



AF-200 COMPOSITE FIBERGLASS DOOR TEST RESULTS

Pultruded Structural Shapes
Tensile Strength, ASTM-D638: Minimum 30,000 psi.
Compressive Strength, ASTM-D695: Minimum 30,000 psi.
Flexural Strength, ASTM-D790: Minimum 30,000 psi.
Flexural Modulus, ASTM-D790: Minimum 1.6×10^6 psi.
Short Beam Shear, ASTM-D2344: Minimum 4,500 psi.
Impact, Notched, ASTM-D256: Minimum 25 ft-lb/in.
Thermal Expansion, ASTM-D696: Maximum 8.0×10^{-6} psi.
Surface Burning, ASTM-E84: Flame Spread ≤ 25 , Smoke Developed ≤ 450 .
AF-150 Framing
Tensile Strength, ASTM-D638: Minimum 30,000 psi.
Compressive Strength, ASTM-D695: Minimum 30,000 psi.
Flexural Strength, ASTM-D790: Minimum 30,000 psi.
Flexural Modulus, ASTM-D790: Minimum 1.6×10^6 psi.
Short Beam Shear, ASTM-D2344: Minimum 4,500 psi.
Impact, Notched, ASTM-D256: Minimum 25 ft-lb/in.
Thermal Expansion, ASTM-D696: Maximum 8.0×10^{-6} psi.
Surface Burning, ASTM-E84: Flame Spread ≤ 25 , Smoke Developed ≤ 450 .
Fastener Withdrawal, ASTM-D1761: 924 lbs.
Percent Fiberglass: Minimum 50%.
Door and AF-150 Frame Assembly
PP Polypropylene Honeycomb Core.
Thermal Transmittance, NFRC 100.
<i>Opaque Swinging Door (< than 50% glass)</i>
U-Factor = 0.26 Btu/hr·ft ² ·°F.
<i>Commercially Glazed Swinging Entrance Door (> than 50% glass)</i>
U-Factor = 0.44 Btu/hr·ft ² ·°F.
Air Leakage, NFRC 400, ASTM-E283.
<i>Opaque Swinging Door (< than 50% glass)</i>
0.00 cfm/sqft @ 1.57 psf.
0.00 cfm/sqft @ 6.24 psf.
<i>Commercially Glazed Swinging Entrance Door (> than 50% glass)</i>
0.04 cfm/sqft @ 1.57 psf.
0.05 cfm/sqft @ 6.24 psf.



STC and OITC, ASTM-E90:
STC = 31, OITC = 26.
Expanded Polystyrene Core.
Thermal Transmittance, NFRC 100.
<i>Opaque Swinging Door (< than 50% glass)</i>
U-Factor = 0.24 Btu/hr·ft ² ·°F.
<i>Commercially Glazed Swinging Entrance Door (> than 50% glass)</i>
U-Factor = 0.43 Btu/hr·ft ² ·°F.
Air Leakage, NFRC 400, ASTM-E283.
<i>Opaque Swinging Door (< than 50% glass)</i>
0.02 cfm/sqft @ 1.57 psf.
0.06 cfm/sqft @ 6.24 psf.
<i>Commercially Glazed Swinging Entrance Door (> than 50% glass)</i>
0.30 cfm/sqft @ 1.57 psf.
0.53 cfm/sqft @ 6.24 psf.
STC and OITC, ASTM-E90:
STC = 30, OITC = 30.