

ABOUT THE PRODUCT

The **VS-Series** flush doors are designed to meet the international requirements for extra heavy duty to maximum duty full flush doors. **Vertically Stiffened** doors are designed for high frequency and severe traffic openings used for exterior or interior applications, where rigidity is of high importance.

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

“Steel Stiffened core doors feature steel ribs in the interior of the door and are ideal for high traffic situations where durability and security are important”.

FEATURES

CORE:

- ▶ Spaces between stiffeners are insulated with Fiberglass to the full height of the door.
- ▶ Standard infill thickness 50 mm of nominal density 24 Kg/m³.
- ▶ Thermal Conductance (50 mm): $U = 0.123 \text{ Btu/hr.ft}^2.\text{°F}$. (ASTM C177).
- ▶ Thermal Resistance: R-Factor = 8.11 hr.ft².°F/Btu. (ASTM C518-63T).
- ▶ Combustibility: None / IMO Resolution-ASTM E 136-82, BS 476 Part 4, ISO R1182.

OPTIONS:

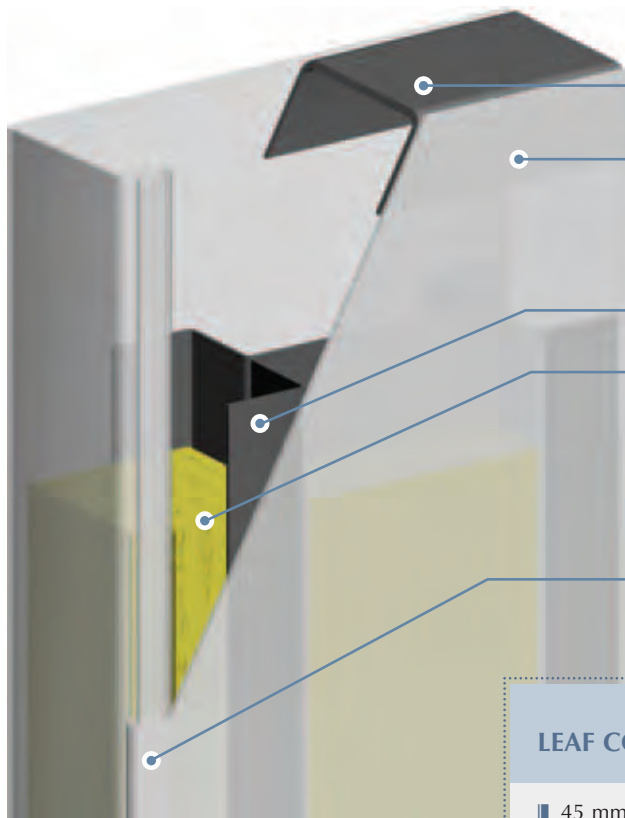
- ▶ Seamless design.
- ▶ Rock wool core infill.
- ▶ Beveled or flush welded glass beads.
- ▶ Alkyd, polyurethane or epoxy RAL paint finish (factory applied).
- ▶ Non-handed reversible design.
- ▶ Vision panels, louver kits, transoms and sidelights..



SPECIFICATIONS OF COMPLIANCE

- ▶ Construction of the VS 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, ISO 3008, BS EN 1634-1 and BS 476 Part 20.
- ▶ Level “A” grade in accordance with ANSI A 250.4 test procedures.





1.5 mm thick inverted top channel

Bottom door skin interlocked to top skin

0.8 mm thick vertical steel stiffeners at full height

Fiberglass or mineral wool insulation

Interlocking detail

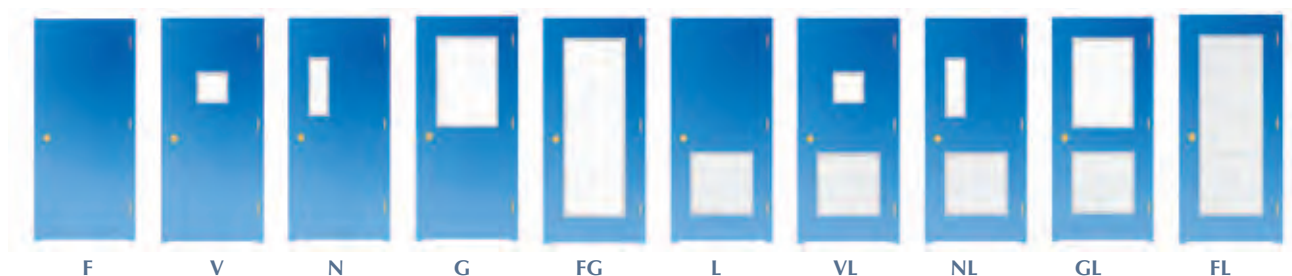
LEAF CONSTRUCTION: *(NB: Colors shown for illustrative purposes)*

- 45 mm (1 3/4") thick full flush construction fabricated from 1.2 mm (GA 18), 1.5 mm (GA 16), 2.0 mm (GA 14) or 3.0 mm (GA 12) thick steel sheets (commercial quality cold rolled steel / ASTM 366 or Galvanized / ASTM A653).
- Face sheets are stiffened by vertical 0.8 mm (GA 22) steel stiffeners, spaced 190 mm on center and welded to face sheets at 100 mm on center.
- 1.5 mm (GA 16) thick steel top and bottom channels welded to both face sheets on 150 mm centers.
- Mechanically interlocked, hemmed vertical edge seams for added strength and rigidity (up to 2.0 mm face sheet).
- 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 VS-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