

Non-Pressure Concrete Pipes

Description

Mainly used to carry waste water, the pipes are made with reinforced concrete. Diameters range from 300mm to 1,066mm.

General Characteristics

- Overall Length: 2.600m
- Effective Length: 2.440m

Materials Specifications

- Cement
ORDINARY PORTLAND CEMENT (CEM I – 42.5N)
Compliance with BS EN 197-1:2000 – Cement. Composition, specifications and conformity criteria for low heat common cements.
- Aggregates
UBP AGGREGATES (Rocksand 0/4mm washed & Coarse 3/8mm)
Compliance with BS 882: 1992 – Specification for aggregates from natural sources for concrete.
- Water
BOREHOLE – Clean and free from any harmful amounts of deleterious matter, either in suspension or in solution controlled each month.
- Admixtures
None.

Manufacturing Specifications

- Concrete
CONCRETE GRADE 40
Minimum characteristic strength at 28 days: $f_{cu} = 40\text{MPa}$.
Minimum ratio of 360kg/m^3 of fully compacted concrete.
Minimum cover over all steel reinforcement of 12mm.
- Reinforcement
HARD DRAWN NAIL WIRE – SAE 1008 – $\varnothing 6\text{mm}$
Characteristic strength of reinforcement wire: $f_y = 630\text{-}700\text{MPa}$.
- Curing Period
Pipes are submitted to 3 hours in a curing chamber with vapor and 28 days of curing in yard prior to delivery.
- Connection Details
Spigot and socket type with rubber joint.

Diameters Available & Specifications

Manufacturing Diameter (1)	Ø (")	42	39	36	33	30	27	24	21	18	15	12
	Ø (mm)	1066	990	914	838	762	685	609	533	457	380	304
Weight	(kg)	1703	1466	1228	1042	908	697	625	512	403	312	243
Wall Thickness (2)	(mm)	69	65	58	58	54	42	42	41	40	35	34

(1): A possible deviation on the actual diameter is allowed ($\pm 5\text{mm}$ on 12" pipe and $\pm 6\text{mm}$ on all other diameters mentioned).

(2): A possible variation on the wall thickness is allowed ($\pm 6\text{mm}$ on all pipes).

