

# 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 PVC Technical Manual Literature & Technical Info | Polypipe or email <u>buildingservices.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.



Polypipe Building Service, New Hythe Business Park, College Road, Aylesford, Kent ME20 7PJ Tel: +(0)1622 795263 Email: commercialenquiries@polypipe.com www.polypipe.com/commercial-building-services

