

# THE MSDS SHEET

## FRP/GRP WATER TANK

### 1. DEFINITION

GRP (FRP) sectional water tank are made from prefabricated Fibreglass Reinforced Polyester (FRP) and can be easily assembled by bolting them together. The panels are hot pressed SMC (Sheet Moulding Compound) designed to meet the highest standards of sanitary storage of potable water. GPR tank are widely used in the residential, Using for buildings, commercial, industrial and public places.

### 2. INSTALLATION

GRP has a good strength to weight ratio. A standard GRP panel is about 1/3 the weight of a steel panel. The light weight material allows costs for transportation, handling and erection to be saved. These advantages will be felt more when the GRP sectional tanks are chosen for erection in remote country and congested building sites and are scheduled to be completed over a short time frame. Skilled labour with simple conventional tools are usually sufficient to complete a successful installation.

### 3. APPLICATION

GRP panel tank is non-toxic and is safe for storage of drinking water. The SMC material used in the moulding has good ultra-violet resistant properties and gives a high degree of opacity to daylight that prevents growth of organisms within the tank.

### 4. TECHNICAL DATA

#### A. Material

Hot Pressed from SMC, consisting of glass fibre and isophthalic resin

#### B. Panel sizes

For 1.000m x 1.000m module: 1.000 x 1.000, 500 x 1.000 and 500 x 500

#### C. Contents of HDG water tank

#### D. Properties of insulation

Insulated panels are recommended for areas subject to extreme weather conditions. The insulated panel consists of a 25mm thick insulation material (rigid polyurethane foam) sandwiched in between the tank panel and an outer resin skin.

COMPONENTS	STANDARD ITEMS
Tank Panel	Hot Pressed SMC - cream colour
Nut, Bolt, Washer	Galvanized steel - non water contact Stainless steel - water contact
Sealant	UV resistant PVC foam
External Reinforcement	Galvanized steel
Internal Reinforcement	Stainless steel tie rods
Roof Support	uPVC Pipes
Indicator	Mechanical cat and mouse type
Steel Skid	Anti rust coated structural steel sections

#### Physical properties of insulation

Density	38 - 40 kg/m
Thermal Conductivity	0.018 - 0.020 cal/m/hr/°C
Closed Cells	90 - 95 %
Operation Temperature	-60°C to +80°C
Light Transmission	0.00

#### E. Parts and components

PARTS	SPECIFICATION
Standard SMC panels of 1.0m x 1.0m, 1.0m x 0.5m, 0.5m x 0.5 m. (1.5 m x 1.0 m under planning)	Hot Pressed from SMC, consisting of glass fibre and isophthalic resin.
Manhole	Hot Pressed from SMC, consisting of glass fibre and isophthalic resin.
Insulated Panel	Rigid polyurethane foam sandwiched in between the hot pressed GRP panel and an outer hot pressed GRP skin.
Corner Angles	Galvanized steel, stainless steel and GRP available optionally.
Sealant	UV resistant foam sealant.
Tie Rods	SS 304 rods, SS 316 available optionally.
Bolts, Nuts, Washers	Galvanized steel not in contact with water. SS in contact with water.
External Reinforcement	Galvanized steel. Other available optionally.

Internal Roof Support	PVC pole.
External Ladder	Galvanized steel. Other available optionality.
Internal Ladder	Aluminium or PVC. Stainless steel available optionality.
Air Vent	PVC goose neck or GRP/powder coated mushroom type.
Water Level Indicator	Cat and mouse type. Acrylic tube indicator available optionally.
Skid	Mild steel painted, galvanized steel. Both available optionally.

## 5. PICTURES

