



SL-20 SAND STONE FRP/ALUMINUM HYBRID DOOR TEST RESULTS

Door Panel
Indoor Air Quality, ASTM-D5116, ASTM-D6607:
GreenGuard, GreenGuard Gold
Door and Aluminum Tube Frame Assembly
Structural Performance, ASTM E-330
Single or Pair of Doors, 6'4" x 7'2" overall size, single point latching
± 90 psf design pressure, pass
Door and Thermally Broken Aluminum Frame Assembly
Thermal Transmittance, NFRC 100
Opaque Swinging Door (< than 50% glass)
U-Factor = 0.33 Btu/hr-ft ² ·°F
Commercially Glazed Swinging Entrance Door (> than 50% glass)
U-Factor = 0.62 Btu/hr-ft ² ·°F
Air Leakage, NFRC 400, ASTM-E283
Opaque Swinging Door (< than 50% glass)
0.02 cfm/sqft @ 1.57 psf
0.02 cfm/sqft @ 6.24 psf
Commercially Glazed Swinging Entrance Door (> than 50% glass)
0.22 cfm/sqft @ 1.57 psf
0.42 cfm/sqft @ 6.24 psf
Sound Transmission, ASTM-E90:
STC = 30, OITC = 30
Door and AF-150 Frame Assembly
Thermal Transmittance, NFRC 100
Opaque Swinging Door (< than 50% glass)
U-Factor = 0.33 Btu/hr-ft ² ·°F
Commercially Glazed Swinging Entrance Door (> than 50% glass)
U-Factor = 0.58 Btu/hr-ft ² ·°F
Air Leakage, NFRC 400, ASTM-E283
Opaque Swinging Door (< than 50% glass)
0.11 cfm/sqft @ 1.57 psf
0.07 cfm/sqft @ 6.24 psf
Commercially Glazed Swinging Entrance Door (> than 50% glass)
0.03 cfm/sqft @ 1.57 psf
0.04 cfm/sqft @ 6.24 psf
AF-150 Framing
Tensile Strength, ASTM-D638: 15,900 psi



Tensile Modulus of Elasticity, ASTM-D638: 1.58×10^6 psi
Maximum Compressive Strength, ASTM-D695: 15,500 psi
Compressive Modulus of Elasticity, ASTM-D695: 6.7×10^5 psi
Flexural Strength, ASTM-D790: 39.3×10^3 psi
Flexural Modulus, ASTM-D790: 1.23×10^6 psi
Izod Impact, ASTM-D256: 8.1 ft-lb/in
Barcol Hardness, ASTM-D2583: 57
Specific Gravity, ASTM-D792: 1.45 @ 23 °C
Density, ASTM-D792: 1445.6 kg.m^3 @ 23 °C
Coefficient of Linear Expansion, ASTM-D696: 1.26×10^{-5} in/in/°F
Short Beam Strength, ASTM-D2344: 3,980 psi
Fastener Withdrawal, ASTM-D1761: 924 lbs
Percent Fiberglass: 60%