

## GLASS FIBER REINFORCED PLASTIC GUTTER AND DOWNSPOUT



### PART 1 – GENERAL

#### 1.1 SECTION INCLUDES

- A. Glass fiber reinforced plastic (FRP/GRP) gutter.
- B. Glass fiber reinforced plastic (FRP/GRP) downspout.
- C. FRP/GRP end caps and splices.
- D. Adhesive.

#### 1.2 REFERENCES

- A. ASTM International (ASTM):
  - 1. ASTM E84 - Surface Burning Characteristics of Building Materials.
  - 2. ASTM 2583 - Indentation Hardness of Plastics.

#### 1.3 SUBMITTALS

- A. Submit under provisions of Section 01300.
  - 1. Product Data: Manufacturer's data sheets on each product to be used.
  - 2. Installation, storage and handling instructions.

#### 1.4 QUALITY ASSURANCE

- A. Manufacturer shall have current ISO 9001 certification.

#### 1.5 DELIVERY, STORAGE, AND HANDLING

- A. Materials shall be unloaded and stored per manufacturer's instructions to prevent damage.
- B. When handling materials, spreader bars shall be used when lifting FRP material and surfaces protected from cuts, gouges, abrasions and impacts. Wire slings shall not be used unless materials are protected.
- C. During storage, FRP materials shall be kept dry and under cover but ventilated. For water drainage and air circulation, materials shall be stored off of the ground with one end elevated.

### PART 2 – PRODUCTS

#### 2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Enduro Composites, Inc., 16602 Central Green Blvd., Houston, TX 77032; Tel: 713-358-4000, 800-231-7271; email: [sales@endurocomposites.com](mailto:sales@endurocomposites.com); [www.endurocomposites.com](http://www.endurocomposites.com).
- B. Substitutions: Not permitted unless allowed by and in accordance with provisions in Section 01600.
- C. Any proposed substitution shall include manufacturer's data showing the product meets all listed Performance Requirements, certification and approval requirements, and material requirements relevant to performance including, but not limited to, resin material, UV coating protection, and glass fiber reinforcing content.

#### 2.2 GLASS FIBER REINFORCED GUTTER AND DOWNSPOUT

- A. FRP/GRP Gutter Box shall have 6" vertical legs and 6 3/8" base. Lengths shall be 20' or 10'.
- B. FRP/GRP Gutter Flange shall have 6" adjustable legs. Lengths shall be 20' or 10'.
- C. FRP/GRP Downspout shall be 4" x 4" square tube. Lengths shall be 20' or 10'.
- D. Color of gutter box and downspout shall be Enduro standard gray, white, or beige as selected by owner. Color of gutter flange shall be neutral.

#### 2.3 GLASS FIBER REINFORCED PLASTIC PANEL MATERIAL

- A. Material resin shall be premium grade, isophthalic polyester.

#### 2.4 ACCESSORIES

- A. Accessories shall include end caps, splices, adhesive, fasteners, and other items as required for complete installation.