

Series 8000 Door – FRP Test Results

CMI Architectural Products, Inc. utilizes a superior FRP (fiberglass reinforced plastic) interior and exterior skin in the assembly of the Series 8000 Door. The FRP material is U.V. stabilized, exhibits superior stain and chemical resistance and is extremely durable with surface hardness comparable to glass. Test results are provided from a laboratory independent from CMI.

A. Product Description:

Panel Thickness: 0.120"

Panel color: Integral, "high performance" pigments, light stable

Surface texture: embossed (pebble like), matt finish

Reinforcement: random chopped fiberglass roving fibers

B. Physical Properties

PROPERTY	ACHIEVED VALUE	TEST METHOD
IZOD Impact strength	20 ft. lbs / in. notch	ASTM D 256
Water Absorption (%)	0.20 (24 hrs @ 77° F)	ASTM D 570
Tensile Strength	14,300 PSI	ASTM D 638
Tensile Modulus	1,400 PSI	ASTM D 638
Flexural Strength	24,000 PSI	ASTM D 790
Flexural Modulus	0.09 X 10 ⁶ PSI	ASTM D 790
Barcol Meter Hardness	55	ASTM D 2583

C. Stain Resistance (Cleanability)

STAIN	SURFACE CHANGE (24 hrs) ASTM D 1308
Blood (beef)	Superficial
Crayon (green)	Superficial
Oil (crankcase)	Superficial
Tea	Unaffected
Tomato Acid	Unaffected
Key: Unaffected = wipes off easily with damp cloth & mild soap Superficial = stain removed easily with water and/or mild abrasive Considerable = stain not completely removable	

D. Chemical Resistance

TEST AGENT	EFFECT (4 hr exposure)
Acetic Acid	Excellent
Ethyl Alcohol (50%)	Good
Formaldehyde	Excellent
Hydrochloric Acid (10%)	Excellent
Mineral Oil	Excellent
Nitric Acid (40%)	Excellent
Sodium Hypochloride Solution (6%)	Excellent
Sulfuric Acid (40%)	Excellent
Turpentine	Good
Key: Excellent = Suitable for use Good = Probably suitable for use; test specific conditions Fair = Probably unsuitable for use; further testing suggested Poor = Unsuitable for use in most conditions	

E. Flame / Smoke Rating: Flame spread – 145, Smoke developed – 345, Class C per ASTM E84-79a

Note: All information and data is offered in good faith, but without guarantee. Consult CMI for specific use and product application.