

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)

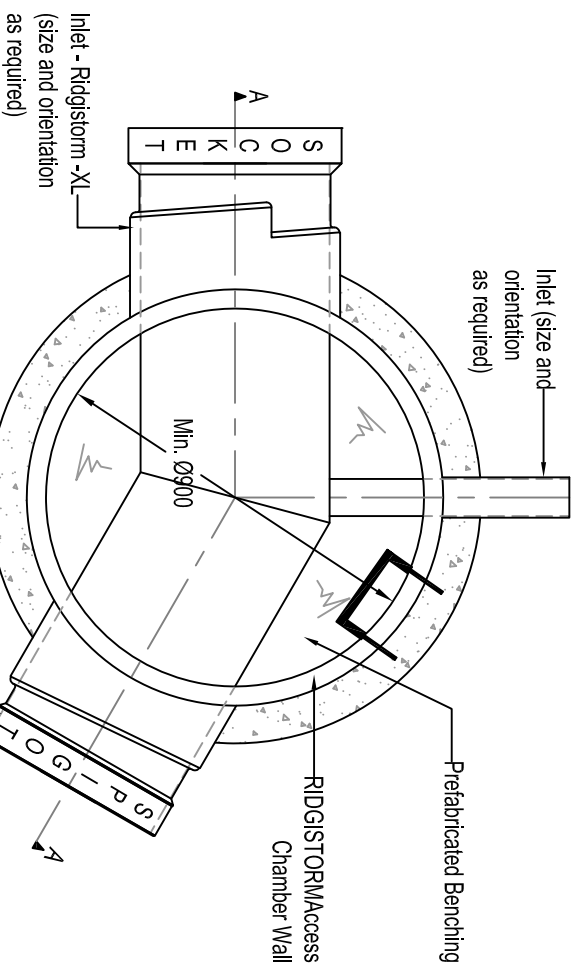
Type of access	Depth to pipe soffit from cover level (m)	DN largest pipe in manhole / means of descent into shaft	Min. internal dimensions ^{a)} circular diameter (Ømm)	Min. clear opening size circular diameter (Ømm)	Remarks
Manhole ^{b)}	< 1.5	≤ 150 225 300 375 - 450 500 - 700 750 - 900	1000 1200 1200 1350 1500 1800	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.
	≥ 1.5	> 900	The larger of 1800 or (DN + 900)	600	
Manhole shaft ^{c)}	> 3.0	Steps ^{d)} Ladders ^{e)} Winch	1050 1200 900	600	Min. clear space between the ladder/steps and the opposite face should be 900mm. 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	*	✓ ²⁾	✓	✓	✓	✓	✓	✓	✓
Lifting Lugs	✓	✓	✓	✓	✓	✓	✓	✓	✓
Connections (Refer to Manhole sheet)	Connections available from 100mm - 3000mm - Dependant on Technical Approval								
Benching and channelling	✓	✓	✓	✓	✓	✓	✓	✓	✓

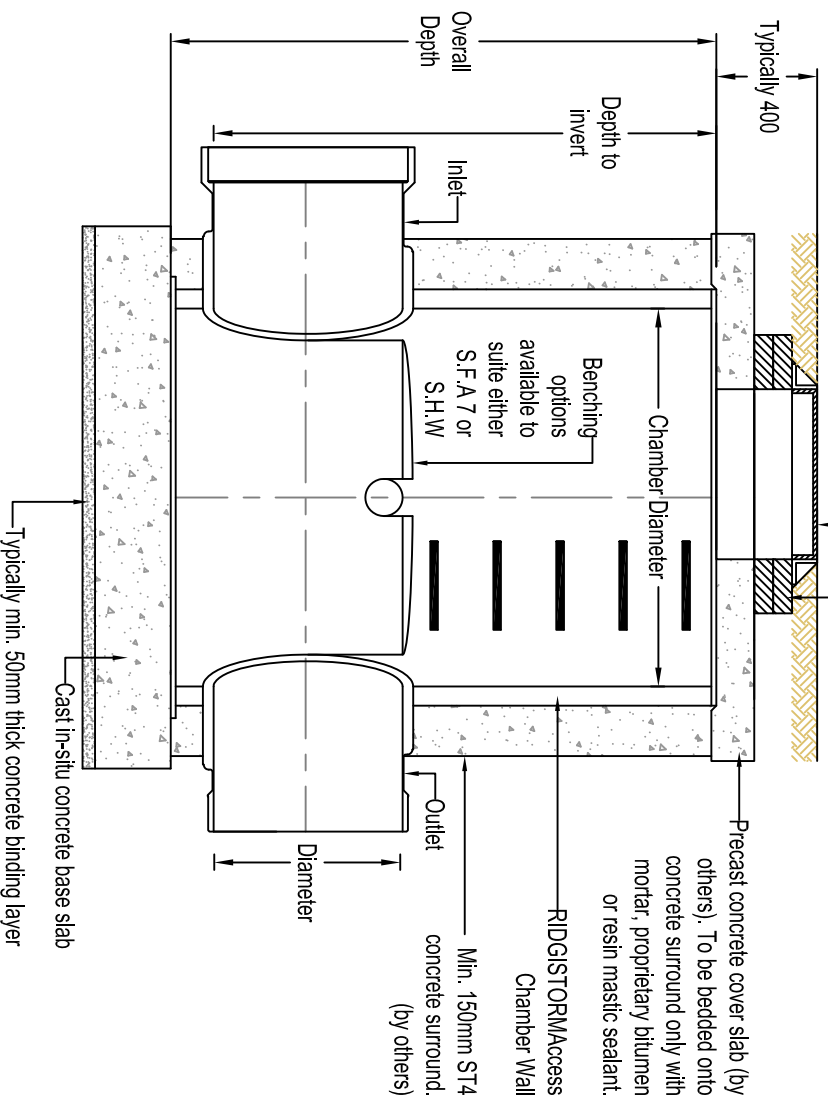
1. Typically step rungs are only used to a depth of 3m, once this depth is exceeded ladders are typically required.
2. Ladders cannot be used in chamber diameters smaller than Ø1200mm
3. Lifting points are available in standard, extended and heavy duty forms, the correct lifting points will be chosen 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)
Class B engineering brick (min 2 - max 4 courses) or precast concrete cover frame seating rings (by others).



SECTION A-A
Scale (1:30)

The information in this document is of an illustrative nature and is supplied by Polypipe Civils without charge. This document does not form the whole or any part of a contract or intended contract with the user. The information within this document should not be solely relied upon to determine the suitability or installation requirements of our products for a proposed application and expected site conditions; expert advice should be sought in this respect. Final determination of the suitability of any information or material for the use contemplated and the manner of use is the sole responsibility of the user and the user must assume all risk and liability in connection therewith. Further information with regard to liabilities may be found at www.polypipe.com/disclaimer.



Polypipe Civils

Charmwood Business Park,
North Road, Loughborough,
Leicestershire, LE11 1LE

Tel: 01509 615100
Fax: 01509 615215
www.polypipe.com/civils
www.polypipe.com/wms

PROJECT

RIDGISTORMAccess

TITLE

PREFABRICATED RIDGISTORM-XL MANHOLE

STATUS
FOR INFORMATION

DATE
16/03/16

DRAWN BY
JL

ORIGINAL SIZE
A3

SCALE
AS SHOWN

DRAWING NO.
RST_SD_AC_002

NOTES

- All dimensions in millimetres, unless otherwise stated.
- All dimensions are nominal and may vary within manufacturing or construction tolerances.
- All site temporary and enabling works by others.
- RidgistorM-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.
- 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.
- 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.
- Unless otherwise stated, all RidgistorM-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.
- Minimum and maximum chamber depths applicable, dependant on project specification and fabrication restrictions.

NOTES - Step Rungs and GRP Ladders

- Polypipe Civils can supply man access chambers with pre-installed step rungs or ladder. Please refer to Polypipe RidgistorM-XL Technical Guide and standard detail RST_SD_CM_002.
- 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

- Polypipe Civils can supply access chambers with pre-installed lifting lugs; subject to technical assessment. Please refer to Polypipe RidgistorM-XL Technical Guide and standard detail RST_SD_CM_001.

NOTES - Stub Connections and Rocker Pipes

- Polypipe Civils supply stub connections and rocker pipes if required. For guidance please refer to Polypipe RidgistorM-XL Technical Guide and standard detail RST_SD_FT_003.