

Table 1) Abridged Reproduction of BS EN 752: 2008 Table NA.22 (refer to note 10).

Recommended dimensions for the construction of new manholes and manhole shafts (with personnel entry)

Type of access	Depth to pipe soffit from cover level (m)	DN largest pipe in manhole / means of descent into shaft	Min. internal dimensions ^{a)} circular diameter (Ømm)	Min. clear opening size circular diameter (Ømm)	Remarks
Manhole ^{b)}	< 1.5	≤ 150	1000	N/A	Generally in accordance with Safe work in confined spaces - Health and Safety Commission. Larger opening size is required for manholes at shallower depths to permit standing / crouching.
		225	1200		
		300	1200		
		375 - 450	1350		
		500 - 700	1500		
		750 - 900	1800		
		> 900	The larger of 1800 or (DN + 900)		
Manhole shaft ^{c)}	> 3.0	≤ 225	1200	600	Where steps or a ladder are provided the minimum size should be increased - see below
		300	1200		
		375 - 450	1350		
		500 - 700	1500		
		750 - 900	1800		
		>900	The larger of 1800 or (DN + 900)		
		Steps ^{d)}	1050	600	Min. clear space between the ladder/steps and the opposite face should be 900mm.
		Ladders ^{e)}	1200		
		Winch	900	600	Winch only - no steps or ladders (permanent or removable)

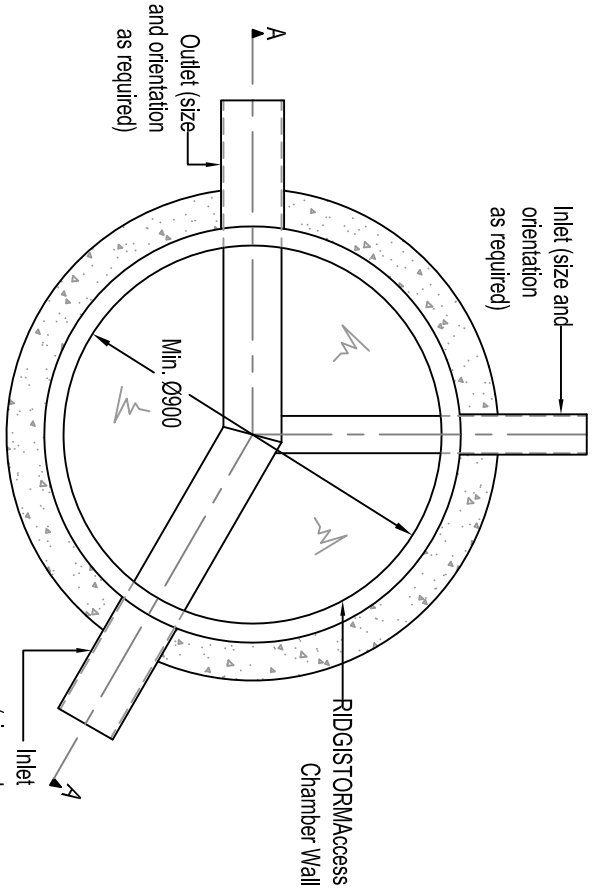
NOTES:

- a) These sizes apply to straight-through pipe; for turning chambers or chambers with several side branches or where specific maintenance requirements are necessary, e.g. disconnecting traps, the minimum sizes should be increased.
- b) Chamber with a removable cover constructed on drain or sewer to permit entry by personnel.
- c) Minimum height of a chamber in shafted manhole 2m from benching to underside of reducing slab.
- d) Step rungs to be used in chambers ≤ 3.0m.
- e) Ladders to be used in chambers 3.0m to 6.0m.

Table 2) Typical Chamber Specification

Chamber diameter (Ømm)	900	1050	1200	1500	1800	2100	2400	2700	3000
Step Rungs / Ladder	x	✓ ²⁾	✓	✓	✓	✓	✓	✓	✓
Lifting Lugs	✓	✓	✓	✓	✓	✓	✓	✓	✓
Connections (Refer to Manhole sheet)	✓	✓	✓	✓	✓	✓	✓	✓	✓
Benching and channeling	✓	✓	✓	✓	✓	✓	✓	✓	✓

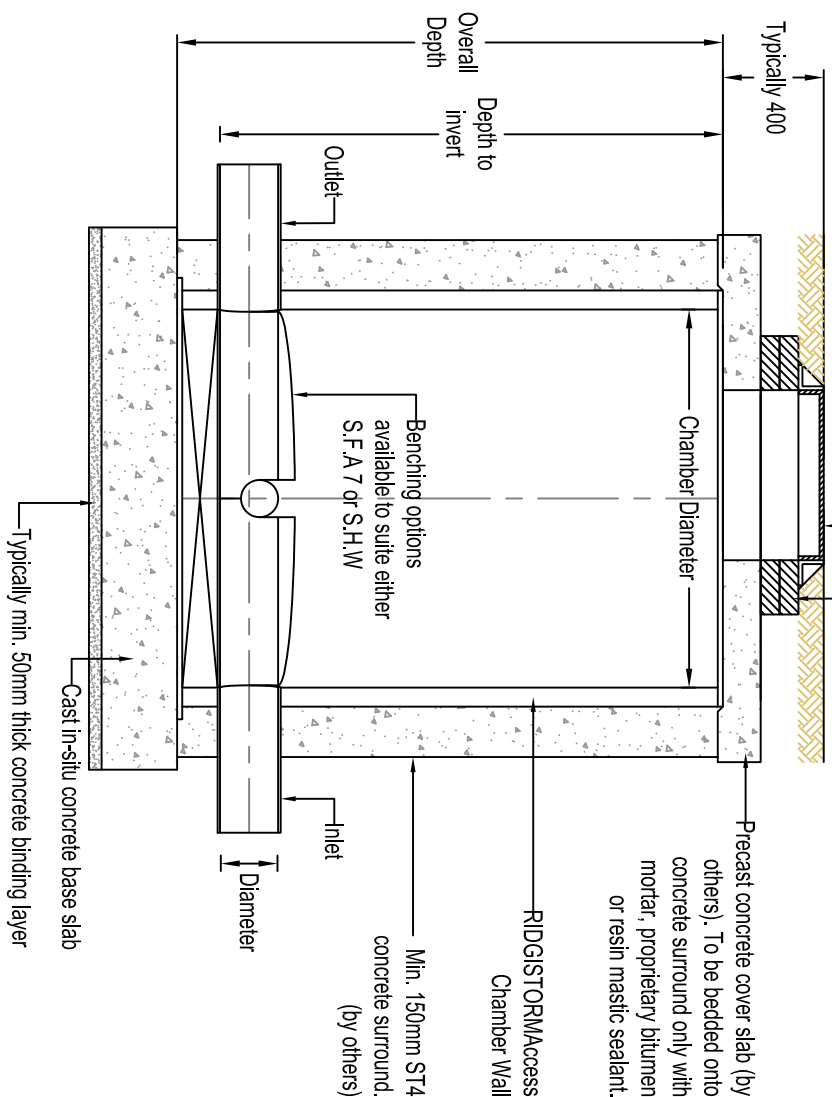
1. Typically step rungs are only used to a depth of 3m, once this depth is exceeded ladders are typically required.
2. Ladders cannot be used in chamber diameters smaller than Ø1200mm
3. Lifting points are available in standard, extended and heavy duty forms, the correct lifting points will be chosen dependant on weight and diameter.



PLAN VIEW
Scale (1:30)

Note:
All builders work and manhole covers by others

Appropriately load rated cover & frame in accordance with BS EN 124. Clear access opening above ladder to be maintained (By Others)



SECTION A-A
Scale (1:30)

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RIDGISTORMAccess

PREFABRICATED CONVENTIONAL MANHOLE

- NOTES - Step Rungs and GRP Ladders**
1. Polypipe Civils can supply man access chambers with pre-installed step rungs or ladder. Please refer to Polypipe Ridgistor-XL Technical Guide and standard detail RST_SD_CM_002.
 2. Installer to ensure access to manholes to comply with HSE Safe work in confined spaces: Confined Spaces Regulations 1997 Approved Code of Practice (ACOP) L101 (Third Edition, published 2014).

- NOTES - Lifting Points**
1. Polypipe Civils can supply access chambers with pre-installed lifting lugs: subject to technical assessment. Please refer to Polypipe Ridgistor-XL Technical Guide and standard detail RST_SD_CM_001.

- NOTES - Stub Connections and Rocker Pipes**
1. Polypipe Civils supply stub connections and rocker pipes if required. For guidance please refer to Polypipe Ridgistor-XL Technical Guide and standard detail RST_SD_FT_003.

- NOTES**
1. All dimensions in millimetres, unless otherwise stated.
 2. All dimensions are nominal and may vary within manufacturing or construction tolerances.
 3. All site temporary and enabling works by others.
 4. Ridgistor-XL units to be installed in accordance with Polypipe Civils recommendations (refer to Polypipe technical guidance for further information), giving due consideration to the requirements of the approving and adopting organisation(s) who will be taking ultimate ownership of the installation.
 5. Dimensions are based on a minimum stiffness class SN2 pipe; corresponding to the standardised pipe profiles current at the time of this drawing's issue.
 6. This drawing is intended for guidance only. Confirmation of the information contained within this document should be sought from the consulting engineers before final design or construction activities commence.
 7. Unless otherwise stated, all Ridgistor-XL is supplied to site without direct means of lifting incorporated. The lift supervisor must assess and plan the lift, in the circumstances of the lift, and provide slings and/or other controls as deemed necessary to ensure a safe lift.
 8. Minimum and maximum chamber depths applicable, dependant on project specification and fabrication restrictions.

FOR INFORMATION

STATUS	DATE	DRAWN BY
DATE	16/03/16	JL
ORIGINAL SIZE	A3	SCALE
DRAWING NO.	RST_SD_AC_001	AS SHOWN
REV.		