

NOTES FOR STANDARD DRAWINGS W2-2-01A, W2-2-02 & W2-2-11

1. ACCESS CHAMBERS LOCATED IN ROAD RESERVES INCLUDING THE VERGE, NATURE STRIP OR FOOTPATH AND WALKWAYS OR MALLS TO BE FINISHED FLUSH WITH SURROUNDING SURFACE AND BE FITTED WITH A CLASS D COVER (HEAVY DUTY). ACCESS CHAMBERS IN OTHER AREAS TO BE FINISHED 200mm MAXIMUM (UNLESS PRIOR APPROVAL) ABOVE THE FINISHED SURFACE LEVEL IN ANY DIRECTION AND BE FITTED WITH A CLASS B COVER (LIGHT DUTY) OR CLASS D COVER (HEAVY DUTY).
2. ACCESS COVERS AND FRAMES ARE MATCHED PAIRS AND MUST BE INSTALLED AS A UNIT.
3. THE COMBINED CHAMBER-COVER DESIGNATION ON PROJECT DRAWINGS SHALL BE IN THE FORMAT 'TYPE C (DIA)/(CLASS)'. ACCESS COVER AND CHAMBER DESIGNATIONS ON PROJECT DRAWINGS ARE TO BE SHOWN AS FOLLOW:

TABLE 1

| COVER TYPE | COVER DESIGNATION |
|------------------------------------|-------------------|
| RECTANGULAR - CLASS D (HEAVY DUTY) | TYPE RD |
| RECTANGULAR - CLASS B (LIGHT DUTY) | TYPE RB |
| CIRCULAR - CLASS D (HEAVY DUTY) | TYPE CD |
| CIRCULAR - CLASS B (LIGHT DUTY) | TYPE CB |

4. DIAMETER OF CIRCULAR CHAMBERS SHALL BE BASED ON INTERNAL DIAMETER, EG. INTERNAL DIAMETER OF 1140mm WOULD BE DENOTED (1140).
5. ACCESS COVERS AND FRAMES ARE TO BE:
 - RECTANGULAR COVERS - 900 x 600 NOMINAL CLEAR OPENING.
 - CIRCULAR COVERS - 900 DIAMETER NOMINAL CLEAR OPENING.
7. FOR CAST IN-SITU CHAMBERS, WHERE PERMITTED BY PWC AND SUBJECT TO CERTIFICATION BY A STRUCTURAL ENGINEER, CONCRETE FOR ACCESS CHAMBERS SHALL BE MINIMUM CLASS N40 CONCRETE (40 MPa, 20mm MAX. AGGREGATE), SUPPLIED AND PLACED IN ACCORDANCE WITH AS 3600. CEMENT TYPE SHALL BE IN ACCORDANCE WITH AS 3972.
8. UNLESS OTHERWISE SPECIFIED OR APPROVED BY PWC, ALL CHAMBERS ON SEWERS OF DN375 AND LARGER AND FOR THE DISCHARGE CHAMBER AND NEXT DOWNSTREAM CHAMBER FROM RISING MAINS AND STEP SYSTEM SEWERS, THE FULL INTERIOR OF THE CHAMBER SHALL BE COATED OR LINED TO PWC APPROVAL.

9. MINIMUM TYPE 1 DROP THROUGH ACCESS CHAMBERS.

TABLE 2

| SEWER SIZE | ANGLE THROUGH CHAMBER | Ⓐ TOTAL DROP (mm) PRECAST BASE |
|-----------------|-----------------------|--------------------------------|
| DN150 AND DN225 | 0° - 60° | 30 |
| | 60° - 90° | 40 |
| DN300 | 0° - 90° | Ⓑ 20 |

- Ⓐ TOTAL DROP WITHIN CHAMBER AND ASSOCIATED WITH SEWER DESIGN FROM OUTLET OF UPSTREAM ACCESS CHAMBER TO INLET OF DOWN STREAM ACCESS CHAMBER.
- Ⓑ ANGULAR PIPELINE DEFLECTION OF GREATER THAN 90° IS NOT RECOMMENDED AND SHALL ONLY BE ALLOWED WITH PWC APPROVAL. WHERE APPROVED INSIDE WALL RADIUS OF BENCHING SHALL BE NOT LESS THAN 300mm.
10. ALL SEWER PIPE CONNECTIONS (INLET AND OUTLET) TO AN ACCESS CHAMBER STRUCTURE SHALL HAVE 2 FLEXIBLE (ROCKER) PIPE JOINTS ADJACENT TO THE STRUCTURE. THE FIRST JOINT SHALL NOT EXCEED THE MAXIMUM LENGTH L1 IN THE TABLE BELOW FROM THE EXTERNAL WALL OF THE STRUCTURE. THE SECOND JOINT SHALL NOT EXCEED THE MAXIMUM LENGTH L2 FROM THE FIRST JOINT AS SPECIFIED BELOW:

TABLE 3

| PIPE DIAMETER, DIA | MAXIMUM LENGTH, L1 (mm) | MAXIMUM LENGTH, L2 (mm) |
|--------------------|-------------------------|-------------------------|
| DN150 | 300 | 600 |
| DN225 - DN300 | 350 | 600 |
| DN375 - DN450 | 1.5 x DIA | 600 |
| DN525 - DN1050 | 1.5 x DIA | 1000 |

11. APPROVED PRECAST ACCESS CHAMBERS SHALL BE STRUCTURALLY CERTIFIED AND COMPONENTS SHALL BE IN ACCORDANCE WITH AS 3735 AND THESE STANDARD DRAWINGS.
12. ALL SURFACES IN CONTACT WITH POURED CONCRETE AND EPOXY MORTAR SHALL FIRST BE BRUSHED/SCABBLED AND COATED WITH AN APPROVED BONDING AGENT. EPOXY MORTAR TYPE SHALL BE APPROVED BY PWC.

TABLE 4

| MINIMUM INTERNAL DIAMETER OF CHAMBER (mm) | MAXIMUM HORIZONTAL DEFLECTION AT CHAMBER | |
|---|--|---------|
| | ≤ 90° | ≤ 45° |
| 1100 | ≤ DN300 | |
| 1200 | ≤ DN375 | |
| 1500 | ≤ DN450 | ≤ DN600 |
| 1800 | - | ≤ DN750 |

13. FOR SEWERS LARGER THAN DN750, REFER TO PWC.
14. AFTER INSTALLATION, COVER LIFT POINTS ON PRECAST COMPONENTS WITH EPOXY MORTAR.