



Architectural Fiberglass, Inc.

AB 2004

Manufacturer & Designer

Custom Fiberglass

Architectural Ornamentation



Made in the U.S.A.



FRP Fluted Columns
with Corinthian Capitals



Simulated FRP Cast Stone
Cornices & Keystones



FRP Decorative Elements



FRP Grapevine Column & Base



Reproduced Historic FRP Cupola



FRP Dome, Base, Cross,

Arches • Balusters • Canopies • Column Covers • Column Caps & Bases

Architectural Fiberglass, Inc. (AFI) custom designs and manufactures decorative fiberglass ornamentation for the restoration, reproduction, and new construction industries. AFI can manufacture fiberglass composites requiring exact specifications with unlimited repetition. Our designers can provide as much or as little design support that may be required. AFI can manufacture products superior to existing ornamentation and is only limited by the scope of the architect's imagination. Complex configurations and reproductions of historical shapes can be achieved with fiberglass. Architects now have the ability to replicate existing architecture that was once cost prohibitive. AFI's products are unparalleled in their beauty, strength, longevity, and the answers to many maintenance problems.



FRP Terra Cotta Replacement



25' Gold FRP Domes & Crosses



Historical FRP Simulated Cast Stone Cornices, Pediments & Decorative Elements



Historical Reproduced FRP Bell Tower Housing Cellular Antenna



25' diameter FRP Dome



Historical Reproduced FRP Stone Elements



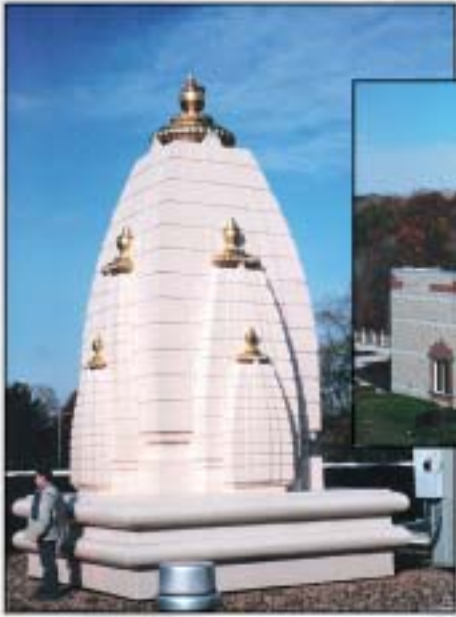
40" diameter by 30' Tall FRP Entasis Column Covers

Cornices • Crosses • Cupolas • Custom Shapes • Domes •

Restoration

Reproduction

New Construction



Two 25' tall FRP Shikhars
(Religious Ornaments)



Stone Finish FRP Dentil Cornice and Brackets



FRP Dome & Cupola/Finial



FRP Cornice and Brackets



FRP Signature Signage & Cornice



FRP Window Ornament

Fiberglass Benefits

Fiberglass Reinforced Polyesters (FRP) can replicate wood, stone, concrete, terra cotta, marble, granite, copper, steel, and other popular building materials. FRP parts are chosen over other building materials because it is lightweight, cost effective, corrosion resistant, and is virtually maintenance free. Fiberglass products can be painted or the color can be molded in the surface. Because FRP begins with liquid polymer resins and formable glass fibers, the finished shape can be curved, corrugated, ribbed, or contoured in a variety of ways, with varying thickness. Per unit of weight, FRP is among the strongest commercial material available. Pound for pound, FRP is stronger than concrete, steel or aluminum and has weathered extremes for more than thirty years. FRP parts can often reduce maintenance and installation cost when compared to other traditional building materials.

Sculptures • Signs • Simulated Stone • Spandrel Panels • Towers • Urns

Fascia Panels • Louvers • Molding • Pilasters • Railings

FRP Properties

Listed below are ranges of physical properties that can be created for architectural applications

Flexural strength, psi	16,000 to 32,000
Flexural modulus, psi.....	0.8 to 1.4 x10 ⁶
Tensile strength, psi.....	9,000 to 18,000
Tensile modulus, psi	0.8 to 1.4 x 10 ⁶
Elongation	1.0 to 2.5%
Compressive strength, psi	15,000 to 25,000
Impact strength izod, lb./in. of notch	4 to 12
Specific gravity	1.0 to 1.8
Density, lbs./ft.3.....	.80 - 100
Continuous heat resistance.....	150 to 350
Thermal coefficient of expansion	
in/in/F x 10-	12 to 20
Barcol hardness	40 to 60

Properties of a typical 1/8" glass mat laminate using specific fire retardant resin

Flexural strength, psi @ 77 degrees F	28,000
Flexural strength, psi @ 77 degrees F	1.07 x 10 ⁶
Tensile strength, psi @ 77 degrees F	16,800
Elongation	2.2%
Barcol hardness	40-50
Glass content	31%
Specific gravity	1.62
ASTM E-84 (tunnel test).....	<25
UL Subject 94	V-O



FRP Copper top Cupola



FRP Cornice and Brackets



FRP Canopy



FRP Balusters and Dentil Cornice



FRP Fluted Columns & Corinthian Capitals, Dentil Cornice



FRP Grapevine Columns, simulated Marble Wall Panels



Reproduced Gold FRP Domes, Crosses & Bases

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