

THERMAL DOOR & FRAME ASSEMBLIES



**ASTM
1363-19**

**OPERABLE
RATING
"U"=.34**

**MAX SIZES
40100 SGL
80100 DBL**



PREMIER STEEL
DOORS
AND
FRAMES



ENERGY EFFICIENT DOORS AND FRAMES

With the ever-increasing costs of heating and cooling commercial buildings, Premier has designed and tested our products to the highest levels of thermal performance. Premier's thermal doors are offered in a variety of door core solutions, with an industry best **"operable"** U-Factor of .34. All Premier assemblies were tested at an accredited laboratory, in an **"operable"** configuration to ASTM C1363-19 and SDI-113-23 test standards.



THERMAL FEATURES AND OPTIONS

STANDARD FEATURES

- 18-gauge (16 gauge optional)
- 16-gauge top and bottom channels
- 14-gauge closer reinforcement
- 7-gauge hinge reinforcements

AVAILABLE SIZES

- 4080 (Singles) 8080 (Pairs) .34 U-Factor – Polyurethane Core
- 40100 (Singles) 80100 (Pairs) .40 U-Factor – Polystyrene Core
- 4080 (Singles) 8080 (Pairs) .35 U-Factor – Steel Stiffened Polyurethane Core

MATERIAL

- Standard Galvanealed (A40) Steel

CORES

- Proprietary Polyurethane Core (U-Factor .34)
- Steel Stiffened Polyurethane Core (U-Factor .35)
- Polystyrene Core (U-Factor .40)

SPECIAL OPTIONS

- Hurricane Rated up to +/- 116 PSF 3070 (Single) +/- 80 PSF 6070 (Pairs)
- Fire Rated up to 3 Hours 4080 (Single) 8080 (Pairs) U-Factor .40
- Prime or Finish Paint Options (Contact Factory)
- 6-Panel and 2-Panel Designs Available (Size Limitations Apply - Consult Factory)

TESTING STANDARDS

ASTM 1363-19 Test Method for Thermal Performance of Building Materials and Envelope Assemblies by Means of a Hot Box Apparatus.

SDI-113-23 Standard practice for determining the steady-state thermal transmittance of steel door and frame assemblies.

U-FACTOR

U-Factor is the door's thermal conductivity. Based on measured heat flow through a sample at the temperature difference of the air on the indoor and outdoor sides. Lower U-Factor the better

$$U = \frac{BTU}{F^{\circ} \times ft^2 \times hr}$$

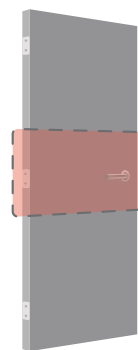
R-VALUE

R-Value is the door's thermal resistance. Higher R-Value the better.

$$R = \frac{F^{\circ} \times ft^2 \times hr}{BTU}$$

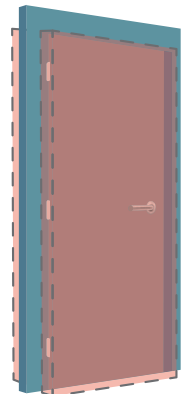
ASTM C1363 vs ASTM C518 - ASTM 1363's new criteria provides realistic values representative of actual room conditions and are based on the full surface of an operable door rather than just the center portion of the door surface as with old test procedures utilized in ASTM C518.

ASTM C515



Previous test method -
tested central portion
of door panel

ASTM C1363



Updated test method -
entire operable door
assembly is tested

PREMIER DOOR AND FRAME SYSTEMS

TrustPremier.com



MONROE, LA: (318) 361-0796 • ATLANTA, GA: (770) 944-1006 • HOUSTON, TX: (713) 690-0435

