# Polypipe

Ridgidrain NBS Specification

July 2014



#### R12 DRAINAGE BELOW GROUND

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#### STRUCTURED WALL PLASTICS PIPELINES

Standard: BBA Cert. 00/3678, 100 - 600mm

HAPAS Cert. 02/H068, 100 - 600mm

Network Rail Cert. PA05/05460 100 - 600mm

Manufacturer: Polypipe Civils

Product reference: Ridgidrain plain end and/or single integral socket perforated and

unperforated pipes

Sizes: 100 - 600mm

#### PIPES, BENDS AND JUNCTIONS - SUPPLY

Pipes and Fittings: From same manufacturer for each pipeline

Manufacturer: Polypipe Civils Product reference: Ridgidrain

## PIPES, BENDS AND JUNCTIONS – PLASTICS STRUCTURED WALL Ridgidrain System

Extruded twin wall HDPE Pipework and injection moulded fittings.

Nominal diameters: 100, 150, 225, 300, 375, 400, 450, 500 and 600mm.

SN 6 rating

All Ridgidrain pipework and fittings shall be manufactured with the same SN rating.

All bends and branches shall be in direction of flow at all connections.

### CONNECTORS – Waste and Rainwater Pipes for HDPE Drainage

Refer to Polypipe Civils technical guide

#### FLEXIBLE COUPLINGS -

Ridgidrain pipe work is supplied plain ended and/or with a single integral socket, all fittings are supplied with integral sockets, with the following flexible methods of jointing on site available

100mm - 600mm Ø EPDM ring seals to EN 681 Part 1

#### STORAGE TANKS - PLASTIC UNITS

Manufacturer: Polypipe Civils Product reference: Ridgidrain

Ridgidrain pipe work and fittings combine to form a structural attenuation/storage

tank. Refer to Engineer Drawings xxxxxxx

Inlet Connections: xxx mm Outlet pipe diameter: xxx mm.

Silt trap: Consult with Polypipe Civils for recommendations and details. Installation: Consult with Polypipe Civils for recommendations and details.



#### SOAKAWAY SYSTEMS - PLASTIC UNITS

Manufacturer: Polypipe Civils Product reference: Ridgidrain

Ridgidrain pipe work and fittings combine to form a structural soakaway. Refer to

Engineer Drawings xxxxxxx Inlet Connections: xxx mm Outlet pipe diameter: xxx mm.

Silt trap: Consult with Polypipe Civils for recommendations and details. Installation: Consult with Polypipe Civils for recommendations and details.

## GROUNDWATER PRESSURE RELIEF DRAIN FOR SURFACE/ SUB SURFACE WATER

Manufacturer: Polypipe Civils

Product reference: Ridgidrain Perforated/Half perforated HDPE Pipework and

injection moulded fittings.

Nominal diameters: 100, 150, 225, 300, 375, 400, 450, 500 and 600mm.

SN 6 rating

#### GEOTEXTILE MEMBRANES – FILTER

The permeable geotextile (infiltration structure) encapsulation of the 'tank' shall be completed in accordance with the manufacturer's requirements. It should be noted that the geosynthetic manufacturer may recommend the use of an additional protective geotextile fleece be incorporated within the works.

#### GEOTEXTILE MEMBRANES - IMPERVIOUS

The geomembrane (attenuation structure) encapsulation of the 'tank' shall be completed in accordance with the manufacturer's requirements. It should be noted that the geosynthetic manufacturer may recommend the use of an additional protective geotextile fleece be incorporated within the works.

#### LAYING PIPELINES

Pipe bed and surround material shall consist of natural and/or recycled coarse aggregate complying with BS EN 13242. Refer to Engineering drawing xxxxxxx Backfilling in accordance with the Building Regulations, BS EN 752, Sewers for Adoption, CESWI, MCHW, Volume 3 and will only be carried out after the works have been inspected and approved.

Mechanical compaction will not be employed until 600mm of cover has been placed to protect the pipes from the effects of this equipment. Heavy mechanical plant will not be allowed to run over the pipeline until all the backfill has been consolidated. Where the pipe run detailed on the engineer's drawings is shallower than the manufacturers recommended minimum for the expected load conditions, protection will be required as detailed on the Engineers drawings. Consideration should also be given to any further requirements of the approving and/or adopting organisation

#### JOINTING PIPELINES

Ridgidrain pipe work is supplied plain ended and/or with a single integral socket, all fittings are supplied with integral sockets, with the following flexible methods of jointing on site available

100mm - 600mm Ø EPDM ring seals to EN 681 Part 1



ONE PIECE GULLIES AND COVERS (EXTERNAL)

Standard: BBA Cert. 90/R054, Manufacturer: Polypipe Civils

Product reference: Ridgigully corrugated polyethylene road gully

Sizes: 480mm Outlet size: 150mm

COVER

Product reference: xxxxxx

Type: xxxxxxx Material: xxxxxxx Size: xxxxxxxx

Loading grade: xxxxxxxx

#### **INSTALLING ACCESS POINTS**

Access/ Inspection turrets to be positioned as detailed on the Engineering Drawings and installed in accordance with manufacturer's requirements/recommendations and good practice.

#### **INSTALLING INSPECTION CHAMBERS - PLASTICS**

The Installer will provide apparatus for the off-loading and handling of fabricated modular chambers in accordance with manufacturer's requirements / recommendations and good practice. Where practicable, chambers shall incorporate lifting lugs for ease of handling, and any manholes suffering damage resulting from any means, will be immediately rejected from the site. Making good of damaged chambers will not be permitted

#### INSTALLING UNDERGROUND STORAGE TANK UNITS

The Installer will provide apparatus for the off-loading and handling of modular pipework and fittings in accordance with manufacturer's requirements / recommendations and good practice. Any pipework or fittings suffering damage resulting from any means will be immediately rejected from the site. Making good of damaged components will not be permitted

#### AIR TEST (NON-PRESSURE PIPELINE)

Temporarily seal low ends of drains and connections.

Connect glass 'U' tube gauge to drain plug in length of drain under test.

Pump air into test section 100mm water gauge for pipelines or where gullies and/or ground floor appliances are connected, of slightly more than 50mm water gauge.

Allow five minutes for stabilisation of air temperature.

Adjust air pressure to 100mm or 50mm water gauge as necessary.

Without further pumping, the head of water should not fall by more than 25mm in a period of five minutes for a 100mm water gauge test pressure, and 12mm for a 50mm water gauge test pressure.



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