Precast Reinforced Concrete Pipes

MS

QUALITY SYSTEM STANDARDS MALAYSIA
Certified to ISO 9001 : 2015
Cert. No. : QMS 00797

QUALITY SYSTEM UKAS
Certified to ISO 9001 : 2015
Cert. No. : QMS 00797

CIDB MALAYSIA
No Perakuan A001299

SPAN

PRECAST REINFORCED CONCRETE PIPES (RCP)

Overview: -

E-RETE's Precast Reinforced Concrete Pipes are manufactured with centrifugal spinning process. The compaction of the concrete is achieved by combining centrifugal force and vibration when spinning the pipe horizontally with stipulated speed.

Types Of Pipe:-

a) Rigid Jointed Pipes - Rebated /Ogee Pipes with internal / external flush joints.

b) Flexible jointed Pipes - Spigot and socket pipe with rubber rings. (also known as Rubber Ring Joint Pipes)

Applications:-

*** DRAINAGE :-** Use for normal drainage and stormwater. Rebated Joint and Rubber Ring Joint Pipe are both applicable based on the the type of soil bedding and design criteria required by project's consultant.

***SEWERAGE :-** Sewerage pipes are manufactured using Ordinary Portland Cement and internally lined with 12mm thick High Alumina Cement. Rubber Ring Joint Pipe is a watertight pipe recommended for use in Sewer applications.

Rebated / Ogee Joint (RJ)

Specifications:-

E-Rete's RC pipes are designed and manufactured to meet the following standards :-

* Malaysian Standard -MS 881:Pt:1 1991 - Flexible Joint pipes - Drainage & Sewerage Class L,M H
* Malaysian Standard -MS 881:Pt:3 1991 - Land Drainage & Sewer age Class L,M H
* Australian / New Zealand Standard: AS/NZS 4058: 2007 - Extra Strength Reinforced Concrete Pipe (Class 1.5Z, 2.0Z, 2.5Z, 3.0Z etc)

Spigot And Socket Joint (RRJ)

Selection Of Pipe Class:-

Upon establishing the size/diameter of pipe culvert required base on the probable maximum run-off to be reasonably expected at the site, the class of pipes best suited to the site shall then be selected.

The selection of pipe class is dependent on the following factors:

a) Installation conditions:- trench /embankment condition

b) Type of Bedding

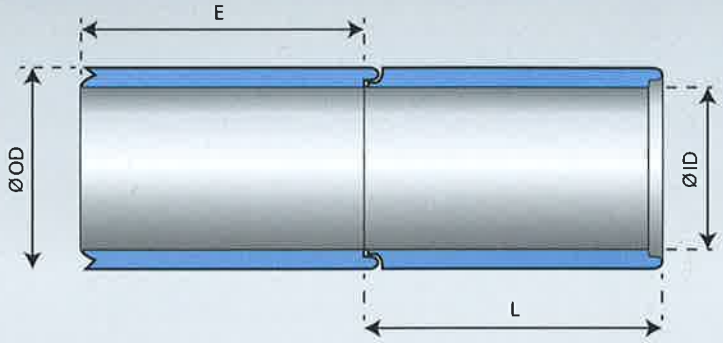
c) Depth of Fill

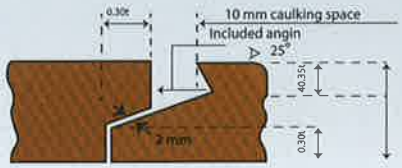
d) Type of Soil Fill

e) Availability of superimposed load (Traffic Loading)

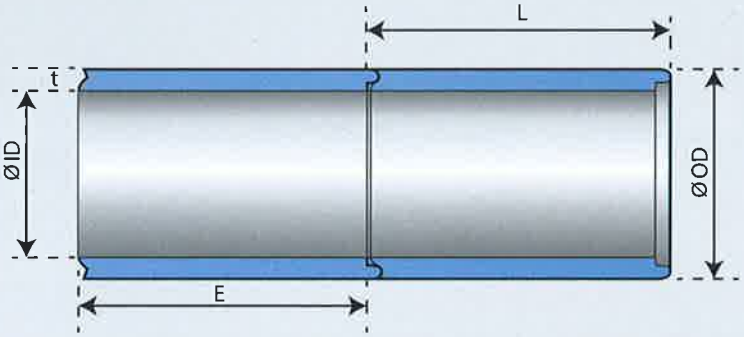
Rebated / Ogee Joint (RJ)

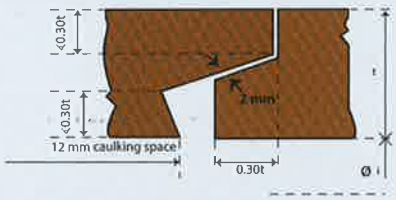
(External Flush Joint - Diameter 300mm to 750mm)





(Internal Flush Joint - Diameter 900mm to 1800mm)



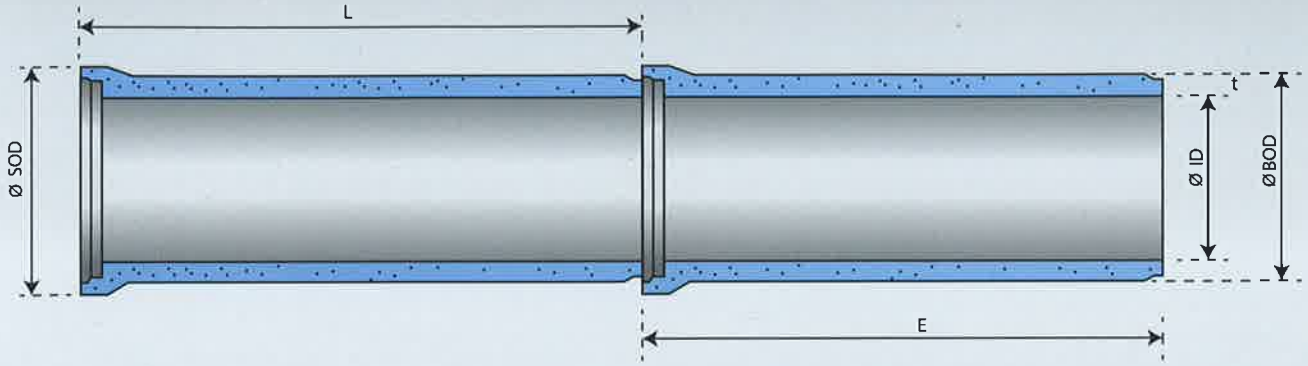


Nominal Diameter Ø	External Diameter OD Ø	Internal Diameter ID Ø	Class	Wall Thickness t	Length		Approx. Weight
					Effective E	Overall L	
mm	mm	mm		mm	mm	mm	mm
225	279	228	L,Y,Z	25.5	1821	1829	0.093
300	362	385	L	28.5	1820	1829	0.137
		302	M	30.0			0.143
		299	Z	31.5			0.150
375	441	381	L	30.0	1820	1829	0.177
		378	M	31.5			0.185
		375	H	33.0			0.193
450	533	457	L	38.0	1507	1518	0.224
		451	M	41.0	1506		0.241
		445	H	44.0	1505		0.257
525	609	533	L	38.0	1507	1518	0.259
		527	M	41.0	1506		0.278
		514	H	47.50	1504		0.318
600	698	609	L	44.5	1505	1518	0.347
		597	M	50.5	1503		0.390
		584	H	57.0	1501		0.436
675	775	686	L	44.5	1505	1518	0.388
		673	M	51.0	1503		0.440
		654	H	60.5	1500		0.515
750	864	762	L	51.0	1503	1518	0.494
		750	M & H	57.0	1501		0.548
900	1016	914	L	51.0	1503	1518	0.587
	1036	900	M & H	68.0	1484		0.785
1000	1094	1067	L	63.5	1500	1518	0.856
	1202	1050	M & H	76.0	1495		1.020
1200	1346	1219	L	63.5	1470	1518	0.971
	1372	1200	M & H	86.0	1492		1.319
1350	1511	1572	L	69.5	1497	1518	1.195
	1540	1350	M & H	95.0	1472		1.637
1500	1676	1524	L	76.0	1491	1518	1.450
	1712	1500	M & H	106.0	1472		2.03
1650	1854	1676	L	89.0	1491	1518	1.873
	1884	1660	M & H	117.0	1470		2.465
1800	2032	1829	L	101.5	1485	1518	2.336
	2054	1800	M & H	127.0	1467		2.918
2100	2430	2100	M, Y, Z	165.0	2500	2540	7.191

Note: Class L, M & H - Conforms to MS 881 : Part 3 : 1991
Class X, Y & Z - Conforms to AS/NZS 4058 : 2007
Class S - Available for all Nominal Diameter Conforms to AS 1342 : 1973

Spigot And Socket Joint (RRJ)

* With Rubber Ring



Nominal Diameter ø	External Diameter		Internal Diameter ID ø	Class	Wall Thickness t	Length		Approx. Weight
	Socket SOD ø	Barrel BOD ø				Effective E	Overall L	
mm	mm	mm	mm		mm	mm	mm	mm
300	435	362	301 299	L M & Z	30.5 31.5	1829	1899	0.158 0.163
375	533	441	381 375	L M & H	30.0 33.0	1829	1905	0.194 0.212
450	648	538	458 450	L M & H	40.3 44.3	3048	3124	0.513 0.560
525	705	609	533 514	L M & H	37.0 47.5	3048	3124	0.559 0.687
600	806	698	609 584	L M & H	44.5 57.0	3048	3137	0.752 0.945
675	883	775	686 654	L M & H	44.5 60.5	3048	3153	0.845 1.124
750	1034	888	774 750	L M & H	57.0 69.0	3048	3169	1.238 1.477
900	1192	1036	920 900	L M & H	58.0 68.0	3048	3188	1.491 1.731
1050	1440	1194	1067 1042	L M & H	63.5 76.0	3048	3188	1.888 2.234
1200	1499	1346	1219 1174	L M & H	63.5 86.0	3048	3188	2.141 2.849
1350	1689	1511	1372 1321	L M & H	69.5 95.0	3048	3188	2.634 3.537
1500	1854	1676	1524 1464	L M & H	76.0 106.0	3048	3188	3.197 4.376
1650	2057	1854	1676 1620	L M & H	89.0 117.0	3048	3188	4.130 5.344
1800	2261	2032	1829 1778	L M & H	101.5 127.0	3010	3162	5.110 6.310

Note: Class L, M & H - Conforms to MS 881 : Part 1 : 1991
Class X, Y & Z - Conforms to AS/NZS 4058 : 2007
Class S - Available for all Nominal Diameter Conforms to AS 1342 : 1973