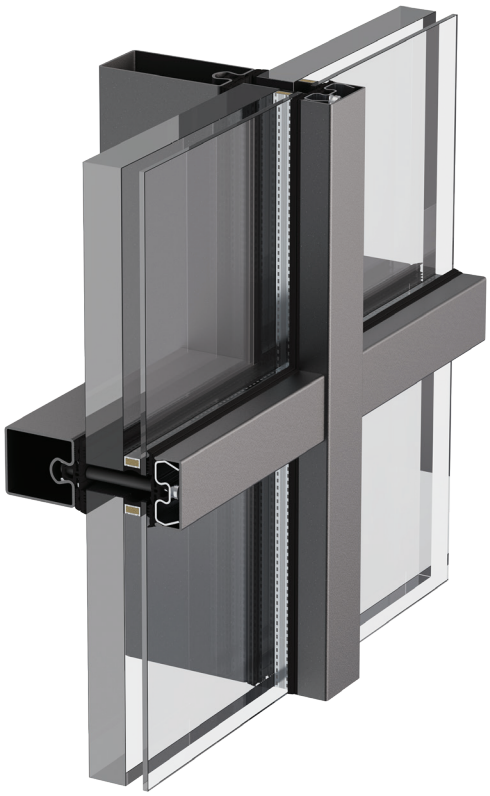
# POLFLAM STL CW

## 60 & 120 MINUTE FIRE-RATED CURTAIN WALL SYSTEM



The POLFLAM STL CW 60 & 120 fire-rated curtain wall systems combine robust steel framing with the proven performance of POLFLAM fire-resistive glass to deliver a fully tested facade solution for today's demanding architectural projects.
Designed for exterior and large-span interior applications, POLFLAM STL CW offers outstanding fire containment, air and water resistance, and structural stability, all within a refined, slim-profile frame that maximizes daylight and transparency.

Engineered and tested to UL 263 / ASTM E119 / CAN-ULC S101, this system ensures reliable protection for facades, stair enclosures, atriums, and glazed partitions requiring up to 120 minutes of fire resistance - without compromising design freedom or visual continuity.

### KEY FEATURES

- **Fire Resistance Options – 60 min and 120 min**
- **Exterior & Interior CW System – Air and water-tested with proven drainage and thermal performance**
- **Large Glass Sizes – Up to 119 1/2 in. (3036 mm) height**
- **Compatible Glazing Options – POLFLAM 60 / 120 and POLFLAM VIEW 60 / 120 butt-joint glass (MONO and IGU)**
- **Minimal Sightlines – Slim, modern appearance for maximum daylight**
- **Structural Integrity – Engineered for tall spans and multi-story applications**
- **Tested & Certified - Meets recognized fire-safety standards for peace of mind**
- **Sleek Aesthetics – Precision-ground edges and uniform joint lines**
- **Sustainable Choice – Recyclable steel framing and eco-friendly glass composition**

## Maximum Framing / Glass Sizes:

| Fire Rating | Max. Width Framing | Max. Height Framing | Glass Type | Max. Width Glass | Max. Height Glass | Max. Area Glass |
|---|---|---|---|---|---|---|
| 60 minutes | Unlimited | depending on design requirements | POLFLAM 60 | 118 1/8 in. (3000 mm) | 118 1/8 in. (3000 mm) | 6975 sq. in. (4.50 m²) |
| | | | POLFLAM VIEW 60 | 59 1/16 in. (1500 mm) | 119 1/2 in. (3036 mm) | 7053 sq. in. (4.55 m²) |
| 120 minutes | Unlimited | depending on design requirements | POLFLAM 120 | 118 1/8 in. (3000 mm) | 118 1/8 in. (3000 mm) | 6975 sq. in. (4.50 m²) |
| | | | POLFLAM VIEW 120 | 59 1/16 in. (1500 mm) | 119 1/2 in. (3036 mm) | 7053 sq. in. (4.55 m²) |

## Technical Specifications of Fire-Resistive Glass:

| POLFLAM | 60 | VIEW 60 | 120 | VIEW 120 |
|---|---|---|---|---|
| Nominal thickness | 1 3/16 in. (30 mm) | 1 1/2 in. (38 mm) | 1 5/8 in. (42 mm) | 1 15/16 in. (50 mm) |
| Thickness tolerance | ±1/16 in. (±2 mm) | ±1/8 in. (±3 mm) | ±1/8 in. (±3 mm) | ±1/8 in. (±3 mm) |
| Weight | 10.6 lbs/ft² 52 kg/m² | 15.4 lbs/ft² 75 kg/m² | 13.7 lbs/ft² 67 kg/m² | 18.4 lbs/ft² 90 kg/m² |
| Fire-Resistance Rating | 60 min | 60 min | 120 min | 120 min |
| Certification | Intertek | Intertek | Intertek | Intertek |
| Listing Standard | UL 263, ASTM E119, CAN/ULC S101 and EN 1364-1 | UL 263, ASTM E119, CAN/ULC S101 and EN 1364-1 | UL 263, ASTM E119, CAN/ULC S101 and EN 1364-1 | UL 263, ASTM E119, CAN/ULC S101 and EN 1364-1 |
| Visible Light Transmittance | 86% | 84% | 84% | 81% |
| U-value [Btu/h•ft²•F] | 0.64 (Winter) 0.60 (Summer) | 0.62 (Winter) 0.58 (Summer) | 0.52 (Winter) 0.49 (Summer) | 0.51 (Winter) 0.48 (Summer) |
| STC Rating | 42 | 42 | 45 | 46 |
| Impact Safety Compliance | CPSC 16 CFR 1201 (Category II) ANSI Z97.1 (Class A) | CPSC 16 CFR 1201 (Category II) ANSI Z97.1 (Class A) | CPSC 16 CFR 1201 (Category II) ANSI Z97.1 (Class A) | CPSC 16 CFR 1201 (Category II) ANSI Z97.1 (Class A) |
| Storage and Transportation Temperature Range | -40°F to +122°F | -40°F to +122°F | -40°F to +122°F | -40°F to +122°F |

*Optional with Low-Iron glass*

## Precision Edge Detailing for Seamless Aesthetics

POLFLAM VIEW fire-resistive glass is fabricated with all edges ground smooth for safe handling and clean integration. A high-quality ceramic edge print, approximately 14 mm (0.55 in.) wide on the vertical edges, ensures a visually seamless connection between adjacent panes – ideal for modern, uninterrupted glazed wall applications.

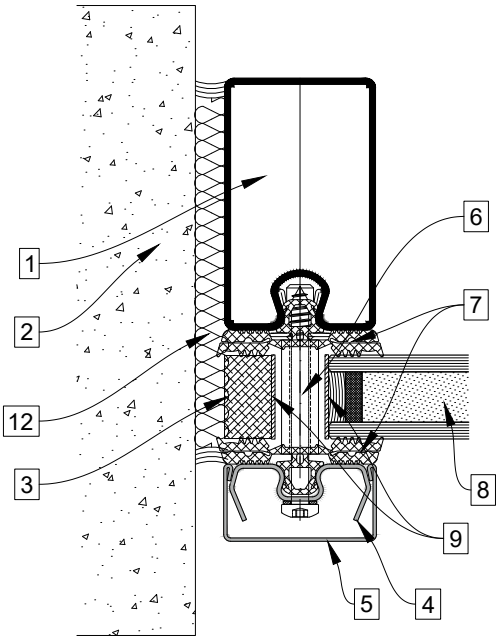
POLFLAM and POLFLAM VIEW fire-resistive glass is permanently laser-marked for full traceability and compliance.

16 CFR 1201 II
ANSI Z97.1-2015
CAN/CGSB 12.1-2022
1/4 U A SGCC 10060
UL 10B | 10C | 263
D-H-T-60 | W-60

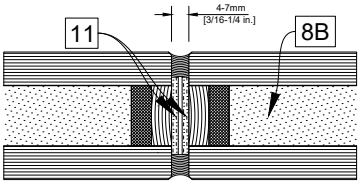
16 CFR 1201 II
ANSI Z97.1-2015
CAN/CGSB 12.1-2022
1/4 U A SGCC 10060
UL 263
W-120

Listings:
Classified and labeled by INTERTEK
Spec ID 90002 - Design No. PSZ/FRG 60-03 (60 minute rating)
Spec ID 90002 - Design No. PSZ/FRG 120-03 (120 minute rating)
Tests performed in accordance with UL 263 / ASTM E119 / CAN/ULC S101

POLFLAM STL CW 60
Spec ID 90002
Design No. PSZ/FRG 60-03
(60 minute rating)




Butt-joint Detail




1. **CERTIFIED MANUFACTURER:** Polflam Sp. z o.o.

   **CERTIFIED PRODUCT:** POLFLAM STL CW 60

   POLFLAM STL CW fire rated framing system, 1-3/4 in. (45 mm) or 2-3/8 in. (60 mm) wide with a nominal min. depth of 3 in. (75 mm). Cut lengths according to glazing size. Secure the frame to the wall with steel anchor brackets at the top and bottom of each vertical member. Installation of frames and brackets to be made in accordance with the installation instructions for this system.
2. **WALL ASSEMBLY:** Min. 1-hour fire rated wall assembly.
3. **PERIMETER FILLER:** Install nominal 3/4 in. (19 mm) wide × 3/4 in. (19 mm) deep × minimum 7/8 in. (22 mm) long perimeter fillers, made of hardwood or calcium silicate, with or without stainless steel or galvanized steel cladding. Fasten fillers to the steel framing members using No. 8 × 2-3/8 in. (60 mm) long self-tapping drywall screws.
4. **STAINLESS STEEL PRESSURE CAPS:** Install nominal 1-5/8 in. (42 mm) wide × 5/8 in. (17 mm) deep or nominal 2-1/4 in. (57 mm) wide x 5/8 in. (17 mm) deep stainless steel pressure caps onto the framing members. Fasten with pressure plate screws spaced 11-13/16 in. (300 mm) on center (O.C.). Stainless steel pressure caps are furnished with the framing system. Maintain a minimum 5/8 in. (15 mm) edge cover on the glazing.
5. **COVER CAPS:** Snap nominal 1-3/4 in. (45 mm) or 2-3/8 in. (60 mm) wide cover caps over the stainless steel pressure caps. Cover caps are furnished with the framing system.
6. **PRESSURE PLATE SCREWS:** Use nominal 1/4 in. (6 mm) diameter screws with a minimum length of 2-7/16 in.
   (62 mm). Longer screws may be required for thicker glazing. Screw types and sizes shall comply with the manufacturer's installation instructions. Locate screws 4 in. (102 mm) from each end of the framing member and space them at 11-13/16 in. (300 mm) on center (O.C.). Pressure plate screws are furnished with the framing system.
7. **EPDM GASKETS:** Install nominal 1-3/4 in. (45 mm) or 2-3/8 in. (60 mm) wide × 5/16 in. (8 mm) thick EPDM gaskets on the framing members and pressure caps to cushion and seal the glazing. EPDM gaskets are furnished with the framing system.
8. **FIRE RESISTANT GLAZING MATERIAL:** Install one of the following:
   A. Install Listed 1 Hour Fire-Resistant Rated POLFLAM 60, 30 mm (1 3/16 in.) thick glazing panes in the following max. size:

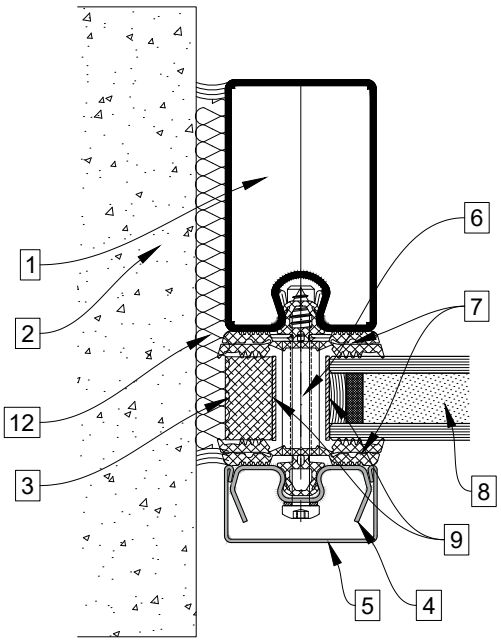
      POLFLAM 60 Max. Linear Dimension (width or height): 3000 mm (118 1/8 in.)
      POLFLAM 60 Max. area: 4.50 m² (6975 sq. in.)

   B. Install Listed 1 Hour Fire-Resistant Rated POLFLAM VIEW 60, 38 mm (1 1/2 in.) thick glazing panes in the following max. size:

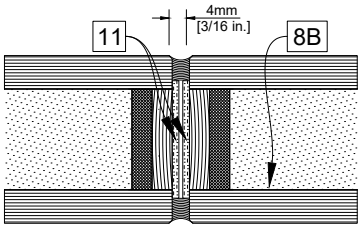
      POLFLAM VIEW 60 Max. Width: 1500 mm (59 1/16) by Max. Height: 3036 mm (119 1/2 in.), POLFLAM VIEW 60 Max. area: 4.55 m² (7053 sq. in.)

      **NOTE-** Double-glass units (DGU) and triple-glass units (TGU) incorporating tempered or laminated glazing are permitted. DGU and TGU configurations shall be installed with the non-fire-resistive glass oriented toward the unexposed side of the assembly only.
9. **INTUMESCENT TAPE:** Install 5/64 in. (2 mm) thick self-adhesive intumescent tape (Ref: Kerafix® FXL 200) continuously along the perimeter of the glazing and on the edge of the perimeter filler adjacent to the glazing. Tape width shall equal the glazing thickness. Intumescent tape is furnished with the curtain wall profiles.
10. **SETTING BLOCKS** (Not Shown): Install glazing panes on nominal 5 mm ± 2 mm (3/16 in. ± 3/32 in.) thick × 100 mm (3-15/16 in.) long hardwood or magnesium silicate setting blocks. The width of the setting blocks must be selected to match the glass thickness. Position setting blocks on steel support plates located 6 in. (150 mm) from each corner of the glazing.
11. **BUTT JOINT INTUMESCENT TAPE AND SEALANT** (with item 8B): Apply self-adhesive intumescent tape, 25 mm (1 in.) wide × 2 mm (1/16 in.) thick (Ref: KERAFIX® FXL 200 or equivalent), to the vertical butt joints between glazing panes, one strip applied to each pane. Apply neutral-cure silicone sealant (Ref: DOWSIL® 791 or equivalent) continuously along the vertical joints between the glazing panes.
12. **FILL, VOID, OR CAVITY MATERIAL:** Install a third-party certified ASTM E814 or UL 1479 firestop system to fill the void between framing members and the wall opening. The system must include mineral fiber insulation and sealant, providing a minimum 1-hour fire-resistance rating. As an example, install ceramic fiber insulation with a minimum density of 8 pcf together with a suitable sealant, or apply a bead of 3M CP25 WB+ at the joint between the frame and the finished wall opening.
13. **METAL SHEET** (Not Shown) (Optional): Where required, 0.032 in. (0.81 mm) thick steel or aluminum sheets may be installed between the gaskets and the fire-resistant glazing panes (single or IGU) on the unexposed, non-fire side. On the fire-exposed side, the sheet may be applied with a suitable adhesive directly to the visible glazing surface only.
14. **METAL PANELS** (Not Shown) (Optional): If specified, assemblies of metal-faced insulated panels may be used. These consist of a minimum 1-3/16 in. (30 mm) thick insulation board with a 1/32–5/64 in. (1–2 mm) steel or aluminum facing sheet, together with an additional 2-5/16 in. (58 mm) thick mineral wool layer at a minimum density of 3.7 pcf (60 kg/m³). The mineral wool must be secured with a 0.020 in. (0.5 mm) steel sheet welded or screw-fastened to mullions and transoms at 4 in. (100 mm) on center. Acceptable insulation boards include calcium silicate boards at 54 pcf (870 kg/m³), cement-bonded glass-fiber reinforced boards at 50 pcf (800 kg/m³), or gypsum fiberboards at 69 pcf (1100 kg/m³), such as Promatect-H, Aestuver Firestop, or Knauf GIFAboard. Multiple thinner layers may be combined to achieve the required thickness. Facing sheets of 1/32–5/64 in. (1–2 mm) steel, stainless steel, or aluminum must be secured using tested adhesives such as hybrid polymer adhesives or with mechanical fasteners.

POLFLAM STL CW 120
Spec ID 90002
Design No. PSZ/FRG 120-03
(120 minute rating)




Butt-joint Detail




1. **CERTIFIED MANUFACTURER:** Polflam Sp. z o.o.

   **CERTIFIED PRODUCT:** POLFLAM STL CW 120

   POLFLAM STL CW fire rated framing system, 1-3/4 in. (45 mm) or 2-3/8 in. (60 mm) wide with a nominal min. depth of 3 in. (75 mm). Cut lengths according to glazing size. Secure the frame to the wall with steel anchor brackets at the top and bottom of each vertical member. Installation of frames and brackets to be made in accordance with the installation instructions for this system.
2. **WALL ASSEMBLY:** Min. 2-hour fire rated wall assembly.
3. **PERIMETER FILLER:** Install nominal 3/4 in. (19 mm) wide × 3/4 in. (19 mm) deep × minimum 7/8 in. (22 mm) long perimeter fillers, made of hardwood or calcium silicate, with or without stainless steel or galvanized steel cladding. Fasten fillers to the steel framing members using No. 8 × 2-3/8 in. (60 mm) long self-tapping drywall screws.
4. **STAINLESS STEEL PRESSURE CAPS:** Install nominal 1-5/8 in. (42 mm) wide × 5/8 in. (17 mm) deep or nominal 2-1/4 in. (57 mm) wide x 5/8 in. (17 mm) deep stainless steel pressure caps onto the framing members. Fasten with pressure plate screws spaced 11-13/16 in. (300 mm) on center (O.C.). Stainless steel pressure caps are furnished with the framing system. Maintain a minimum 5/8 in. (15 mm) edge cover on the glazing.
5. **COVER CAPS:** Snap nominal 1-3/4 in. (45 mm) or 2-3/8 in. (60 mm) wide cover caps over the stainless steel pressure caps. Cover caps are furnished with the framing system.
6. **PRESSURE PLATE SCREWS:** Use nominal 1/4 in. (6 mm) diameter screws with a minimum length of 3-1/4 in. in. (83 mm). Longer screws may be required for thicker glazing. Screw types and sizes shall comply with the manufacturer's installation instructions. Locate screws 4 in. (102 mm) from each end of the framing member and space them at 11-13/16 in. (300 mm) on center (O.C.). Pressure plate screws are furnished with the framing system.
7. **EPDM GASKETS:** Install nominal 1-3/4 in. (45 mm) or 2-3/8 in. (60 mm) wide × 5/16 in. (8 mm) thick EPDM gaskets on the framing members and pressure caps to cushion and seal the glazing. EPDM gaskets are furnished with the framing system.
8. **FIRE RESISTANT GLAZING MATERIAL:** Install one of the following:
   A. Install Listed 2 Hour Fire-Resistant Rated POLFLAM 120, 42 mm (1 5/8 in.), thick glazing panes in the following max. size:

      POLFLAM 120 Max. Linear Dimension (width or height): 3000 mm (118 1/8 in.)
      POLFLAM 120 Max. area: 4.50 $m^2$ (6975 sq. in.)

   B. Install Listed 2 Hour Fire-Resistant Rated POLFLAM VIEW 120, 50 mm (1 15/16 in.), thick glazing panes
      in the following max. size:

      POLFLAM VIEW 120 Max. Width: 1500 mm (59 1/16 in.) by Max. Height: 3036 mm (119 1/2 in.) POLFLAM VIEW 120 Max. area: 4.55 $m^2$ (7053 sq. in.)

   **NOTE-** Double-glass units (DGU) and triple-glass units (TGU) incorporating tempered or laminated glazing are permitted. DGU and TGU configurations shall be installed with the non-fire-resistive glass oriented toward the unexposed side of the assembly only.
9. **INTUMESCENT TAPE:** Install 5/64 in. (2 mm) thick self-adhesive intumescent tape (Ref: Kerafix® FXL 200) continuously along the perimeter of the glazing and on the edge of the perimeter filler adjacent to the glazing. Tape width shall equal the glazing thickness. Intumescent tape is furnished with the curtain wall profiles.
10. **SETTING BLOCKS** (Not Shown): Install glazing panes on nominal 5 mm ± 2 mm (3/16 in. ± 3/32 in.) thick × 100 mm (3-15/16 in.) long hardwood or magnesium silicate setting blocks. The width of the setting blocks must be selected to match the glass thickness. Position setting blocks on steel support plates located 6 in. (150 mm) from each corner of the glazing.
11. **BUTT JOINT INTUMESCENT TAPE AND SEALANT** (with item 8B): Apply self-adhesive intumescent tape, 35mm (1-3/8 in.) wide x 2mm (1/16 in.) thick (ref: KERAFIX® FXL 200), on the vertical joints between the glazing panes, one on each pane. Apply neutral cure silicone sealant (ref: Dowsil 791) on vertical joints between the glazing panes.
12. **FILL, VOID, OR CAVITY MATERIAL:** Install a third-party certified ASTM E814 or UL 1479 firestop system to fill the void between framing members and the wall opening. The system must include mineral fiber insulation and sealant, providing a minimum 1-hour fire-resistance rating. As an example, install ceramic fiber insulation with a minimum density of 8 pcf together with a suitable sealant, or apply a bead of 3M CP25 WB+ at the joint between the frame and the finished wall opening.
13. **METAL SHEET** (Not Shown) (Optional): Where required, 0.032 in. (0.81 mm) thick steel or aluminum sheets may be installed between the gaskets and the fire-resistant glazing panes (single or IGU) on the unexposed, non-fire side. On the fire-exposed side, the sheet may be applied with a suitable adhesive directly to the visible glazing surface only.
14. **METAL PANELS** (Not Shown) (Optional): If specified, assemblies of metal-faced insulated panels may be used. These consist of a minimum 1-15/16 in. (50 mm) thick insulation board with a 1/32–5/64 in. (1–2 mm) steel or aluminum facing sheet, together with an additional 2-5/16 in. (58 mm) thick mineral wool layer at a minimum density of 3.7 pcf (60 kg/$m^3$). The mineral wool must be secured with a 0.020 in. (0.5 mm) steel sheet welded or screw-fastened to mullions and transoms at 4 in. (100 mm) on center. Acceptable insulation boards include calcium silicate boards at 54 pcf (870 kg/$m^3$), cement-bonded glass-fiber reinforced boards at 50 pcf (800 kg/$m^3$), or gypsum fiberboards at 69 pcf (1100 kg/$m^3$), such as Promatect-H, Aestuver Firestop, or Knauf GIFAboard. Multiple thinner layers may be combined to achieve the required thickness. Facing sheets of 1/32–5/64 in. (1–2 mm) steel, stainless steel, or aluminum must be secured using tested adhesives such as hybrid polymer adhesives or with mechanical fasteners.

*NOTE: Details not to scale. The information provided herein is for reference only and is subject to change without notice.*