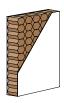
# **HM DOOR CORES**

## Standard & Custom Engineered Doors

## **Door Core Technical Data**



#### **HMD-HC SERIES:** Honeycomb Core

Structural 1" (25 mm) hexagonal cells. 80 lb (36 kg) Per Ream. 1.03 PCF (16 kg/m3). Impact resistance is estimated at: 45 PSI. Core is permanently bonded to face sheets with heat resistant, structurally reinforced, resin-based epoxy adhesive. This is our most popular core. It's available in all door sizes and gauges. Our doors with this core are also available as fire rated: Class A (3 hours); Class B (1 ½ hours); or Class C (45 minutes). Some restrictions do apply.



#### **HMD-PS SERIES:** Polystyrene Core

Rigid extruded fire retardant, closed cell board. Density; 1 to 2 PCF (16 to 32 kg/m3), thermal performance: R-value = 7.0 (RSI 1.05) min. This is our most popular core that's an insulated core. It's available in all door sizes (up to 8'-0" in height) and all gauges. This core adheres 100% to the steel face sheets. (If an insulated door is required taller than 8'-0" please refer to our Polyurethane core (HMD-PU). Our doors with this core are also available as fire rated: Class A (3 hours); Class B (1 ½ hours); or Class C (45 minutes). Some restrictions do apply.



#### **HMD-PU SERIES: Polyurethane Core**

Rigid, modified polyisocyanurate, closed cell board. Density; 2.0 PCF (32 kg/m3) min., thermal performance: R-value = 12.25 (RSI 1.93) min. This our core with the highest insulating value. It's available in all door sizes and gauges. Our doors with this core are also available as fire rated: Class A (3 hours); Class B (1 ½ hours); or Class C (45 minutes). Some restrictions do apply.



#### **HMD-TR SERIES:** Temperature Rise Core

(Mineral Board) Core composition to limit the temperature rise on the unexposed side of door to 250°F at 30 minutes or 450°F at 60 minutes, as determined by governing building code requirements. Core was tested as part of a complete door assembly, in accordance with ASTM E-152 or NFPA 252, covering the Standard Method of Tests of Door Assemblies & shall be listed by a nationally recognized testing agency having a factory inspection service.

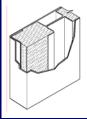


### HMD-S SERIES: Channel-Shaped Steel Stiffened Core

Doors shall be reinforced with internally with (channel-shaped) vertical steel stiffeners (20 gauge) and the voids between each stiffener shall be filled with one of the three following cores: Honeycomb; Polystyrene; Polyurethane or Fiberglass insulation.

This "additional security" core is available in all door sizes and gauges.

When high security is a priority, consider using our HMD-MED series steel stiffened HM door. HMD-MED has hat-shaped steel stiffeners and has fully welded seamless edges. Contact Metropolitan for more details.



#### HMD-MED SERIES: Hat-Shaped Steel Stiffened Core

The HMD-MED Series door is manufactured with "hat-shaped" vertical steel stiffeners, spaced 6" on-center and spotwelded 4" on-center (with loose-batt type insulation in the voids). The edges of the door are fully welded seamless and the door is prime painted with a commercial quality rust inhibitive primer. This door is available as fire rated: UL (or WHI) labeled x Class A (3 hours) or UL labeled Class B (1 1/2 hours) fire rated. This door also has an additional NYC MEA label for use in the City of New York. The HMD-MED Series door is for high security applications.

#### Note

The adhesive (where applicable) for Cores and Steel Components is a heat resistant, structural reinforced, resin-based epoxy.

