

## Technical Bulletin 4

### Product Testing (Above Ground)

To maintain our position as the industry leader, Polypipe Terrain continue to invest in product development and testing procedures to ensure high quality, fully accredited PVC-u and MuPVC soil and waste drainage systems.

Terrain pipework and fittings conform fully, where applicable, with the following British Standards, and bear the Kitemark approval.

- [BS 5255:1989 Specification for Thermoplastics Waste Pipes and Fittings](#)
- [BS 4514:2001 PVC Soil and Ventilation Pipes, Fittings and Accessories](#)
- [BS EN 1329:2000 Plastic Piping Systems for Soil and Waste Discharge](#)
- [BS EN 1566:2000 Plastic Piping Systems for Soil and Waste Discharge \(Chlorinated\)](#)

All Terrain products are manufactured to an approved quality plan: our products undergo type testing (off-line testing) and production testing (at time of manufacture). Both sets of tests are undertaken internally at our manufacturing plant in Aylesford, Kent, England. They are also independently checked and verified by external accredited testing facilities, including BSI, BBA and BSRIA. At Terrain we carry out in excess of 75 quality tests on each product group to ensure we maintain the highest quality standards.

#### **Type Tests**

In order to achieve 'compliance', there are a significant number of type tests that Terrain are required to achieve. The tests are initially carried out in-house and then re-tested at an accredited testing facility to verify (or otherwise) our results. Typical tests include:

**Accelerated Weathering** – The colour of our product samples are measured and then subjected to significant levels of UV over a period of time in both wet and dry cycles.

**Hot and Cold Cycling** - Our products are assembled on to a test rig and subjected to repeated cycles of hot (95 degrees) and cold (20 degrees) water cycles, with drain down periods between each cycle. This is repeated for up to 2,500 cycles of each temperature. The test is designed to thermal shock the material. We measure for joint integrity, horizontal pipe sag and pipe/fitting deformation both before and after the test.

**Compliance to STD Dims** - Pipe and fitting samples are measured for dimensional accuracy, according to the relevant British Standard.

**Material Formulation** - our PVC-u formulation is checked for compliance in each of its constituent parts. For each part of the formulation we must comply to standard physical characteristics such as bulk densities, and in the case of the PVC-u polymer its K value.

**For further assistance please contact our Technical Team on:**

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