



REINFORCED CONCRETE MANHOLES



MS
S.S. 9911 Part 1 | 2002



Certified to ISO 9001 : 2015
Cert. No. : QMS 00707



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No Perakuan A001299



SPAN

PRECAST CONCRETE MANHOLE

EFFICIENT PRECAST SOLUTIONS FOR SEWER SYSTEM

E-RETE's Precast concrete circular manholes are widely used as maintenance chambers that provide access to pipelines inspection and cleanouts.

Applications:-

- Sewer reticulation in new subdivisions
- Sewer or storm water pump stations
- Maintenance shafts
- Inspection Chambers
- Wet wells

Product Range:-

- 1200mm, 1350mm, 1500mm, 1800mm, 2100mm diameter

Advantages:-

- Easy Installation
- High Quality and Uniformity
- Cost Saving and Time Effective Solutions

Features:-

- Manhole ring with internal flush rebated joints
- 20mm thick High Alumina Cement Mortar (HAC)
- Two layers of Coal Tar Epoxy
- Ordinary Portland Cement (OPC)

Quality Assurance:-

- Designed and Manufactured to MS 881:Pt 1: 1991
- Approved by SPAN, SIRIM, CIDB and ISO 9001 Certified



Deep Manhole

Shallow Manhole



Chamber Cover Slab

Make Up Piece	Shaft Cover Slab	Taper	Chamber Ring	Chamber Cover Slab	Base Slab
<ul style="list-style-type: none"> • Optional component to match up the required manhole depth. • Height:- 150mm, 225mm,300mm 	<ul style="list-style-type: none"> • RC Cover Slab for Taper • Height:- 140mm • OPC/Coal Tar Epoxy Lining 	<ul style="list-style-type: none"> • Height:- 600mm - 1200mm diameter • Height :- 900mm 1350 / 1500/1800mm diameter • OPC/Coal Tar Epoxy Lining 	<ul style="list-style-type: none"> • Various Heights:- 300 / 600 / 900 / 1200 / 1500mm • OPC / HAC / Coal Tar Epoxy 	<ul style="list-style-type: none"> • RC Cover Slab on Chamber Ring • Height:-145mm — 1200mm diameter • Height :-160mm —1350 / 1500 / 1800mm 	<ul style="list-style-type: none"> • Round Shape • OPC • Thickness: 300 / 400mm

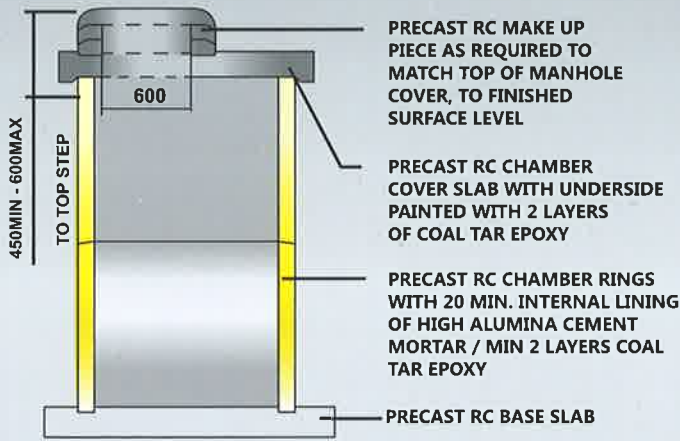
Selection Guideline for Minimum Manhole Diameters (Refer Malaysian Sewerage Industry Guidelines — Table 2.6)

*** The Company Reserves The Right To Alter Specifications Without Notice.**

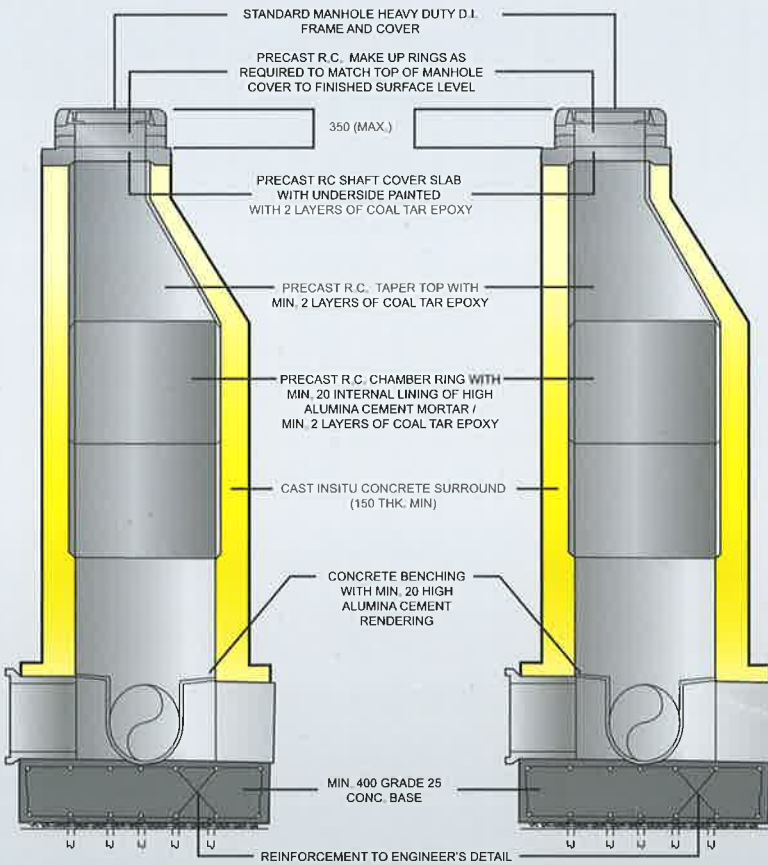
*** All Dimension Not To Scale.**

Types of Manhole

(Shallow / Deep / Caisson)

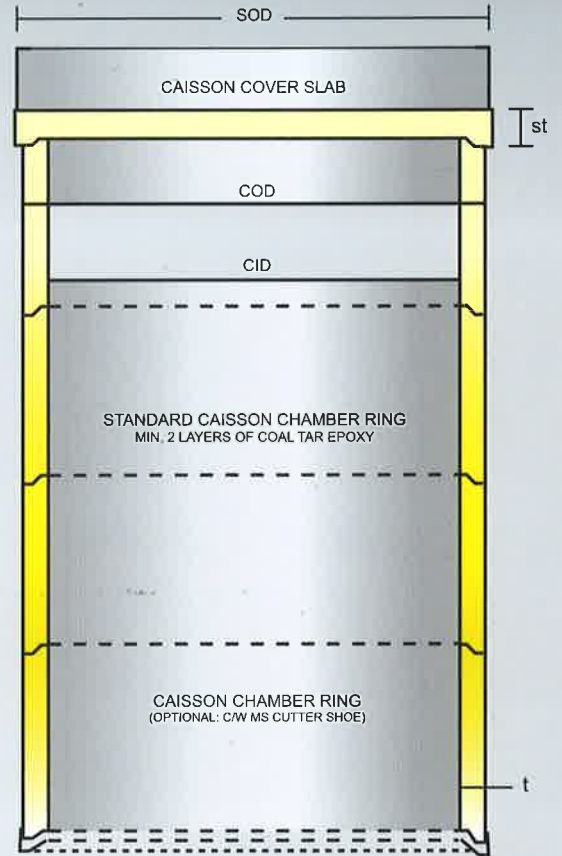


STANDARD SHALLOW PRECAST CONCRETE MANHOLE
(GROUND LEVEL TO TOP OF BENCHING < 2.5 METRES)



Standard Deep / Medium Precast Concrete Manhole
Ground Level To Invert Level of PIPE $2.5 \leq D \leq 9$ METRES

STANDARD PRECAST CAISSON MANHOLE



MILD STEEL CUTTER SHOE
(Only if required)

RC CAISSON COVER SLAB			
CID Diameter (mm)	Slab OD (mm)	st (mm)	Approx. Product Weight (ton)
2100	2540	250	2.95

RC CAISSON CHAMBER RING				
CID (mm)	COD (mm)	t (mm)	Height (m)	Approx. Product Weight (ton)
2100	2430	165	0.6	1.73
			0.9	2.59
			1.0	2.94
			1.5	4.31

MANHOLE DIAMETER (mm)	SHAFT COVER SLAB		SHAFT RING		TAPER E (mm)	CHAMBER RING		BASE SLAB H (mm)	CHAMBER COVER SLAB		E.R.P	
	A (mm)	B (mm)	C (mm)	D (mm)		F (mm)	G (mm)		I (mm)	J (mm)	K (mm)	L (mm)
1200	140	940	673	775	600	1219	1346	1650	1500	145	498	673
1350	140	1125	914	1016	900	1350	1540	1850	1690	160	595	770
1500	140	1125	914	1016	900	1500	1712	2000	1850	160	681	856
1800	140	1125	914	1016	900	1800	2054	2400	2174	160	852	1027