



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

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



Tensile Modulus of Elasticity, ASTM-D638: $1.58 \times 10^6$ psi
Maximum Compressive Strength, ASTM-D695: 15,500 psi
Compressive Modulus of Elasticity, ASTM-D695: $6.7 \times 10^5$ psi
Flexural Strength, ASTM-D790: $39.3 \times 10^3$ psi
Flexural Modulus, ASTM-D790: $1.23 \times 10^6$ 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: $1445.6 \text{ kg.m}^3$ @ 23 °C
Coefficient of Linear Expansion, ASTM-D696: $1.26 \times 10^{-5}$ in/in/°F
Short Beam Strength, ASTM-D2344: 3,980 psi
Fastener Withdrawal, ASTM-D1761: 924 lbs
Percent Fiberglass: 60%