
GlasCurtain Inc.
Design No. GLC/CSA 25-01
Exterior Wall Systems
GlasCurtain Thermaframe
CAN/ULC-S134
Rating: Meets Conditions of Acceptance

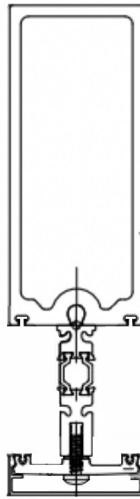


Figure 1. GlasCurtain Thermaframe Fiberglass Framing

- 1. EXTERIOR WALL ASSEMBLY:** The system described herein represents the construction as tested or evaluated to the standardized test conditions of the referenced standard. Reference Figures for additional construction details.

CERTIFIED MANUFACTURER: GlasCurtain Inc.

CERTIFIED PRODUCT: Exterior Curtain Wall Framing

CERTIFIED MODEL: GlasCurtain Thermaframe

Use the following supplied components for assembly:

- A. **FRAMING** – GlasCurtain mullions (vertical members) and transoms (horizontal members) are of fiberglass material and

consist of the following sub-components:

- i. Fiberglass Back Section
- ii. Fiberglass Pressure Plate
- iii. Aluminum Alloy Cap

- B. **VERTICAL MULLION SLEEVE** – Use to join vertical framing (Item 1A) members.

- C. **INSULATION** – Use Rockwool Cavityrock® 4 in. thick mineral wool insulation with min. dual density of 6.2 lbs/ft³(100 kg/m³) outer layer and 3.8 lbs/ft³ (61 kg/m³) inner layer, bearing the Intertek Mark, to fill framing (Item 1A) members at specified locations, to insulate galvanized steel backpans, and to pack gap between the framing members and the supporting construction (Item 2) at specified locations. Reference Figures 2-3.

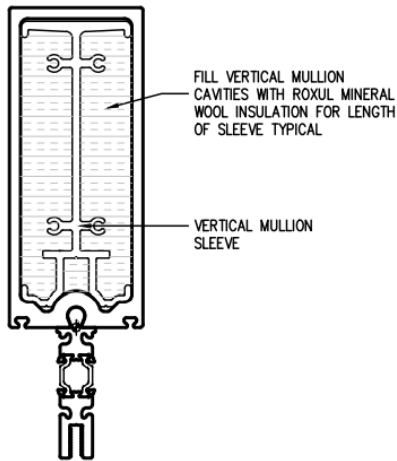


Figure 2. Framing Cross-Section (Top View) with Vertical Mullion Sleeve and Insulation

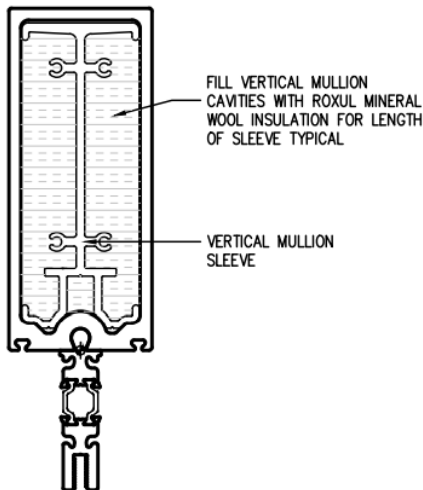


Figure 3. Framing Cross-Section (Front View) with Vertical Mullion Sleeve and Insulation

- D. GASKETS – Use the following gaskets at specified locations.
- Exterior Gasket [G17]: 6mm pressure plate gasket for fiberglass backsections Trelleborg 16081-02-00
 - Interior Gasket [G19]: 12.7mm compression gasket for fiberglass backsections Trelleborg 1405-02-00

- Foam Tape [G102B]: Norton 1/8 in. x 3/8 in.

E. SETTING BLOCKS

- SB5 (silicone): 1.6 x 44.0 x 152.0 LG Triple Glazed Setting Block Tremco TR-15743S
- SB6 (EPDM): 6.0 x 43.0 x 152.0 LG Triple Glazed Setting Block Tremco TR-13705E
- SB8 (EPDM/Silicone): 10.0 x 10.0 x 152.0 LG Spandrel Glazed Setting Block Tremco TR-5112S/E

- F. CORNER BLOCKS – 22mm x 62mm long, triple glazed corner plug Tremco TR-14450E.

- G. THERMAL BREAKS [T2] – Fiberglass pressure plate thermal break, Perfect Fit FG-004.

H. ALUMINUM CHANNELS

- [AC1]: 16mm x 46mm x 22mm
- [AC2]: 16mm x 54mm x 22mm

I. SCREWS

- [F3]: Flat Head 10-16 x 1 1/2 in. 'AB'
- [F7]: Pan 8-18 x 1 1/2 in. 'AB'
- [F10]: #10-16 x 3/4 in. AB Truss Head
- [F20]: Pan 1/4-20 x 3/4 in. M.S.
- [F35]: Pan 10-16 x 1 in. TEKS/3
- [F36]: HWH 1/4-14 x 1-1/4 in. TEKS/3
- [F51]: HILTI 3/8 x 3-1/4 in. Kwik HUS (KH)

- J. VISION GLASS [V] – 45mm Triple Sealed Unit consisting of:

- 6mm Clear Tempered
- 13mm Air Space
- 6mm Clear Tempered
- 13mm Air Space
- 6mm Clear Tempered

- K. SPANDREL GLASS [S] – 6mm Tempered

- L. ALUMINUM PANELS [AL] – 2mm thick



- M. BACK PANS – 20 GA, galvanized steel lined with insulation (Item 1C), fastened using 4 in. long, 12 GA galvanized steel pin with max. spacing of 1 pin/sq.ft. along with galvanized steel washers of 1-1/2 in. in diameter and max. spacing of 1 pin/sq.ft. The back pans shall be installed at the floor slab and at all spandrel locations.
- N. SILICONE SEALANT – Dow Corning 795. Sealant shall be applied between the perimeter of the galvanized back pan (Item 1M) and the framing (Item 1A) forming a continuous air seal. Less than 1mm thick silicone sealant is used at the joints of the framing.
- O. GALVANIZED STEEL FLASHING – 90-degree angled, 26 GA, galvanized steel flashing with one end attached to transoms that are cavity filled with insulation (Item 1C), and the other end attached to the base wall using fasteners. Flashing is also attached in a similar manner around the wall perimeter.
- P. MOUNTING BRACKETS – Double T-shaped aluminum alloy mounting bracket, 206mm long x 120mm wide x 90mm tall, with the top flange at 10mm thick and the legs at 6mm thick, for anchoring of the assembly mullion to the base wall using 3/8 in. concrete anchors.



V: VISION GLASS

S: SPANDREL GLASS & GALVANIZED BACKPAN W/ INSULATION

AL: ALUMINIUM PANEL & GALVANIZED BACKPAN W/ INSULATION

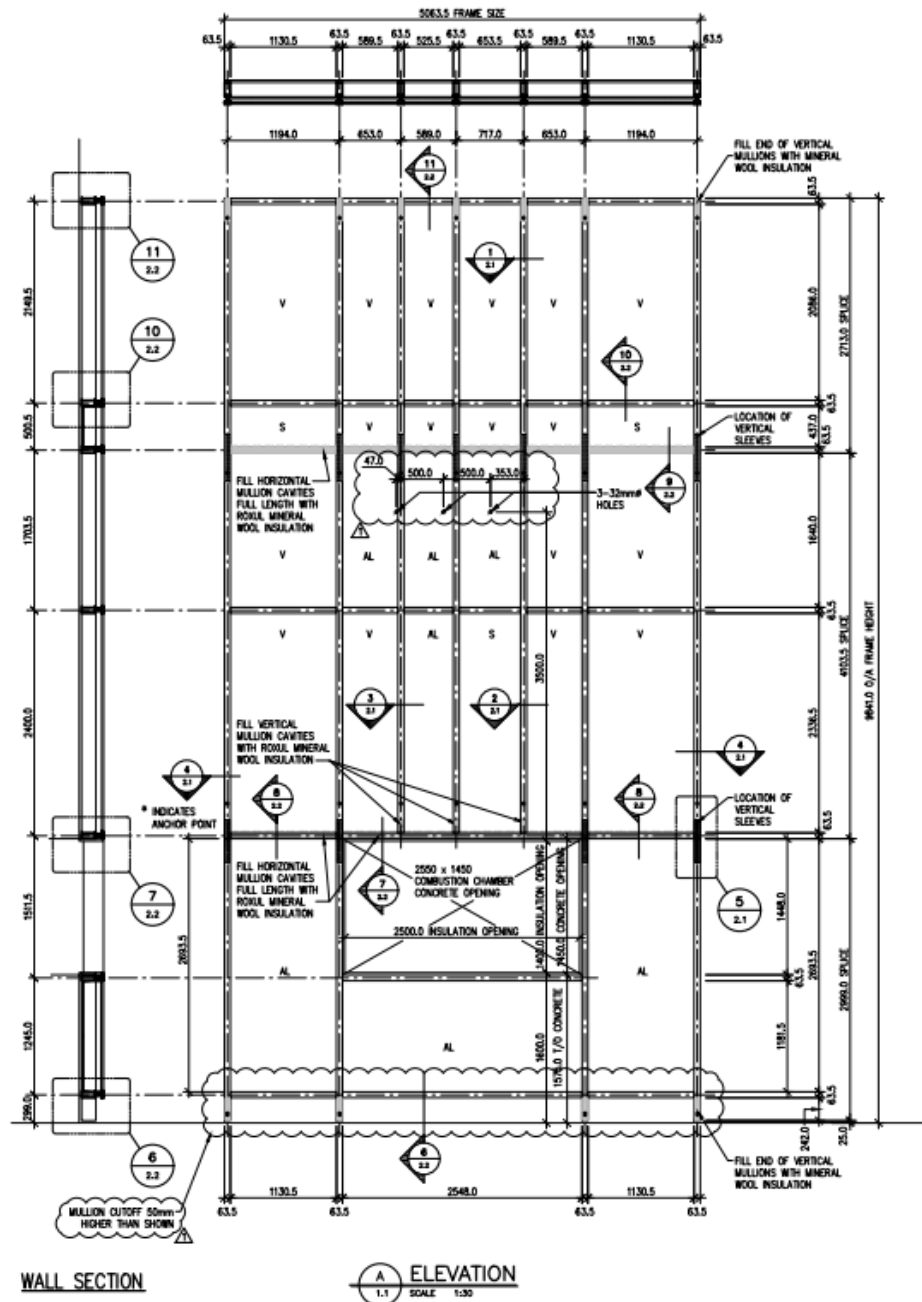


Figure 4. Overall Wall Assembly



2. SUPPORTING CONSTRUCTION: Construct the exterior wall assembly (Item 1) onto the supporting construction with the following method:

- A. Fasten the mullions to the base wall with 6mm angles, measured 76 x 51 x 120mm.
- B. Use one 3/8 in. x 3 in. concrete anchor to fasten the angle to the supporting construction.
- C. Use three 1/4 in.-14 x 1-1/4 in. Tek3 HH screws to fasten the angle to the GlasCurtain mullions; angles are located across the width of the wall assembly – at the base of the wall, at the transom line above the window opening, underneath the second transom line above the window opening, and underneath the uppermost transom line.
- D. Maintain a 25mm spacing between the supporting construction and the exterior wall assembly.
- E. Insert a piece of 25mm thick x 50mm wide insulation (Item 1C) between the supporting construction and the transoms throughout the width of the wall assembly, for transoms located at the base of the wall assembly, above the window opening, and underneath the second transom line above the window opening.

F. Apply a bead of 3M Fire Barrier 1003 SL self-leveling silicone over the top of each piece of insulation inserted.

G. Seal the perimeter of the angles using Dow Corning® 795 building silicone.

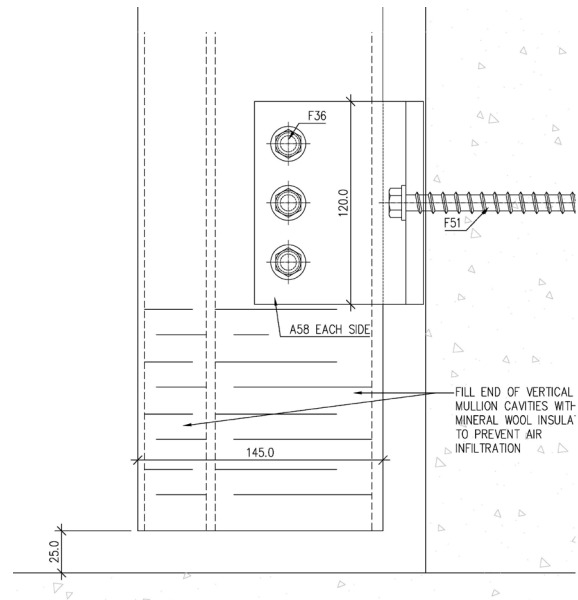


Figure 5. Mullion, Angle and Supporting Construction

3. INSTALLATION: Observe the following installation details in Figures 6 - 15, in reference to the specific elevations shown in Figure 4.

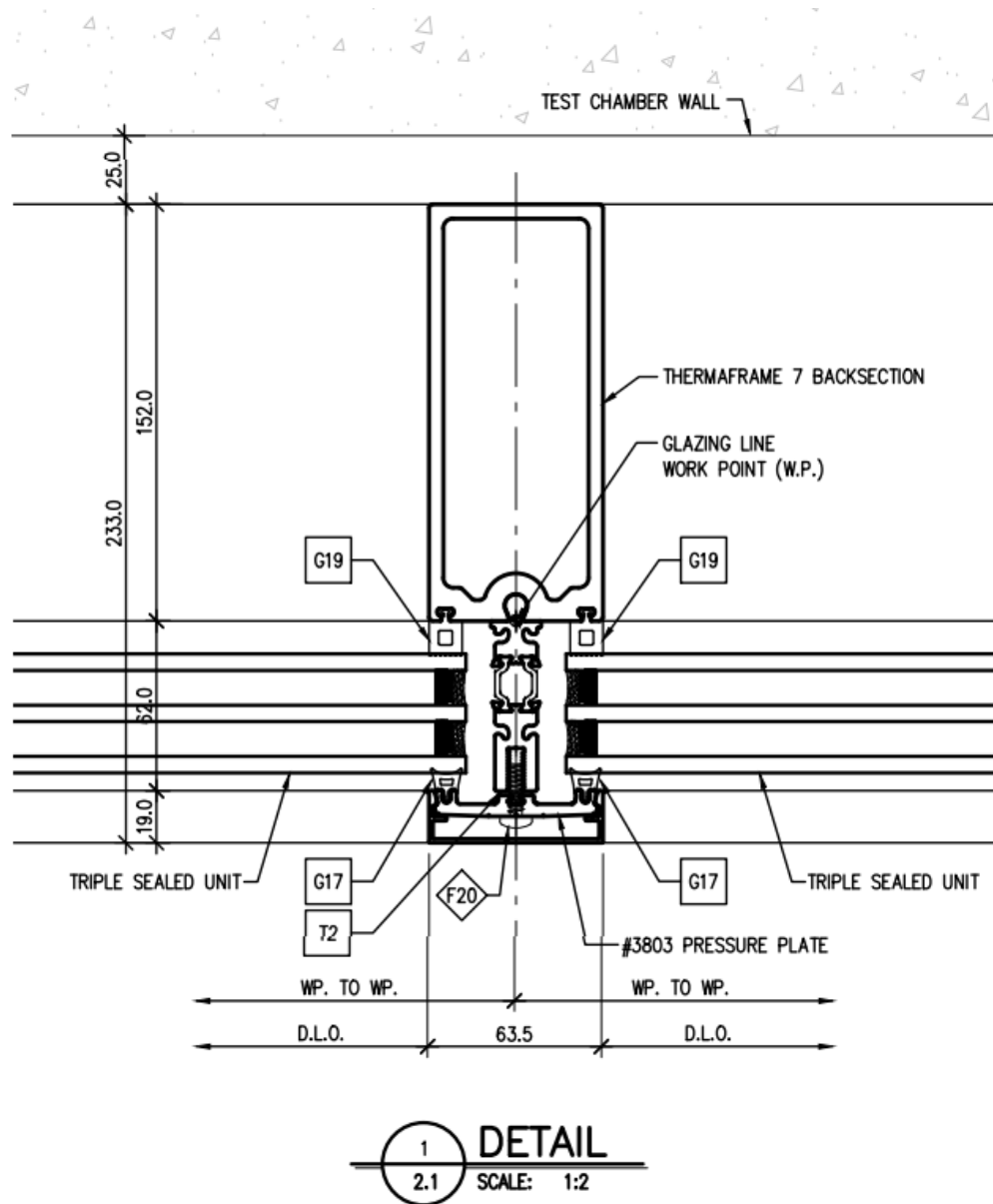


Figure 6. $\frac{1}{2.1}$ DETAIL

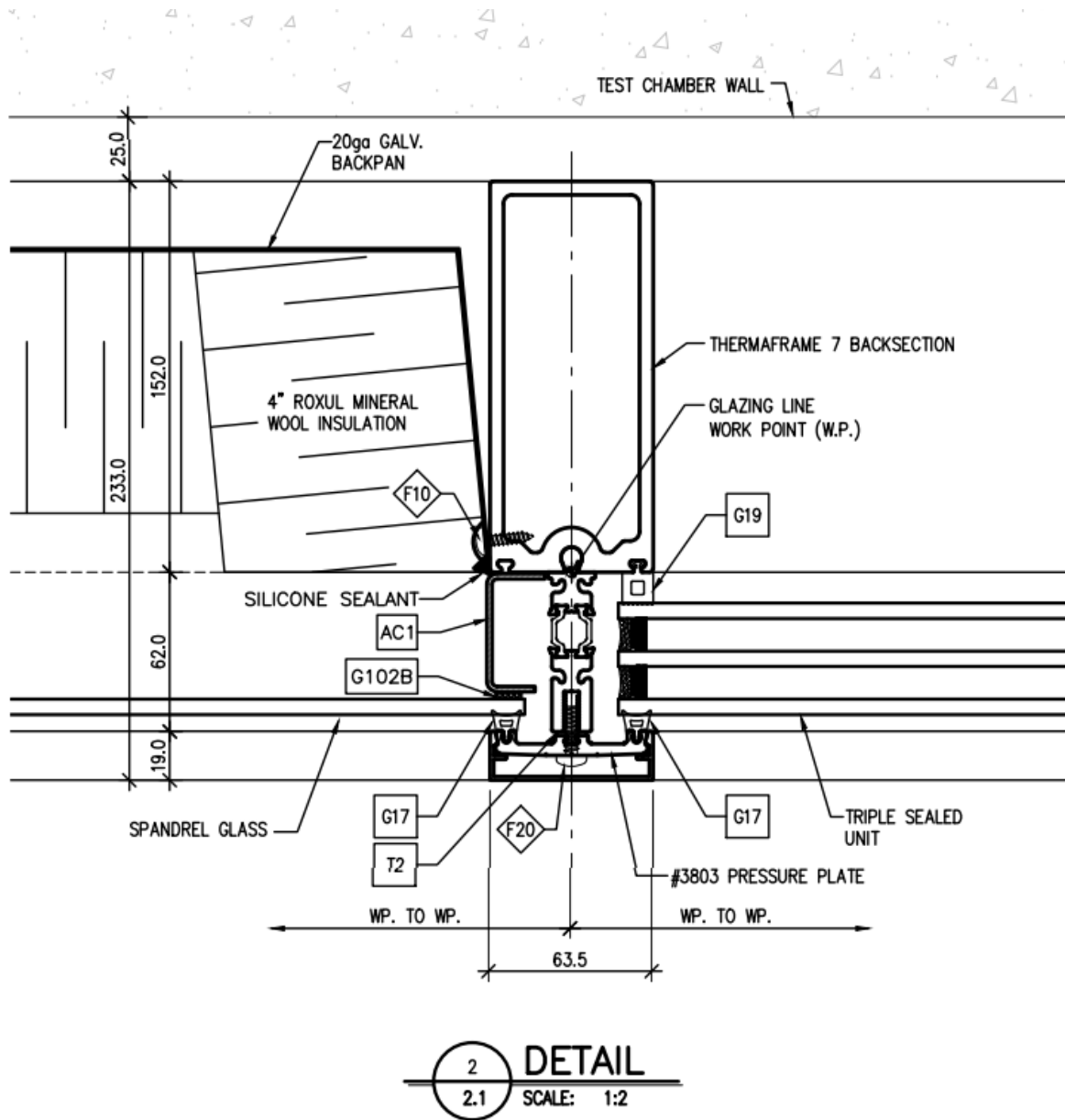
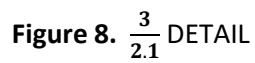
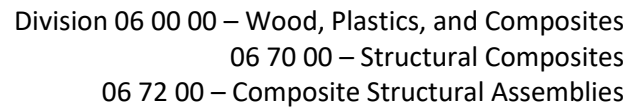


Figure 7. $\frac{2}{2.1}$ DETAIL



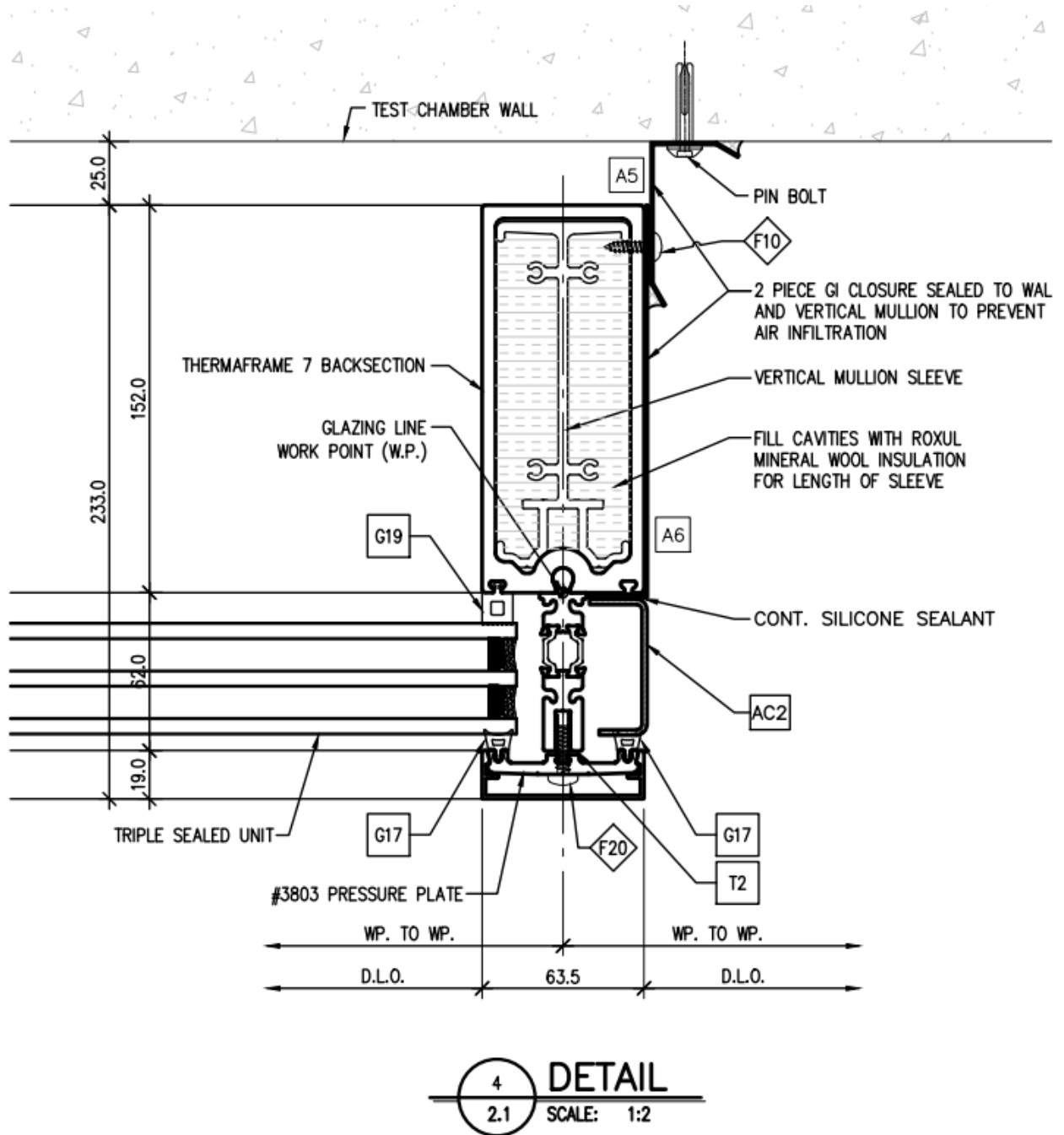


Figure 9. $\frac{4}{2.1}$ DETAIL

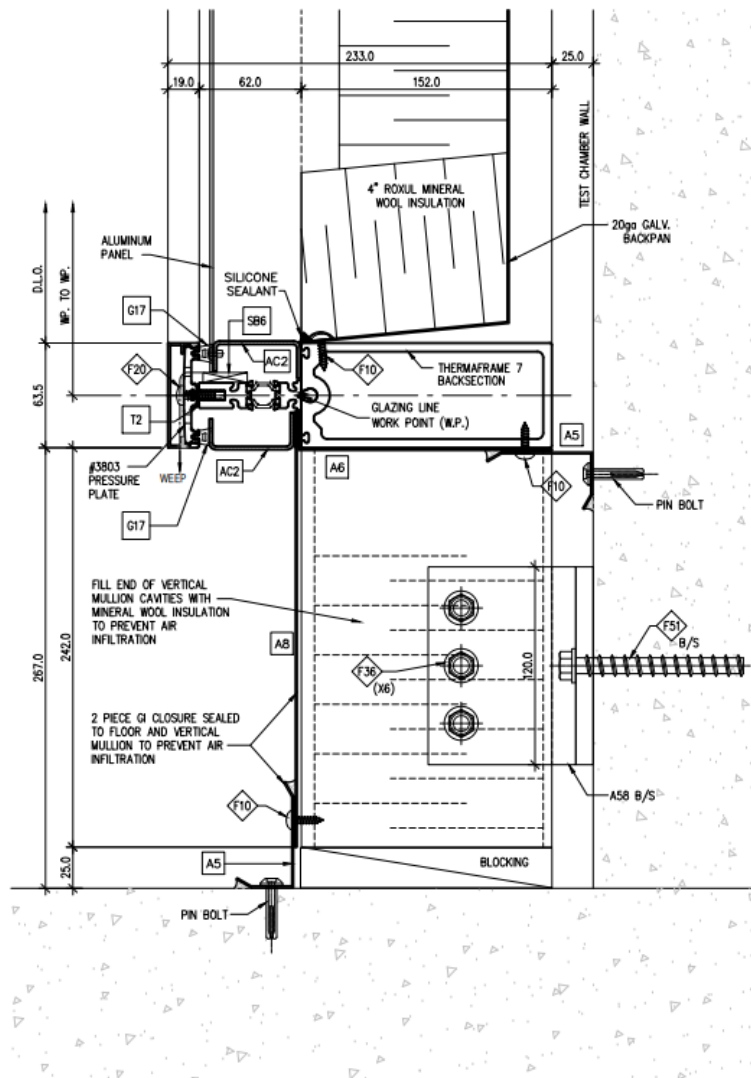


Figure 10. $\frac{6}{2.2}$ DETAIL

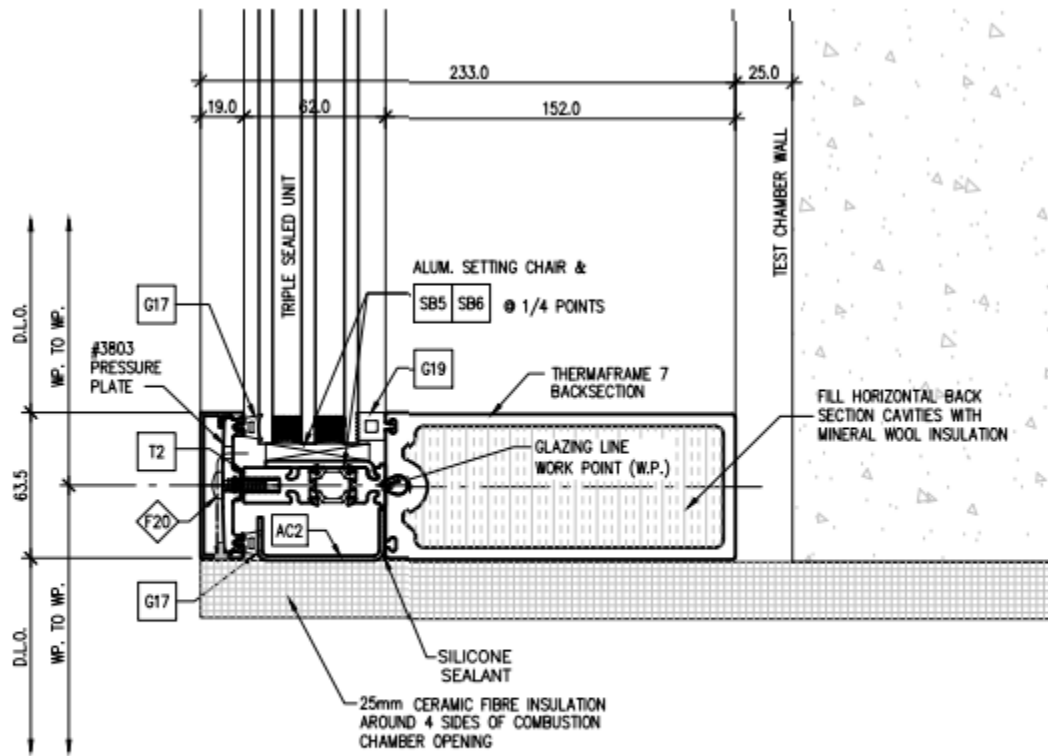


Figure 11. $\frac{7}{2.2}$ DETAIL



Division 06 00 00 – Wood, Plastics, and Composites

06 70 00 – Structural Composites

06 72 00 – Composite Structural Assemblies

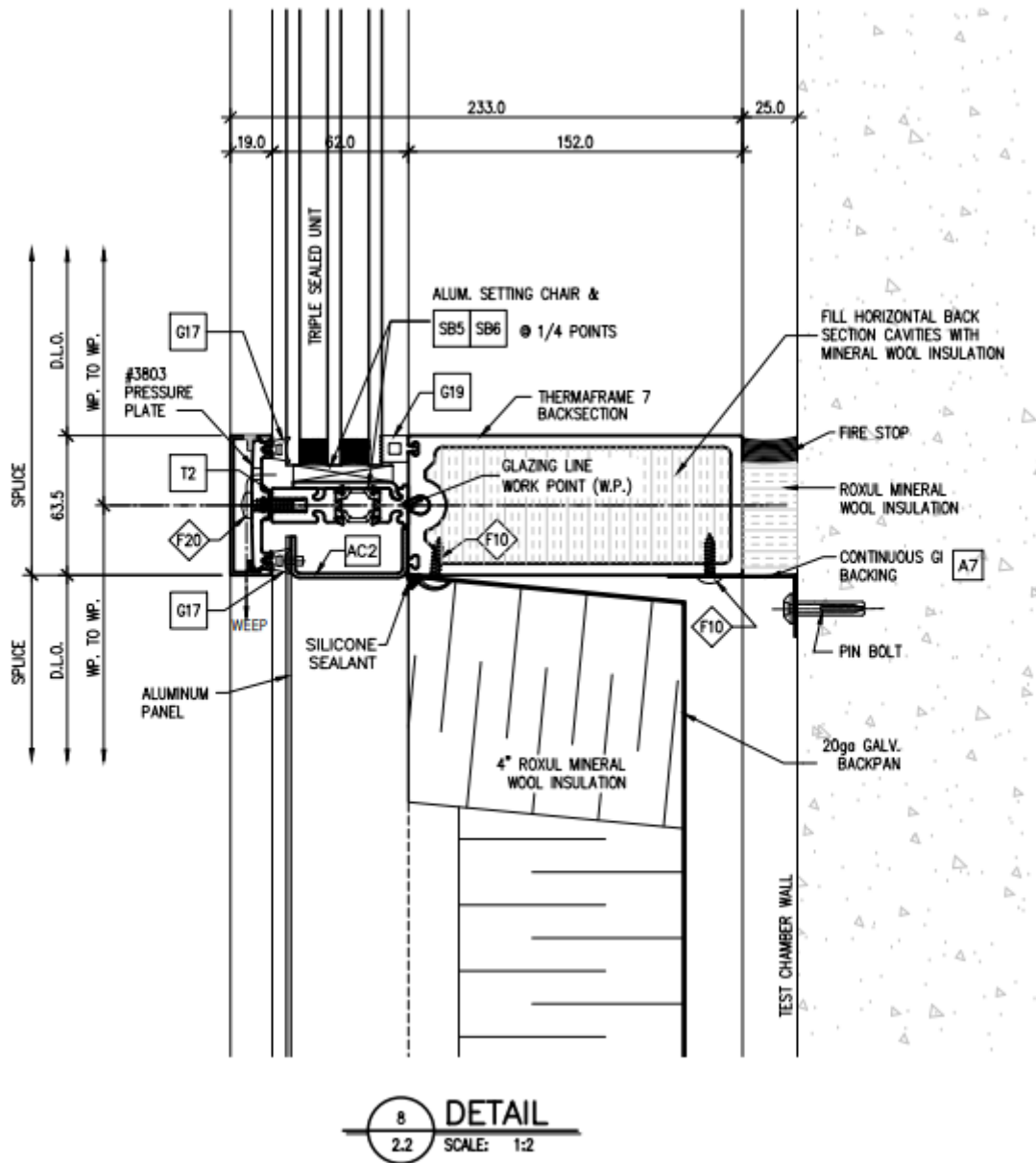


Figure 12. $\frac{8}{2.2}$ DETAIL

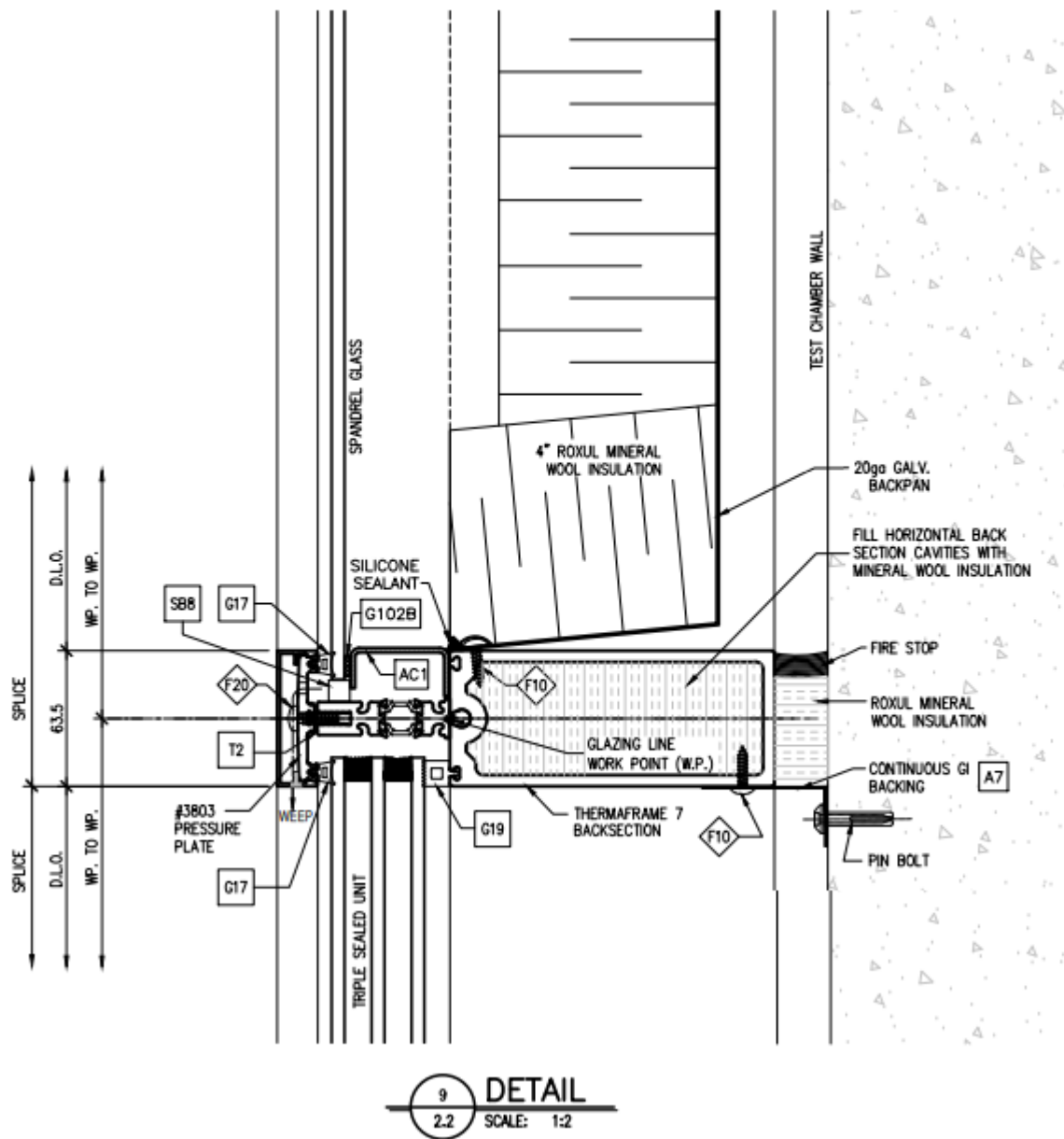
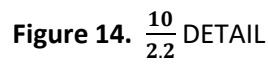
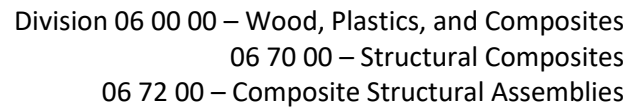


Figure 13. $\frac{9}{2.2}$ DETAIL



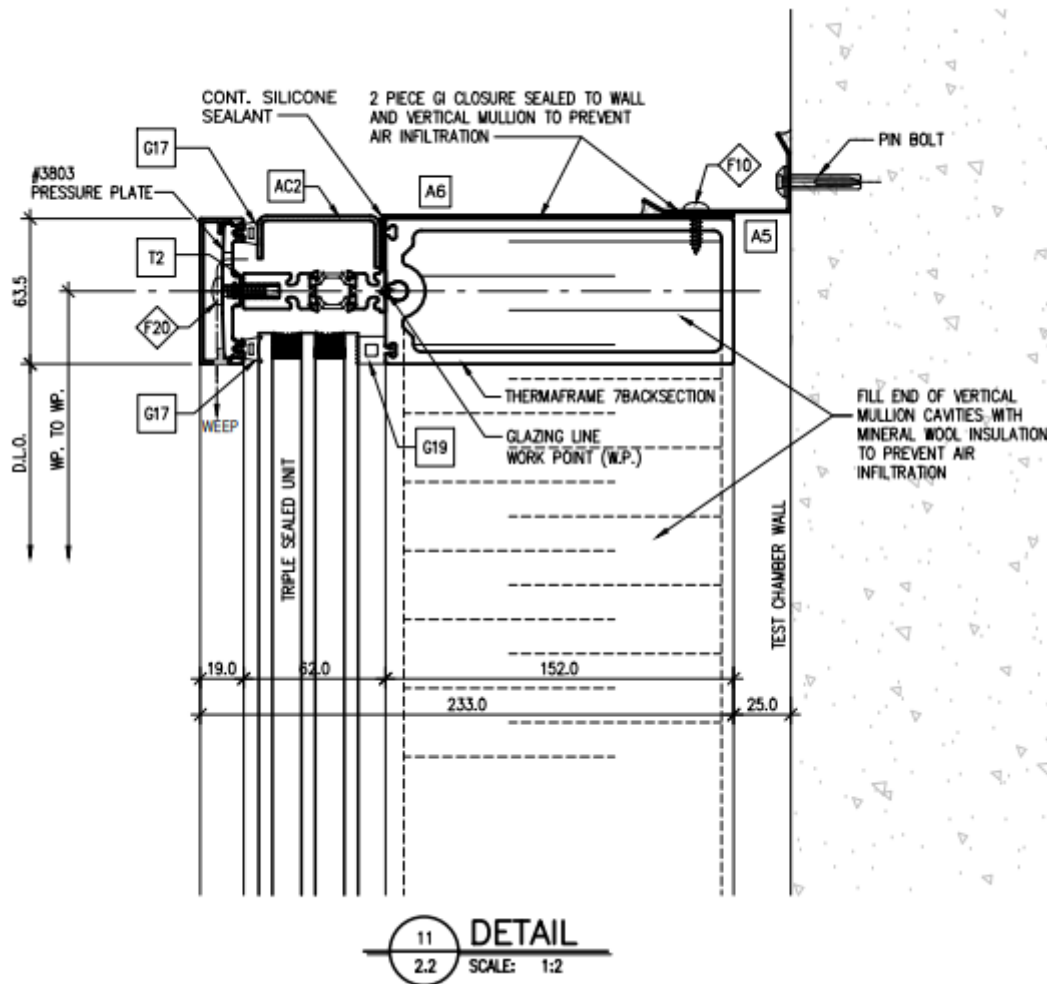


Figure 15. $\frac{11}{2.2}$ DETAIL

Consult the listing report on the Directory of Building Products (<https://bpdirectory.intertek.com>) for the edition of the standard(s) evaluated.

Compliance of the assembly described in this Design Listing with the referenced standard relies on verification that the assembly constructed in the field is consistent with that described herein. Intertek certified products may be verified by the approved Intertek label; other products must be verified by the Authority Having Jurisdiction as meeting the specifications stated herein.