ELEVATION
RISER FOR DN 100
SINGLE CONNECTION
(COMMONLY KNOWN AS K5)

DROP DIMENSIONS

<table>
<thead>
<tr>
<th>DN</th>
<th>MIN 'A'</th>
<th>MIN 'B'</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>600</td>
<td>450</td>
</tr>
<tr>
<td>150</td>
<td>600</td>
<td>450</td>
</tr>
</tbody>
</table>

REVISION PANEL

REV DATE DIN DETAILS
3 18/06/19 RP  REINFORCED FITTINGS ADDED WHERE INDICATED
3 08/06/19 RP  OLD DRAWING NOT ADDED TO CONNECTION TYPE
1 31/03/16 MS  2016 STANDARDS REVIEW

DESIGN PANEL

CURRENT REV 26/03/18
APPROVED T. GALEK
AUTHORISED 31/03/18
SIGNATURE: T. GALEK
DRAWN: 25/06/18
REVIEWED: 26/03/18
ORIGINAL SIGNED: TG

SA WATER STANDARD DRAWINGS
SEWER CONSTRUCTION MANUAL
PROPERTY CONNECTION
WITH VERTICAL RISER

NOTES:
1. REFER 4005-20002-01 TO 4005-20002-03 FOR GENERAL NOTES.
2. REFER 4005-20006-03 FOR TYPICAL SEWER CONNECTION DETAILS.
3. REFER SECTION 6 FOR MORE ALTERNATIVES TO THE STANDARD CONNECTION ASSEMBLY.
5. ALL DIMENSIONS IN MILLIMETRES.
OPTION 1
IP OUTSIDE PROPERTY BOUNDARY

OPTION 2
IP WITHIN ALLOTMENT BOUNDARY

NOTES:
1. REFER 4005-20002-01 TO 4005-20002-03 FOR GENERAL NOTES.
2. REFER 4005-20006-03 FOR TYPICAL SEWER CONNECTION DETAILS.
3. SHOULD SITE CONDITIONS REQUIRE MODIFICATION TO THE STANDARD ARRANGEMENTS DISPLAYED, APPROVAL SHALL BE SOUGHT FROM THE SA WATER REPRESENTATIVE PRIOR TO ANY WORK BEING UNDERTAKEN.
4. ALL FITTINGS IDENTIFIED BY SHADING SHALL BE A "REINFORCED FITTING".
5. ALL DIMENSIONS ARE IN METRES.
SA WATER STANDARD DRAWINGS
SEWER CONSTRUCTION MANUAL
PROPERTY CONNECTIONS INTO MAINTENANCE HOLE OPTIONS

NOTES:
1. REFER 4005-20002-01 TO 4005-20002-03 FOR GENERAL NOTES.
2. CONNECTIONS INTO A MAINTENANCE HOLE CAN BE AHEAD, LEFT OR RIGHT SIDE. THE PIPE ANGLE SHALL BE WITHIN THE PERMISSIBLE RANGE AS SHOWN.
3. REFER 4005-20005-03 FOR MAINTENANCE HOLE TYPICAL PRECAST STRUCTURE ASSEMBLY DETAILS AND CORING / REMEDIAION OF THE PIPE THROUGH THE WALL.
4. CONNECTION CHANNELS AND BENCHING SHALL BE SIMILARLY CONSTRUCTED TO SEWER CHANNEL AND BENCHING REFER 4005-20005-06.
5. FOR JUMP UP CONNECTIONS, THE INTERNAL JUMP UP IS THE PREFERRED OPTION.
6. FOR USE OF THE EXTERNAL OPTION APPROVAL FROM THE SA WATER REPRESENTATIVE SHALL BE SOUGHT.
7. FOR STEEP SEWER GRADIENTS, USE ADDITIONAL BEND(S) TO ENSURE JUMP UP REMAINS VERTICAL.
8. MAXIMUM OF 2 INTERNAL JUMP UPS PER MAINTENANCE HOLE SHALL BE PERMITTED.
9. ALL FITTINGS IDENTIFIED BY SHADING SHALL BE A CONFIRMED FITTING REFER 2 ROOO 3111

ALL DIMENSIONS ARE IN MILLIMETRES.

REV DATE DGN DETAILS
1 16/05/19 PH ENHANCED FITTINGS ADDED WHERE INDICATED
tg
2 03/06/19 RLP CONNECTION AT INVERT AND RANGE ADDED
tg
3 31/03/18 MS 2016 STANDARDS REVIEW
tg

DESIGNED: 05/05/18 AUTHOURISATION: T. GALE
SIGNATURE: T. GALE

DRN: 25/05/15 DRAWN: T. GALE
SIGNATURE: T. GALE

ORIGINAL SIGNED: 25/05/18 REVIEWED: TG
SA WATER STANDARD DRAWINGS
SEWER CONSTRUCTION MANUAL
MAINTENANCE SHAFT
WITH PROPERTY CONNECTION

NOTES:

1. REFER 4005-20002-01 TO 4005-20002-03 FOR GENERAL NOTES.
2. MAXIMUM 2 PROPERTY CONNECTIONS PERMITTED INTO ONE MAINTENANCE SHAFT, INCLUDING 'DROP JUNCTION' OPTION. DISPENSATION FROM THIS REQUIREMENT WILL REQUIRE APPROVAL OF THE SA WATER REPRESENTATIVE AND WOULD BE BASED UPON THE JOB SPECIFIC CIRCUMSTANCES, E.G. SEWER FLOWS, ETC.
3. ADJUST MS TO PIPE GRADE BY TILTING CHAMBER. MAX DEVIATION FROM VERTICAL OF THE RISER TO BE 1% OR A MAXIMUM OF 300 AT SURFACE. USE THE 'KICKER BEND' (NOT SHOWN), IF REQUIRED TO ADJUST RISER TO VERTICAL.
4. REFER 4005-20005-10 & 4005-20005-11 FOR MAINTENANCE SHAFT DETAILS.
5. LID & COVER TO BE STREET BOX REFER TS 0502 FOR MANUFACTURER DETAILS. INSTALLATION SHALL BE AS PER 4005-20005-04.
6. MANUFACTURERS OF MAINTENANCE SHAPS CONFIRM A MAXIMUM DEPTH TO INVERT VARYING FROM 3000 TO 5000. REFER TS 0502, 3.3.2 FOR MANUFACTURER LIMITATIONS.
7. ALL FITTINGS IDENTIFIED BY ISOGRADE SHALL BE ‘DROP JUNCTION’ FITTING REFER TS 0502, 3.3.2.
8. IF ANY RIDGE IS UTILISED THIS DIMENSION IS INCREASED. THE DESIGNER SHALL REFER MANUFACTURER PRODUCT INFORMATION TO DETERMINE THE REQUIRED INVERT OF THE CONNECTION.
9. ALL DIMENSIONS IN MILLIMETRES.

REV
15/11/19
08/05/18
05/04/18
31/03/16

DATE
28/03/17
25/03/17
23/03/17
27/03/17

DIN
TP
TP
TP
TP

DETAILS
REINFORCED FITTINGS ADDED & NOTES CHANGED.
OFFICE AMEND.
OFFICE AMEND.
2016 STANDARDS REVIEW.

APV
T. GALE
T. GALE
T. GALE
T. GALE

AUTHORISED:

SIGNATURE:

T. GALE
T. GALE
T. GALE
T. GALE

DESIGNED:

MS
MS
MS

DRAWN

28/03/17
25/03/17
27/03/17

REVIEWED:

T. GALE
T. GALE
T. GALE

SIGNATURE

T. GALE
T. GALE
T. GALE

ORIGINAL SIGNED

T. GALE
T. GALE
T. GALE

THIS DRAWING IS THE PROPERTY OF THE SOUTH AUSTRALIAN WATER CORPORATION AND SHALL NOT BE COPIED OR MODIFIED IN PART OR IN WHOLE WITHOUT AUTHORIZATION.

A3

DRAUGHTING NUMBER

4005-20006-08

TOTAL SHEETS:
1

REVISION PANEL

4
NOTES:
1. REFER 4005-20002-01 TO 4005-20002-03 FOR GENERAL NOTES.
2. THE VC PIPE ARRANGEMENT IS SIMILAR TO THE UPVC ARRANGEMENT WITH AN ADAPTOR AT EACH END.
3. THE USE OF 2 SLIP COUPLINGS ALLOWS THE PRE-ASSEMBLED ARRANGEMENT TO BE FITTED WITH A MINIMUM OF END CLEARANCE/DISCONTINUITY. ALTERNATIVES FOR POSITION OF COUPLINGS ARE DISPLAYED IN OPTIONS 1 & 2.
4. REFER SECTION 6 FOR CONNECTION CONSTRUCTION.
5. FOR TRUNK SEWERS, TEMPORARY ISOLATION OR DIVERSION OF FLOWS MAY BE NECESSARY DURING LIVE INSTALLATIONS. METHOD FOR UNDER Take WORK SHALL BE APPROVED BY THE SA WATER REPRESENTATIVE PRIOR TO COMMENCEMENT.
6. THE USE OF AN ALTERNATIVE ADAPTOR SYSTEM SHALL BE APPROVED BY THE SA WATER REPRESENTATIVE.
7. ALL FITTINGS IDENTIFIED BY SHADING SHALL BE A "RUBBER RING JOINTED" FITTING REFER TS 2942_2943.