

Polypipe Building Services <u>Terrain PVC-u</u>

1. General

The Terrain PVC-u soil and waste drainage system consist of:

- A range of extruded PVC-u pipes made from PVC-u lead free material
- A range of injection moulded PVC-u fittings made from PVC-u lead free material
- Pipe/fittings shall be colour grey, to British Standard 5252:10.A.0, black or white.

1.1 Operating Pressure and Temperature:

The Terrain PVC-u system is recommended for use as a gravity soil and waste system. It has a nominal pressure rating of 0.5bar.

The Terrain PVC-u system is nominally rated to carry fluids up to +76°C with an intermittent full bore flow of +100°C acceptable.

1.2 System Sizes

Terrain PVC-u is manufactured in the range from OD 36mm to OD of 160mm

1.3 System Applications

Terrain PVC-u system can be used for the following applications:

- In-building soil and waste
- Gravity rainwater
- High chemical resistance but if used in chemical waste scheme the chemical content solution and its temperature must be checked by contacting:<u>buildingservices.technical@polypipe.com</u>

2. Quality Assurance

- BS EN ISO 9001 Quality Management System
- BS EN ISO 14001 Environmental Management System BS ISO 45001 Occupational Health & Safety Management System
- PAS 99 Integrated Management Registration
- BS ISO 56002 Innovation Management System

2.1 Standards Compliance and Certifications

All materials are manufactured under:

- BS 5255:1989
- BS 4514:2001
- BS EN 1329-1
- BS EN 1566

Terrain Soil and Waste systems are manufactured in accordance with the appropriate British and European Standards and, where applicable, bear a kitemark (KM).

PVCu Soil systems – 82, 110 and 160mm Soil Pipes and Fittings BS 4514 (KM 05252) and BS EN 1329 – 1 (KM 57744)

PVCu Waste Systems – 32, 40 and 50mm Waste Pipes and Fittings BS EN 1566 (KM 88038) and BS 5255 (KM 06413)

3. Fire Protection

Firetrap Collars for Terrain PVCu are rated up to 4 hours fire rating to BS 476 Part 20, BS EN 1366-3 and offers protection above and below slab. The Firetrap Collars hold a European Technical Assessment ETA-20/1151, BS EN 13501-1 (reaction to fire) and BS EN 13501-2 (resistance to fire).

Please refer to the Terrain Q Technical Manual Literature & Technical Info | Polypipe or email <u>buildingservices.</u> <u>technical@polypipe.com</u>

4. Installation Guidance

4.1 General

The Terrain PVC-u system is in full compliance BS EN 12056 part 2 gravity drainage systems inside buildings and approved document H of the Building Regulations. All products manufactured to BS EN 1519

4.2 Solvent Welding

Method of jointing to be employed shall be that of solvent welding using Terrain Liquid Weld cement Kitemark BS EN 14680.

4.3 Push Fit

Method of jointing shall be seal ring joint using Terrain silicone lubricant 9136L.

4.4 Thermal Movement

- Control of thermal movement must be considered for a Terrain PVC-u system. This thermal movement can be controlled as recommended below.
- Expansion joints shall be provided at a maximum of 4 metre centres for soil and 2 metre centres for waste and fixing points over 1 metre centres. It is recommended that one expansion coupling and anchor point is fitted per floor to accommodate thermal movement from the floor above.
- The anchor point can be made directly on to a Terrain soil fitting in the bracket grooves incorporated in each fitting.

4.5 Stack Ventilation

- A vent pipe for purposes of the installation shall be considered part of the system and as such be installed using the same methods as that seen for the soil pipe.
- An alternative to the traditional secondary ventilation can be the Terrain P.A.P.A.®/Pleura system, this product can
 only be offered as a technical design option from Polypipe Building Services and schematic drawings would need
 to be provided to: <u>buildingservices.technical@polypipe.com</u>

4.6 Typical Terrain PVC-u Riser Fittings per Floor Level

- Universal Soil Manifold for multiple low level connections: 119.412.15
- Fittings to include grooved section allowing secure Anchor Bracket fixing
- Access Pipe Single Socket: 139.4
- Expansion Coupler: 111.4
- Anchor/Guide Bracket x2: 9140.110B

5. Polypipe Advantage

The Terrain PVC-u system can also be supplied as a fabrication option, the Advantage team supporting with design, fabrication, coordinated delivery and support. Enquiries should be sent to buildingservices.technical@polypipe.com

6. Testing

All completed soil and waste systems to be air tested to a minimum 38mm water gauge over 3 minutes. There will be no drop in pressure during this time period.



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