**NOTES**

1. **CONCRETE STRENGTH GRADES SHOWN ARE FOR EXPOSURE CLASSIFICATION A2. REFER TO AS3600-2009, SECTION 4 FOR CONCRETE STRENGTH GRADES, COVER TO REINFORCEMENT AND FOR OTHER EXPOSURE CLASSIFICATIONS.**

2. **WEEPHOLES ARE TO BE PROVIDED AT 1800 CENTRES (MAXIMUM) AT OUTLET ONLY.**

3. **ALL STEEL BARS TO BE GRADE 400Y TO AS4671-2001.**

**REFERENCED DOCUMENTS:**

- AS4671-2001 STEEL REINFORCING MATERIALS
- AS3600-2009 CONCRETE STRUCTURES
- SPECIFICATION R11 - STORMWATER DRAINAGE
- SPECIFICATION B80 - CONCRETE WORK FOR BRIDGES
- ROAD POLICY, SPECIFICATIONS AND TECHNOLOGY

**DIMENSIONS**

- **NOMINAL PIPE DIAMETER (mm):**
  - 300, 375, 450, 525, 600, 750, 900

- **LENGTH (mm):**
  - 200, 200, 200, 200, 600, 600, 600, 400, 400, 400

- **NOM COVER (SEE NOTE 1):**
  - 4.6, 4.8, 5.2, 5.5, 5.8, 6.0, 6.3, 6.6

- **MOM COVER (SEE NOTE 1):**
  - 0.45, 0.57, 0.72, 0.86, 1.05, 1.40, 1.81

**SECTION 1**

- **APRON DEPTH AT INLET:**
  - 500

- **HEADWALL LENGTH:**
  - 1055, 1135, 1215, 1295, 1375, 1455, 1535, 1615

- **APRON WIDTH:**
  - 200

- **WINGWALL LENGTH:**
  - 1040, 1400, 1780

**SECTION 2**

- **APRON DEPTH AT OUTLET:**
  - 2000

- **HEADWALL LENGTH:**
  - 1020, 1100, 1270, 1450

- **APRON WIDTH:**
  - 1600

- **WINGWALL LENGTH:**
  - 1055, 1135, 1215, 1295, 1375, 1455, 1535, 1615

**EXPOSURE CLASSIFICATIONS**

- B2 & C

**REINFORCEMENT**

- **CONCRETE N25 (SEE NOTE 1):**
  - 2.0 TO 1 OR STEEPER

- **2 HEADWALLS:**
  - Ø12 mm

**CONCRETE HEADWALLS SINGLE CELL Ø300mm TO Ø900mm**

- **EDMS No.:**
  - R0210 STORMWATER DRAINAGE SERIES - HEADWALLS

- **ORIGINAL ISSUE DATE:**
  - JANUARY 2017

- **DOCUMENT VER.:**
  - SCAN TO CHECK

- **CONTACT DETAILS:**
  - technologystandards@rms.nsw.gov.au

- **PREPARED BY:**
  - © Roads and Maritime Services

- **ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN**

- **PROJECTWISERAMQRCODELAYER**
**CONCRETE HEADWALLS DOUBLE CELL Ø300 mm TO Ø900 mm**

**NOTES:**

1. **CONCRETE STRENGTH GRADES SHOWN ARE FOR EXPOSURE CLASSIFICATION:**
   - All refer to AS3600-2009, Section 4 for concrete strength grades shown.

2. **WEEPHOLES ARE TO BE PROVIDED:**
   - At 1800 centres (maximum at outlet only).

3. **ALL STEEL BARS TO BE GRADE 400Y TO AS4671-2001.**

4. **MESH LAPS SHALL BE MADE SO THAT THE TWO OUTERMOST WIRES OF THE SHEET WILL BE LAPED.**

5. **SPACING FOR MULTIPLE PIPES AS SPECIFIED IN R0240-01.**

**REFERENCED DOCUMENTS:**

- A3647-2001 STEEL REINFORCING MATERIALS
- AS1926-2005 CONCRETE STRUCTURES
- SPECIFICATION R11 - STORMWATER DRAINAGE
- SPECIFICATION B80 - CONCRETE WORK FOR BRIDGES

**SHEETS:**

- PLAN
- SECTION
- ELEVATION

**DIMENSIONS:**

- Nominal Pipe Diameter (mm):
  - 300
  - 375
  - 450
  - 525
  - 600
  - 750
  - 900

- Length (mm):
  - 310
  - 480
  - 680
  - 850

- Nom Cover (see Note 1):
  - 80
  - 500

- Mesh:
  - M1 Mesh

- Wall Width (mm):
  - 120

- Headwall Length (mm):
  - 1210
  - 1540
  - 1440
  - 1600
  - 1780
  - 1940
  - 2100
  - 2440
  - 2800

- Apron Width (mm):
  - 1750
  - 2080
  - 2460
  - 2790
  - 3140
  - 3840
  - 4580

- Wingwall Length (mm):
  - 1040
  - 1400
  - 1780
  - 2055
  - 2215
  - 2555
  - 2915

- Apron Depth (mm):
  - 7820
  - 8460
  - 9180
  - 9820
  - 13660
  - 15020
  - 16460

- Steel Reinforcement:
  - Concrete N25 (see Note 1)

- Mark:
  - SL81

- Concrete Headwalls Double Cell Ø300 mm to Ø900 mm must be consistent with R0240-01.
Manufacture and construction must be consistent with R0240-01.
Manufacture and construction with R0240-01 and R0210-01 must be consistent with R0240-01.
The drawing is a standard drawing for the manufacture and construction of headwalls under review. It includes dimensions and instructions for installation, such as:

- Inlet protection with 170 mm thick rock mattress.
- Outlet protection with 200 mm thick rock mattress.
- Heads with nominal pipe diameters from 300 mm to 900 mm.
- Steel reinforcement with grade 400Y.
- Geotextile lining at the underside and ends of the headwalls.

Referenced documents include:

- AS3600-2009 Concrete Structures
- AS4671-2001 Steel Reinforcing Materials
- R0240-01 Specify Concrete Structures
- R0210-08 Stormwater Drainage Series - Headwalls

The drawing is intended to be used for the construction of headwalls in stormwater drainage systems, ensuring consistency with R0240-01.
This drawing depicts the reinforcement for 2 headwalls. The table and diagram illustrate various dimensions and specifications, including pipe diameters, headwall heights, and other related measurements. The notes at the bottom of the page provide additional information on concrete grades and other relevant details.
CONCRETE HEADWALLS FOUR CELL Ø300 mm TO Ø900 mm

WITH CONCRETE APRON (2 TO 1 BATTER OR STEEPER)

ELEVATION

PLANE

SECTION

NOT TO SCALE

SECTION

NOT TO SCALE

NOTES
1. CONCRETE STRENGTH GRADES SHOWN ARE FOR EXPOSURE CLASSIFICATION A3. REFER TO AS3600-2009, SECTION 4 FOR CONCRETE STRENGTH GRADES SHOWN ARE FOR EXPOSURE CLASSIFICATIONS. COVER TO REINFORCEMENT AND FOR OTHER EXPOSURE CLASSIFICATIONS.

2. WEEPHOLSES ARE TO BE PROVIDED AT 1800 CENTRES (MAXIMUM) AT OUTLET ONLY.

3. ALL STEEL BARS TO BE GRADE 400Y TO AS4671-2001.

4. MESH LAPS SHALL BE MADE SO THAT THE TWO OUTERMOST WIRES OF ONE FABRIC OVERLAP THE TWO OUTERMOST WIRES OF THE SHEET BEING LAPPED.

5. BRACING FOR MULTIPLE PIPES AS SPECIFIED IN R0240-01.

REFERENCED DOCUMENTS:
AS4671-2001 STEEL REINFORCING MATERIALS
AS3600-2009 CONCRETE STRUCTURES
AS/NZS 2309 2000 CONCRETE WORK FOR BRIDGES
Concrete Headwalls

Dimensions in millimeters unless otherwise shown.

**NOTES:**
1. Concrete strength grades shown are for exposure classification A2. Refer to AS3600-2009, Section 4 for concrete strength grades shown are for exposure classifications.
2. Weepholes are to be provided at 1800 centres (maximum) at outlet only.
3. All steel bars to be grade 40Y to AS4671-2001.
4. Spacing for multiple pipes as specified in R0240-01.

**REFERENCED DOCUMENTS:**
- AS4671-2001 Steel Reinforcing Materials
- AS3600-2009 Concrete Structures
- R0210-11 Stormwater Drainage

**CONTACT DETAILS:**
Send feedback on this standard drawing to technologystandards@rms.nsw.gov.au

**STANDARD DRAWING:**
R0210 Stormwater Drainage Series - Headwalls
Concrete headwalls four cell Ø300 mm to Ø900 mm
With rock mattress protection at inlet and outlet

**DRAWING TO:**
ROAD DESIGN ENGINEERING
ROAD POLICY, SPECIFICATIONS 
AND TECHNOLOGY

**ISSUED BY:**
MANAGER ROAD DESIGN ENGINEERING AND TECHNOLOGY
PROJECT MANAGER, SPECIFICATIONS AND TECHNOLOGY

© Roads and Maritime Services

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NOTE:
1. CONCRETE STRENGTH GRADES SHOWN ARE FOR EXPOSURE CLASSIFICATION A2. REFER TO AS3600-2009, SECTION 4 FOR CONCRETE STRENGTH GRADES SHOWN ARE FOR EXPOSURE CLASSIFICATION A2.
2. WEEPHOLES ARE TO BE PROVIDED AT 1800 CENTRES (MAXIMUM) AT OUTLET ONLY.
3. ALL STEEL BARS TO BE GRADE 400Y TO AS4671-2001.
4. MESH LAPS SHALL BE MADE SO THAT THE TWO OUTERMOST WIRES OF ONE FABRIC OVERLAP THE TWO OUTERMOST WIRES OF THE SHEET BEING LAPPED.
5. BRACING FOR MULTIPLE PIPES AS SPECIFIED IN R0240-01.

REFERENCED DOCUMENTS:
AS4671-2001 STEEL REINFORCING MATERIALS
AS3600-2009 CONCRETE STRUCTURES
SPECIFICATION R11 - STORMWATER DRAINAGE
SPECIFICATION B80 - CONCRETE WORK FOR BRIDGES

All dimensions are in millimetres unless otherwise shown.

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<thead>
<tr>
<th>PIPE DIAMETER (mm)</th>
<th>L1</th>
<th>L2</th>
<th>L3</th>
<th>NO. REQ</th>
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<th>W/2</th>
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<td>L1</td>
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<td>L2</td>
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<th>STEEL REINFORCEMENT</th>
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<td>CONCRETE N25 (SEE NOTE 1)</td>
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<th>MARK</th>
<th>SL81</th>
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<tr>
<td>L3</td>
<td>590</td>
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<td>L4</td>
<td>735</td>
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| L1   | 270  |
| L2   | 415  |
| L3   | 590  |
| L4   | 735  |

| L1   | 270  |
| L2   | 415  |
| L3   | 590  |
| L4   | 735  |

| L1   | 270  |
| L2   | 415  |
| L3   | 590  |
| L4   | 735  |
Manufacture and construction of headwalls

ERE REVIEW

STANDARD DRAWING No.

REV. DATE AMENDMENT / REVISION DESCRIPTION WVR No. APPROVAL

SCALEs ON A3 SIZE DRAWING

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QR CODE

CONTACT DETAILS

DRAWING TO :
SEND FEEDBACK ON THIS STANDARD TECHNOLOGY

technologystandards@rms.nsw.gov.au

SHEET OF

STANDARD DRAWING

ROAD DESIGN ENGINEERING

R0210 STORMWATER DRAINAGE SERIES - HEADWALLS

CONCRETE HEADWALLS FIVE CELL Ø300 mm TO Ø900 mm

1. CONCRETE STRENGTH GRADES SHOWN ARE FOR EXPOSURE CLASSIFICATION A2. REFER TO AS3600-2009, SECTION 4 FOR CONCRETE STRENGTH GRADES FOR OTHER EXPOSURE CLASSIFICATIONS.

2. WEEPHOLES ARE TO BE PROVIDED AT 1800 CENTRES (MAXIMUM) AT OUTLET ONLY.

3. ALL STEEL BARS TO BE GRADE 400Y TO AS4671-2001.

4. SPACING FOR MULTIPLE PIPES AS SPECIFIED IN R0240-01.

REFERENCED DOCUMENTS:

AS3600-2009 CONCRETE STRUCTURES

AS4671-2001 STEEL REINFORCING MATERIALS

ADDS-2038 CONCRETE STRUCTURES

SPECIFICATION R11 - STORMWATER DRAINAGE

NOTES

REFERENCED DOCUMENTS:

SEND FEEDBACK ON THIS STANDARD DRAWING TO technologystandards@rms.nsw.gov.au

STEEL REINFORCEMENT

CONCRETE N25 (SEE NOTE 1)

CONCRETE N25 (SEE NOTE 1)

STEEL REINFORCEMENT

CONCRETE N25 (SEE NOTE 1)

STEEL REINFORCEMENT

CONCRETE N25 (SEE NOTE 1)

STEEL REINFORCEMENT

CONCRETE N25 (SEE NOTE 1)
CONCRETE HEADWALLS SINGLE CELL Ø300 mm TO Ø900 mm

WITH CONCRETE APRON (3 TO 1 BATTER OR FLATTER)

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<th>NOMINAL PIPE DIAMETER</th>
<th>LENGTH (mm)</th>
<th>APRON DEPTH (mm)</th>
<th>HEADWALL LENGTH (mm)</th>
<th>WINGWALL LENGTH (mm)</th>
<th>NOMINAT COVER (mm)</th>
<th>E1 BARS Ø12</th>
<th>M1 MESH</th>
<th>STEEL REINFORCEMENT</th>
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<td>Ø300</td>
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<td>900</td>
<td>970</td>
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<td>120°</td>
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<td>136.2</td>
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**NOTES**

1. CONCRETE STRENGTH GRADES SHOWN ARE FOR EXPOSURE CLASSIFICATION A2. REFER TO AS3600-2009, SECTION 4 FOR CONCRETE STRENGTH GRADIENTS, COVER TO REINFORCEMENT AND FOR OTHER EXPOSURE CLASSIFICATIONS.

2. WEEPHOLES ARE TO BE PROVIDED AT 450 CENTRES (MAXIMUM AT OUTLET ONLY).

3. ALL STEEL BARS TO BE GRADE 400Y TO AS4671-2001.

4. SHEET MESH IS TO BE MADE SO THAT THE TWO OUTERMOST WIRES OF ONE FABRIC OVERLAP THE TWO OUTERMOST WIRES OF THE SHEET BEING LAPPED.

5. SPACING FOR MULTIPLE PIPES AS SPECIFIED IN R0240-01.

**REFERENCED DOCUMENTS:**

AS3600-2009 CONCRETE STRUCTURES
AS4671-2001 STEEL REINFORCING MATERIALS
SPECIFICATION B80 - CONCRETE WORK FOR BRIDGES
SPECIFICATION R11 - STORMWATER DRAINAGE
SPECIFICATION B83 - CONCRETE WORK FOR BRIDGES
## Standard Drawing

**Road Design Engineering**

### Standard Drawing

**R0210 STORMWATER DRAINAGE SERIES - HEADWALLS**

**Concrete Headwalls Single Cell Ø300 mm to Ø900 mm**

**Dimensions**

<table>
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<tr>
<th>Dimension</th>
<th>Ø300</th>
<th>Ø375</th>
<th>Ø450</th>
<th>Ø525</th>
<th>Ø600</th>
<th>Ø750</th>
<th>Ø900</th>
</tr>
</thead>
</table>

### Notes

1. Concrete strength grades shown are for exposure classification A2. Refer to AS3600-2009, Section 4 for concrete strength grade, cover to reinforcement and for other exposure classifications.

2. Inlet protection 170 mm thick rock mattress protection 25 mm thick rock mattress underside and ends lined with geotextile.

3. Outlet protection 230 mm thick rock mattress.

4. Inlet protection 170 mm thick rock mattress.

### Referenced Documents

- AS4671-2001 Steel Reinforcing Materials
- AS3600-2009 Concrete Structures
- AS3600-2009 Concrete Structures with Rock Mattress Protection
- AS1210-1997 - Groundwater Control

---

**Send feedback on this standard drawing to:**

transportstandards@rms.nsw.gov.au

**Transport for NSW Engineering Services**

**Manager Road Safety and Geotechnical Technology**

**Date:** 20.01.17

---

**QR Code:** 3D model and PDF for ProjectWise QR Code Layer
Concrete headwalls double cell Ø300 mm to Ø900 mm with concrete apron (3 to 1 batter or flatter).

Dimensions:
- Nominal pipe diameter (mm): 300, 375, 450, 525, 600, 750, 900
- Length (mm): 470, 730
- Apron width (mm): 150, 300
- Headwall length (mm): 1830, 2320
- Apron depth (mm): 1910, 2330
- Wingwall length (mm): 1560, 2110

Reinforcement:
- M1 mesh
- Ø12 mm bars

Notes:
1. Concrete cover groups shown are for Exposure Classifications A2, B2 & C.
2. Concrete strength grades shown are for Exposure Classifications A2. Refer to AS3600-2009, Section 4 for concrete strength grades.
3. Steel bars to be grade 400Y to AS4671-2001.
4. Outlet only.
5. Outlet only.
6. Outlet only.
7. Outlet only.
8. Outlet only.
9. Outlet only.
10. Outlet only.
11. Outlet only.
12. Outlet only.
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100. Outlet only.

Manufacturer is consistent with RD240-01.
**NOTES:**

1. CONCRETE STRENGTH GRADES SHOWN ARE FOR EXPOSURE CLASSIFICATION A REFER TO AS3600-2009, SECTION 4 FOR CONCRETE STRENGTH GRADES. COVER TO REINFORCEMENT AND FOR OTHER EXPOSURE CLASSIFICATIONS.

2. WEEPHOLES ARE TO BE PROVIDED AT 1800 CENTRES (MAXIMUM) AT OUTLET ONLY.

3. ALL STEEL BARS TO BE GRADE 400Y TO AS4671-2001.

4. SPACING FOR MULTIPLE PIPES AS SPECIFIED IN R0240-01.

**REFERENCED DOCUMENTS:**

- AS4671-2001 STEEL REINFORCING MATERIALS
- AS1393 CONCRETE STRUCTURES
- R11 - STORMWATER DRAINAGE

---

**ELEVATION**

**PLAN**

**SECTION**

**NOT TO SCALE**

---

**QUANTITIES**

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**H1** and **H2** are nominal pipe diameters in millimetres.
CONCRETE HEADWALLS TRIPLE CELL Ø300 mm TO Ø900 mm

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<th>NOMINAL PIPE DIAMETER (mm)</th>
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<th>L2 (mm)</th>
<th>No. REQ</th>
<th>LENGTH (mm)</th>
<th>A (mm)</th>
<th>C (mm)</th>
<th>S (mm)</th>
<th>W (mm)</th>
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</tbody>
</table>

STEEL REINFORCEMENT

1. CONCRETE STRENGTH GRADES SHOWN ARE FOR EXPOSURE CLASSIFICATION B2 & C.
2. MESH LAPS SHALL BE MADE SO THAT THE TWO OUTERMOST WIRES OF ONE FABRIC OVERLAP THE TWO OUTERMOST WIRES OF THE SHEET BEING LAPPED.
3. ALL STEEL BARS TO BE GRADE 400Y TO AS4671-2001.
4. OUTLET ONLY.
5. WEEPHOLES ARE TO BE PROVIDED AT 1800 CENTRES (MAXIMUM) AT Outlet Only.

REFERENCES DOCUMENTS:
- AS4671-2001 STEEL REINFORCING MATERIALS
- SPECIFICATION R11 - STORMWATER DRAINAGE
- SPECIFICATION B80 - CONCRETE WORK FOR BRIDGES
- AS3600-2009 CONCRETE STRUCTURES

NOTES:
- CONCRETE STRENGTH GRADES SHOWN ARE FOR EXPOSURE CLASSIFICATION B2 & C.
- COVER TO REINFORCEMENT AND FOR OTHER EXPOSURE CLASSIFICATIONS.
- EXPOSURE CLASSIFICATION A2. REFER TO AS3600-2009, SECTION 4 FOR CONCRETE STRENGTH GRADES SHOWN ARE FOR EXPOSURE CLASSIFICATIONS.
- SPACING FOR MULTIPLE PIPES AS SPECIFIED IN R0240-01.
1. Concrete strength grades shown are for exposure classification A2, refer to AS3600-2009, Section 4 for concrete strength grades shown are for exposure classification A2. Refer to AS3600-2009, Section 4 for concrete strength grades shown are for exposure classification A2. Refer to AS3600-2009, Section 4 for concrete strength grades shown are for exposure classification A2. Refer to AS3600-2009, Section 4 for concrete strength grades shown are for exposure classification A2. Refer to AS3600-2009, Section 4 for concrete strength grades shown are for exposure classification A2. Refer to AS3600-2009, Section 4 for concrete strength grades shown are for exposure classification A2. Refer to AS3600-2009, Section 4 for concrete strength grades shown are for exposure classification A2. Refer to AS3600-2009, Section 4 for concrete strength grades shown are for exposure classification A2. Refer to AS3600-2009, Section 4 for concrete strength grades shown are for exposure classification A2. 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Concrete Headwalls Four Cell Ø300 mm to Ø900 mm

<table>
<thead>
<tr>
<th>Nominal Pipe Diameter (mm)</th>
<th>L1 (mm)</th>
<th>L2 (mm)</th>
<th>No. REQ</th>
<th>Length (mm)</th>
<th>Weight (kg)</th>
<th>Volume (m³)</th>
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**NOTES:**
1. Concrete strength grades shown are for exposure classification B2 & C. Refer to AS3600-2009, Section 4 for concrete strength grades shown are for exposure classification B2 & C.
3. All steel bars to be grade 400Y to AS4671-2001.
4. Mesh laps shall be made so that the two outermost wires of one fabric overlap the two outermost wires of the sheet being lapped.
5. Spacing for multiple pipes as specified in R0240-01.

**REFERENCED DOCUMENTS:**
- AS4671-2001 Steel Reinforcing Materials
- AS3600-2009 Concrete Structures
- Specification R11 - Stormwater Drainage
- Specification B80 - Concrete Work for Bridges
**Concrete Headwalls Four Cell Ø300 mm to Ø900 mm**

### Dimensions

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<th>Pipeline Diameter</th>
<th>Nominal Pipe Diameter (mm)</th>
<th>L1 (mm)</th>
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<th>Weight (kg)</th>
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**Notes:**

1. Concrete strength grades shown are for exposure classification A2. Refer to AS3600-2009, Section 4 for concrete strength grade, cover to reinforcement and for other exposure classifications.
2. Weepholes are to be provided at 1800 centres (maximum) at inlet only.
3. All steel bars to be grade 40Y to AS4671-2001.
4. Spacing for multiple pipes as specified in R0210-22.

**Referenced Documents:**

- AS4671-2001 Steel Reinforcing Materials
- AS3600-2009 Concrete Structures

**Estimated Weight:**

- Ø300: 11.7 kg
- Ø450: 12.8 kg
- Ø600: 14.1 kg
- Ø750: 15.3 kg
- Ø900: 19.2 kg
Manufacture and construction of headwalls must be consistent with R0240-01.
NOTES

1. EXPOSURE CLASSIFICATIONS B2 AND C PROVIDE DAMP PROOF MEMBRANE FOR EXPOSED SURFACES TO BE 25 mm CHAMFER.

2. EXPOSURE CLASSIFICATIONS A2. REFER TO AS3600-2009, SECTION 4 FOR CONCRETE STRENGTH GRADES SHOWN ARE FOR EXPOSURE CLASSIFICATION A.

3. CONCRETE STRENGTH GRADE N25.

SEND FEEDBACK ON THIS STANDARD DRAWING TO technologystandards@rms.nsw.gov.au

PER HEADWALL

<table>
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<th>DIMENSIONS MM</th>
<th>CONCRETE (M³)</th>
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<td>300</td>
<td>2.320</td>
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CONCRETE STRENGTH GRADE N25.
FLAT CONCRETE HEADWALL FOR Ø300 mm TO Ø450 mm SINGLE PIPE CULVERTS

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<th>Ø D  mm</th>
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NOTES
1. CONCRETE STRENGTH GRADES SHOWN ARE FOR EXPOSURE CLASSIFICATION A1. REFER TO AS3600-2009, SECTION 4 FOR CONCRETE STRENGTH GRADIENTS.
2. CONCRETE STRENGTH GRADE N25.
3. EXPOSED SURFACES TO BE 25 mm CHAMFER.

SEND FEEDBACK ON THIS STANDARD DRAWING TO: technologystandards@rms.nsw.gov.au

NOTE: THIS DRAWING MAY BE PREPARED IN COLOUR AND MAY BE INCOMPLETE IF COPIED.
NOTES

1. CONCRETE AS PER QA SPECIFICATION R93.
2. COVER INCLUDING EDGE COVER MUST BE 50 mm UNLESS OTHERWISE SHOWN.
3. REINFORCING STEEL TO BE IN ACCORDANCE WITH AZ/NZS 4671.
4. PRECAST UNIT MUST BE SECURED TO CURTAIN WALL IN ACCORDANCE WITH MANUFACTURER'S DESIGN DOCUMENTATION.
5. CAST IN SITU SLAB MUST PROVIDE UNIFORM BEARING FOR PRECAST UNIT IN ACCORDANCE WITH THE PRECAST HEADWALL MANUFACTURER'S INSTRUCTIONS.

FRONT ELEVATION

PLAN

TO SUIT WIDTH OF PRECAST HEADWALL

TO SUIT LENGTH OF PRECAST HEADWALL

SECTION

SEE NOTE 4

TO SUIT LENGTH OF PRECAST HEADWALL

MESH CENTRED REINFORCEMENT

CAST IN-SITU CURTAIN WALL

SL82 MESH CENTRED REINFORCEMENT

OVERLAY CENTRED MESH

SL82 MESH CENTRED REINFORCEMENT

OVERLAY CENTRED MESH

ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN

SEND FEEDBACK ON THIS STANDARD DRAWING TO technologystandards@rms.nsw.gov.au

MANAGER ROAD POLICY, SPECIFICATIONS & TECHNOLOGY

DATE: 20.01.17

STANDARD DRAWING
ROAD DESIGN ENGINEERING
R0210 STORMWATER DRAINAGE SERIES - HEADWALLS
CAST IN-SITU CURTAIN WALL FOR USE WITH PRECAST HEADWALLS PIPE DIAMETER UP TO 1,200 mm

SHEET 1 OF 1

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