

Diagram illustrating the construction details of a manhole assembly, showing the connection between the main pipe and the manhole structure.

Labels and Specifications:

- MORTAR BEDDING AND HUNCHING TO COVER AND FRAME TO CLAUSE E6.7
- SURFACE COURSE
- BINDER COURSE
- BASE COURSE
- MINIMUM 50mm GAP BETWEEN SLAB AND CHAMBER UNIT
- PRECAST CONCRETE SLAB OR IN-SITU CONCRETE SLAB TO SUPPORT COVER AND FRAME
- FLEXIBLE SEAL (SEAL NEEDS TO BE WATERTIGHT AND PROVIDE A SUITABLE SPECIFICATION FOR THE DETAILS AND MATERIAL)
- TEMPORARILY CAP MANHOLE SHAFT DURING CONSTRUCTION
- JOINT BETWEEN BASE AND SHAFT AND SHAFT COMPONENTS TO BE FITTED WITH WATERTIGHT SEALS
- JOINT TO BE AS CLOSE AS POSSIBLE TO FACE OF CHAMBER TO PERMIT SATISFACTORY JOINT AND SUBSEQUENT MOVEMENT
- COVER COMPLYING WITH CLAUSE E.2.32
- IF DISTANCE FROM COVER LEVEL TO SOFFIT OF PIPE IS >1m, ACCESS OPENING SHALL BE RESTRICTED TO 350mm DIAMETER OR 300mmx300mm
- CLASS B ENGINEERING BRICKWORK OR PRECAST CONCRETE COVER FRAME SEATING RINGS
- GRANULAR TYPE 1 SUB-BASE MATERIALS TO CLAUSE E2.43 (THICKNESS VARIES)
- PRECAST CONCRETE SLAB OR IN-SITU CONCRETE SLAB TO SUPPORT COVER AND FRAME
- MINIMUM INTERNAL DIMENSIONS 450 mm DIAMETER OR 450 mm x 450 mm
- MINIMUM 150mm THICK GRANULAR TYPE 1 SUB-BASE MATERIAL TO CLAUSE E2.43 OR GEN3 IN-SITU CONCRETE SURROUND COMPLYING WITH E4.1 AND BRE SPECIAL DIGEST 1 IN ACCORDANCE WITH THE MANUFACTURE'S INSTRUCTION
- BASE UNIT TO HAVE ALL CONNECTIONS WITH SOFFIT LEVELS SET NO LOWER THAN THAT OF THE MAIN PIPE
- GRANULAR BEDDING MATERIAL
- INVERT OF CONNECTING PIPE AT LEAST 50mm ABOVE THAT OF THE MAIN PIPE

MORTAR BEDDING AND HUNCHING TO COVER AND FRAME TO CLAUSE E6.7

150mm DEEP CONCRETE COLLAR

TEMPORARILY CAP SHAFT DURING CONSTRUCTION

FLEXIBLE SEAL

COMPACTED GRANULAR BED (TYPE 20/5 OR SINGLE SIZE STONE MAX 20mm)

IF DISTANCE FROM COVER LEVEL TO SOFFIT OF PIPE IS > 1m, ACCESS OPENING SHALL BE RESTRICTED TO 350mm DIAMETER OR 300mm x 300mm

MINIMUM INTERNAL DIMENSIONS
450mm DIAMETER OR
450mm x 450mm

PERMEABLE BLOCK PAVING TO LANDSCAPE ARCHITECTS DETAILS

50mm DEPTH LAYING COURSE.
6mm AGGREGATE TO BS7533-13

GEOTEXTILE MEMBRANE

MIN 150mm THICK CLEAN 4/20mm
COURSE GRADED AGGREGATE
1mm THICK IMPERMEABLE MEMBRANE

150φ PERFORATED PIPE WRAPPED
IN GEOTEXTILE MEMBRANE

MIN. CONCRETE ENCASUREMENT		
PIPE Ø (C) (mm)	D1 (mm)	D2 (mm)
100-600	150	400 - 900
675	150	975
750	150	1100
825	150	1125
900	150	1200
975	150	1275
1050	150	1350
1200	170	1540
1350	180	1710
1500	200	1900
1650	220	2090

AIR ADMITTANCE VALVE WHERE AAV SHOWN ON PLAN
OPEN VENT WHERE SVP SHOWN ON PLAN

I.L. OF LOWEST CONNECTION

450MM MINIMUM UP TO 3 STOREYS
750MM FOR 4 STOREYS AND OVER

F.F.L.

SEE DETAILS FOR PIPE BEDDING REQUIREMENTS

TOP 1/3RD OF FND

GROUND LEVEL

REFER TO ARCHITECTS DETAILS FOR FLOOR CONSTRUCTION

JOINT TO BE A MINIMUM OF 150MM FROM FACE OF WALL TO ENSURE FLEXIBILITY

600 MAX

150 MIN

600 MAX

ROCKER PIPE

FLEXIBLE JOINT

TRENCH FILL FOUNDATIONS

MASK OPENING WITH RIGID SHEET MATERIAL TO PREVENT ENTRY OF FILL OR VERMIN

PLASTIC SLEEVE MIN 25MM CLEARANCE AROUND PIPE
MAX ALLOWABLE SLEEVE SIZE IS 300MMØ

STANDARD NOTES

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECT'S AND ENGINEER'S DRAWINGS AND THE SPECIFICATIONS.

2. THIS DRAWING SHOULD NOT BE SCALED.

3. ALL DIMENSIONS ARE TO BE VERIFIED BY THE CONTRACTOR ON SITE.

4. ALL DISCREPANCIES SHOULD BE REPORTED TO C.A./E.A. PRIOR TO THE COMMENCEMENT OF WORKS.

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25.09.23

R02

PERMEABLE PAVING DETAIL AMENDED

TC

CK

11.08.23

P01

SUBMITTED FOR INFORMATION

ZH

CK

DATE

REV

DESCRIPTION

DRAWN

CHKD

MAINCHESTER

LONDON

LEEDS

GLASGOW

Carver's Warehouse, 77 Dale Street, Manchester, M1 2HG. Tel: 0161 228 6757
Reeds Wharf, 33 Mill Street, London SE1 2AX. Tel: 020 7523 2977
1 Saw Mill Street, Water Lane, Leeds, LS1 3 SW6. Tel: 0113 2025 130
35 Virginia Street, Glasgow, G1 1TN. Tel: 0141 370 1829

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PROJECT

ECHO STREET

TITLE

TYPICAL DRAINAGE DETAILS SHEET 1

DRAWING STATUS

INFORMATION

STATUS CODE

-

CE PROJECT No.

2925

SCALE @ A1

1:10

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