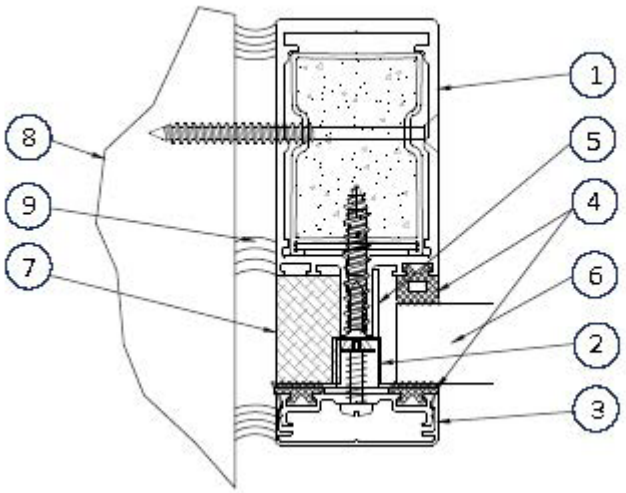
Aluflam North America LLC
Design No. AFM/AF 60-02
Fire Rated Aluminum Frames
Aluflam AW50, AW50D, AW64 Series
ASTM E119, UL 263, CAN/ULC-S101
Rating: 1 Hour, Non-Load Bearing Wall



1. **CERTIFIED MANUFACTURER:** Aluflam North America LLC.

   CERTIFIED PRODUCT: Aluflam AW50, AW50D, AW64 Curtainwall Series.

   Cut min. 1-15/16 in. wide (50 mm) × min. 3-1/8 in. (79 mm) deep aluminum framing members to length according to glazing size. Secure composite framing members to supporting construction using min. 1/4 in. diameter steel fasteners, 4 in. (100 mm) from each end and max. 17-11/16 in. (450 mm) on center (oc) through the side of the framing member. Secure horizontal mullions to the vertical framing members prior to installation of the glazing. Fasten the horizontal mullions with two screws where the mullion overlaps the vertical framing. Install the frames and mullion clips in accordance with the installation instructions for this system. Mullion clips and trim are supplied by Aluflam North America LLC.

2. **RETAINING CLIPS:** Attach the min. 1-15/16 in. (49 mm) wide × min. 5/8 in. (17 mm) tall stainless steel retaining clips of various depth, depending on glass thickness, to the framing members using min. 1/4 in. diameter × 1-1/4 in. long machine screws to clamp the glazing (Item 6) into place. Space clips nominally 5-13/16 in. (150 mm) in from both ends and max. every 14-3/4 in. (375 mm) oc. Stainless steel retaining clips are supplied by Aluflam North America LLC.

   A. STAINLESS STEEL RETAINING CHANNEL (Optional, Not Shown) – Continuous stainless steel glass retaining channels may be used as an alternative to the stainless steel retaining clips (Item 2). Use min. 1-15/16 in. (49 mm) wide stainless steel

retaining channels of varying depth, depending on glass thickness, with anchoring holes located nominal 5-13/16 in. (150 mm) in from both ends and max. 14-3/4 in. (375 mm) oc. Screw the channel to the framing member with min. 1/4 in. diameter × 1-1/4 in. long machine screws to clamp the glazing (Item 6) into place. Stainless steel retaining channels are supplied by Aluflam North America LLC.

3. **PRESSURE PLATES AND CAPS:** Cut min. 1-7/8 in. (47 mm) wide × 7/16 in. (11 mm) deep pressure plates and caps to length according to glazing size. Anchor the pressure plates into the mullions with machine screws over the stainless steel retaining clips and snap the pressure caps over the pressure plates with no mechanical fasteners. Pressure plates and caps are supplied by Aluflam North America LLC but are not used when continuous stainless steel retaining channels are used (Item 2A).

4. **GLAZING GASKETS:** Cut EPDM glazing gaskets to length to match the glazing panel sizes. Install on both sides of the glazing material (Item 6). Glazing gaskets are supplied by Aluflam North America LLC.

5. **INTUMESCENT TAPE:** Apply nominal 3/4 in. (20 mm) wide × nominal 1/16 in. (2 mm) thick self-adhesive intumescent strip to the pressure plates. Apply strips of 1/16 in. (2 mm) thick self-adhesive intumescent material if varying width, depending on glass thickness, to the framing adjacent to the edges of the glazing panels. Intumescent strips are supplied by Aluflam North America LLC.

6. **FIRE RESISTANCE RATED GLAZING MATERIAL:** Install one of the following:

   A. FIRE RESISTANCE RATED GLAZING MATERIAL – Fire resistance rated glass panel by VETROTECH SAINT-GOBAIN NORTH AMERICA INC. See Table 1 and Table 2 at the end of this document for options and limitations. Glazing must bear a third-party certification label confirming that the product is certified to ASTM E119, UL 263, or CAN/ULC-S101 as applicable for a mini 1-hour fire resistance rating.

   B. INFILL PANEL (Optional, Not Shown) – Infill panels may be used as an alternative to Fire Resistant Glazing (Item 6A). The infill panels are min. 1-3/4 in. (44 mm) thick and are constructed from two 20 mm thick calcium silicate boards, fastened together with 1-1/2 in. long 16 GA staples spaced 12 in. oc. Infill panels are faced on each side with 0.079 in. (2 mm) thick aluminum. Infill panels are supplied by Aluflam North America LLC.

7. **PERIMETER SPACERS:** Cut spacers to length to fit the opening as needed. Attach nominal 3/4 in. (20 mm) wide spacers to the framing members with 5/32 in. diameter screws. Spacers are used to maintain the clamping force of the pressure caps opposite the glazing panels along the perimeter of the frame. Spacers are supplied by Aluflam North America LLC.

8. **WALL ASSEMBLY:** Min. 1-hour fire rated wall assembly.

9. **FILL, VOID, OR CAVITY MATERIALS:** Fill the void between the framing members and the wall opening with a third-party certified ASTM E814 or UL 1479 firestop system, comprising of mineral fiber insulation and caulk, with a min. 1-hour fire resistance rating.

10. **SHIMS/SETTING BLOCKS:** (Not Shown) Place min. 1/8 in. (3 mm) thick hard fiber or hardwood or calcium silicate shims on bottom of glazing opening to set glazing material.

11. **DECORATIVE TRIM:** (Not Shown) When applying decorative trim on exterior face of framing member, install extruded aluminum retainers to the framing members using screws. The retainer and trim are supplied by Aluflam North America LLC.

Table 1: Fire Resistance Rated Glass by Vetrotech Saint-Gobain when used in a fully captured frame application:

Glazing	Min. Nominal Thickness	Max. Exposed Area per Panel	Max. Daylight Dimensions
Contraflam 60	1 in. (25 mm)	4,996 in.^{2} (3.223 m^2)	94-1/2 in. (2399 mm)
Contraflam 60-3	1-1/16 in. (28 mm)	4,996 in.^{2} (3.223 m^2)	94-1/2 in. (2399 mm)
Contraflam 60-3 IGU	1-9/16 in. (40 mm)	4,996 in.^{2} (3.223 m^2)	94-1/2 in. (2399 mm)
Contraflam 60-3 IGU Blind	1-9/16 in. (40 mm)	4,996 in.^{2} (3.223 m^2)	94-1/2 in. (2399 mm)
Contraflam 60	1-3/16 in. (31 mm)	7,574 in.^{2} (4.887 m^2)	Height: 138-1/2 in. (3518 mm)
Contraflam 60-1 US/C	1-1/8 in. (28 mm)	7,429 in.^{2} (4.79 m^2)	138-9/16 in. (3519 mm)

Table 2: Fire Resistance Rated Glass by Vetrotech Saint-Gobain when used in a Butt Joint application:

Glazing	Min. Nominal Thickness	Max. Exposed Area per Panel	Max. Daylight Dimensions
Contraflam Structure 60	1-3/16 in. (31 mm)	7,574 in.^{2} (4.887 m^2)	Height: 138-1/2 in. (3518 mm)

Contraflam Structure 60 may be manufactured with a mitered joint to allow up to a 19° angle to be formed between the glazing unit and the vertical plane to create a corner or bowed assembly. Overall widths may be greater than 94-5/8 in. by the dimensions of the joint feature incorporated into these products. However, max. exposed height is limited to listed dimension.

1) All glazing units may contain fully, or partially enameled heat-strengthened or fully tempered glass produced by applying and baking of ceramic paints of any color on one or both exterior faces.
2) All glazing units may contain patterned glass on one or both exterior faces. Patterned glass shall be 1mm thicker than the standard outer pane of the Contraflam unit.
3) All glazing units may be constructed into an Insulated Glazing Unit (IGU) configuration, with tempered or laminated glazing panes, with a Low-E outboard lite as the exterior surface separated from the main panel with a spacer.
4) All glazing units, except Contraflam 60-1, may contain laminated glass panes instead of the tempered outer panes. Minimum 8mm laminated panes made from 44.2 glass make-up.
5) Individual glass panes of the Contraflam can be thicker.

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.