

**22.2.1.3.2. Type Tests**

- a) Vicat Softening Point. Ensure that the deformation temperature of each tested sample is not lower than 79°C, when two random samples taken from the pipe are tested in accordance with ISO 2507.
- b) Impact Resistance. Ensure that the pipe sample when tested to ISO 3127, have a true impact rate (TIR) below 10 % at a confidence level of 90 %.
- c) Heat Reversion. Ensure that at no position around the pipe the length changes by more than 5 % when three samples of each pipe size are tested to ISO 2505. Samples shall not show faults such as cracks, cavities or blisters during or after the tests.
- d) Hydraulic Test. Test specimens of pipe of each pipe size in accordance with ISO 1167, three specimens at 20°C and a further three specimens at 60°C. Ensure that samples of pipe will sustain the stresses without failure for the times and temperatures given in table 22-2 below.

**Table 22-2: uPVC Hydraulic Test**

Test Temperature °C	Minimum Time to Failure Hrs	Induced Stress N/mm <sup>2</sup>
20	1	42
60	1000	10

- e) Joint Tests. Two Jointed pipes of each pipe size to be tested in accordance with the requirements of BS EN ISO 1452 .
  - i. No leakage at any point of the jointing area during the test.
  - ii. Negative Pressure change shall be < 0.5bar.
  - iii. Maintain 2.0° deflection during the deflected joint tests.
  - iv. The Engineer may require fittings to undergo similar type tests to those specified above. Carry out such tests in accordance with the appropriate ISO standard. Use fittings of similar quality to those of the pipes being tested.
  - v. Quality Control Tests. Carry out the quality control tests listed below at the frequency stated. Records of all tests and inspections to be maintained by