

FORT® Honeycomb Door Series

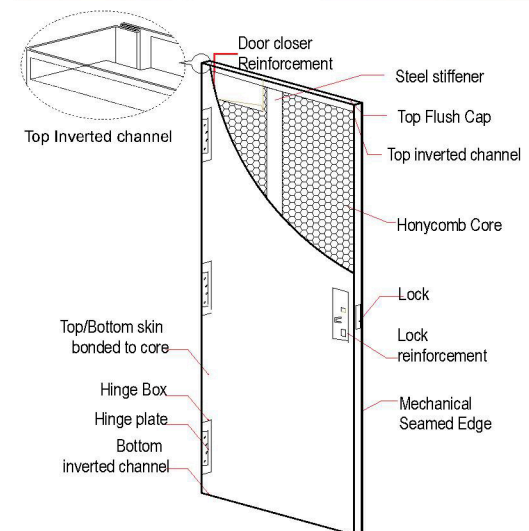
FORT® Honeycomb door has a paper honeycomb core. The core is permanently bonded to door skins strengthening the structural integrity of the door, enhancing long term performance and durability, while significantly reducing the weight.

FORT® door is constructed with HONICEL paper-honeycomb from the N.L.

Honeycomb was developed as a structural core for military aircraft wings during World War II. Among its advantages are a high strength-to-weight ratio, uniform crushing strength, high shear strength, and excellent impact resistance. It is durable, can be treated to resist decay and insects, and also provides sound deadening and insulating properties. The rigid honeycomb structure is integrated with door to form hundreds of small I-beams with the door, with a uniform thickness and flat surface that makes it easy to add lites, louvers or other features. It reinforces the full width and height of the door. Door edges are mechanically interlocked the full height of the door. Top and bottom inverted channels provide stability and protection. Beveled hinge and lock edges allow for tighter installation tolerances, to ensure easier operation and eliminate binding and sticking.

FORT® Honeycomb construction is in compliance with SDI-100 standards (ANSI A250.8-1998). Hardware preparation, reinforcement and locations are in accordance with ANSI A- 250.6-1997 and SDI 129-00. Honeycomb core doors are recommended for interior and exterior applications. Honeycomb core have integral high resistance to impact damage. Calculated thermal conductivity factors and STC rating for Honeycomb core doors are as follows.

*U-Factor: 0.42 *R-Factor: 2.38 *STC: 30



FORT® Honeycomb door specification.

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|-------------------------------------|---|
| Construction | : FORT® Standard |
| Usage Class | : FORT® Usage class A & B.(SDI Level I, II, III & IV) |
| Door thickness | : 44.5mm |
| Finish | : Factory Primed & Powder Coated |
| Steel sheet thickness | : 18ga (1.2mm), 16ga (1.6mm), 14ga (2mm) |
| Core | : HONICEL paper-honeycomb |
| Cutout for hinges | : As per Hardware requirements. |
| Cutout for locks | : As per Hardware requirements. |
| Astragal | : On one leaf of double doors. |
| Flush bolt cutout | : As per Hardware requirements. |
| Door Closer Reinforcement | : Provided on all doors and frames. |
| Top/Bottom Channels | : Inverted U-Channel. |
| Fire Rating (As per BS476: Part 22) | : 4 hr Flush door, 120 min. with vision panel. |

*U-Factor:
HT-at transmission in BTU per hour per square foot per degree Fahrenheit of temperature difference from air to air for a complete Panel section
(The lower the U-factor, the better the insulation)

*R-Factor:
Thermal resistance to retard heat flow, R represents a value of the thermal resistance, per hour per square foot of a typical panel section
(the bigger the "R", the better the insulating value)

*STC-Ratings:
Sound Transmission rating that measures the amount of sound passing through a building product
(the higher the STC - Number the better the rating)