



SECTION 06 82 00 – FRP ARCHITECTURAL SPECIFICATION

SECTION 06 82 00 – FIBERGLASS REINFORCED POLYMER (FRP)

Wilson Composites, LLC — Design-to-Install Composite Solutions

PART 1 – GENERAL

1.1 SUMMARY

A. Section includes architectural Fiberglass Reinforced Polymer (FRP) components including cornices, column covers, pediments, moldings, signage, and custom three-dimensional forms.

B. Related Sections:

1. 04 20 00 – Unit Masonry
2. 05 50 00 – Metal Fabrications
3. 07 92 00 – Joint Sealants
4. 09 90 00 – Painting and Coating

1.2 PERFORMANCE REQUIREMENTS

A. Fire Performance: Class A flame spread rating per ASTM E84.

B. Dimensional Stability: Maintain tolerances under thermal movement.

C. Installation Accuracy: Provide shop drawings showing attachment points and fabrication tolerances.

1.3 SUBMITTALS

A. Product Data: Technical properties, resin system, finishes.

B. Shop Drawings: Dimensioned drawings showing anchorage locations and supports.

C. Samples: Minimum 6" × 6" finish sample.

D. Quality Assurance Submittals: Installer qualifications.

1.4 QUALITY ASSURANCE

A. Manufacturer shall have minimum 10 years' experience producing FRP components.

B. Installer shall be trained and approved by manufacturer.

1.5 WARRANTY

A. Provide manufacturer's 1-year materials warranty.



SECTION 06 82 00 – FRP ARCHITECTURAL SPECIFICATION

PART 2 – PRODUCTS

2.1 MANUFACTURER

Basis of Design:

Wilson Composites, LLC

www.wilsoncomposites.com • Sales@WilsonComposites.com • (864) 646-3000

2.2 MATERIALS

A. FRP: Gelcoat over fiberglass-reinforced thermoset resin laminate.

1. Matrix: ISO/NPG gelcoat and polyester resin.
2. Glass Fiber Content: 25–30% typical.
3. Shell Thickness: 3/16" nominal.
4. Weight: 1.75–2.25 lb/ft² (from Wilson Composites product sheet).

B. Physical Properties (verified values):

- Flexural Strength: 32,100 psi
- Tensile Strength: 15,950 psi
- Modulus of Elasticity: 1,080,000 psi

C. Attachment Hardware: Stainless steel concealed fasteners.

2.3 FINISHES

A. Smooth gelcoat finish, paint-ready unless factory finish specified.

B. Custom textures available.

PART 3 – EXECUTION

3.1 EXAMINATION

A. Verify substrates are plumb and ready to receive FRP components.

3.2 INSTALLATION

- A. Install per manufacturer instructions and shop drawings.
- B. Use concealed fasteners wherever possible.
- C. Shim as necessary for alignment.

3.3 FIELD QUALITY CONTROL

A. Inspect fastening prior to concealment.



SECTION 06 82 00 – FRP ARCHITECTURAL SPECIFICATION

3.4 CLEANING AND PROTECTION

A. Clean using mild detergent and water. Do not pressure wash.