

Cold-pressed moulded GRP panel tanks are acceptable subject to the Distribution Company's approval.

- (a) the internal and external surface of the shell or panel shall be smoothly finished; no fibre shall project out and the surfaces must be free of defects such as crazing, wrinkles, crevices and pinholes so as to prevent the adhesion of foreign matter such as dust, dirt, moss, algae, bacteria, scale formation and rust;
- (b) the GRP sheet moulding compound shall have ultraviolet protection features to ensure long panel life;
- (c) the base panels shall be of a convex shape to assist in the complete draining of water;
- (d) all tank openings shall be flanged, with the flanges rated and drilled to match the supply/discharge pipeline ratings; otherwise to BS EN 1092-1 and BS EN 1092-2. All nozzles shall be of uPVC;
- (e) GRP tanks shall be constructed with internal partition walls to provide separate sections so that one section can be isolated for maintenance while the other section(s) is/are still operational. In this case, each section shall be provided with the specified accessories to allow for safe isolation;
- (f) all tanks shall be fitted with roof supports manufactured from uPVC pipes. Tanks up to 5000 x 5000 x 3000mm (H) shall be fitted with an internal bracing system comprised of angle brackets manufactured in stainless steel grade 316 or above;
- (g) tanks with dimensions above 5000 x 5000 x 3000 mm (H) shall be fitted with a hot-dipped galvanized external bracing structure. Each tank shall be permanently equipped with an internal ladder of uPVC or GRP and a hot-dipped galvanized external ladder;
- (h) each tank shall be fitted with a hot-dipped galvanized mild steel beam/channel skid. The steel skid shall be fixed on the concrete beams by anchor bolts and levelled. The allowable deflection of the steel footing shall not exceed 3mm; and
- (i) all bolts, nuts and washers shall be in stainless steel grade 316L (or above) when in contact with water. Bolts, nuts and washers not in contact with water shall be of stainless steel grade 316 and above.

1.92 For outdoor bolted tanks, insulated GRP panels shall be utilised to withstand the temperature extremes. The insulated tank panels shall be factory insulated with at least 25mm of polyurethane foam or 40mm of expanded polystyrene. The insulation shall not be exposed to external weather conditions. It shall be covered with a permanently-fixed external cover made of the same material as used in the GRP

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