



Industries

South Australia's leading manufacturer of pre-cast concrete products
including Ri Treat waste water treatment, trades waste arrestors,
septic tanks and rainwater tanks

www.ri-industries.com.au



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**Leaders in pre-cast concrete products
that enhance the environment**

Ri-Industries was established 1947. We are totally committed to achieving excellence in all that we do, which is why South Australian residents and businesses repeatedly buy our products and regularly recommend us.

www.ri-industries.com.au

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About Ri Industries

Specialists in pre-cast concrete products since 1947.

Ri-Industries manufactures and supplies pre-cast concrete products. Since 1947 we have established a strong reputation for the quality of our products, service, and our knowledge, in particular, of septic tanks, waste water treatment and rainwater tanks. We are totally committed to achieving excellence in all that we do, which is why South Australian residents and businesses repeatedly buy our products and regularly recommend us.

For homeowners our Ri-Treat waste water treatment system is considered to be the finest in Australia. The same goes for our concrete septic tanks and concrete rainwater tanks. If you want a product that is of the highest quality with trouble-free maintenance then you want Ri Industries pre-cast concrete septic tanks, rainwater tanks and wastewater treatment systems.

Our wastewater treatment systems help you save water with the garden and lawn irrigation system that is included.

For businesses we offer Ri-Cycle, a commercial version of our waste water treatment system, trade waste arrestors, stormwater sumps and grates and frames, and covers. We also work regularly with civil engineering and construction companies to provide tailored pre-cast concrete solutions such as retaining wall panels, bridge parapets, pre-cast beams and arch tunnels. If you have a special project needing pre-cast concrete, we can provide the solution.

Committed to excellence

From our base in Angle Park, South Australia, we have made it our life's work to deliver outstanding pre-cast concrete products. We are committed to excellence, not only in our manufacturing techniques and processes but through every interaction we have with our customers.

We are South-Australian owned and operated and we service all parts of metropolitan Adelaide, rural and regional areas within SA and the Northern Territory.

Ri-Industries was the first South Australian company to combine the manufacture, delivery and placement of septic tanks. With engineering experience that spans over 60 years, we have developed a number of associated products to deal with sewage and waste, most notably our Ri-Treat system. Our unique design has become a leader in South Australia for the management and treatment of waste water.

All of our products are 'over-engineered'. That is how we strive for 100% excellence. Plumbers describe our products as "second-to-none" and "the best in South Australia". We are proud of our stand-out quality of product and service. This is further backed up by our on-time deliveries, knowledgeable sales team and after sales back-up services.

Septic tanks



A septic tank from Ri-Industries offers a number of benefits:

- Engineer-designed and built from fine tolerance steel moulds
- Tanks are made from 40 MPa concrete to give additional strength and durability
 - Internally, all joints are sealed, reducing the potential for leakages
 - Tanks are offered in 14 different sizes, for maximum flexibility
- Child-proof and vandal-proof lids on our septic tanks give you additional peace of mind.



Industries

Septic tanks

Ri-Industries have over 60 years experience in the septic tank business and have developed efficient manufacturing techniques to produce septic tanks of the highest quality that are built to last.

- All tanks are engineer-designed and built from fine tolerance steel moulds which produce reliable wall thickness
- Tanks are made from 40 MPa concrete to give additional strength and durability
- Internally, all joints are sealed, reducing the potential for leakages
- Septic Tanks are offered in 14 different sizes, for maximum flexibility
- Child-proof and vandal-proof lids

General information

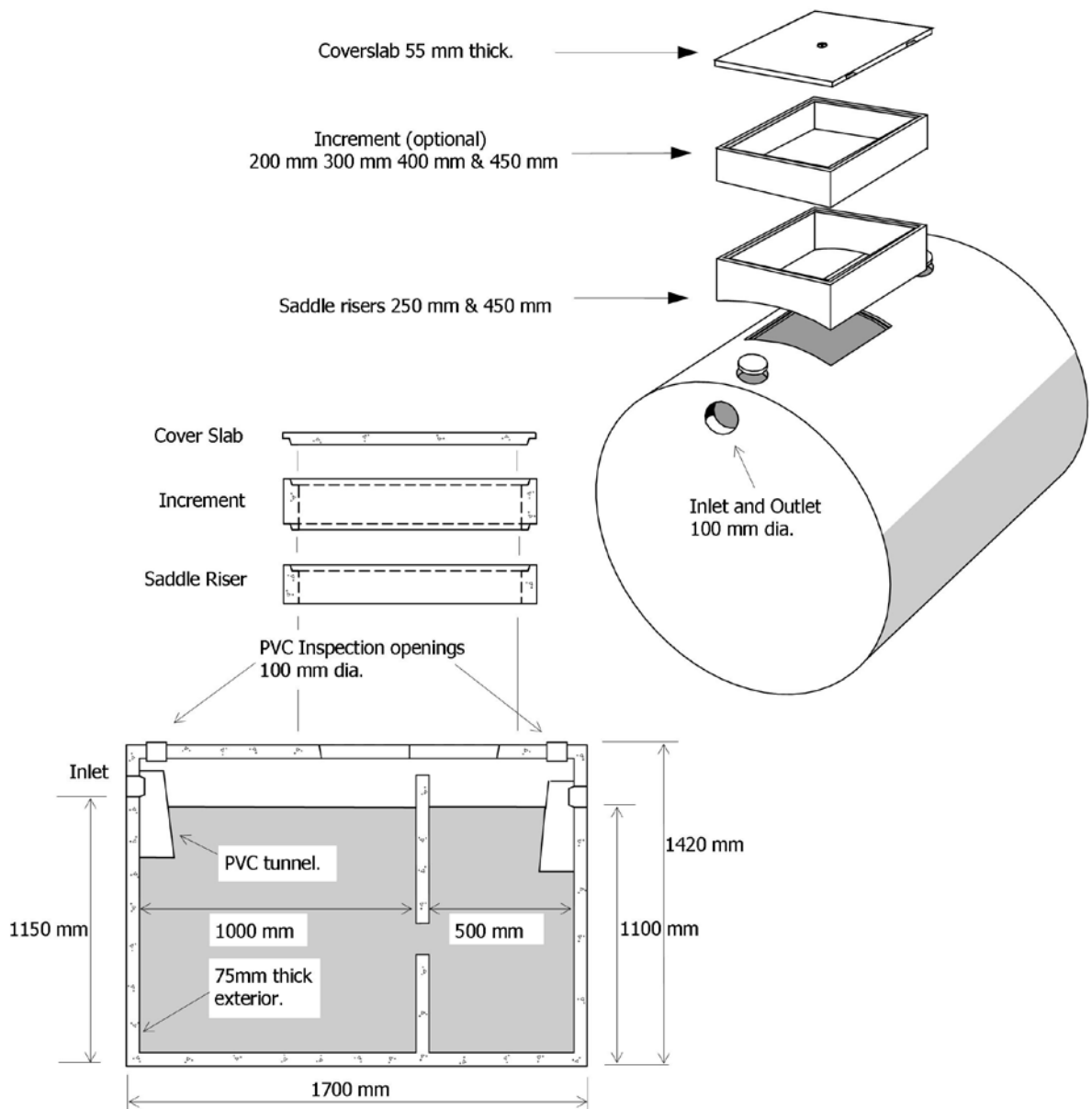
Installation and design of septic systems are regulated by the Health Department in each state. Local Council Health Inspectors will have relevant area specific information.

To keep the septic tank fresh and operating correctly:

- For an average family of 4-6 people the septic tank may need to be de-sludged approximately every 4 years or as per Council requirements.
- Material that will not break down such as plastic bags, tampons, disposable nappies, condoms, etc, must NOT be put into the septic system. Biodegradable products should be used wherever possible. The bacterial action of septic tanks can also be severely inhibited by excessive amounts of disinfectants or old medicine entering the tank. Only use products approved for use in septic systems.
- Pooling of effluent near the seepage trench indicates that the system may be clogging. If this occurs contact your local liquid waste disposal contractor to empty the system.
- More detailed information on the workings of septic systems are available from the South Australian Health Commission.

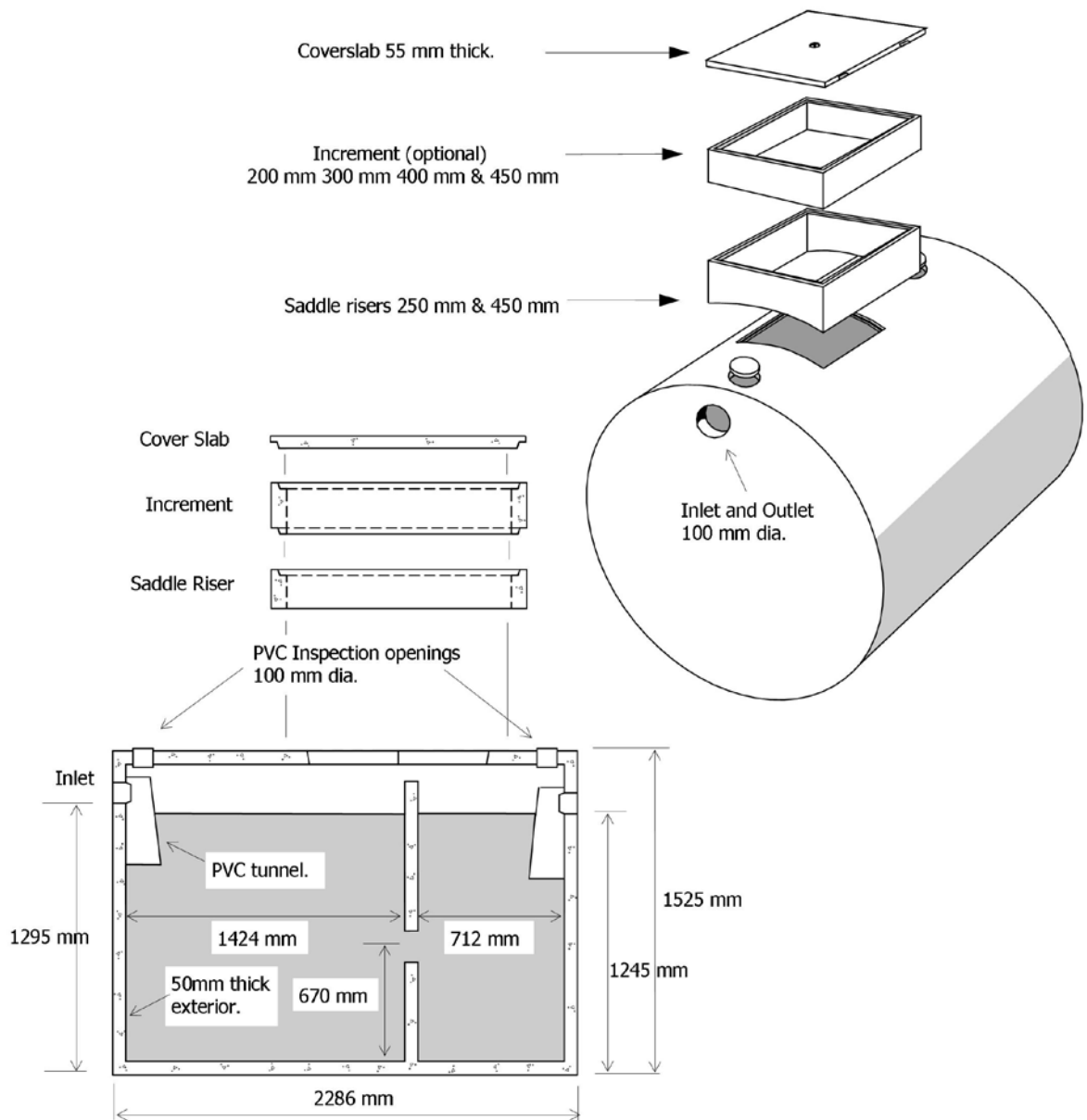
Septic tank • 1,620 litre

| Item | Approx Mass |
|-------------------------|-------------|
| 1,620 litre septic tank | 1,875kg |



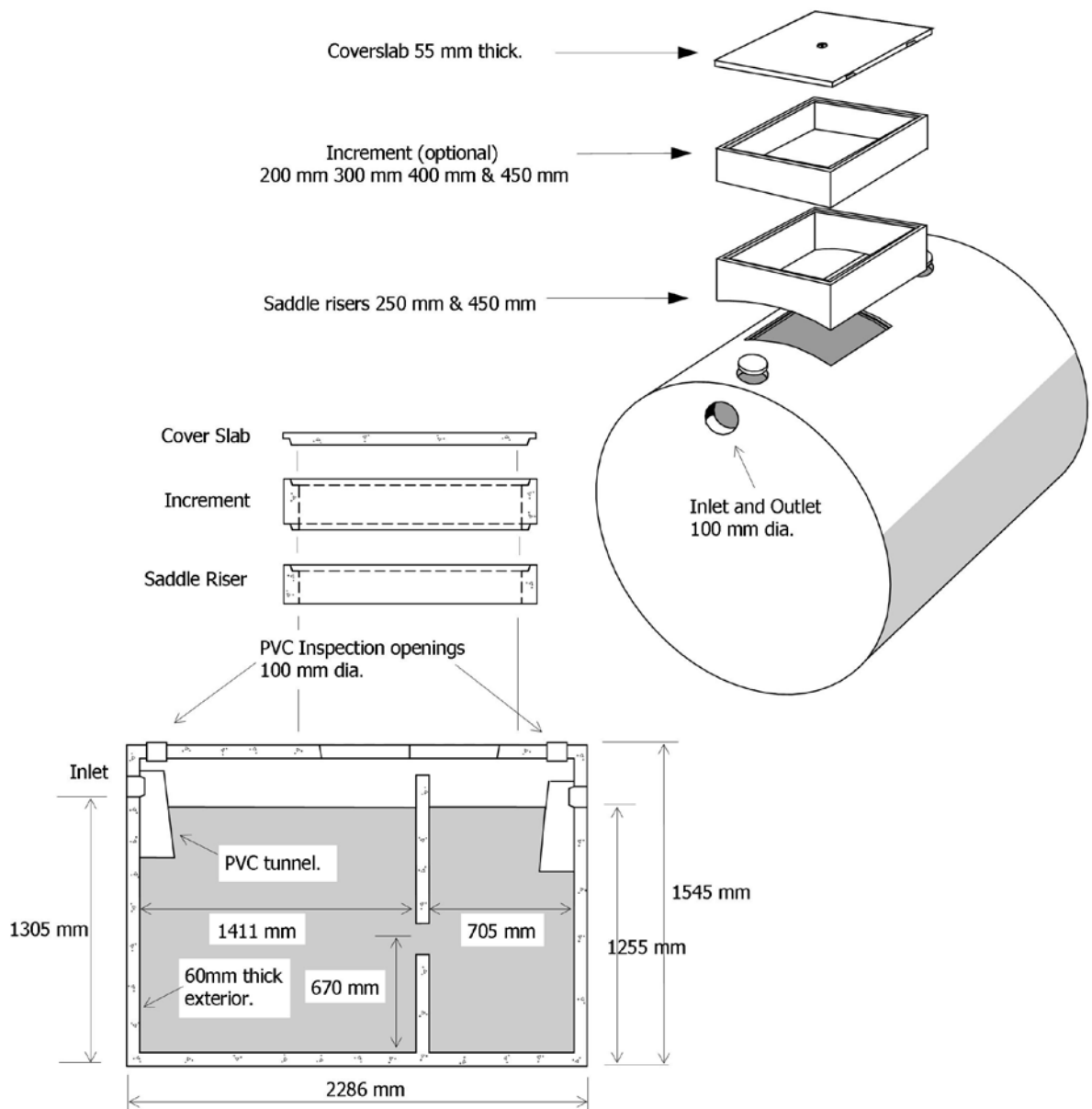
Septic tank • 3,000 litre, 50mm wall

| Item | Approx Mass |
|-------------------------------------|-------------|
| 3,000 litre septic tank (50mm wall) | 2,000kg |



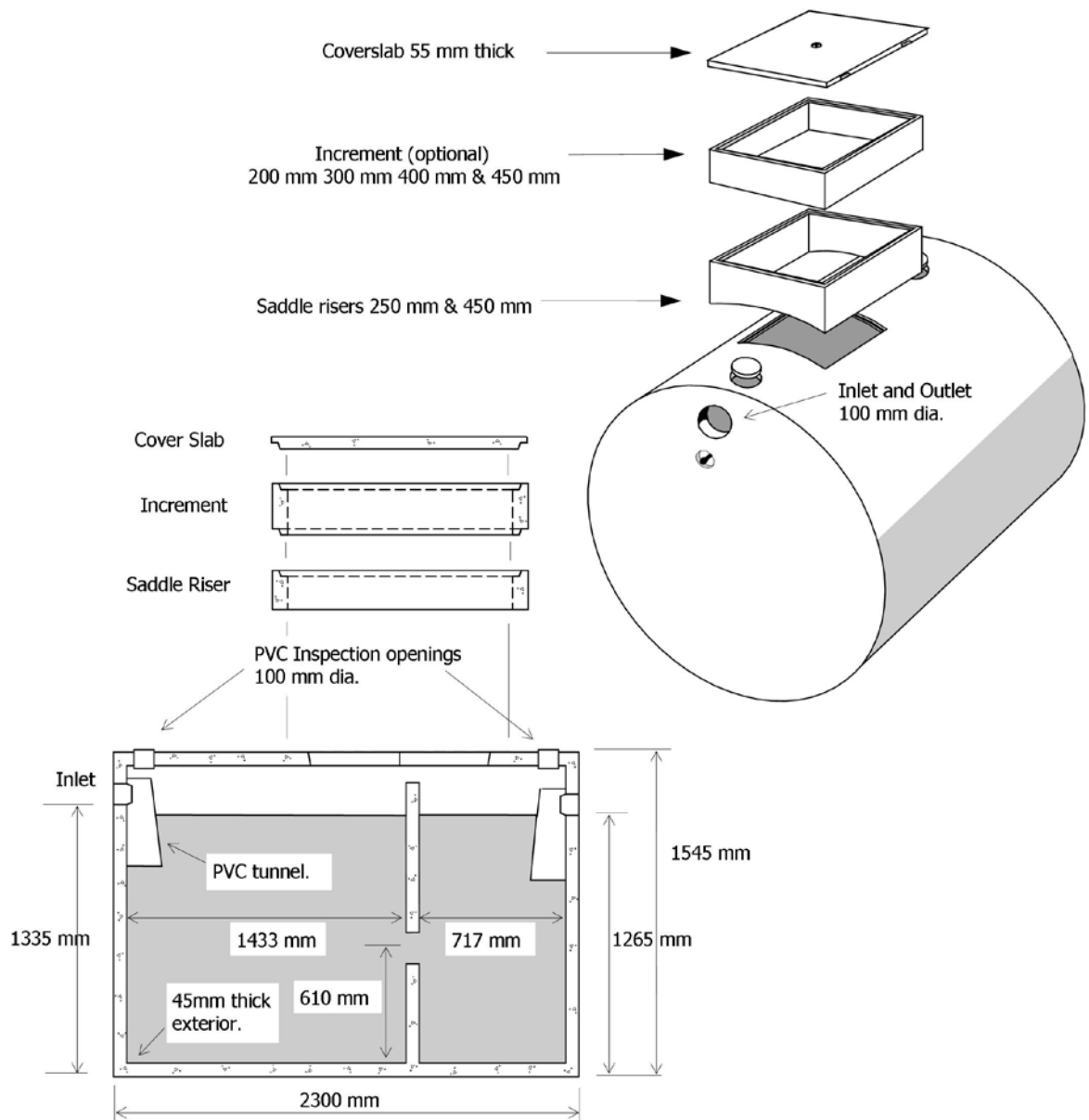
Septic tank • 3,000 litre, 60mm wall

| Item | Approx Mass |
|-------------------------------------|-------------|
| 3,000 litre septic tank (60mm wall) | 2,300kg |



Septic tank • 3,250 litre

| Item | Approx Mass |
|-------------------------|-------------|
| 3,250 litre septic tank | 2,140kg |

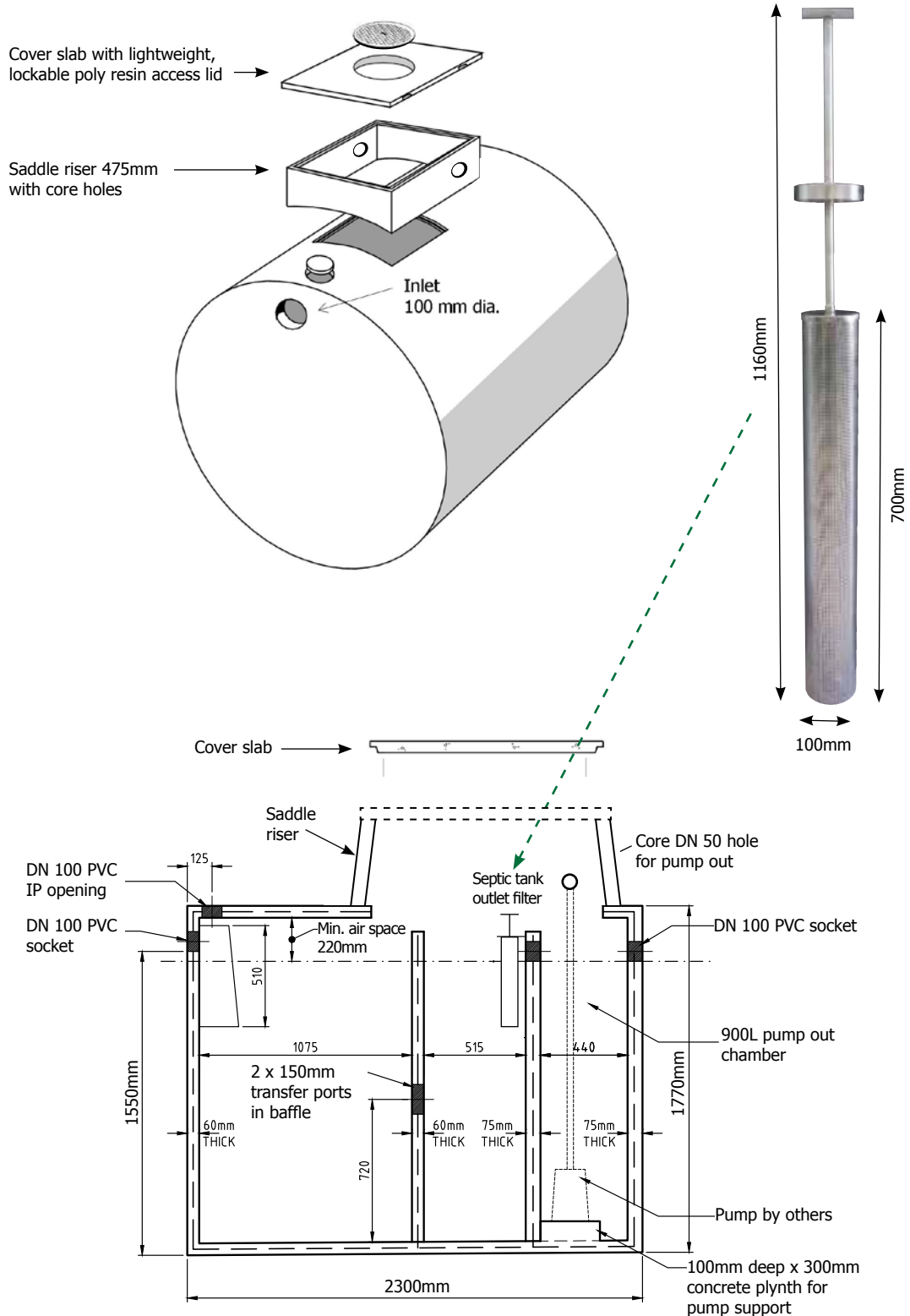


Ri-Scape tank • 3,300 litre with 900L pump chamber

| Item | Approx Mass |
|---------------------------|-------------|
| 3,300 litre Ri-Scape tank | 3,200kg |

Septic tank outlet filter

3mm punched apertures meets Standard AS1547:2012

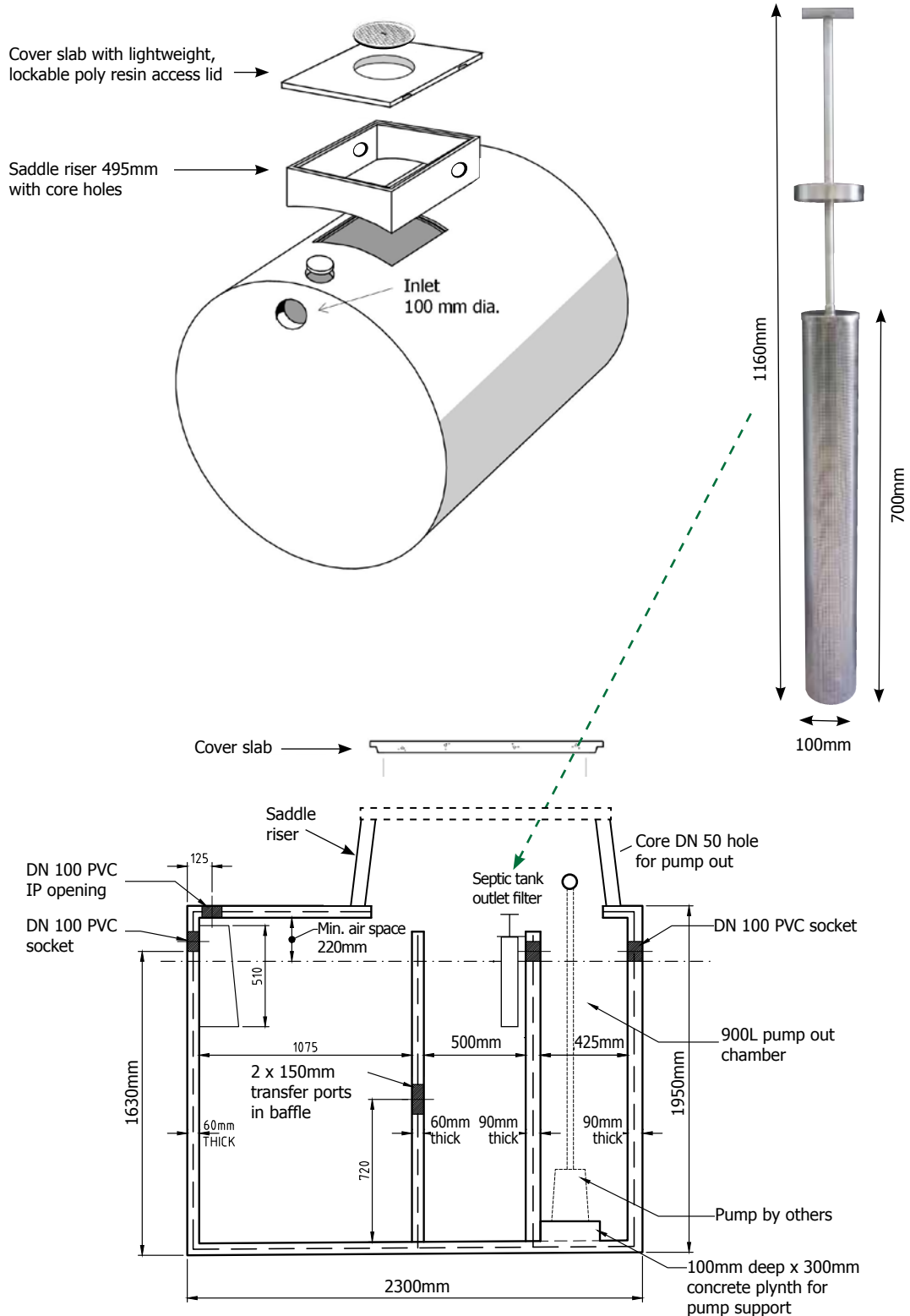


Ri-Scape tank • 4,000 litre with 900L pump chamber

| Item | Approx Mass |
|---------------------------|-------------|
| 4,000 litre Ri-Scape tank | 3,700kg |

Septic tank outlet filter

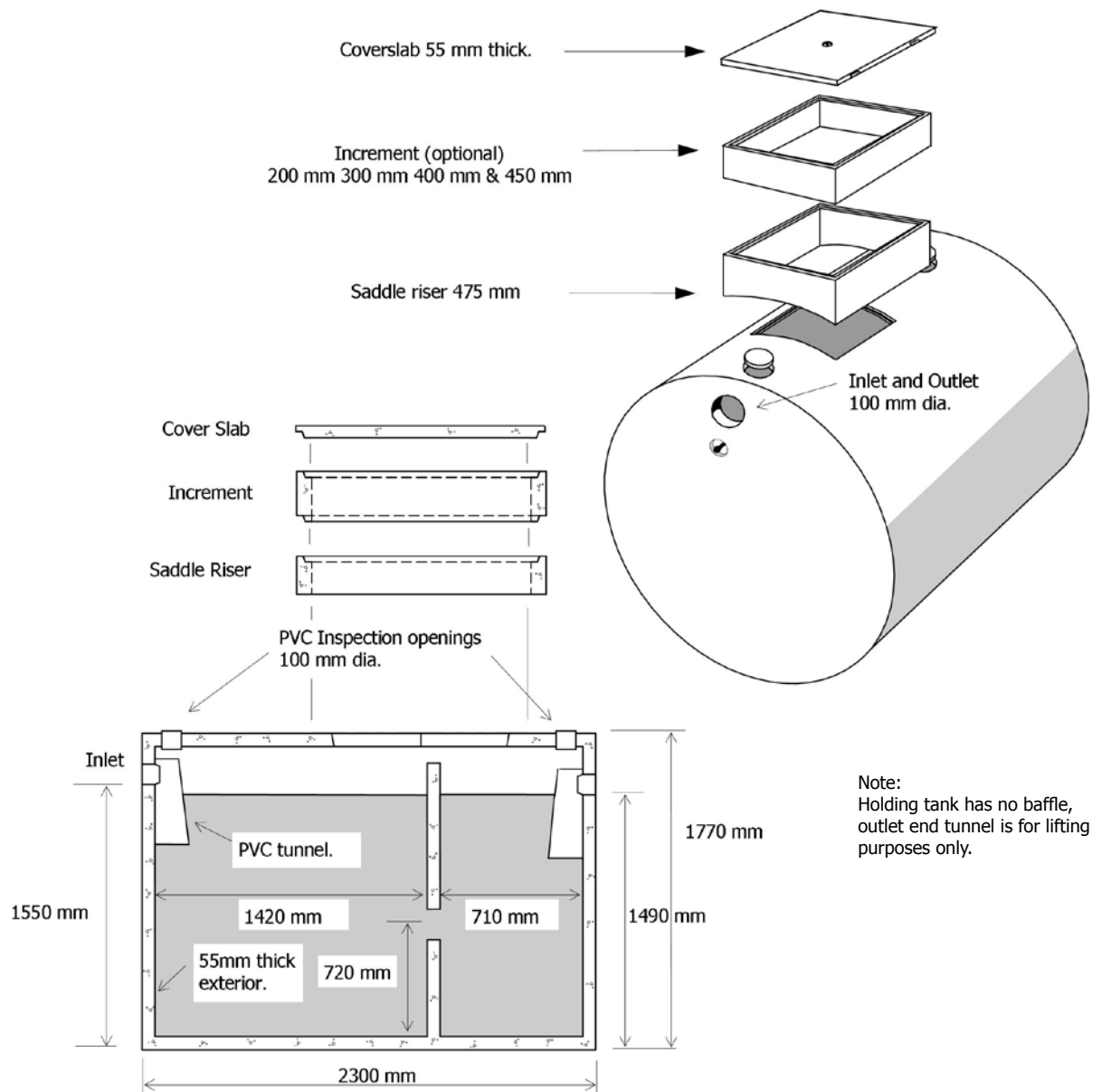
3mm punched apertures meets Standard AS1547:2012



Septic tank • 4,300 litre

Holding tank • 4,300 litre

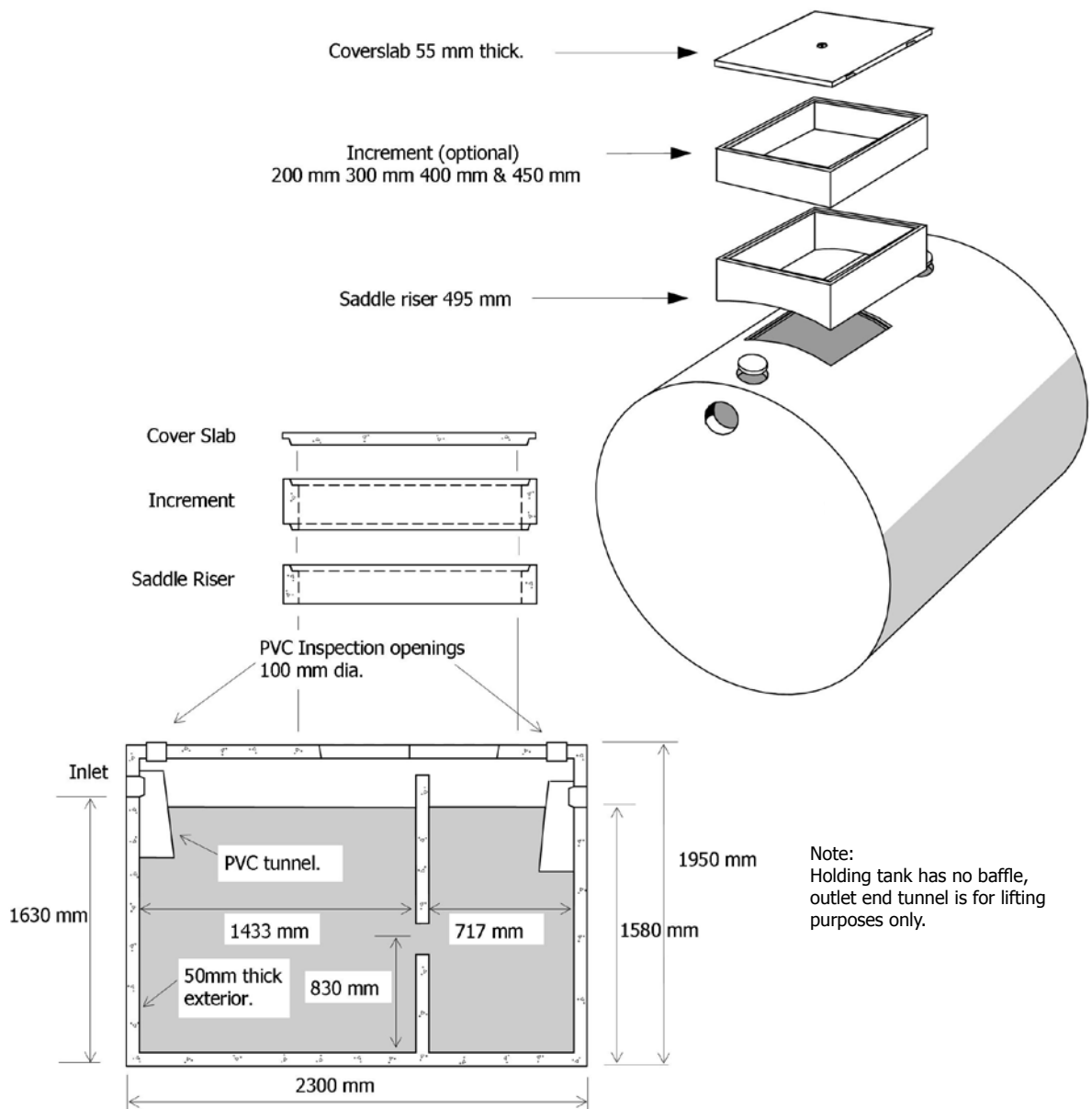
| Item | Approx Mass |
|--------------------------|-------------|
| 4,300 litre septic tank | 2,550kg |
| 4,300 litre holding tank | 2,200kg |



Septic tank • 5,000 litre

Holding tank • 5,000 litre

| Item | Approx Mass |
|--------------------------|-------------|
| 5,000 litre septic tank | 3,000kg |
| 5,000 litre holding tank | 2,700kg |

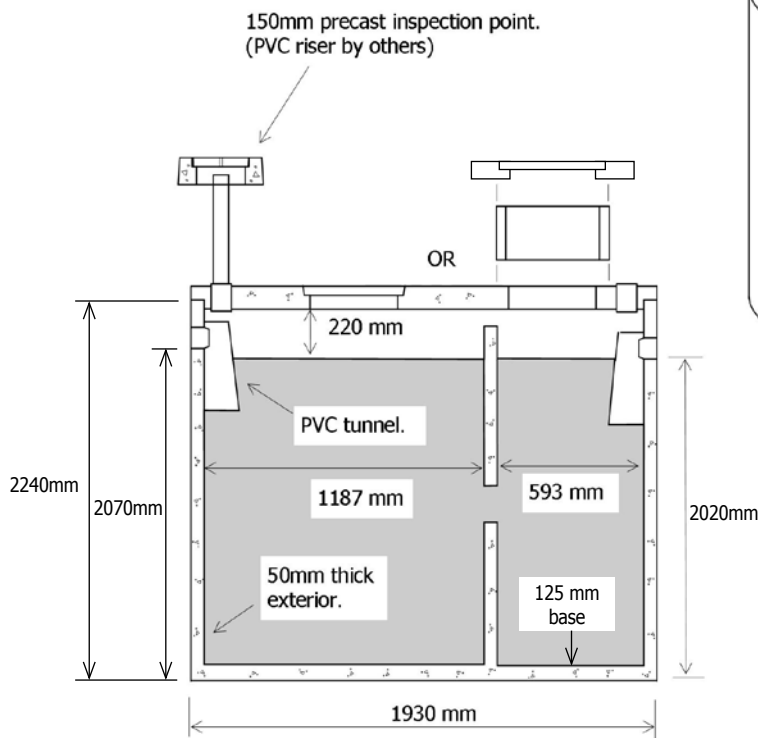
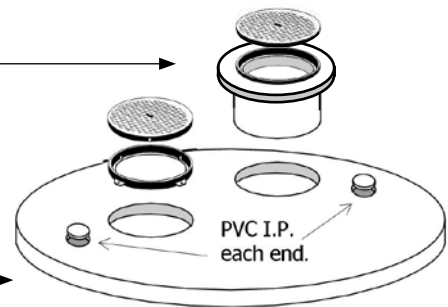


Vertical septic tank • 5,000 litre

| Item | Approx Mass |
|----------------------------------|-------------|
| 5,000 litre vertical septic tank | 4,600kg |

800 dia pipe increments available 600 mm and 300 mm high to raise access openings to finished surface level.
 600 dia covers available in heavy duty and light duty application.

150 mm thick coverslab with inspection and access openings

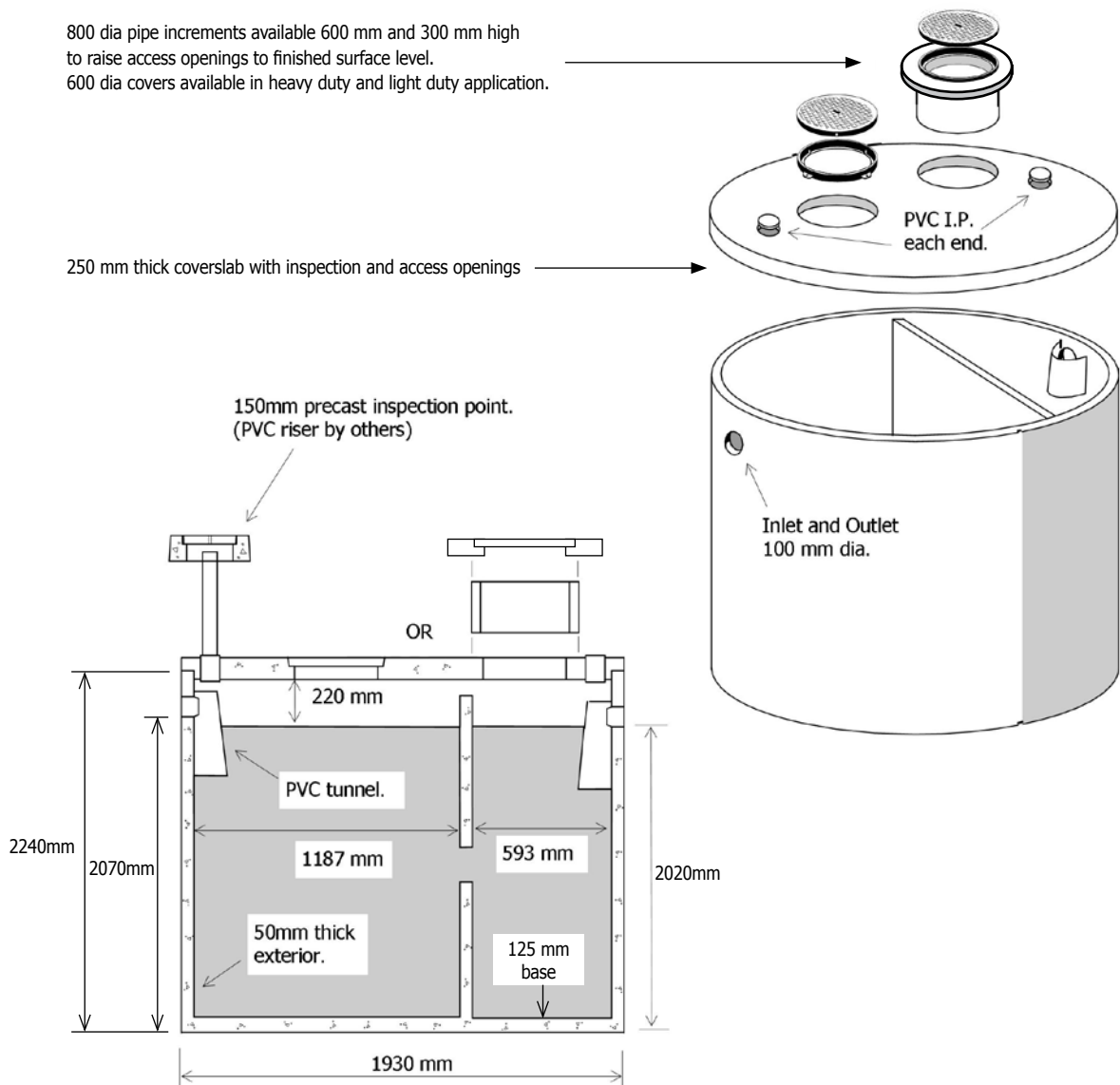


Vertical septic tank & trafficable lid • 5,000 litre

| Item | Approx Mass |
|----------------------------------|-------------|
| 5,000 litre vertical septic tank | 5,350kg |

800 dia pipe increments available 600 mm and 300 mm high to raise access openings to finished surface level.
600 dia covers available in heavy duty and light duty application.

250 mm thick coverslab with inspection and access openings

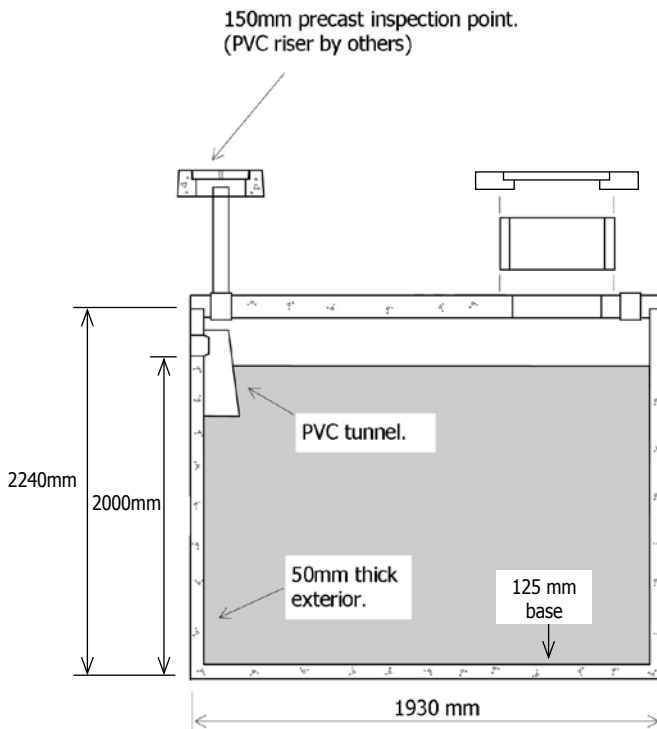
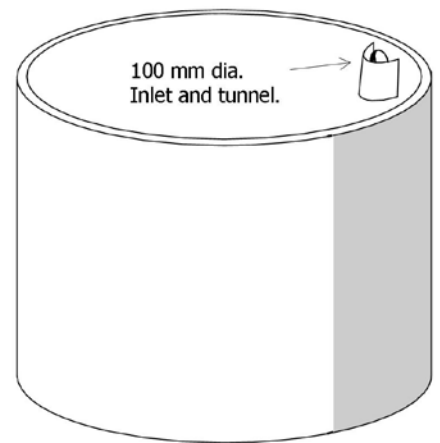
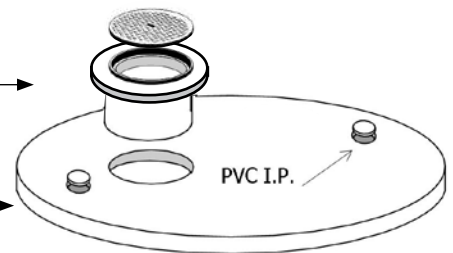


Vertical holding tank • 5,000 litre

| Item | Approx Mass |
|-----------------------------------|-------------|
| 5,000 litre vertical holding tank | 4,020kg |

800 dia pipe increments available 600 mm and 300 mm high to raise access openings to finished surface level.
600 dia covers available in heavy duty and light duty application.

150 mm thick coverslab with inspection and access openings

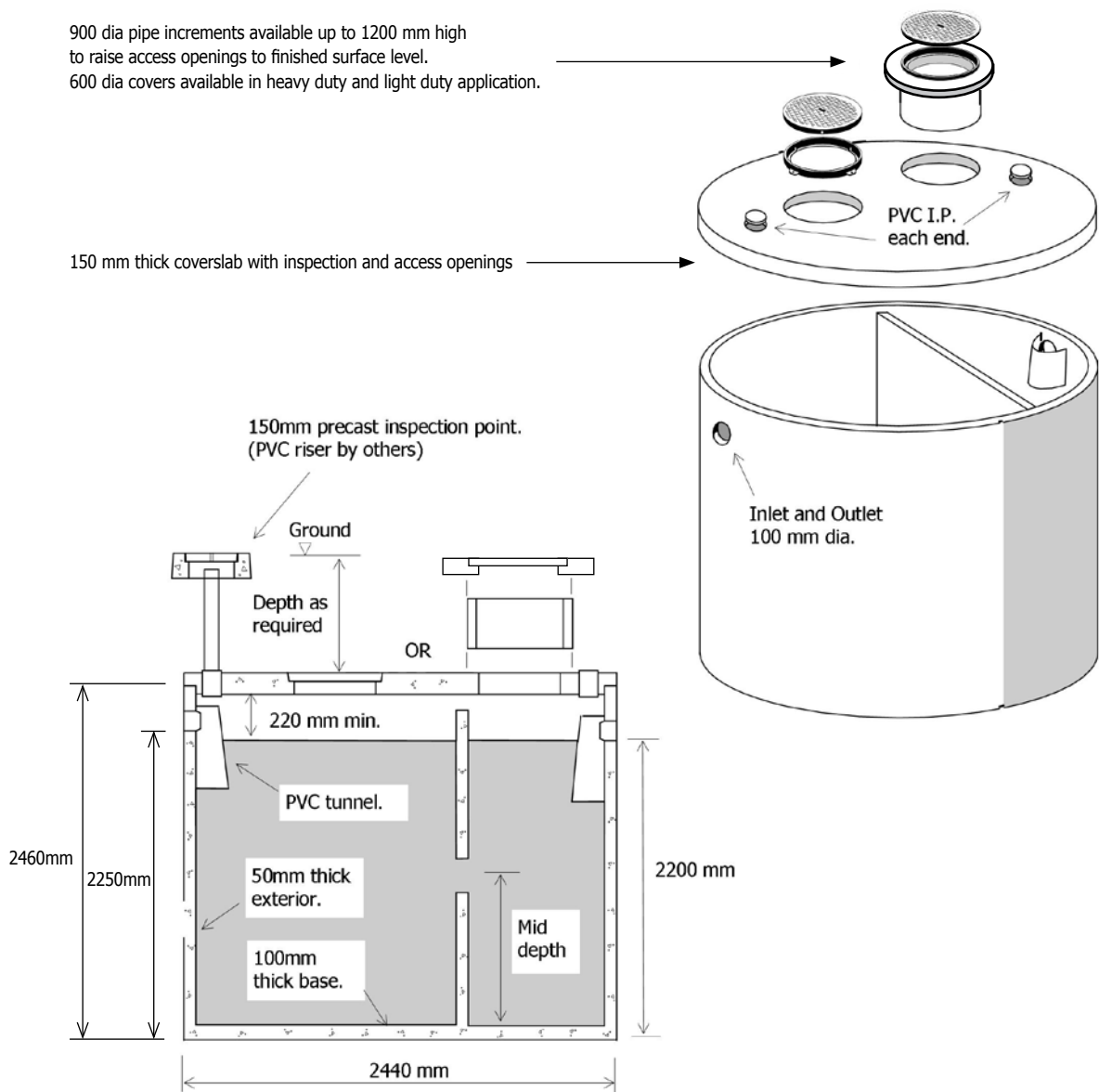


Septic tank & lid • 8,000 litre

| Item | Approx Mass |
|----------------------------------|-------------|
| 8,000 litre vertical septic tank | 6,310kg |

900 dia pipe increments available up to 1200 mm high to raise access openings to finished surface level.
 600 dia covers available in heavy duty and light duty application.

150 mm thick coverslab with inspection and access openings



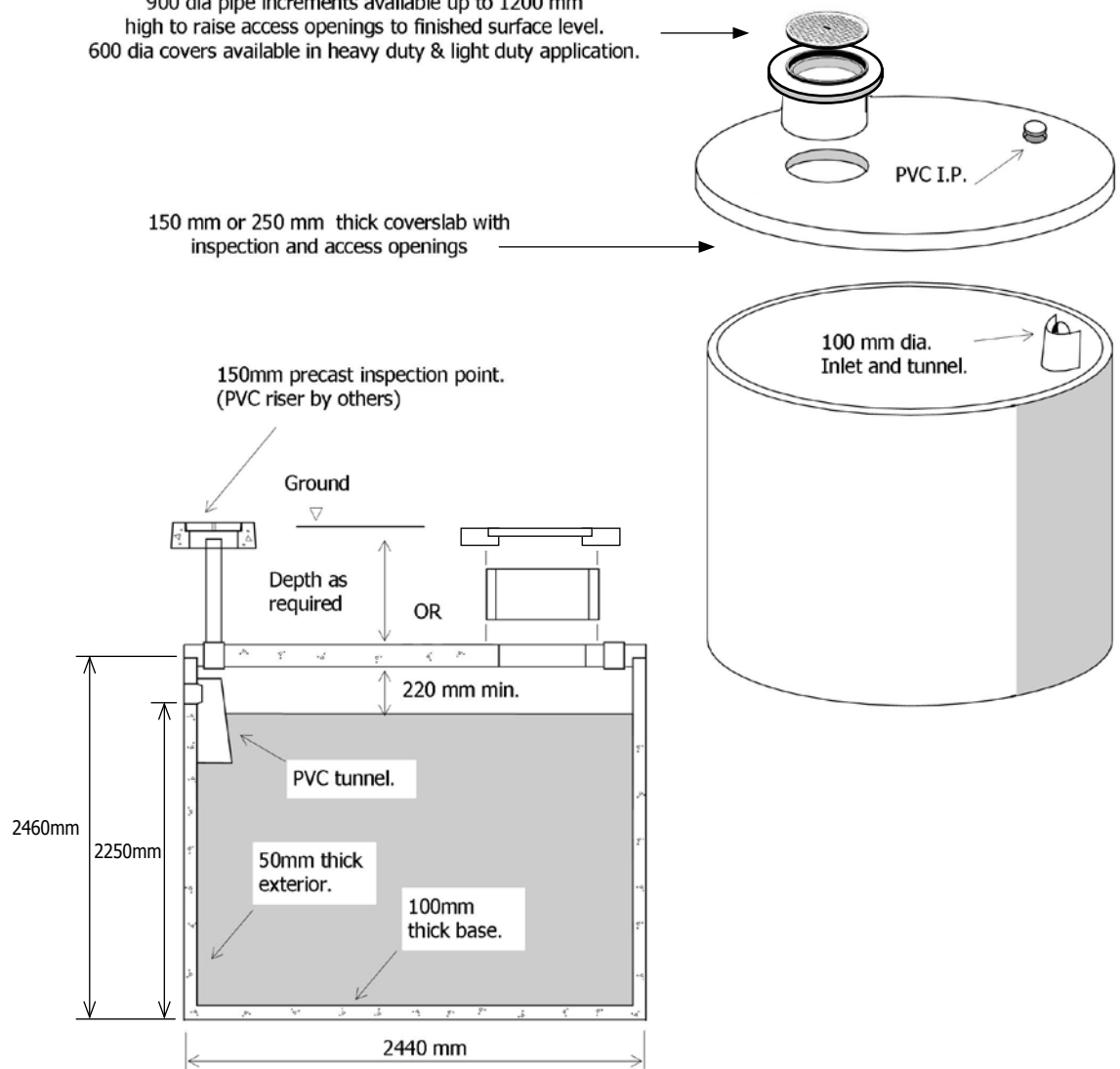
Vertical holding tank • 8,000 litre

| Item | Approx Mass |
|-----------------------------------|-------------|
| 8,000 litre vertical holding tank | 5,670kg |

900 dia pipe increments available up to 1200 mm high to raise access openings to finished surface level. 600 dia covers available in heavy duty & light duty application.

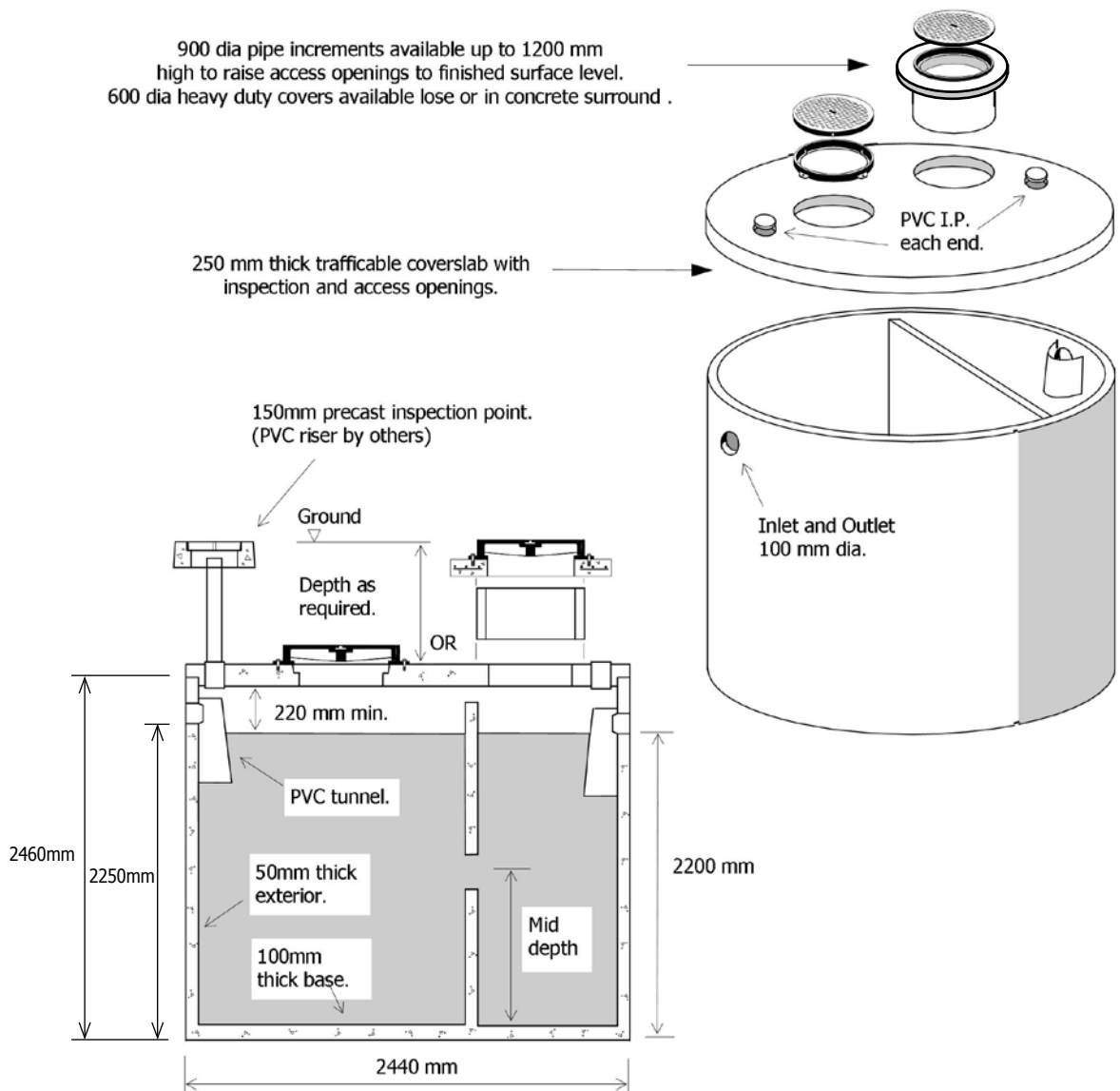
150 mm or 250 mm thick coverslab with inspection and access openings

150mm precast inspection point. (PVC riser by others)



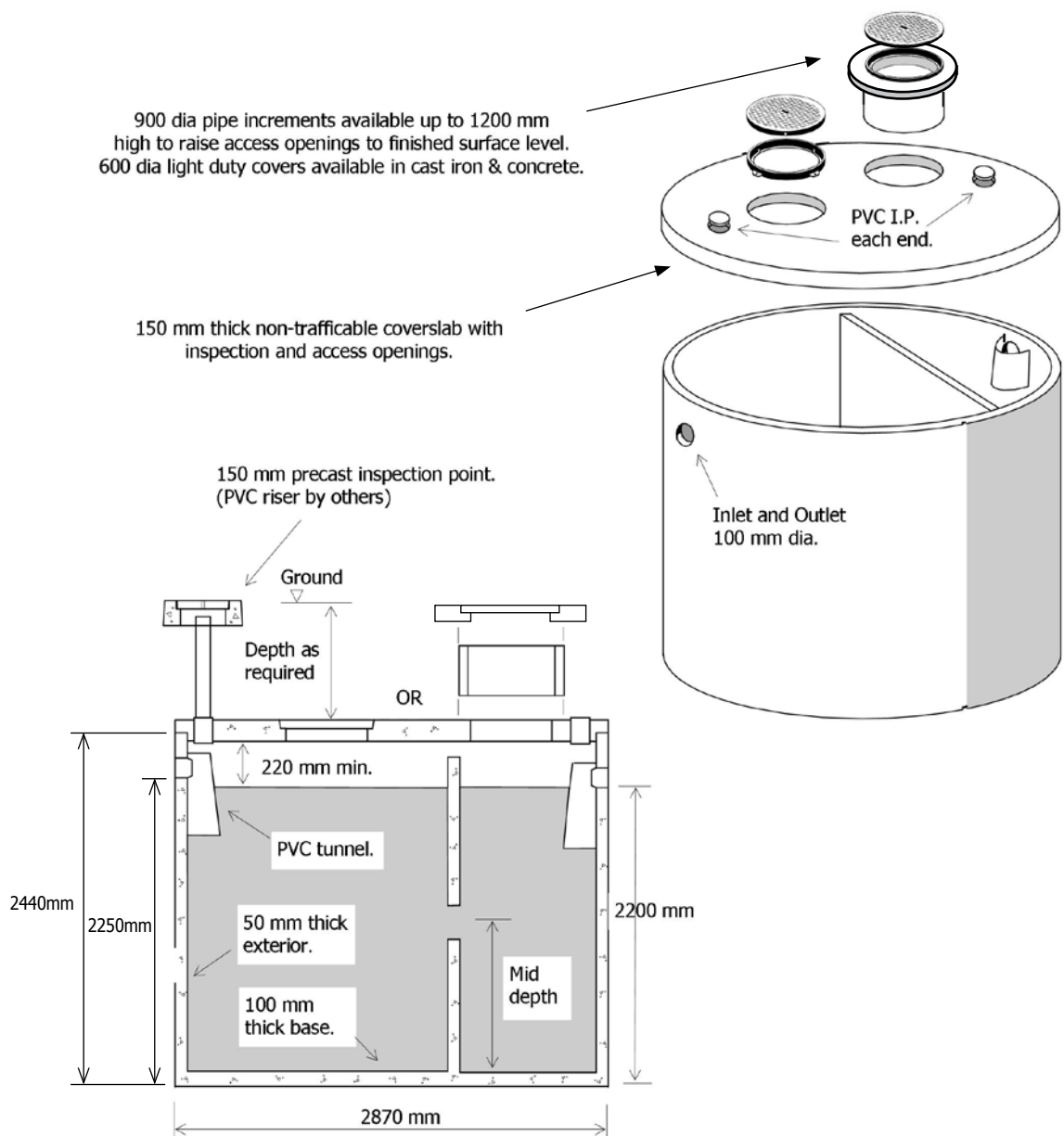
Septic tank & trafficable lid • 8,000 litre

| Item | Approx Mass |
|----------------------------------|-------------|
| 8,000 litre vertical septic tank | 7,460kg |



Septic tank & lid • 12,000 litre

| Item | Approx Mass |
|-----------------------------------|-------------|
| 12,000 litre vertical septic tank | 8,420kg |



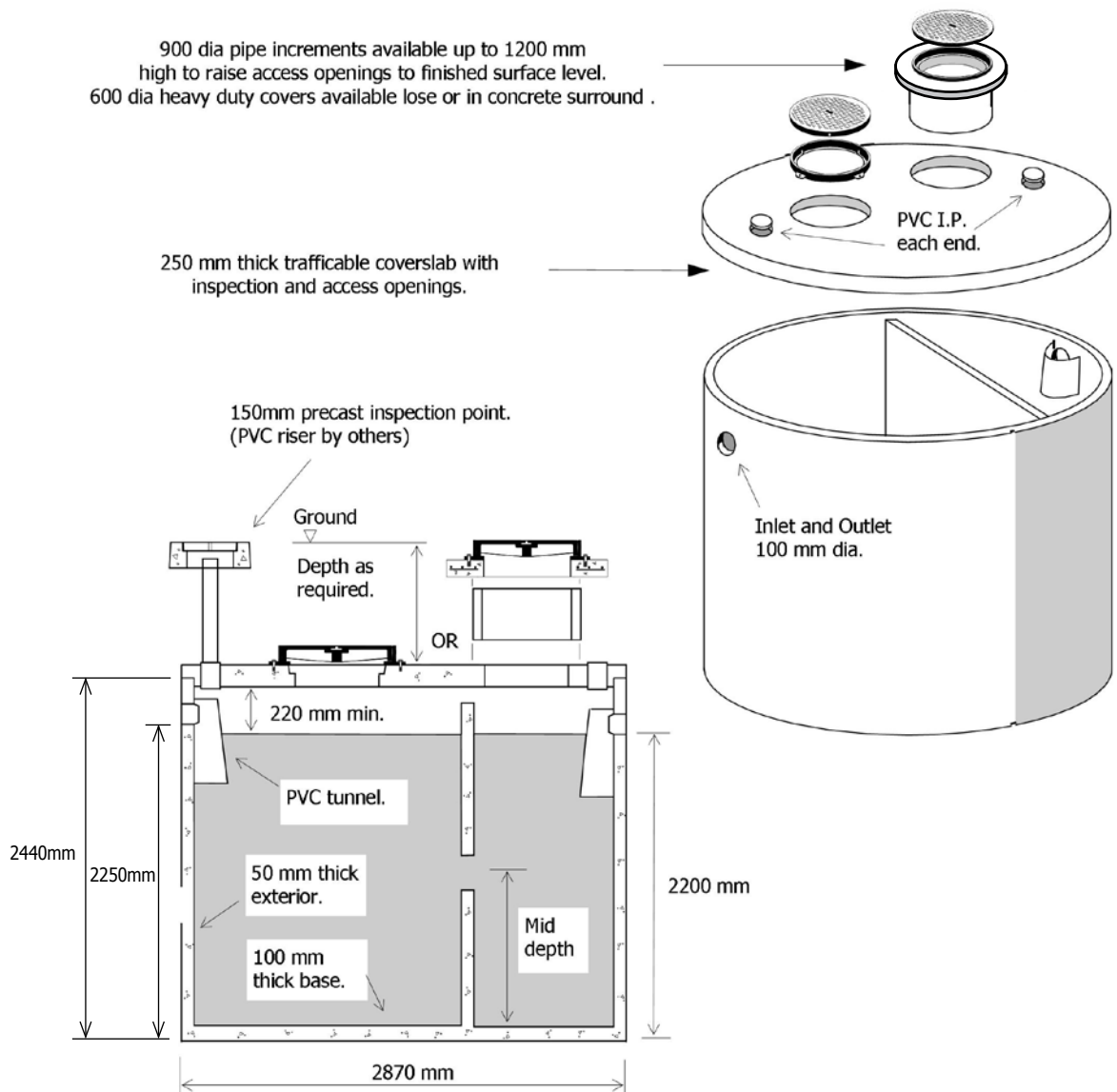
Septic tank & trafficable lid • 12,000 litre

| Item | Approx Mass |
|-----------------------------------|-------------|
| 12,000 litre vertical septic tank | 9,840kg |

900 dia pipe increments available up to 1200 mm high to raise access openings to finished surface level.
600 dia heavy duty covers available loose or in concrete surround .

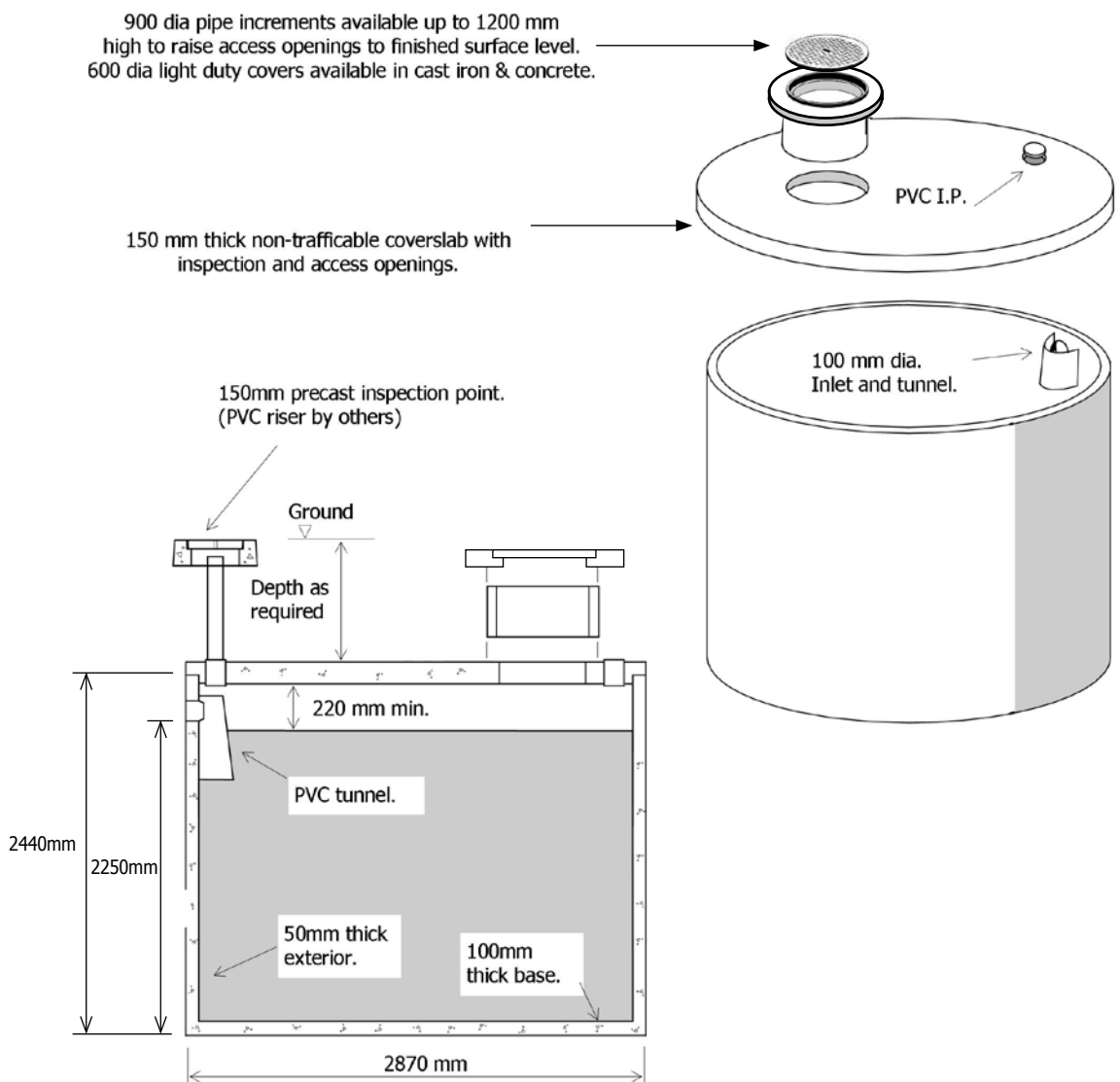
250 mm thick trafficable coverslab with inspection and access openings.

150mm precast inspection point.
(PVC riser by others)



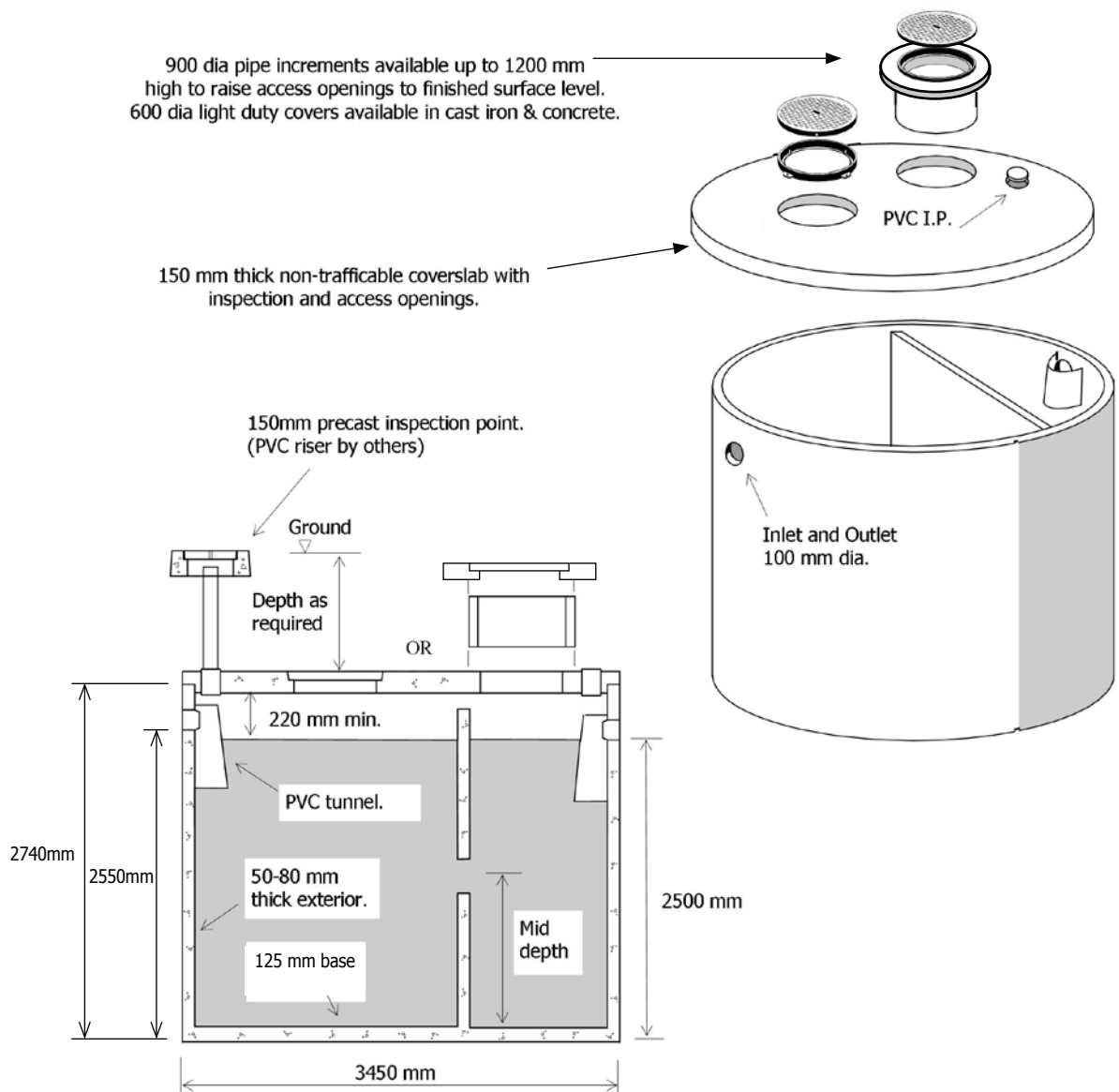
Vertical holding tank • 12,000 litre

| Item | Approx Mass |
|------------------------------------|-------------|
| 12,000 litre vertical holding tank | 7,300kg |



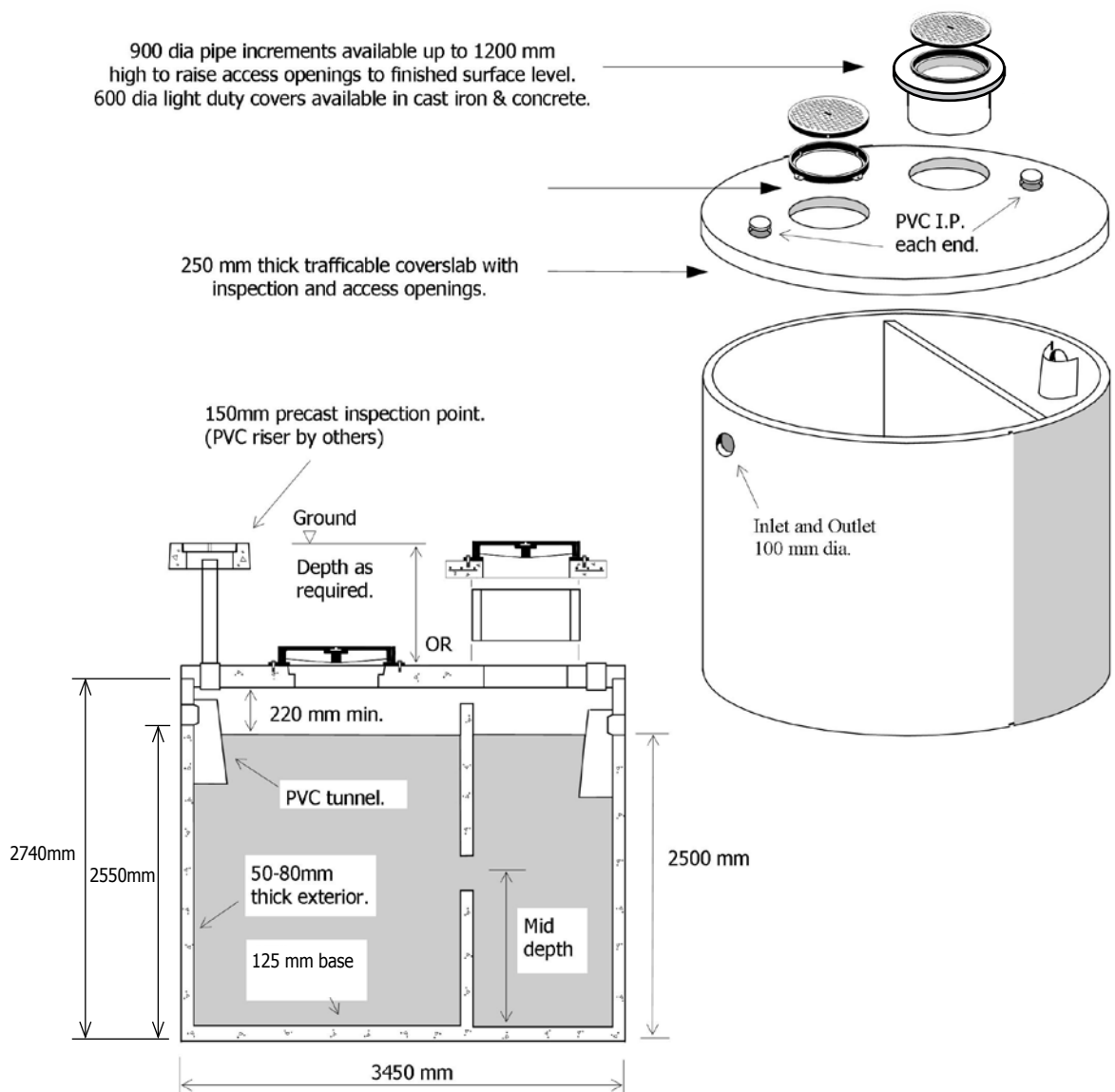
Septic tank & lid • 20,000 litre

| Item | Approx Mass |
|-----------------------------------|-------------|
| 20,000 litre vertical septic tank | 12,510kg |



Septic tank & trafficable lid • 20,000 litre

| Item | Approx Mass |
|-----------------------------------|-------------|
| 20,000 litre vertical septic tank | 14,620kg |



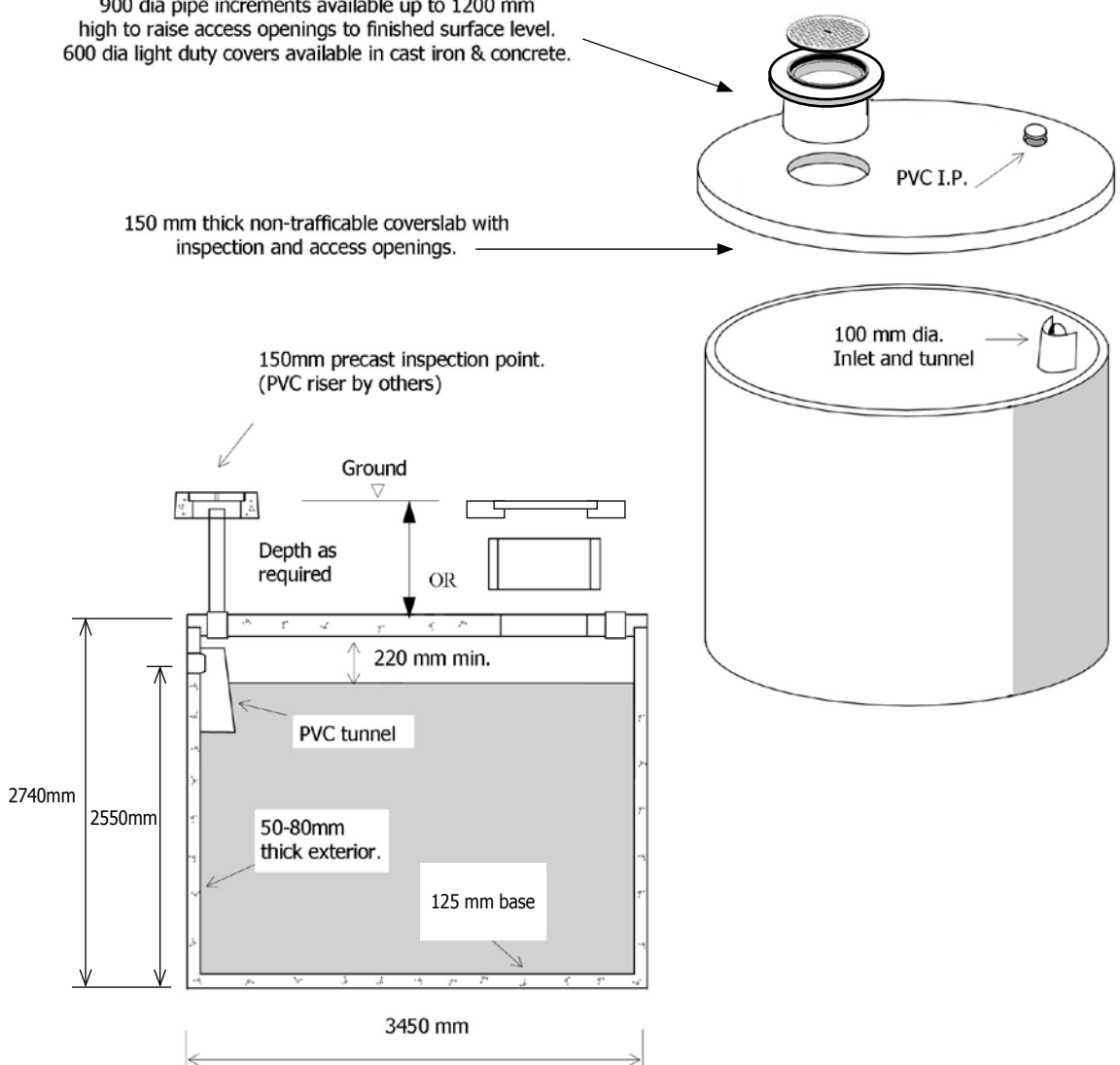
Vertical holding tank • 20,000 litre

| Item | Approx Mass |
|------------------------------------|-------------|
| 20,000 litre vertical holding tank | 10,600kg |

900 dia pipe increments available up to 1200 mm high to raise access openings to finished surface level. 600 dia light duty covers available in cast iron & concrete.

150 mm thick non-trafficable coverslab with inspection and access openings.

150mm precast inspection point. (PVC riser by others)

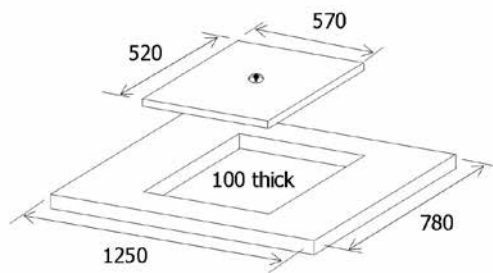


Saddle risers, increments & coverslabs

- To suit all horizontal septic and holding tanks
- Coverslabs suitable for pedestrian traffic only
- Radius of saddle riser varies to suit tank
- Each component fitted with 1.3t 'Swiftlift' anchors for lifting

TYPE 34

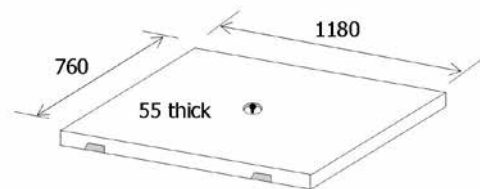
Suitable for 622L pump chamber.



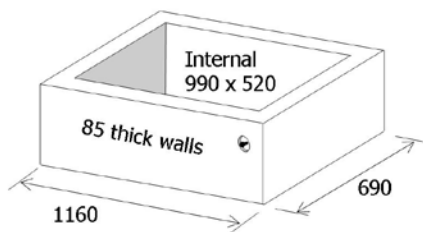
Weight 192kg

TYPE 33

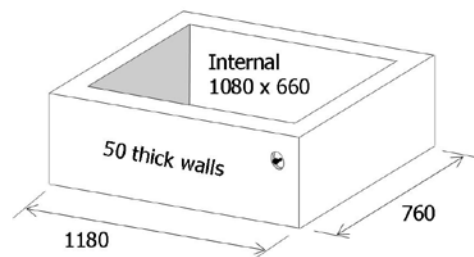
Suitable for all other horizontal tanks.



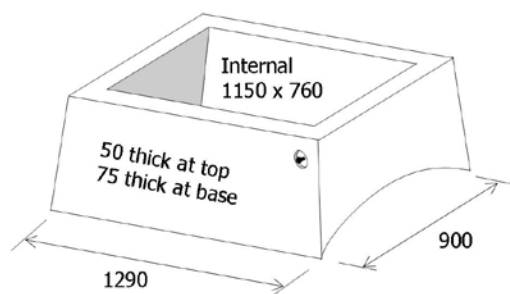
Weight 100kg



200mm - weight 96kg
450mm - weight 268kg



200mm - weight 86kg
300mm - weight 124kg
400mm - weight 166kg
450 - weight 188kg



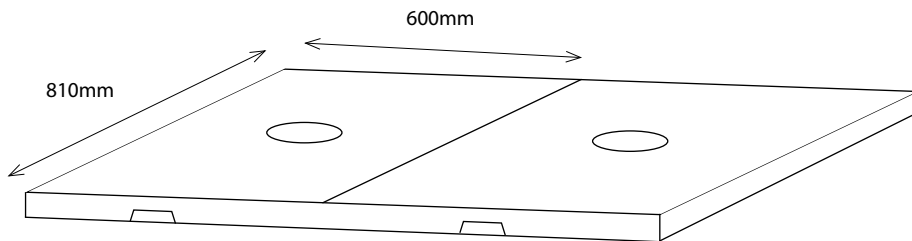
250mm - weight 235kg
450mm - weight 320kg
475mm (4,300 litre) - weight 320kg
495mm (5,000 litre) - weight 335kg

Glass reinforced concrete lightweight slabs & risers

- Specifically designed to be used in difficult or existing areas where truck access is not available to lift normal concrete products
- Suitable for pedestrian traffic only

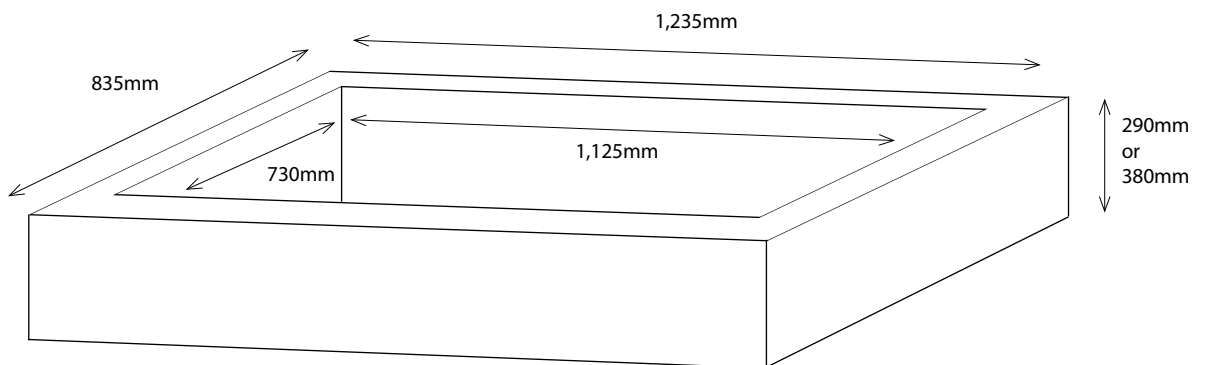
Slab lid in normal concrete to suit weight GRC saddle and riser (2 part lid)

- Approx weight 50kg each
- Can be lifted with 1.3 tonne Swiftlift claws



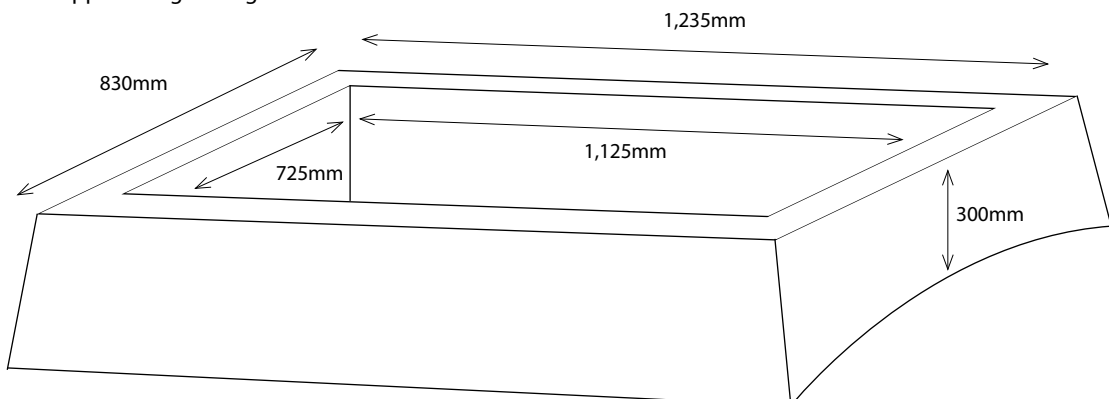
Glass reinforced concrete lightweight extension riser for saddles

- Approx weight 60kg
- Sizes for extensions 290mm and 380mm
- Actual 400mm and 310mm with rebate of 20mm
- Suitable for 1,620, 3,000 and 3,250 litre septic tanks



Glass reinforced concrete lightweight saddle riser

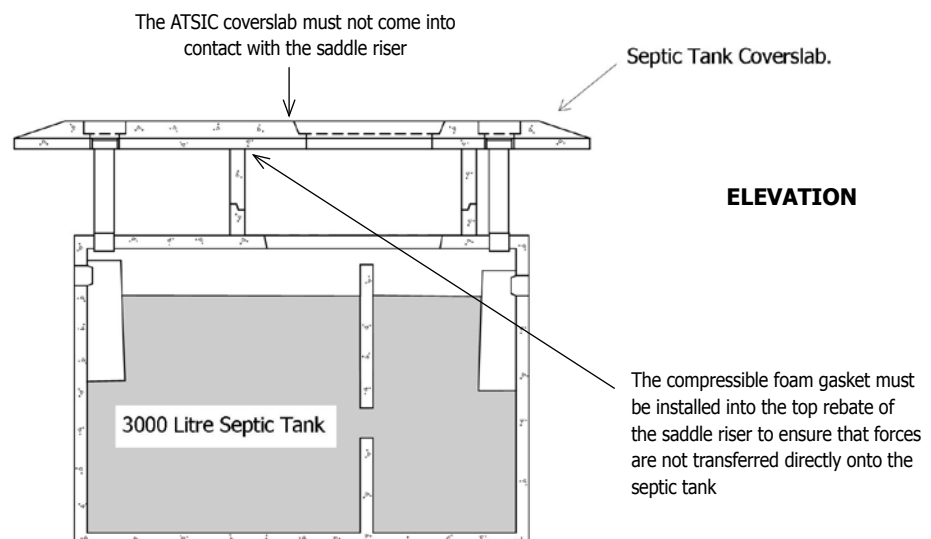
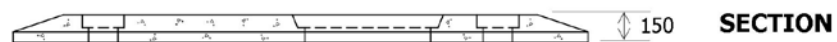
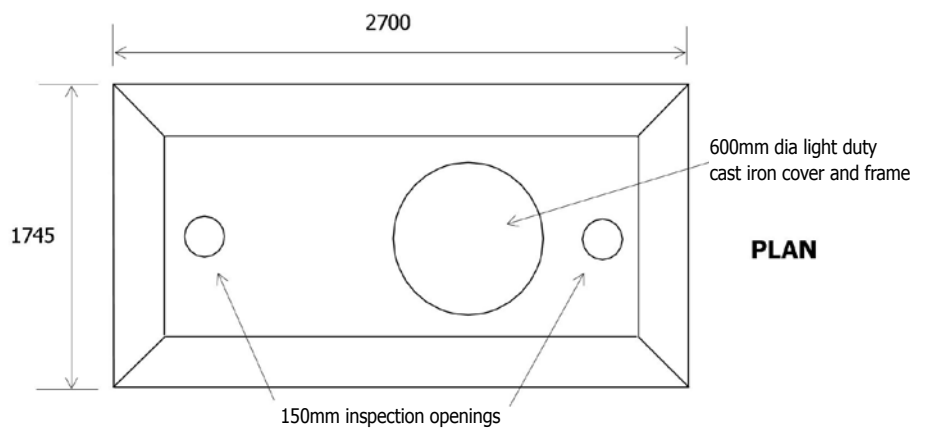
- Approx weight 56kg



ATSIC coverslab • 3,000 litre septic tank

- Class B - light duty unit for use in areas accessible only by cars and light 4WD vehicles with a gross maximum mass of 2670kg
- Designed to span across the saddle riser bearing onto the ground each side of it

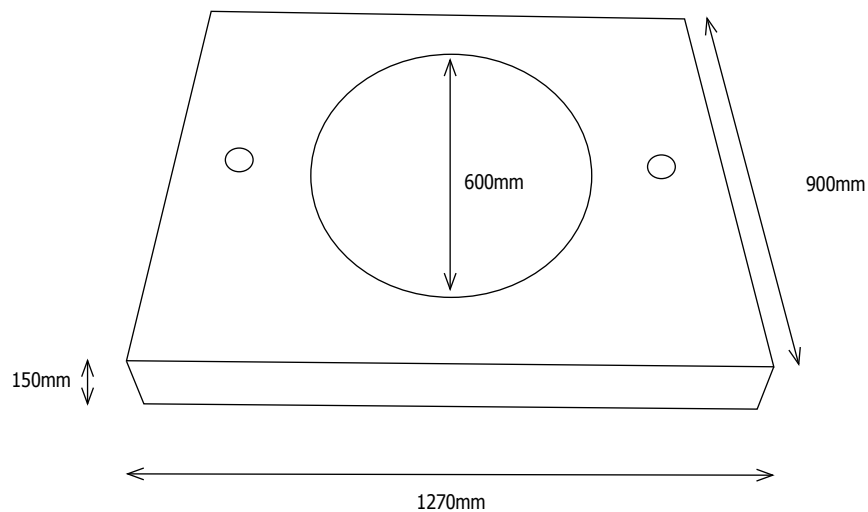
| Item | Approx Mass |
|-----------------------|-------------|
| Septic tank coverslab | 1,700kg |



Small ATSiC coverslab • 3,000 litre septic tank

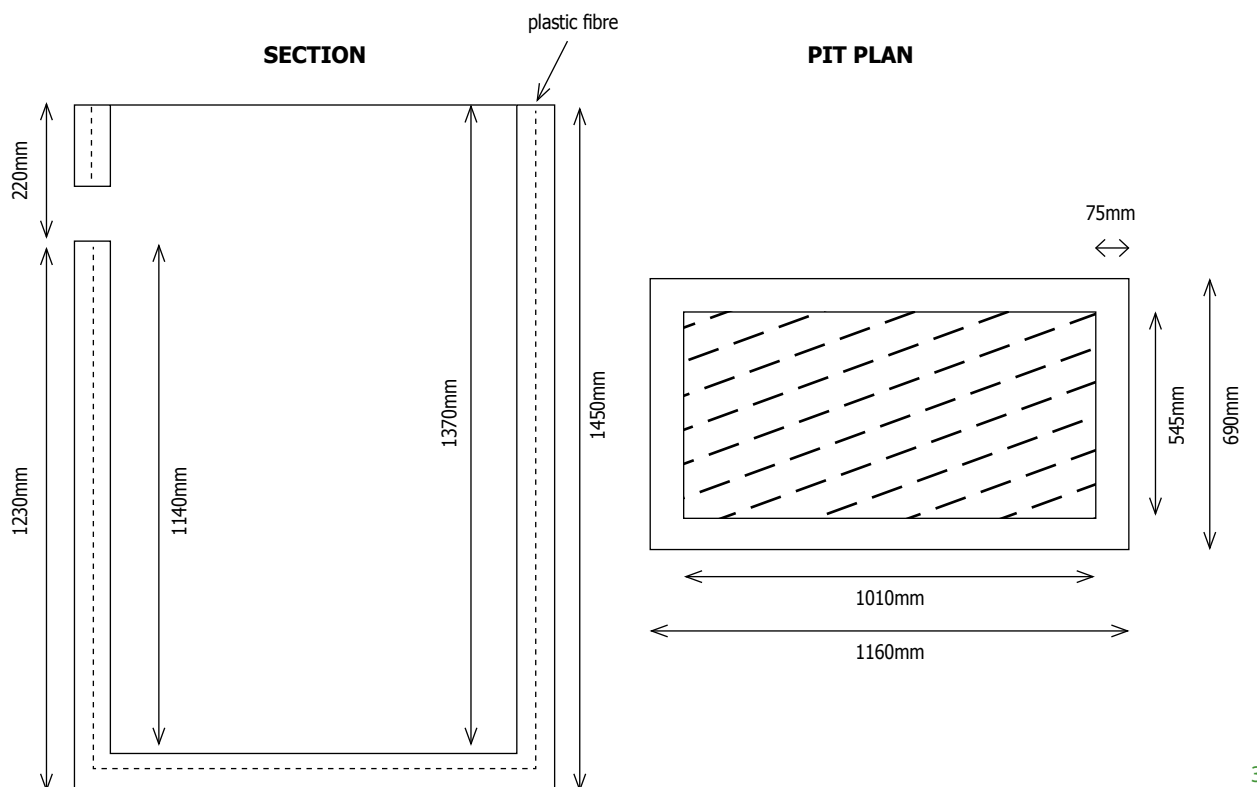
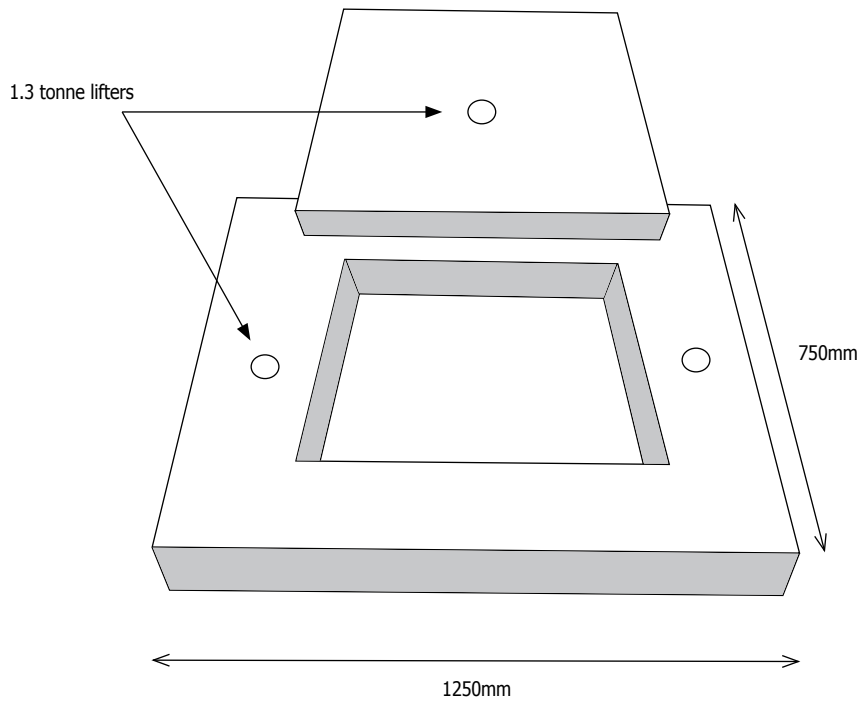
- Precast concrete saddle riser coverslab with 600mm dia cast iron Class B light duty cover
- Designed to suit 250mm and 400mm high saddle risers and increments
- There is width overlap on saddles and width and length overlap on the increment - cover is rebated to suit either saddle or increment

| Item | Approx Mass |
|-----------------------|-------------|
| Septic tank coverslab | 340kg |



Precast pump chamber • 622 litre

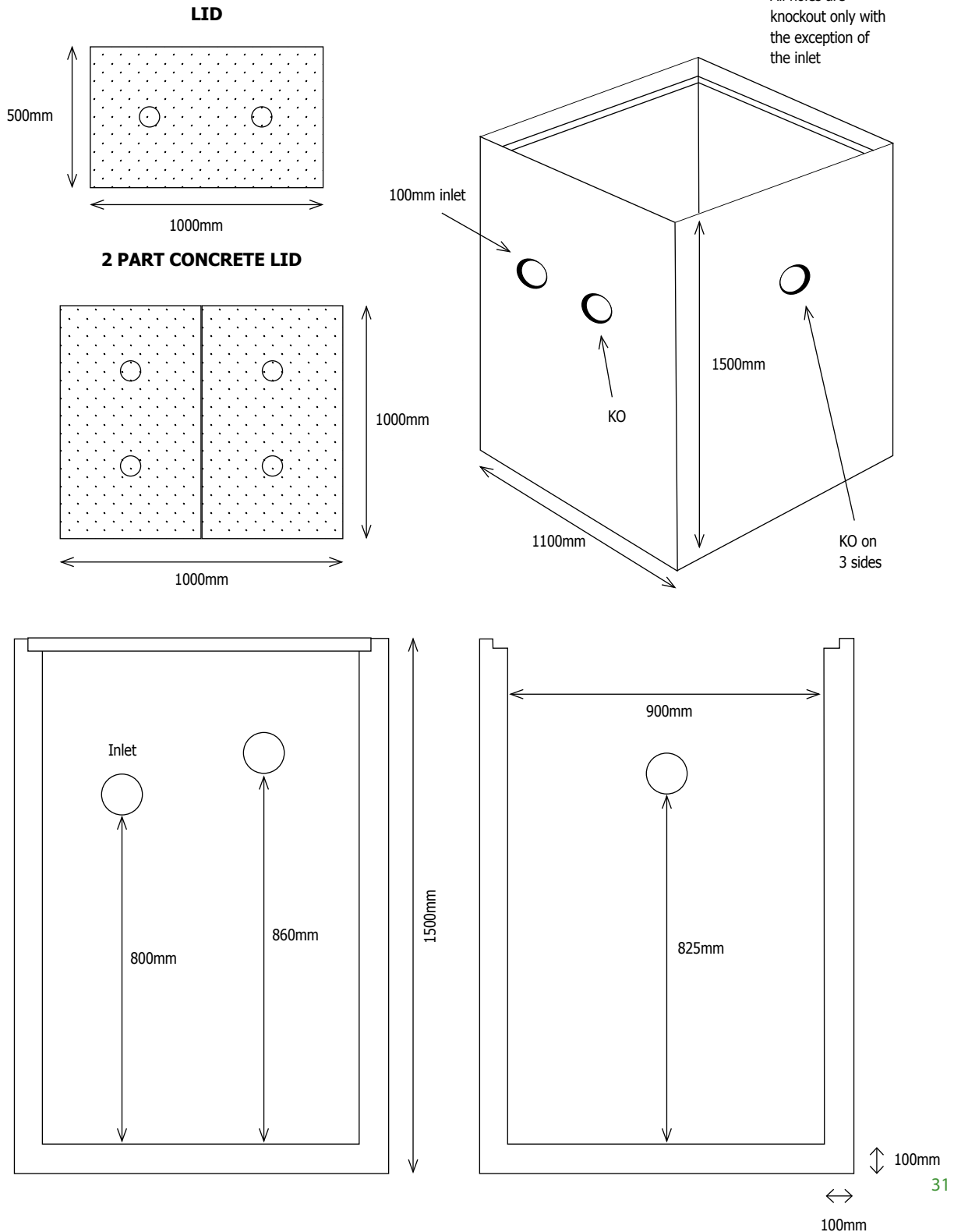
| Item | Approx Mass |
|--------------------------------|-------------|
| 622 litre precast pump chamber | 1,264kg |



Precast pump chamber • 1,100 litre

- Constructed using concrete with plastic fibre

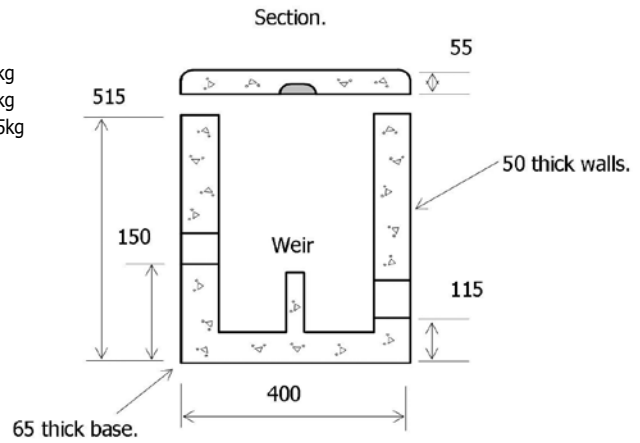
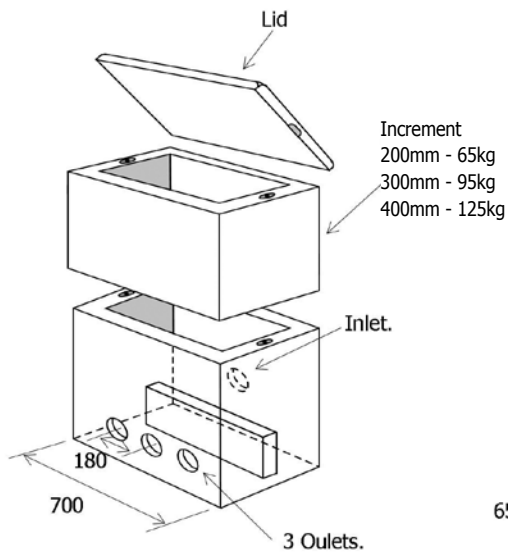
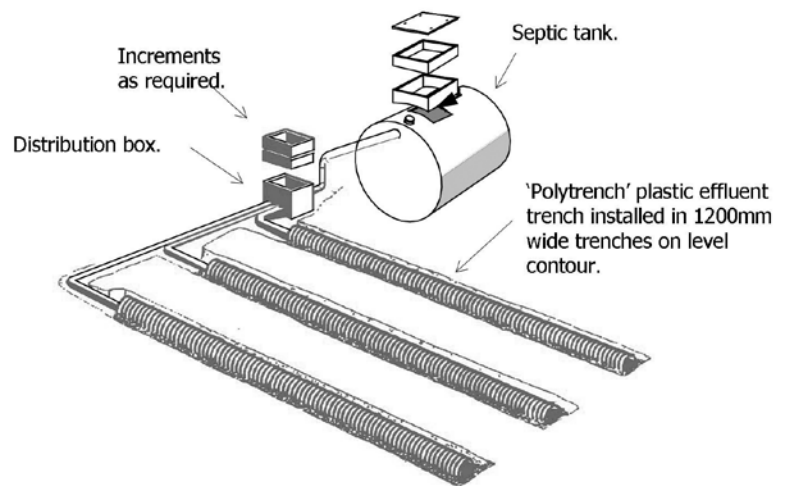
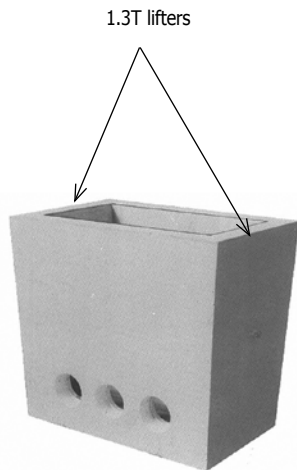
| Item | Approx Mass |
|----------------------------------|-------------|
| 1,100 litre precast pump chamber | 1790kg |



Distribution box

- Precast reinforced concrete box fitted with 100mm diam PVC inlet and outlet collars
- Box and increments fitted with 'Swiftlift' anchors for lifting
- Approved by the SA Health Commission

| Item | Approx Mass |
|---------------------------|-------------|
| Distribution box with lid | 150kg |
| Lid only | 35kg |



Polytrench plastic effluent trench

- The plumber's choice for septic tank or stormwater drainage in unserviced areas
- A simple, economical and fast way to lay effluent trench
- Premium grade high density polypropylene with UV filter injected to give high impact strength
- Lapping joint
- Specially designed slots on either side allow the water to penetrate into the surroundings but retain the settled sludge within the Polytrench, ensuring longer life
- End caps available

General installation information

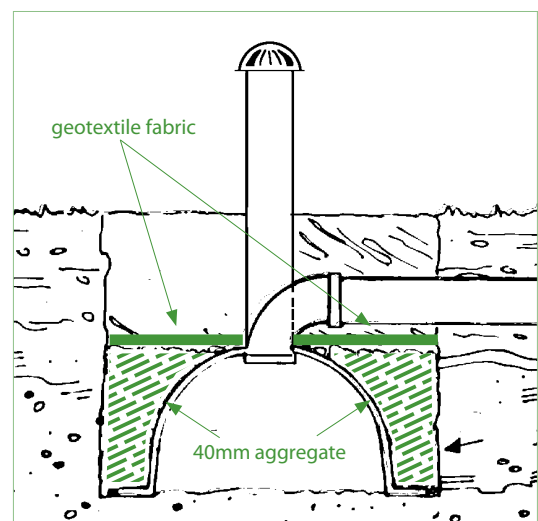
Check with your relevant Health Department before starting to lay Polytrench.

- 1 On a level contour excavate a trench to the required length, 1,200mm wide and to the required depth below the end of the septic tank outlet pipe. Ensure that the trench bottom is level.
- 2 Lay the interconnecting units centrally in the excavation (fit moulded end caps to the end of each run).
- 3 Connect the tank outlet pipe into the top of the first piece of Polytrench.
- 4 Backfill with 40mm aggregate to the top of the Polytrench ensuring that there are 300mm of aggregate on either side of the units.
- 5 Cover the aggregate and the Polytrench with trench fabric/geotextile.
- 6 Backfill with suitable material.

Specifications

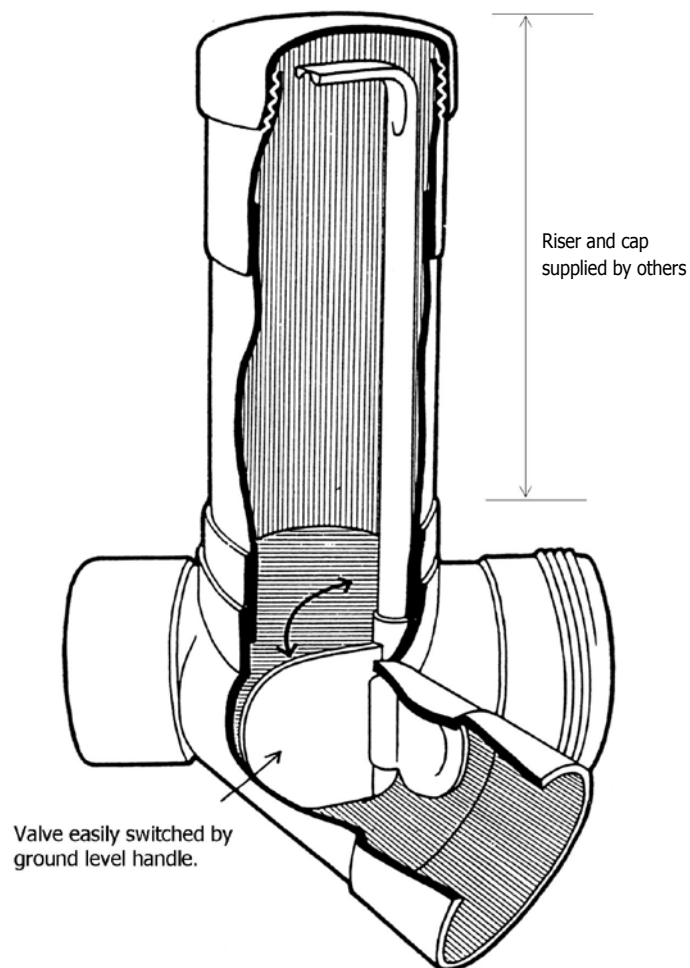
Our Polytrench has interlocking sections, supplied in manageable lengths:

- Length - 1,000mm
- Height - 330mm
- Width - 450mm



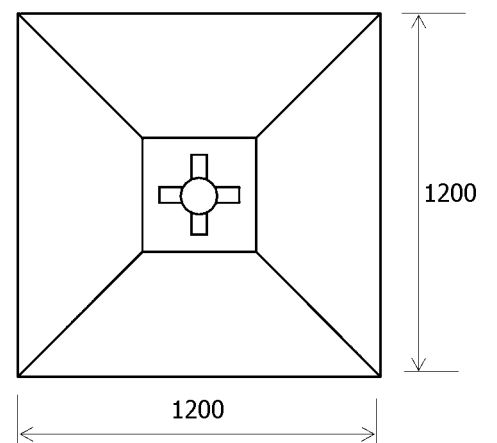
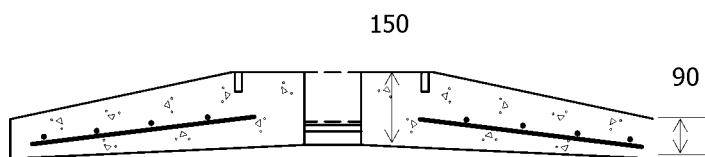
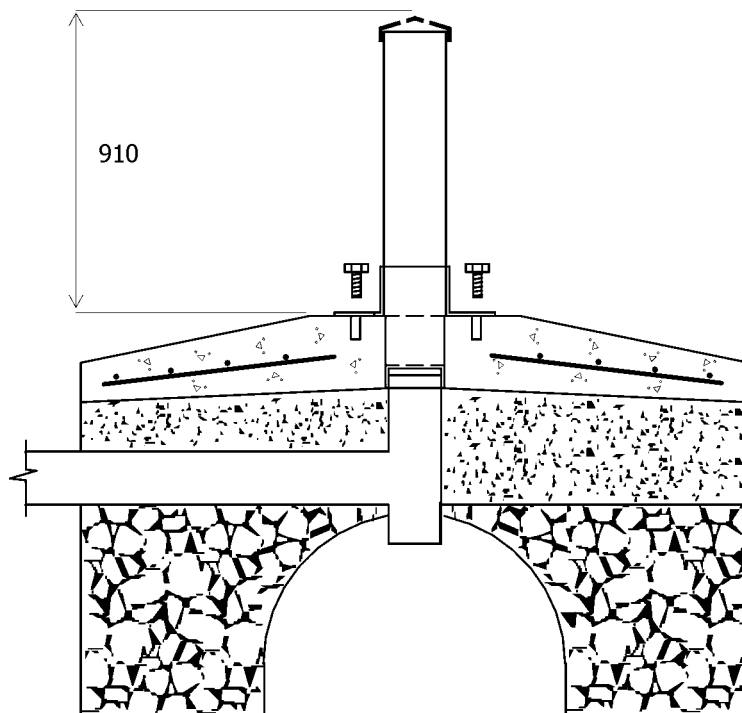
PVC effluent diverter junction

- Cost effective: no extra fittings for line up or I.O.
- Light weight: no sagging lines
- Standard 45 degree 'Y' size and style for quick, easy installation
- The correct operation is visible after installation
- Riser and switching lever easily cut to suit depth of job
- Available with left and right hand diversion



Induct vents

| Item | Approx Mass |
|---------------------------|-------------|
| Induct vent base complete | 386kg |



'Swiftlift' lifting system

The 'Swiftlift' concrete lifting system provides a simple, safe and rapid method of lifting and handling precast concrete elements.

Originally developed to overcome the need to use time consuming and potentially dangerous threaded connectors, the system has been extensively used throughout the world for more than ten years and has proved its versatility, operational simplicity and safety in a wide range of applications.

Full approval has been granted for the use of this system by the regulatory authorities in every state of Australia and new Zealand.

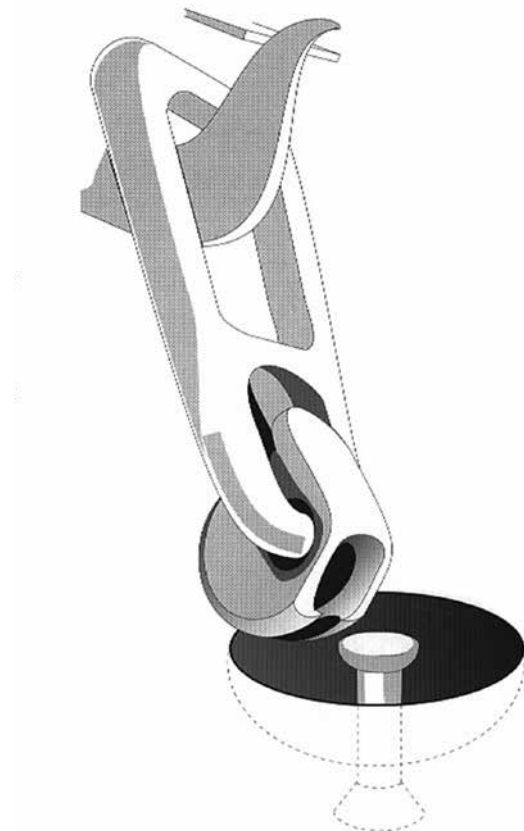
The system uses forged steel anchors which are normally hot dipped galvanised. Each anchor has its capacity, in tonnes, clearly marked on the head to ensure maximum safety on site.

A specially designed 'lifting eye' is connected to the head of the embedded anchor. The lifting eyes are designed so that, when properly connected, they cannot release whilst the system is under load.

On completion of the lift, the eye is simply disengaged and, where required, the recess is grouted over.

The 'Swiftlift' lifting system is standard in all Ri products and the lifting eyes may be purchased from our office.

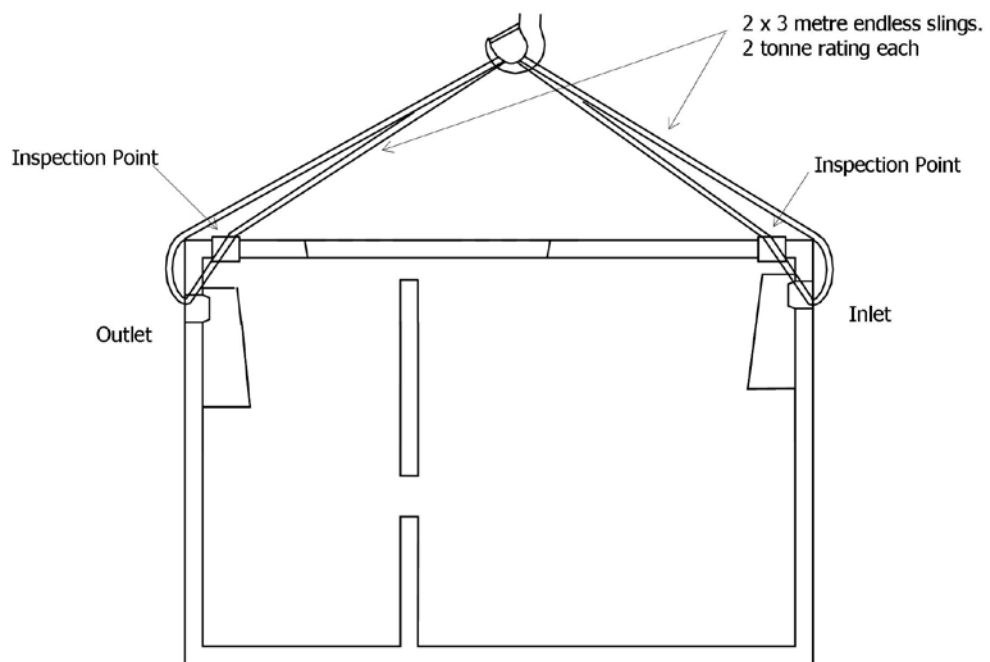
Available in 1.3, 2.5, 5.0 and 10 tonnes.



Lifting septic tanks • 3,000 - 5,000 litre

The use of unapproved lifting equipment may damage or crack tanks.

The diagram shown below is the **correct** method for lifting a "Ri" 560 - 5,000 litre horizontal cylindrical type septic tank. Where 'Swiftlift' anchors are fitted, these may be used for lifting with an appropriate lifting eye.



Ri-Treat waste water treatment system



**Reclaim your waste water by recycling
and reusing water around the home**

- Guaranteed superior quality
- Engineer-designed and SA manufactured
- FREE onsite visit to find the best location for your tank



The best waste water treatment system

The design of the Ri-Treat waste water treatment system is unique to Ri-Industries. Proudly South Australian, we have manufactured pre-cast concrete tanks and products since 1947.

Our environmentally friendly waste water treatment system is guaranteed to be of superior quality. Our customers repeatedly tell us that "Ri-Industries products are the best in South Australia."

Choosing a Ri-Treat waste water treatment system gives you a number of advantages:

- A mono cast 50 MPa reinforced concrete construction, with no fibreglass or plastic structural components, means that **no untreated effluent will escape into the environment.**
- The high quality bio filter medium enhances the **purity of the recycled water.**
- All irrigation pumps are Lowara or Grundfos 316 stainless steel, and are **submersible, quiet, reliable and inexpensive to operate.**
- The Japanese Nitto Air Pump offers the most **reliable and efficient aeration** and has a **3 year warranty.**
- Ri-Treat tanks come in three sizes, offering **maximum flexibility** and even allow for an internal spa bath.
- Child-proof and vandal-proof lids give you additional **peace of mind.**
- A high quality irrigation kit for **more effective irrigation.**
- The septic **tank is sealed** as an additional precaution.
- We offer a **manufacturer's warranty** on the tank construction.

The operation of the unit has other unique features, such as automatic sludge and skimmer returns.

"...It's heartening that there are still companies who live up to their claims... I'd recommend Ri-Industries to anyone who asks."

Home owner, Victor Harbor

What you get

When you purchase a Ri-Treat waste water treatment system, you receive:

- A mono cast Ri-Treat system in one of three sizes: 3250, 4250, or 4500.
- A Lowara DIWA or Grundfos stainless steel pump (supplied and fitted).
- A Japanese Nitto linear aeration pump (supplied and fitted).
- An internal alarm panel and external control box.
- A 12 month service contract – commissioning the system and the first three services are included in the price of the system.
- An irrigation kit consisting of 50 metres of 25mm poly pipe and 10 above ground sprinklers. Extra sprinklers can be added if required.
- Painted and sealed tank tops.
- Delivery of the unit and placement in the excavated hole (at drivers' discretion).
- Five council-approved reclaimed water signs.

We can also provide a FREE on-site visit to advise on tank location and delivery assessment – saving you trouble and money.

Our waste water treatment systems come in three sizes:

| Type | Capacity | Diameter | Height | Invert (height) | Approx weight |
|------|---------------------|----------|--------|-----------------|---------------|
| 3250 | 6 people + spa bath | 2500mm | 2460mm | 1700mm | 6,565kg |
| 4250 | 8 people + spa bath | 2500mm | 2760mm | 2150mm | 7,100kg |
| 4500 | 9 people + spa bath | 2500mm | 3060mm | 2280mm | 7,350kg |

BELOW GROUND





How it works

The Ri-Treat system separates and digests solid wastes and uses natural processes to purify wastewater. This odourless, clean, disinfected water is then recycled through garden sprinklers.

- 1** All waste water and effluent is gravity-fed into primary sewage chambers where it undergoes settlement and digestion for a minimum of 24 hours.
- 2** Settled waste water then flows into aeration chambers where air is pumped through in fine bubbles, providing the distribution of air and turbulence required for effective treatment.
- 3** Turbulence causes liquids to travel in a circular motion through the bio filter medium which encourages biomass growth. The biomass assimilates nutrients and oxygen from the water, leading to a reduction of impurities as the effluent passes through the system.
- 4** Effluent and sludge then pass into the settlement chamber, where the sludge settles to the bottom before being returned to the primary chambers, along with the scum which floats in the settlement chamber.
- 5** Settled effluent passes through the chlorinator into the irrigation chamber where it is held for irrigation or other means of disposal.

After being treated in our underground tanks, household waste from the toilet, bathroom, kitchen and laundry can be re-used to irrigate your garden.



Suitable plants

The list below is a guide to suitable plants for the surface irrigation disposal area. Please note, due to wide climatic and soil variations, you should check with your local plant nursery before finalising your plant choice.

Trees

| <i>Botanical name</i> | <i>Common name</i> | <i>Approx. height</i> |
|--------------------------|-----------------------|-----------------------|
| Agonis Flexuosa | Willow Myrtle | 5 - 6 metres |
| Acacia Baileyana | Cootamundra Wattle | 3 - 5 metres |
| Banksia Spp. | - | 3 - 10 metres |
| Casuarina Glauca | Swamp Oak | 6 - 12 metres |
| Casuarina Stricta | Drooping She Oak | 3 - 5 metres |
| Casuarina Cunninghiana | River She Oak | 6 - 10 metres |
| Callistemon Viminalis | Red Bottlebrush | 3 - 6 metres |
| Callistemon Salignus | White Bottlebrush | 3 - 6 metres |
| Eucalyptus Robusta | Swamp Mohongany | 6 - 9 metres |
| Eucalyptus Saligna | Sydney Blue Gum | 15 - 20 metres |
| Eucalyptus Grandis | Flooded Gum | 10 - 20 metres |
| Eucalyptus Camaldulensis | River Red Gum | 15 - 20 metres |
| Eucalyptus Cosmophylla | Cup Gum | 5 - 6 metres |
| Hymenosporum Flavum | Native Frangipani | 3 - 6 metres |
| Leptospermum Laevigatum | Coast Tea Tree | 5 - 6 metres |
| Melaleuca Armillaris | Bracelet Honey Myrtle | 3 - 4 metres |
| Malaleuca Quinquenervia | Broad Paperback | 5 - 7 metres |
| Melaleuca Nesophila | Western Tea Myrtle | 2 - 4 metres |
| Pittosporum Spp. | - | 2 - 4 metres |
| Syzygium Paniculatum | Bush Cherry | 8 - 10 metres |
| Tristania Laurina | Kanuka | 3 - 5 metres |

Shrubs

| <i>Botanical name</i> | <i>Common name</i> | <i>Approx. height</i> |
|------------------------|---------------------------|-----------------------|
| Abelia X Grandiflora | Abelia | 2 - 3 metres |
| Acacia Floribund | Gossamer Wattle | 2 - 4 metres |
| Acacia Longifolia | Sallow Wattle | 2 - 4 metres |
| Acacia Iteaphylla | Flinders Range Wattle | 2 - 3 metres |
| Cotoneaster Spp. | - | 2 - 4 metres |
| Cortaderia Selloana | Pampas Grass | 2 - 3 metres |
| Cyperus Alternifolius | Umbrella Grass | 0.5 - 1 metre |
| Cyperus Papyrus | Papyrus | 1 - 2 metres |
| Cassia Spp. | Swamp Mahogany | 1 - 3 metres |
| Chamelaucium Uncinatum | Geraltan Wax | 2 - 4 metres |
| Dryandra Formosa | - | 1 - 3 metres |
| Eremopjhila Spp. | - | 1 - 2 metres |
| Grevillea Spp. | - | 1 - 3 metres |
| Hebe Spp. | Veronica | 0.5 - 1 metres |
| Iris Pseudacorus | Yellow Flag Iris | 0.5 - 1 metres |
| Nerium Oleander | Oleander | 2 - 3 metres |
| Melaleuca Decussata | Cross Leaved Honey Myrtle | 1 - 2 metres |
| Phormium Tenax | New Zealand Flax | 2 - 2.5 metres |

Perennials / Ground cover

| <i>Botanical name</i> | <i>Common name</i> | <i>Approx. height</i> |
|--------------------------|--------------------|-----------------------|
| Aster Novi-gelgii | Perennial Aster | 0.5 - 1 metre |
| Canna | - | 1 - 2 metres |
| Chrysanthemum Frutescens | Marguerite Daisy | 1 metre |
| Chrysanthemum Maximum | Shasta Daisy | 1 metre |
| Gazania Ringens | Black Eyed Susan | 0.4 metres |
| Impatiens Spp. | - | 0.4 metres |
| Salvia Uliginosa | Bog Salvia | 0.4 metres |
| Viola Spp. | - | 0.4 metres |

Climbers

| <i>Botanical name</i> | <i>Common name</i> | <i>Approx. height</i> |
|-----------------------|----------------------|-----------------------|
| Bougainvillea Spp. | - | Variable |
| Clematis Spp. | - | Variable |
| Hardenbergia Violacea | Purple Coral Pea | Variable |
| Hibbertia Scandens | Snake Vine | Variable |
| Jasminum Grandiflorum | - | Variable |
| Jasminum Polyanthum | - | Variable |
| Jasminum Officinale | Common Jasmin | Variable |
| Kennedia Rubicunda | Dusky Coral Pea | Variable |
| Lonicera Japonica | Japanese Honeysuckle | Variable |
| Passiflora Spp. | Passion Flower | Variable |
| Vitis Coignetiae | Glory Vine | Variable |

"I find it staggering that out of over 500 tanks purchased from Ri-Industries I haven't received a single complaint. Their products are the best in South Australia."

SA plumber



Maintenance

Your Ri-Treat system will be effective for more than 30 years, providing it is used and maintained in the correct manner.

When you buy a waste water treatment system from Ri-Industries we provide you with a maintenance manual. This details your maintenance schedule and outlines remedies in the unlikely event of problems. Normally, problems are only ever encountered in extreme circumstances like overloading with solid wastes and intrusion of things like rags, newspapers, oils and scraps.

It is mandatory that you service your system every three months to ensure consistent performance and compliance with the South Australian Health Commission. This will check the operation of pumps, chlorination, aeration and irrigation systems.

The cost of your first four services (eg. commissioning the system and a further three services) is included in the cost of your Ri-Treat waste water treatment system.



Warranties

We are extremely confident in our products, and offer extensive warranties:

Tanks – manufacturer’s warranty on construction

Controls – **3 years**

Air and submersible pumps – **3 years***

**The irrigation pump warranty has been extended from the manufacturer’s standard 1 year warranty because of the high quality effluent being passed through the system. The Nitto air pump normally runs 24 hours per day and uses approximately 85 watts of power per hour (equivalent to a normal light globe).*



Installation

Most plumbers and drain layers in South Australia are familiar with the Ri-Treat waste water treatment system. Contact us for a list of plumbers and drain layers in your area.

For your convenience please tear out the Electrical Installation and Circuit Diagram on the back page and pass to your electrician as soon as possible before installing the system.



Ri-Treat systems

Important installation notes:

- Hole excavation is minimum 3m x 3m square.
- If base is rocky or uneven you will require road or gravel base. Do not backfill with rocky soil as damage may occur.
- SA Department of Health regulations state the lid must sit above ground level at the seal.
- Tanks must be half filled with water through sewer inlet (all chambers) to stop flotation.

Ri-Treat increments:

- 300 - 465kg
- 450 - 600kg
- 600 - 760kg

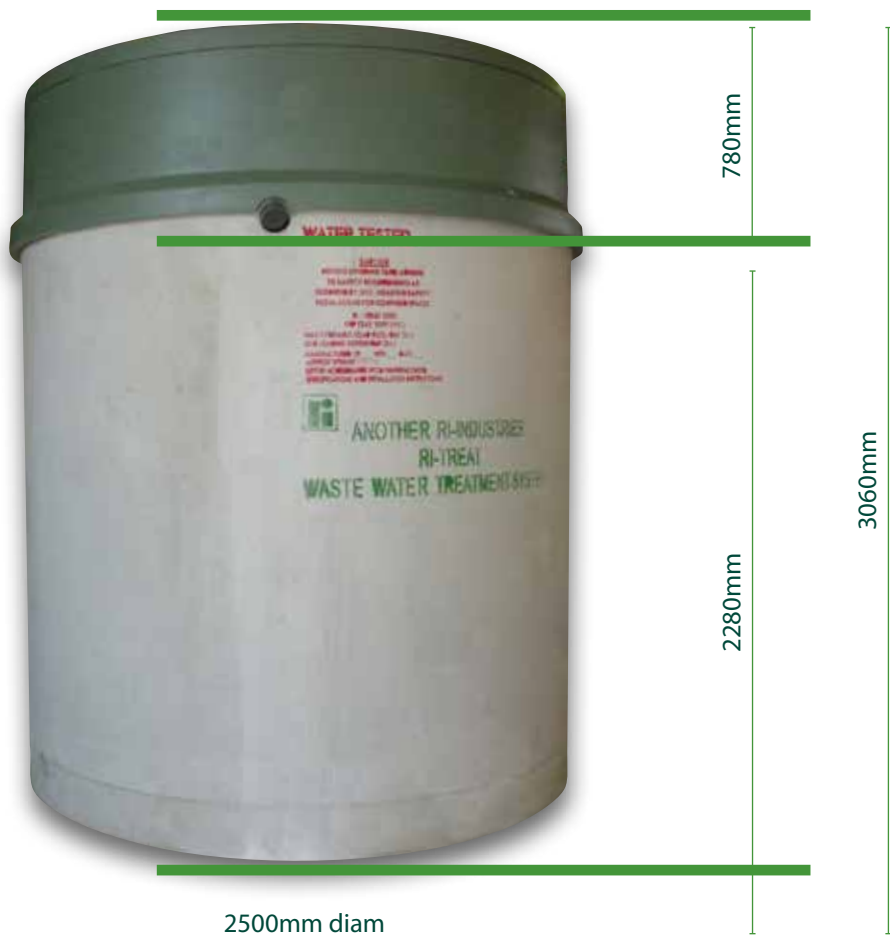
3250 Ri-Treat
6 person
3 bedroom
6,565kg



4250 Ri-Treat
8 person
4 bedroom
7,100kg



4500 Ri-Treat
9 person
5 bedroom
7,350kg

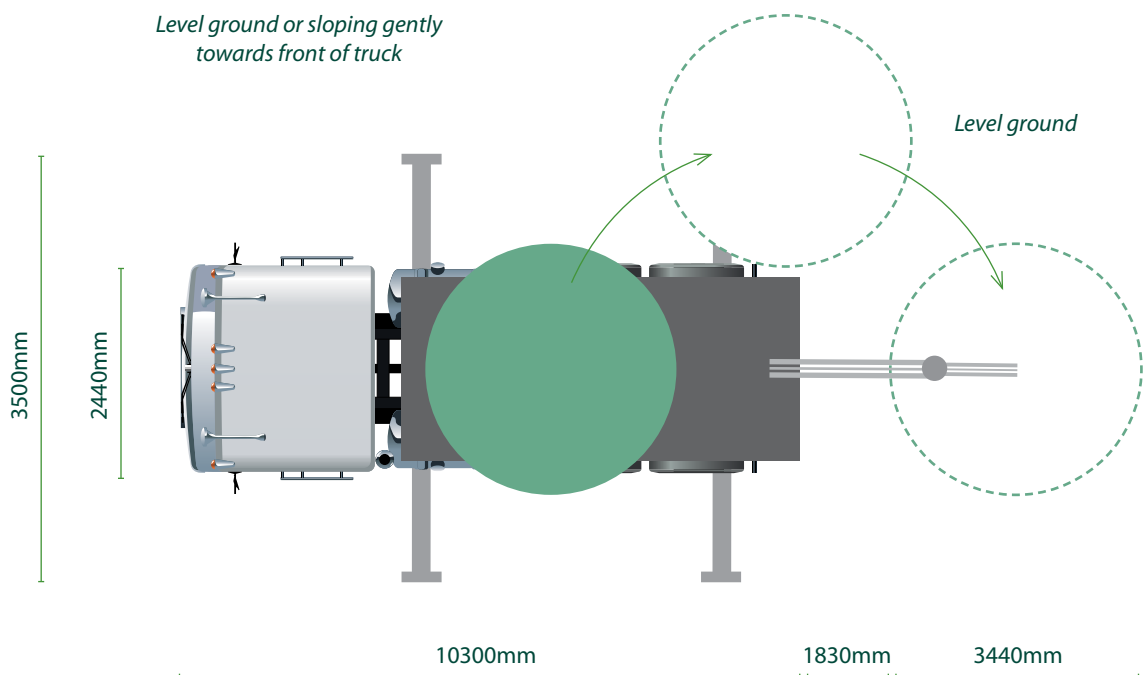
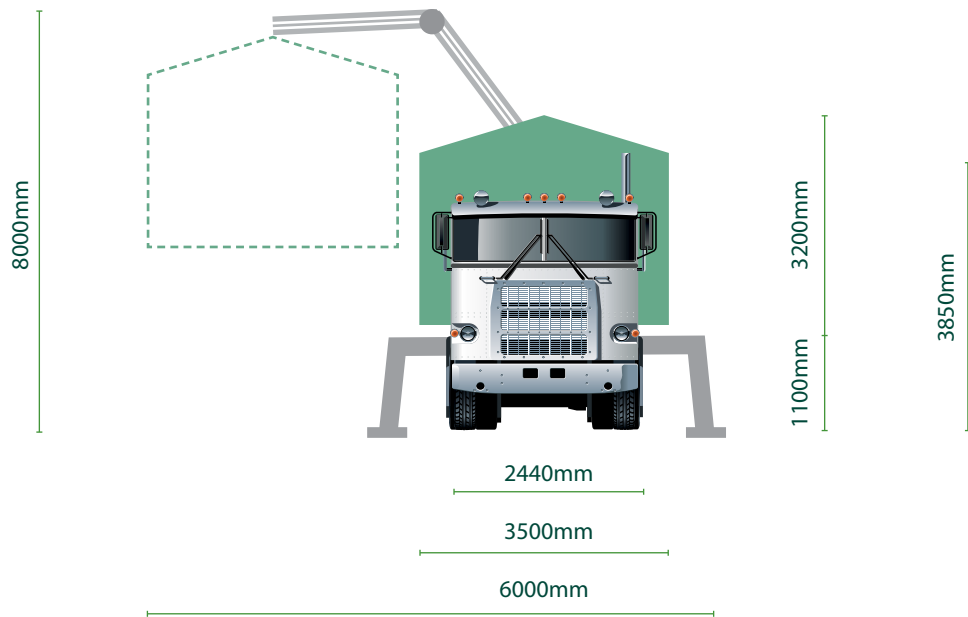


Delivery

We offer a FREE on-site visit to advise on tank location and delivery assessment.

Delivery instructions

The truck would need to reverse up to the hole. A clear level site is required to unload the tank into your prepared excavation. Easy access is very important, ie. NO overhead trees, wires, etc. NO benching out of the hole.



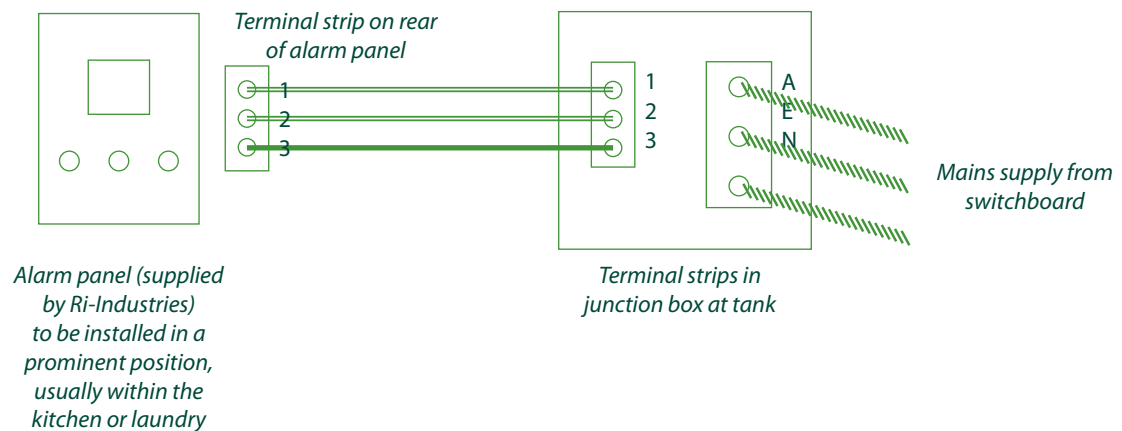
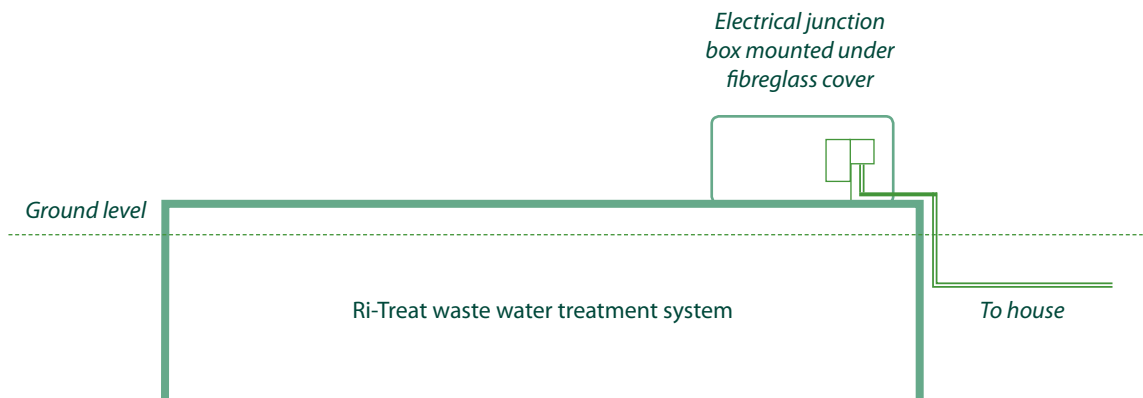
Electrical installation

For your installing plumber

All electrical connections must be carried out by tradespersons who are experienced and licensed for such work.

Within the premises switchboard, we recommend the use of an independent and dedicated circuit of 16 Amp (minimum) being serviced with its own ELCB (residual current device) to supply power to your Ri-Treat waste water treatment system.

Note: Ri-Industries' alarm panels will reset automatically and are 12 volt AC powered from a transformer within the control box mounted to the top of the tank. The green light indicates that there is power to the system. Low voltage for **your safety**. Auto reset for the least inconvenience and peace of mind.



Rain water tanks



A concrete rain water tank from Ri-Industries offers a number of advantages:

- The water stays cooler
- No algae develops
- The water has no after-taste
- They are vandal-proof and fire-proof
- Underground installation saves space
- Concrete is stronger and more durable
- Below ground tanks **can be made trafficable** with the use of heavy duty covers



Industries

Concrete rain water tanks

As a manufacturer of pre-cast concrete products, Ri-Industries can also provide you with a below ground rain water tank.

Concrete rain water tanks offer a number of advantages:

- The water stays cooler.
- No algae develops.
- The water has no after-taste.
- They are vandal-proof and fire-proof.
- Being underground means they are out of sight and don't take up much of your valuable real estate.
- Concrete is stronger and more durable.

Our concrete tanks are made from high frequency vibrated reinforced concrete using the highest quality of materials. Steel mesh is cast into the rain water tanks and lids, and all fittings are made from brass – to give additional peace of mind. We also have full engineering approval for below ground tanks

Australian factory, inlets and outlets can be custom made and inserted at any required position on the tanks – to suit your exact requirements.

Coupled with our **manufacturer's warranty** on the tank construction, you can be sure that a rain water tank from Ri-Industries will last the distance.



Rain water tanks

Installation

In order to fully extend the life of your concrete rain water tank, site preparation is essential:

- Excavate to the required depth plus 75mm (or more if required to achieve a fall from gutter height) and then back-fill with a layer of 10mm-12mm gravel or screenings. The tank will then be placed directly onto this level base.
- Ensure the gutter outlet is above the tank inlet.
- Check delivery access with Ri-Industries.
- A minimum height clearance of 8 metres is required when unloading.
- 4.7 metres is needed for the truck to pass under trees and overhead power lines.
- 4 metres clearance is required between gate posts.
- Please highlight the position of any underground drains or cables. Trucks will not drive over any concrete or sealed areas without indemnity being signed (including all foundations).
- Please ensure the unloading site is level.
- Ri-Industries strongly recommends your tank not be left empty for extended periods.
- If you have any doubts regarding your installation a site inspection can be arranged.

Please also note that:

- Underground rain water tanks can be installed down to a maximum of 2 metres below the ground but this requires riser pipes to allow access at ground level and a heavy duty concrete cover.

Specifications

- Specifications can be forwarded through to Council/engineers upon request.
- Four sizes of tank are available.

| Tank capacity | Diameter | Height | Weight | <p style="text-align: center;">BELOW GROUND</p>  |
|---------------|----------|--------|------------|---|
| 5,000 litres | 1930mm | 2240mm | 2.97 tonne | |
| 9,090 litres | 2440mm | 2460mm | 3.9 tonne | |
| 13,640 litres | 2870mm | 2440mm | 4.9 tonne | |
| 22,730 litres | 3450mm | 2740mm | 7.3 tonnes | |

**Heights and weights shown are for tank only.*

Trade waste arresters



A Ri-Industries trade waste arrester offers a number of benefits:

- Made from precast concrete with a strength of 50 MPa at 28 days.
- A number of different trade waste arresters are available including silt, grease and detention tanks.
 - All inlets suit HDPE pipes for easier connection.
- Gas-tight lids set in precast concrete can also be supplied, as well as extension risers.
- Increments and trafficable, gas-tight, heavy duty cast iron/concrete covers are available.
- Units are lowered into the excavation site providing the site is level, firm and accessible.
 - All units are SA Water approved.



Industries

Trade waste arresters

General installation information

- Outside installations must be a minimum of 50mm above ground level to exclude stormwater.
- Chequerplate covers can be fitted with recessed drop handles and/or frame to suit brick paved areas.
- Cast iron covers can be supplied.
- Epoxy coating is available upon request.
- Increments are available on request.
- Heavy duty and light duty concrete covers with cast in cast iron covers and frames are available.
- Trade waste arresters are available as either oil and grease arresters, settling pits or acid neutraliser pits.

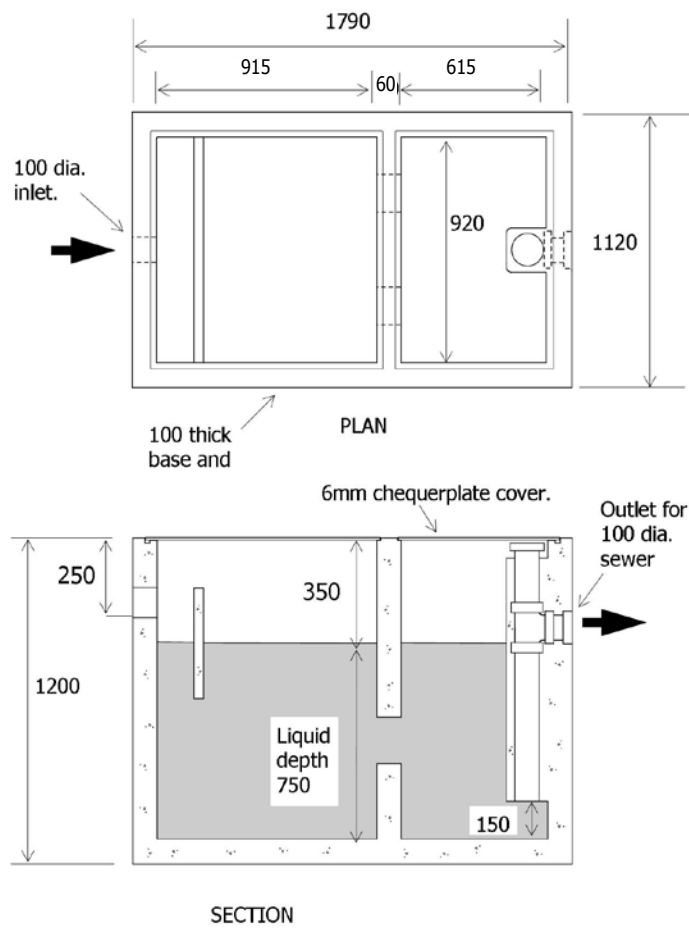
Please note: Where circular gas-tight inspection covers are fitted a minimum of 600mm vertical clearance between the underside of the cover slab and the static water level in the arrester is necessary to facilitate routine servicing.

Maintenance

Our trade waste arresters are particularly strong and built to last. The arrester is designed to trap all fats and oils contained in the washwater. Therefore, it should be completely cleaned out at three-monthly intervals or more frequently if necessary, following SA Water recommendations. Tank waste must not be discharged to the sewage system.

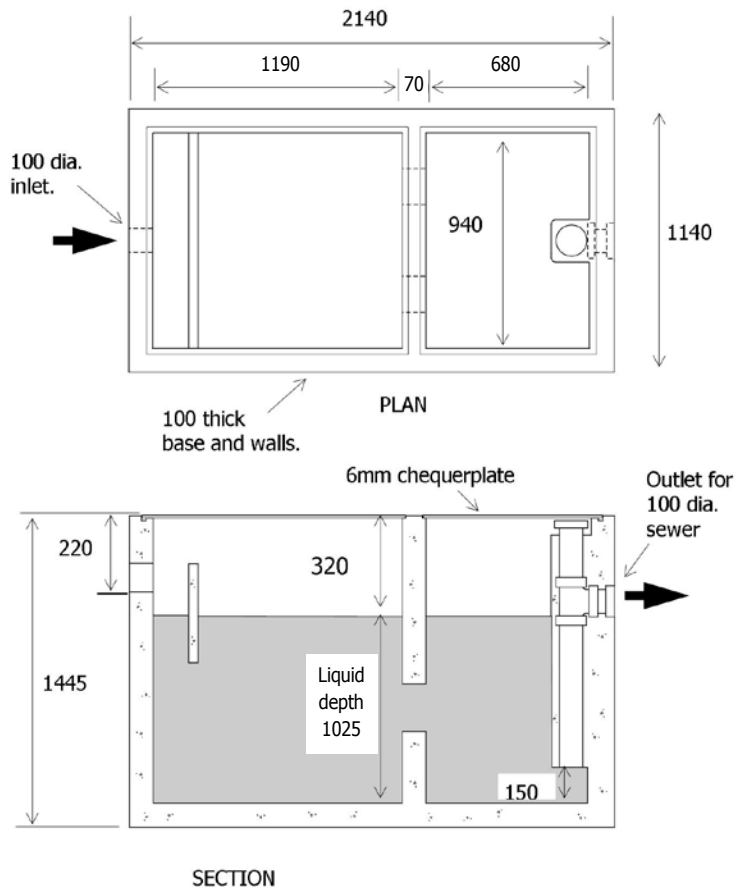
Trade waste arrester • 1,100 litre - No. 2

| Item | Approx Mass |
|-------------------|-------------|
| 1,200mm base unit | 2,500kg |



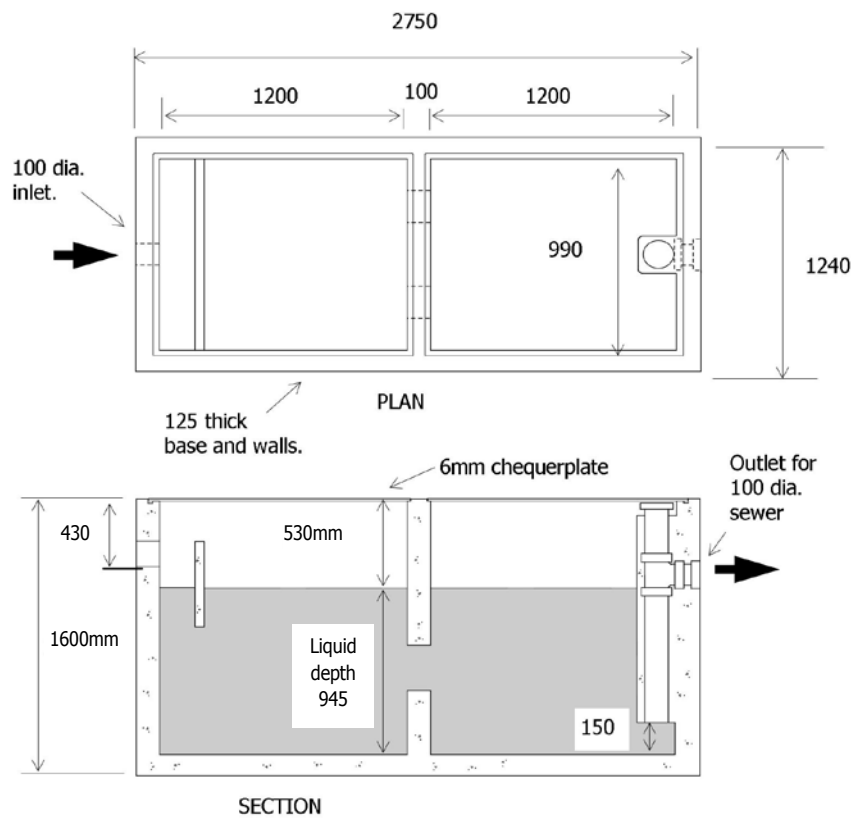
Trade waste arrester • 1,750 litre - No. 3

| Item | Approx Mass |
|-------------------|-------------|
| 1,445mm base unit | 3,000kg |



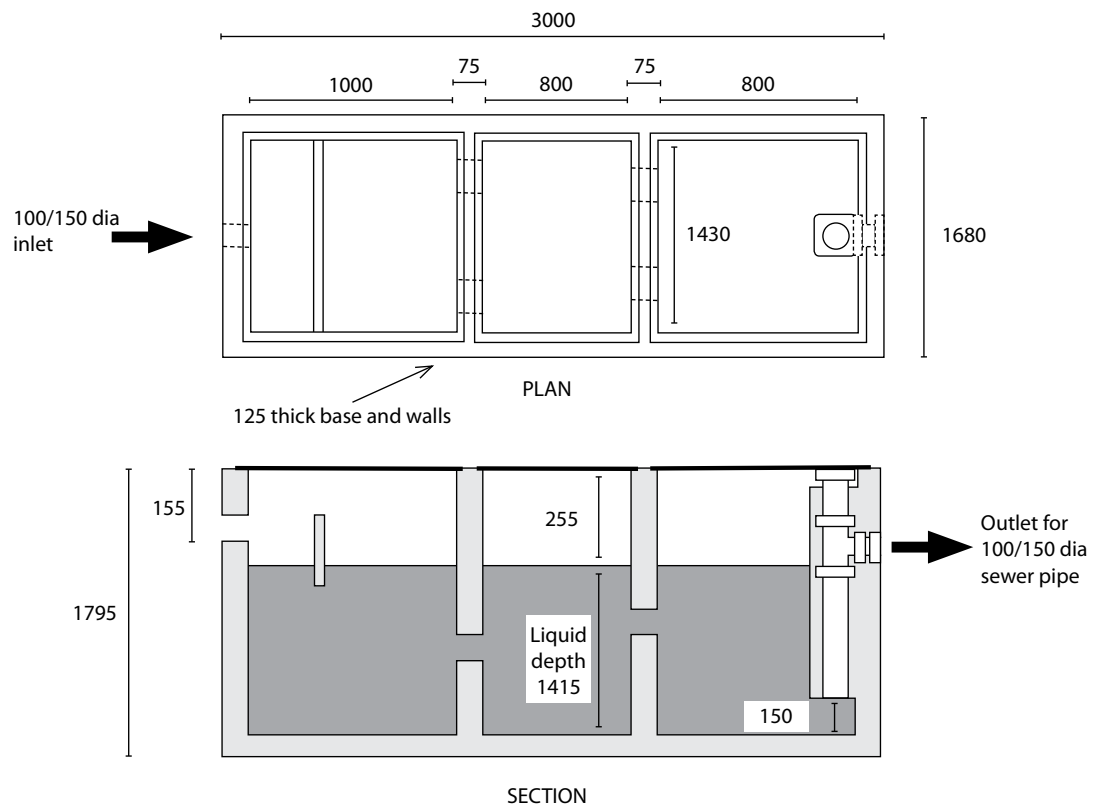
Trade waste arrester • 2,400 litre - No. 4

| Item | Approx Mass |
|-------------------|-------------|
| 1,600mm base unit | 5,150kg |



Trade waste arrester • 5,200 litre - No. 5

| Item | Approx Mass |
|-------------------|-------------|
| 1,795mm base unit | 7,200kg |



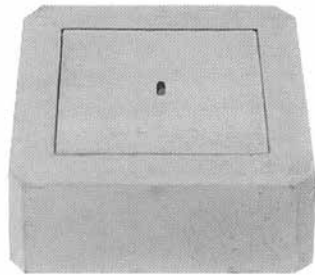
Inspection openings



Industries

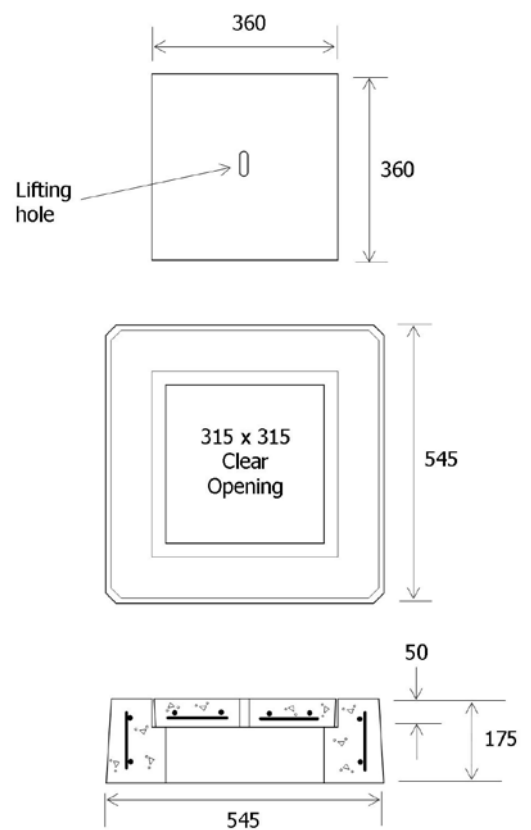
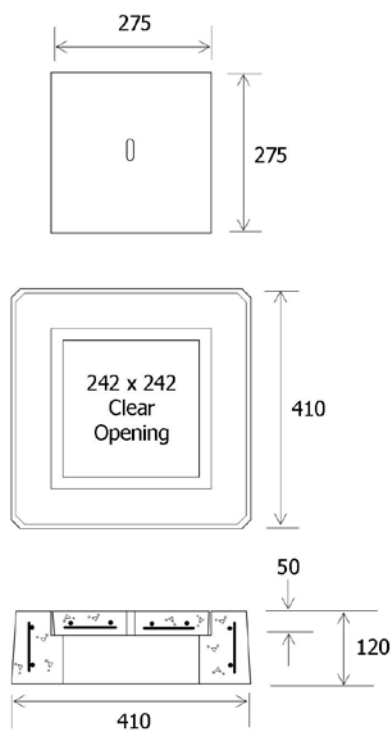
Precast concrete inspection cover

- Suitable for grassed, bituminised and paved areas
- Available in two sizes to suit 100mm or 150mm risers
- Minimum concrete strength 32 MPa at 28 days



| Item | Approx Mass |
|----------|-------------|
| 100mm IP | 33kg |

| Item | Approx Mass |
|----------|-------------|
| 150mm IP | 83kg |

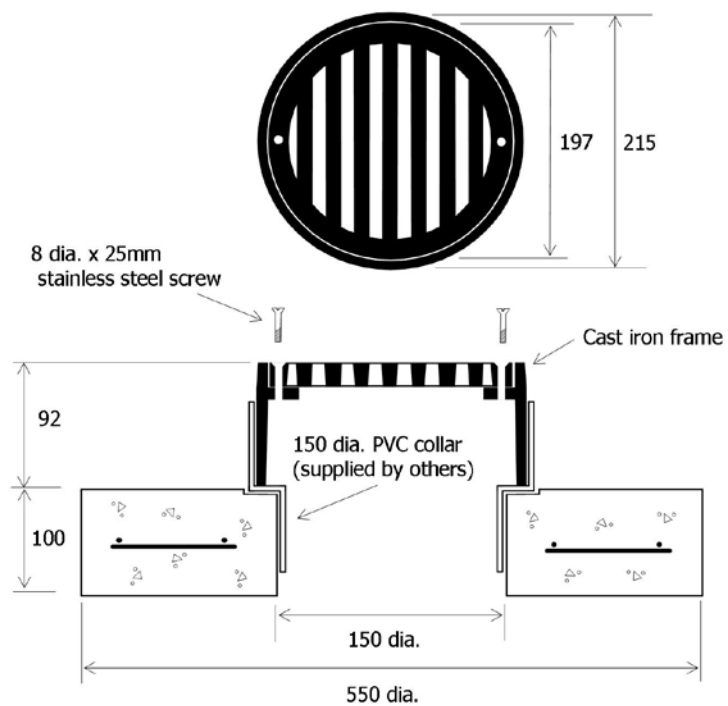


Grated stormwater collection point

- Cast iron grate and frame
- Provides stormwater collection to 150mm drains (fits 150mm PVC collar)
- Suitable for all paved, bituminised and concreted areas
- Tar dipped grate and frame

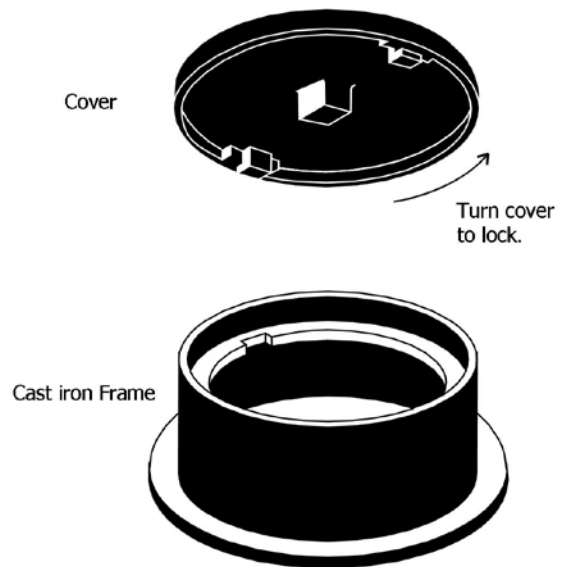
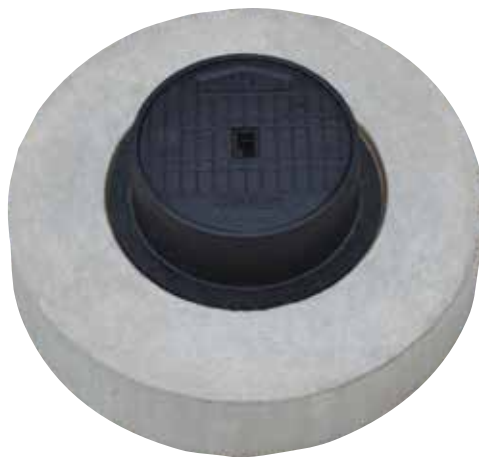


| Item | Approx Mass |
|-----------------|-------------|
| Grate and frame | 5kg |

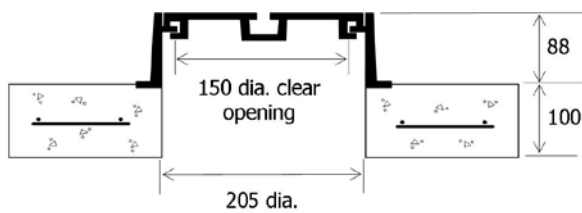


Flanged I.O. cover and frame • Type 1

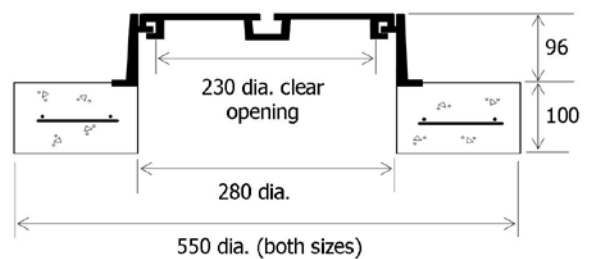
- Suitable for use in concreted and paved areas
- Available in two sizes to suit 100mm or 150mm risers
- Cast iron frame and cover are tar dipped
- Available in bolt down
- Minimum concrete strength 32 MPa at 28 days
- Available for sewer or stormwater



| Item | Approx Mass |
|---------------|-------------|
| Cover & frame | 6.5kg |
| Support block | 45kg |

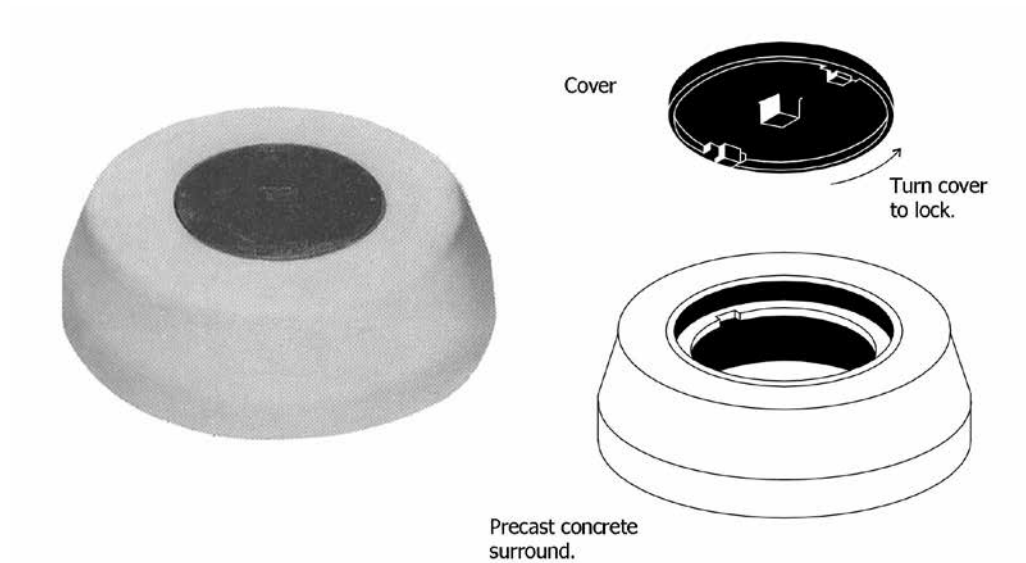


| Item | Approx Mass |
|---------------|-------------|
| Cover & frame | 14.5kg |
| Support block | 40kg |

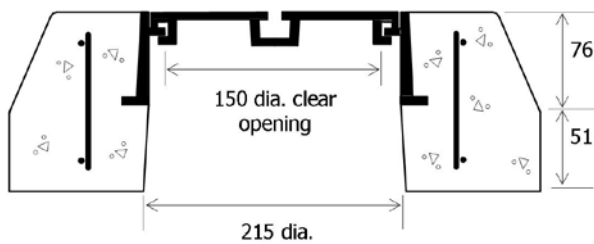


I.O. cover and frame • Type 2

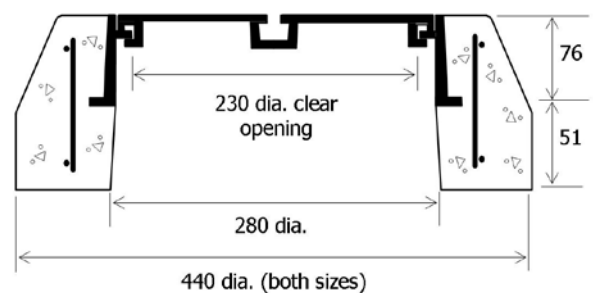
- Suitable for use in paved, bituminised and grasses areas
- Available in two sizes to suit 100mm or 150mm risers
- Cast iron frame and cover are tar dipped
- Available in bolt down
- Minimum concrete strength 32 MPa at 28 days
- Available for sewer or stormwater



| Item | Approx Mass |
|------------------|-------------|
| Cover & surround | 32kg |



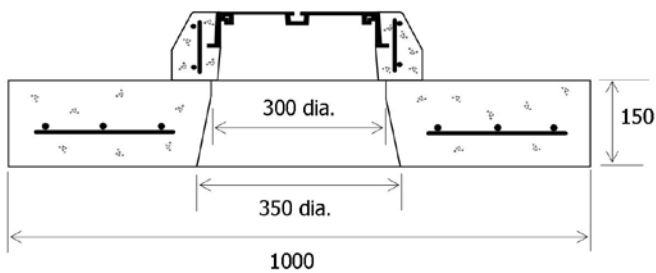
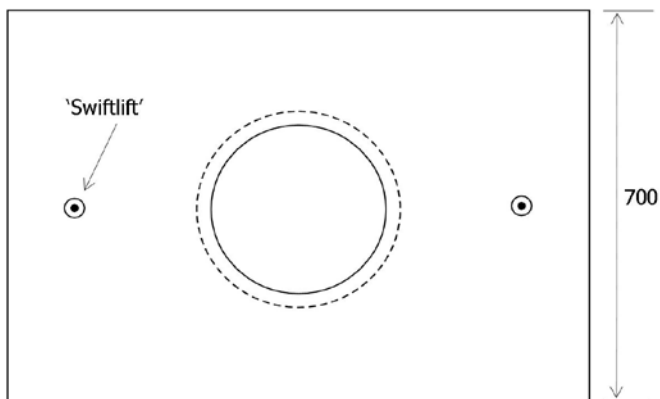
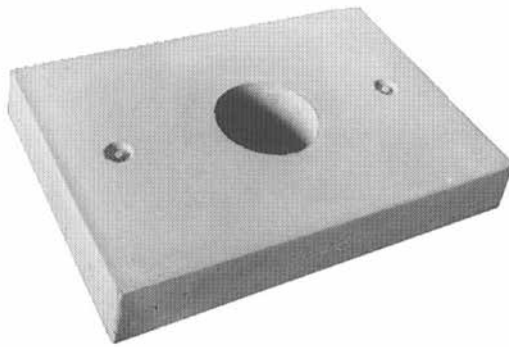
| Item | Approx Mass |
|------------------|-------------|
| Cover & surround | 29kg |



Precast concrete flushing point support block

- For heavy surface installation with common effluent drains
- Will suit both 100mm and 150mm flushing points
- Designed to suit I.O. cover and frame type 2 (refer to Ri-Industries' data sheet E3)
- Minimum concrete strength 32 MPa at 28 days

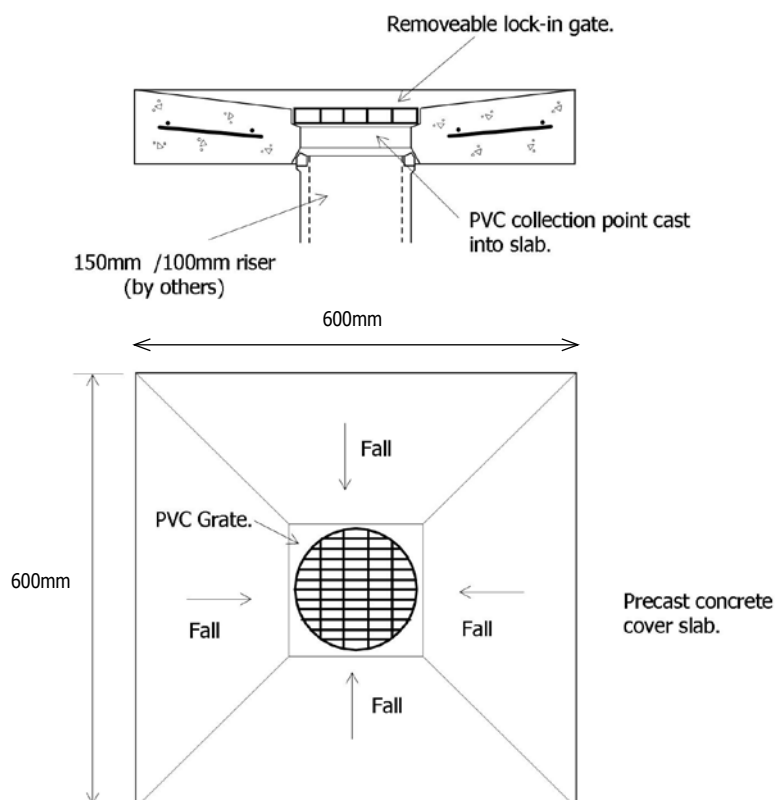
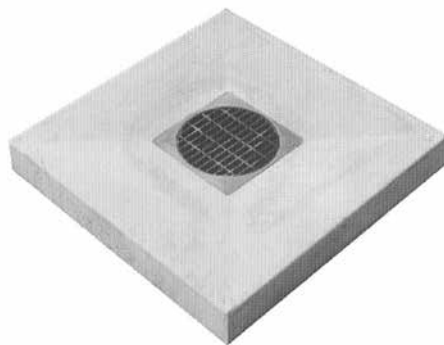
| Item | Approx Mass |
|-------------|-------------|
| 1,000 x 700 | 225kg |
| 600 x 600 | 100kg |



Rear of allotment collection slab

- For light service use, ie. domestic blocks where surface water collection is required
- Designed for pedestrian traffic only
- Model suits 100mm and 150mm risers
- Moulded to suit all PVC and metal stormwater grates
- PVC grate supplied with the slab
- Minimum concrete strength 32 MPa at 28 days

| Item | Approx Mass |
|-----------------|-------------|
| 100/150mm riser | 62kg |



Cast iron grates & frames

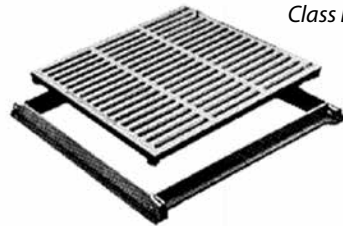
Sump grates standard sizes

Available in: 300 x 300 / 450 x 450 / 600 x 600 / 900 x 900

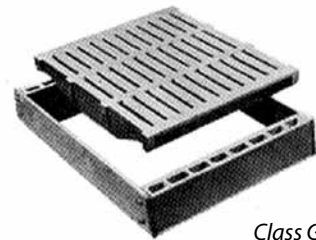
Non standard sizes available on request



Class D



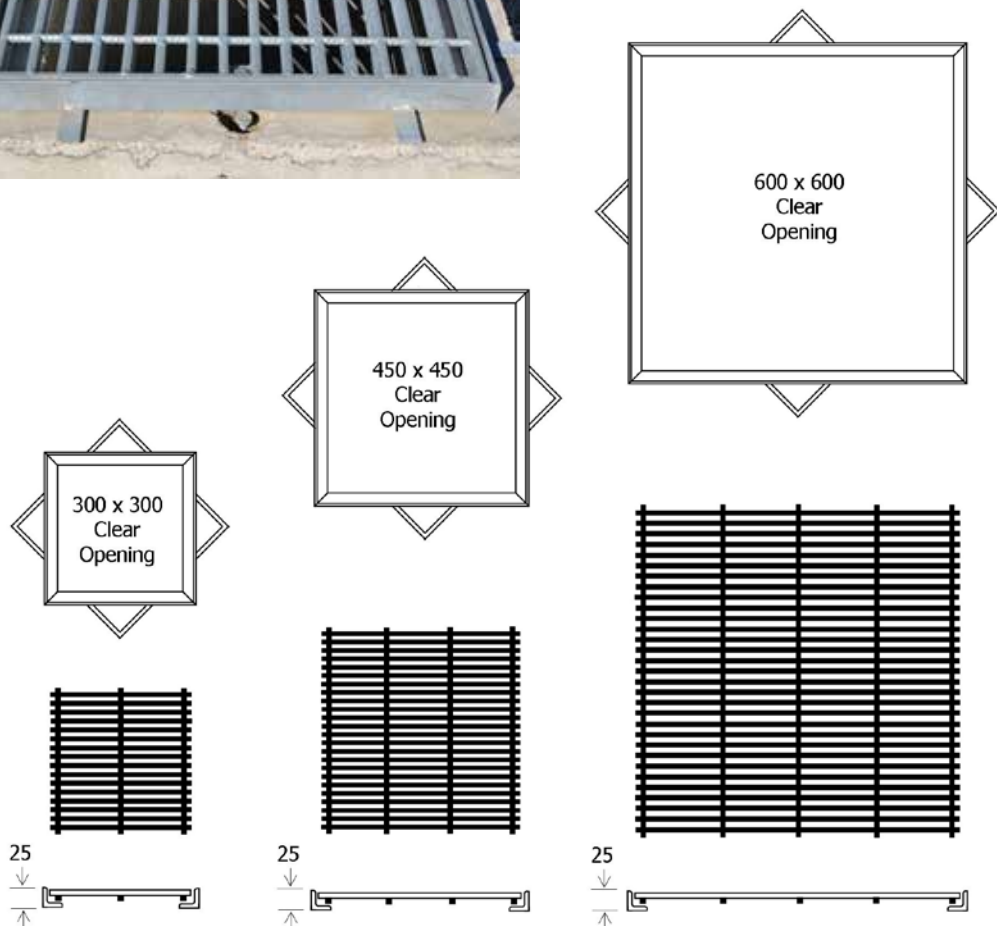
Class B



Class G

Light duty galvanised grates & frames

- Also available for heavy duty application
- Hot dipped galvanised after fabrication
- Suitable for use in concreted or bitumised areas servicing pedestrian traffic
- Special sizes to suit other pits supplied to order

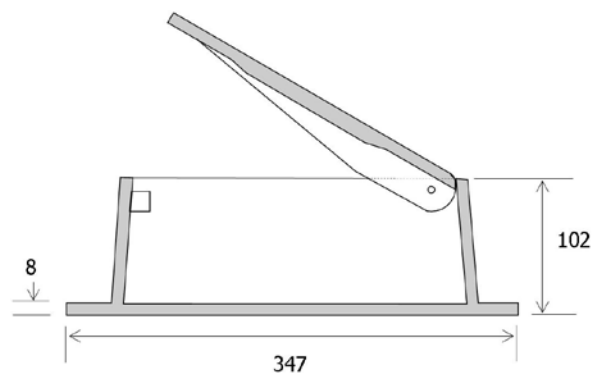
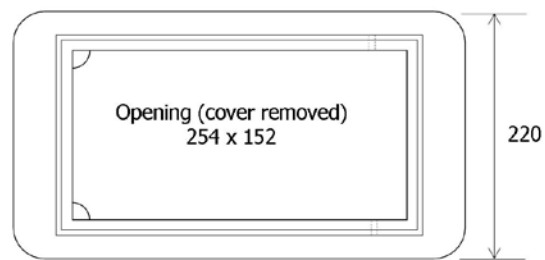
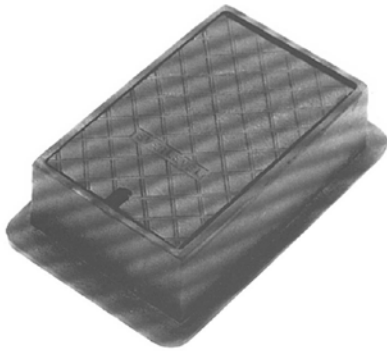


| Description | Weight |
|-------------|--------|
| 300 x 300 | 15.5kg |
| 450 x 450 | 15.5kg |
| 600 x 600 | 24.5kg |

Cast iron tap/valve box

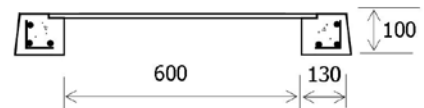
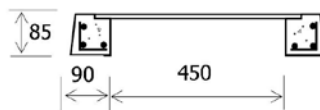
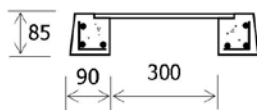
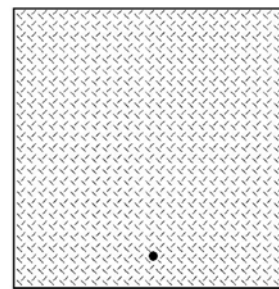
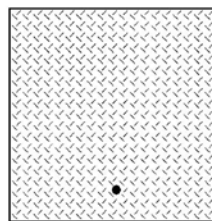
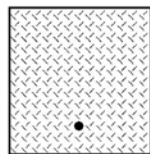
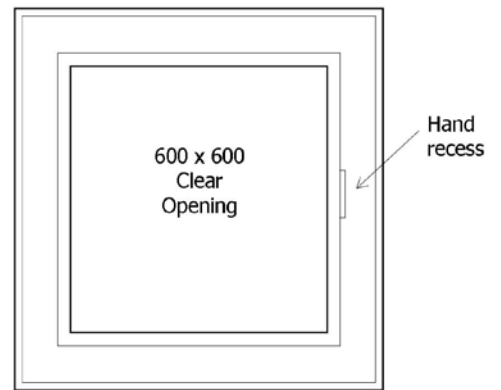
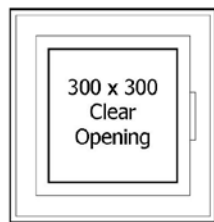
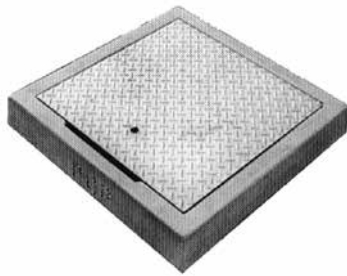
- Provides effective protection for small stop cocks, etc. located below ground level
- Tar dipped cast iron construction with steel pin hinge
- Also available with 100mm x 100mm clear opening

| Opening | Approx Mass |
|-----------|-------------|
| 254 x 152 | 12kg |



Chequerplates & sump finishing collars

- 6mm thick galvanised chequerplate
- For finishing pits in grassed, bituminised or paved areas
- Special sizes fabricated to order
- Minimum concrete strength 32 MPa at 28 days



| Item | Weight |
|-------------------|--------|
| 300 x 300 Plate | 6.5kg |
| 300x 300 Surround | 21.5kg |

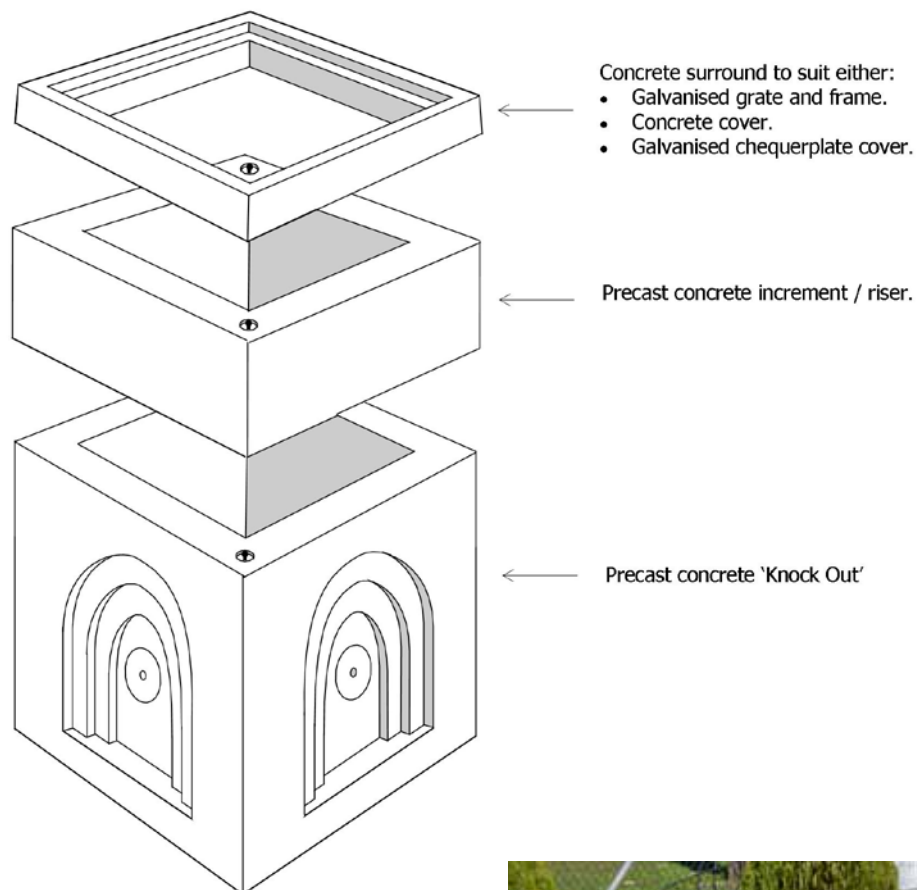
| Item | Weight |
|--------------------|--------|
| 450 x 450 Plate | 13.5kg |
| 450 x 450 Surround | 21.5kg |

| Item | Weight |
|-------------------|--------|
| 600 x 600 Plate | 6.5kg |
| 600x 600 Surround | 21.5kg |

Precast concrete 'knock out' sumps

- Pre-formed to enable penetrations to be 'knocked out' with a sledge hammer at desired locations
- Available ex-stock - suitable for emergencies or tight schedules

| Length | Breadth | Depth | Approx Mass |
|--------|---------|-------|-------------|
| 300mm | 300mm | 300mm | 105kg |
| 450mm | 450mm | 500mm | 330kg |
| 600mm | 600mm | 600mm | 520kg |





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