ABOUT THE PRODUCT

The PU-Series flush doors are designed to be used where intense protection from freezing cold is a priority. The foam-in-place polyurethane core provides total surface support and an exceptionally flat surface, high impact resistance and outstanding thermal resistance.

It provides a high level of compression and shear strength, which is further enhanced by bonding with facing materials.

It offers the lowest “U” value and the highest R-Factor (a measure of insulating performance / thermal resistance, and measure of ability to retard heat flow) of all the cores.

FEATURES

CORE:
- Foam-In-Place polyurethane thermal insulation core, having a thickness of 43 mm and a nominal density of -35 to 42 Kg/m3 (DIN 53420).
- Thermal Conductance (43 mm): $U = 0.08 \text{ Btu/hr.ft.}^2{}^\circ\text{F}$ (0.456 w/m2k)(ASTM C177).
- Thermal Resistance: R-Factor = $12.45 \text{ hr.ft.}^2{}^\circ\text{F/ btu}$ (2.193 m2k/w)(ASTM C63-518T).
- Polyurethane is a thermo-setting material, which when subjected to heat, merely slowly chars without melting or producing flaming droplets (BRUFMA/ID/2/2001).

OPTIONS:
- Interlock seam joint, seamless full welding /metal putty edge.
- Beveled or flush.
- Polyurethane or epoxy RAL paint finish (factory applied).
- Non-handed reversible design.
- Rectangular/square/circular vision panels, louver kits, transoms and sidelights.
- Smoke and draft control doors comply with UL1784 and NFPA105-
- Doors can be equipped with protection plates of maximum size 48”wide and 46” height comply with UL10C/BS 476 part22-20 and ANSI A 156.6

SPECIFICATIONS OF COMPLIANCE

- Construction of the PU doors meets the requirements of ANSI A250.8 (SDI 100).
- Fire Rating: Up to 3 hrs for single leaf and up to 2 hrs for double leaf swing doors, listed and labeled by Intertek- Warnock Hersey according to UL 10C, UL 10B, UBC 1997/1994 -2-7, NFPA 252, CAN-4S104 and ISO 3008. BS 476part22-20 for 90 minutes
- Level “A” grade in accordance with ANSI A 250.4 test procedures.
LEAF CONSTRUCTION:
(NB: Colors shown for illustrative purposes)

- 45 mm (1 3/4") thick full flush construction fabricated from 1.2 mm (GA 1.5, 18 mm (GA 16) or 2.0 mm (GA 14) thick steel sheets (commercial quality cold rolled steel / ASTM A1008 or galvanized steel / ASTM A653
- 1.5 mm (GA 16) thick steel top and bottom channels welded to both face sheets for lasting integrity.
- Mechanically interlocked, hemmed vertical edge seams for added strength and rigidity.
- Hardware reinforcing in accordance to ANSI, SDI, NFPA standards requirements.
- 5.0 mm steel hinge reinforcement.
- Factory applied epoxy prime base coat.

DOOR TYPES
Al Kuhaimi’s doors are available with a wide range of glass light and louver preparations. For fire rating limitations, please refer to the “Product Range Certifications”

OTHER AVAILABLE INSULATION TYPES
- Polyurethane Core
- Polystyrene Core
- Steel Stiffened with Fiberglass
- Steel Stiffened with Rockwool
- Honeycomb Core
- Temperature Rise Door (Georgia Pacific)

PAINT FINISHES
- Wet Paint
- Powder Coating
- Wood Finish
- Veneer Laminated
- Plastic Laminated
- Stainless Steel:
  - Hairline
  - Non Directional
  - Mirror Finish

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