

DEPTH FROM COVER LEVEL TO SOFFIT OF PIPE UP TO 3m
FLEXIBLE MATERIAL CONSTRUCTION FOR USE IN AREAS SUBJECT TO VEHICLE LOADING

TECHNICAL DRAWING: MANHOLE ACCESS CHAMBER DETAILS

Top Section Details:

- MORTAR BEDDING AND HAUNCHING TO COVER AND FRAME TO CLAUSE E6.7
- REFER TO ROAD CONSTRUCTION DETAILS
- MINIMUM 50mm GAP BETWEEN SLAB AND PLASTIC CHAMBER UNIT
- MINIMUM 150mm 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 SHAFT DURING CONSTRUCTION
- IF DISTANCE FROM COVER LEVEL TO SOFFIT OF PIPE IS $>1m$, ACCESS OPENING SHALL BE RESTRICTED TO 350mm DIAMETER OR 300mm x 300mm
- CLASS B ENGINEERING BRICKWORK OR PRECAST CONCRETE COVER FRAME SEATING RINGS
- GRANULAR TYPE 1 SUB-BASE MATERIAL TO CLAUSE E2.43 (THICKNESS VARIES) REFER TO ROAD CONSTRUCTION DETAILS
- Dimensions: 300mm MIN, 150mm MIN

Bottom Section Details:

- SELECTED AS DUG MATERIAL
- MINIMUM INTERNAL DIMENSIONS 450mm DIAMETER OR 450mm x 450mm
- 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 MANUFACTURER'S INSTRUCTION
- JOINTS BETWEEN BASE AND SHAFT AND BETWEEN 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
- BASE UNIT TO HAVE ALL CONNECTIONS WITH SOFFIT LEVELS SET NO LOWER THAN THAT OF THE MAIN PIPE
- GRANULAR BEDDING MATERIAL REFER TO PIPE BEDDING DETAILS
- Dimensions: 150mm MIN, 150mm MIN

NOTE: WHERE THE ACCESS CHAMBER IS IN THE

INVERT OF CONNECTING PIPE AT LEAST 50mm ABOVE THAT OF THE MAIN PIPE

TYPE D - TYPICAL INSPECTION CHAMBER DETAIL
FIGURE B 19 SEWERAGE SECTOR GUIDANCE APPENDIX C - 'THE CODE'
FLEXIBLE MATERIAL CONSTRUCTION ALTERNATIVE TOP DETAILS FOR USE IN AREAS OF LIGHT
VEHICLE LOADING OR LANDSCAPED AREAS

The image contains two technical cross-section drawings of manhole construction, each with a set of labels and dimensions.

Top Drawing: SITED IN DOMESTIC DRIVEWAYS/FOOTWAYS

- Labels (Left):**
 - MORTAR BEDDING AND HAUNCHING TO COVER AND FRAME TO CLAUSE E8.7
 - REFER TO ROAD CONSTRUCTION DETAILS
 - SELECTED AS DUG MATERIAL
 - FLEXIBLE SEAL
 - TEMPORARILY CAP SHAFT DURING CONSTRUCTION
 - 150mm COMPACTED GRANULAR SURROUND (TYPE 20/5 OR SINGLE SIZE STONE MAX 20mm)
- Labels (Right):**
 - COVER COMPLYING WITH CLAUSE E2.32
 - 150mm DEEP GEN3 CONCRETE COLLAR
 - 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
- Internal Detail:** A small rectangular detail labeled "250mm MIN" is shown within the concrete collar.

Bottom Drawing: SITED IN DOMESTIC GARDENS

- Labels (Left):**
 - MORTAR BEDDING AND HAUNCHING TO COVER AND FRAME TO CLAUSE E8.7
 - SELECTED AS DUG MATERIAL
 - FLEXIBLE SEAL
 - TEMPORARILY CAP SHAFT DURING CONSTRUCTION
 - 150mm COMPACTED GRANULAR SURROUND (TYPE 20/5 OR SINGLE SIZE STONE MAX 20mm)
- Labels (Right):**
 - COVER COMPLYING WITH CLAUSE E2.32
 - TOP SOIL TO LANDSCAPE ARCHITECTS SPECIFICATIONS
 - 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

ROODING ACCESS
POINT LOCATED 1M
ABOVE GROUND LEVEL

RAIN WATER DOWN PIPE
CONNECTION TO ARCHITECTS
SPECIFICATION

PROPRIETARY CONNECTION
BETWEEN DOWNPIPE AND
UNDER GROUND DRAINAGE

EASY/REST BEND WITH MIN
150MM CONCRETE BED AND
SURROUND GRADE ST4 TO BS
5328 : PART 2

SEALED RAIN WATER DOWNPIPE

GROUND LEVEL

∇

A

WHERE A IS LESS THAN 1.0m FILL TRENCH WITH CONCRETE TO THIS LEVEL

GROUND LEVEL

∇

A

1.5m

WHERE A IS 1.0m OR MORE FILL TRENCH WITH CONCRETE TO THIS LEVEL

A LESS

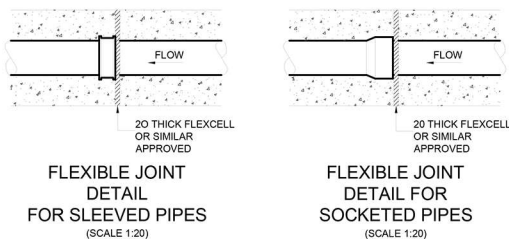


Diagram illustrating the cross-section of a D400 MANHOLE COVER TO SUIT 675mm CLEAR OPENING, showing the structure and components:

- MORTAR LAUNCHING TO MH COVER AND FRAME
- ROAD CONSTRUCTION
- TWIN WALLED 900 mm Ø MANHOLE WITH FILTER BARRIER
- PIPE STOPPER
- TUMBLING BAY TO BE A 45° OR 55° OBlique JUNCTION (ACTUAL DETAILS WILL BE DEPENDENT ON THE PIPE USED)
- IN-SITU CONCRETE TO BE GEN 3 (DESIGNED TO BRE SPECIAL DIGEST 1 CONCRETE IN AGGRESSIVE GROUND)
- 45° SHORT BEND 225mm MINIMUM DIAMETER
- 200 mm SUMP FOR SILT COLLECTION
- D400 MANHOLE COVER TO SUIT 675mm CLEAR OPENING
- 65mm DEEP PRE CAST CONCRETE ADJUSTING UNIT
- INSITU CONCRETE PLINTH MIN 150mm THICK
- 150mm IN-SITU CONCRETE SURROUND TO BE GEN 3 (DESIGNED TO BRE SPECIAL DIGEST 1 CONCRETE IN AGGRESSIVE GROUND)
- ESS FILTER BARRIER INSERTED USING SIDE RAILS (ALSO ACTING AS OVERFLOW WEIR AT MAXIMUM FLOW CONDITIONS)
- OVERFLOW WEIR AT MAXIMUM FLOW CONDITION
- CONNECTED TO ESS TANK
- 150mm CONCRETE BASE

DOOR AND FLOOR
FINISHED TO
ARCHITECT'S DETAILS
AND SPECIFICATION

FOUNDATIONS TO
STRUCTURAL
ENGINEERS DETAILS
AND SPECIFICATION

ACC RAINDRAIN BRICKSLOT B125
INSTALLED TO MANUFACTURES
DETAILS AND TO BE CONNECTED
TO THE SURFACE WATER
DRAINAGE SYSTEM USING ACC
BRICKSLOT B125 ACCESS CHANNELS
AND OUTLET END CAPS

FINISHES VARY SEE PLAN

**ACO MULTIDRAIN
150Ø D400**

GRATING
3mm BELOW
SURF

CONCRETE
HAIR CRACKS

200 mm

200 mm

TANK PROTECTION WHICH IS REQUIRED TO BE INSTALLED TO MANUFACTURERS DETAILS AND SPECIFICATION
1. PERMEABLE FABRICATED GEOMEMBRANE LINER

VENT PIPE INSTALLED TO MANUFACTURERS DETAILS AND SPECIFICATION (LOCATION TO BE AGREED WITH ARCHITECT)

SURFACE MAKE UP OR BACKFILL AS REQUIRED

100mm COARSE SAND PROTECTION LAYER

INLET PIPE INSTALLED TO MANUFACTURERS DETAILS AND SPECIFICATION

BACKFILL AROUND THE SIDES OF THE TANK WITH 100mm THICK COARSE SAND OR CLASS 6H SELECTED GRANULAR MATERIAL

100mm COMPACTED SAND SUB-BASE (FLAT WITH NO UNDULATIONS)

GROUND LEVEL

TOP OF BOX LEVEL

BOTTOM OF BOX LEVEL

650mm MINIMUM COVER TO THE TOP OF TANK OR TO SUIT MANUFACTURER DETAILS AND SPECIFICATION

BACKFILL AROUND EXCAVATION USING TYPE 3 SUB-BASE OR SELECTED GRANULAR MATERIAL, AND COMPACT IN LAYERS OF NOT LESS THAN 150mm

FIRST 500mm OF BACKFILL SHOULD BE COMPACTED BY HAND

IN POOR GROUND CONDITIONS ANY SOFT SPOTS FOUND AT BASE LEVEL SHALL BE REMOVED AND REPLACED WITH SUITABLE MATERIAL. SEEK ADVICE FROM THE ENGINEER

IMPORTANT NOTE: CAUTION
ALL INFORMATION SHOWN ON THIS DRAWING IS FOR INFORMATION ONLY. IT IS THE RESPONSIBILITY OF THE SERVICES/STATUTORY UNDERTAKERS' PLANNING DEPARTMENT TO VERIFY THE INFORMATION SHOWN ON THIS DRAWING.

P01 25/01/24		FIRST ISSUE		10	
REV	DATE	DESCRIPTION			ISS
CLIENT	**				
ARCHITECT	MAW Ltd				
PROJECT TITLE	LAUREN HOUSE 6 BEECHPARK AVENUE MANCHESTER, M22 4BL				
DATE OF FIRST ISSUE	SCALE @ 1/4"		SCALE @ 1/3"		
JAN 2024	1:20		1:40		
PROJECT TECHNOLOGICAL / ENGINEER	PROJECT LEAD / ENGINEER				
J. MARSH	S. BAKER				
DRAWING TITLE					
PROPOSED BELOW GROUND DRAINAGE DETAILS					
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DRAWING NUMBER					
P209S1-KR-XX-XX-DR-C-0501					
PROJECT STATUS		SUITABLE FOR CO-ORDINATION			REVISION
S1					P01