

STANDARD SPECIFICATION
JANUARY 2010

DIVISION 7

SECTION 7F CORNICES

7F.01 GENERAL: Comply with all of the Contract Documents.

7F.02 SCOPE OF WORK: Refer to "Division Scope of Work"

7F.03 WORK OF OTHER SECTIONS

A. Finish painting - Section 9F.

7F.04 CORNICE REPAIRS

- A. Metal cornices, shall be carefully examined by this contractor. He shall inform Architect/Engineer in writing of any problems he expects that will prevent him from successfully restoring the cornices.
- B. Cornices that have been corroded or damaged shall be repaired as necessary. Use materials and shapes to match existing. All fasteners to be non-corrosive.
- C. Prime all repaired areas with appropriate paint.

7F.05 FIBERGLASS REINFORCED PLASTIC CORNICES (FRP)

- A. Fiberglass Reinforced Plastic Cornices (FRP Units with end walls /return flanges) shall be as manufactured by Architectural Fiberglass Corp., Edon Fiberglass or approved equal as determined by Architect/Engineer and as follows:
 - 1. Surface:
 - a. The molded exterior surface of the FRP unit shall consist of U-V inhibited, NPG-ISO polyester gel coat.
 - b. Wet film thickness should be 18 to 22 mils thick.
 - c. Gel coat shall be color matched to sample supplied by Architect.
 - d. Profiles shall be as specified and approved by Architect/Engineer.
 - 2. Back Up Laminate
 - a. Resin (1) Fire retardant, Isophthallic Polyester resin. (2) Fire retardant to be class I per ASTM E-84 test method (flame spread rating of 25 or less)
 - b. Fiberglass Reinforcement;

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- 1) "E" type fiberglass.
 - 2) Random chopped glass fibers.
 - 3) Glass content approximately 25% to 30%.
- c. Laminate Thickness;
- 1) Nominal thickness approximately 3/16" typ.
 - 2) Additional thickness and reinforcement shall be used if necessary for structural strength.

B. AVERAGE MECHANICAL PROPERTIES:

PROPERTY	VALUE	TEST METHOD
Tensile strength	12,000PSI	ASTMD638
Flexural strength	18,000PSI	ASTMD790
Flexural modulus	0.9x10-6PSI	ASTMD790
Compressive strength	18,000PSI	ASTMD695
Bearing strength	10,000PSI	ASTMD638
Thermal expansion	10x10-6	(in/in/F)
Weight/surface area	11/2PSF	

NOTE: Certain applications may be best suited to specialty resins not capable of meeting the above mechanical strength values. Such resins will be allowed with compensatory increases in minimum thickness.

C. System performance:

1. All work shall conform to building codes as supplied by Contracting Authority.
2. The FRP shapes, when installed shall be capable of withstanding positive and negative wind pressure without structural failure, cracking, crazing, permanent distortion or displacement.
3. Allowable design stresses and resistances shall be conservatively selected by the engineer.
4. Load Bearing Strengths: The maximum temporary deflection due to all loads shall not exceed 1/360th of the distance between supports.
5. Thermal Movement: Design, fabricate and install component parts to provide for expansion and contraction over an ambient temperature range of 120 degrees without damage.

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D. Related Materials:

1. Attachment and/or hanging structures (supplied by others) shall be of stainless steel, galvanized steel or treated wood blocking.
2. All hardware (to be supplied by installers) shall be galvanized or stainless steel.

E. Installation:

1. Lift, place and secure FRP units in accordance with Manufacturers shop drawing and as acceptable to Architect/Engineer.
2. Protect units from damage from field operation.
3. Caulk all joints with approved elastomeric sealant.
4. Assure conformity of all as built structural and attachment substrate dimensions to the allowable tolerances for proper installation of prefabricated architectural FRP components.
5. Coordinate delivery and installation of prefabricated architectural FRP components with the work of other trades.
6. Confirm the acceptance of all underlying structure and/or attachment substrate prior to allowing installation of architectural FRP components to proceed.
7. Do not allow work involving the use of resin or resin based materials to proceed at temperatures below 55 degrees

F. Submittals

1. Shop Drawings
 - a. Submit shop drawings showing complete information for the fabrication and installation of FRP units, Indicate member dimensions, and cross-section, location, size and type of reinforcement, including special reinforcement necessary for handling and erection.
 - b. Provide layout, dimensions and identification of each FRP unit corresponding to the sequence and procedure of installation, Indicate location and details of anchoring devices that are to be embedded in other construction.
 - c. Samples:

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Submit two sets of sample (approximately 6" x 12") to illustrate quality, color and texture of finished surface. Approved samples shall become the standard for judging the work.

G. Scaffolding

1. All scaffolding necessary for the proper execution of the work of this Section shall be provided for under this Section, Scaffolding shall be constructed and maintained in strict conformity with the local laws and regulations governing the same, Scaffolding shall be so erected as to interfere as little as possible with the work of other Sections.
2. At the completion of the work of this Section this Contractor shall remove the scaffolding from the premises.

H. Warranty

1. All fabrications will be in accordance with approved drawings and specifications.
2. Materials and workmanship will meet or surpass industry standards for similar work.
3. Any components found to be defective in materials or workmanship will be either repaired or replaced at the option of the fabricator.
4. The minimum warranty period will be twelve (12) months following substantial completion.

F.06 GUARANTEES

- A. Guarantee all items of work furnished and installed under this Section for (1) one year, in addition to manufacturer's standard warranties. All guarantees to be from the date, when **Final Certificate of Occupancy** is issued from Department of Buildings.

END OF SECTION