

### 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.

As described by HMMA / NAAMM-USA (National Association of Architectural Metal Manufacturers-United States of America):

"Urethane core doors possess superior insulating properties (R- factor of 11.1) and are suitable for exterior openings in cold climates".

### FEATURES

#### CORE:

- ▶ Foam-In-Place polyurethane thermal insulation core, having a thickness of 43 mm and a nominal density of 47 Kg/m<sup>3</sup> (DIN 53420).
- ▶ Thermal Conductance (43 mm):  $U = 0.078 \text{ Btu/hr.ft}^2.\text{°F}$ . (ASTM C177).
- ▶ Thermal Resistance: R-Factor = 12.80 hr.ft<sup>2</sup>.°F/Btu. (ASTM C518-63T).
- ▶ 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:

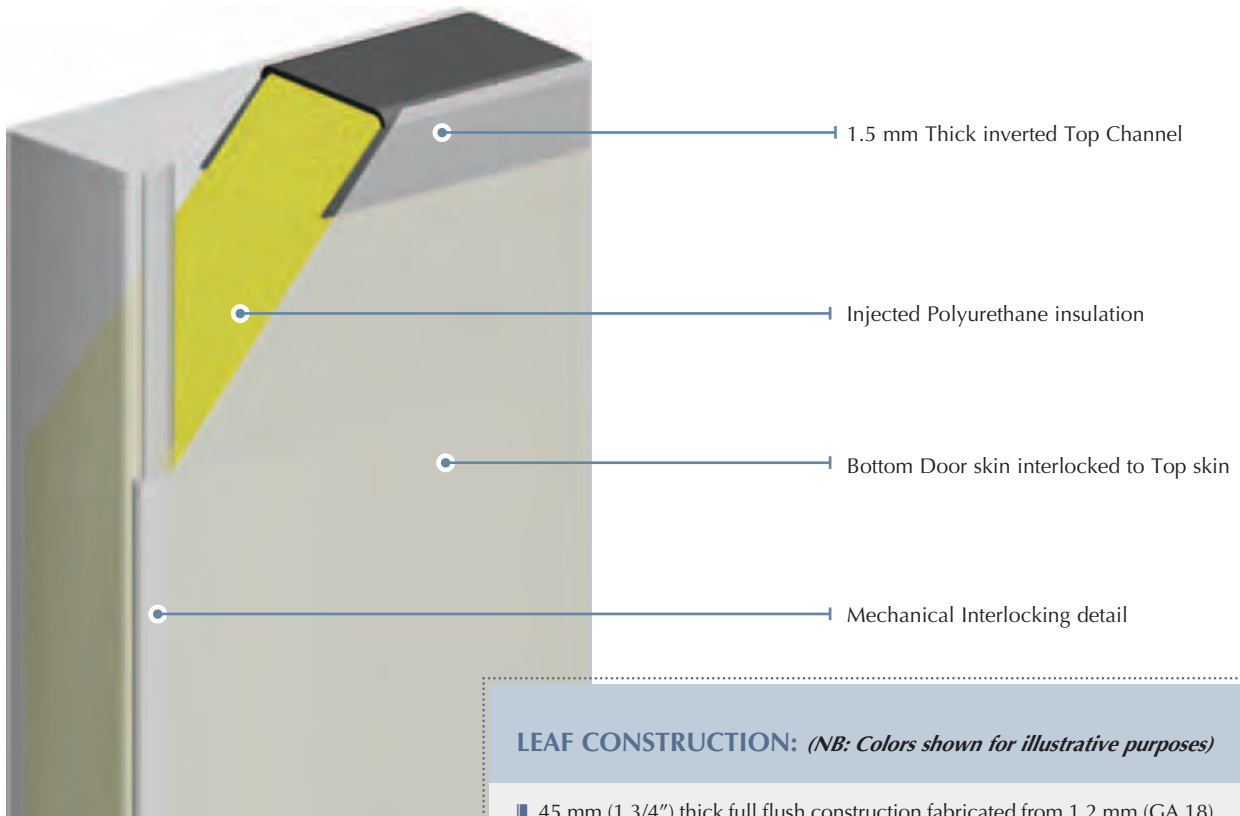
- ▶ Seamless design.
- ▶ Beveled or flush welded glass beads.
- ▶ Alkyd, polyurethane or epoxy RAL paint finish (factory applied).
- ▶ Non-handed reversible design.
- ▶ Vision panels, louver kits, transoms and sidelights.



### SPECIFICATIONS OF COMPLIANCE

- ▶ Construction of the PU doors meets the requirements of ANSI A250.8-2003 (SDI 100) and ANSI 151.1.
- ▶ Fire Rating: : Up to 3 hrs for single leaf and double leaf swing doors, listed and labeled by Intertek-Warnock Hersey according to UL 10C, UL 10B, UBC 7-2-1994/1997, NFPA 252-1995, ASTM E152-81a, CAN4-1980, BS 476 Part 20 and ISO 3008.
- ▶ Level "A" grade in accordance with ANSI A 250.4 test procedures.





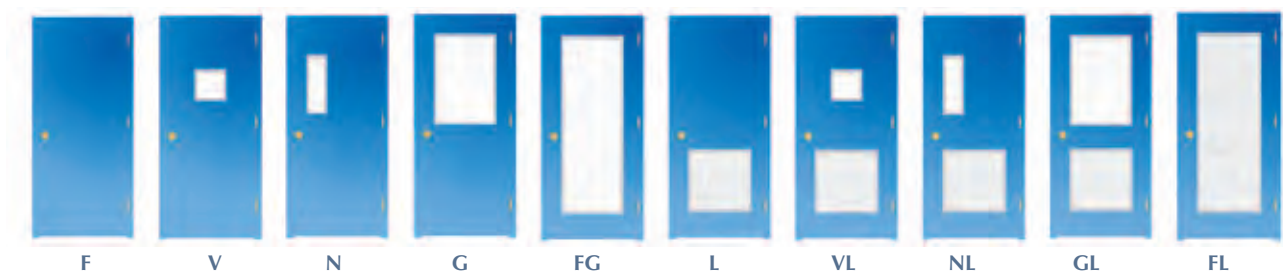
**LEAF CONSTRUCTION:** *(NB: Colors shown for illustrative purposes)*

- 45 mm (1 3/4") thick full flush construction fabricated from 1.2 mm (GA 18), 1.5 mm (GA 16) or 2.0 mm (GA 14) thick steel sheets (commercial quality cold rolled steel / ASTM 366 or galvanized steel / ASTM A653 - A526).
- 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

The PU-Series doors are available with a wide range of glass light and louver preparations. For fire rating limitations, please refer to the "Product Range Certifications" pages 11 to 15.

### DOOR TYPES



F

V

N

G

FG

L

VL

NL

GL

FL