** FIBERGLASS ABOVEGROUND TANK SPECIFICATION**

 **For**

**RESIDENTIAL RAINWATER HARVESTING**

**Short Form Specification**

The contractor shall provide the appropriate aboveground fiberglass storage tank and accessories as indicated on tank drawings. Capacity, dimensions, fitting locations and sizes will also be indicated on tank drawings. Tanks shall be fiberglass as manufactured by Containment Solutions, Inc. The tank must be installed according to manufacturer's current installation instructions.

**Long Form Specification**

# *Part I: General*

* 1. **Quality Assurance**
1. Acceptable Manufacturers:
Containment Solutions, Inc., Conroe, Texas
2. Governing Standards:
	1. Tank manufacturer shall be in the business of manufacturing fiberglass tanks.
	2. The tank shall be manufactured to meet or exceed the applicable requirements of ANSI/AWWA – D120 (Thermosetting Fiberglass-Reinforced Plastic Tanks).
	3. The tank shall be manufactured to meet or exceed the applicable requirements listed in the Rainwater Catchment Design and Installation Standards published by ARCSA (American Rainwater Catchment Systems Association).

**1.02 Submittals**

Contractor shall submit to engineer \_\_\_\_ copies of shop drawings for each tank
and \_\_\_ copies of manufacturer's literature (including installation instructions).

### Part II: Products

**2.01 Fiberglass Aboveground Tanks**

1. Product-Storage Requirements:
	1. All tanks must be vented. Tanks are designed for operation at atmospheric pressure only.
	2. Tanks shall be capable of storing non-potable water not to exceed 150OF at the tank interior surface.
2. Loading Conditions - Tanks shall meet the following design criteria:
	1. Internal Load: Tanks shall withstand 5 psig air pressure test with 3:1 safety factor.
	2. Tanks shall be designed to support accessory equipment such as submersible pumps and inlet pipes when installed according to manufacturer's recommendations and limitations.
3. Materials:
	1. The tank shall be manufactured of resin and glass fibers.
	2. Tank inner shell wall shall be fabricated against a mold to produce a non-air inhibited and high gloss laminate to provide fully cured inner surface without the need of wax coats, a low coefficient of friction and a natural resistance to the build-up of algae or other contamination on the surface.
	3. A fiberglass based adhesive shall be injected into the bottom and top channels to secure the shell wall.
	4. Standard tanks shall be factory painted with a low VOC desert sand or forest green paint to inhibit sunlight from penetrating the tank.
4. Fittings:
5. The tank shall have (2) 1 ½” fiberglass threaded half couplings (outlet and spare) positioned 90 °apart and within 4” of tank bottom.
6. The tank top shall have (1) 1 ½” fiberglass threaded half coupling (optional gauge or spare).
7. The tank shall have a 12” threaded polypropylene lid with 11” I.D. opening.
8. The tank shall be supplied with one 5” inlet hole in tank top and one 5” overflow/vent in tank wall. Two grommets sized for SDR 35 thin wall PVC pipe shall be supplied in shipping packet.
9. Tank Dimensions and Sizes: (refer to CSI sales literature and drawings)
	1. Tank height shall be 6’.
	2. Tank diameter shall be \_\_\_\_ (choose 36, 42,48,54,60 or 66 inches).
	3. Tank capacity shall be \_\_\_\_ (choose 300,425,500,700,875 or 1,050 gallons).

**2.02 Accessories**

1. Fiberglass Gravel Foundation Ring:
	1. Gravel ring shall be made of non corrosive fiberglass as supplied by tank manufacturer.
	2. Gravel ring shall be a 6” high continuous fiberglass loop without joints.
2. Liquid Level Gauge:
	1. Liquid level site gauge with stainless steel swing arm and HDPE floats.

#### Part III: Installation

**3.01 Installation**

1. Installation - Tank shall be installed according to the CSI Installation Instructions (publication INST RWHAGT) in effect at time of installation.
2. Rainwater Catchment Design and Installation Standards published by ARCSA - American Rainwater Catchment Systems Association should be followed.

# *Part IV: Limited Warranty*

**4.01 Limited Warranty**

Warranty shall be Containment Solutions one year limited warranty in effect at time of delivery.