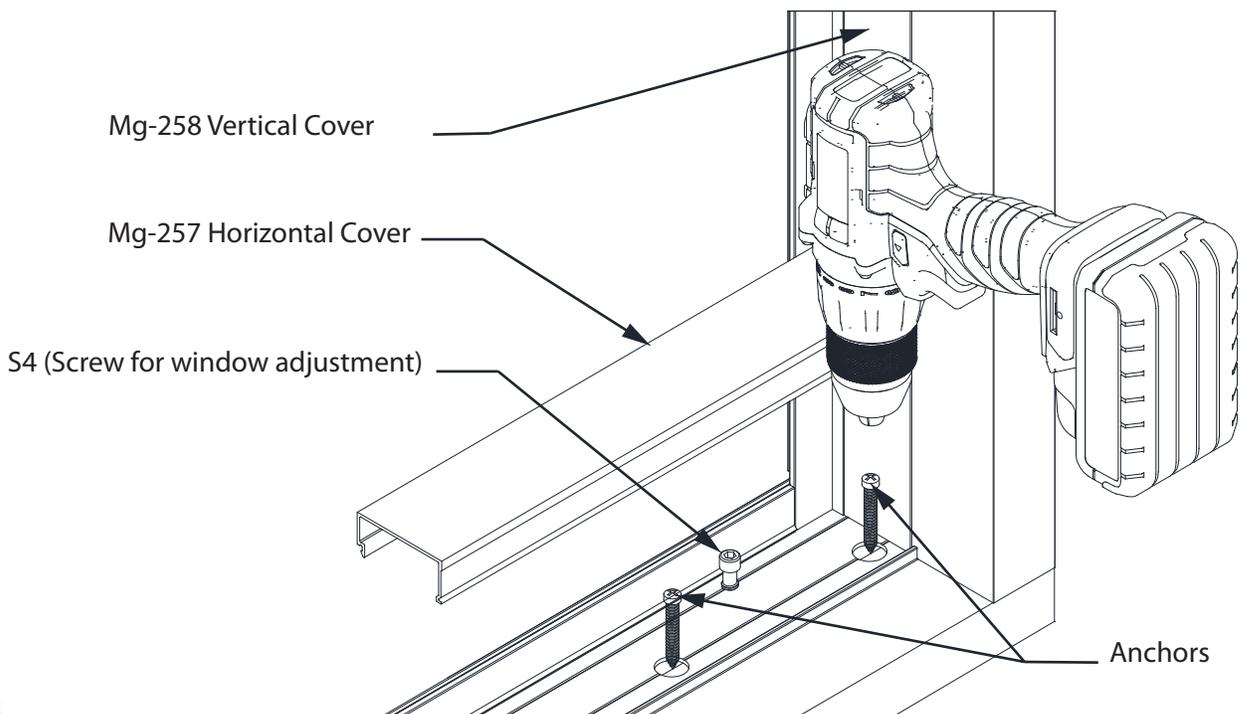


- c. Present the window inside the opening.
- d. Via S4 screws at sill, adjust the level/height of the window. Adjust the screws at head to project out the anchor clips 253 until it reaches the substrate on top.
- e. Ensure there is a minimum 1/4\" gap between the sill and the concrete at bottom (3/8\" is recommended by Mr. Glass) to allow for a free drainage. Ensure that no stucco or other finish is going to be applied to the opening, in a way that prevents the drainage to work properly. Opening sill with positive slope to help drainage are encouraged in new construction and wherever is feasible.
- f. If the window is formed by several units bring the next adjacent unit to the opening and snap it in place with the one already there, via the vertical mullions and the clips 9007. Repeat the process of leveling used before.



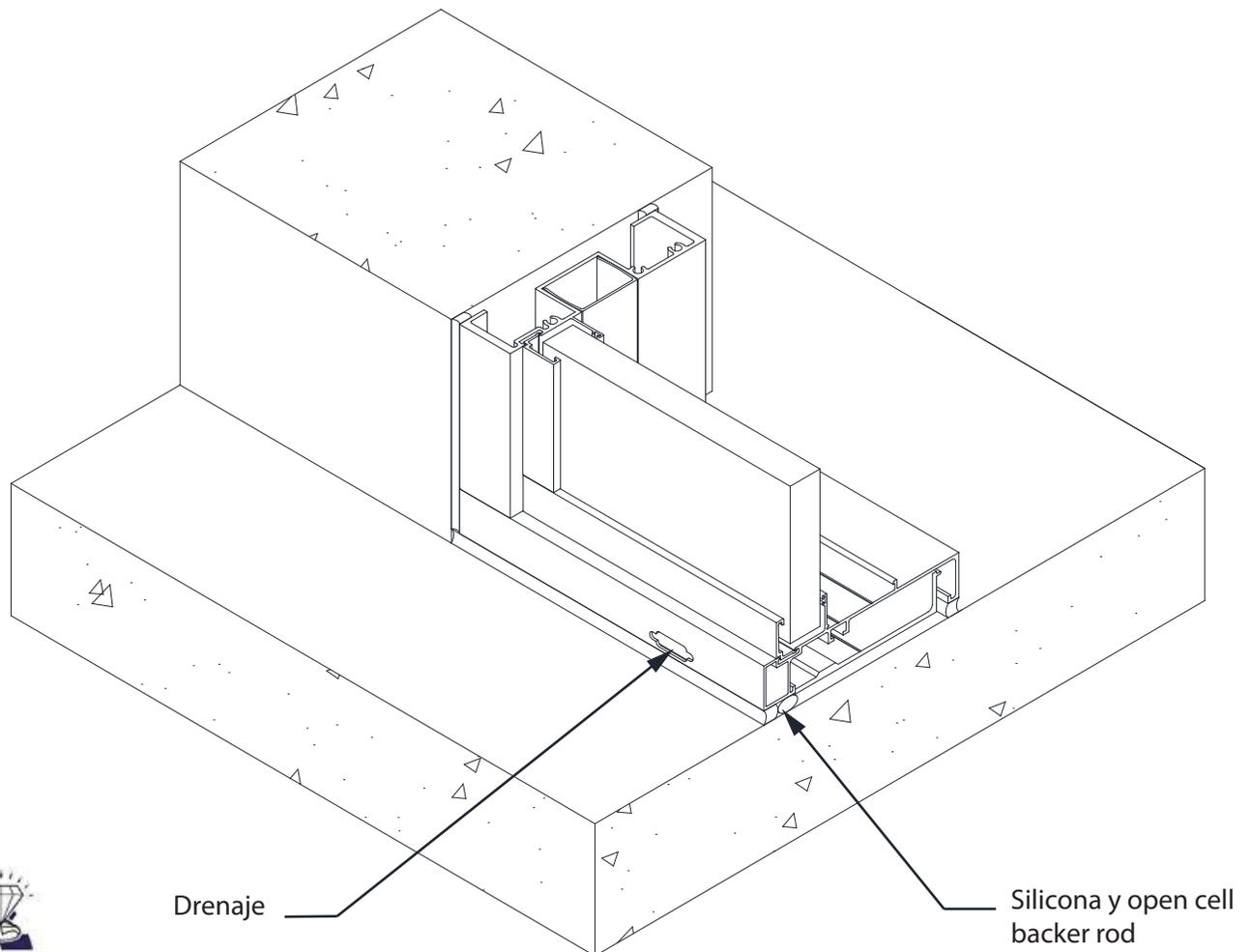
3. WINDOW INSTALLATION

- g. The clips 9007 are located between horizontals. It is useful to use plastic clamps to help attain the snap. A $\frac{1}{4}$ " gap should be respected between verticals.
- h. Recheck level and plumb.
- i. Start applying the anchors via access holes at sill and head, and into the clips 253. Check the required length of anchors in the next section.
- j. Once all anchors are in place, release (un-tighten) the S4 screws at head, to allow for some vertical movement due to live load of slab above or due to thermal expansion of the units.
- k. At this point the anchor inspection can be performed, and once finished, the covers 257 can be reinstalled.
- l. Verify that the sash operates correctly and that the guides are installed.
With the vent opened, verify that the seal at the joint of the sill and the vertical is correct. This is a critical seal detail, that can be damaged during transport or installation. Mr. Glass recommends to re touch it once the installation is finished.



4. SEALING THE WINDOW

- a. Prior to initiate the seal of the unit, check the shop drawings to see the details, as well as the type of silicone specified.
- b. MG 250 can be used in residential and commercial applications. Depending on the type of project it is possible that silicone adhesion, as well as compatibility tests on substrates etc., have been specified. Make sure to consult the test reports and to follow the instructions.
- c. Clean the opening as well as possible, removing residues, debris, stucco etc.
- d. Use open cell backer rod between the window and the substrate. For un-anchor jambs make sure that the minimum gap between the jambs and the substrate are being followed as per Florida Approval
- e. Apply the sealant and tool it properly. At sill make sure that the drainages are not obstructed with silicone. If it has not been done, set in place the drainage valves.
- f. For multiple units, the $\frac{1}{4}$ " joint between panels will be sealed. Clean the aluminum surface with alcohol and dry it with a cloth immediately. The joint between units has to match with the perimeter seal.

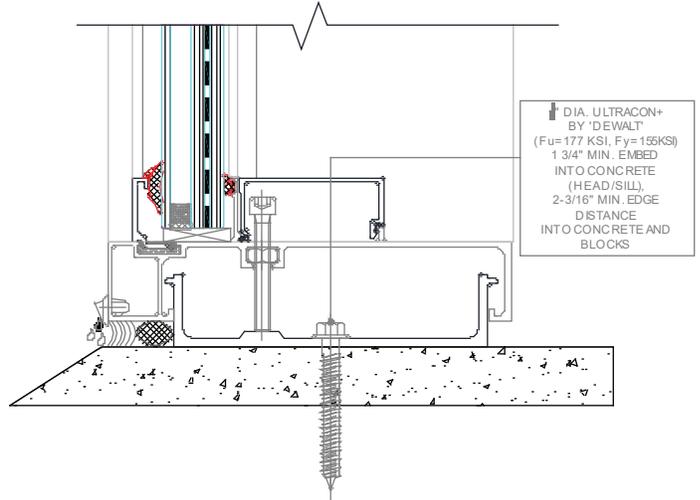


5. ANCHORS

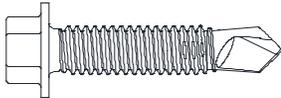
Ultracon



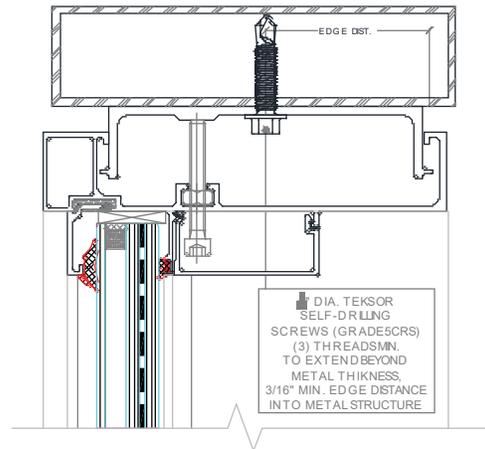
ø5/16 HEX WASHER HEAD (HWH)
2 1/4" Minimum Length (No Shim Space)



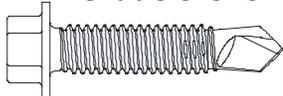
Grade 5 CRS



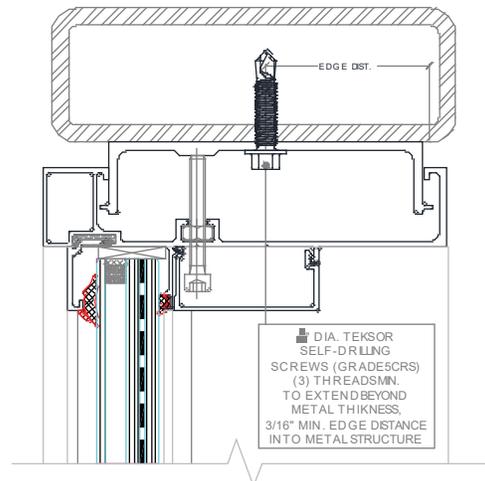
ø5/16 Teks or Self-Drilling
1" Minimum Length (No Shim Space)



Grade 5 CRS



ø5/16 Teks or Self-Drilling
1" Minimum Length (No Shim Space)



6. WINDOW CLEANING

- a. Once the installation is complete, proceed to clean the window. Mr. Glass recommends using water and mild soap or detergent
- b. Consult Service Bulletin 01-2021 "Maintenance of coated surfaces" and 02-2021 "Glass Cleaning Recommendations"
- c. Do not use sharp objects that may damage the finish in the aluminum or scratch the glass
- d. Remove all temporary seals and logos.
- e. Clean the work area and dispose of all the packaging residues.

