

Glass Reinforced Polyester Water Tank Works

In giving this approval of plans, I hereby impose the following conditions under item 6 in section 17(1) of the Buildings Ordinance:-

- (a) Performance tests are required to be carried out upon completion of the glass reinforced polyester water tank to satisfy the following requirements. The glass reinforced polyester water tank shall be filled with water up to the overflow level at ambient temperature for the testing:-
 - (i) Leakage test – The assembled glass reinforced polyester water tank should be tested to demonstrate that there will be no visible sign of leakage after standing for at least 48 hours.
 - (ii) Deflection test – The assembled glass reinforced polyester water tank should be tested to satisfy that the deflection of the sides and bottom of the glass reinforced polyester water tank shall not exceed 1.0% of the depth of the glass reinforced polyester water tank and 10mm respectively after maintaining the full water load for at least 2 hours.
- (b) Upon satisfactory completion of the performance tests specified above, the test reports should be submitted within 21 days after testing and appended with a statement signed by the Registered Structural Engineer to confirm that the glass reinforced polyester water tank works have been carried out to satisfy the above-mentioned performance requirements.

2. The following conditions in respect of qualified supervision of works is imposed under item 6 in section 17(1) of the Buildings Ordinances:

- (a) Qualified site supervision of the glass reinforced polyester water tank works, including fabrication, erection and examination of the structural elements/fixings, by experienced and competent persons as defined in (b) and (c), should be provided to ensure that the works are carried out in accordance with the plans approved and that the required standards are complied with.
- (b) The Registered Structural Engineer should assign a quality control supervisor to supervise the works, determine the necessary frequency of inspection by the quality control supervisor which should not be less than once a week, and devise inspection check lists. The minimum qualifications and experience of the quality control supervisor is to be the same as the Technically Competent Person of grade T3 under the Registered Structural Engineer's stream, as stipulated in the Code of Practice for Site Supervision 2009.
- (c) The Registered General Building Contractor should assign a quality control co-ordinator to provide full time on site supervision of the works and devise inspection check lists. The minimum qualifications and experience of the quality control co-ordinator is to be the same as the Technically Competent Person of grade T1 under the Registered General Building Contractor's/Registered Specialist Contractor's stream, as stipulated in the Code of Practice for Site Supervision 2009.

- (d) The names and qualifications of the supervisory personnel representing the Registered Structural Engineer and the Registered General Building Contractor respectively should be recorded in an inspection log book. The date, time, items inspected and inspection results should be clearly recorded in the log book. The log book should be kept on site for inspection by representatives of the Buildings Department.

3. Under Building (Administration) Regulation 10, the following documents are required to be submitted prior to consent application for the commencement of glass reinforced polyester water tank works:-

- (a) Test reports issued by a recognised laboratory/organisation to substantiate the mechanical properties of the fibre glass panel and its ability to withstand 6 times the design hydrostatic pressure.
- (b) Manufacturer's quality control details of the production of fibre glass panels and fabrication of the glass reinforced polyester water tank.