

- a. The surface of the PVC-u fitting shall be roughened to accept a 100mm wide GRP lamination on the inside of the fitting and a 25 mm wide GRP lamination on the inside of the fitting.
- b. Isophthalic resin shall then be applied to the roughened areas and one layer of chopped strand mat 300 g/m<sup>2</sup> applied and wetted out with the resin.
- c. The PVC-u fitting shall be inspected by the Engineer prior to placing in the benching.

#### **10.2.5.5 GRP Formwork**

1. GRP formwork, which remains in place, shall be fabricated as follows unless otherwise approved by the Engineer.
  - a. The outer layer shall comprise one layer of glass surface veil 30 g/m<sup>2</sup> of approved type impregnated with corrosion resistant vinylester resin of approved type.
  - b. The structural layer shall comprise one layer of chopped strand mat 450 g/m<sup>2</sup>, two layers of 800 g/m<sup>2</sup> woven roving and one layer of chopped strand mat 450 g/m<sup>2</sup> of approved type impregnated with corrosion resistant isophthalic resin of approved type.
  - c. The inner layer shall comprise one layer of glass surface veil 30 g/m<sup>2</sup> of approved type impregnated with corrosion resistant vinylester resin of approved type.
  - d. Resin to glass ratio shall be 70% to 30% by weight with a tolerance of  $\pm 5\%$ .
  - e. Total minimum thickness shall be 4 mm.
2. Suitable straps or anchors shall be fitted to the formwork to prevent handling damage and hold the formwork in place during concreting.
3. Any exposed surfaces shall be given a 100 micron thick gel coat with ultra violet inhibitor.

#### **10.2.6 Waterproof Membrane**

1. The waterproof membrane system shall have a proven track record of not less than 5 years in Abu Dhabi or in similar environmental conditions.
2. The waterproof membrane shall be an impervious torch applied purpose formulated modified bituminous membrane consisting of an atactic polypropylene (APP) bitumen compound reinforced with a polyester fabric core