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Fiberglass Basin (wet well) Short Specification

The resins used shall be commercial grade polyester and shall be evaluated as a laminate test or determined by previous service to be acceptable for the intended environment.

The reinforcing material shall be a commercial grade of glass fiber (continuous strand, chopped-strand, continuous mat and/or non-continuous mat) having a coupling agent, which will provide a suitable bond between the glass reinforcement material and resin.

The FRP* laminate wall thickness shall vary with the wet well height to provide the aggregate strength necessary to meet the tensile and flexural physical properties requirements. The wet well FRP* wall laminate must be designed to withstand wall collapse or buckling based on:

- Hydrostatic pressure of 62.4 lbs. per square foot
- Saturated soil weight of 120 lbs. per cubic foot
- Soil modulus of 700 lbs. per square foot
- Pipe stiffness values as a specified in ASTM D3753.

The wet well FRP* laminate must be constructed to withstand or exceed two times the assumed loading on any depth of the wet well.

The finished FRP* laminate will have a Barcol hardness of at least 90% of the resin manufacturer's specified hardness for the fully cured resin. The Barcol hardness shall be the same for both the interior and exterior surfaces.

The wet well top flange (cover flange) shall have on outside diameter 2inches (min.) greater than the inside diameter of the wet well. A four or six bolthole pattern shall accommodate the mounting of a cover with at least 1/4" diameter 300 series Stainless Steel fasteners.

The following non-corroding threaded inserts are expectable for use:

• Non-corroding Stainless Steel threaded inserts shall be fully encapsulated with non-continuous mat or chopped-strand glass strand reinforcement. The inserts shall have an offset tab to prevent stripping or spinning out when removing and reinserting cover fasteners.

*Fiberglass Reinforced Polyester