

BRUNO ALTIN & CO PTY LTD

The Precast Concrete Specialists



Product Guide

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**Australian
Standard**

AS/NZS 4058:2007
Pre-cast Concrete Pipes
(pressure & non-pressure)

Lic No. SMK00685
Certified by SAI Global



GROWING TO MEET YOUR NEEDS...



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Your Pre-cast Concrete Specialist Contact is:

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M:

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E:

THE BIRTH OF AN INDUSTRY

The founder of the company, Bruno Altin, arrived in Australia from Maser, Province of Treviso, Italy, in 1951, and by 1953 had settled to work in Griffith as a mechanic. Being impressed by the potential for the region to provide work, he called for his wife Adelia and two sons from Italy. Bruno and Adelia worked long hours to repay the debt incurred by the family's trip to Australia, and save for their dream home of building their own home. To realise this dream, Bruno and Adelia bought a simple manually operated machine for making concrete bricks. They both worked hard at making bricks, Adelia during the day, and Bruno after work and on weekend. Bricks were in demand in the Griffith area, local builders soon became interested in buying the bricks intended for Adelia's own home. This led Bruno, Adelia and their children to work harder and longer hours to meet the demands for more and more bricks.

Griffith and the MIA were developing rapidly at this time and there was a growing demand for concrete products for housing, irrigation and road building. Bruno used his resourcefulness and experience in farming, welding and metalwork to build a concrete mixing machine and formwork to increase production of concrete bricks, and also to begin manufacturing other concrete products like tile drainage rings, pipes and water stops. While Bruno Altin & Co officially opened for business in 1954, Bruno himself did not work fulltime in the business until 1957, but only worked in his spare time after work, leaving Adelia to attend to the production and administration of the business on a day to day basis.

Over the years the company continued to expand its range of products and to increase it's output. In 1963 Bruno registered his first two patents for the "T" and "L" shaped water stops, and won first prize at a display for design in irrigation at the Griffith Waterwheel Festival. The company now holds six registered patents and makes over 350 different precast products. Many of these products comply with Australia Standards and RTA specifications. Its customers include farmers, industry and local and state governments.

Today, production is fully mechanised ensuring the manufacture of high quality and economically viable products to meet customer demands. Bruno's son Gino and his team, are dedicated to improving both the design of the products, and the manufacturing process itself, to ensure upmost customer satisfaction. During the last ten years production from the factory has quadrupled, and continues to increase. Ongoing innovation, design and a desire to please the individual needs of its customers has been the key to the birth of this precast concrete industry and a successful business in the Griffith area.





BRUNO ALTIN & CO PTY LTD
THE PRECAST CONCRETE SPECIALISTS

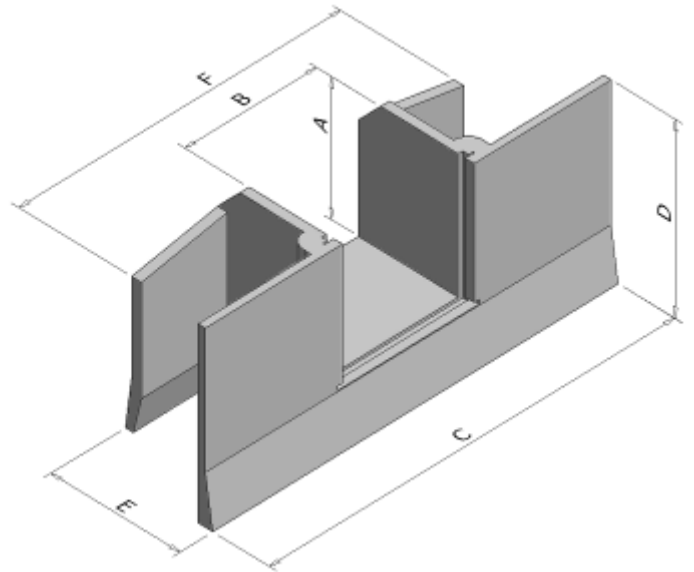
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Please note: Sizing may change at any time without notice. To confirm sizing and measurements

Please contact Bruno Altin & Co Pty Ltd or your local Bruno Altin distributor.

WINGED 'L' WATER STOP

- Stops erosion & effects of swirling
- Self cleaning groove to remove debris from your door slide.
- New extended rear wings for added stability.
- Deeper sides to help reduce wash outs.
- Helps to eliminate water wastage
- Able to take a steel door in a neoprene seal or wooden boards/steel slats for overflow control.
- These units are available with steel doors or winch control tarp systems with the NEW solar powered 'wireless automated control system' that can monitor and control the stop straight from your smart phone.

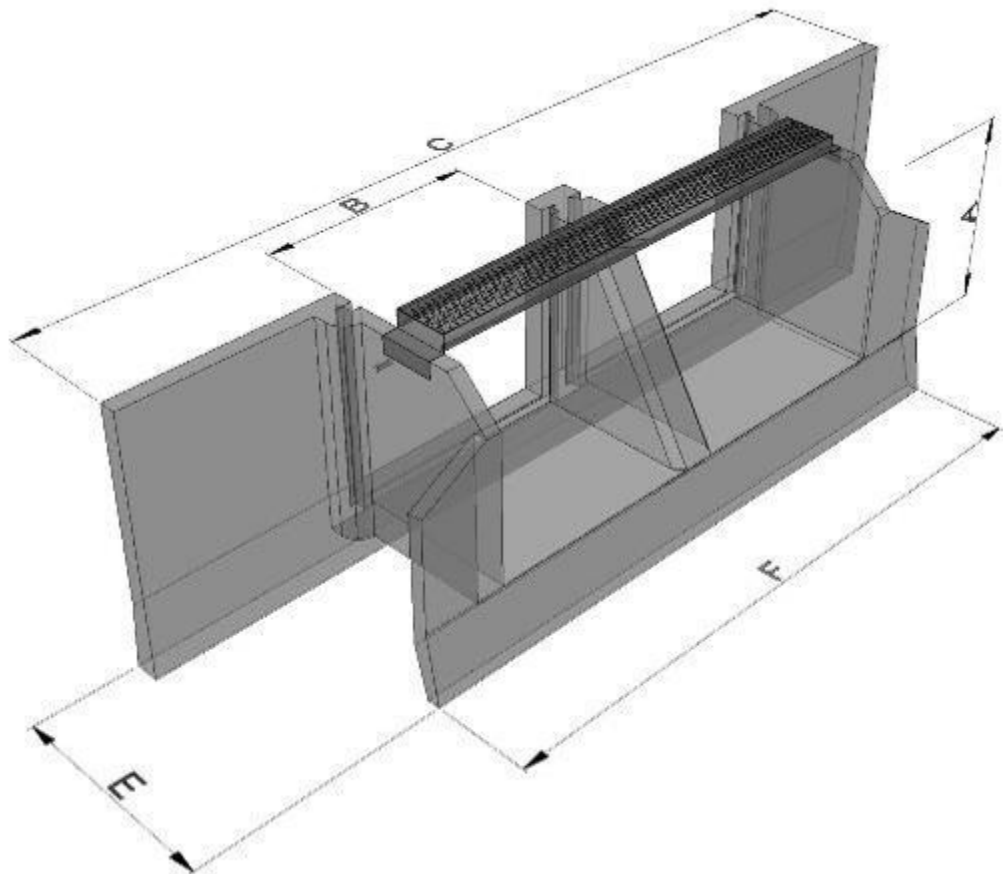


| CODE | DEPTH & WIDTH | A | B | C | D | E | F | BOARD SIZES LENGTH X THICKNESS | APPROX. WEIGHT |
|---------|---------------|-----|------|------|------|------|------|-----------------------------------|-------------------|
| 430/440 | 40cm x 45cm | 400 | 450 | 1250 | 560 | 420 | - | 510mm x 25mm | 125kg |
| 450/460 | 50cm x 60cm | 500 | 600 | 1620 | 650 | 500 | 1020 | 660mm x 25mm | 215kg |
| 470/480 | 60cm x 80cm | 600 | 800 | 2020 | 810 | 640 | 1290 | 865mm x 25mm | 390kg |
| 490/500 | 70cm x 90cm | 700 | 900 | 2460 | 960 | 780 | 2000 | 980mm x 50mm | 730kg |
| 504/506 | 80cm x 90cm | 800 | 900 | 2690 | 1110 | 1115 | 2420 | 980mm x 50mm | 1150kg |
| 510/515 | 80cm x 1.0m | 800 | 1000 | 2790 | 1100 | 1090 | 2570 | 1090mm x 50mm | 1200kg |
| 517/519 | 90cm x 90cm | 900 | 900 | 3040 | 1210 | 1120 | 2600 | 980mm x 50mm | 1540kg |

| OPENING WINGED 'L' STOP H & W | TYPE | ML PER DAY |
|----------------------------------|-------------|------------|
| 400mm x 450mm | L BOX STOP | 4.57 |
| 500mm x 600mm | WL BOX STOP | 8.86 |
| 600mm x 800mm | WL BOX STOP | 18.24 |
| 700mm x 900mm | WL BOX STOP | 23.6 |
| 800mm x 900mm | WL BOX STOP | 27.2 |
| 800mm x 1000mm | WL BOX STOP | 29.9 |
| 900mm x 900mm | WL BOX STOP | 30.0 |

DUAL WINGED 'L' WATER STOP

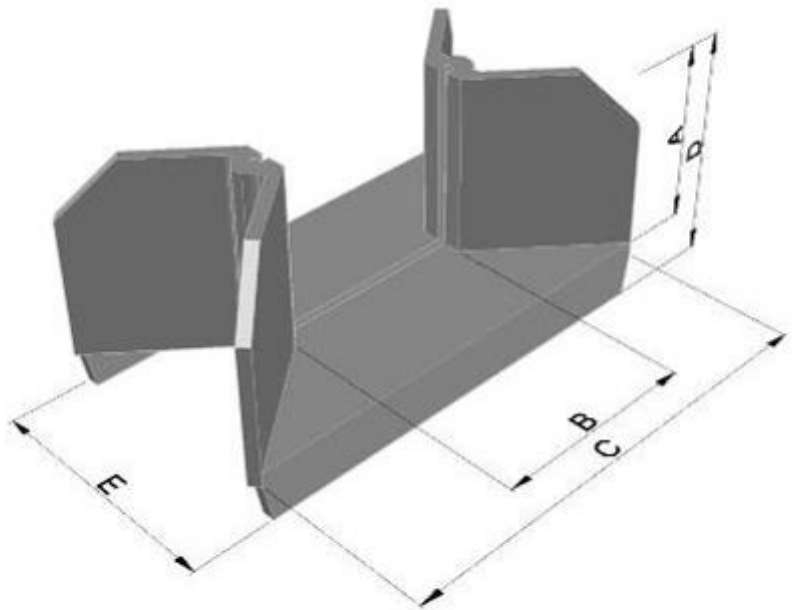
| CODE | DEPTH & WIDTH | A | B | C | D | E | F | BOARD SIZES LENGTH X THICK- NESS | APPROX. WEIGHT |
|---------|-------------------------------------|-----|-----|------|---|------|------|--|-------------------|
| 522/524 | 900mm x 900mm + 900mm x 900mm | 900 | 900 | 4165 | - | 1115 | 3720 | 980mm x 50mm | 2230 |



| OPENING DUAL 'WL' STOP WITH WALKWAY H & W | TYPE | ML PER DAY |
|---|------------------|------------|
| 900mm x 900mm + 900mm x 900mm | DUAL WL BOX STOP | 60.8 |

V SHAPED BOX WATER STOPS

- Large range of sizes.
- Helps to eliminate water wastage
- Able to take a steel door in a neoprene seal or wooden boards/steel slats for overflow control.
- These units are also available with steel doors or winch control tarp systems modified to incorporate the NEW solar powered 'wireless automated control system' that can monitor and control the stop straight from your smart phone.



| CODE PLAIN/ RUBBER | DEPTH X WIDTH | A | B | C | D | E | BOARD SIZE LENGTH X THICKNESS | APPROX. WEIGHT | ML PER DAY |
|--------------------------|------------------|------|------|------|------|------|----------------------------------|-------------------|---------------|
| 530/540 | 45cm x 55cm | 450 | 550 | 1070 | 650 | 640 | 620mm x 25mm | 190kg | 8.3 |
| 550/560 | 52.5cm x 60cm | 525 | 600 | 1260 | 735 | 750 | 670mm x 25mm | 290kg | 10.49 |
| 570/580 | 52.5cm x 65cm | 525 | 650 | 1235 | 750 | 750 | 720mm x 25mm | 310kg | 11.35 |
| 590/600 | 55cm x 80cm | 550 | 800 | 1320 | 760 | 770 | 870mm x 25mm | 300kg | 13.84 |
| 610/620 | 60cm x 75cm | 600 | 750 | 1500 | 885 | 870 | 820mm x 25mm | 360kg | 14.13 |
| 630/640 | 60cm x 90cm | 600 | 900 | 1450 | 820 | 820 | 970mm x 25mm | 350kg | 20.17 |
| 650/660 | 65cm x 70cm | 650 | 700 | 1440 | 885 | 950 | 770mm x 25mm | 450kg | 14.23 |
| 670/680 | 65cm x 1.0m | 650 | 1000 | 1700 | 880 | 940 | 1080mm x 25mm | 520kg | 24.41 |
| 690/700 | 70cm x 90cm | 700 | 900 | 1700 | 940 | 950 | 970mm x 25mm | 540kg | 23.6 |
| 710/720 | 90cm x 1.0m | 900 | 1000 | 2200 | 1180 | 1265 | 1080mm x 35mm | 990kg | 33.71 |
| 730/740 | 1.0m x 1.2m | 1000 | 1200 | 2450 | 1310 | 1400 | 1275mm x 35mm | 1400kg | 44.95 |
| -/742 | 1.5m x 1.05m | 1500 | 1050 | 3200 | 2015 | 2000 | 1120mm x 35mm | 3600kg | 69.17 |
| 744/- | 1.5m x 1.6m | 1500 | 1600 | 3900 | 2000 | 1915 | 1675mm x 35mm | 4100kg | 105.4 |

WINCH CONTROL SYSTEM

- The ultimate control system for board & door control in one.
- Ergonomically friendly.
- Weather resistant tarp.
- Made in stainless steel for durability.
- Light & easy to carry with the ability to move from one stop to another.
- 100% water tight seal.
- Available with manual control or automated to suit your needs.
- Able to be used on V & L Water stops as well as Channel Headwalls.



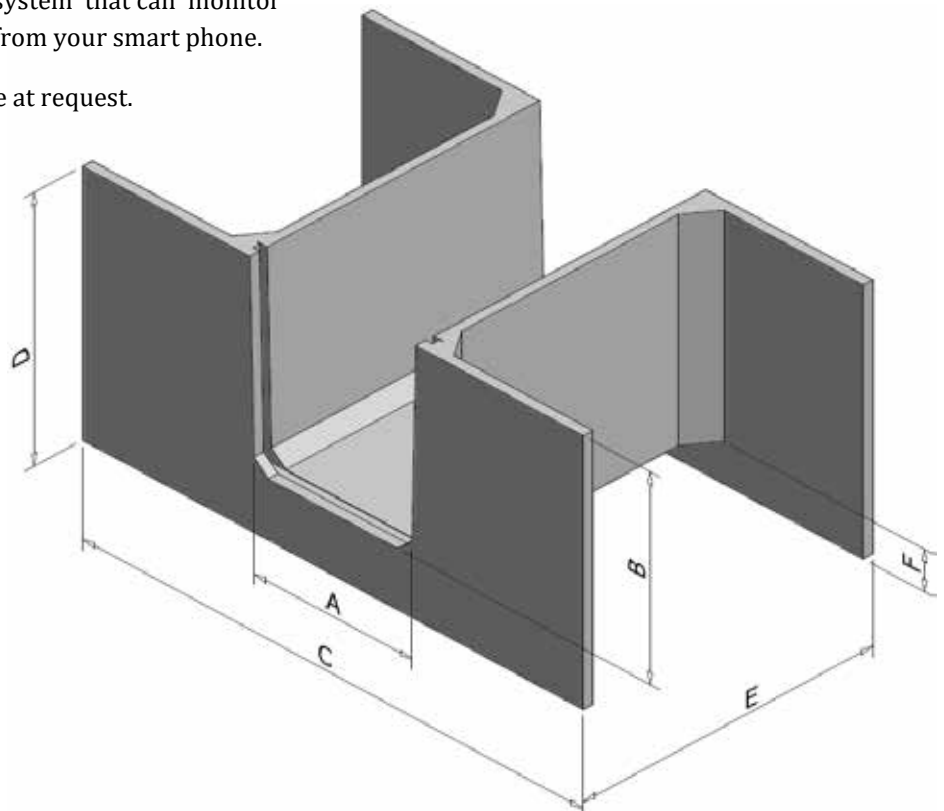
| MANUAL WINCH CODE | V BOX STOP TO SUIT |
|-------------------|--------------------|
| 561 | 52.5cm x 60cm |
| 581 | 52.5cm x 65cm |
| 601 | 55cm x 80cm |
| 621 | 60cm x 75cm |
| 641 | 60cm x 90cm |
| 661 | 65cm x 70cm |
| 681 | 65cm x 1.0m |
| 701 | 70cm x 90cm |

| MANUAL WINCH CODE | WINGED L STOP TO SUIT |
|-------------------|-----------------------|
| 461 | 50cm x 60cm |
| 481 | 60cm x 80cm |
| 501 | 70cm x 90cm |
| 507 | 80cm x 90cm |
| 516 | 80cm x 1.0m |
| 520 | 90cm x 90cm |



SINGULAR WEIR STRUCTURE

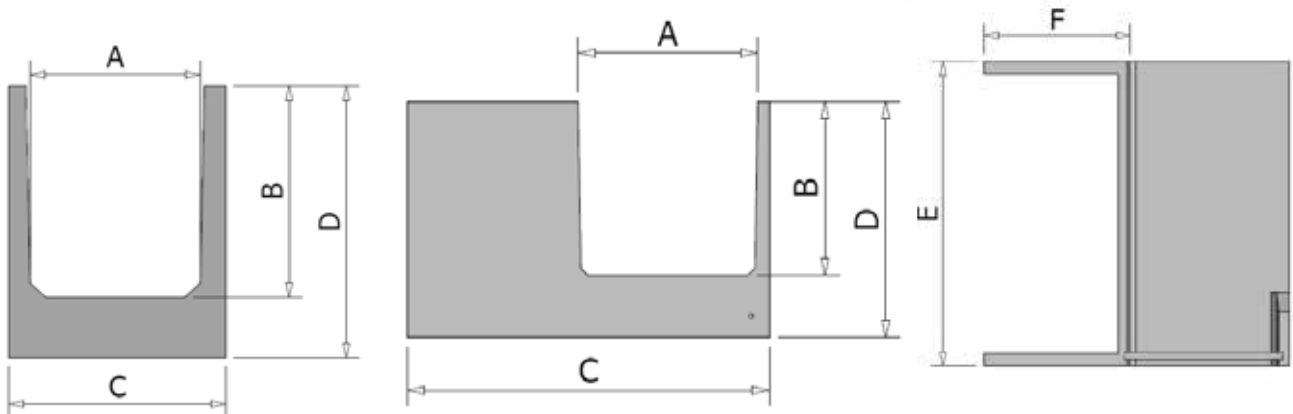
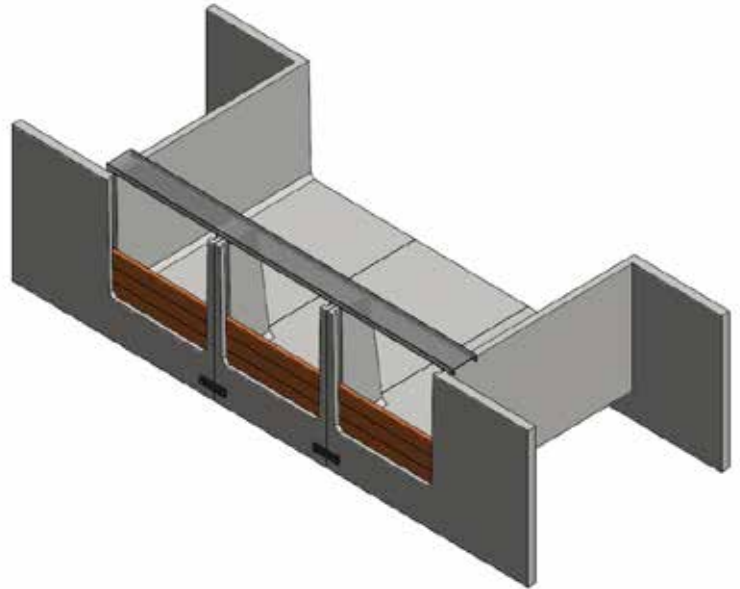
- Larger wings at both the upstream and downstream to prevent erosion & effects of swirling
- Can be used for bankless channels and supply channels in place of standard water stops.
- Successful in reactive soils.
- Deeper sides to stop water undermining the structural stability.
- These units are available with steel boards or winch control tarp systems with the NEW solar powered 'wireless automated control system' that can monitor and control the stop straight from your smart phone.
- Customized Product available at request.



| CODE | A MM | B MM | C MM | D MM | E MM | F MM | APPROX. WEIGHT |
|------|---------|---------|---------|---------|---------|---------|-------------------|
| 491 | 900 | 600 | 2700 | 1000 | 2500 | 300 | 2480kg |
| 492 | 900 | 900 | 2700 | 1300 | 2500 | 300 | 3100kg |
| 493 | 1200 | 900 | 3800 | 1300 | 2200 | 300 | 3460kg |
| 494 | 1200 | 1200 | 3800 | 1600 | 2200 | 300 | 4030kg |
| 495 | 1200 | 1500 | 3800 | 1900 | 2200 | 300 | 4580kg |

MULTI WEIR STRUCTURE

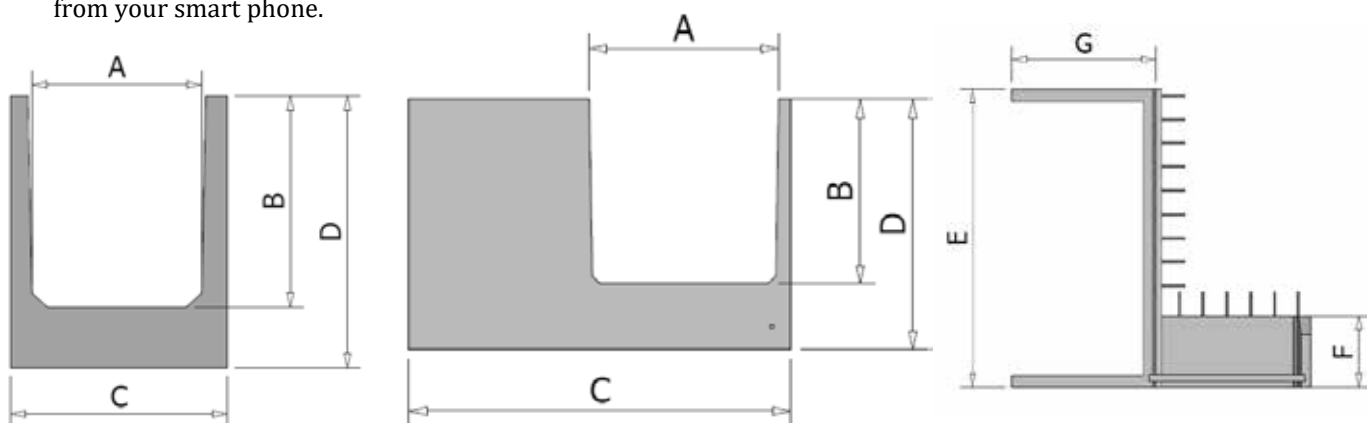
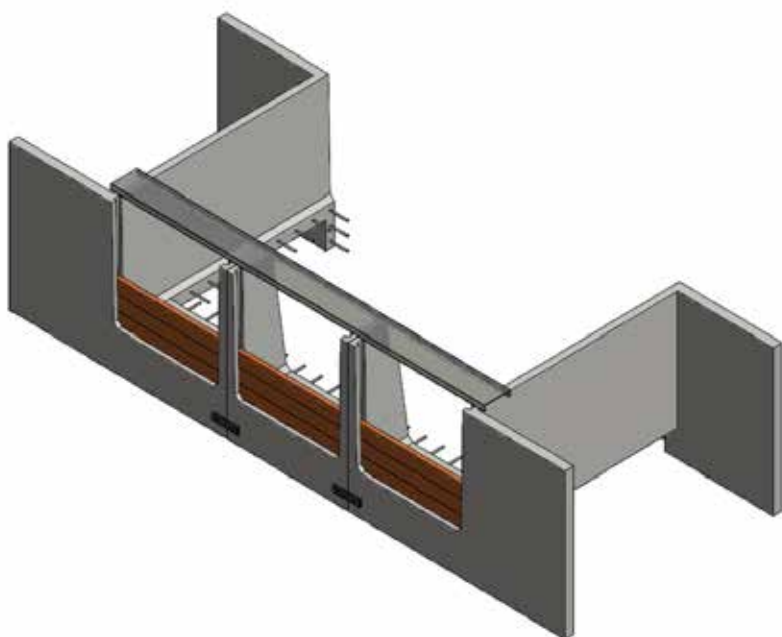
- Designed to suit large scale cotton farmers.
- Successful in reactive soils.
- In-built base with no need for a concrete base to be poured on site
- Can be customized as per clients request, with additional centre modules available to achieve the volume required.
- Available with walkway for easy access to open individual weir modules.
- Ideal for isolated farmers without access to onsite pouring.
- These units are available with steel boards or winch control tarp systems with the NEW solar powered 'wireless automated control system' that can monitor and control the stop straight from your smart phone.



| CODE | PRODUCT | A MM | B MM | C MM | D MM | E MM | F MM | APPROX. WEIGHT |
|-------|---------------------------|---------|---------|---------|---------|---------|---------|-------------------|
| 6600C | 1200 x 900 Centre Module | 1200 | 900 | 1400 | 1330 | 2200 | - | 1840kg |
| 6600L | 1200 x 900 Left Wing | 1200 | 900 | 2500 | 1330 | 2200 | 1300 | 2610kg |
| 6600R | 1200 x 900 Right Wing | 1200 | 900 | 2500 | 1330 | 2200 | 1300 | 2610kg |
| 6610C | 1200 x 1200 Centre Module | 1200 | 1200 | 1400 | 1630 | 2200 | - | 1940kg |
| 6610L | 1200 x 1200 Left Wing | 1200 | 1200 | 2500 | 1630 | 2200 | 1300 | 2940kg |
| 6610R | 1200 x 1200 Right Wing | 1200 | 1200 | 2500 | 1630 | 2200 | 1300 | 2940kg |
| 6620C | 1200 x 1500 Centre Module | 1200 | 1500 | 1400 | 1930 | 2200 | - | 2030kg |
| 6620L | 1200 x 1500 Left Wing | 1200 | 1500 | 2500 | 1930 | 2200 | 1300 | 3260kg |
| 6620R | 1200 x 1500 Right Wing | 1200 | 1500 | 2500 | 1930 | 2200 | 1300 | 3260kg |

MULTI WEIR STRUCTURE + STARTER BARS

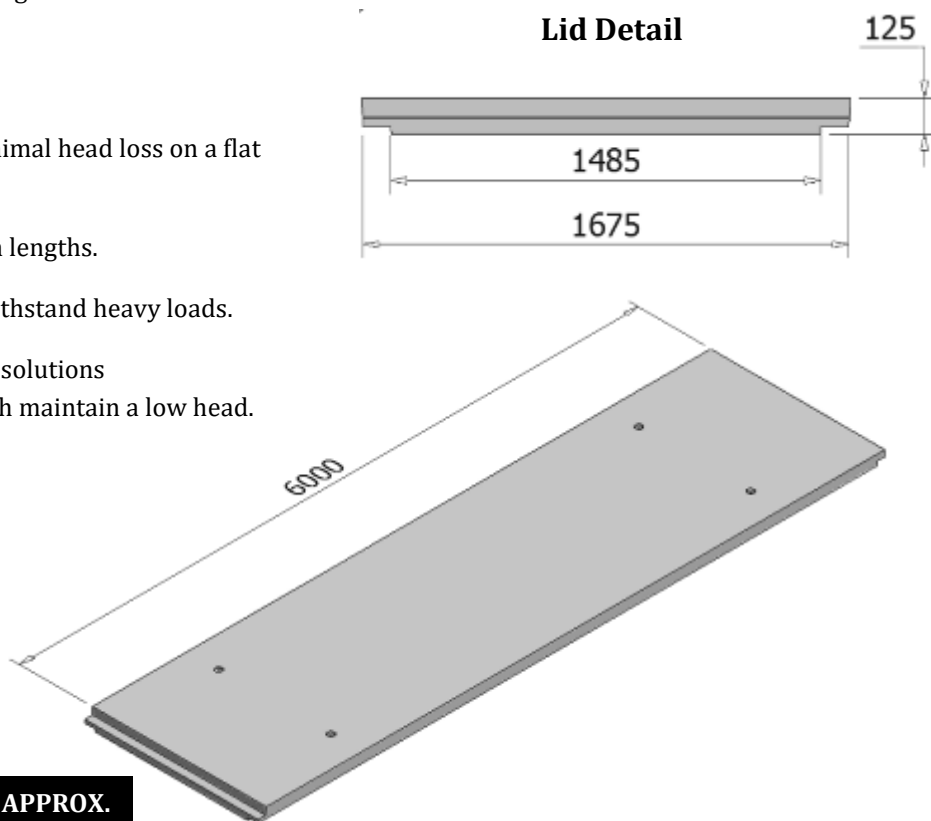
- Allows for extendable apron to be poured on site as per clients needs.
- Starter bars for pour in situ base
- Designed to suit large scale cotton farmers.
- Successful in reactive soils.
- Can be customized as per clients request, with additional centre modules available to achieve the volume required.
- Reduces freight costs
- Available with walkway for easy access to open individual weir modules.
- These units are available with steel boards or winch control tarp systems with the NEW solar powered 'wireless automated control system' that can monitor and control the stop straight from your smart phone.



| CODE | PRODUCT | A MM | B MM | C MM | D MM | E MM | F MM | G MM | APPROX. WEIGHT |
|-------|---------------------------|---------|---------|---------|---------|---------|---------|---------|-------------------|
| 6605C | 1200 x 900 Centre Module | 1200 | 900 | 1530 | 1330 | - | 600 | - | 780kg |
| 6605L | 1200 x 900 Left Wing | 1200 | 900 | 2650 | 1330 | 2200 | 600 | 1300 | 1812kg |
| 6605R | 1200 x 900 Right Wing | 1200 | 900 | 2650 | 1330 | 2200 | 600 | 1300 | 1812kg |
| 6615C | 1200 x 1200 Centre Module | 1200 | 1200 | 1530 | 1630 | - | 600 | - | 875kg |
| 6615L | 1200 x 1200 Left Wing | 1200 | 1200 | 2650 | 1630 | 2200 | 600 | 1300 | 2142kg |
| 6615R | 1200 x 1200 Right Wing | 1200 | 1200 | 2650 | 1630 | 2200 | 600 | 1300 | 2142kg |
| 6625C | 1200 x 1500 Centre Module | 1200 | 1500 | 1530 | 1930 | - | 600 | - | 970kg |
| 6625L | 1200 x 1500 Left Wing | 1200 | 1500 | 2650 | 1930 | 2200 | 600 | 1300 | 2460kg |
| 6625R | 1200 x 1500 Right Wing | 1200 | 1500 | 2650 | 1930 | 2200 | 600 | 1300 | 2460kg |

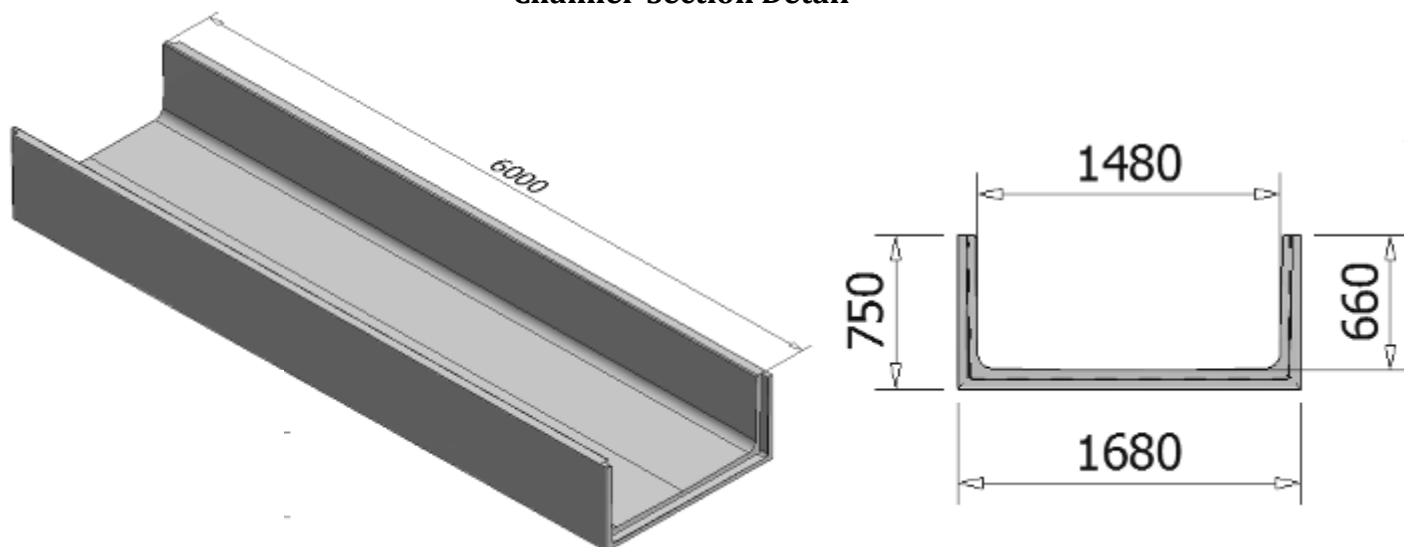
CONCRETE WATER CHANNELS

- Stops erosion and seepage
- Available in shorter lengths on order.
- Able to be laid on flat bed saving installation time & costs.
- Easy installation
- Able to carry 72MGL with minimal head loss on a flat grade of 20m or less.
- Rubber seal joint to easily join lengths.
- Trafficable lids available to withstand heavy loads.
- Able to be used for numerous solutions including road crossings which maintain a low head.



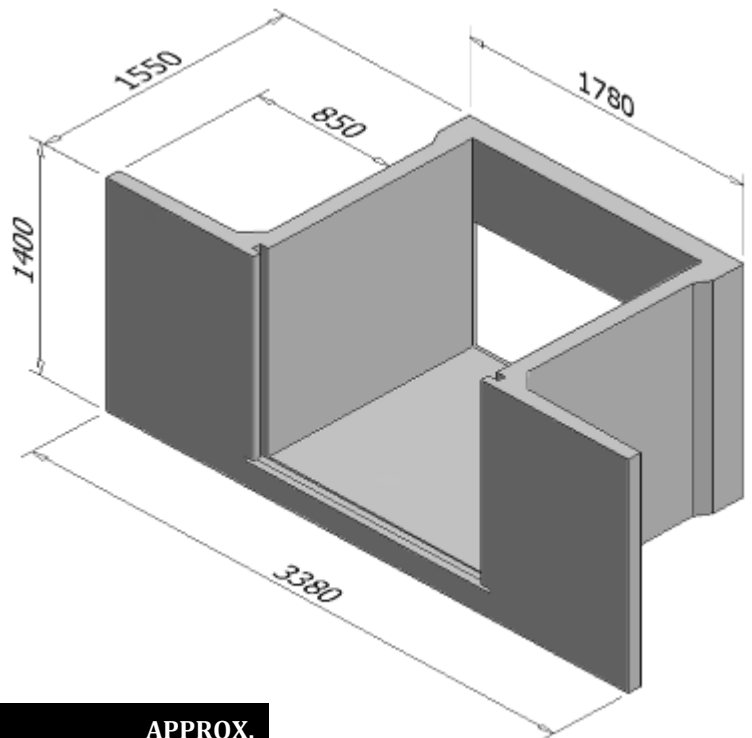
| CODE | PRODUCT | APPROX. WEIGHT |
|------|---------------------|----------------|
| 177 | Lid to suit Channel | 3200kg |
| 176 | 6m Channel Section | 4000kg |

Channel Section Detail

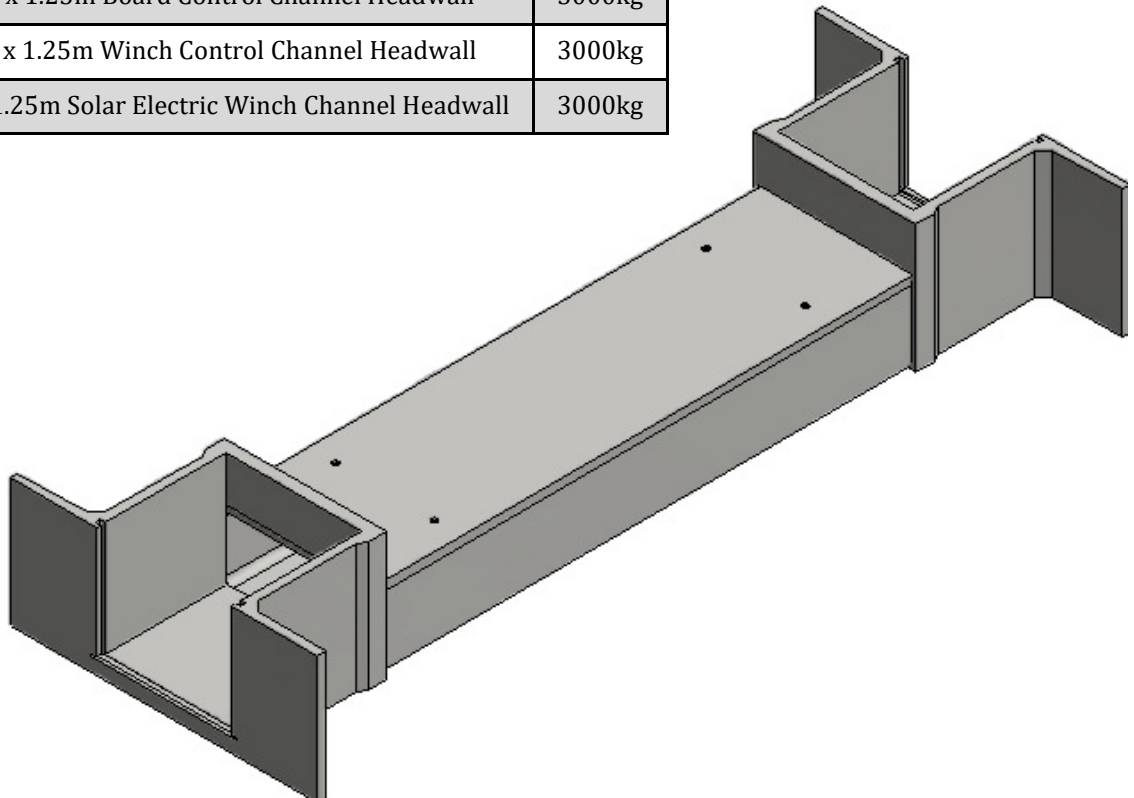


WATER CHANNEL HEADWALLS

- Large wings to prevent erosion from turbulence.
- These units are also available with steel doors or winch control tarp systems modified to incorporate the NEW solar powered 'wireless automated control system' that can monitor and control the stop straight from your smart phone.
- Also available with steel slats.
- Interlock with concrete channel systems.
- Easy installation
- Able to carry 72MGL with minimal head loss.
- Ideal for large bank less channel roll over systems.
- Also available in smaller sizes upon request.

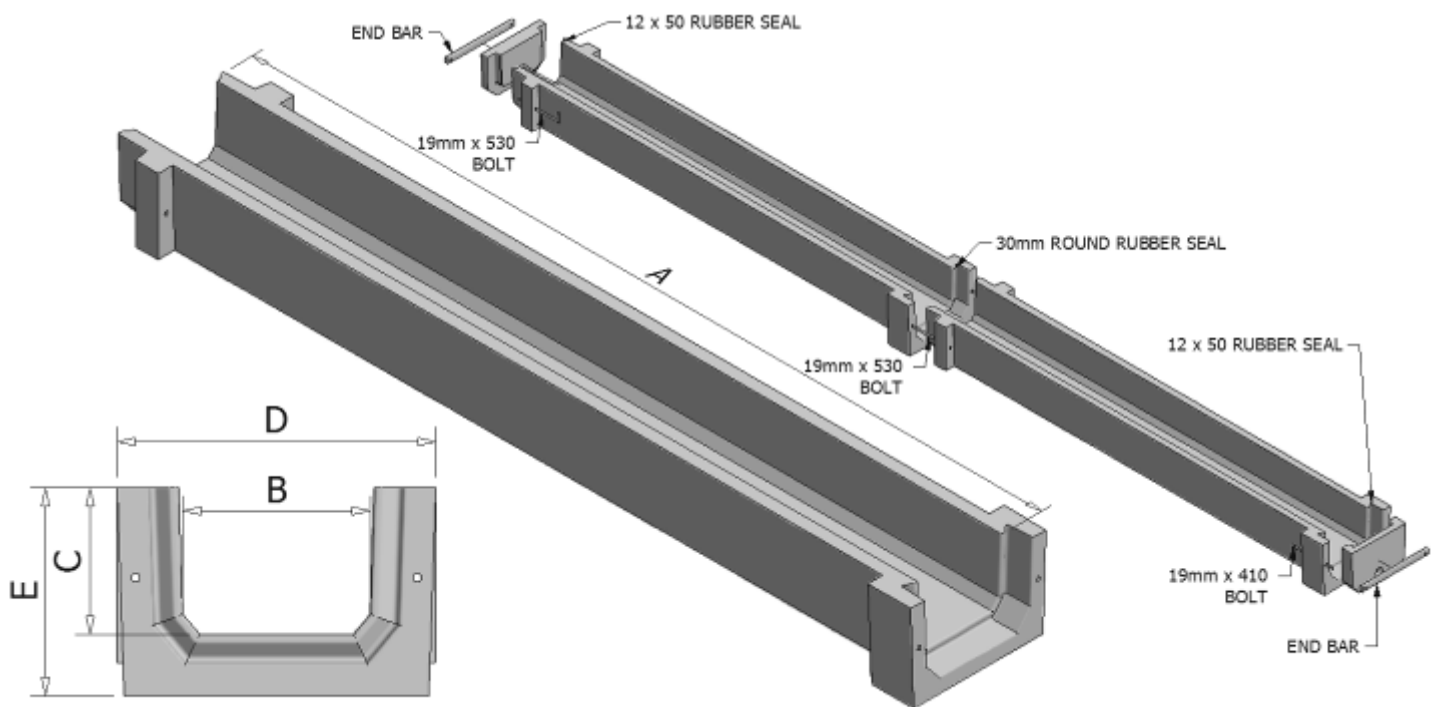


| CODE | PRODUCT | APPROX. WEIGHT |
|------|--|----------------|
| 178 | 1.5m x 1.25m Plain Channel Headwall | 3000kg |
| 179 | 1.5m x 1.25m Board Control Channel Headwall | 3000kg |
| 181 | 1.5m x 1.25m Winch Control Channel Headwall | 3000kg |
| 180 | 1.5m x 1.25m Solar Electric Winch Channel Headwall | 3000kg |



CHANNEL SECTION

- Can be used for water or feed troughs.
- Single lengths can be joined together for increased capacity.
- 100mm Brass drainage plug + removable ends for easy cleaning.
- Non corrosive stainless steel bolts
- Able to be laid on flat ground.
- Can be used for industrial drainage farms, factories, mines, storm water diversion in low yielding areas and irrigation.



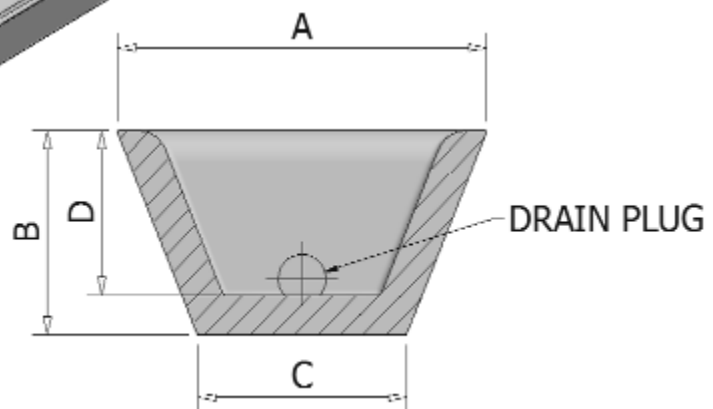
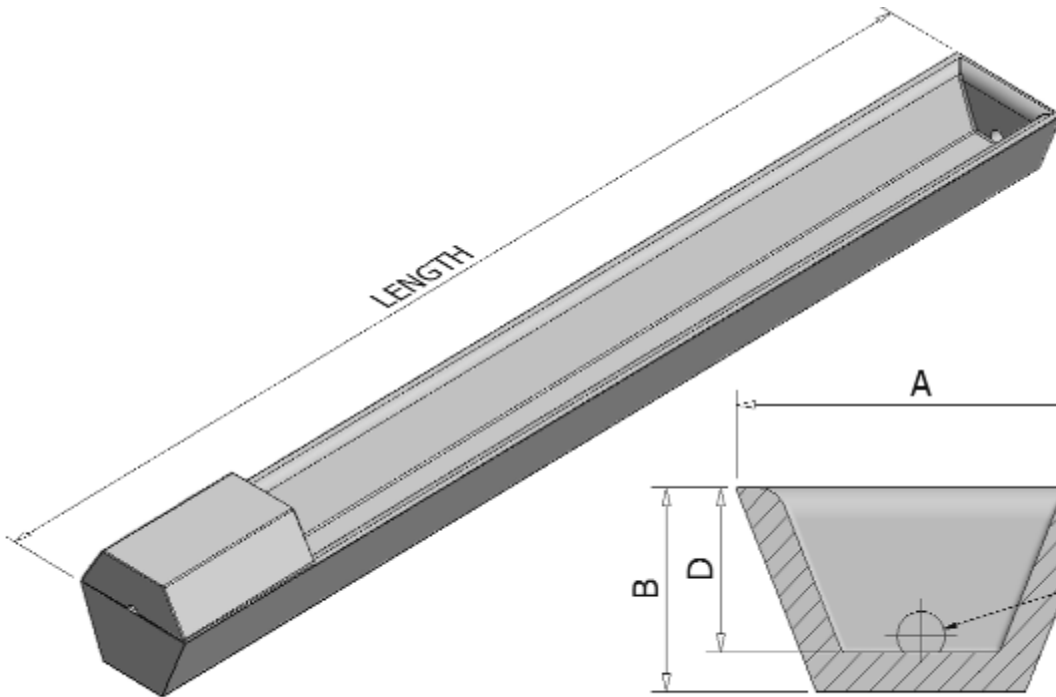
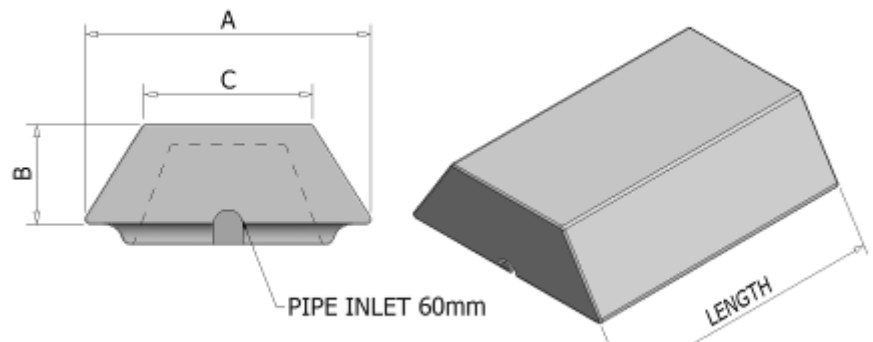
| CODE | DEPTH X WIDTH | A | B | C | D | E | APPROX. WEIGHT |
|------|------------------|------|-----|-----|------|-----|-------------------|
| 174 | 400 X 550 | 5485 | 555 | 405 | 920 | 585 | 1700kg |
| 172 | 500 X 700 | 5240 | 705 | 500 | 1060 | 680 | 2160kg |

WATER TROUGH

- Units have a non-slip float valve cover for protection from stock.
- Brass drain plug is installed for easy cleaning
- Flat base design alleviates the necessity for additional stands, creating a more stable unit.

LID DETAIL

| CODE | TO SUIT | A | B | C | LENGTH | APPROX. WEIGHT |
|------|---------|-----|-----|-----|--------|----------------|
| 170 | 180L | 450 | 250 | 285 | 740 | 70kg |
| 165 | 450L | 560 | 260 | 335 | 745 | 80kg |
| 160 | 560L | 670 | 260 | 385 | 775 | 110kg |

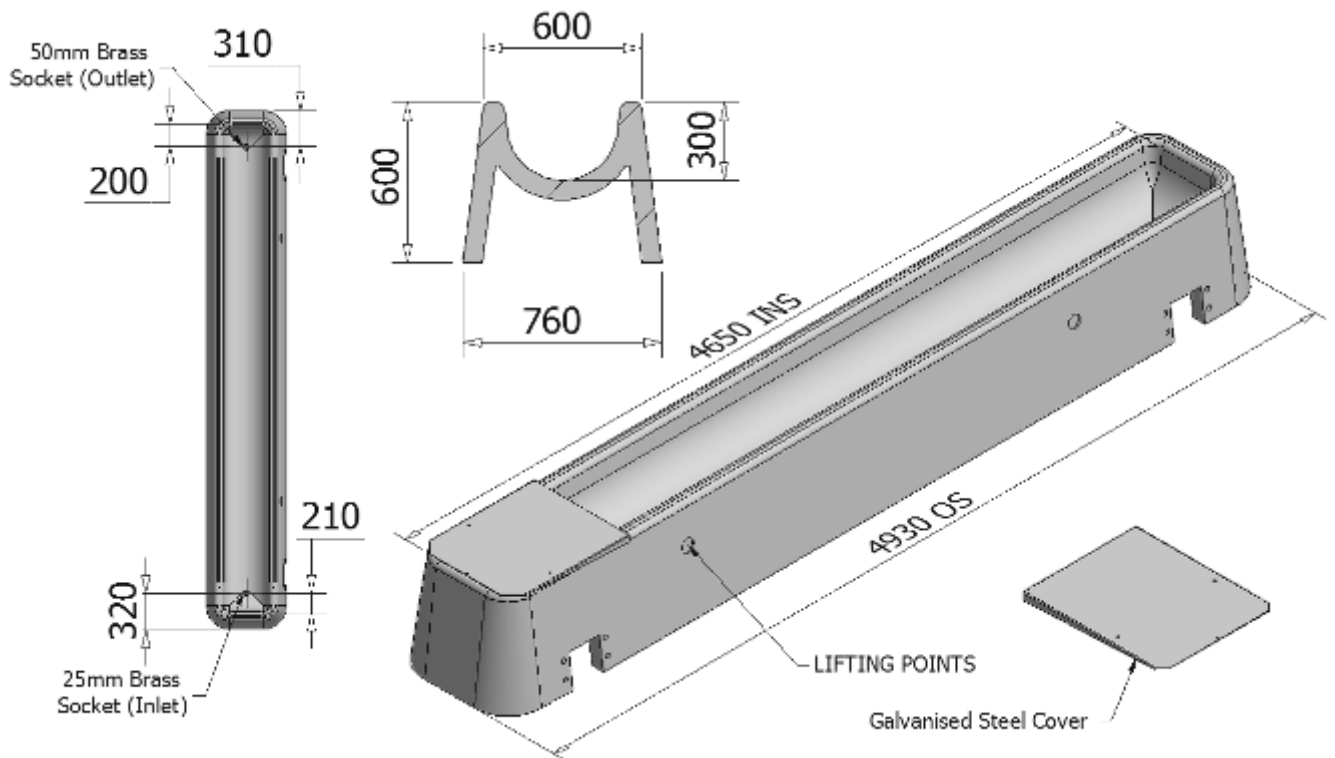


| CODE | SIZE | A | B | C | D | LENGTH | APPROX. WEIGHT |
|------|------|-----|-----|-----|-----|--------|----------------|
| 140 | 180L | 430 | 260 | 300 | 205 | 2515 | 280kg |
| 130 | 450L | 590 | 300 | 325 | 230 | 4870 | 640kg |
| 120 | 560L | 670 | 360 | 400 | 280 | 5165 | 890kg |

FEEDLOT TROUGH

- Specifically designed for high density stock situations.
- Rounded edges help reduce stock injury.
- Brass drain plug is installed for easy cleaning.
- Pump system able to be stalled securely beneath the trough with inlet hole access.

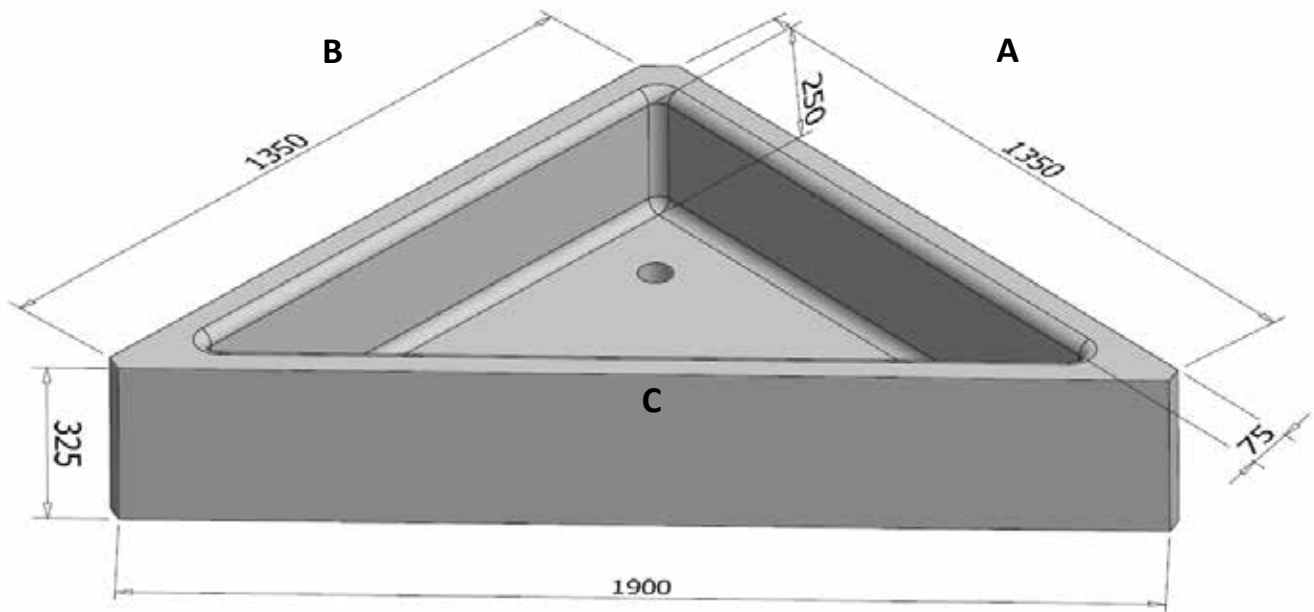
| CODE | LENGTH | WIDTH | HEIGHT | APPROX. WEIGHT |
|------|--------|-------|--------|----------------|
| 155 | 4665 | 600 | 600 | 1720kg |



TRIANGULAR WATER TROUGH

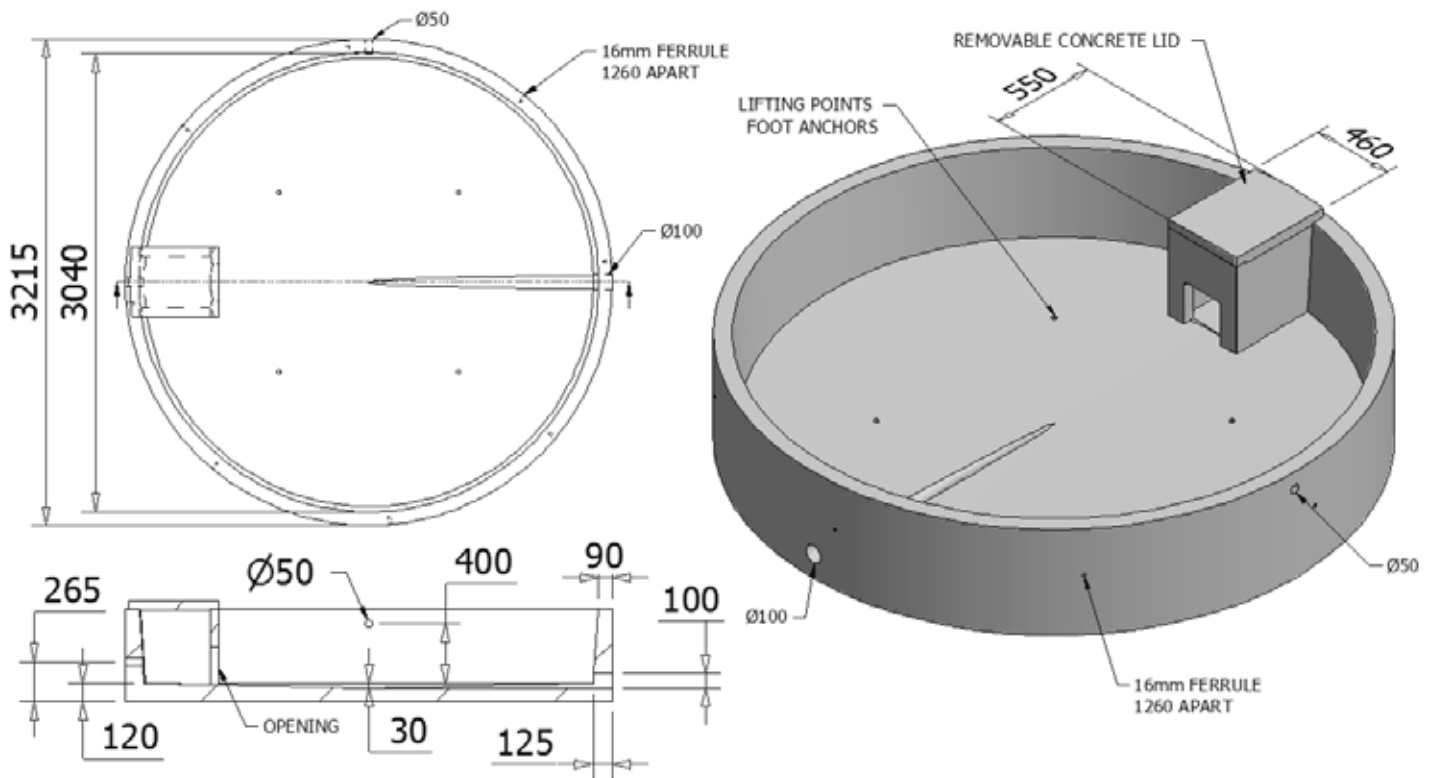
- Able to hold 380L
- Brass drain plug is installed for easy cleaning
- Flat base design alleviates the necessity for additional stands, creating a more stable unit.
- Ideal for stockyards as corner trough.

| CODE | A INT. MM | B INT. MM | C INT. MM | APPROX. WEIGHT |
|------|--------------|--------------|--------------|-------------------|
| 150 | 1150 | 1150 | 1600 | 340kg |



ROUND WATER TROUGH

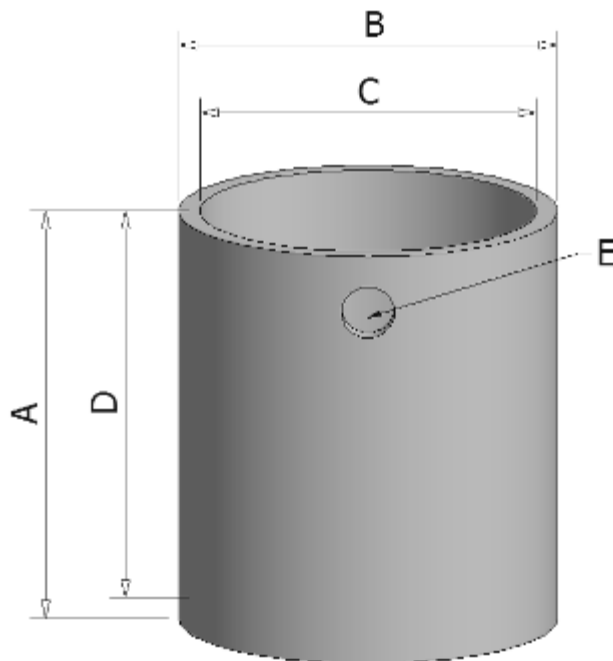
- Able to hold 3000L
- Large volume enables the water temperature to remain cooler.
- Ferrules are built in to allow installation of a guard to prevent stock from entering the trough but still allow drinking.
- Used predominantly for cattle.
- Comes with high volume float
- Stock proof cover for float



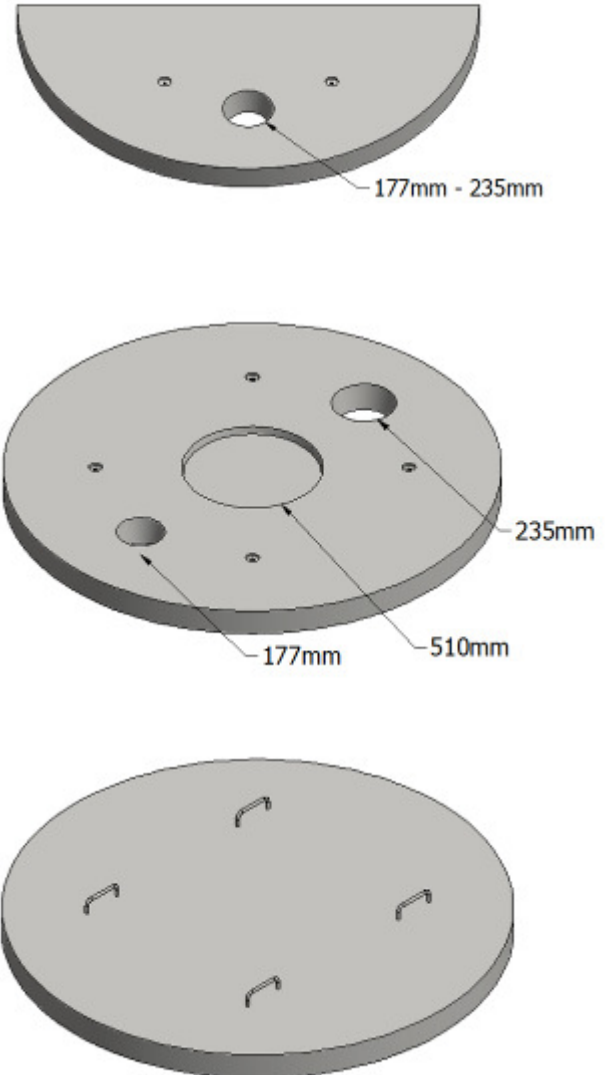
| CODE | INT. DIA | OUT. DIA | APPROX. WEIGHT |
|------|----------|----------|----------------|
| 105 | 3040 | 3215 | 3600kg |

SEPTIC TANKS

- Tanks range in size from 1220L to 4500L capacity with extensions available for most sizes.
- Suitable for the reception and treatment of sewage & silage for households.
- Can also be used in an irrigation recycling system.
- Available with various lid styles to suit.



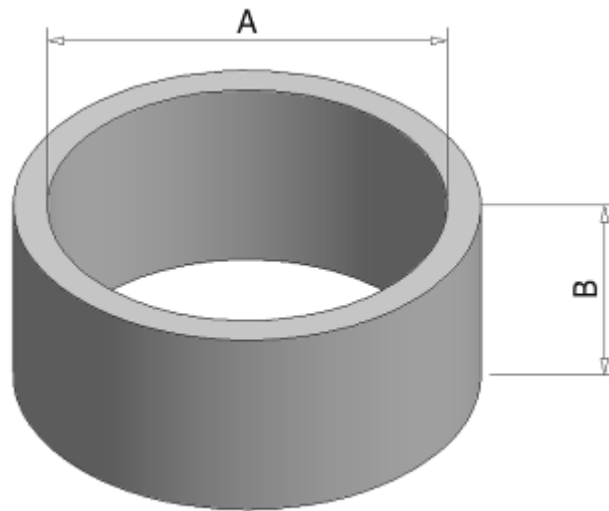
Example Lids



| CODE | CAPACITY | A MM | B MM | C MM | D MM | APPROX WEIGHT. | LID CODE |
|------|----------|---------|---------|---------|---------|-------------------|-------------|
| 1270 | 1220L | 1800 | 1200 | 1070 | 1690 | 1290kg | 1320 |
| 1260 | 1700L | 1950 | 1360 | 1220 | 1830 | 1690kg | 1310 |
| 1250 | 2300L | 2150 | 1505 | 1350 | 2020 | 2340kg | 1300 |
| 1240 | 2700L | 1920 | 1705 | 1500 | 1780 | 3130kg | 1290 |
| 1230 | 4500L | 2300 | 2030 | 1830 | 2150 | 3360kg | 1280 |

TILE DRAINAGE RINGS

- Tile drainage is a system that reduces salinity in the soil, maintaining a stable water level by controlled drainage.
- Flat or dome lids available to suit.
- Available in numerous sizes to suit any system.
- Bases are able to be poured for any size.

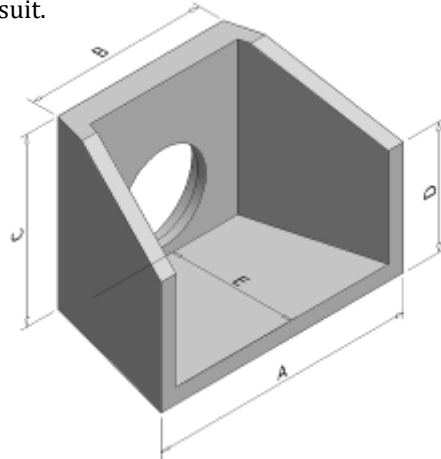
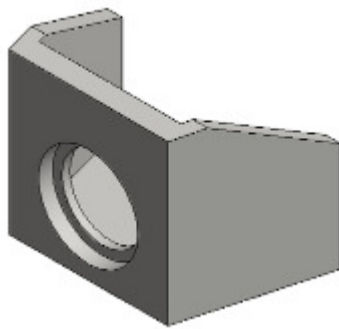


| CODE | A MM | B MM | APPROX. WEIGHT |
|------|---------|---------|-------------------|
| 1070 | 800 | 150 | 52kg |
| 1080 | 800 | 300 | 102kg |
| 1090 | 800 | 1500 | 692kg |
| 1100 | 900 | 300 | 132kg |
| 1110 | 900 | 600 | 242kg |
| 1120 | 900 | 1600 | 682kg |
| 1128 | 1220 | 300 | 212kg |
| 1130 | 1220 | 600 | 432kg |

| CODE | A MM | B MM | APPROX. WEIGHT |
|-------|---------|---------|-------------------|
| 1132 | 1350 | 300 | 232kg |
| 1134 | 1350 | 600 | 442kg |
| 1136 | 1500 | 600 | 780kg |
| 1138 | 1800 | 300 | 360kg |
| 1139 | 1800 | 600 | 720kg |
| 1139C | 2100 | 600 | 1450kg |
| 1139A | 2300 | 300 | 540kg |
| 1139B | 2300 | 600 | 1080kg |

HEADWALL/PIPE END DIMENSIONS

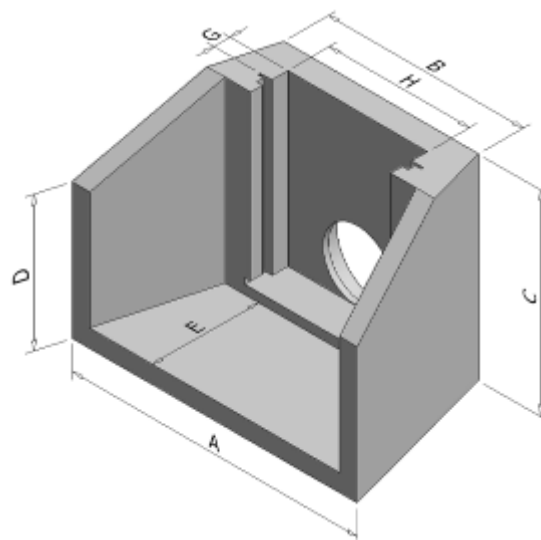
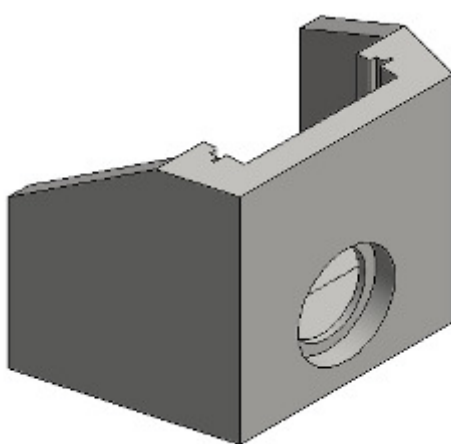
- Wide range of sizes are manufactured to fit from 150mm to 1800mm inside diameter pipes.
- Can be used to eradicate erosion in a lift pump situation.
- Frequently used in access crossings, subdivisions and road works.
- Also available in full neoprene to give a water tight seal able to take a steel door.
- Available with step for board control allows overflow to maintain you channel water level.
- New design has a self cleaning groove to remove debris from door slide.
- Easy pipe installation with either a rubber ring or emer seal eliminating the need for any grouting.
- Multi-cell headwalls available to order.
- Quick lift & A-Frame systems available to suit.



| CODE | PIPE INT. DIAM MM | HOLE SIZE MM | A MM | B MM | C MM | D MM | E MM | APPROX. WEIGHT |
|------|-------------------|--------------|------|------|------|------|------|----------------|
| 1493 | PVC | 150 | 750 | 460 | 400 | 300 | 270 | 105kg |
| 1495 | 250 | 310 | 1030 | 770 | 660 | 460 | 330 | 205kg |
| 1510 | 300 | 380 | | | | | | |
| 1540 | 350 | 420 | | | | | | |
| 1547 | 375 | 465 | | | | | | |
| 1551 | 400 | 490 | | | | | | |
| - | 300 | 380 | 1320 | 1000 | 840 | 580 | 450 | 385kg |
| - | 350 | 420 | | | | | | |
| 1558 | 375 | 465 | | | | | | |
| 1561 | 400 | 490 | | | | | | |
| 1570 | 450 | 545 | | | | | | |
| 1650 | 450 | 545 | 1450 | 1040 | 940 | 670 | 550 | 495kg |
| 1680 | 525 | 630 | | | | | | |
| 1770 | 600 | 715 | 1700 | 1200 | 1140 | 800 | 580 | 700kg |
| 1800 | 700 | 830 | | | | | | |
| 1816 | 750 | 895 | 1930 | 1400 | 1370 | 1000 | 770 | 1090kg |
| - | 800 | 920 | | | | | | |
| 1830 | 825 | 945 | | | | | | |
| 1860 | 900 | 1070 | 2170 | 1600 | 1570 | 1080 | 950 | 1600kg |
| 1890 | 1050 | 1210 | 2350 | 1700 | 1900 | 1300 | 1040 | 2250kg |
| 1950 | 1200 | 1380 | 2850 | 2000 | 2200 | 1450 | 1100 | 2910kg |
| 1980 | 1350 | 1510 | | | | | | |
| 2000 | 1500 | 1680 | | | | | | |
| 2010 | 1500 | 1680 | 3700 | 2450 | 3000 | 2150 | 2150 | 9000kg |
| 2025 | 1800 | 2000 | | | | | | |

HEADWALL/PIPE END DIMENSIONS

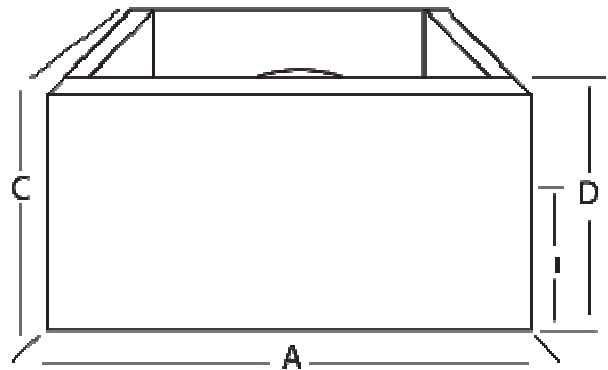
WITH DOOR OR BOARD CONTROL



| CODE BOARD/BOARD & DOOR | PIPE INT. DIAM MM | HOLE SIZE MM | A MM | B MM | C MM | D MM | E MM | G MM | H MM | APPROX. WEIGHT |
|-------------------------------|----------------------|-----------------|---------|---------|---------|---------|---------|---------|---------|-------------------|
| 1554/1555 | 300 | 380 | 1250 | 840 | 840 | 580 | 460 | 85 | 620 | 465kg |
| 1556/1557 | 350 | 420 | | | | | | | | |
| 1559/1560 | 375 | 465 | | | | | | | | |
| 1562/1563 | 400 | 490 | | | | | | | | 435kg |
| 1572/1573 | 450 | 545 | | | | | | | | |
| 1662/1663 | 450 | 545 | 1490 | 920 | 940 | 670 | 560 | 90 | 620 | 655kg |
| 1692/1693 | 525 | 630 | | | | | | | | |
| 1722/1723 | 525 | 630 | 1460 | 1040 | 1140 | 810 | 620 | 100 | 735 | 860kg |
| 1782/1783 | 600 | 715 | | | | | | | | |
| 1812/1813 | 700 | 830 | | | | | | | | |
| 1815/1817 | 750 | 895 | 1800 | 1220 | 1370 | 1000 | 780 | 110 | 900 | 1200kg |
| - | 800 | 920 | | | | | | | | |
| 1820/1840 | 825 | 945 | | | | | | | | |
| 1850/1870 | 900 | 1070 | 2150 | 1440 | 1570 | 1100 | 1000 | 120 | 1020 | 1970kg |
| 1880/1900 | 1050 | 1210 | 2370 | 1560 | 1900 | 1320 | 1050 | 130 | 1170 | 2690kg |
| 1940/1960 | 1200 | 1380 | 2920 | 1860 | 2200 | 1530 | 1230 | 140 | 1400 | 4210kg |
| 1970/1990 | 1350 | 1510 | | | | | | | | |

NIB/SILL - HEADWALLS/PIPE ENDS

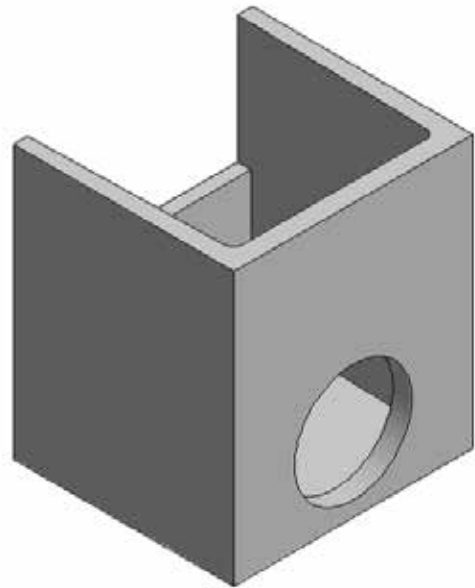
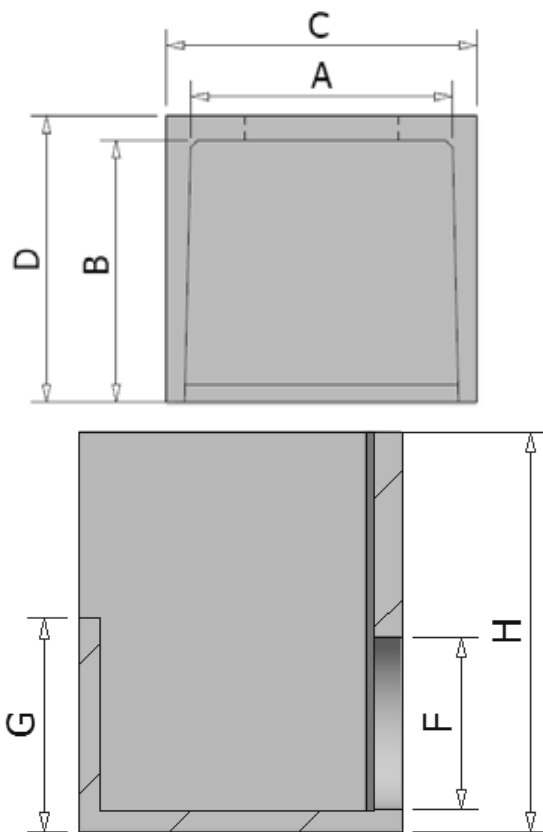
- Available in half and full height.
- Can be used to reduce silt build-up in pipes, increasing water flow rates.
- Allows pipes to be set lower to allow greater water flow.
- Separate unit allows for adjustable heights.



| CODE | A MM | C MM | D MM | I MM | APPROX. WEIGHT |
|------|---------|---------|---------|---------|-------------------|
| 2383 | 1400 | 660 | - | 230 | 45kg |
| 2385 | 1400 | 660 | 460 | - | 90kg |
| 2387 | 1500 | 840/940 | - | 350 | 100kg |
| 2390 | 1500 | 840/940 | 680 | - | 200kg |
| 2393 | 1800 | 1140 | - | 400 | 160kg |
| 2395 | 1800 | 1140 | 810 | - | 320kg |
| 2397 | 1950 | 1370 | - | 500 | 210kg |
| 2400 | 1950 | 1370 | 1000 | - | 420kg |
| 2403 | 2250 | 1570 | - | 600 | 330kg |
| 2405 | 2250 | 1570 | 1200 | - | 660kg |
| 2407 | 2400 | 1900 | - | 700 | 410kg |
| 2410 | 2400 | 1900 | 1400 | - | 820kg |
| 2413 | 2900 | 2200 | - | 750 | 615kg |
| 2415 | 2900 | 2200 | 1500 | - | 1230kg |

DROP BOX HEADWALL

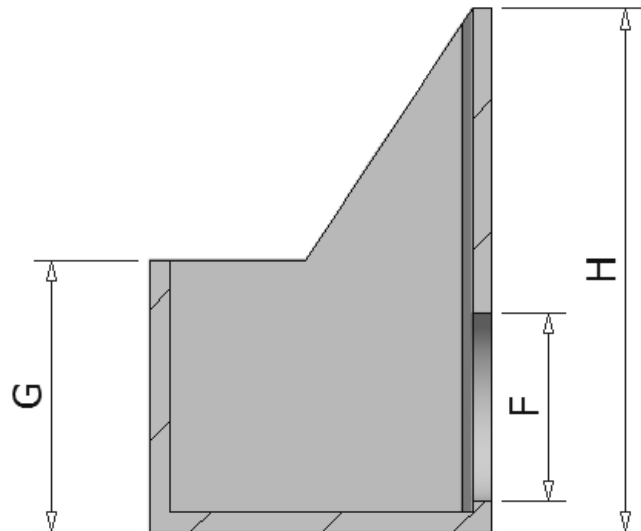
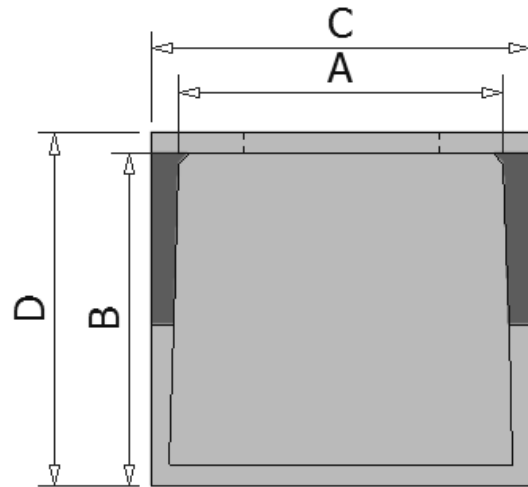
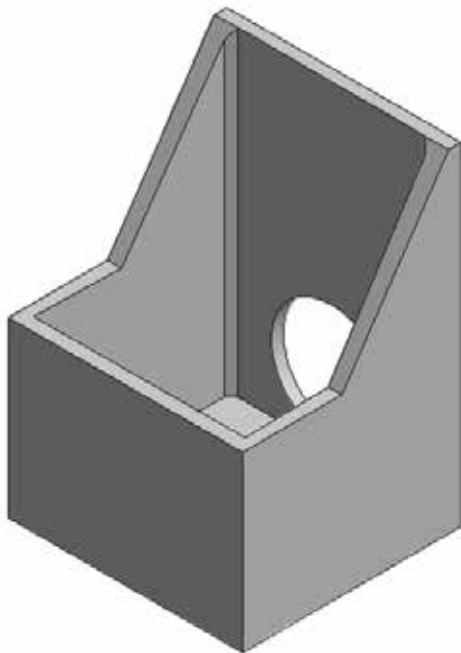
- Used for minimizing erosion in high flow irrigation areas.
- Ideal for crossings over variable channel heights.
- Complete custom square wing drop box solution.
- Variable wing lengths, height and sill heights available to suit your pipe size of choice.
- Available in additional sizes made to order.



| CODE | A | B | C | D | F | G | H |
|-------|------|------|------|------|--------|--------|--------|
| | MM | MM | MM | MM | MM | MM | MM |
| 4342H | 1200 | 1200 | 1400 | 1330 | CUSTOM | CUSTOM | CUSTOM |
| 4402H | 1500 | 1500 | 1750 | 1630 | CUSTOM | CUSTOM | CUSTOM |
| 4472H | 1800 | 1800 | 2130 | 1970 | CUSTOM | CUSTOM | CUSTOM |
| 4552H | 2100 | 2100 | 2455 | 2285 | CUSTOM | CUSTOM | CUSTOM |
| 4640H | 2400 | 2100 | 2800 | 2300 | CUSTOM | CUSTOM | CUSTOM |

SLOPED DROP BOX HEADWALL

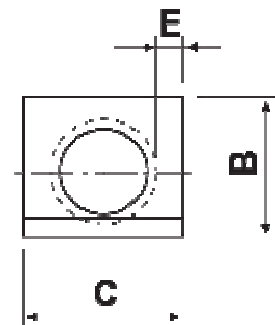
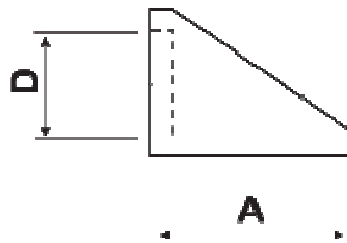
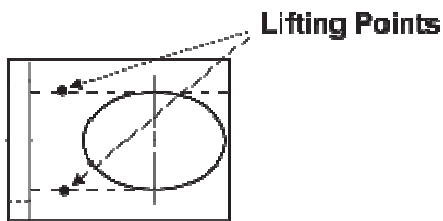
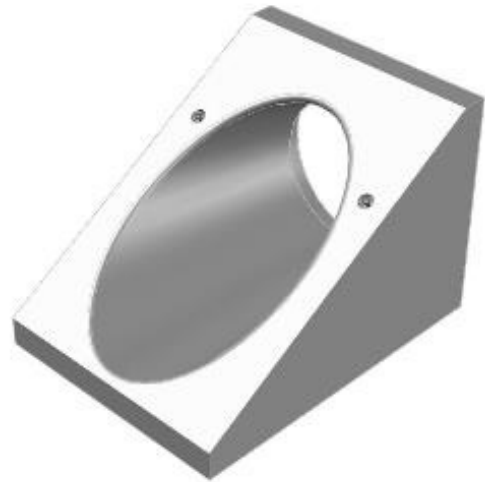
- Used for minimizing erosion in high flow irrigation areas.
- Ideal for crossings over variable channel heights.
- Complete custom sloped wing drop box solution.
- Variable wing lengths, height and sill heights available to suit your pipe size of choice.
- Available in additional sizes made to order.



| CODE | A MM | B MM | C MM | D MM | F MM | G MM | H MM |
|--------|---------|---------|---------|---------|---------|---------|---------|
| 4342SH | 1200 | 1200 | 1400 | 1330 | CUSTOM | CUSTOM | CUSTOM |
| 4402SH | 1500 | 1500 | 1750 | 1630 | CUSTOM | CUSTOM | CUSTOM |
| 4472SH | 1800 | 1800 | 2130 | 1970 | CUSTOM | CUSTOM | CUSTOM |
| 4552SH | 2100 | 2100 | 2455 | 2285 | CUSTOM | CUSTOM | CUSTOM |
| 4640SH | 2400 | 2100 | 2800 | 2300 | CUSTOM | CUSTOM | CUSTOM |

SLOPED HEADWALLS

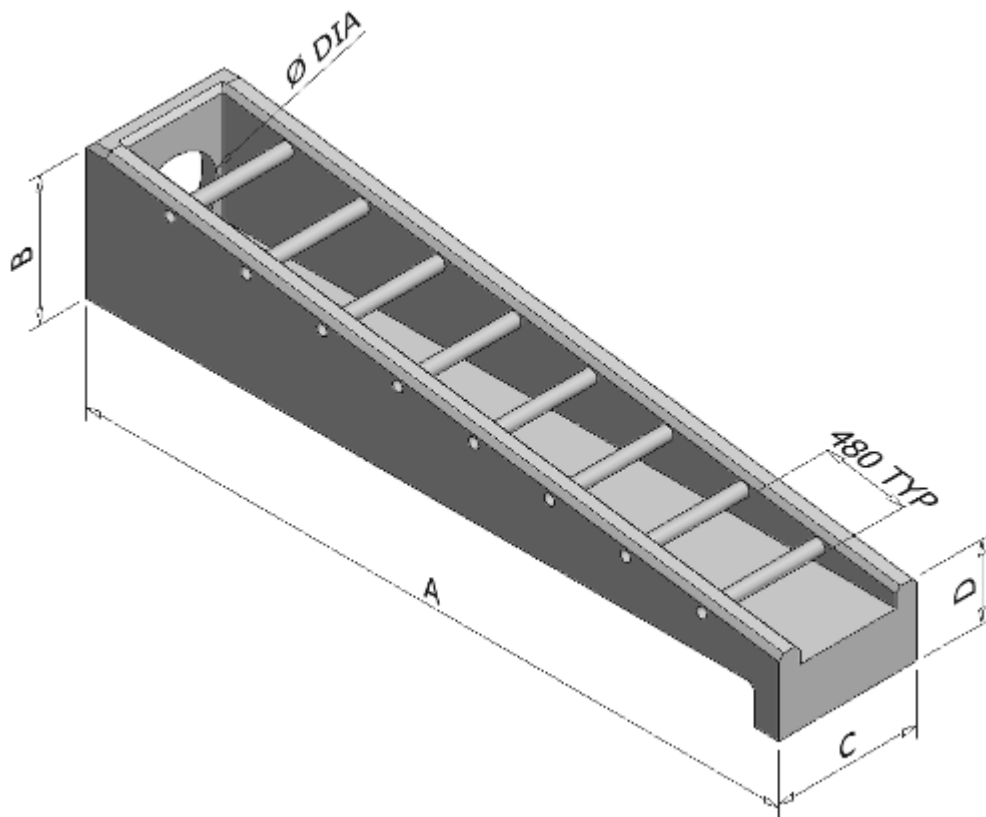
- Minimises hazard on shoulder of roads without compromising the batter of the soil.
- Generally used by Roads & Maritime Services and Shire Councils across Australia.
- Sizes range to suit 300mm to 600mm inside diameter pipes.



| CODE | PIPE SIZE MM | A MM | B MM | C MM | D MM | E MM | APPROX. WEIGHT |
|------|-----------------|---------|---------|---------|---------|---------|-------------------|
| 2100 | 300 | 700 | 500 | 580 | Ø380 | 95 | 210kg |
| 2105 | 375 | 960 | 685 | 780 | Ø460 | 160 | 480kg |
| 2115 | 450 | 960 | 685 | 780 | Ø545 | 130 | 460kg |
| 2120 | 525 | 1335 | 900 | 1015 | Ø635 | 190 | 1020kg |
| 2125 | 600 | 1335 | 900 | 1015 | Ø715 | 155 | 1010kg |

TRAFFICABLE HEADWALLS

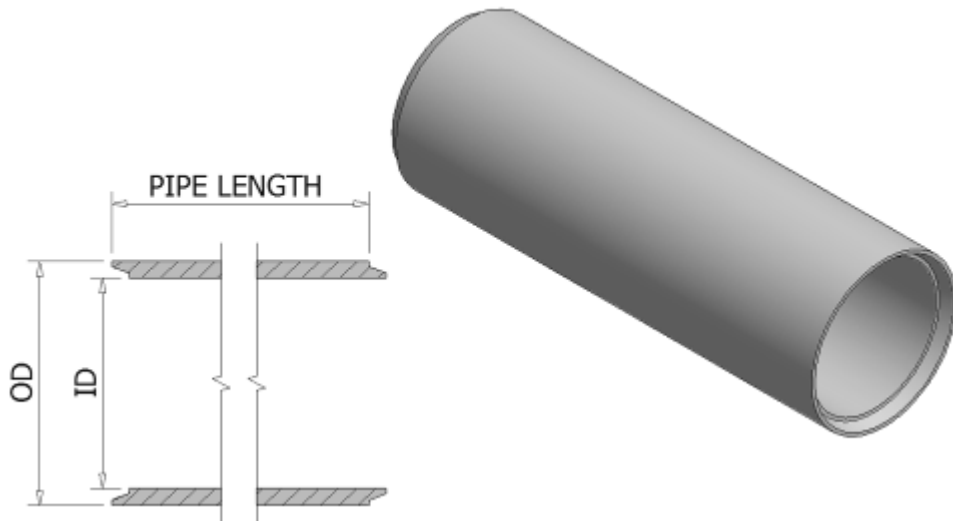
- Minimises hazard on shoulder of roads without compromising the batter of the soil.
- Generally used by Roads & Maritime Services and Shire Councils across Australia.
- Sizes range to suit 300mm to 525mm inside diameter pipes.



| CODE | PIPE ID | A MM | B MM | C MM | D MM | APPROX. WEIGHT |
|------|---------|------|------|------|------|----------------|
| 2130 | 300 | 2705 | 655 | 675 | 460 | 1140kg |
| 2135 | 375 | 2710 | 655 | 675 | 460 | 1120kg |
| 2140 | 450 | 4340 | 840 | 860 | 460 | 2550kg |
| 2145 | 525 | 4330 | 840 | 860 | 460 | 2490kg |

INTERLOCKING/BUTT PIPES

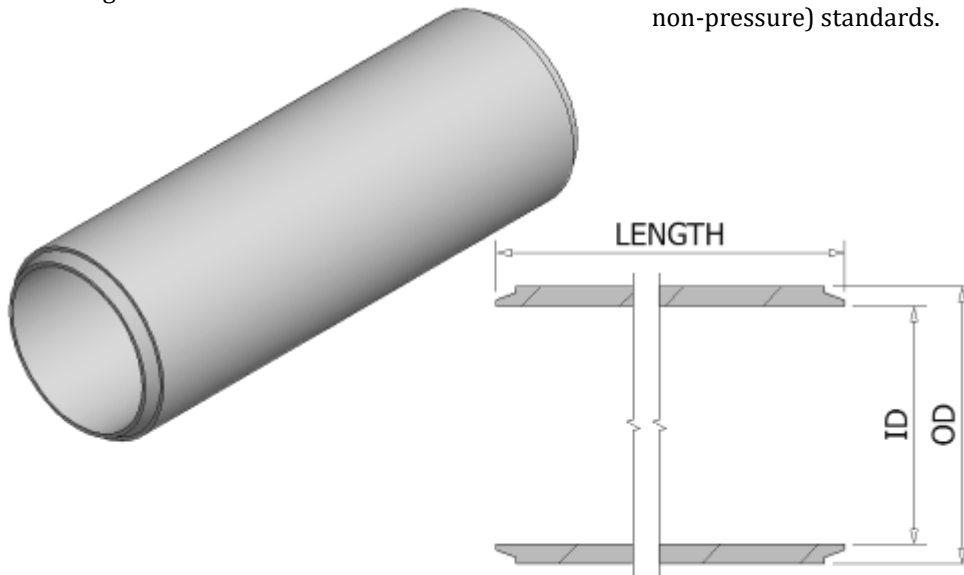
- Designed with a 'male' & 'female' end for ease of functionality.
- Used for irrigation needs; supply drainage, sumps & crossings.
- Available with pipe sealing bands where pipelines need to be flexible.
- Manufactured to AS/NZS 4058:2007 Pre-cast concrete pipes (pressure & non-pressure) standards.



| CODE | SIZE ID | SIZE OD | JOINED LENGTH | APPROX. WEIGHT |
|------|---------|---------|---------------|----------------|
| 2470 | 230 | 285 | 2000 | 130kg |
| 2490 | 250 | 310 | 2500 | 190kg |
| 2500 | 300 | 360 | 2500 | 290kg |
| 2510 | 350 | 415 | 2500 | 360kg |
| 2515 | 375 | 460 | 2500 | 375kg |
| 2520 | 400 | 472 | 2500 | 410kg |
| 2540 | 450 | 524 | 2500 | 460kg |
| 2550 | 525 | 615 | 2500 | 540kg |
| 2570 | 600 | 697 | 2500 | 700kg |
| 2580 | 700 | 810 | 2500 | 880kg |
| 2585 | 750 | 825 | 2490 | 1500kg |
| 2590 | 800 | 922 | 2500 | 1130kg |
| 2595 | 825 | 947 | 2500 | 1225kg |
| 2600 | 900 | 1025 | 2500 | 1390kg |
| 2610 | 1050 | 1184 | 2500 | 1750kg |
| 2620 | 1200 | 1350 | 2500 | 2100kg |
| 2630 | 1350 | 1513 | 2500 | 2600kg |
| 2640 | 1500 | 1700 | 2500 | 3750kg |

SPIGOT PIPE

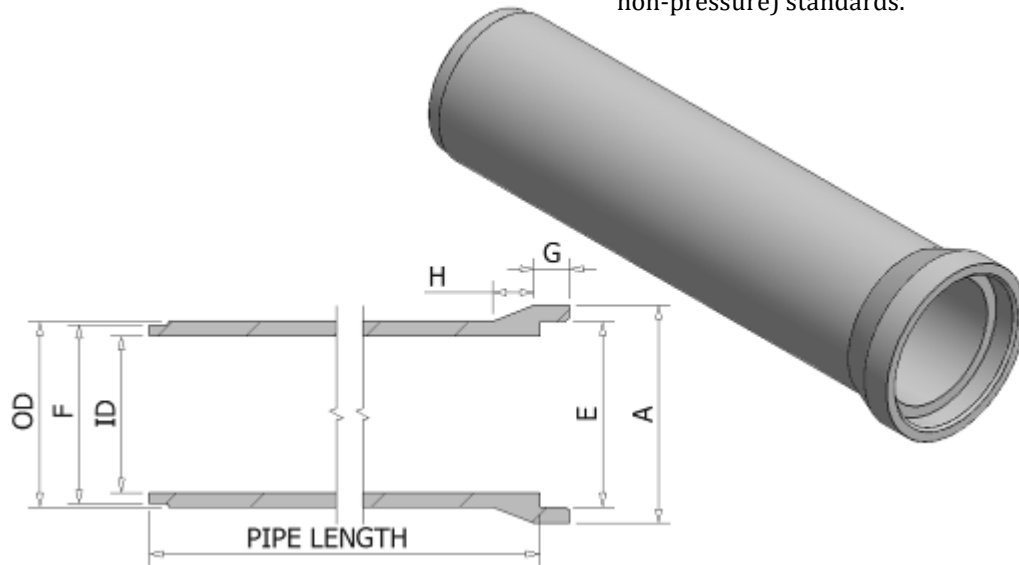
- Typically used in conjunction with a pipe head-wall and rubber ring joint pipe.
- Used for irrigation needs; supply drainage, sumps & crossings.
- Available in strength classes made to suit your irrigation needs.
- Manufactured to AS/NZS 4058:2007 Pre-cast concrete pipes (pressure & non-pressure) standards.



| CODE | SIZE ID | SIZE OD | JOINED LENGTH | APPROX. WEIGHT |
|------|---------|---------|---------------|----------------|
| 2660 | 300 | 363 | 2485 | 255kg |
| 2665 | 375 | 460 | 2480 | 375kg |
| 2670 | 400 | 472 | 2490 | 345kg |
| 2680 | 450 | 530 | 2480 | 425kg |
| 2690 | 525 | 620 | 2475 | 540kg |
| 2700 | 600 | 697 | 2500 | 740kg |
| 2710 | 700 | 810 | 2480 | 870kg |
| 2715 | 750 | 860 | 2470 | 1130kg |
| 2720 | 800 | 922 | 2500 | 1100kg |
| 2725 | 825 | 950 | 2490 | 1225kg |
| 2730 | 900 | 1030 | 2500 | 1320kg |
| 2740 | 1050 | 1197 | 2500 | 1730kg |
| 2750 | 1200 | 1355 | 2500 | 2030kg |
| 2751 | 1350 | 1513 | 2000 | 2259kg |
| 2752 | 1500 | 1675 | 2000 | 3300kg |
| 2754 | 1800 | 2000 | 2000 | 4500kg |

RUBBER RING JOINT PIPE

- Quality reinforced flanged pipe for irrigation.
- Rubber ring coupling gives flexibility to eliminate joint cracks.
- Allows for ground movement after Installation.
- Available in strength classes made to suit your irrigation needs.
- Manufactured to AS/NZS 4058:2007 Pre-cast concrete pipes (pressure & non-pressure) standards.



| CODE | PIPE ID MM | SIZE OD MM | JOINED LENGTH | A MM | E MM | F MM | G MM | H MM | APPROX. WEIGHT |
|------|---------------|---------------|------------------|---------|---------|---------|---------|---------|-------------------|
| 2880 | 300 | 365 | 2400 | 490 | 382 | 355 | 100 | 140 | 270kg |
| 2883 | 375 | 430 | 2400 | 585 | 465 | 440 | 120 | 135 | 380kg |
| 2885 | 400 | 475 | 2400 | 605 | 490 | 465 | 120 | 140 | 395kg |
| 2890 | 450 | 525 | 2400 | 655 | 540 | 515 | 100 | 150 | 470kg |
| 2900 | 525 | 620 | 2400 | 747 | 628 | 600 | 120 | 160 | 600kg |
| 2902 | 600 | 700 | 2400 | 835 | 710 | 685 | 135 | 190 | 780kg |
| 2903 | 700 | 814 | 2400 | 960 | 827 | 805 | 130 | 200 | 1030kg |
| 2904 | 750 | 875 | 2350 | 1040 | 895 | 865 | 140 | 220 | 1170kg |
| 2905 | 825 | 965 | 2370 | 1140 | 980 | 950 | 150 | 245 | 1270kg |
| 2906 | 900 | 1035 | 2355 | 1245 | 1070 | 1020 | 150 | 250 | 1680kg |
| 2907 | 1050 | 1185 | 2330 | 1400 | 1225 | 1170 | 165 | 245 | 2000kg |
| 2908 | 1200 | 1360 | 2315 | 1580 | 1385 | 1345 | 165 | 300 | 2380kg |
| 2910 | 1350 | 1585 | 2265 | 1775 | 1560 | 1555 | 255 | 240 | 3150kg |
| 2870 | 1500 | 1740 | 2265 | 1965 | 1733 | 1697 | 250 | 290 | 4000kg |
| 2912 | 1800 | 2060 | 2265 | 2350 | 2060 | 2020 | 250 | 380 | 5700kg |

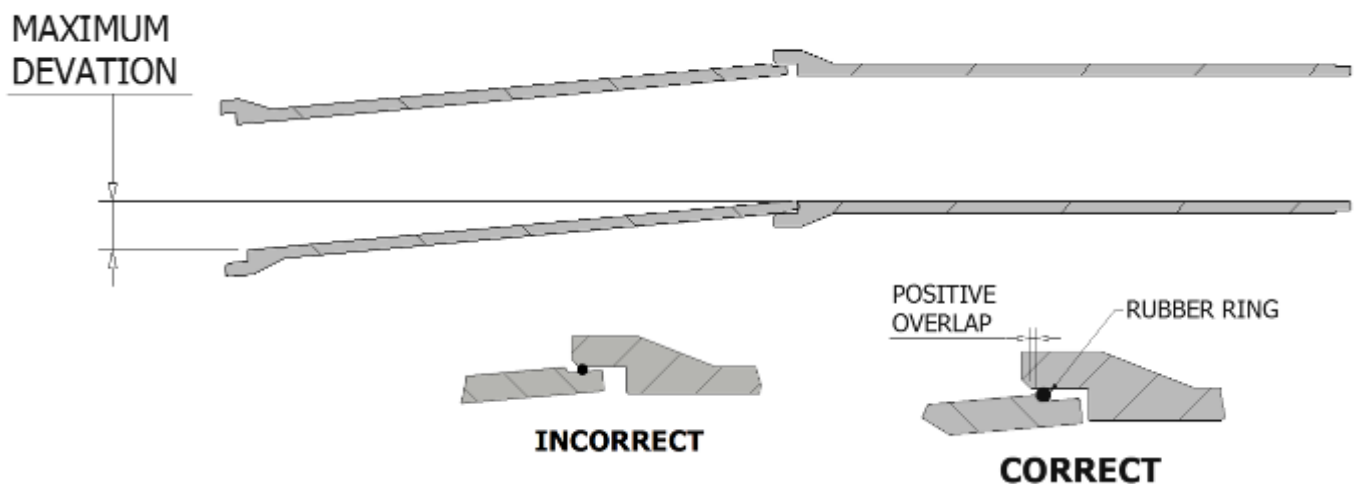
PIPE JOINT DEVIATIONS

| PIPE SIZE | PIPE LENGTH | MAX. DEVIATION AT 100KPA PRESSURE |
|-----------|-------------|--------------------------------------|
| 300 | 2450 | 65 |
| 375 | 2450 | 65 |
| 400 | 2450 | 65 |
| 450 | 2450 | 55 |
| 525 | 2450 | 46 |
| 600 | 2450 | 40 |
| 700 | 2450 | 28 |
| 750 | 2450 | 27 |
| 800 | 2450 | 26 |
| 900 | 2450 | 25 |
| 1050 | 2450 | 23 |
| 1200 | 2450 | 23 |
| 1350 | 2450 | 23 |
| 1500 | 2450 | 21 |
| 1650 | 2450 | 20 |
| 1800 | 2450 | 20 |

NOTES:

PRESSURE PIPE - The maximum deviation, at 100kPa, is at the dimension shown. Larger deviations or greater pressure is possible, contact Bruno Altin & Co. for assistance and advice. For greater pressures deviation would become less, ie. maximum pressure possible would be with pipes in a straight line.

DRAINAGE PIPE - Maximum deviation can be achieved so long as pipes have a positive overlap as shown. Maximum deviation, for drainage pipe only, is possible up to twice as indicated for pressure pipe. Contact Bruno Altin & Co. for further information.



APPROX. PIPE CULVERT FLOWS

DIAMETER

DISCHARGE

| MM | INS | RICE WHEEL REVS | CUMECS | ML PER DAY | CUSECS |
|------|-----|--------------------|--------|---------------|--------|
| 250 | 10 | 2.6 | 0.04 | 3.3 | 1.4 |
| 300 | 12 | 3.7 | 0.055 | 4.8 | 2.0 |
| 350 | 14 | 5.0 | 0.07 | 6.5 | 2.7 |
| 375 | 15 | 6.6 | 0.096 | 8.49 | 3.49 |
| 400 | 16 | 7.5 | 0.11 | 9.5 | 3.9 |
| 450 | 18 | 10.0 | 0.145 | 12.5 | 5.0 |
| 525 | 21 | 13.5 | 0.2 | 17.5 | 7.0 |
| 600 | 24 | 18.0 | 0.27 | 23.0 | 9.5 |
| 700 | 28 | 25.0 | 0.37 | 32.0 | 13.0 |
| 750 | 30 | 28.5 | 0.43 | 37 | 15.66 |
| 800 | 32 | 33.0 | 0.49 | 42.1 | 17.3 |
| 900 | 36 | 41.8 | 0.62 | 53.3 | 21.9 |
| 1050 | 42 | 56.8 | 0.84 | 72.5 | 29.8 |
| 1200 | 48 | 74.2 | 0.87 | 94.7 | 38.9 |
| 1350 | 53 | 93.9 | 1.1 | 119.8 | 49.2 |
| 1500 | 60 | 115.9 | 1.36 | 147.9 | 60.7 |
| 1650 | | | | | |
| 1800 | 72 | 165.1 | 2.46 | 212.9 | 86.9 |

Length of Culvert less than 20m

Head difference 100mm

CONVERSION FACTORS (FLOWRATES)

Rice Revs x 1.29 = megalitres/day

Cumecs (m/sec) x 86.4 = megalitres/day

Acre feet/day x 1.233 = megalitres/day

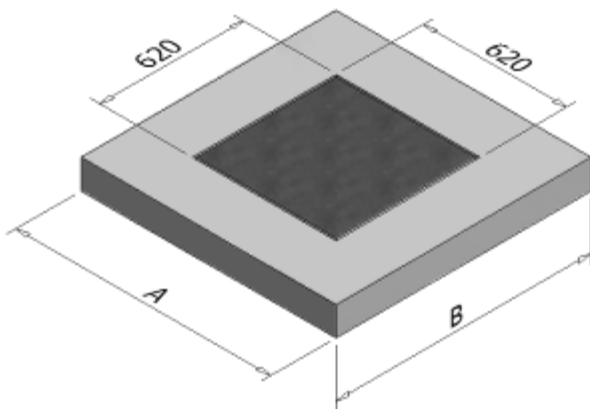
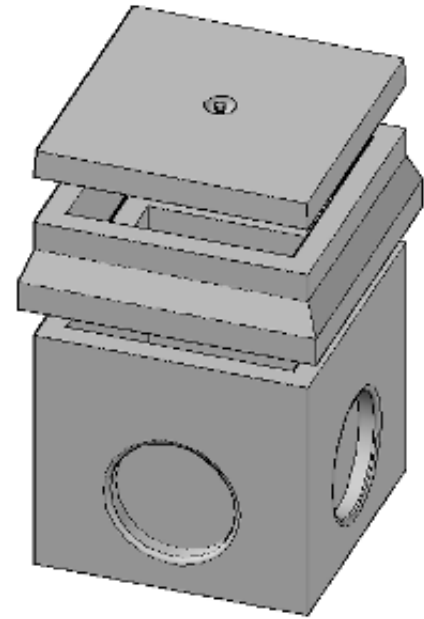
Cusecs (ft/sec) x 2.45 = megalitres/day

Rev = 1.29 ml/day = 15 litres/sec

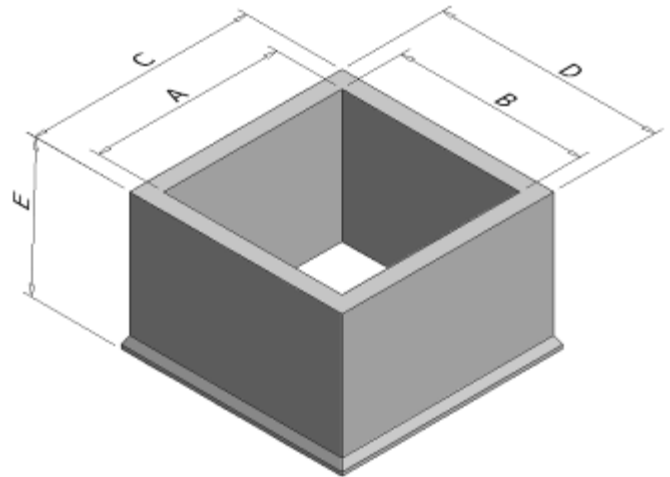
Rev x 15 = litres/sec

STORMWATER INLET PIT

- Suitable for junction pits, grated pits and kerb inlet pits.
- Knockout sections on all 4 sides provide easy pipe connection.
- Can be used as a diversion irrigation system.
- Able to have customized doors fitted to each unit.
- Stackable extensions available for the desired height.
- Multiple lid options including grated, surcharged and plain.
- Lids available in various load class ratings.
- Additional Lids available to those listed.



GATIC LID EXAMPLE



PIT EXTENSION EXAMPLE

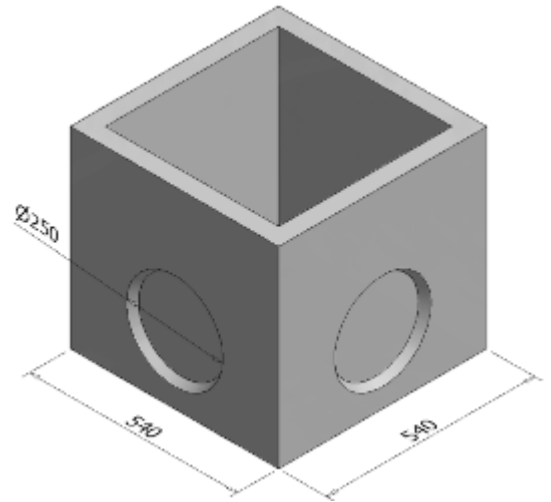
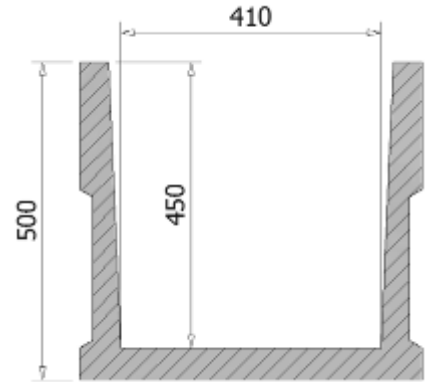


PLAIN LID EXAMPLE

STORMWATER INLET PIT

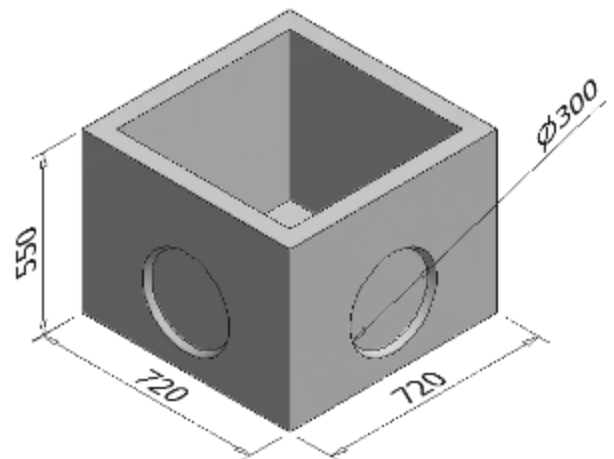
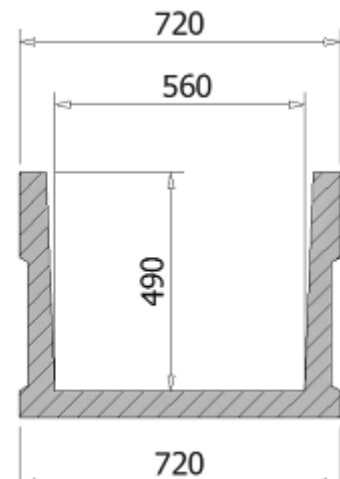
SIZE: ID 450MM (H) X 450MM (W) X 450MM (L)

| CODE | PRODUCT | APPROX. WEIGHT |
|-------|----------------------------------|----------------|
| 1411 | 45cm x 45cm x 45cm Pit | 130kg |
| 1412 | 15cm x 45cm x 45cm Extension | 50kg |
| 1413 | 30cm x 45cm x 45cm Extension | 80kg |
| 1414 | Plain Concrete Lid | 60kg |
| 1415 | LD Recessed Grate CLA | - |
| 1415B | HD Hinged Grate CLB | - |
| 1416C | HD Hinged Grate CLC | - |
| 1417 | HD Recessed Grate CLC | - |
| 1418 | 45cm x 45cm Grate + surround CLB | - |



SIZE: ID 490MM (H) X 600MM (W) X 600MM (L)

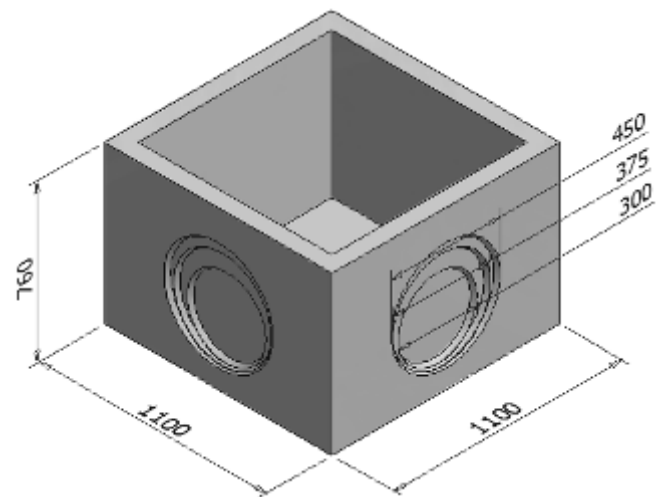
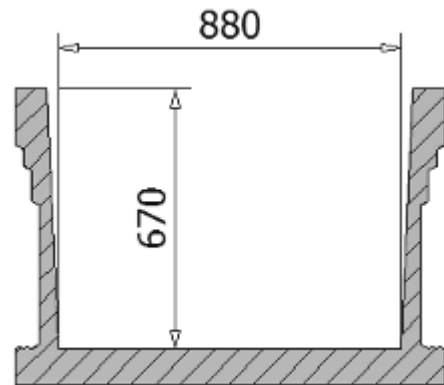
| CODE | PRODUCT | APPROX. WEIGHT |
|-------|--|----------------|
| 1420 | 49cm x 60cm x 60cm Pit | 240kg |
| 1422 | 15cm x 60cm x 60cm Extension | 70kg |
| 1424 | 30cm x 60cm x 60cm Extension | 120kg |
| 1426 | 53cm x 60cm x 60cm Extension | 210kg |
| 1428 | Plain Concrete Lid | 100kg |
| 1430 | Lid with HD Hinged Grate (30cm x 30cm) | 80kg |
| 1430S | Lid with Surcharge Grate CLB | - |
| 1432B | Full Grate with Surround CLB | - |
| 1432C | Full Grate with Surround CLC | - |
| 1432D | Full Grate with Surround CLD | - |
| 1432 | Full Hinged Grate CLB | - |
| 1431 | Full HD Recessed Grate CLC | - |
| 1431B | Full LD Recessed Grate CLA | - |



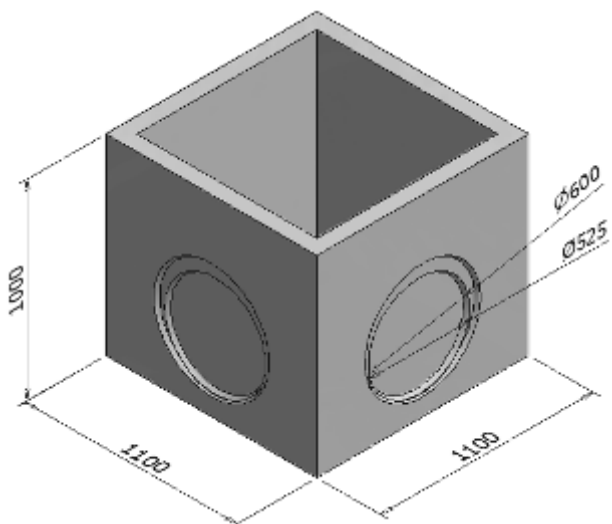
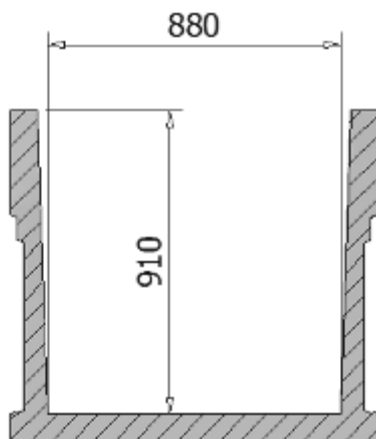
STORMWATER INLET PIT

SIZE: ID 670MM (H) X 900MM (W) X 900MM (L)

| CODE | PRODUCT | APPROX. WEIGHT |
|-------|---------------------------------------|----------------|
| 1435 | 67cm x 90cm x 90cm Pit | 725kg |
| 1435A | 91cm x 90cm x 90cm Pit | 840kg |
| 1436 | 15cm x 90cm x 90cm Extension | 150kg |
| 1437 | 30cm x 90cm x 90cm Extension | 280kg |
| 1438 | 45cm x 90cm x 90cm Extension | 405kg |
| 1438A | 60cm x 90cm x 90cm Extension | 520kg |
| 1439 | 78cm x 90cm x 90cm Extension | 635kg |
| 1440 | Plain Concrete Lid 100mm thick | 285kg |
| 1440B | Lid with 45cm Gatic CLB 100mm thick | - |
| 1440D | Lid with 45cm Gatic 125mm thick | - |
| 1441 | Plain Concrete Lid 125mm thick | - |
| 1446 | Lid behind Lintel (20cm x 110cm) | 40kg |
| 1444 | SO1 HD V-Grate with surround | - |
| 1445 | Lid HD Hinged Grate (60cm x 60cm) CLB | 210kg |
| 1445S | Lid with Surcharged Grate CLB | 210kg |
| 1448 | Full LD Recessed Grate CLA | - |
| 1442 | Full Grate with Surround CLC | 460kg |
| 1443 | Full Recessed Grate CLC | - |
| 1443B | Full Recessed Grate CLB | - |
| 1447 | Full HD Hinged Grate CLC | - |



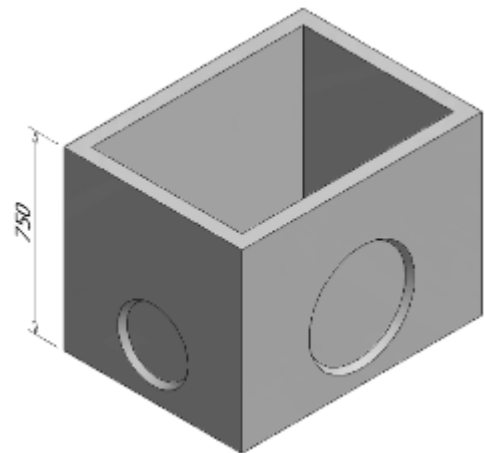
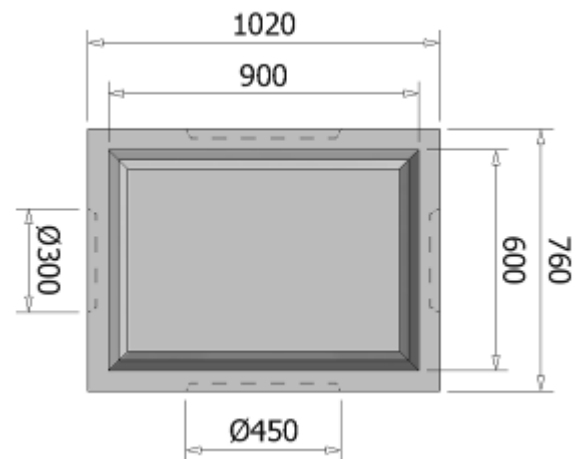
SIZE: ID 910MM (H) X 900MM (W) X 900MM (L)



STORMWATER INLET PIT

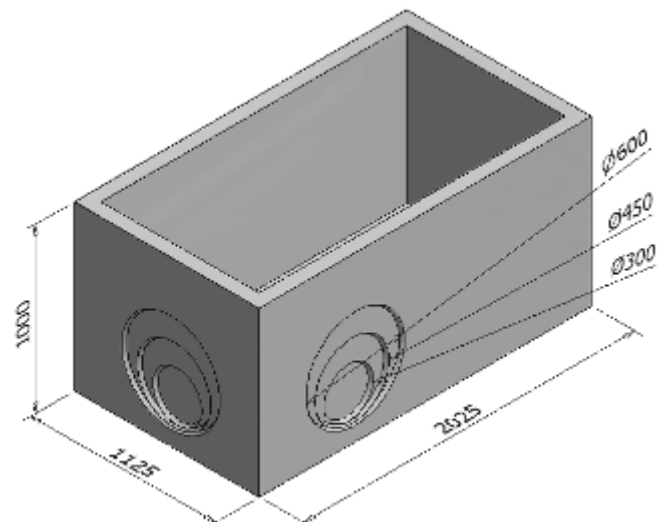
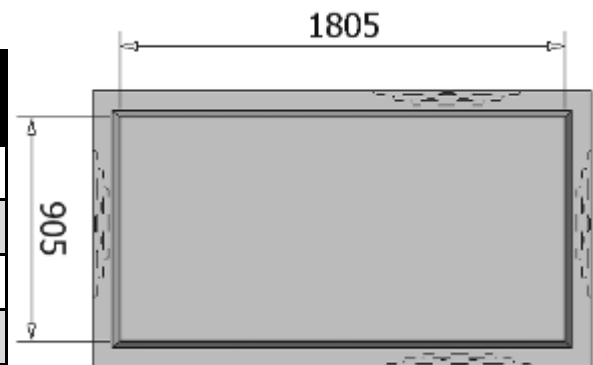
SIZE: ID 670MM (H) X 900MM (W) X 600MM (L)

| CODE | PRODUCT | APPROX. WEIGHT |
|------|--------------------------------|----------------|
| 6550 | 67cm x 90cm x 60cm Pit | 520kg |
| 6552 | 15cm x 90cm x 60cm Extension | - |
| 6554 | 30cm x 90cm x 60cm Extension | - |
| 6556 | 60cm x 90cm x 60cm Extension | - |
| 6558 | Plain Concrete Lid | - |
| 6560 | Lid with 45cm x 45cm Grate CLB | - |
| 6562 | Lid with 45cm x 75cm Grate CLB | - |



SIZE: ID 910MM (H) X 900MM (W) X 1800MM

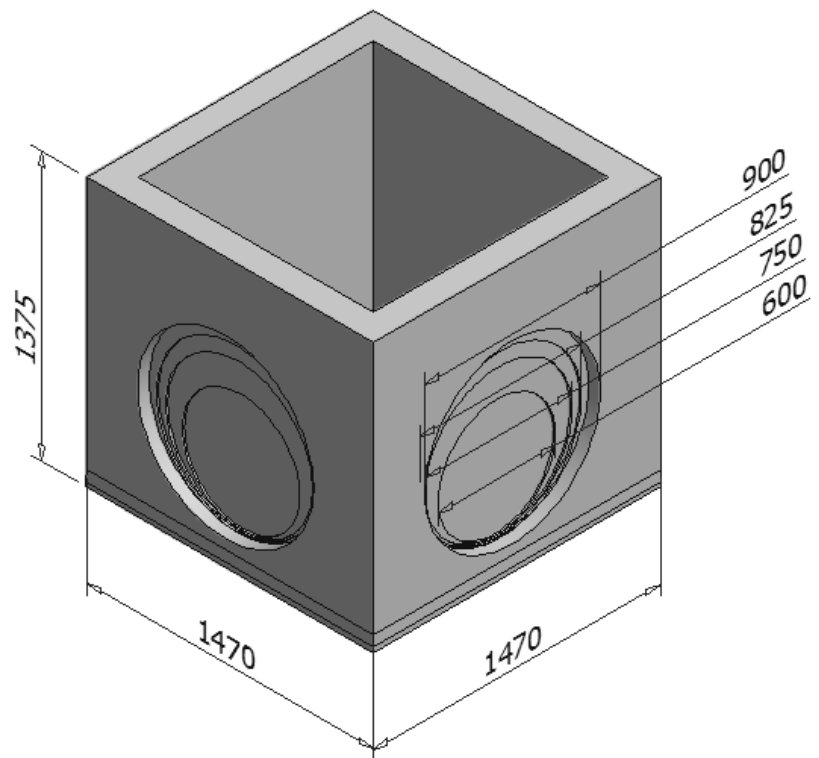
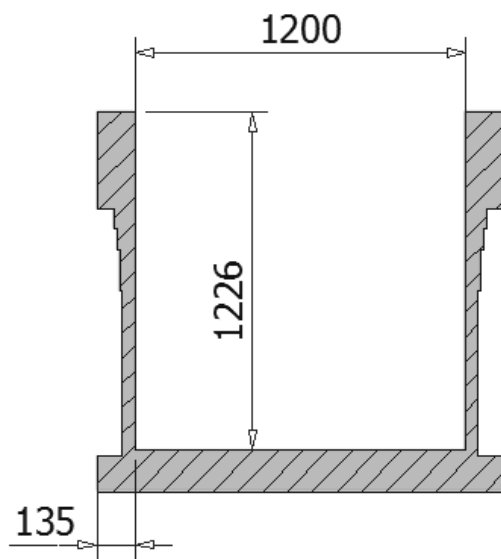
| CODE | PRODUCT | APPROX. WEIGHT |
|-------|---------------------------------------|----------------|
| 1453 | 91cm x 90cm x 1.8m Pit | 1535kg |
| 1455 | 15cm x 90cm x 1.8m Extension | 200kg |
| 1456 | 30cm x 90cm x 1.8m Extension | 395kg |
| 1457 | 45cm x 90cm x 1.8m Extension | 565kg |
| 1458 | 60cm x 90cm x 1.8m Extension | 735kg |
| 1459 | 90cm x 90cm x 1.8m Extension | 1085kg |
| 1460 | 1.8m Half Lid –Plain Behind Lintel | 305kg |
| 1461 | Full Plain Concrete Lid—100mm thick | 600kg |
| 1461A | Full Plain Concrete Lid—125mm thick | 750kg |
| 1462 | 1.8m HD with Hinged Grate 60cm x 60cm | - |
| 1463 | LD Full Recessed Grate CLA | - |
| 1465 | U-Shaped Extension 27cm Behind Lintel | 180kg |
| 1467 | Behind Dish Drain Grate 115cm x 140cm | - |



STORMWATER INLET PIT

SIZE: ID 1200MM (H) X 1200MM (W) X 1200MM (L)

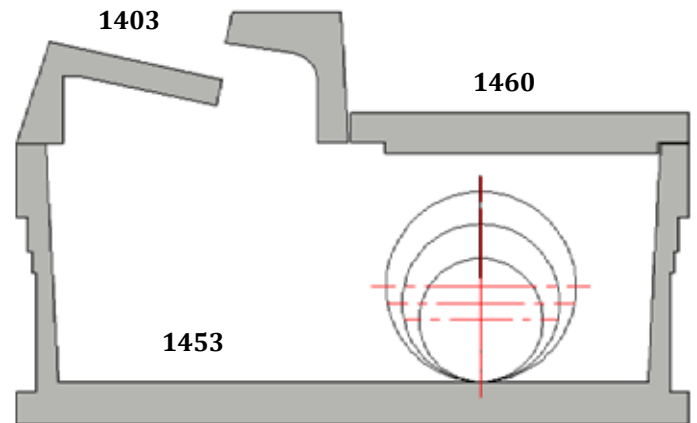
| CODE | PRODUCT | APPROX. WEIGHT |
|------|-------------------------------------|----------------|
| 1473 | 1.2m x 1.2m x 1.2m Pit | 1880kg |
| 1475 | 15cm x 1.2m x 1.2m Extension | 240kg |
| 1477 | 30cm x 1.2m x 1.2m Extension | 410kg |
| 1479 | 60cm x 1.2m x 1.2m Extension | 790kg |
| 1481 | 1.2m x 1.2m x 1.2m Extension | 1540kg |
| 1483 | Full Plain Concrete Lid—125mm thick | 620kg |



STORMWATER KERB INLET PIT ASSEMBLES

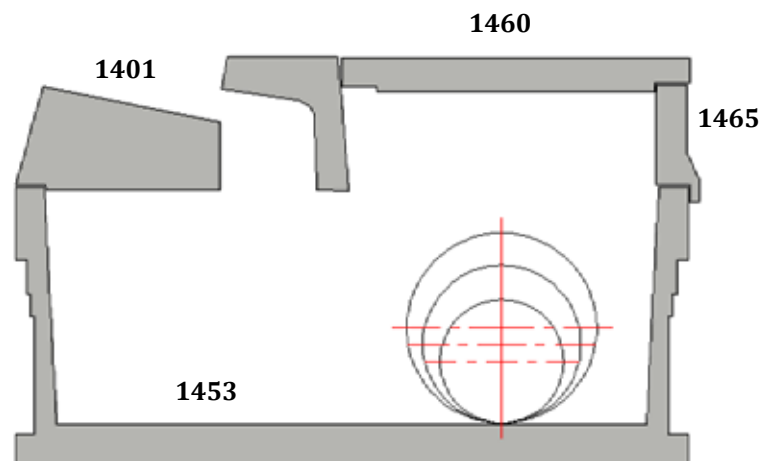
1.8m Pit with Grated Inlet Offset to Kerb Drainage

| CODE | PRODUCT | APPROX. WEIGHT |
|------|--|----------------|
| 1453 | 91cm x 90cm x 1.8m Pit | 1535kg |
| 1403 | 1.5m Lintel with 90cm Grate (1.2m opening) | 555kg |
| 1460 | 1.8m Half Lid –Plain Behind Lintel | 305kg |



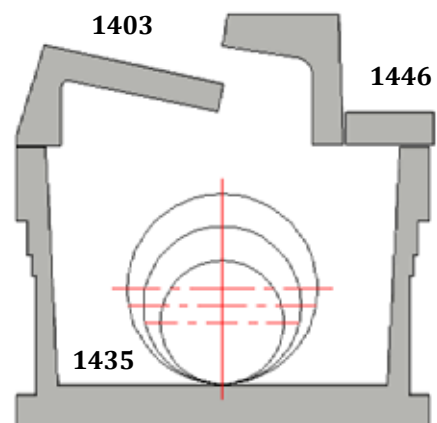
1.8m Pit with Solid Inlet Offset to Kerb Drainage

| CODE | PRODUCT | APPROX. WEIGHT |
|------|---------------------------------------|----------------|
| 1453 | 91cm x 90cm x 1.8m Pit | 1535kg |
| 1401 | 1.5m Lintel with Apron—no grate | 695kg |
| 1460 | 1.8m Half Lid –Plain Behind Lintel | 305kg |
| 1465 | U-Shaped Extension 27cm Behind Lintel | 180kg |



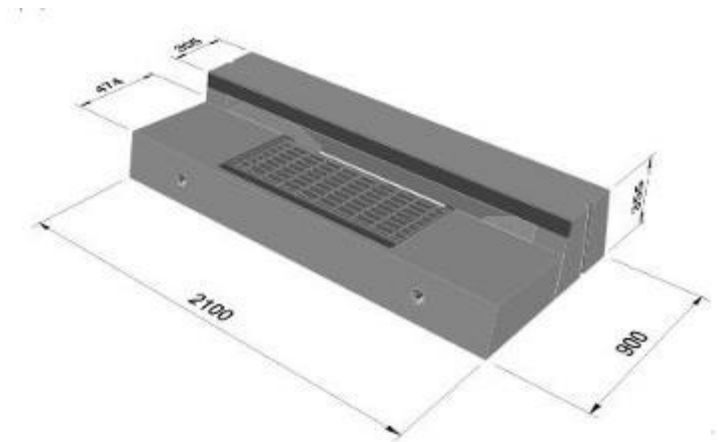
90cm Pit with Grated Inlet under Kerb Drainage

| CODE | PRODUCT | APPROX. WEIGHT |
|------|--|----------------|
| 1435 | 67cm x 90cm x 90cm Pit | 725kg |
| 1403 | 1.5m Lintel with 90cm Grate (1.2m opening) | 555kg |
| 1446 | Lid behind Lintel (20cm x 110cm) | 40kg |



LINTELS

- Designed to take storm water drainage from road curbs.
- Made to withstand heavy vehicle loads with heavy duty galvanized grates.
- Suits pre-cast storm water inlet pit for easy installation.
- Available in plain style, middle right and left openings to accommodate for the water flow direction.
- Lintel without base/apron also available to allow for the ability to pour on site for custom application.
- 2.4M Lintel measurements are consistent with those of the 2.1m lintel with the only alteration the overall length.

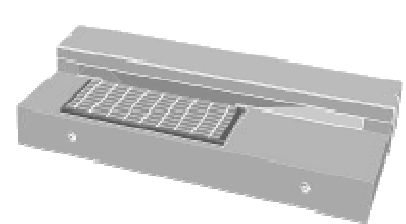
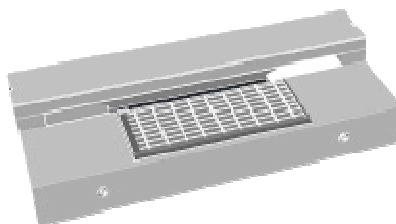
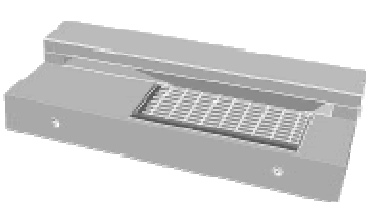


| CODE | PRODUCT | APPROX. WEIGHT |
|-------|---|----------------|
| 1401 | 1.5m Lintel with Apron—No Grate | 695kg |
| 1402 | 1.5m Lintel with 75cm Grate | 575kg |
| 1403 | 1.5m Lintel with 90cm Grate—1.2m Opening | 555kg |
| 1404C | 2.1m Lintel with 90cm Centre Grate—1.8m Opening | 860kg |
| 1404L | 2.1m Lintel with 90cm Left Hand Grate—1.8m Opening | 860kg |
| 1404R | 2.1m Lintel with 90cm Right Hand Grate—1.8m Opening | 860kg |
| 1406 | V Dish Drain Grate HD Hinged (60cm x 90cm) Type C | - |
| 1410 | 1.8m Lintel No Apron—No Grate | 250kg |
| 1405C | 2.4m Lintel with 90cm Centre Grate—2.1m Opening | - |
| 1405L | 2.4m Lintel with 90cm Left Hand Grate—2.1m Opening | - |
| 1405R | 2.4m Lintel with 90cm Right Hand Grate—2.1m Opening | - |

RIGHT

CENTRE

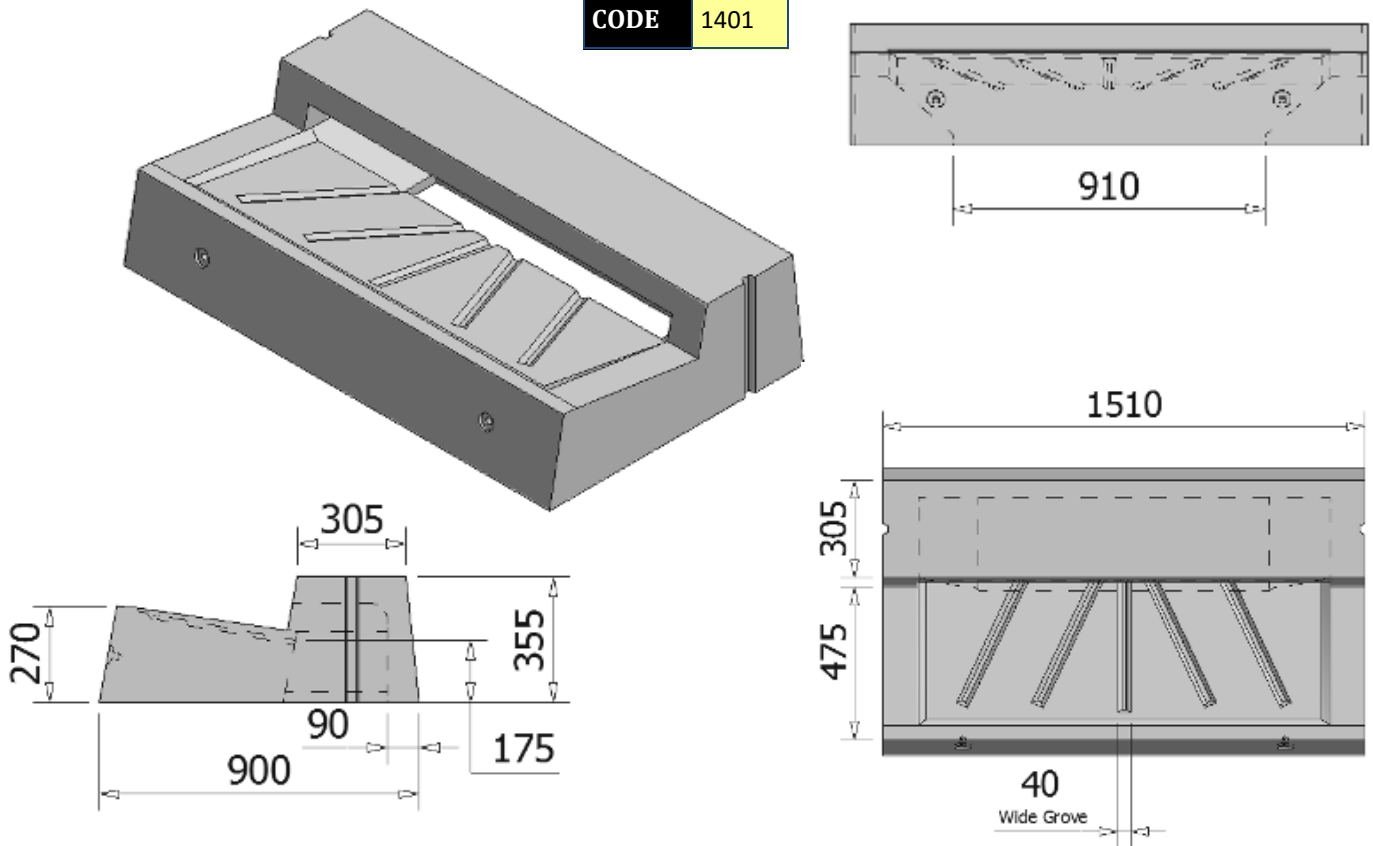
LEFT



LINTELS

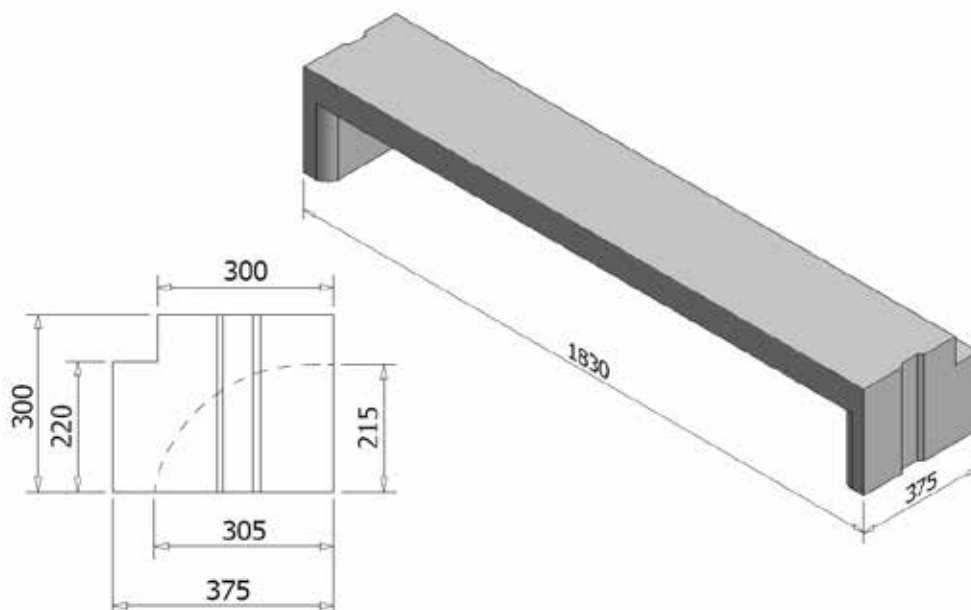
1.5M LINTEL WITH APRON - NO GRATE

CODE 1401



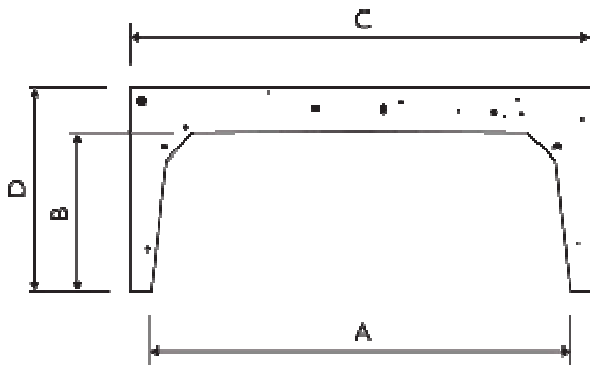
1.8M LINTEL NO APRON - NO GRATE

CODE 1410



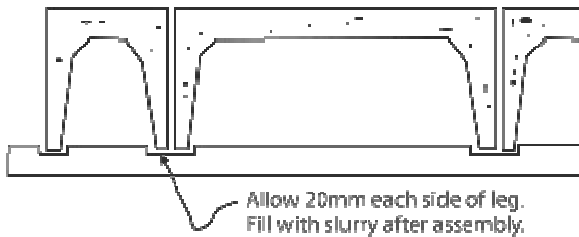
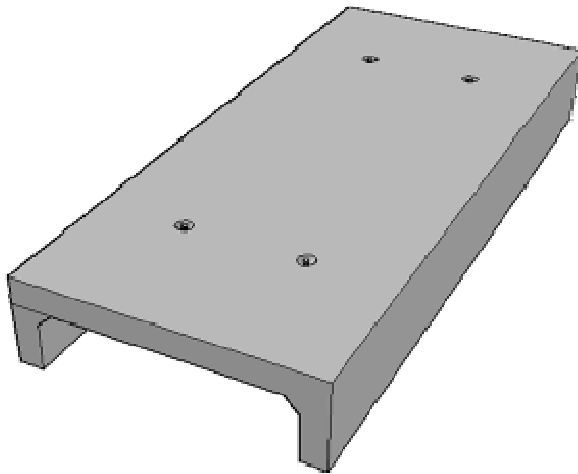
BOX CULVERTS

- Box Culverts are used in irrigation, drainage and bridgeworks for domestic and government projects.
- This product allows for a larger more natural water flow reducing erosion and can be laid with no cover needed.
- Ability to be inverted for ease of cleaning and maintenance.
- Designed to take extreme loads of pressure and any highway vehicle axle load permitted by the Roads & Maritime Services.
- Available in Over 120 different sizes.
- Manufactured to AS 1597.1-2010 & AS 1597.2 2013
- Dimensions may vary, please contact B.Altin & Co for confirmation.



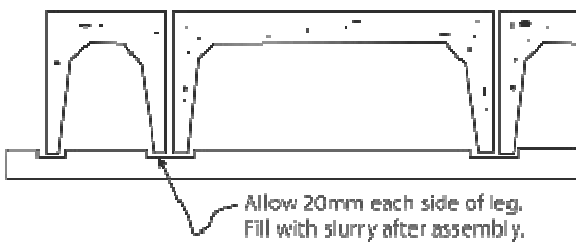
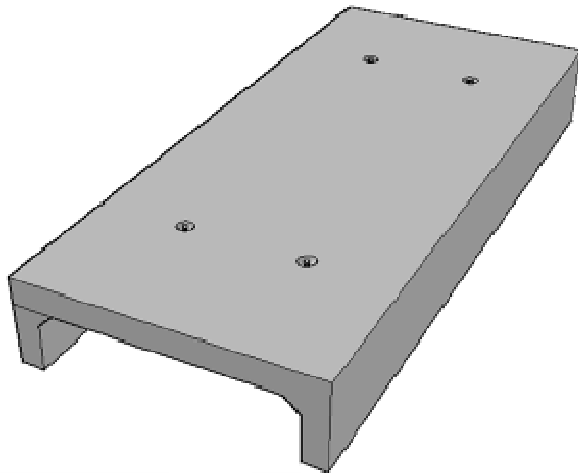
| CODE | W & H | A | B | C | D | SHORT | LONG |
|------|-------------|------|------|------|------|-------|------|
| 4000 | 300 x 150 | 305 | 150 | 420 | 225 | 1245 | 2500 |
| 4010 | 300 x 225 | 310 | 225 | 420 | 300 | 1245 | 2500 |
| 4020 | 300 x 300 | 315 | 300 | 420 | 375 | 1245 | 2500 |
| 4040 | 300 x 450 | 325 | 450 | 420 | 525 | 1245 | 2500 |
| 4110 | 450 x 150 | 460 | 150 | 580 | 225 | 1245 | 2500 |
| 4120 | 450 x 225 | 475 | 225 | 580 | 300 | 1245 | 2500 |
| 4130 | 450 x 300 | 480 | 300 | 580 | 375 | 1245 | 2500 |
| 4132 | 450 x 450 | 485 | 450 | 580 | 525 | 1245 | 2500 |
| 4135 | 600 x 150 | 615 | 150 | 760 | 240 | 1200 | 2440 |
| 4140 | 600 x 225 | 620 | 225 | 760 | 330 | 1200 | 2440 |
| 4150 | 600 x 300 | 625 | 300 | 760 | 405 | 1200 | 2440 |
| 4160 | 600 x 375 | 630 | 375 | 760 | 480 | 1200 | 2440 |
| 4170 | 600 x 450 | 635 | 450 | 760 | 555 | 1200 | 2440 |
| 4172 | 600 x 600 | 645 | 600 | 760 | 705 | 1200 | 2440 |
| 4174 | 750 x 300 | 754 | 300 | 930 | 400 | 1200 | 2440 |
| 4175 | 750 x 450 | 756 | 450 | 930 | 550 | 1200 | 2440 |
| 4176 | 750 x 600 | 758 | 600 | 930 | 700 | 1200 | 2440 |
| 4177 | 750 x 750 | 760 | 750 | 930 | 850 | 1200 | 2440 |
| 4179 | 900 x 150 | 900 | 150 | 1080 | 255 | 1230 | 2500 |
| 4180 | 900 x 225 | 905 | 225 | 1080 | 330 | 1230 | 2500 |
| 4190 | 900 x 300 | 905 | 300 | 1080 | 405 | 1230 | 2500 |
| 4200 | 900 x 375 | 907 | 375 | 1080 | 480 | 1230 | 2500 |
| 4210 | 900 x 450 | 910 | 450 | 1080 | 555 | 1230 | 2500 |
| 4220 | 900 x 600 | 912 | 600 | 1080 | 705 | 1230 | 2500 |
| 4222 | 900 x 750 | 913 | 750 | 1080 | 855 | 1230 | 2500 |
| 4224 | 900 x 900 | 915 | 900 | 1080 | 1005 | 1230 | 2500 |
| 4278 | 1200 x 150 | 1190 | 150 | 1400 | 280 | 1230 | 2500 |
| 4280 | 1200 x 225 | 1195 | 225 | 1400 | 350 | 1230 | 2500 |
| 4290 | 1200 x 300 | 1205 | 300 | 1400 | 425 | 1230 | 2500 |
| 4300 | 1200 x 375 | 1207 | 375 | 1400 | 500 | 1230 | 2500 |
| 4310 | 1200 x 450 | 1210 | 450 | 1400 | 575 | 1230 | 2500 |
| 4320 | 1200 x 600 | 1215 | 600 | 1400 | 725 | 1230 | 2500 |
| 4330 | 1200 x 750 | 1220 | 750 | 1400 | 875 | 1230 | 2500 |
| 4340 | 1200 x 900 | 1225 | 900 | 1400 | 1035 | 1230 | 2500 |
| 4342 | 1200 x 1200 | 1230 | 1200 | 1400 | 1325 | 1230 | 2500 |
| 4350 | 1500 x 300 | 1510 | 300 | 1750 | 430 | 1230 | 2500 |
| 4360 | 1500 x 450 | 1523 | 450 | 1750 | 580 | 1230 | 2500 |
| 4370 | 1500 x 600 | 1530 | 600 | 1750 | 730 | 1230 | 2500 |

BOX CULVERTS



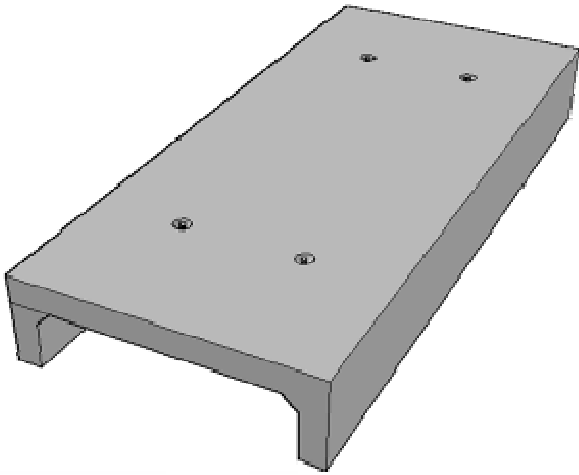
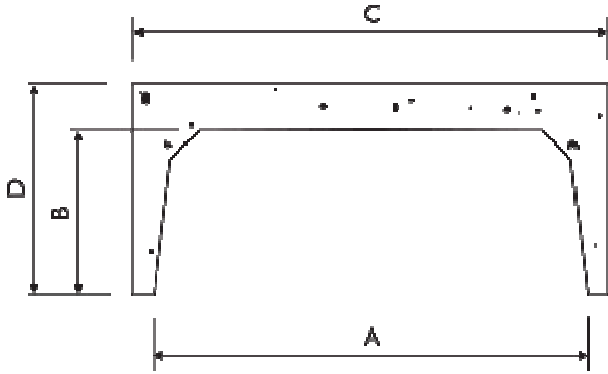
| CODE | W & H | A | B | C | D | SHORT | LONG |
|------|-------------|------|------|------|------|-------|------|
| 4380 | 1500 x 750 | 1540 | 750 | 1750 | 880 | 1230 | 2500 |
| 4390 | 1500 x 900 | 1550 | 900 | 1750 | 1030 | 1230 | 2500 |
| 4400 | 1500 x 1200 | 1570 | 1200 | 1750 | 1330 | 1230 | 2500 |
| 4402 | 1500 x 1500 | 1590 | 1500 | 1750 | 1630 | 1230 | 2500 |
| 4410 | 1800 x 300 | 1805 | 300 | 2075 | 470 | - | 1800 |
| 4432 | 1800 x 300 | 1805 | 300 | 2075 | 470 | 1200 | 2435 |
| 4420 | 1800 x 450 | 1810 | 450 | 2075 | 620 | - | 1800 |
| 4434 | 1800 x 450 | 1810 | 450 | 2075 | 620 | 1200 | 2435 |
| 4430 | 1800 x 600 | 1820 | 600 | 2075 | 770 | - | 1800 |
| 4436 | 1800 x 600 | 1820 | 600 | 2075 | 770 | 1200 | 2435 |
| 4440 | 1800 x 750 | 1827 | 750 | 2130 | 920 | 1200 | 2435 |
| 4450 | 1800 x 900 | 1835 | 900 | 2130 | 1070 | 1200 | 2435 |
| 4460 | 1800 x 1200 | 1850 | 1200 | 2130 | 1370 | 1200 | 2435 |
| 4470 | 1800 x 1500 | 1865 | 1500 | 2130 | 1670 | 1200 | 2435 |
| 4472 | 1800 x 1800 | 1881 | 1800 | 2130 | 1970 | 1200 | 2435 |
| 4480 | 2100 x 300 | 2105 | 300 | 2430 | 485 | - | 1800 |
| 4502 | 2100 x 300 | 2105 | 300 | 2430 | 485 | 1200 | 2435 |
| 4490 | 2100 x 450 | 2110 | 450 | 2430 | 635 | - | 1800 |
| 4504 | 2100 x 450 | 211 | 450 | 2430 | 635 | 1200 | 2435 |
| 4500 | 2100 x 600 | 2120 | 600 | 2455 | 785 | - | 1800 |
| 4506 | 2100 x 600 | 2120 | 600 | 2455 | 785 | 1200 | 2435 |
| 4510 | 2100 x 750 | 2127 | 750 | 2455 | 935 | 1200 | 2435 |
| 4520 | 2100 x 900 | 2135 | 900 | 2455 | 1085 | 1200 | 2435 |
| 4530 | 2100 x 1200 | 2145 | 1200 | 2455 | 1385 | 1200 | 2435 |
| 4540 | 2100 x 1500 | 2160 | 1500 | 2455 | 1685 | 1200 | 2435 |
| 4550 | 2100 x 1800 | 2175 | 1800 | 2455 | 1985 | 1200 | 2435 |
| 4552 | 2100 x 2100 | 2185 | 2100 | 2455 | 2285 | 1200 | 2435 |
| 4560 | 2400 x 300 | 2405 | 300 | 2690 | 500 | 1800 | - |
| 4582 | 2400 x 300 | 2405 | 300 | 2690 | 500 | 1200 | 2435 |
| 4570 | 2400 x 450 | 2412 | 450 | 2690 | 650 | 1800 | - |
| 4584 | 2400 x 450 | 2412 | 450 | 2690 | 650 | 1200 | 2435 |
| 4580 | 2400 x 600 | 2420 | 600 | 2690 | 800 | 1800 | - |
| 4586 | 2400 x 600 | 2420 | 600 | 2690 | 800 | 1200 | 2435 |
| 4590 | 2400 x 750 | 2427 | 750 | 2800 | 950 | 1200 | 2435 |
| 4600 | 2400 x 900 | 2435 | 900 | 2800 | 1100 | 1200 | 2435 |
| 4610 | 2400 x 1200 | 2445 | 1200 | 2800 | 1400 | 1200 | 2435 |

BOX CULVERTS



| CODE | W & H | A | B | C | D | SHORT | LONG |
|------|-------------|------|------|------|------|-------|------|
| 4620 | 2400 x 1500 | 2460 | 1500 | 2800 | 1700 | 1200 | 2435 |
| 4630 | 2400 x 1800 | 2475 | 1800 | 2800 | 2000 | 1200 | 2435 |
| 4640 | 2400 x 2100 | 2490 | 2100 | 2800 | 2300 | 1200 | 2435 |
| 4642 | 2400 x 2400 | 2505 | 2400 | 2800 | 2610 | 1200 | 2435 |
| 4650 | 2700 x 300 | 2705 | 300 | 3100 | 525 | - | 1800 |
| 4672 | 2700 x 300 | 2705 | 300 | 3100 | 525 | 1200 | 2435 |
| 4660 | 2700 x 450 | 2712 | 450 | 3100 | 675 | - | 1800 |
| 4674 | 2700 x 450 | 2712 | 450 | 3100 | 675 | 1200 | 2435 |
| 4670 | 2700 x 600 | 2720 | 600 | 3100 | 825 | - | 1800 |
| 4676 | 2700 x 600 | 2720 | 600 | 3100 | 825 | 1200 | 2435 |
| 4678 | 2700 x 750 | 2727 | 750 | 3100 | 975 | 1200 | 2435 |
| 4680 | 2700 x 900 | 2735 | 900 | 3100 | 1125 | 1200 | 2435 |
| 4690 | 2700 x 1200 | 2745 | 1200 | 3100 | 1425 | 1200 | 2435 |
| 4700 | 2700 x 1500 | 2760 | 1500 | 3100 | 1725 | 1200 | 2435 |
| 4710 | 2700 x 1800 | 2775 | 1800 | 3100 | 2025 | 1200 | 2435 |
| 4720 | 2700 x 2100 | 2790 | 2100 | 3100 | 2325 | 1200 | 2435 |
| 4730 | 2700 x 2400 | 2805 | 2400 | 3130 | 2630 | 1220 | - |
| 4734 | 2700 x 2700 | 2820 | 2700 | 3130 | 2930 | 1220 | - |
| 4740 | 3000 x 300 | 3005 | 300 | 3400 | 500 | 1805 | - |
| 4762 | 3000 x 300 | 3005 | 300 | 3400 | 500 | 1200 | 2435 |
| 4750 | 3000 x 450 | 3012 | 450 | 3400 | 650 | 1805 | - |
| 4764 | 3000 x 450 | 3012 | 450 | 3400 | 650 | 1200 | 2435 |
| 4760 | 3000 x 600 | 3020 | 600 | 3400 | 850 | 1805 | - |
| 4766 | 3000 x 600 | 3020 | 600 | 3400 | 850 | 1200 | 2435 |
| 4768 | 3000 x 750 | 3027 | 750 | 3400 | 1000 | 1200 | 2435 |
| 4770 | 3000 x 900 | 3035 | 900 | 3400 | 1150 | - | 2435 |
| 4780 | 3000 x 1200 | 3045 | 1200 | 3400 | 1450 | - | 2435 |
| 4790 | 3000 x 1500 | 3060 | 1500 | 3400 | 1750 | - | 2435 |
| 4800 | 3000 x 1800 | 3075 | 1800 | 3400 | 2050 | - | 2435 |
| 4810 | 3000 x 2100 | 3090 | 2100 | 3400 | 2350 | 1200 | 2435 |
| 4820 | 3000 x 2400 | 3105 | 2400 | 3440 | 2650 | 1220 | - |
| 4834 | 3000 x 2700 | 3120 | 2700 | 3440 | 2950 | 1220 | - |
| 4836 | 3000 x 3000 | 3135 | 3000 | 3440 | 3250 | 1220 | - |
| 6460 | 3300 x 300 | 3300 | 300 | 3770 | 565 | 1220 | - |
| 6462 | 3300 x 600 | 3316 | 600 | 3770 | 865 | 1220 | - |
| 6464 | 3300 x 900 | 3332 | 900 | 3770 | 1165 | 1220 | - |

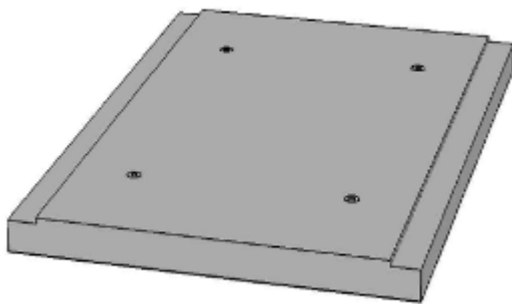
BOX CULVERTS



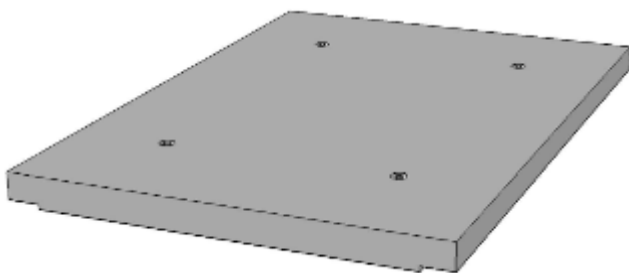
| CODE | W & H | A | B | C | D | SHORT | LONG |
|------|-------------|------|------|------|------|-------|------|
| 6466 | 3300 x 1200 | 3348 | 1200 | 3770 | 1465 | 1220 | - |
| 6468 | 3300 x 1500 | 3364 | 1500 | 3770 | 1765 | 1220 | - |
| 6470 | 3300 x 1800 | 3380 | 1800 | 3770 | 2065 | 1220 | - |
| 6472 | 3300 x 2100 | 3396 | 2100 | 3770 | 2365 | 1220 | - |
| 6474 | 3300 x 2400 | 3412 | 2400 | 3770 | 2665 | 1220 | - |
| 6476 | 3300 x 2700 | 3428 | 2700 | 3770 | 2965 | 1220 | - |
| 6478 | 3300 x 3000 | 3444 | 3000 | 3770 | 3265 | 1220 | - |
| 6480 | 3300 x 3300 | 3460 | 3300 | 3770 | 3565 | 1220 | - |
| 6482 | 3600 x 300 | 3600 | 300 | 4100 | 580 | 1220 | - |
| 6484 | 3600 x 600 | 3615 | 600 | 4100 | 880 | 1220 | - |
| 6486 | 3600 x 900 | 3629 | 900 | 4100 | 1180 | 1220 | - |
| 6488 | 3600 x 1200 | 3644 | 1200 | 4100 | 1480 | 1220 | - |
| 6490 | 3600 x 1500 | 3658 | 1500 | 4100 | 1780 | 1220 | - |
| 6492 | 3600 x 1800 | 3673 | 1800 | 4100 | 2080 | 1220 | - |
| 6494 | 3600 x 2100 | 3687 | 2100 | 4100 | 2380 | 1220 | - |
| 6496 | 3600 x 2400 | 3702 | 2400 | 4100 | 2680 | 1220 | - |
| 6498 | 3600 x 2700 | 3716 | 2700 | 4100 | 2980 | 1220 | - |
| 6500 | 3600 x 3000 | 3731 | 3000 | 4100 | 3280 | 1220 | - |
| 6502 | 3600 x 3300 | 3745 | 3300 | 4100 | 3580 | 1220 | - |
| 6504 | 3600 x 3600 | 3760 | 3600 | 4100 | 3880 | 1220 | - |
| 6506 | 4200 x 300 | 4200 | 300 | 4790 | 610 | 1220 | - |
| 6508 | 4200 x 600 | 4215 | 600 | 4790 | 910 | 1220 | - |
| 6510 | 4200 x 900 | 4229 | 900 | 4790 | 1210 | 1220 | - |
| 6512 | 4200 x 1200 | 4243 | 1200 | 4790 | 1510 | 1220 | - |
| 6514 | 4200 x 1500 | 4258 | 1500 | 4790 | 1810 | 1220 | - |
| 6516 | 4200 x 1800 | 4272 | 1800 | 4790 | 2110 | 1220 | - |
| 6518 | 4200 x 2100 | 4287 | 2100 | 4790 | 2410 | 1220 | - |
| 6520 | 4200 x 2400 | 4301 | 2400 | 4790 | 2710 | 1220 | - |
| 6522 | 4200 x 2700 | 4316 | 2700 | 4790 | 3010 | 1220 | - |
| 6524 | 4200 x 3000 | 4330 | 3000 | 4790 | 3310 | 1220 | - |
| 6526 | 4200 x 3300 | 4335 | 3300 | 4790 | 3610 | 1220 | - |
| 6528 | 4200 x 3600 | 4359 | 3600 | 4790 | 3910 | 1220 | - |
| 6530 | 4200 x 3900 | 4374 | 3900 | 4790 | 4210 | 1220 | - |
| 6532 | 4200 x 4200 | 4390 | 4200 | 4790 | 4510 | 1220 | - |

BASE PLATES/LINK SLABS

- Base Plates/Link Slabs available for most sizes of Box Culverts.
- Base plates prevent undesirable sinking
- Remove the need for footings or to pour on site with pre-cast ease.
- Additional sizes may be available.



Base Plate example

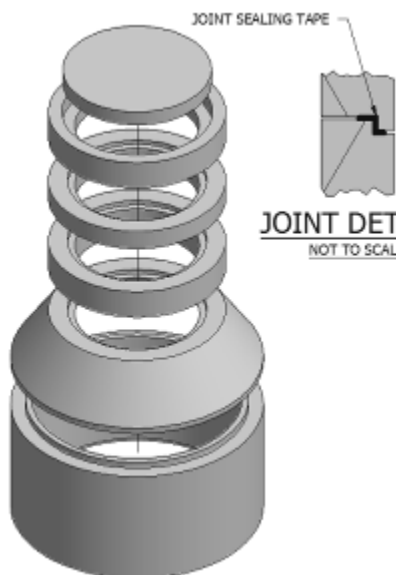
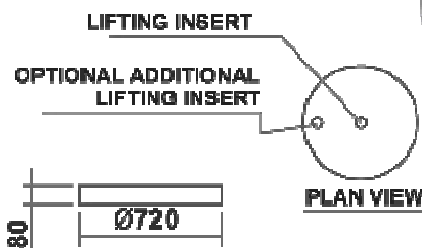
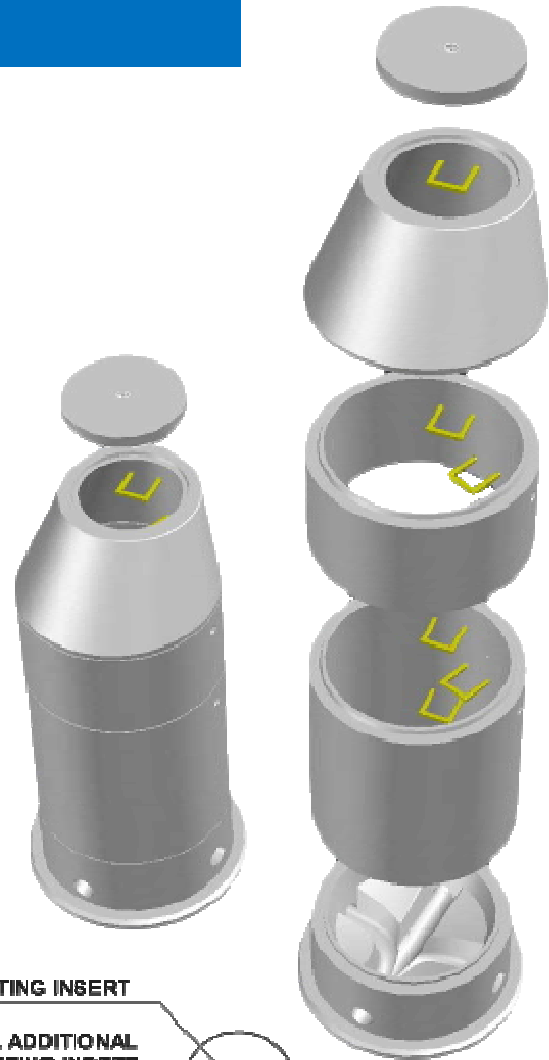


Link Slab example

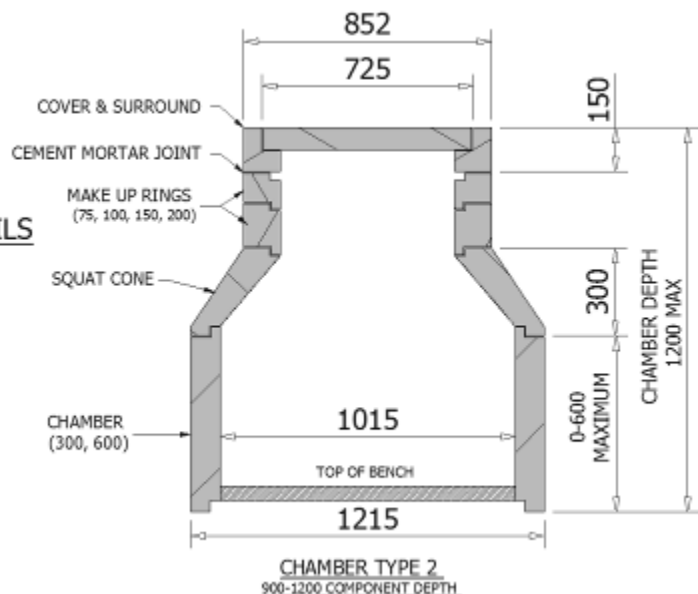
| CODE | WIDTH MM | LENGT H MM | APPROX. WEIGHT |
|------|-------------|------------------|-------------------|
| 4840 | 300 | 2500 | 320kg |
| 4841 | 450 | 2500 | 450kg |
| 4842 | 600 | 2400 | 580kg |
| 4843 | 900 | 2500 | 865kg |
| 4845 | 1200 | 2500 | 1150kg |
| 4846 | 1500 | 2500 | 1700kg |
| 4847 | 1800 | 1800 | 1580kg |
| 4848 | 1800 | 2400 | 2210kg |
| 4849 | 2100 | 1800 | 2010kg |
| 4850 | 2100 | 2400 | 2740kg |
| 4851 | 2400 | 1800 | 2470kg |
| 4852 | 2400 | 2400 | 3270kg |
| 4853 | 2700 | 1800 | 3040kg |
| 4854 | 2700 | 2400 | 4210kg |
| 4855 | 3000 | 1800 | 3878kg |
| 4856 | 3000 | 2400 | 5170kg |

SEWER ACCESS COMPONENTS

- Our sewer Components are made with high strength compressed concrete to cope with corrosive environments.
- Water tight maintenance holes .
- Components fit together easily to create a complete system.
- Pre-configured base chambers are made to suit with either 45 or 90 degree inlet holes.
- Concrete plugs provided for a tight seal when inlet holes not in use.
- Concrete and gatic lids available to suit.
- Bostik seal is used between joins for a water tight seal.
- Components have the option to include steps for ease of access.

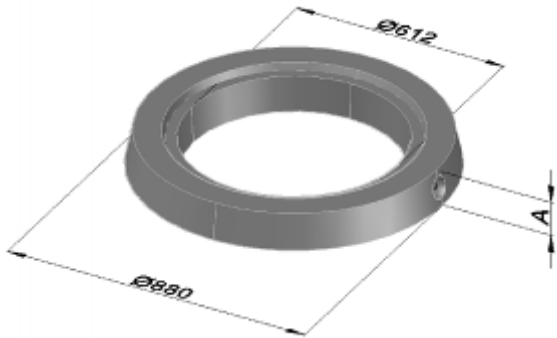


JOINT DETAILS
NOT TO SCALE

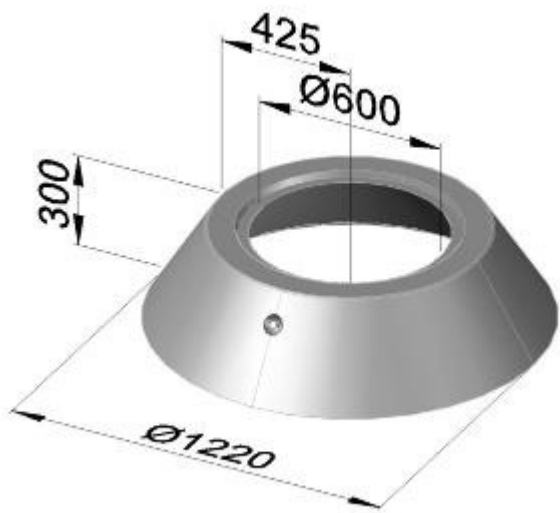


SEWER ACCESS COMPONENTS

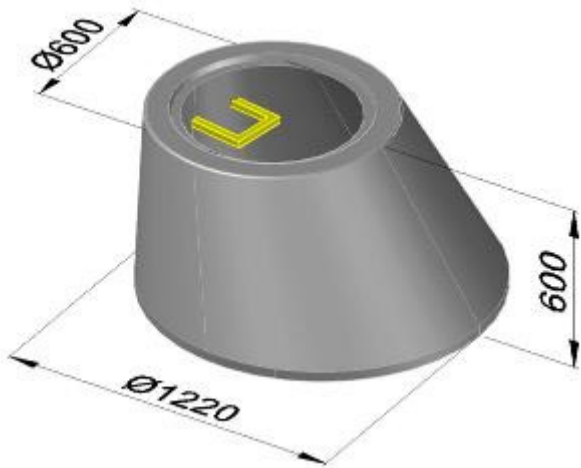
Make Up Ring



| CODE | 6350 | 6360 | 6370 | 6380 |
|---------------|------|------|------|------|
| LENGTH mm (A) | 75 | 100 | 150 | 200 |
| MAX. MASS kg | 50 | 70 | 110 | 140 |



300mm Squat Cone
Detail

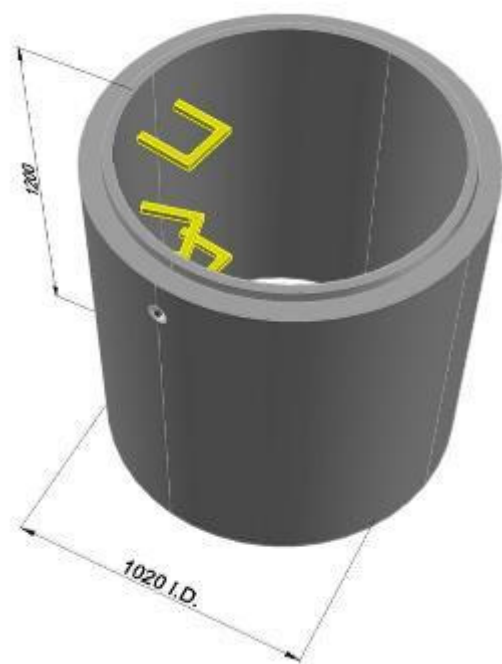
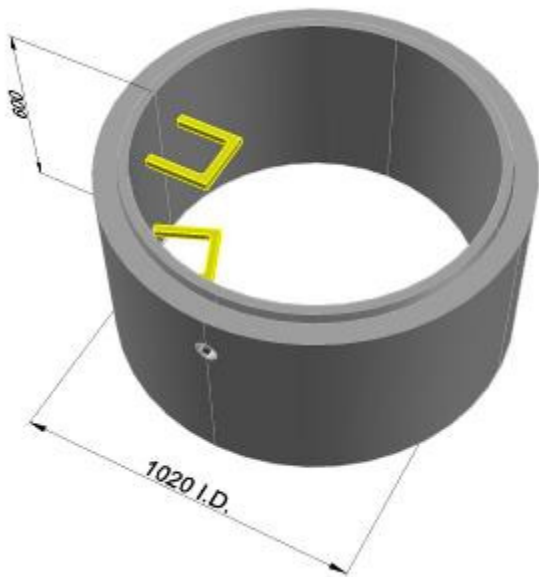


600mm Straight Back
Taper Detail

SEWER CHAMBERS & BASES

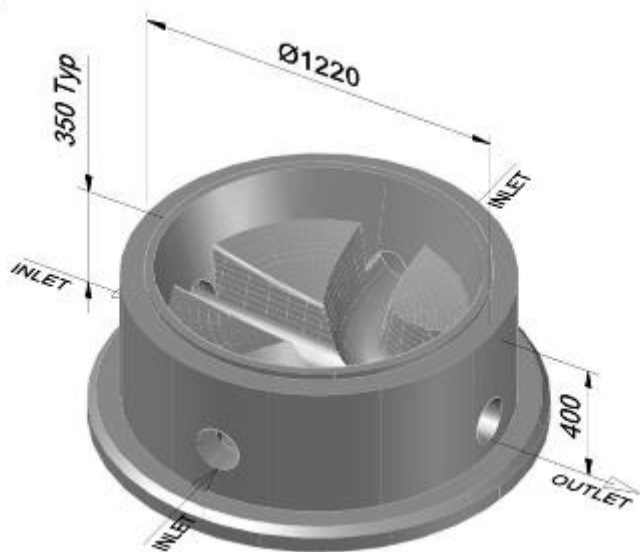
Chamber Examples & Sizes

| CODE | 6300 | 6310 | 6320 | 6330 |
|--------------|------|------|------|------|
| LENGTH mm | 300 | 600 | 1200 | 1800 |
| MAX. MASS kg | 300 | 600 | 1200 | 1800 |

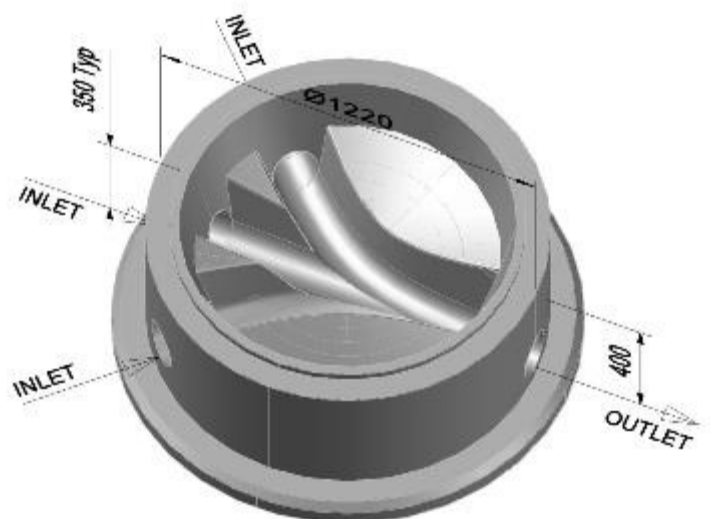


Specification

50mm Difference from Inlet to Outlet
 Rubber flange connector provided
 Pre-cast isolation plugs.
 All outlets and inlets 150mm UPVC



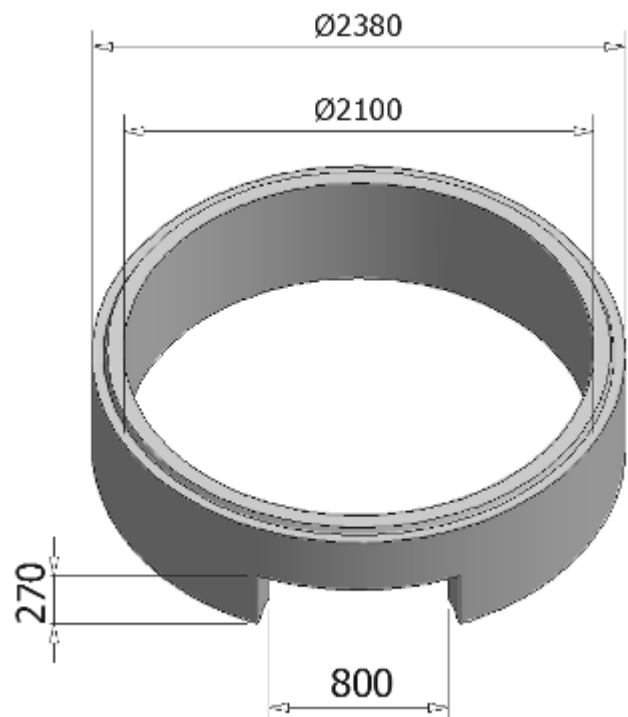
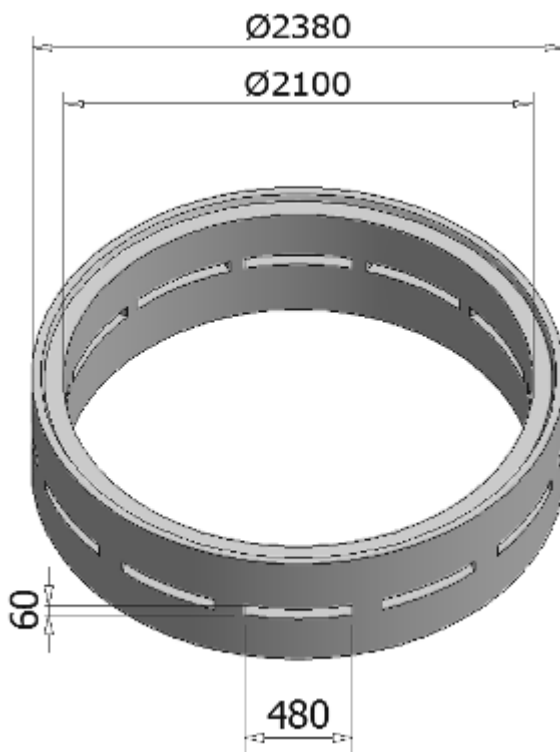
**90 degree Base
Chamber**



**45 degree Base
Chamber**

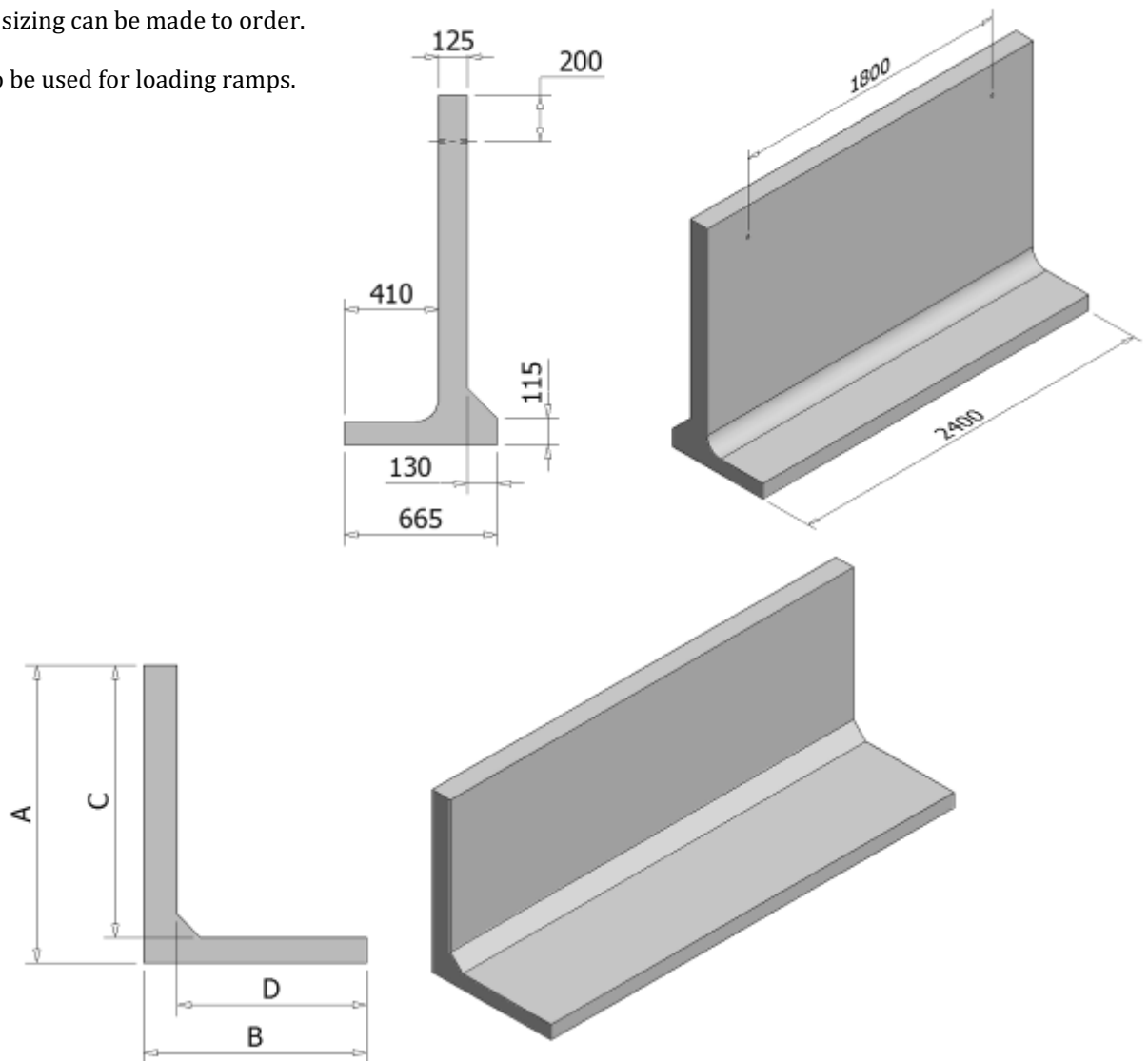
DECANT TOWERS

- Used heavily in the mining sector.
- Accompanied with a pump to remove excess water from water table.
- Available in centred slot style or cut out style.



RETAINING WALLS

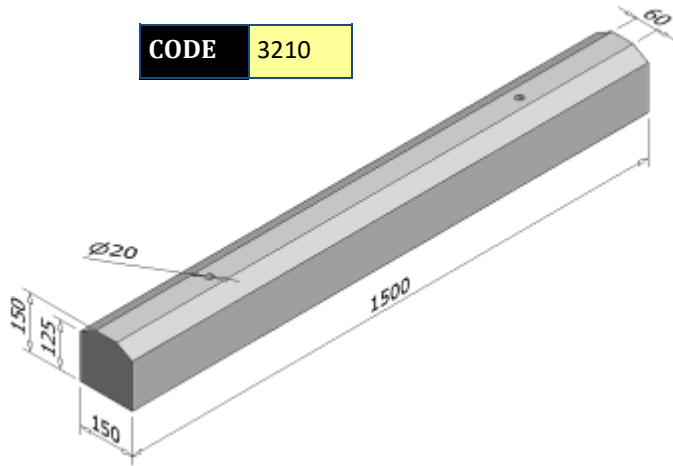
- Used for soil retention & grain storage.
- Custom sizing can be made to order.
- Can also be used for loading ramps.



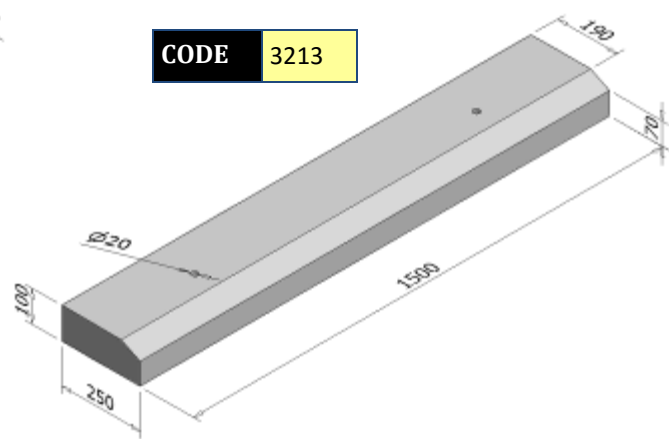
| CODE | PRODUCT | A | B | C | D | LENGTH | APPROX. WEIGHT |
|------|--------------------|------|------|------|-----|--------|----------------|
| 5010 | 90cm x 30cm x 2.4m | 940 | 405 | 860 | 300 | 2.4m | 365kg |
| 5020 | 90cm x 45cm x 2.4m | 940 | 555 | 860 | 450 | 2.4m | 545kg |
| 5030 | 90cm x 60cm x 2.4m | 940 | 705 | 860 | 600 | 2.4m | 725kg |
| 5040 | 1.2m x 30cm x 2.5m | 1180 | 425 | 1078 | 300 | 2.5m | 485kg |
| 5050 | 1.2m x 45cm x 2.5m | 1180 | 575 | 1078 | 450 | 2.5m | 725kg |
| 5060 | 1.2m x 60cm x 2.5m | 1180 | 725 | 1078 | 600 | 2.5m | 965kg |
| 5070 | 1.2m x 90cm x 2.5m | 1180 | 1025 | 1078 | 900 | 2.5m | 1450kg |
| 1400 | 1.5m x 41cm x 2.4m | 1515 | 665 | 1415 | 410 | 2.4m | 1600kg |

KERBS

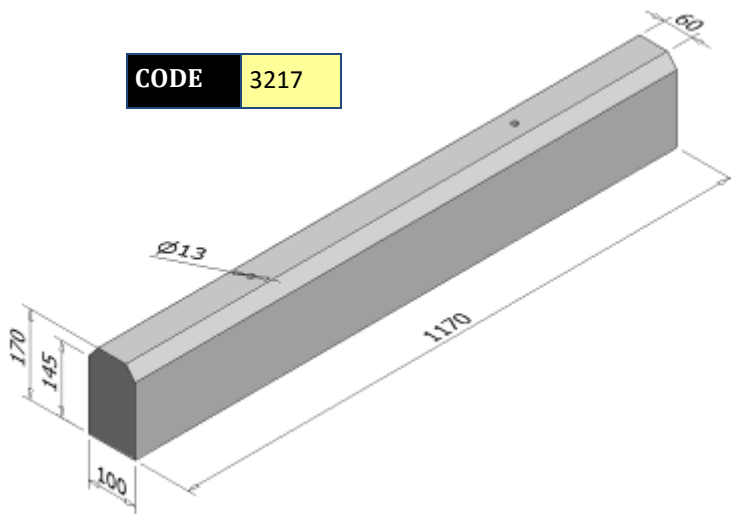
STANDARD KERB



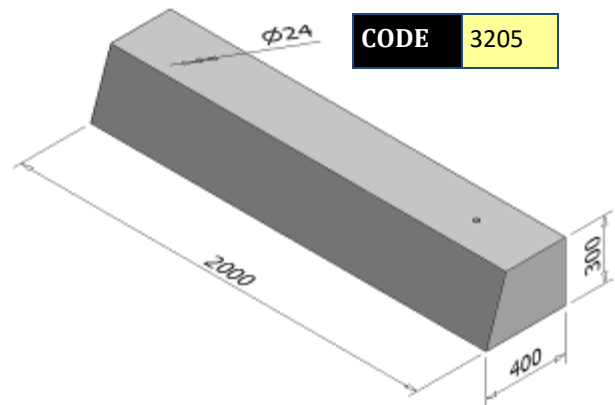
STRAIGHT EDGE KERB



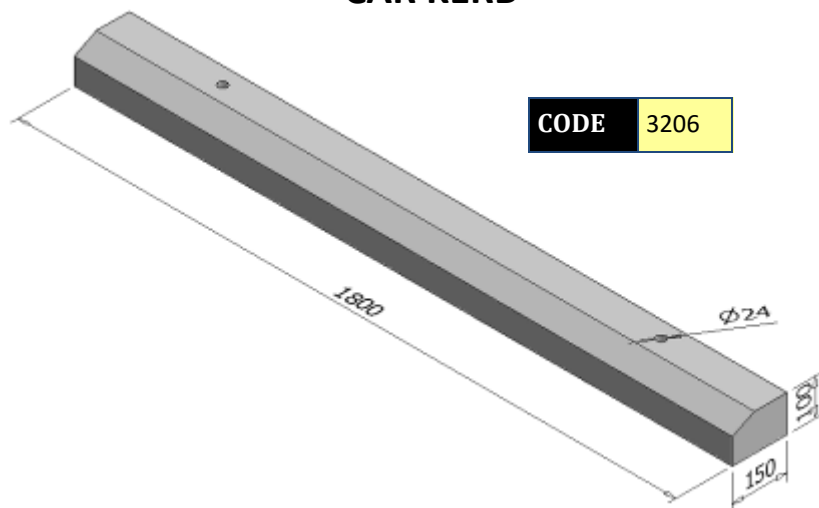
UPRIGHT KERB



TRUCK KERB



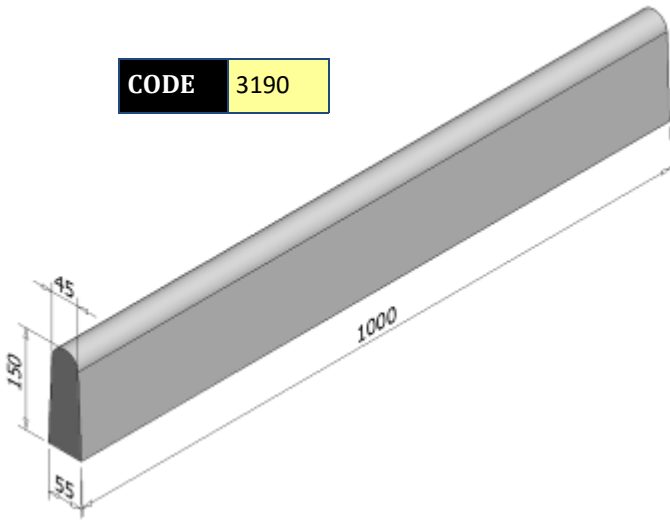
CAR KERB



EDGES & WINDOW SILLS

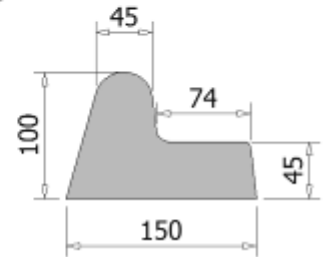
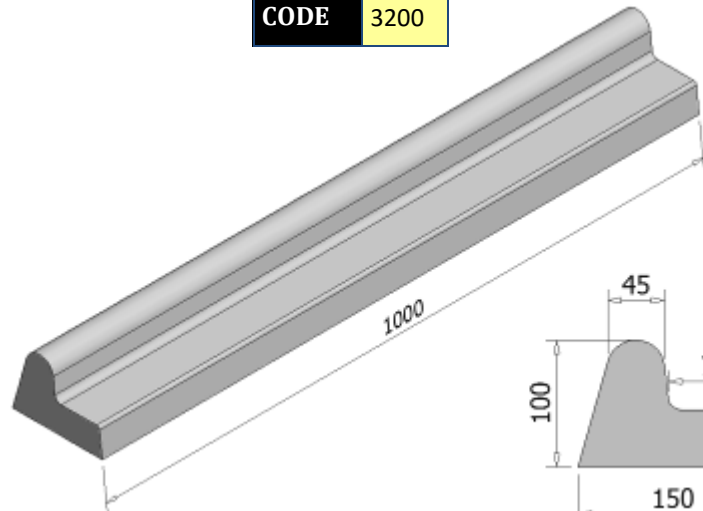
STRAIGHT EDGE

CODE 3190



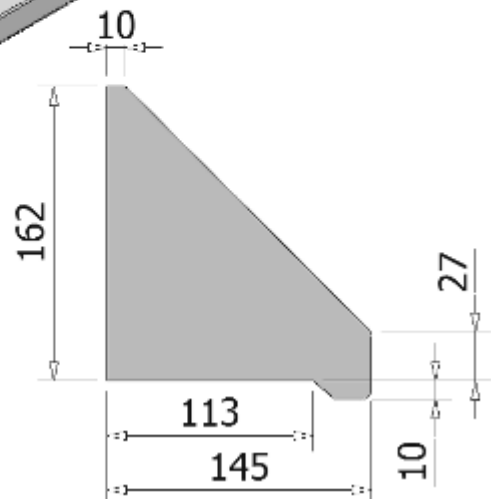
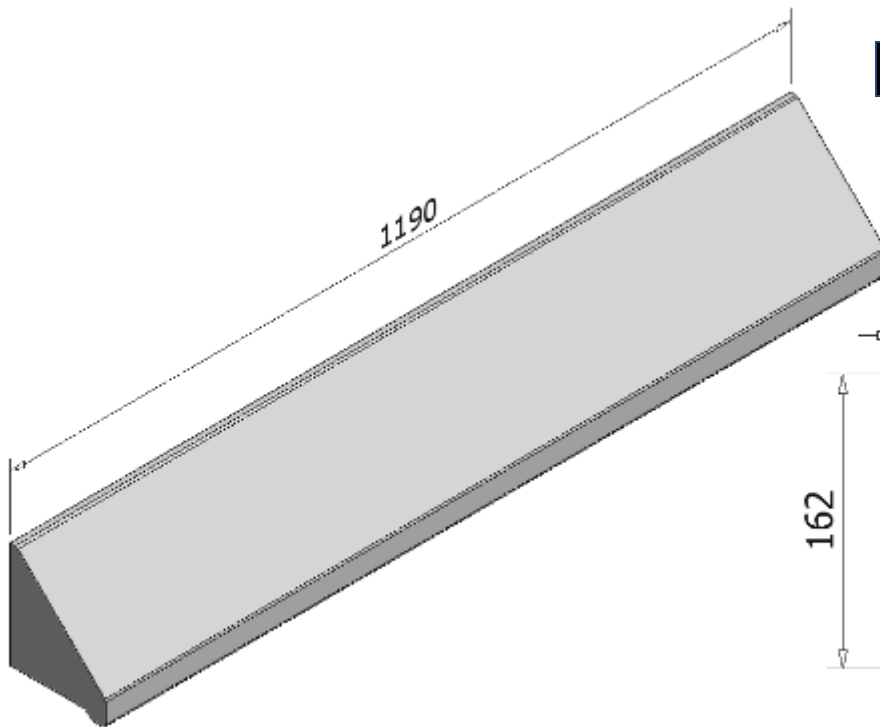
CURVED EDGE

CODE 3200



PRECAST CONCRETE WINDOW SILLS

CODE 3218



ADDITIONAL PRODUCTS

- Cemetery Markers—single & double.
- Cemetery Covers
- Cemetery Plaque
- Square, rectangular & round slabs.
- Bolted Trap Screws & Finishing collars
- Brass Fittings
- Flat Stops in various sizes
- Adjustable water stops
- Lifting Frames to suit pipe Headwalls & customized pits.
- Quick lift to suit Pipe Headwalls
- Posts & Strainers in various sizes.
- 60L Grease Trap
- Dome & Lid
- Rubber Rings to suit rubber ring joint pipes and interlocking/butt pipes.
- Flow control pipes available in 250mm, 300mm & 350mm ID.
- Stepping stones
- Multi-cell pipe & box culvert headwalls
- Cast Iron lids.
- Steel doors to suit headwalls & water stops.

NOTES

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

NOTES

[illegible]

Bruno Altin & Co Pty Ltd – Terms and Conditions of Trade

These terms and conditions as amended or replaced from time to time, apply to any goods or services supplied or to be supplied to the customer, or any third person on the customer's behalf. The customer is taken to have exclusively accepted and is immediately bound, jointly and severally by these terms and conditions if the customer places an order for or accepts delivery of our products. These terms and conditions may only be amended with Bruno Altin & Co Pty Ltd (Bruno Altin) consent in writing and shall prevail to the extent of any inconsistency with any other document or agreement between the customer and Bruno Altin.

Where the customer requests or organises Bruno Altin to provide works, by acting with or on behalf of any third party and that third party is intended to be responsible for the payment (or any part thereof) of the price, than in the event that the third party does not pay for the works when due, the customer acknowledges that they shall be liable for the payment of the price as if they had contacted the works on their own behalf. The customer acknowledges and agrees that it is their responsibility to obtain any necessary approvals or permits from local councils etc. for the works and Bruno Altin shall not be held liable for the customer's failure to comply with this clause.

Your placement of an order with Bruno Altin will only be accepted once we have received a purchase order from the Customer stating all relevant information required confirming order, this includes order number or reference, customers/business details, delivery address, description of products required and quality, contact details etc.

At Bruno Altin's sole discretion the price shall be either as indicated on any invoice provided by Bruno Altin to the Customer or as the quoted prices which will be valid for the period stated in the quotation or otherwise for a period of thirty days. Bruno Altin reserves the right to change the price if a variation to Bruno Altin's quotation is requested. Payment of invoices will be payable by the customer on the dates determined by Bruno Altin which may be as follows: By way of instalments/progress payments in accordance with Bruno Altin payment schedule, thirty (30) days following the end of month in which a statement is posted to the customers address or address for notices, the date specified on any quote, invoice or other form as being the date for payment. Payments can be made by cheque, bank cheque, electronic/on-line banking, or by any other method as agreed to between the customer and Bruno Altin. Unless otherwise stated the price on invoices include GST of 10%.

Bruno Altin and the customer agree that ownership of the products shall not pass until, the customer has paid Bruno Altin all amounts owing to Bruno Altin and the customer has met all of its other obligations to Bruno Altin. Receipt by Bruno Altin of any form of payment other than cash shall not be deemed to be payment until that form of payment has been honored, cleared or recognized. It is further agreed that until ownership of the products passes to the customer in accordance with payment terms and conditions that the customer is only a Bailee of the products and must return the materials to Bruno Altin on request. All products remain the property of Bruno Altin & Co until all monies owing are paid in full, should monies not be received as per payment terms or by agreement by Bruno Altin and Customer, Bruno Altin has the right to reinstate all products on site belonging to Bruno Altin at any time should payment not be received within payment terms or agreement not been placed between customer and Bruno Altin & Co. A service fee of 1.5% per month will be charge on all accounts that exceeds 90 days. It is further agreed that Bruno Altin may cancel all credit trading facilities granted to the customer without notice if accounts are not paid within payment terms and conditions.

All products shall be at the customers risk immediately upon delivery or which occurs on loading of the products at Bruno Altin's premises. Delivery date of products is agreed by both customer and Bruno Altin and is taken to occur at the time that Bruno Altin's nominated carrier delivers the products to the customers nominated address even if the customer is not present at the address. If the Delivery date does not suit customer, customer is to notify Bruno Altin at its earliest so another date can be arranged should you not notify Bruno Altin & Co their carrier will still deliver and unload products on site as per schedule. If the customer requests Bruno Altin and or carrier to leave products outside Bruno Altin's premises for collection or to deliver the products to an unattended location then such products shall be left at the customer's sole risk. Bruno Altin's carriers reserve the right to refuse to enter the site to undertake the delivery in the event that the carrier believes the site to be unsafe. In this event the customer agrees that it is their responsibility to ensure the site is made safe before Bruno Altin will enter the site, Bruno Altin shall not be liable for any delays caused, loss, damages, or costs however resulting from unsafe site.

The Customer must inspect all products on delivery and must within 5 days of delivery notify Bruno Altin & Co of any evident defects/damage, shortage in quantity or failure to comply with the description or quote. The Customer must notify any other alleged defect in the product as soon as reasonably possible after any such defect becomes evident. Upon such notification the customer must allow Bruno Altin & Co to inspect the products. Returns will only be accepted provided that the customer has complied with the provisions by Bruno Altin & Co, Bruno Altin & Co has agreed that the products are defective, the products are returned within a reasonable time at either the customer cost or Bruno Altin pending the reason for return and the materials are returned in the same condition as which they were delivered. Bruno Altin & Co shall not be liable for any defect or damage which may be caused or partly caused by or arise as a result of; the customer failing to properly maintain or store any products, the customer using the products for any other purpose other than for which they were designed, the customer continuing the use of the products after any defect become apparent or should have become apparent to a reasonably prudent operator or user, the customer failing to follow any instructions or guidelines provided by Bruno Altin & Co, fair wear and tear, any accident or act in god. Any customer wanting to return products due to change of decision or incorrect quantity ordered on customers behalf a 10% restocking fee will apply and products to be returned at customers cost and must be returned in the same condition as products received. Any special orders manufactured as per customer's request will not be accepted back to Bruno Altin & Co and customer must still pay all costs that are associated with these orders including freight.

Failure by Bruno Altin to enforce any provision of these terms and conditions shall not be treated as a waiver of that provision, nor shall it affect Bruno Altin's right subsequently enforce that provision. If any provision of these terms and conditions shall be invalid, void, illegal or unenforceable the validity, existence, legality and enforceability of the remaining provisions shall not be affected, prejudiced or impaired.

These terms and conditions and any contract to which they apply shall be governed by the laws of the state of New South Wales in which Bruno Altin has its principal place of business, and are subject to the jurisdiction of the courts of Griffith in that state. Bruno Altin shall be under no liability whatsoever to the client for any indirect and/or consequential loss and/or expense (including loss of profit) suffered by the client arising out of a breach by Bruno Altin of these terms and conditions (alternatively Bruno Altin liability shall be limited to damages which under no circumstances shall exceed the price of the Materials/Equipment). The client shall not be entitled to set off against, or deduct from the price, any sums owed or claimed to be owed to the client by Bruno Altin nor to withhold payment of any invoice because part of that invoice is in dispute. The client agrees that Bruno Altin may amend these terms and conditions at any time. If Bruno Altin makes a change to these terms and conditions, then that change will take effect from the date on which Bruno Altin notifies the client of such change. The client will be taken to have accepted such changes if the client makes a further request for Bruno Altin to provide products to the client. Neither party shall be default due to any act of God, war, terrorism, strike, lock-out industrial action, fire, flood, storm or other event beyond the reasonable control of either party. The client warrants that it has the power to enter into this agreement and has obtained all necessary authorizations to allow it to do so, it is not insolvent and that this agreement creates binding and valid legal obligations on it.

V4:2016

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