



Industries

South Australia's leading manufacturer of pre-cast concrete products
including Ri Treat EP10 secondary treatment system,
trade waste arrestors, septic tanks and rainwater tanks

www.ri-industries.com.au



Contents

| | |
|---|----|
| Septic tanks | 4 |
| Ri-Treat EP10 and EP33 secondary treatment systems | 42 |
| Rain water tanks | 53 |
| Trade waste arresters | 56 |
| Inspection openings | 62 |



**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 EP10 secondary treatment system is considered to be the finest in Australia. The same goes for our concrete septic tanks and underground concrete rainwater tanks.

For businesses we offer 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 supply your needs.

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 70 years, we have developed a number of associated products to deal with sewage and waste, most notably our Ri-Treat EP10 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.

Ri-Industries has current certifications in Quality (ISO 9001), Environment (ISO 14001) and Safety (ISO 45001).



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 a number of 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 has over 70 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 10 different sizes, for maximum flexibility
- Child-proof and vandal-proof lids

General information

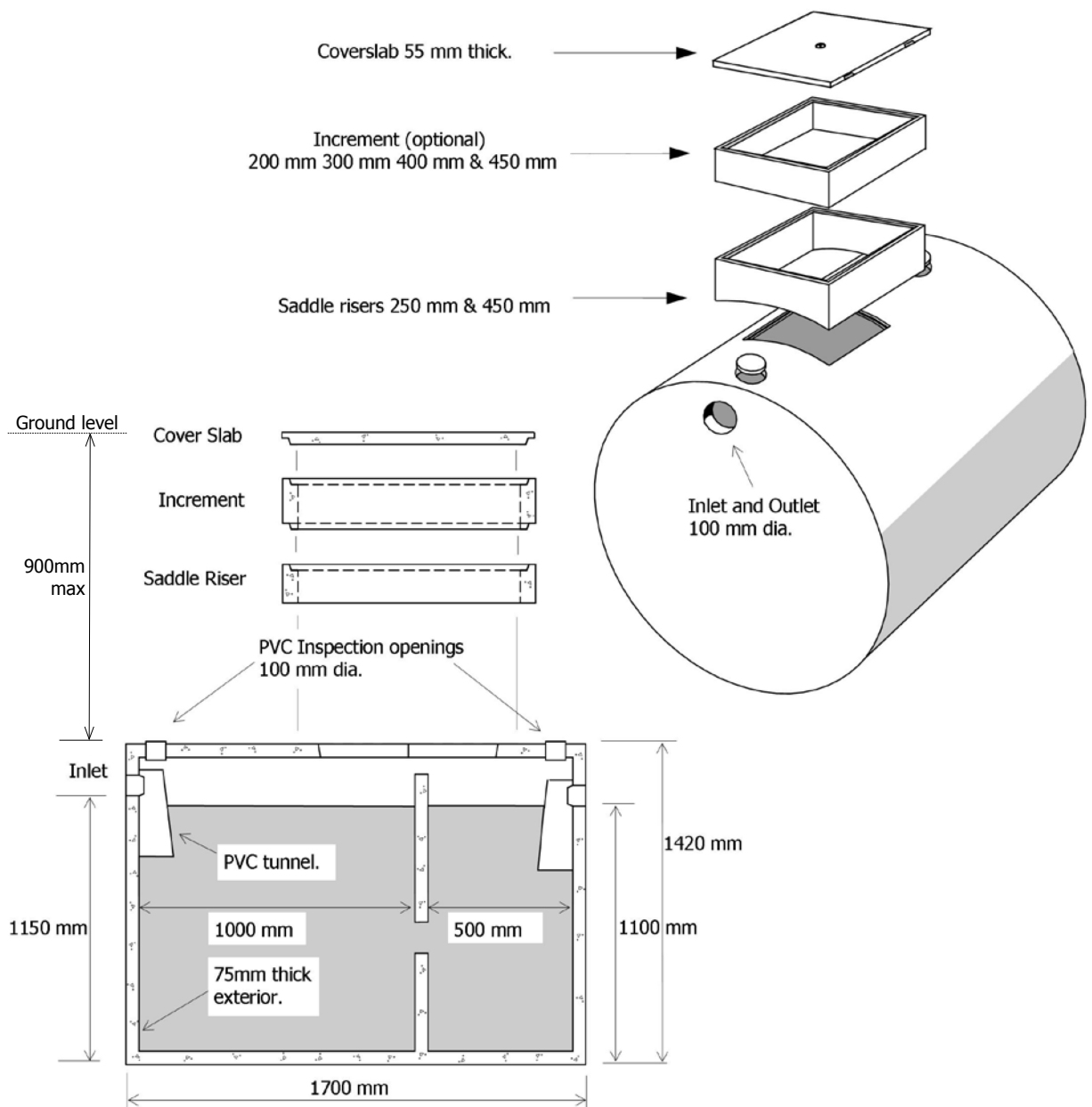
Installation and design of septic systems are regulated by the SA Health Department. Local Council Health Inspectors will have relevant area specific information.

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 SA Health Department.

Septic tank • 1,620 litre

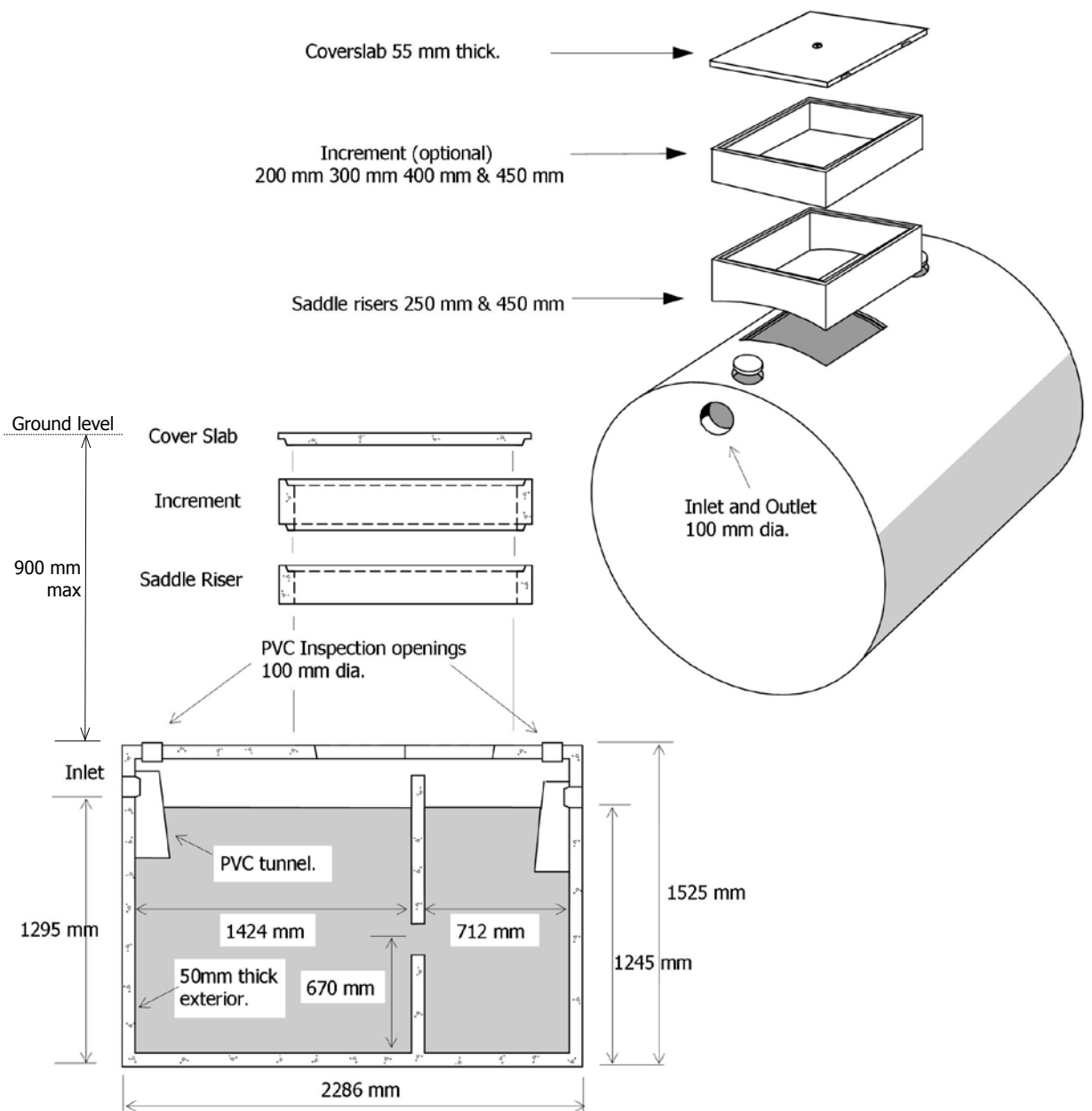
| Item | Approx Mass |
|-------------------------|-------------|
| 1,620 litre septic tank | 1,875kg |



The tanks have been designed to be buried with the top of the tank located 900mm maximum below ground level and with the cover slab at ground level.

Septic tank • 3,000 litre, 50mm wall

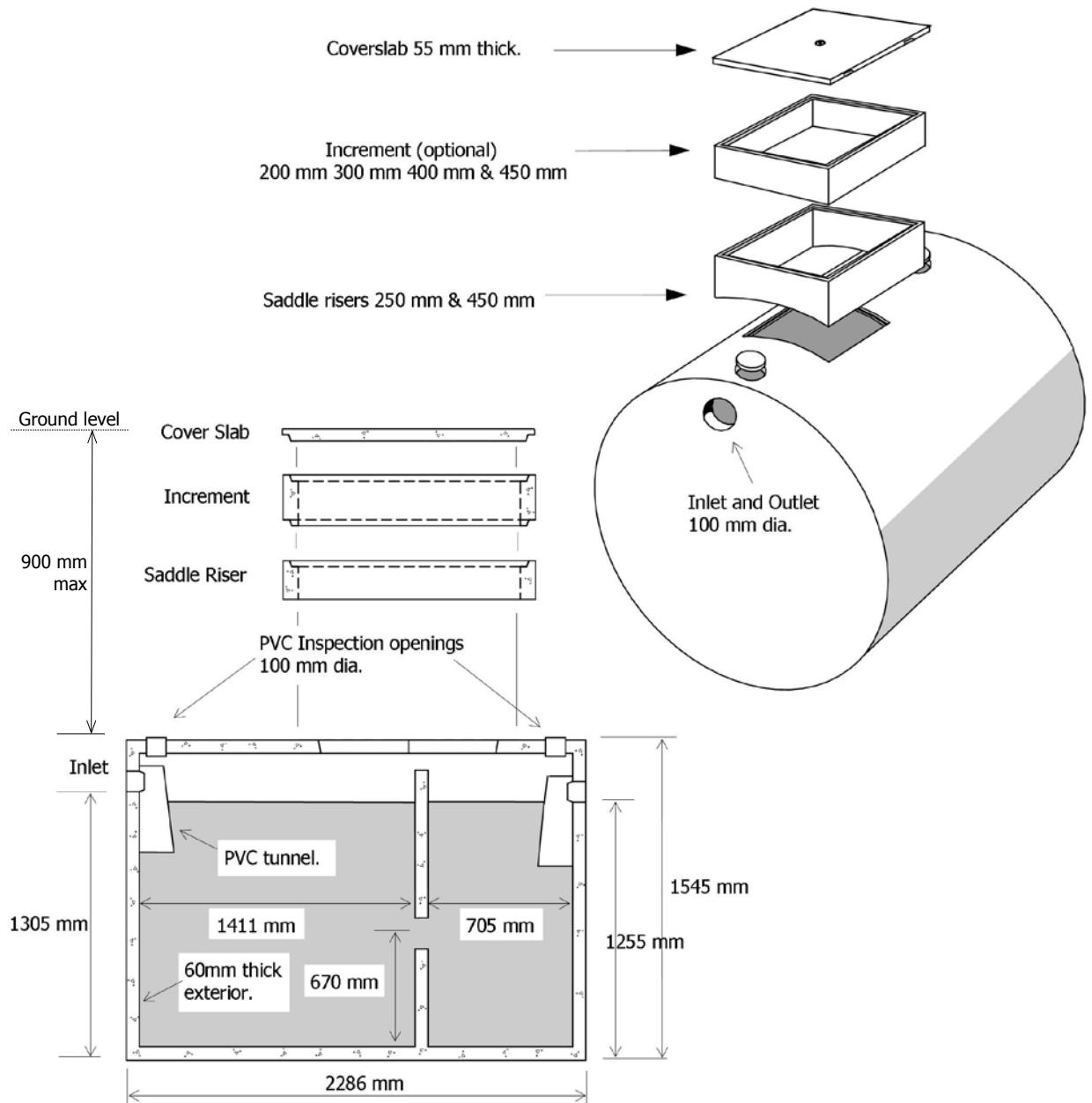
| Item | Approx Mass |
|-------------------------------------|-------------|
| 3,000 litre septic tank (50mm wall) | 2,000kg |



The tanks have been designed to be buried with the top of the tank located 900mm maximum below ground level and with the cover slab at ground level.

Septic tank • 3,000 litre, 60mm wall

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

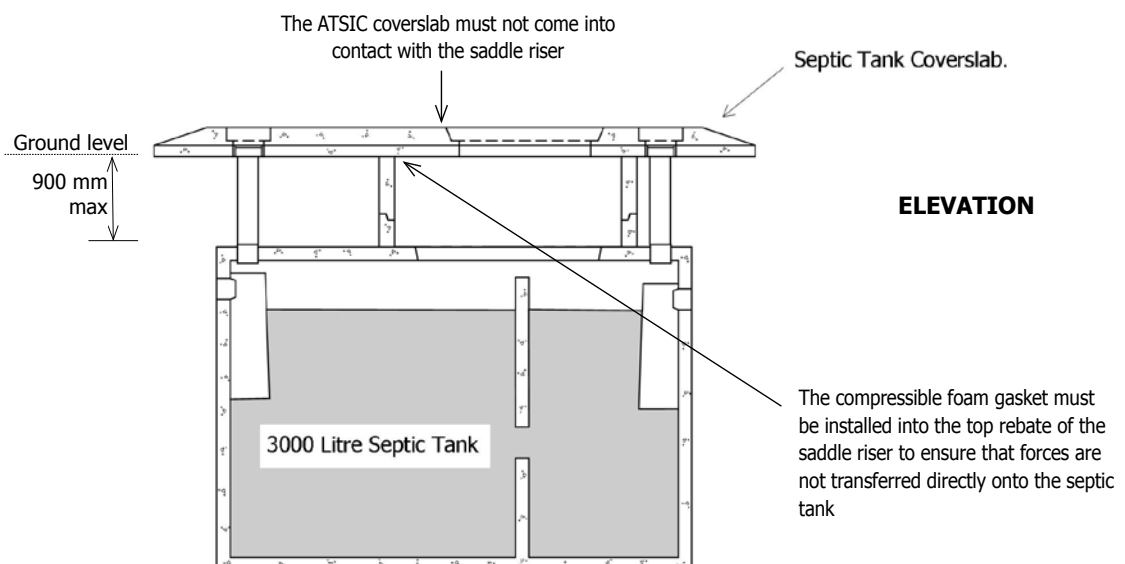
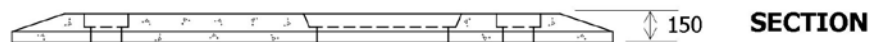
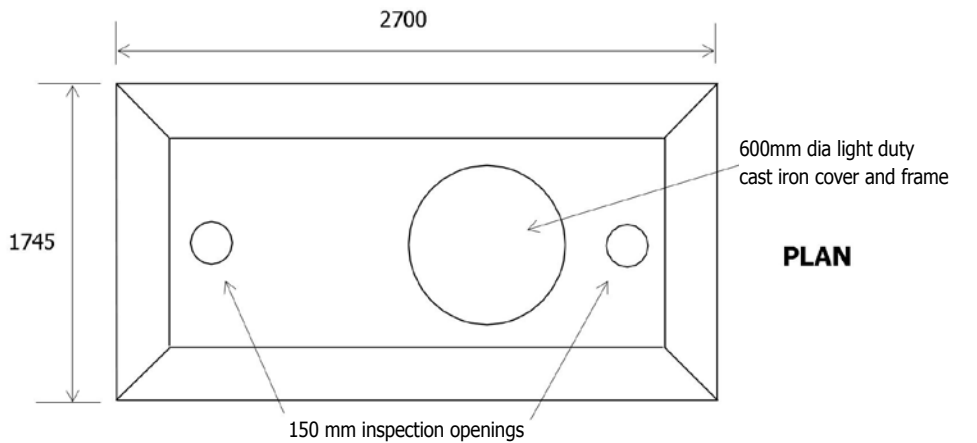


The tanks have been designed to be buried with the top of the tank located 900mm maximum below ground level and with the cover slab at ground level.

ATSIC coverslab • 3,000 litre septic tank

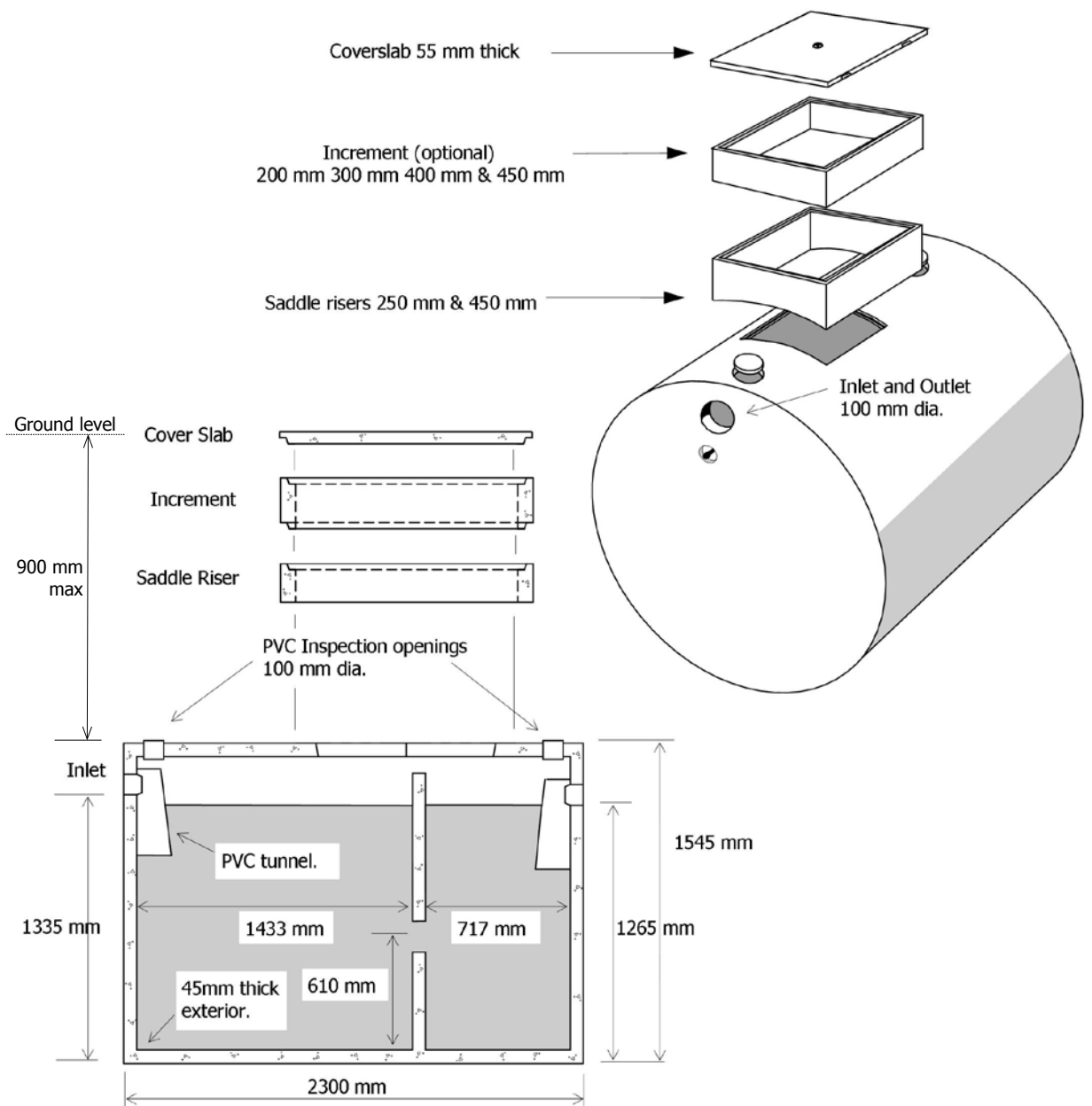
- Class B - light duty unit for use in areas accessible only by cars and light 4WD vehicles with a gross maximum mass of 2670kg
- Designed to span across the saddle riser bearing onto the ground each side of it

| Item | Approx Mass |
|-----------------------|-------------|
| Septic tank coverslab | 1,800kg |



Septic tank • 3,250 litre

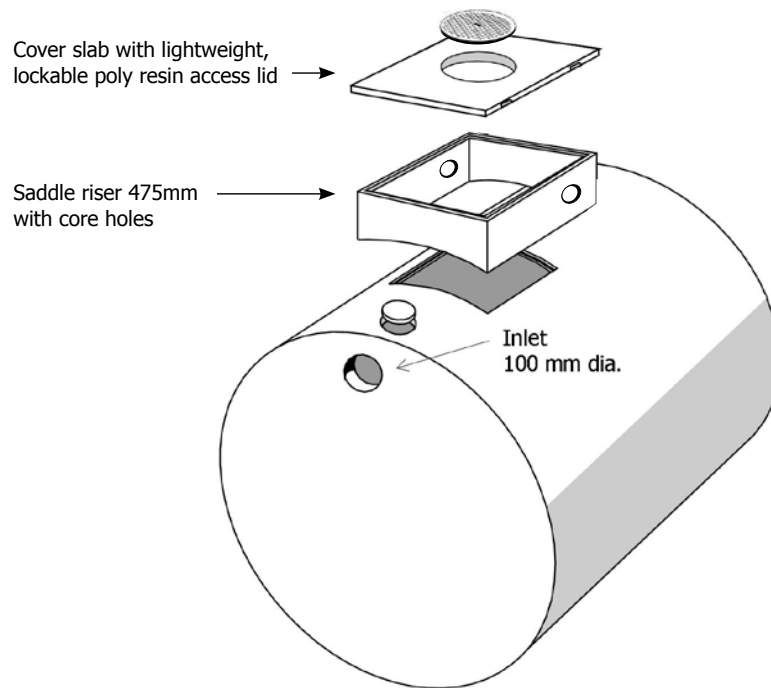
| Item | Approx Mass |
|-------------------------|-------------|
| 3,250 litre septic tank | 2,140kg |



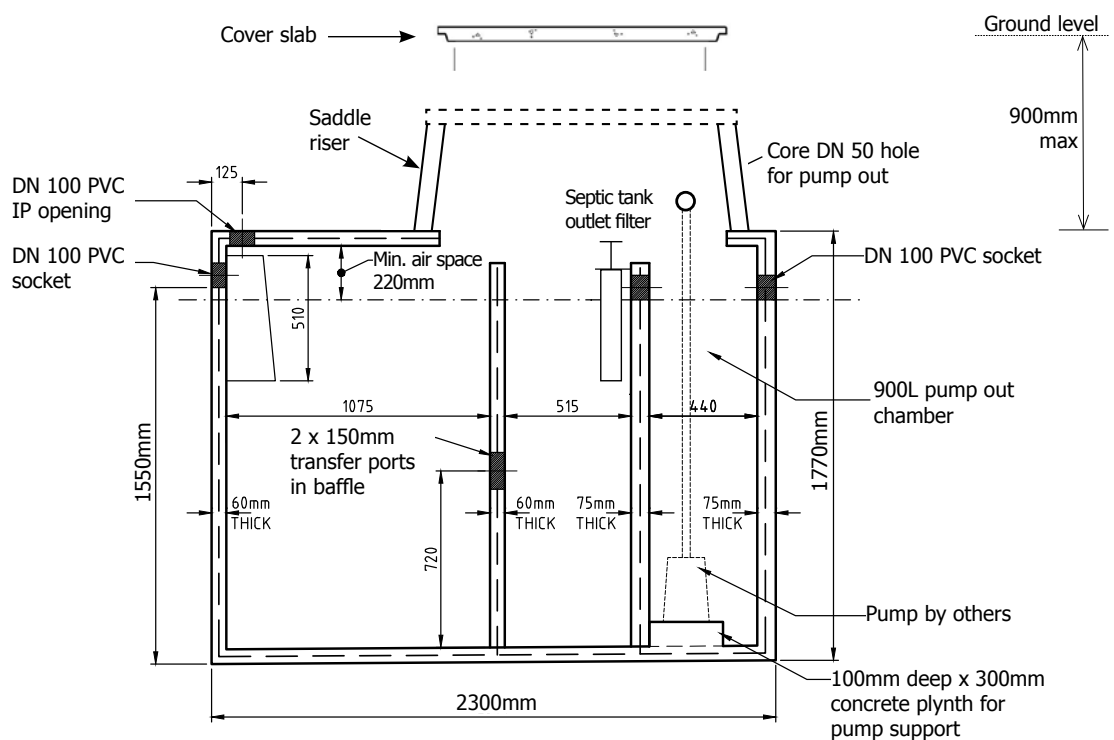
The tanks have been designed to be buried with the top of the tank located 900mm maximum below ground level and with the cover slab at ground level.

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

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

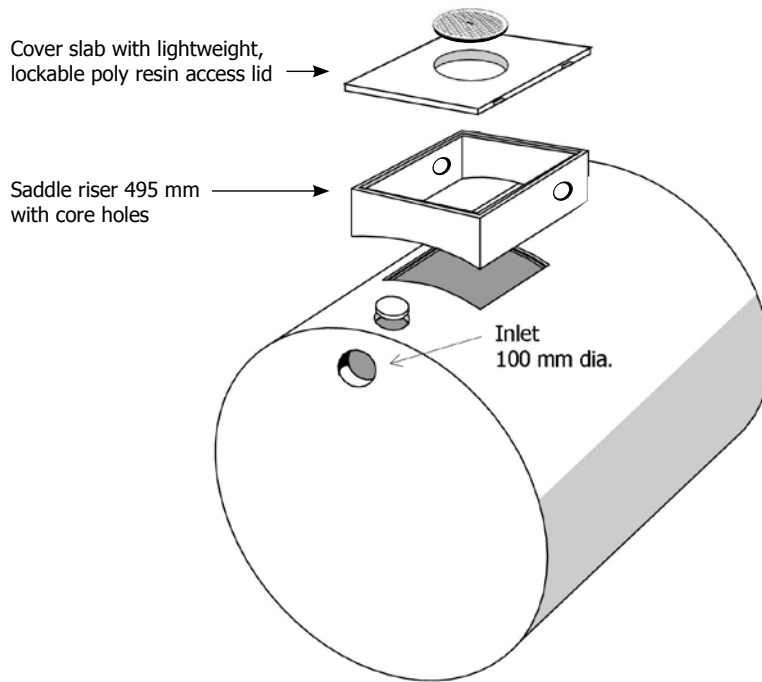


The tanks have been designed to be buried with the top of the tank located 900mm maximum below ground level and with the cover slab at ground level.

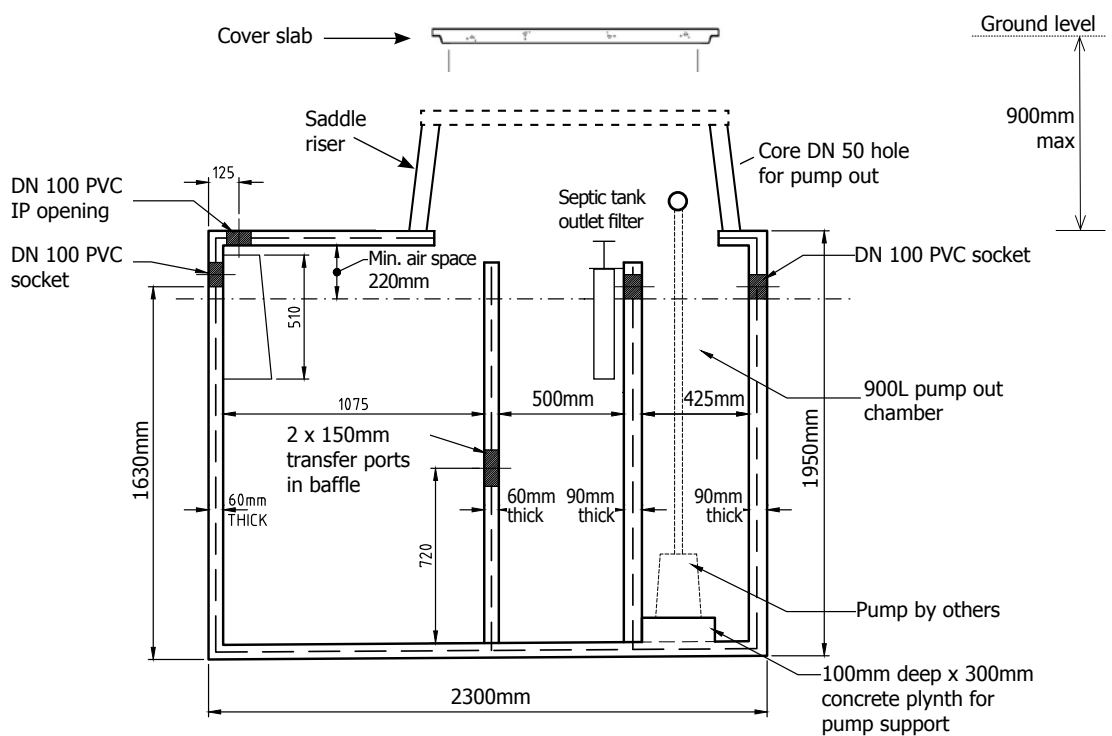


Ri-Scape tank • 4,000 litre with 900L pump chamber

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

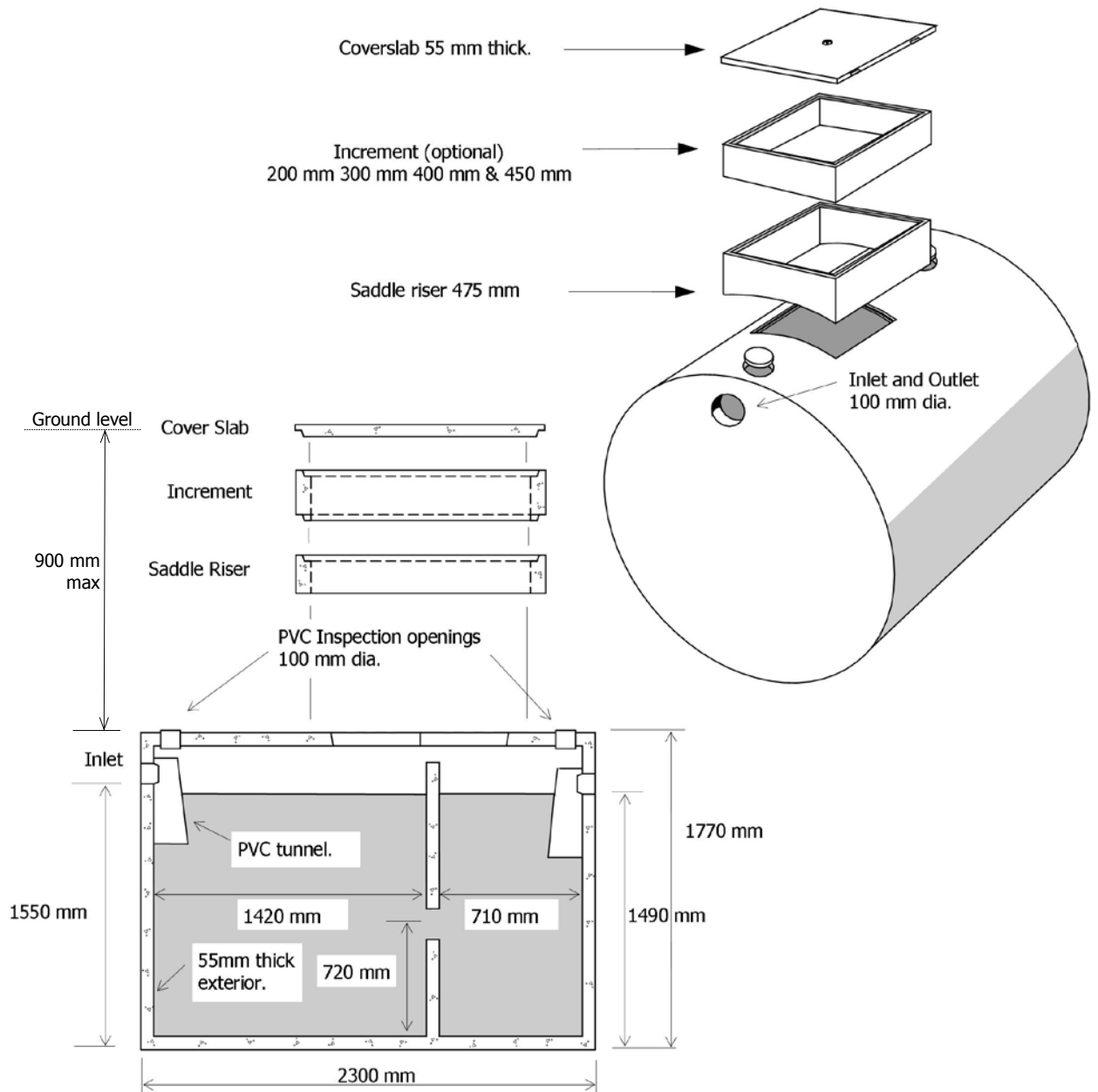


The tanks have been designed to be buried with the top of the tank located 900mm maximum below ground level and with the cover slab at ground level.



Septic tank • 4,300 litre

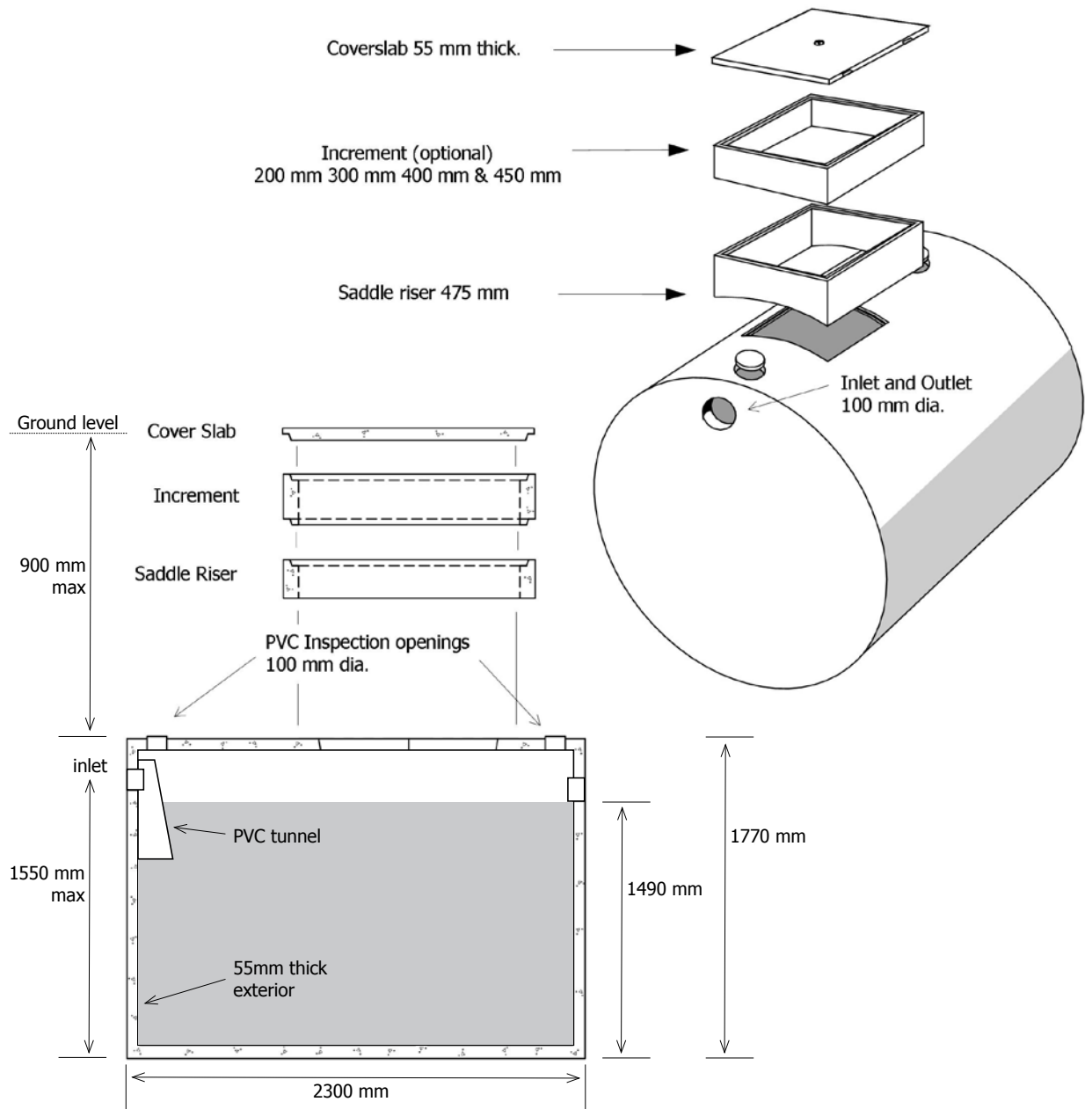
| Item | Approx Mass |
|-------------------------|-------------|
| 4,300 litre septic tank | 2,700kg |



The tanks have been designed to be buried with the top of the tank located 900 mm maximum below ground level and with the cover slab at ground level.

Holding tank • 4,300 litre

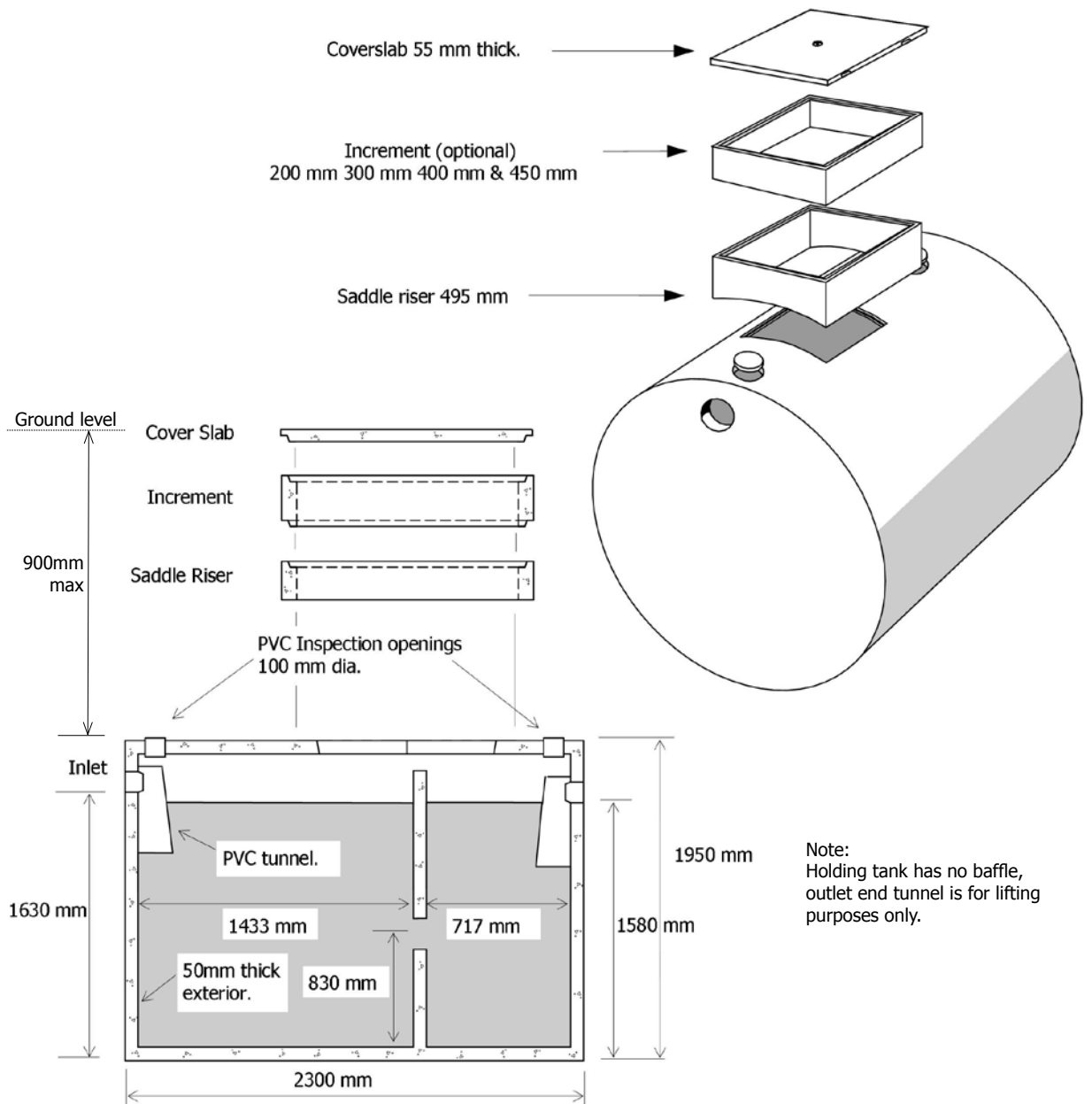
| Item | Approx Mass |
|--------------------------|-------------|
| 4,300 litre holding tank | 2,200kg |



The tanks have been designed to be buried with the top of the tank located 900 mm maximum below ground level and with the cover slab at ground level.

Septic tank • 5,000 litre

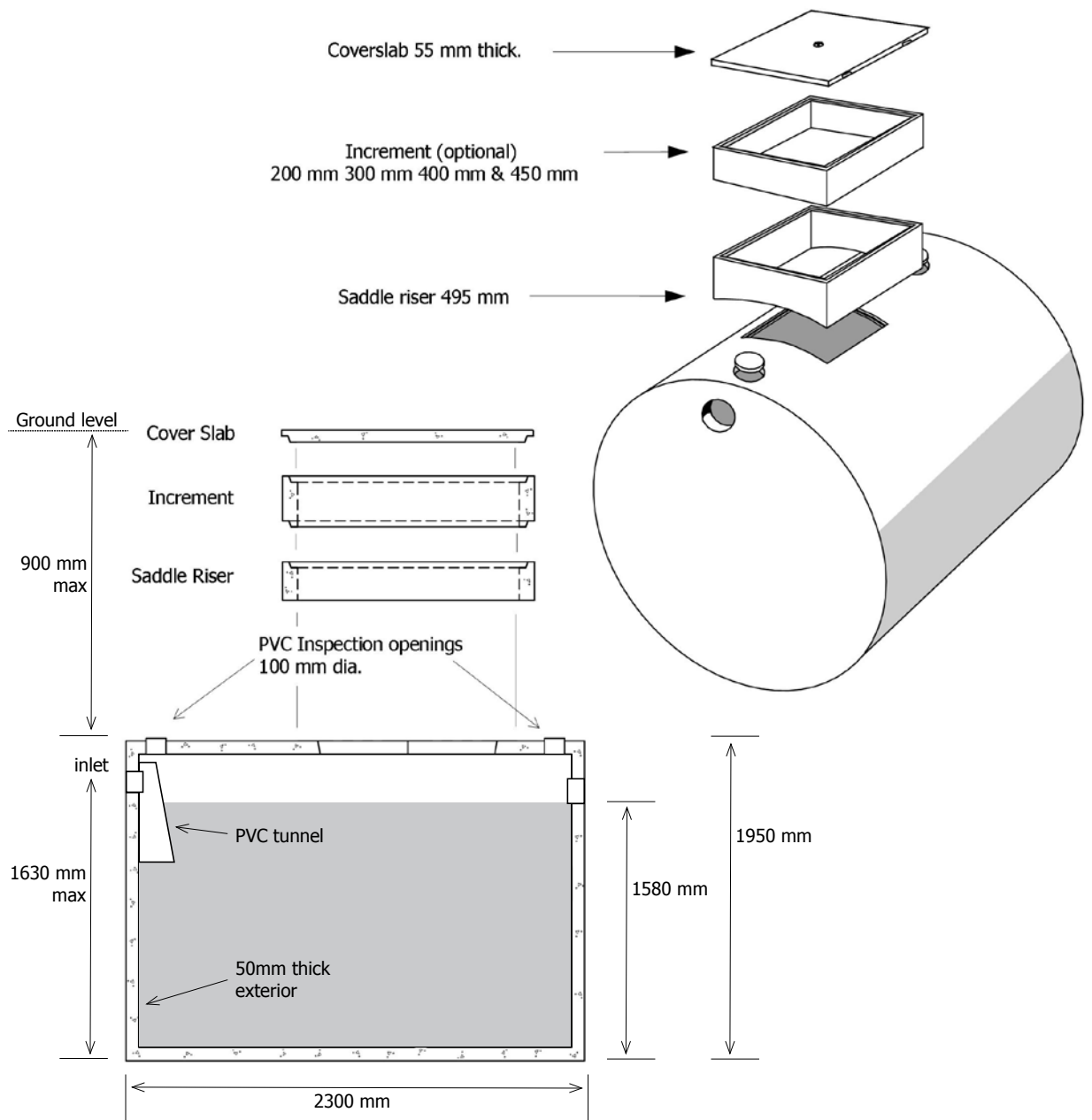
| Item | Approx Mass |
|-------------------------|-------------|
| 5,000 litre septic tank | 3,000kg |



The tanks have been designed to be buried with the top of the tank located 900mm maximum below ground level and with the cover slab at ground level.

Holding tank • 5,000 litre

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



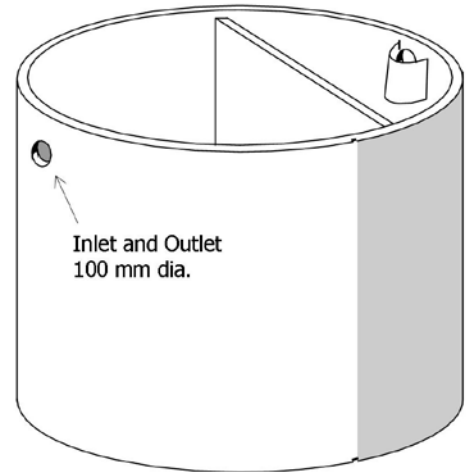
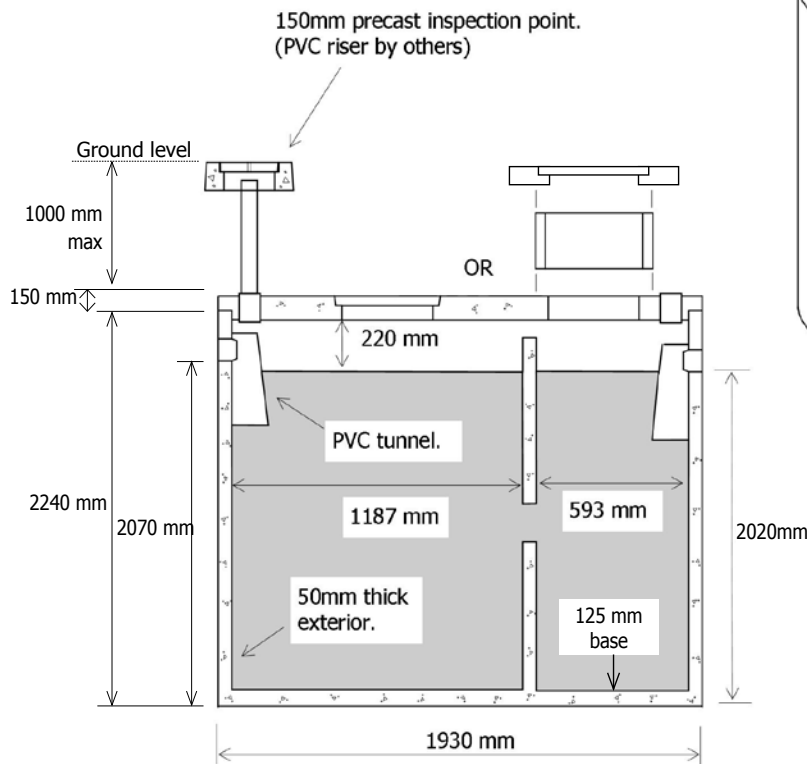
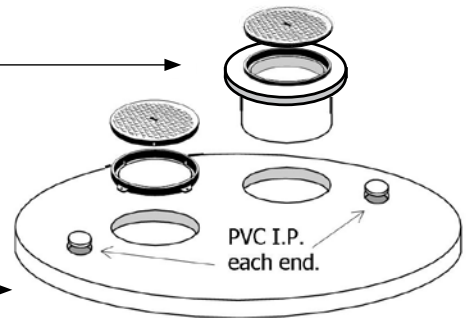
The tanks have been designed to be buried with the top of the tank located 900 mm maximum below ground level and with the cover slab at ground level.

Non-trafficable vertical septic tank • 5,000 litre

| Item | Approx Mass |
|---|-------------|
| 5,000 litre vertical septic tank base with baffle | 3,500kg |
| 5,000 litre vertical septic tank lid | 1,200kg |

800 dia pipe increments available 600 mm, 450 mm and 300 mm high to raise access openings to finished surface level.
600 dia covers available in heavy duty and light duty application.

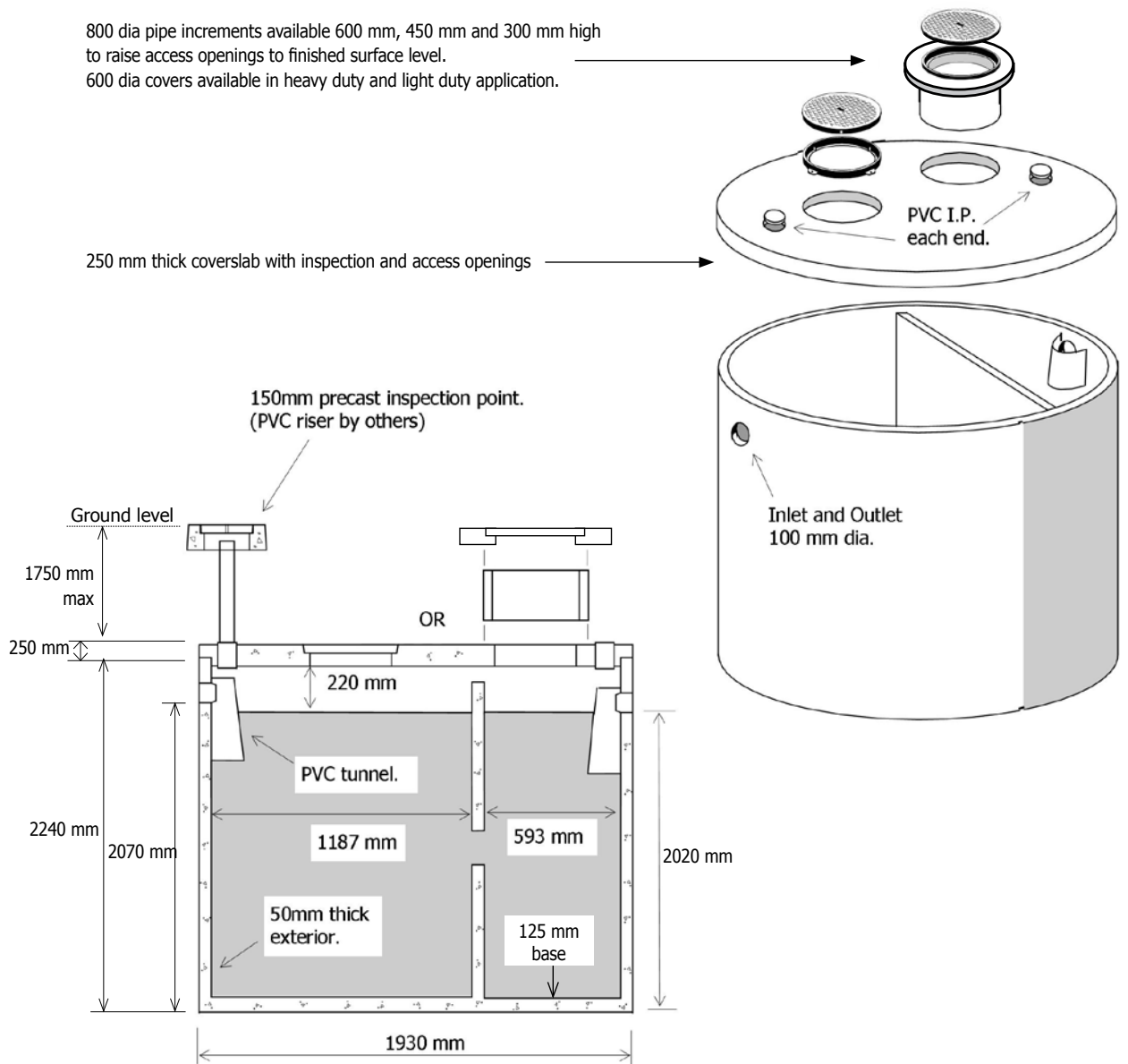
150 mm thick coverslab with inspection and access openings



The non-trafficable cover slabs (150 mm thick) have been designed to be buried a maximum of 1000 mm below ground level.

Trafficable vertical septic tank • 5,000 litre

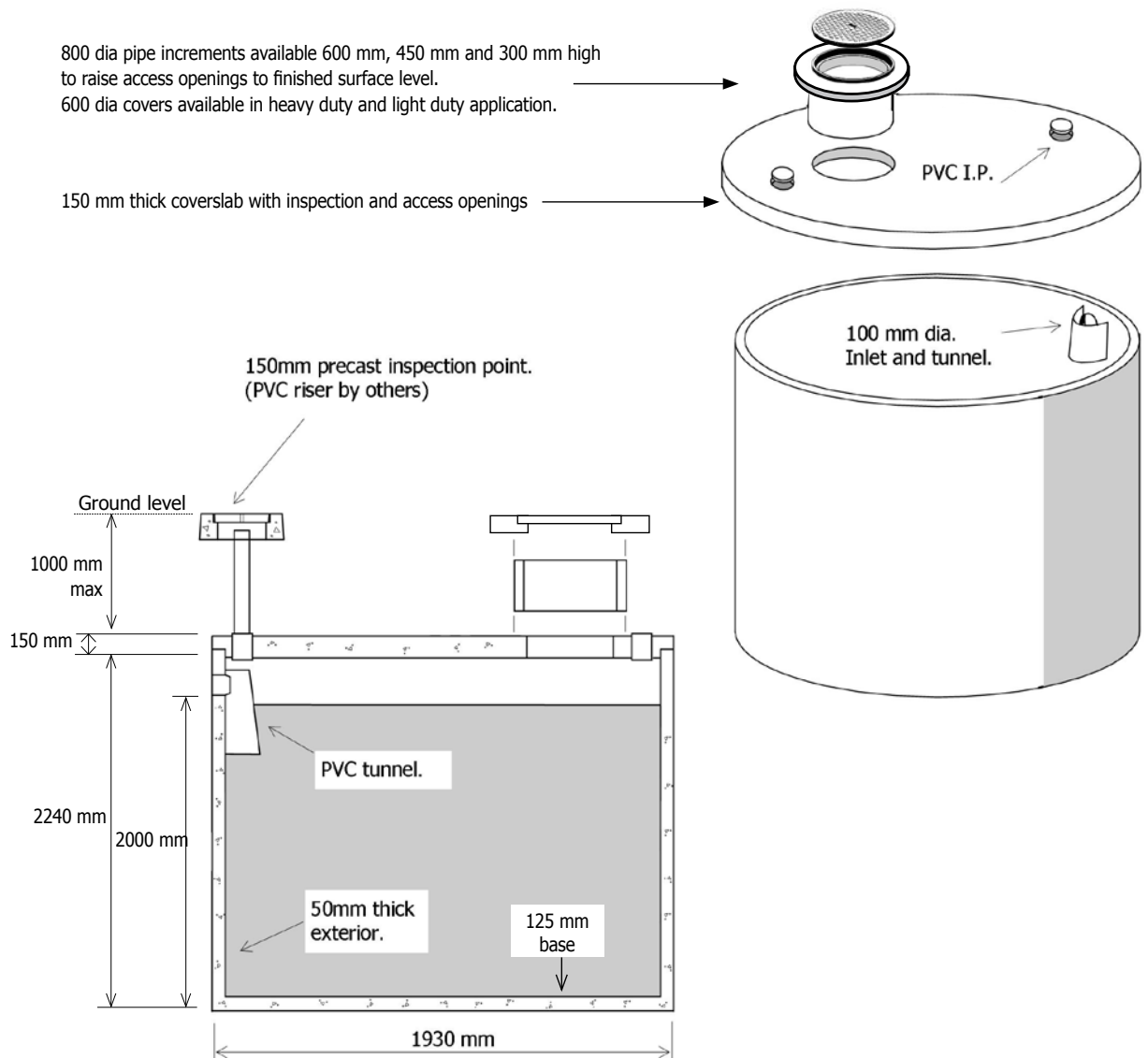
| Item | Approx Mass |
|---|-------------|
| 5,000 litre vertical septic tank base with baffle | 3,500kg |
| 5,000 litre vertical septic tank lid | 2,000kg |



The trafficable cover slabs (250 mm thick) have been designed to be buried a maximum of 1750 mm below ground level.

Non-trafficable vertical holding tank • 5,000 litre

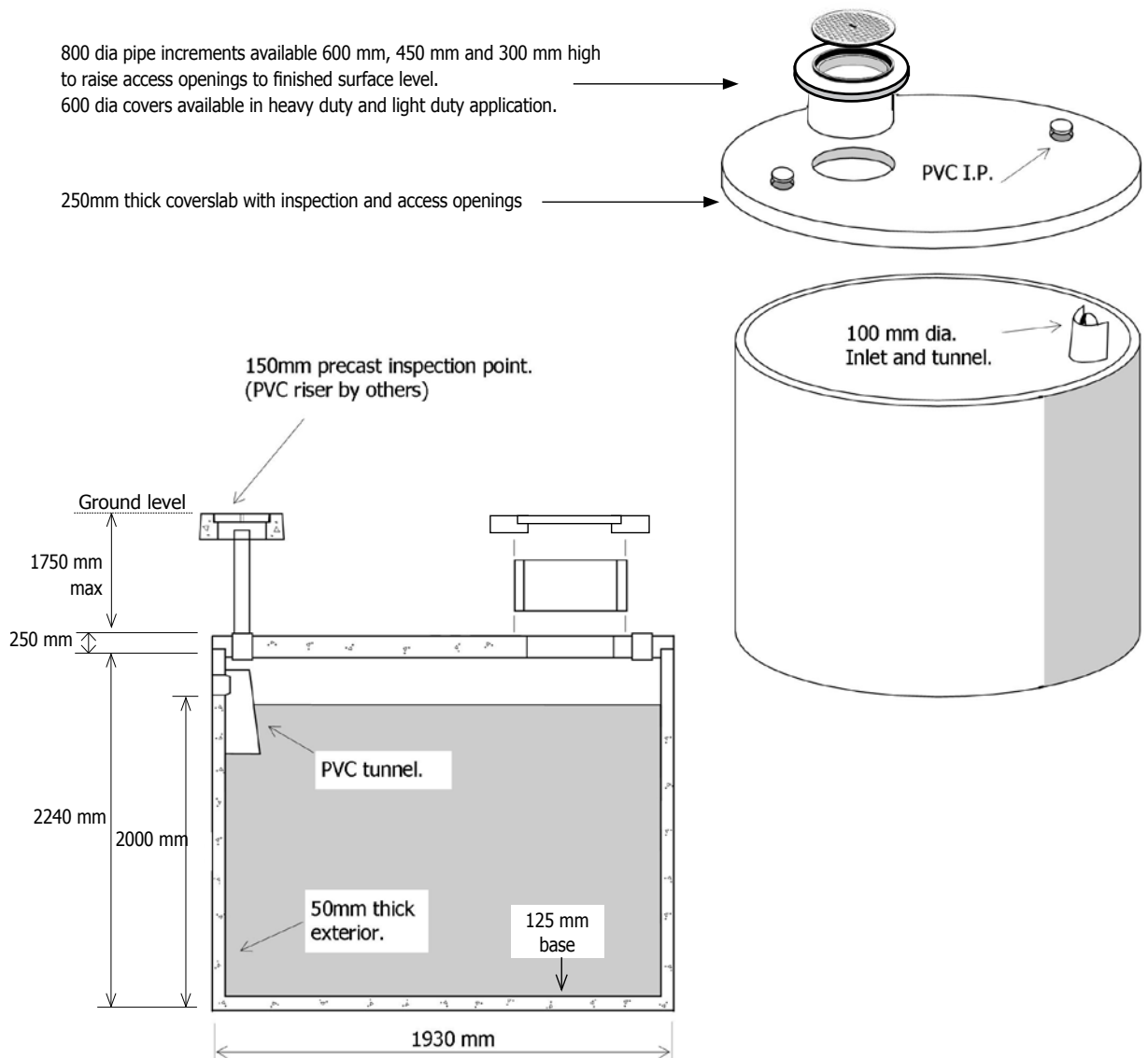
| Item | Approx Mass |
|--|-------------|
| 5,000 litre vertical holding tank base | 3,000kg |
| 5,000 litre vertical holding tank lid | 1,100kg |



The non-trafficable cover slabs (150 mm thick) have been designed to be buried a maximum of 1000 mm below ground level.

Trafficable vertical holding tank • 5,000 litre

| Item | Approx Mass |
|--|-------------|
| 5,000 litre vertical holding tank base | 3,000kg |
| 5,000 litre vertical holding tank lid | 1,850kg |



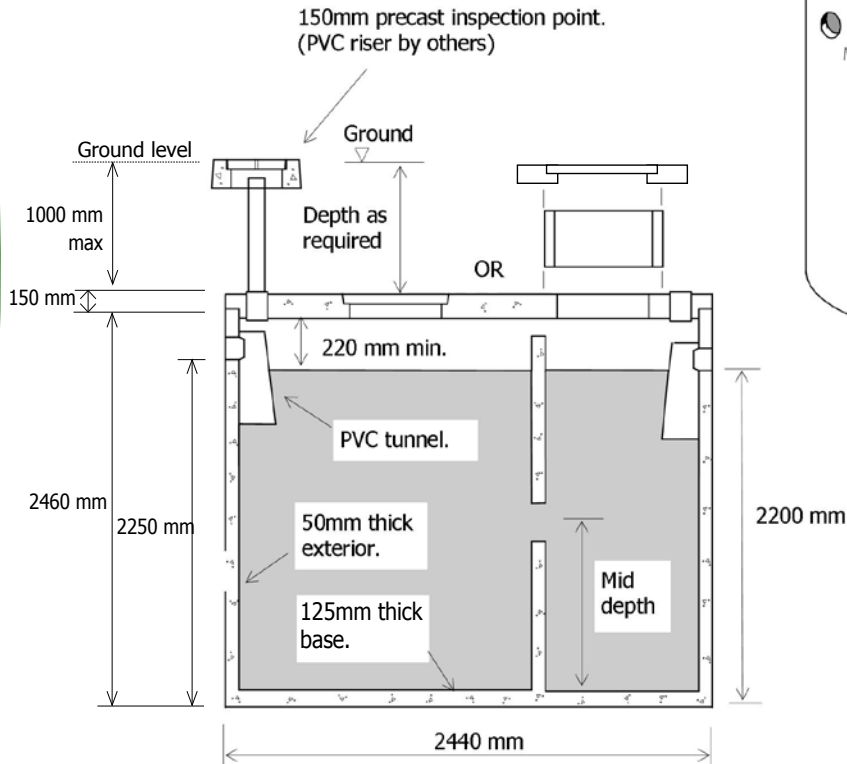
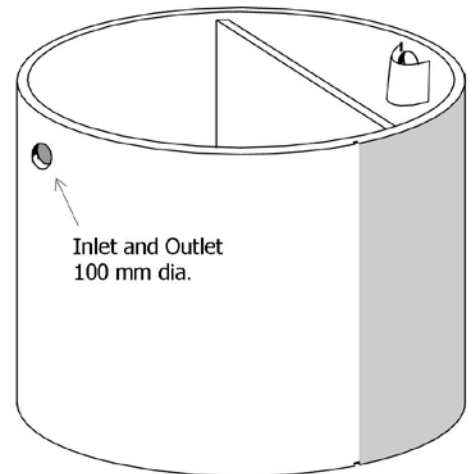
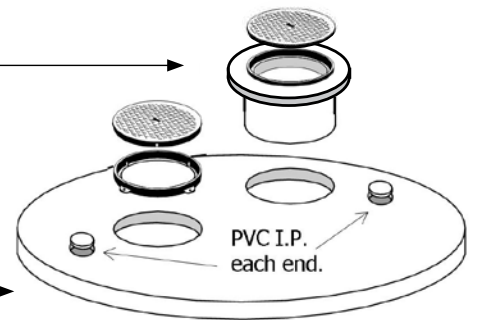
The trafficable cover slabs (250 mm thick) have been designed to be buried a maximum of 1750 mm below ground level.

Non-trafficable septic tank • 8,000 litre

| Item | Approx Mass |
|---|-------------|
| 8,000 litre vertical septic tank base with baffle | 4,850kg |
| 8,000 litre vertical septic tank lid | 1,800kg |

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.

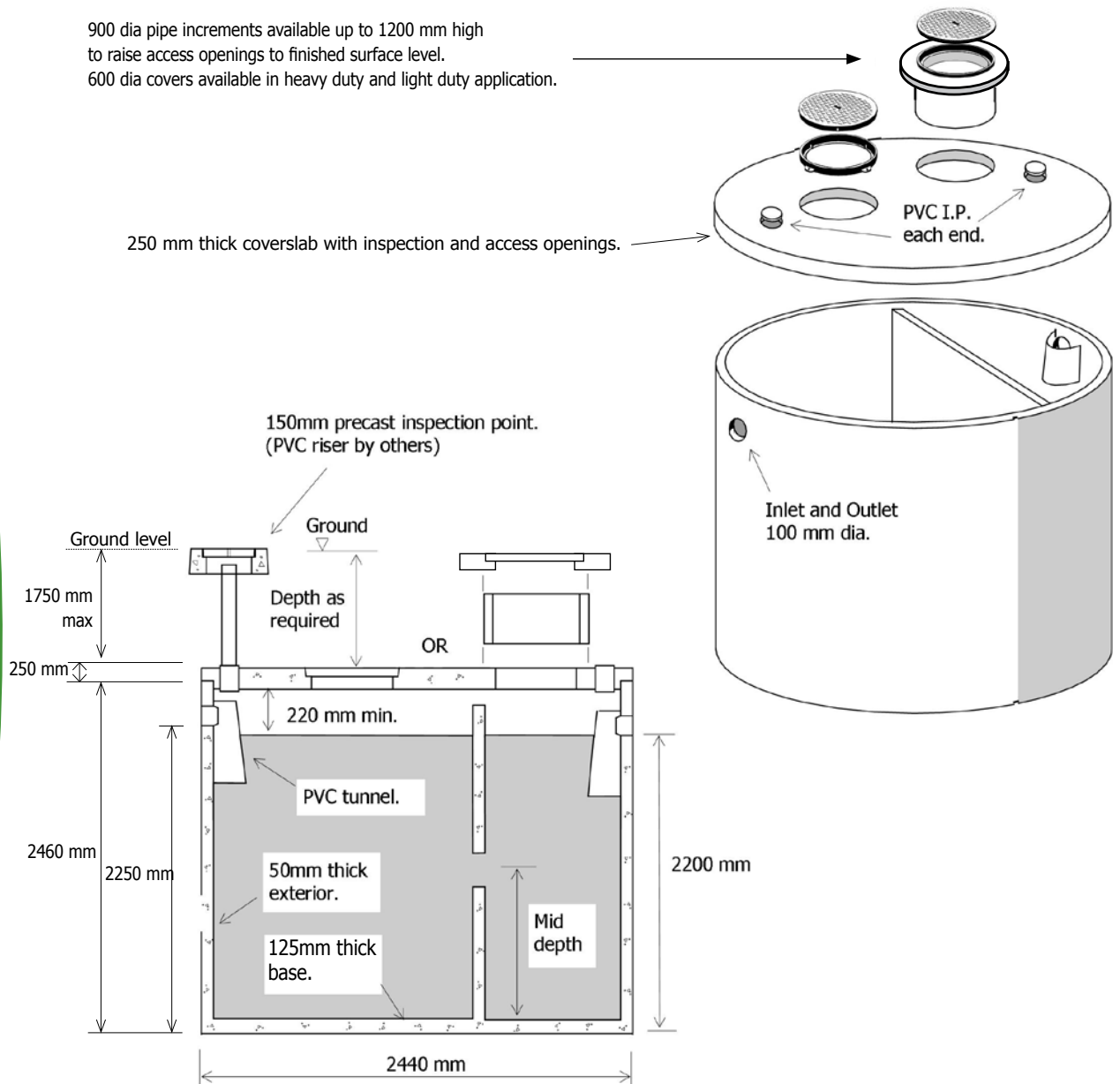
150 mm thick coverslab with inspection and access openings



The non-trafficable cover slabs (150mm thick) have been designed to be buried a maximum of 1000mm below ground level.

Trafficable septic tank • 8,000 litre

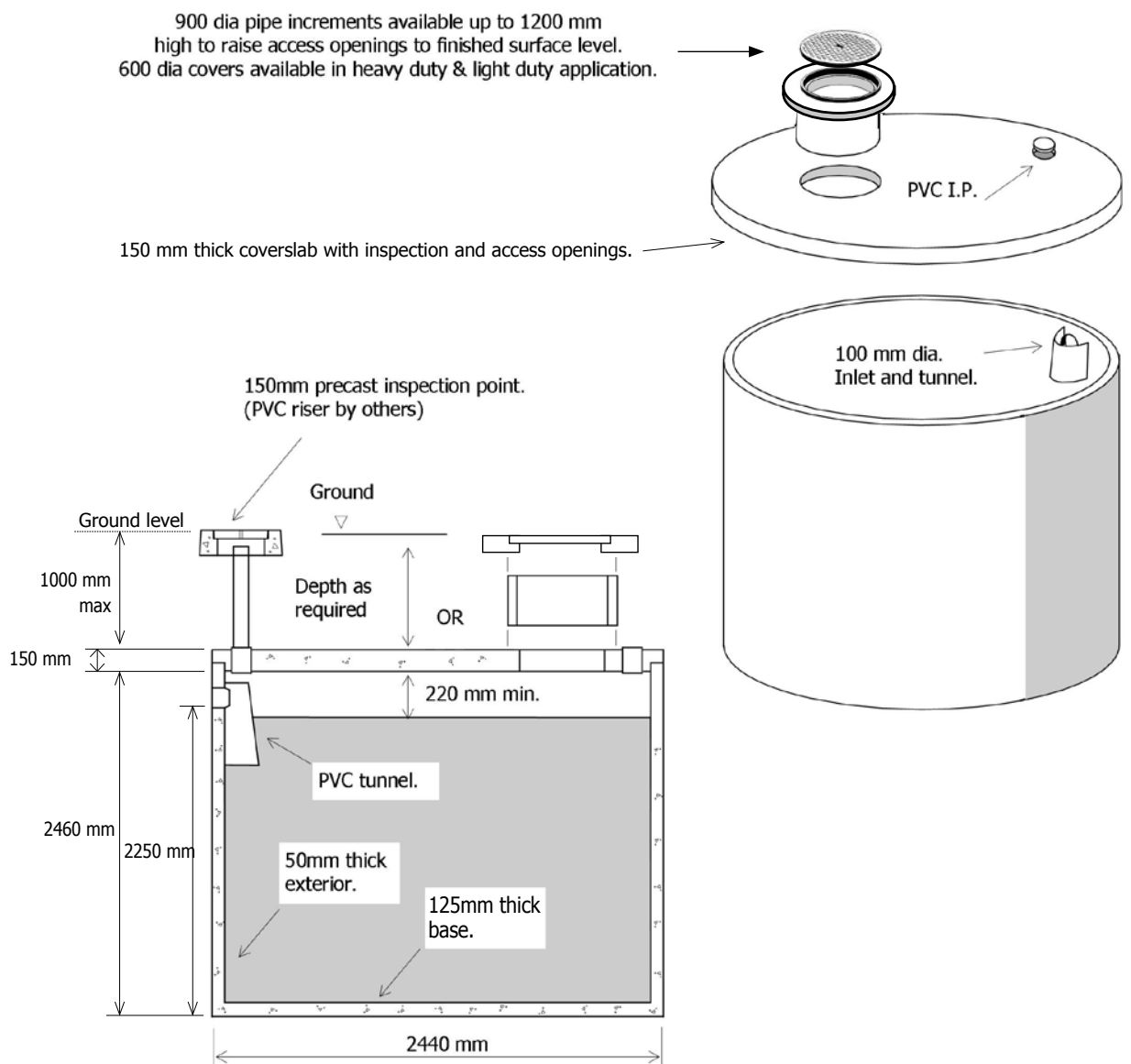
| Item | Approx Mass |
|---|-------------|
| 8,000 litre vertical septic tank base with baffle | 4,850kg |
| 8,000 litre vertical septic tank lid | 3,000kg |



The trafficable cover slabs (250 mm thick) have been designed to be buried a maximum of 1750 mm below ground level.

Non-trafficable vertical holding tank • 8,000 litre

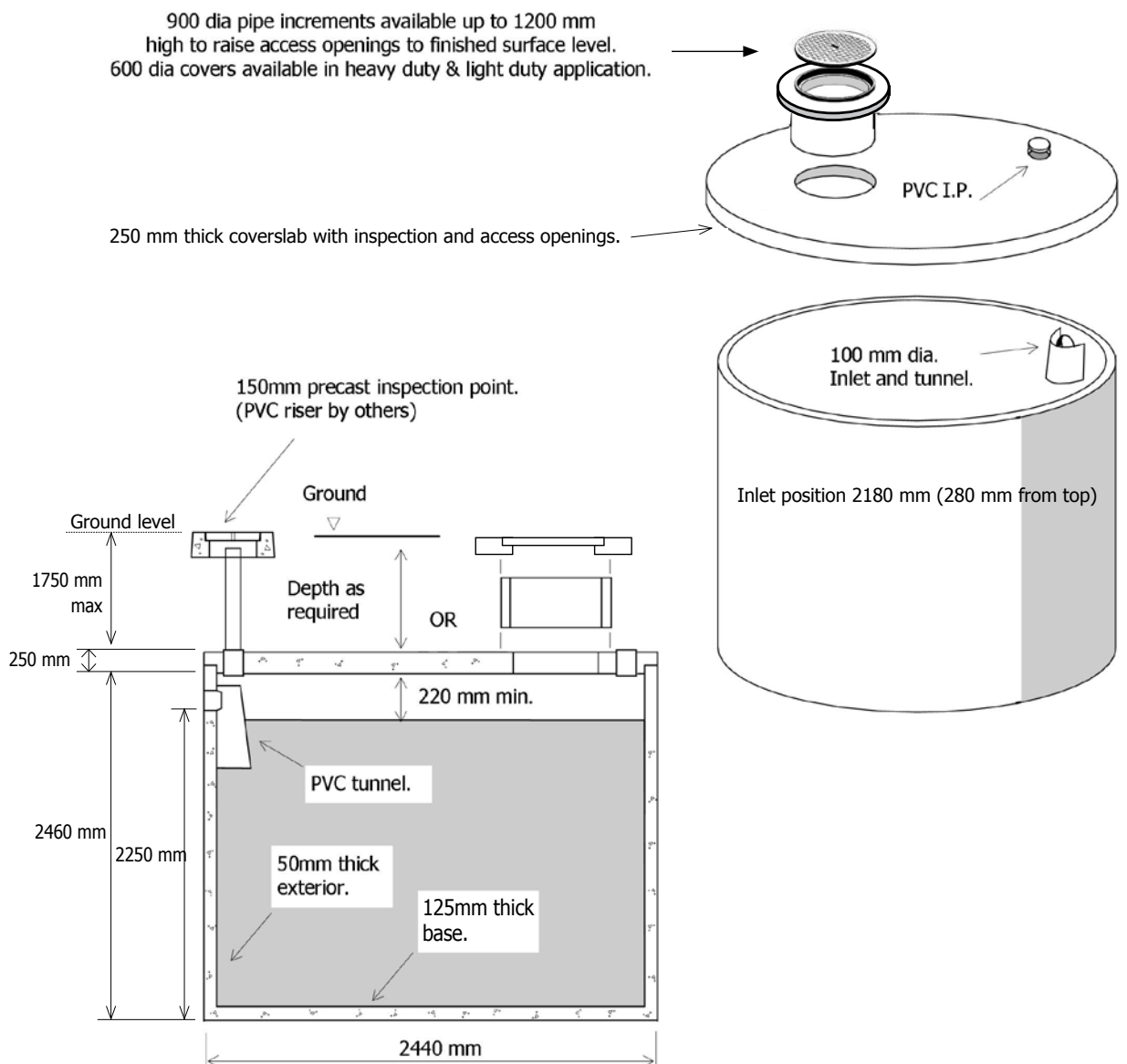
| Item | Approx Mass |
|--|-------------|
| 8,000 litre vertical holding tank base | 4,000kg |
| 8,000 litre vertical holding tank lid | 1,800kg |



The non-trafficable cover slabs (150 mm thick) have been designed to be buried a maximum of 1000 mm below ground level.

Trafficable vertical holding tank • 8,000 litre

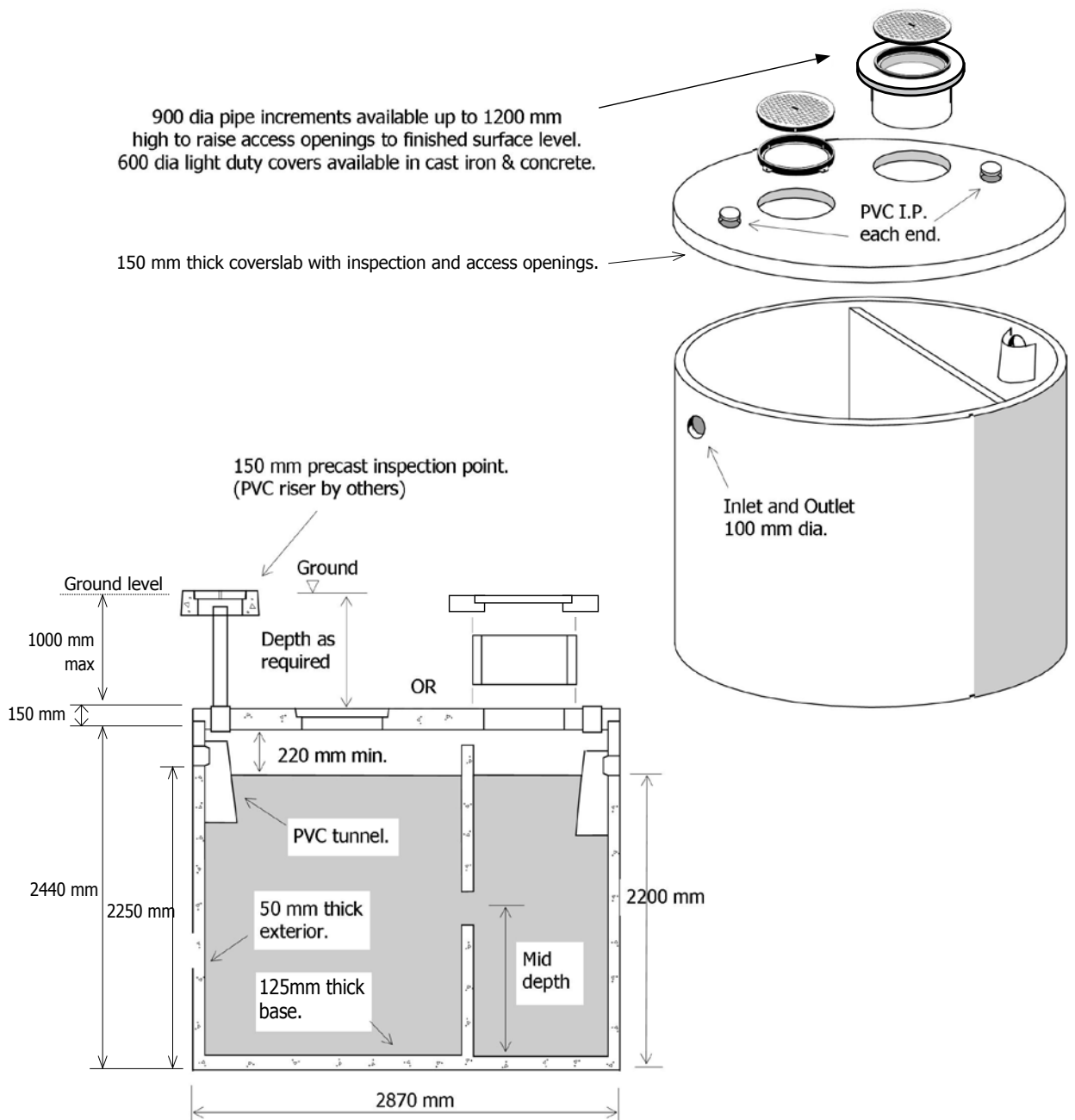
| Item | Approx Mass |
|--|-------------|
| 8,000 litre vertical holding tank base | 4,000kg |
| 8,000 litre vertical holding tank lid | 2,900kg |



The trafficable cover slabs (250 mm thick) have been designed to be buried a maximum of 1750 mm below ground level.

Non-trafficable septic tank • 12,000 litre

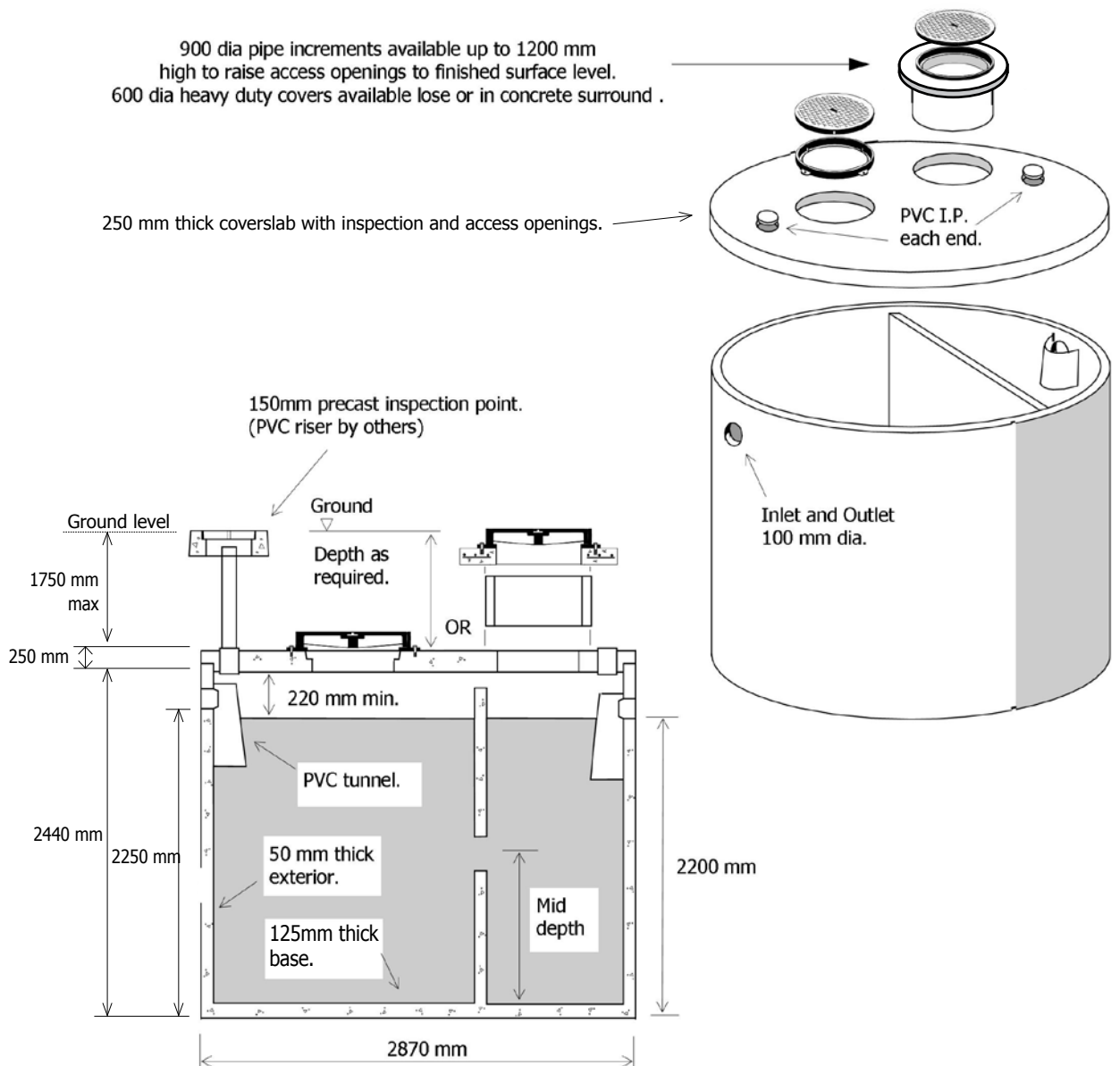
| Item | Approx Mass |
|--|-------------|
| 12,000 litre vertical septic tank base with baffle | 6,300kg |
| 12,000 litre vertical septic tank lid | 2,500kg |



The non-trafficable cover slabs (150 mm thick) have been designed to be buried a maximum of 1000 mm below ground level.

Trafficable septic tank • 12,000 litre

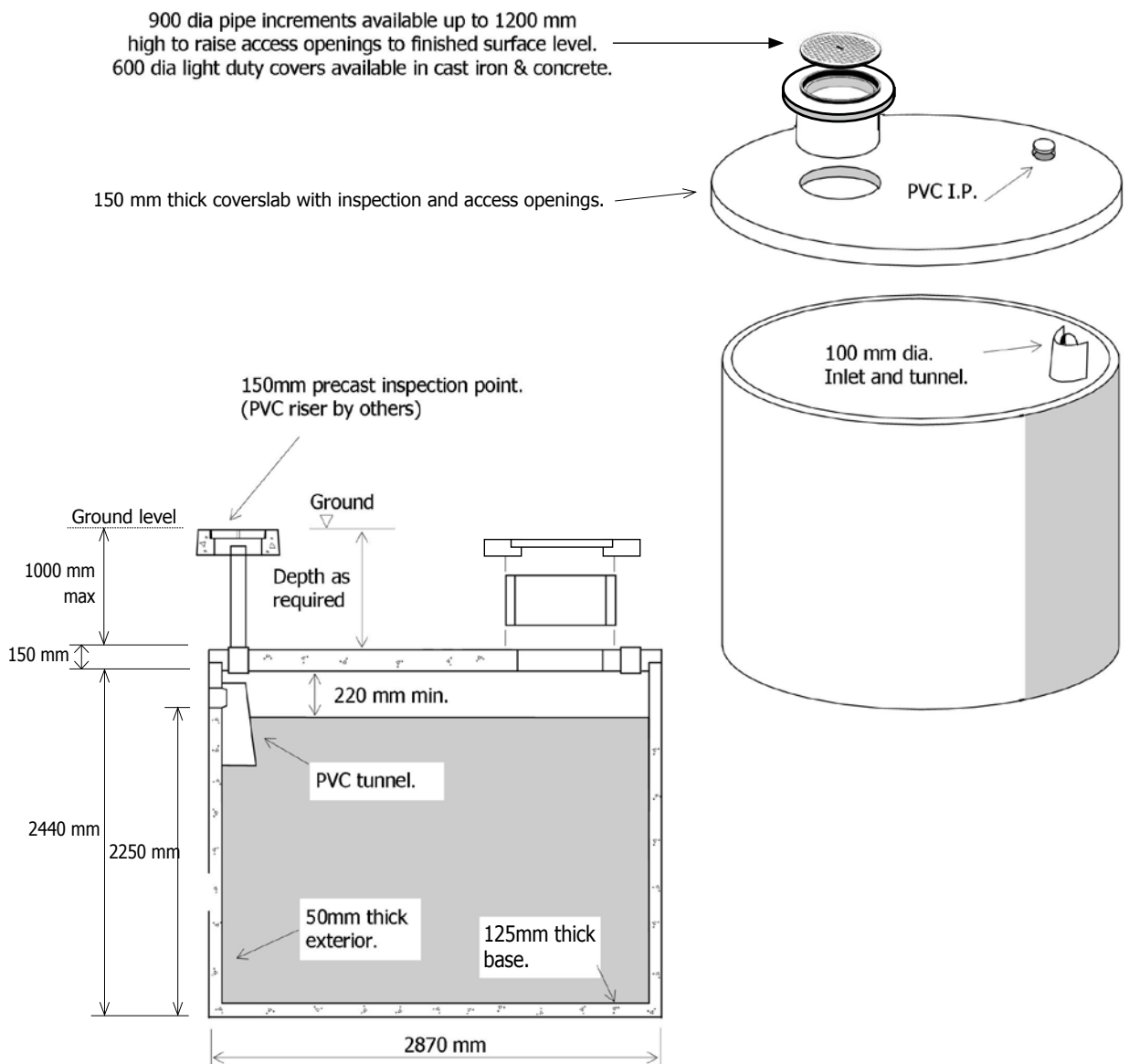
| Item | Approx Mass |
|--|-------------|
| 12,000 litre vertical septic tank base with baffle | 6,300kg |
| 12,000 litre vertical septic tank lid | 3,850kg |



The trafficable cover slabs (250 mm thick) have been designed to be buried a maximum of 1750 mm below ground level.

Non-trafficable vertical holding tank • 12,000 litre

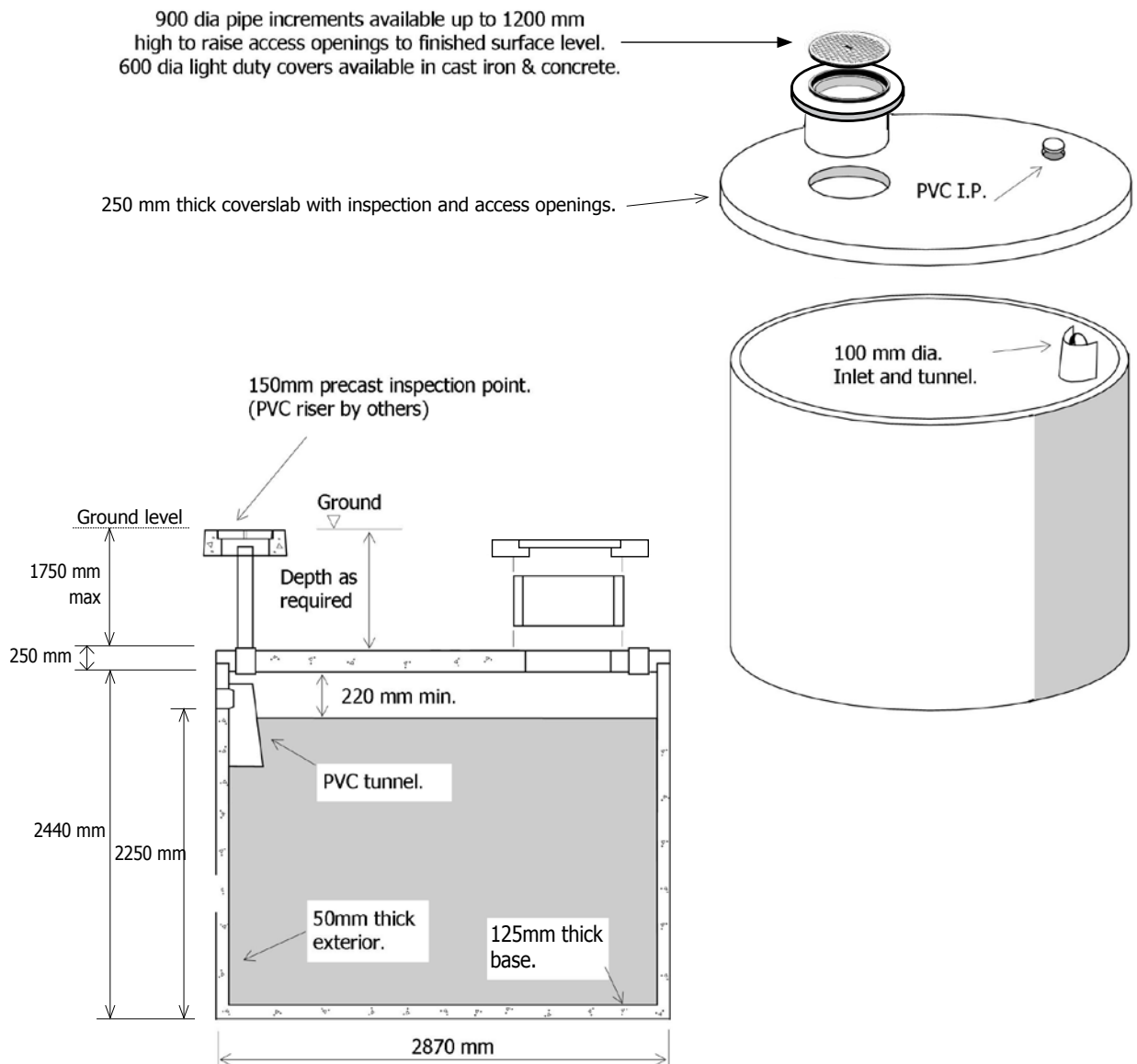
| Item | Approx Mass |
|---|-------------|
| 12,000 litre vertical holding tank base | 5,300kg |
| 12,000 litre vertical holding tank lid | 2,450kg |



The non-trafficable cover slabs (150 mm thick) have been designed to be buried a maximum of 1000 mm below ground level.

Trafficable vertical holding tank • 12,000 litre

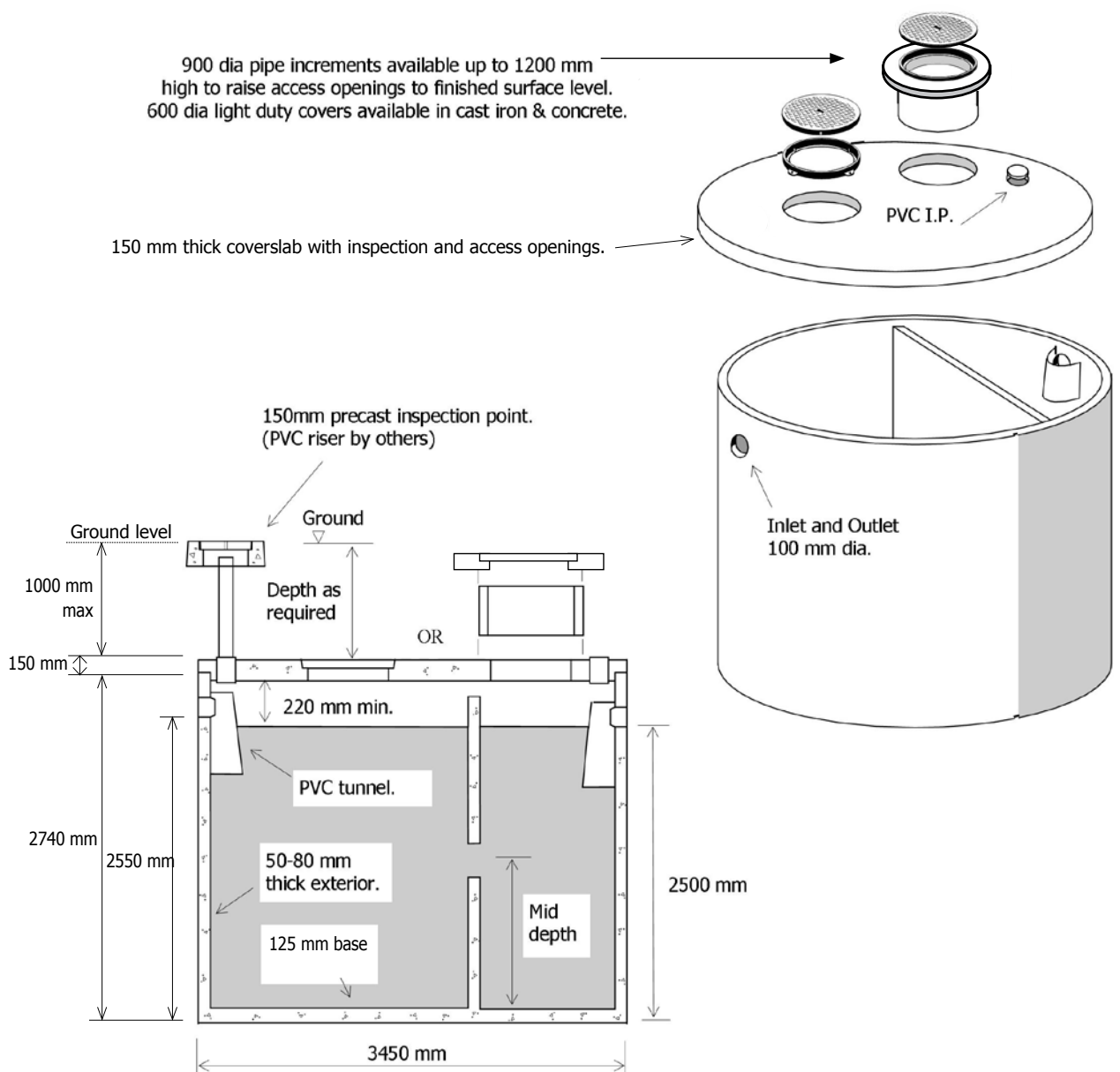
| Item | Approx Mass |
|---|-------------|
| 12,000 litre vertical holding tank base | 5,300kg |
| 12,000 litre vertical holding tank lid | 3,800kg |



The trafficable cover slabs (250 mm thick) have been designed to be buried a maximum of 1750 mm below ground level.

Non-trafficable septic tank • 20,000 litre

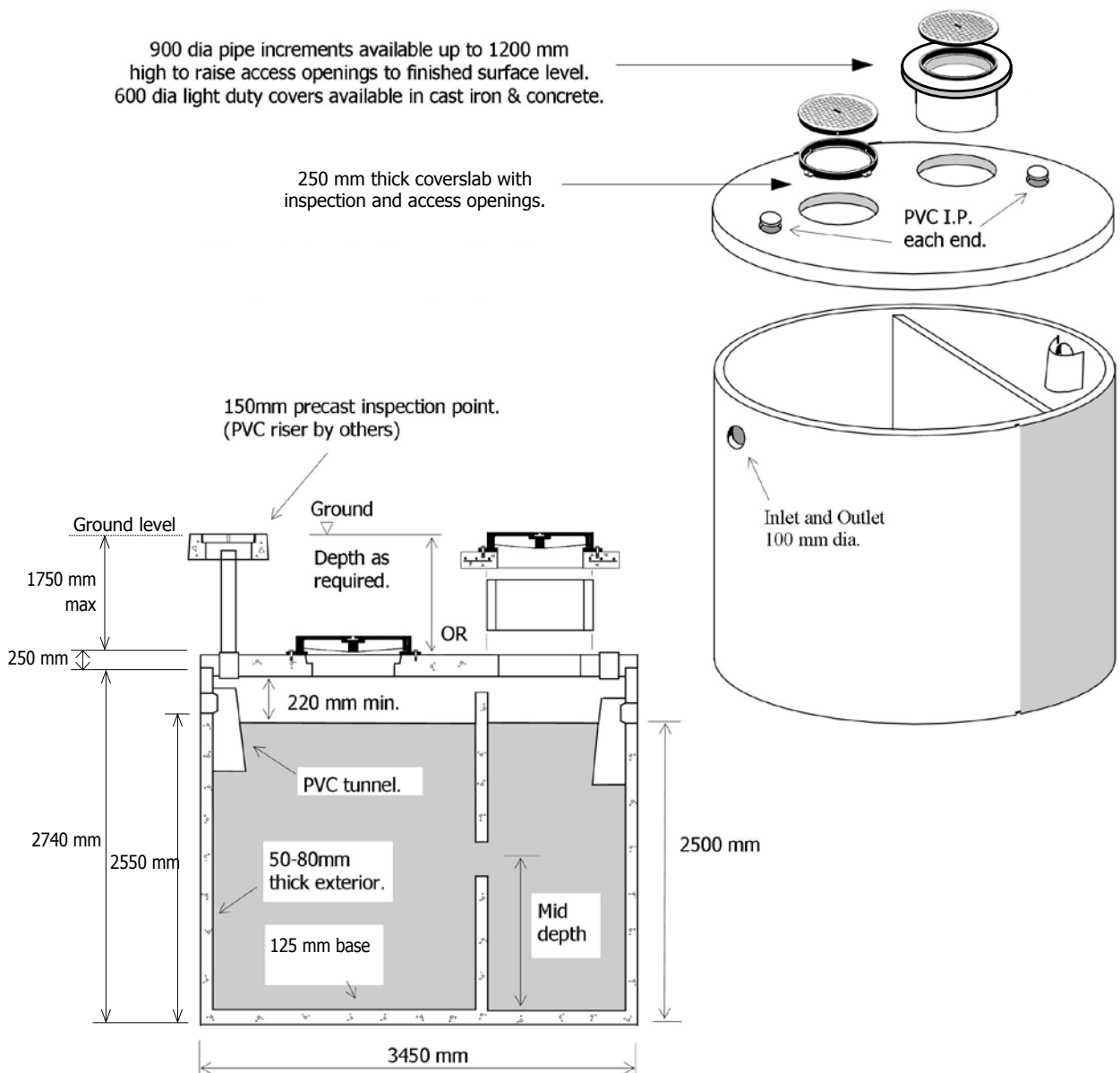
| Item | Approx Mass |
|--|-------------|
| 20,000 litre vertical septic tank base with baffle | 9,400kg |
| 20,000 litre vertical septic tank lid | 3,300kg |



The non-trafficable cover slabs (150 mm thick) have been designed to be buried a maximum of 1000 mm below ground level.

Trafficable septic tank • 20,000 litre

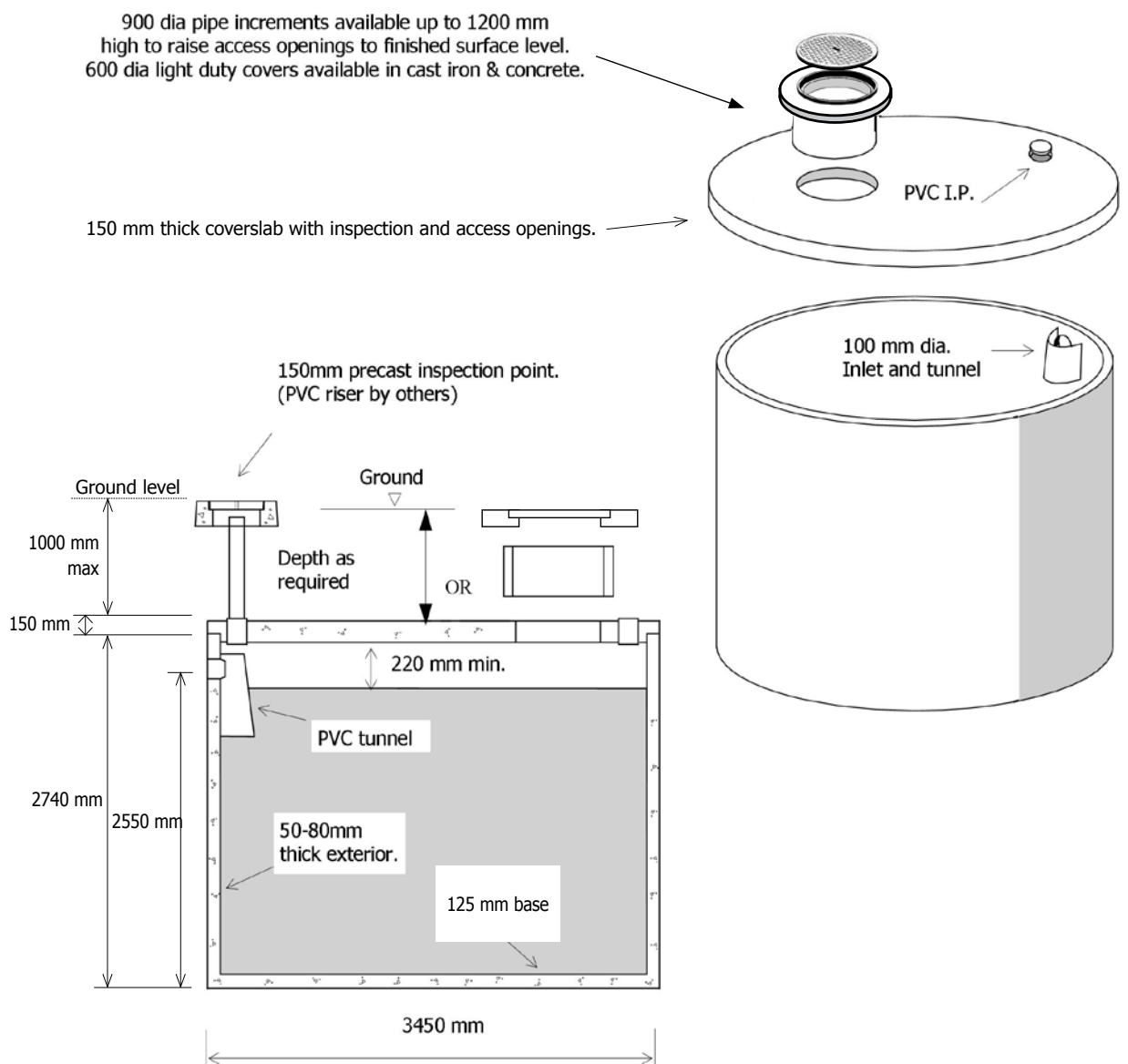
| Item | Approx Mass |
|--|-------------|
| 20,000 litre vertical septic tank base with baffle | 9,400kg |
| 20,000 litre vertical septic tank lid | 5,800kg |



The trafficable cover slabs (250 mm thick) have been designed to be buried a maximum of 1750 mm below ground level.

Non-trafficable vertical holding tank • 20,000 litre

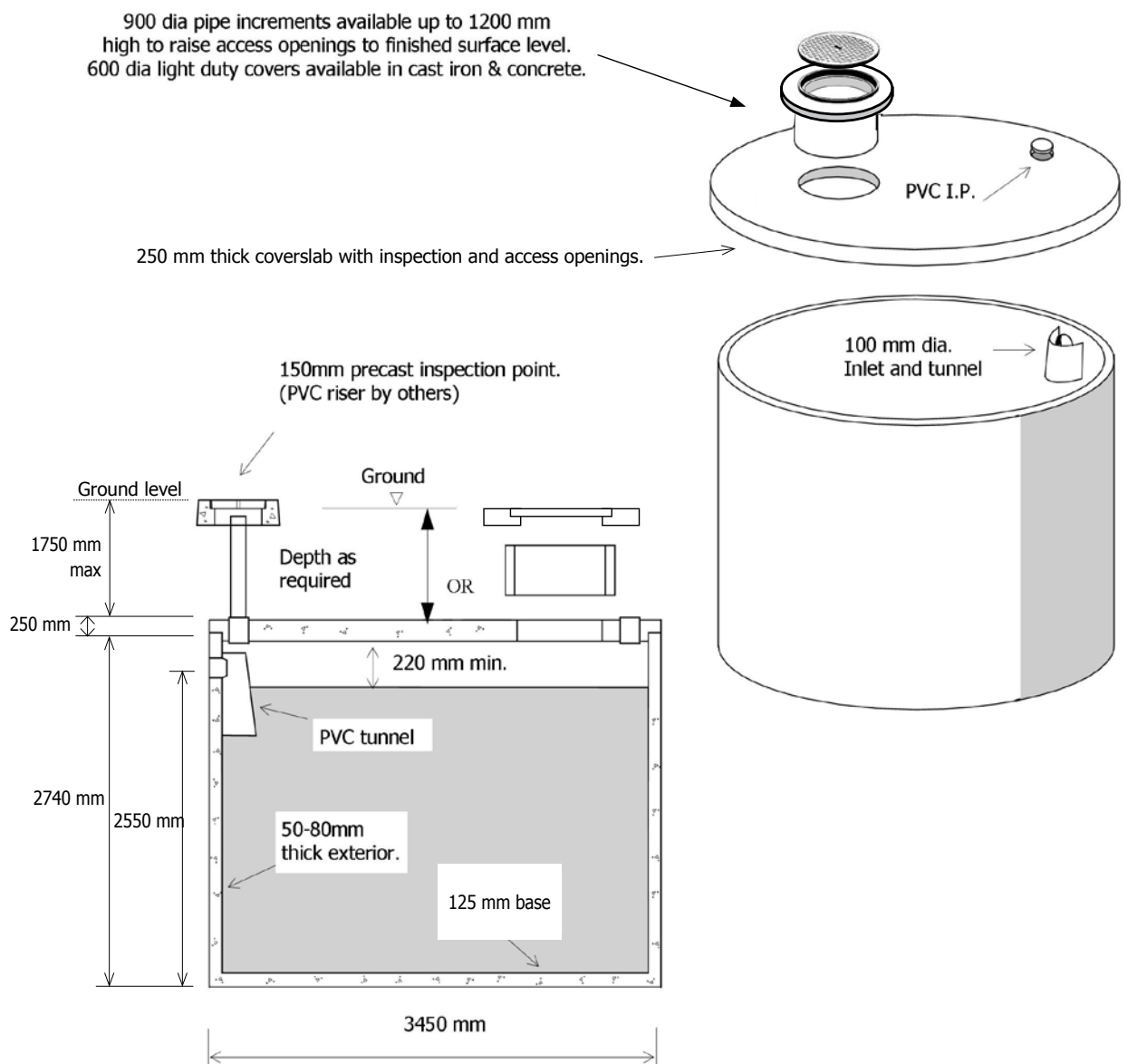
| Item | Approx Mass |
|---|-------------|
| 20,000 litre vertical holding tank base | 7,500kg |
| 20,000 litre vertical holding tank lid | 3,300kg |



The non-trafficable cover slabs (150 mm thick) have been designed to be buried a maximum of 1000 mm below ground level.

Trafficable vertical holding tank • 20,000 litre

| Item | Approx Mass |
|---|-------------|
| 20,000 litre vertical holding tank base | 7,500kg |
| 20,000 litre vertical holding tank lid | 5,800kg |



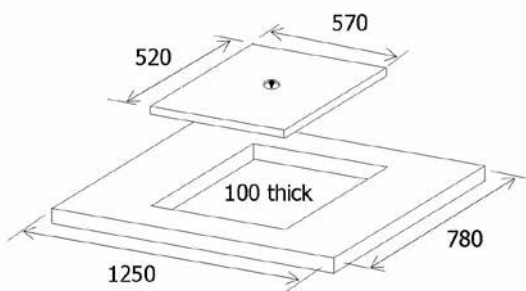
The trafficable cover slabs (250 mm thick) have been designed to be buried a maximum of 1750 mm below ground level.

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

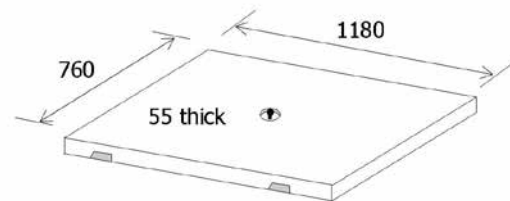
Suitable for 622L pump chamber.



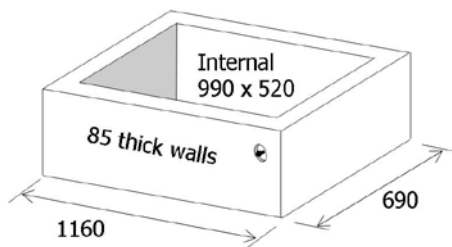
Weight 192kg

TYPE 33

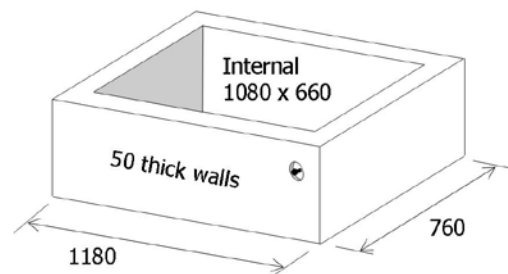
Suitable for all other horizontal tanks.



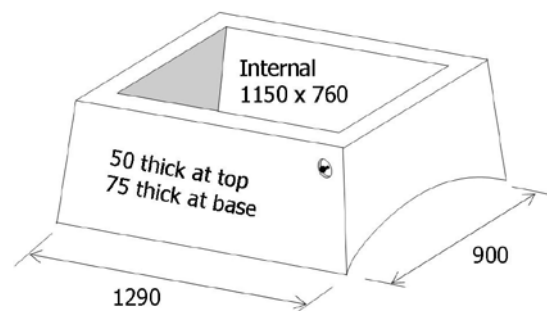
Weight 100kg



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



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

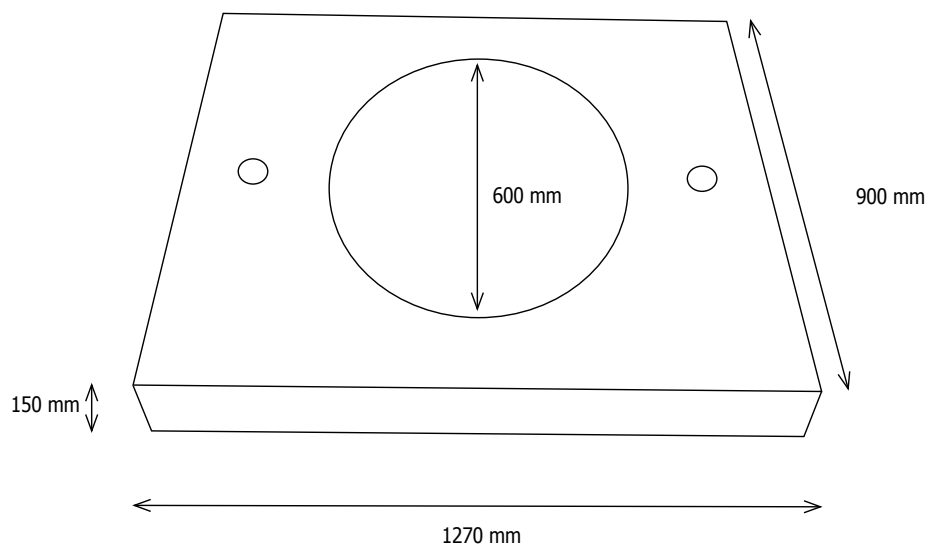


250 mm - weight 235kg
450 mm - weight 320kg
475 mm (4,300 litre) - weight 320kg
495 mm (5,000 litre) - weight 335kg

Small ATSiC coverslab (non-trafficable)

- Precast concrete saddle riser coverslab with 600 mm dia cast iron Class B light duty cover
- Designed to suit 250 mm and 450 mm 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

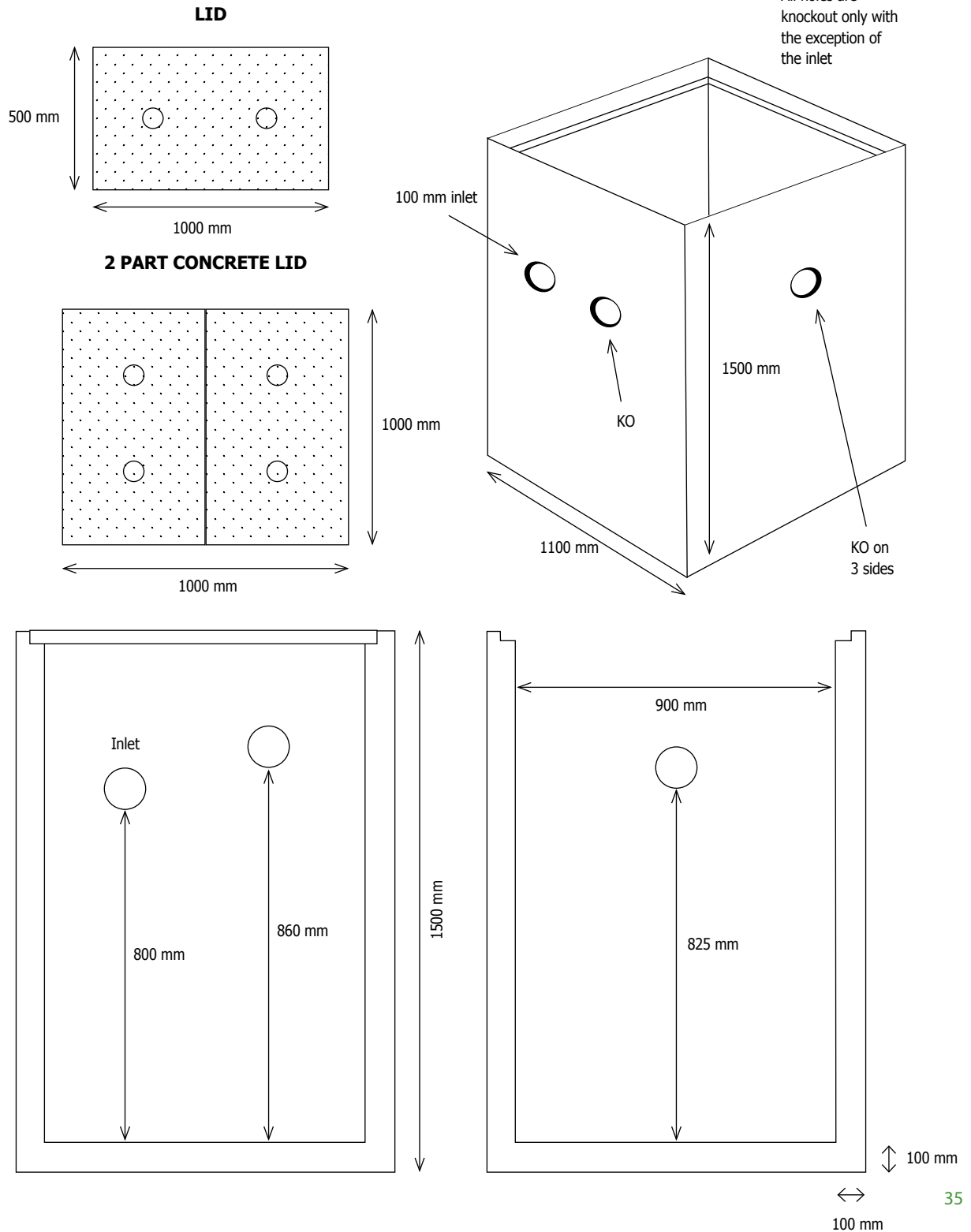
| Item | Approx Mass |
|-----------------------|-------------|
| Septic tank coverslab | 340kg |



Precast pump chamber • 1,100 litre

- Constructed using concrete with plastic fibre

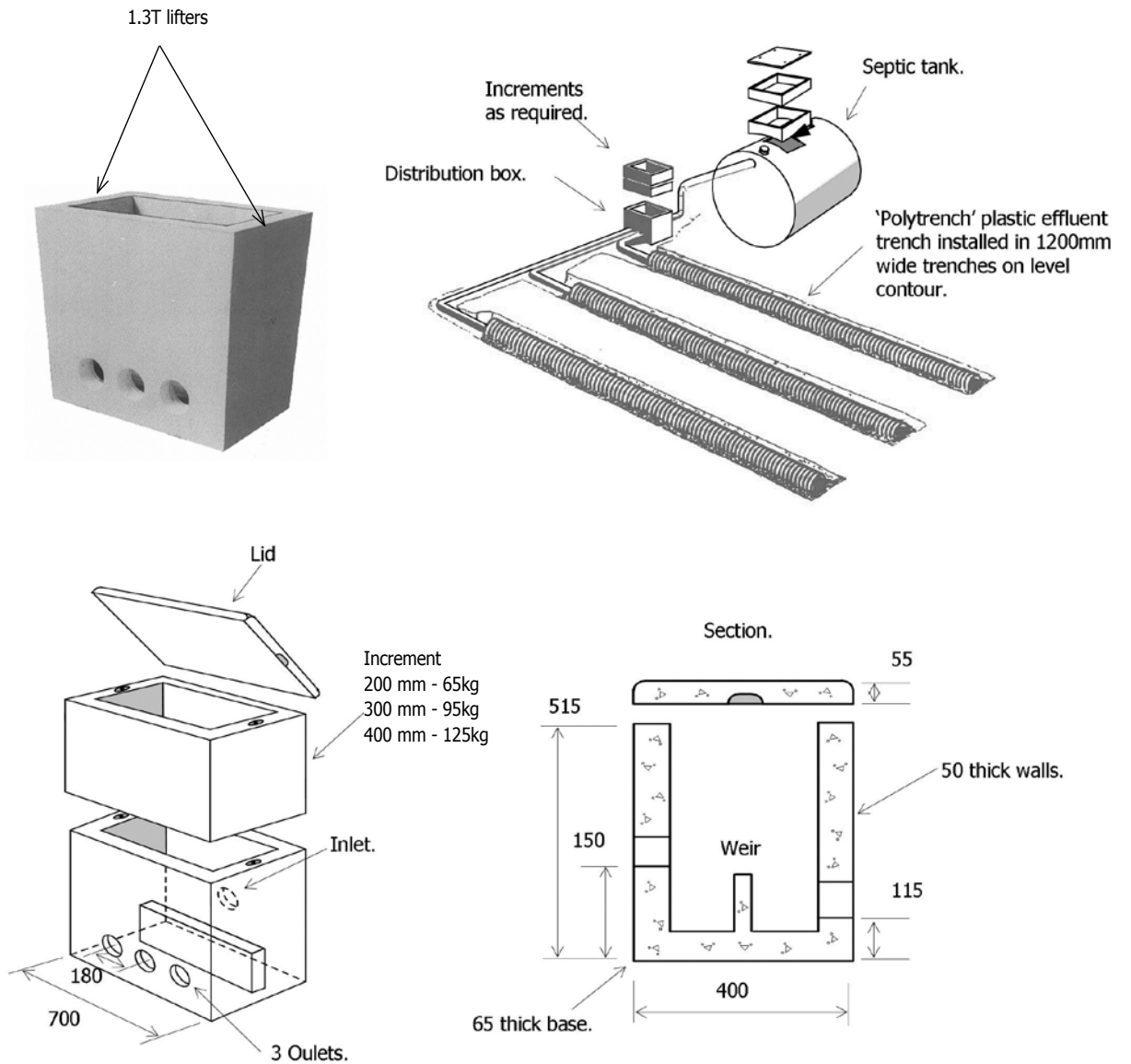
| Item | Approx Mass |
|----------------------------------|-------------|
| 1,100 litre precast pump chamber | 1790kg |



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
- Available in both 1 in 3 out or 1 in 4 out

| 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

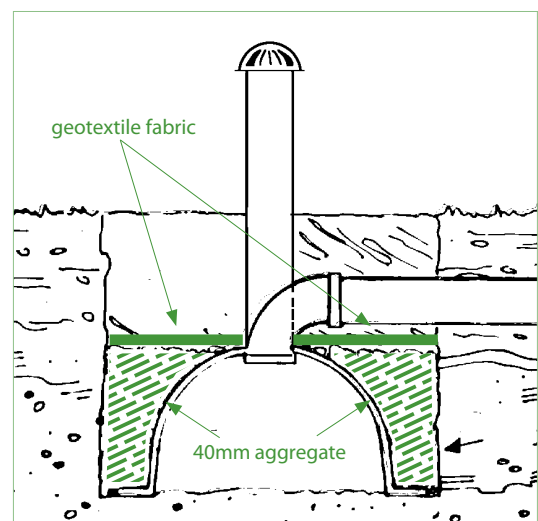
Check with the SA Health Department before starting to lay Polytrench.

- 1 On a level contour excavate a trench to the required length, 1,200 mm 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

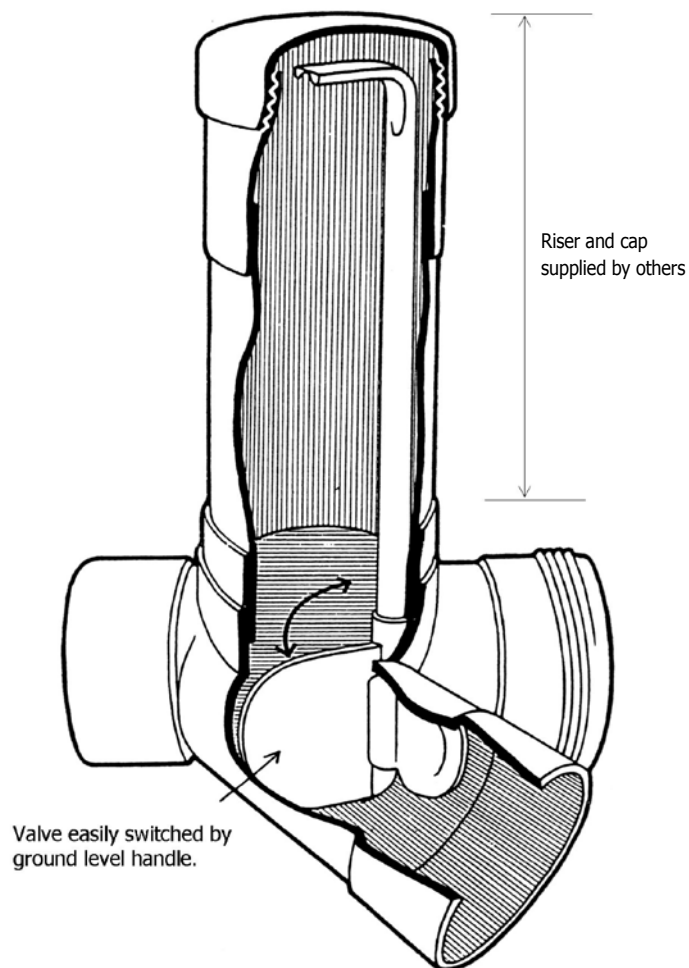
Our Polytrench has interlocking sections, supplied in manageable lengths:

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



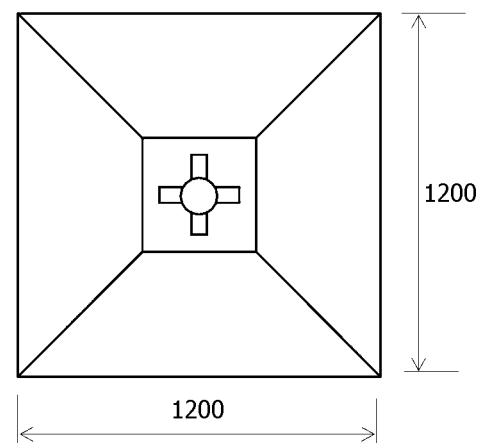
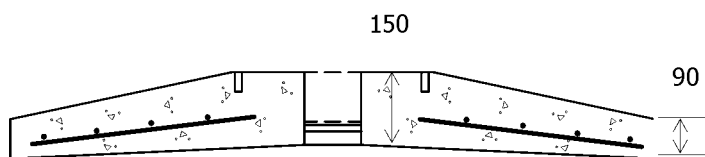
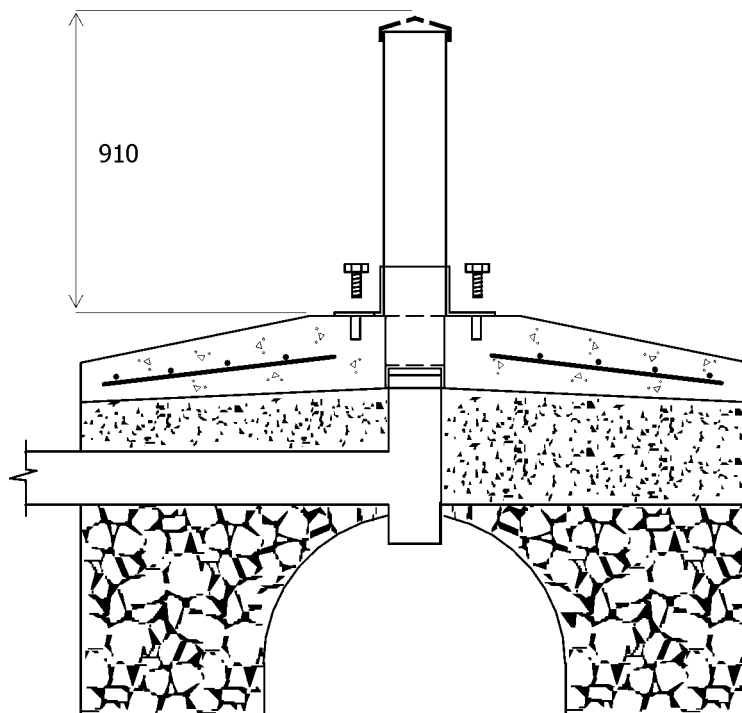
PVC effluent diverter junction

- 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 as a right hand valve



Induct vents

| Item | Approx Mass |
|---------------------------|-------------|
| Induct vent base complete | 410kg |



'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.

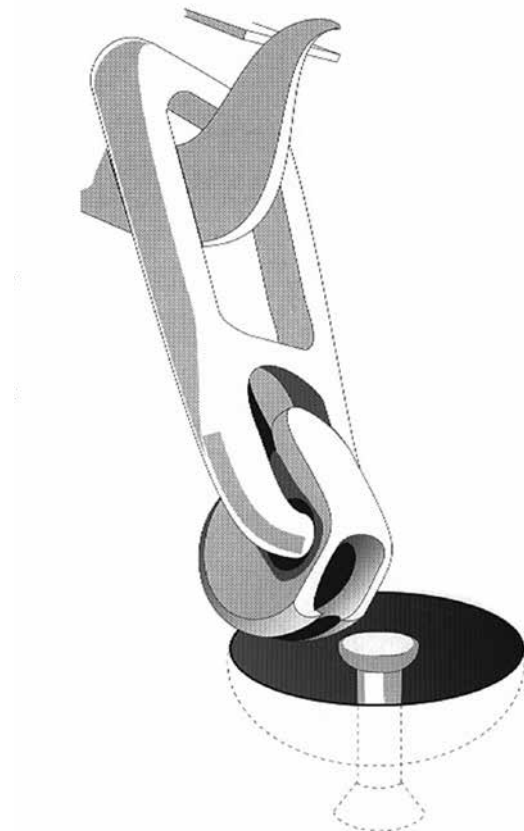
The system uses forged steel anchors which are normally hot dipped galvanised. Each anchor has its capacity, in tonnes, clearly marked on the head to ensure maximum safety on site.

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.

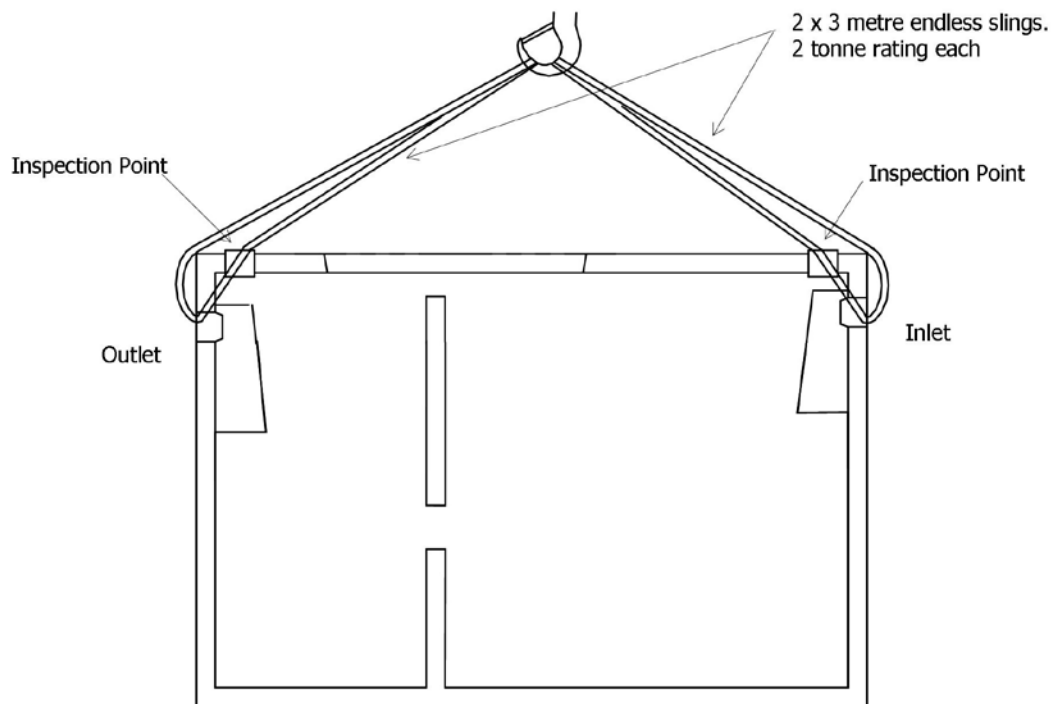
Available in 1.3, 2.5, 5.0 and 10 tonnes.



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” 1620 - 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 EP10 and EP33 superior secondary treatment systems



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

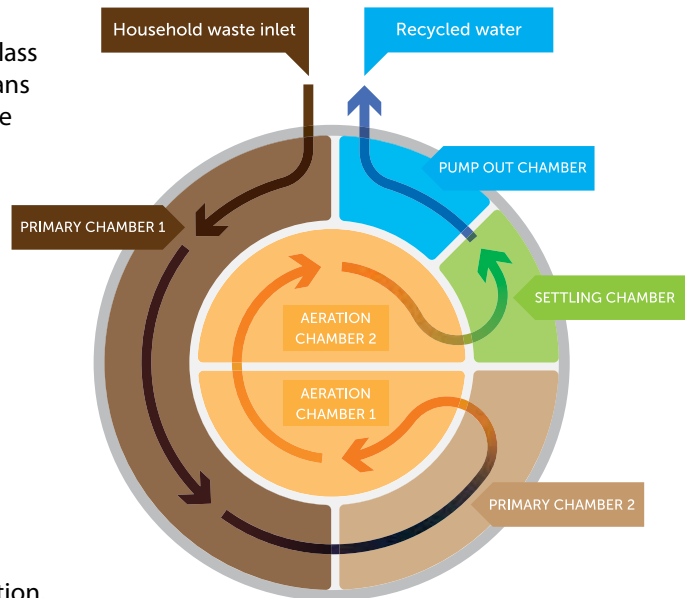
- Guaranteed superior quality • Engineer-designed with a 15 year warranty
- The only SA-manufactured secondary treatment system that's been tested, certified and approved to the Australian Standard (AS/NZS 1546.3:2017) for South Australian conditions. The EP10 achieves an average reduction of 27.1% in nitrogen and 25.1% in phosphorus.



Ri-Treat EP10

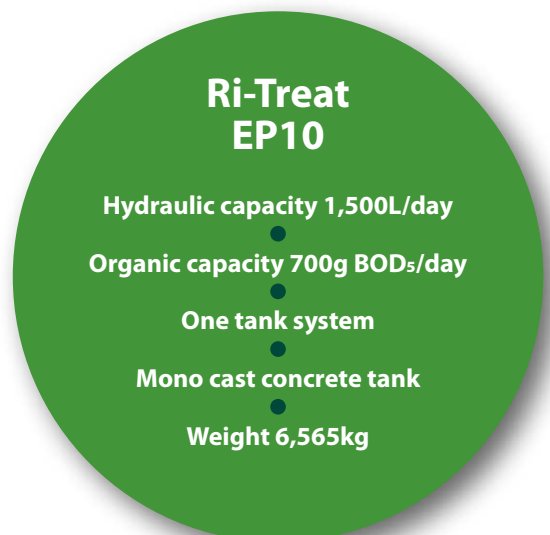
Features of our superior secondary treatment system

- 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, with the added bonus of bristle filters, enhances the purity of the recycled water.
- All irrigation pumps are Lowara stainless steel, and are submersible, quiet, reliable and inexpensive to operate.
- The Japanese Mac100 air blower offers the most reliable and efficient aeration and has a 2 year warranty.
- A 15 year warranty on tank construction.
- Unique features, such as automatic sludge and skimmer returns.



Installation

- 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.
- For more information, see the Installation and Maintenance manual.



What you get

When you purchase a Ri-Treat EP10, you receive:

- An internal alarm panel and external control box.
- Painted and sealed tank tops.
- Delivery of the unit and placement in the excavated hole (at driver's discretion).
- Five council-approved reclaimed water signs.



Installation notes

Important:

- Hole excavation is minimum 3 m x 3 m 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 Health Department regulations state the lid must sit above ground level at the seal.
- The EP10 must be serviced quarterly by an authorised service agent. Ri-Industries can recommend a service agent in your area.
- For more information, see the Installation and Maintenance manual.

Ri-Treat EP10



Ri-Treat EP33

Features of our superior secondary treatment system

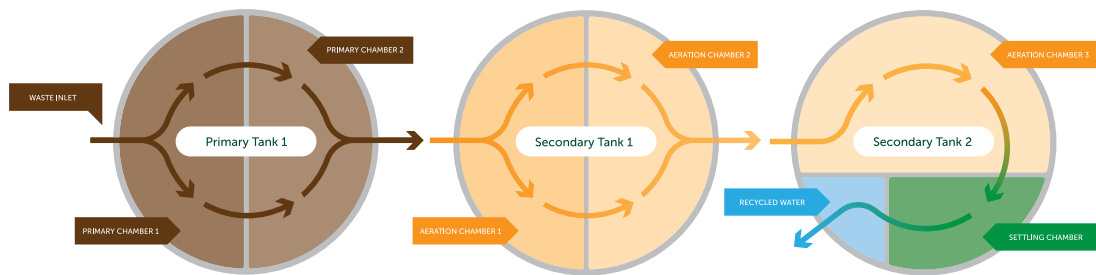
- Consisting of three pre-cast 50 MPa reinforced concrete tanks with no fibreglass or plastic structural components so untreated effluent will not escape into the environment.
- The high quality bio filter medium, with the added bonus of bristle filters, enhances the purity of the recycled water.
- All irrigation pumps are Lowara stainless steel, and are submersible, quiet, reliable and inexpensive to operate.
- The Japanese Mac100 air blower offers the most reliable and efficient aeration and has a 2 year warranty.
- A 15 year warranty on tank construction.
- Unique features, such as automatic sludge and skimmer returns.

**Ri-Treat
EP33**

Hydraulic capacity 5,000L/day

Organic capacity 2310 BOD₅/day

Three pre-cast concrete tanks



Installation

- 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 lids must sit above ground level at the seal.
- For more information, see the Installation and Maintenance manual.

| Ri Treat EP33 specifications (Equivalent persons = 33) | | | |
|--|-----------------|----------------------------------|----------|
| Daily hydraulic load | 5,000L | Width (excavation width min) | 3,500mm |
| Primary tank 1 | 7,800L | Height | 3,160mm |
| Secondary tank 1 | 7,500L | Length (excavation length min) | 10,500mm |
| Secondary tank 2 aeration chamber | 5,200L | Inlet invert (from ground level) | 810mm |
| Secondary tank 2 settlement chamber | 1,550L | Inlet nominal size | 100mm |
| Secondary tank 2 pump out chamber | 450L | Weight (including increment) | |
| Total liquid volume | 22,500L | Primary tank 1 | 6,750kg |
| Air blower | 4 x Mac 100 LPM | Secondary tank 1 | 6,750kg |
| Submersible pump | Lowara DIWA 7 | Secondary tank 2 | 6,960kg |

What you get

When you purchase a Ri-Treat EP33 waste water treatment system, you receive:

- An alarm system with battery back-up, remote monitoring capability and control boxes.
- Painted and sealed tank tops.
- Delivery of the unit and placement in the excavated hole (at driver's discretion).
- Five council-approved reclaimed water signs.



"...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

Installation

Installation of a Ri-Treat EP33

- The Ri-Treat EP33 must be installed by a licensed plumbing contractor.
- The tanks must be level when installed.
- Care must be taken to ensure that excavated material does not fall onto the lid of the tanks, as material may fall into the tanks, clogging the diffusers and irrigation pump.
- The inlet connection is a standard 100mm sewer pipe. The connections between the tanks are 100mm and 40mm. We recommend joining the tanks with a flexible joiner (joiner not supplied).
- The electrical connections are 240 volt for pumps and 12 volt for the alarm panel.
- Backfill around the tanks with gravel or excavated material / good soil. Complete the backfilling with approved granular material such as sand compacted in 150mm layers to a 90% maximum dry density in accordance with AS 3798. Backfilling should be raised evenly around the tanks with a maximum backfill height differential of 400mm at any time. The lids of the three tanks must sit above ground level at the seal. **Rock must not be used as backfill.**
- Tanks to be completely filled with clean water to the operating level.
- **If the tanks are not filled with water they could hydraulically lift out of the ground in wet conditions.**
- **Please refer to the warranty details.**

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 Mahogany | 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 Paperbark | 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 | Geraltion 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."

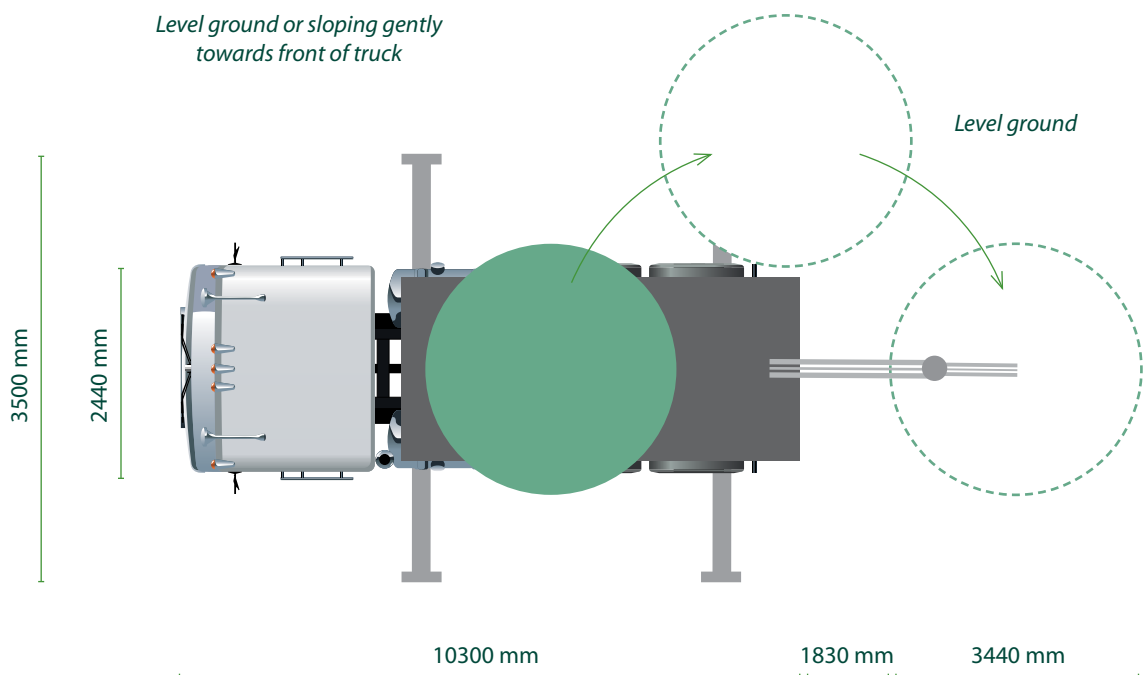
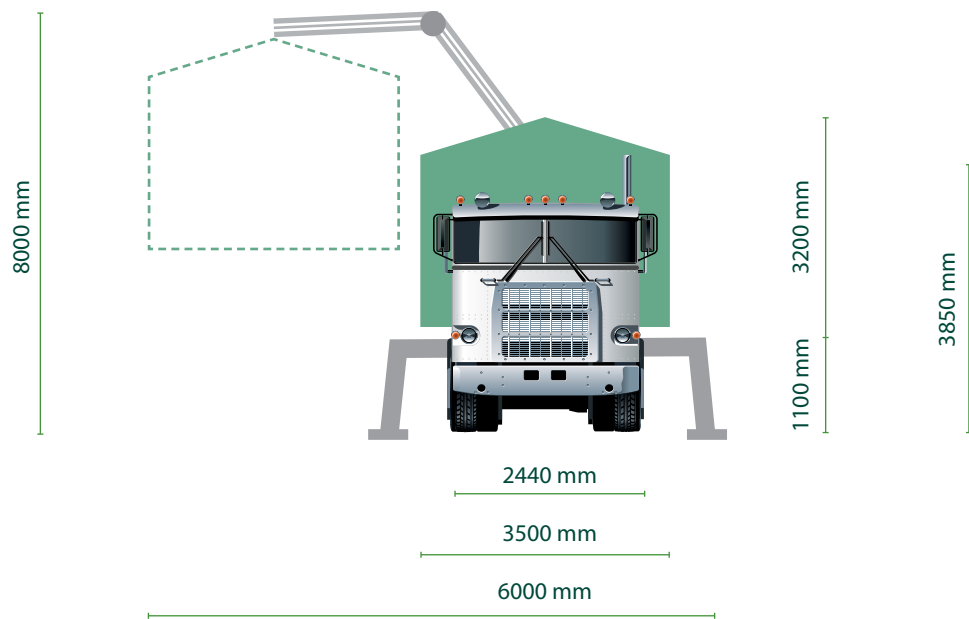
SA plumber

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.



Warranty

The warranty will be void based on failing to install and maintain/operate unit as per the manufacturer's requirements. For example:

- Tank is not installed in strict accordance with the Ri-Industries Installation and Maintenance Manual for the Ri-Treat EP10 or EP33
- Structural modifications in any form
- Aerobic unit is not serviced in accordance with SA Health guidelines for owner/operator operating an onsite wastewater system and in accordance with manufacturers' specified requirements
- Failure to undertake servicing and repairs by an approved SA Health servicing contractor and failure to maintain records for all services and repairs
- Owner/operator overloads the system by failing to meet all guidelines as specified in the General Information section of the Ri-Industries Owner/Operator Operational Manual for the Ri-Treat EP10 or EP33
- Owner/operators use of unsuitable cleaning products as specified in the Ri-Industries Owner/Operator Operational Manual
- Damage caused to the unit from external forces such as but not limited to mother nature storm/fire/flood or planting proximity to tank
- Failure to ensure full details are passed over at the transfer of ownership and/or development of land.

Copies of the Owner/Operator Operational Manual and the Installation & Maintenance Manual can be found online at www.ri-industries.com.au

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

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 75 mm (or more if required to achieve a fall from gutter height) and then back-fill with a layer of 10 mm-12 mm 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:

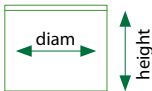
- Underground rain water tanks can be installed down to a maximum of 1750mm below the ground but this requires riser pipes to allow access at ground level and a heavy duty concrete cover.

Specifications

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

| Tank capacity | Diameter | Height | Weight |
|---------------|----------|---------|------------|
| 5,000 litres | 1930 mm | 2240 mm | 2.97 tonne |
| 9,090 litres | 2440 mm | 2460 mm | 3.9 tonne |
| 13,640 litres | 2870 mm | 2440 mm | 5.3 tonne |
| 22,730 litres | 3450 mm | 2740 mm | 7.5 tonne |

BELOW GROUND



The diagram shows a rectangular tank with a horizontal double-headed arrow labeled 'diam' and a vertical double-headed arrow labeled 'height'. Above the diagram, the text 'BELOW GROUND' is written in green.

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

The non-trafficable cover slabs (150 mm thick) have been designed to be buried a maximum of 1000mm below ground level.

The trafficable cover slabs (250 mm thick) have been designed to be buried a maximum of 1750mm below ground level.

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 50 mm 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.

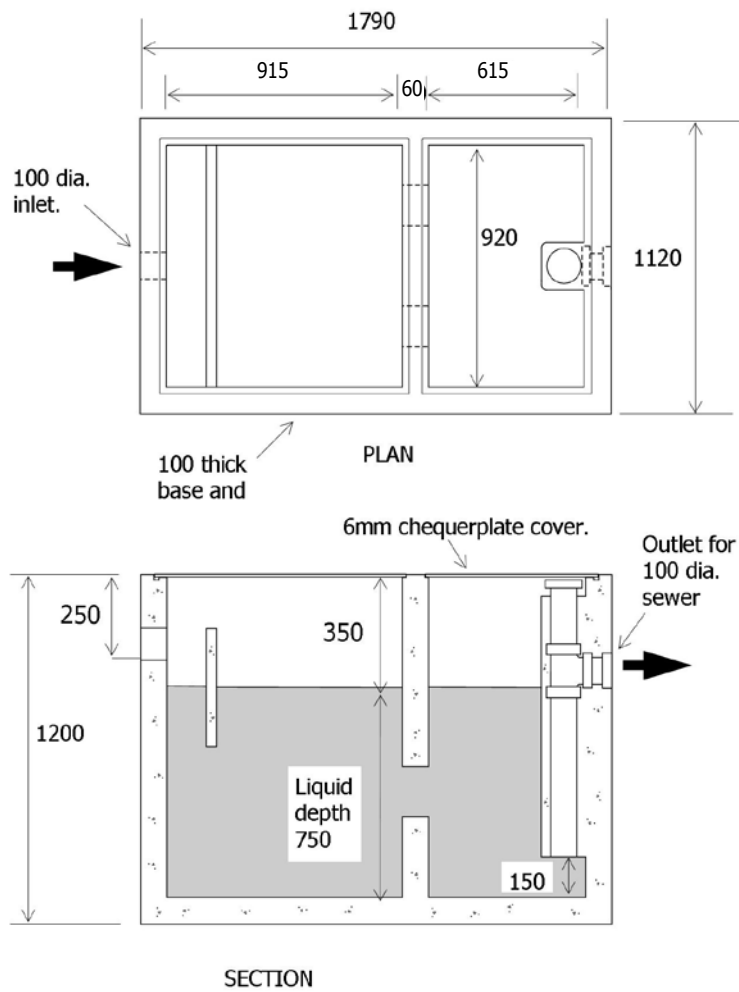
Please note: Where circular gas-tight inspection covers are fitted a minimum of 600 mm vertical clearance between the underside of the cover slab and the static water level in the arrester is necessary to facilitate routine servicing.

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

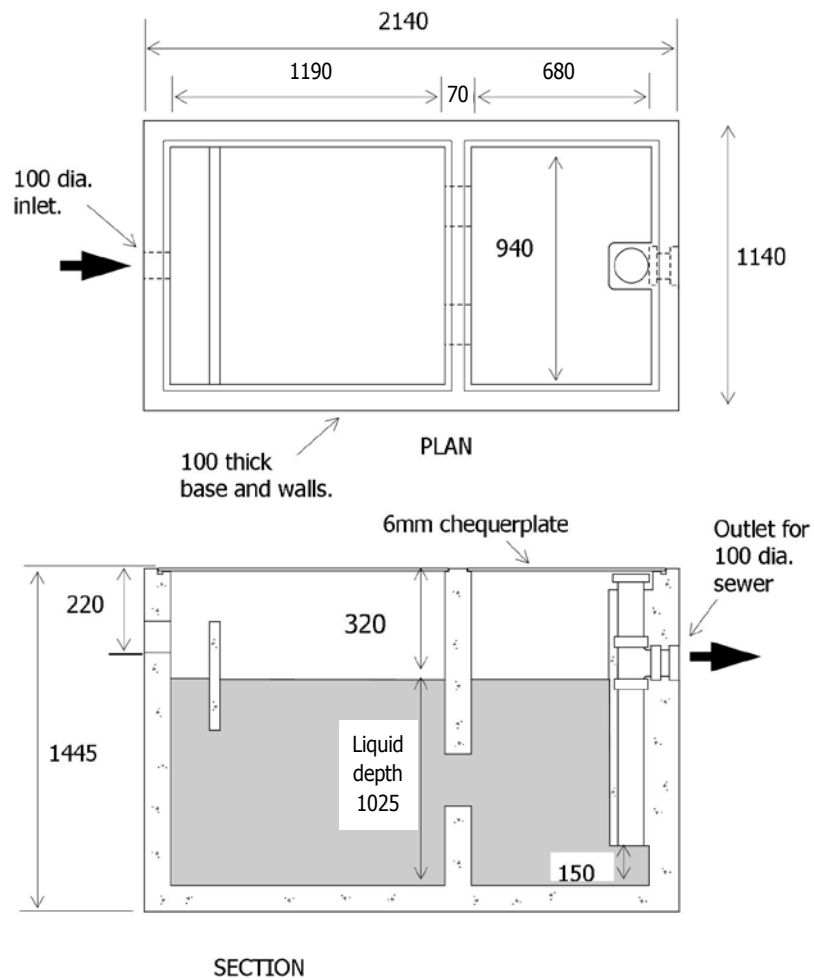
| Item | Approx Mass |
|--------------------|-------------|
| 1,200 mm base unit | 2,200kg |



The tanks have been designed to be buried with the underside of the base unit located 3000 mm maximum below ground level and with the cover slab sitting 50 mm above ground level.

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

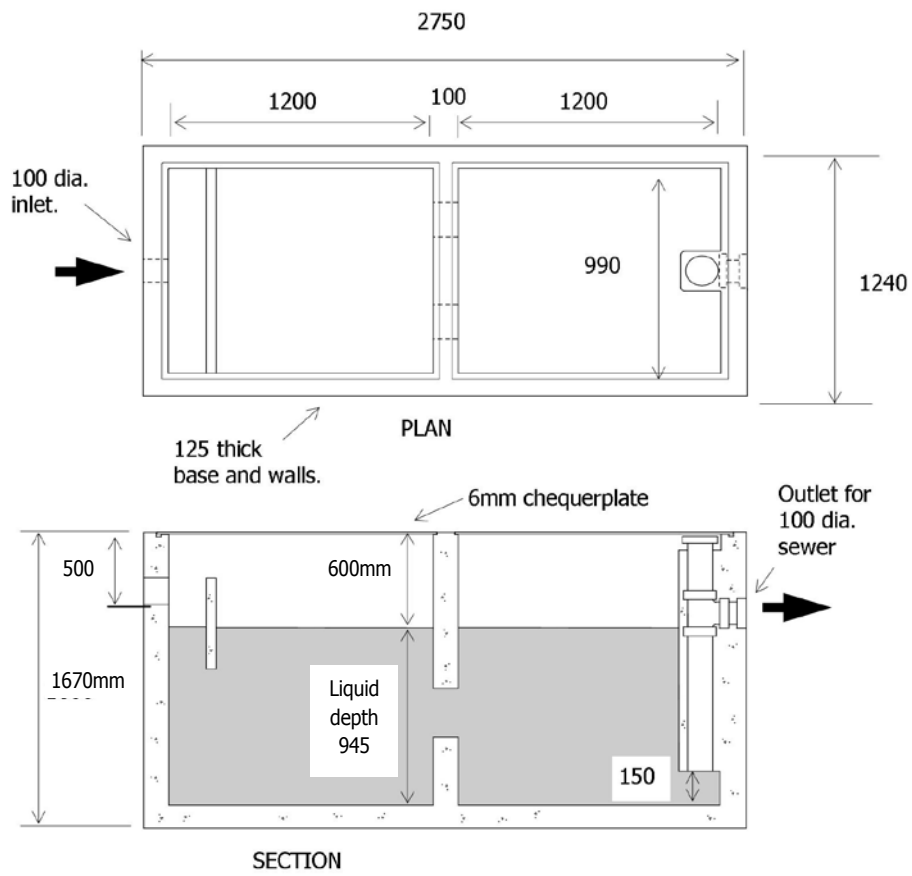
| Item | Approx Mass |
|--------------------|-------------|
| 1,445 mm base unit | 2,900kg |



The tanks have been designed to be buried with the underside of the base unit located 3000 mm maximum below ground level and with the cover slab sitting 50 mm above ground level.

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

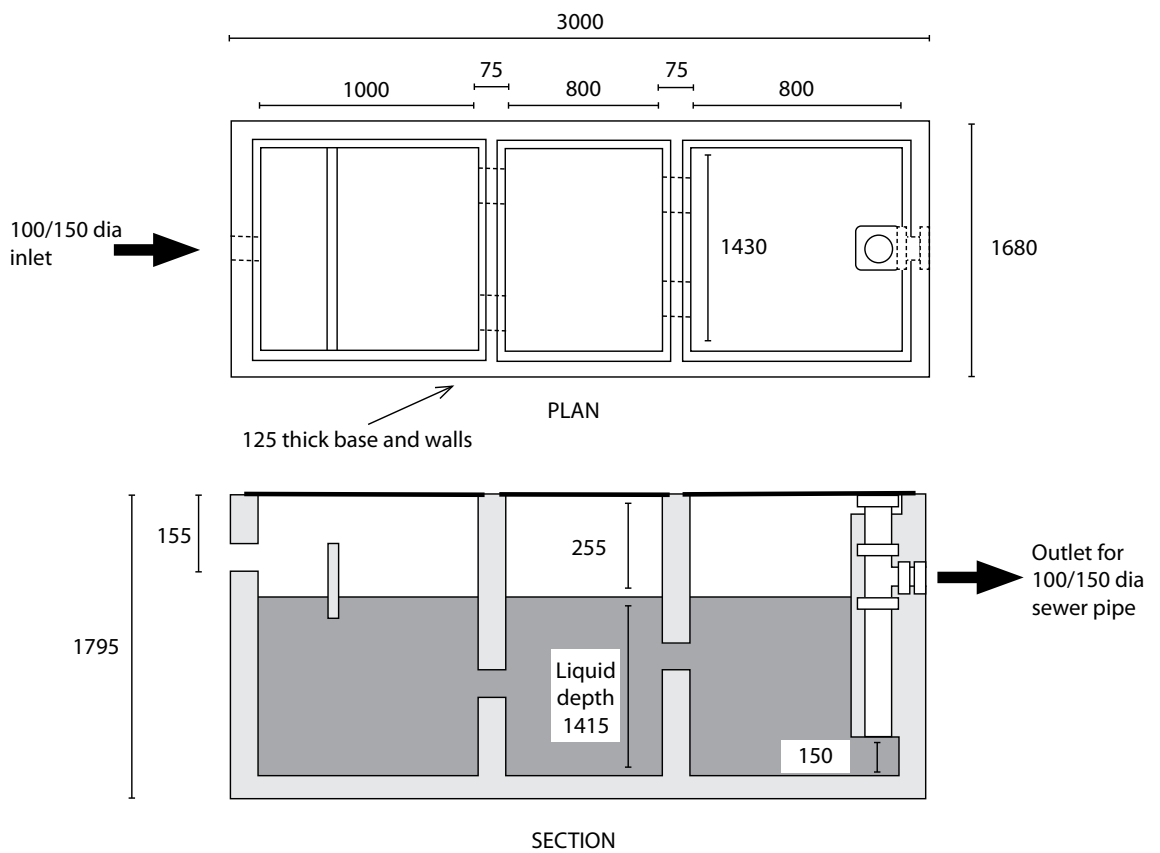
| Item | Approx Mass |
|-------------------|-------------|
| 1,670mm base unit | 5,150kg |



The tanks have been designed to be buried with the underside of the base unit located 4000mm maximum below ground level and with the cover slab sitting 50mm above ground level.

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

| Item | Approx Mass |
|--------------------|-------------|
| 1,795 mm base unit | 7,300kg |



The tanks have been designed to be buried with the underside of the base unit located 4000 mm maximum below ground level and with the cover slab sitting 50 mm above ground level.

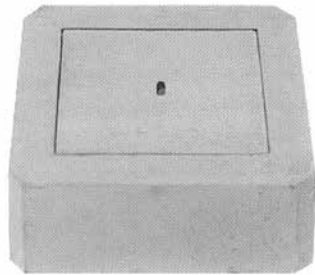
Inspection openings



Industries

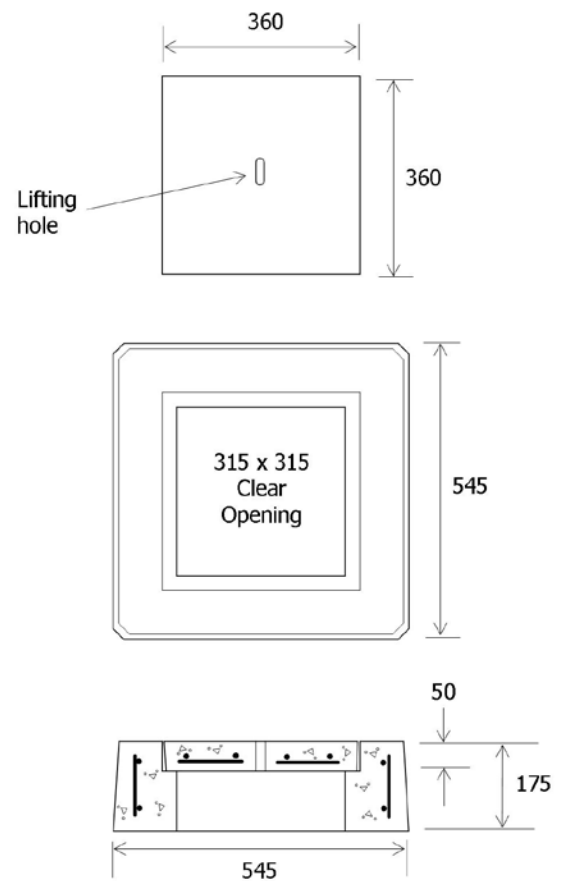
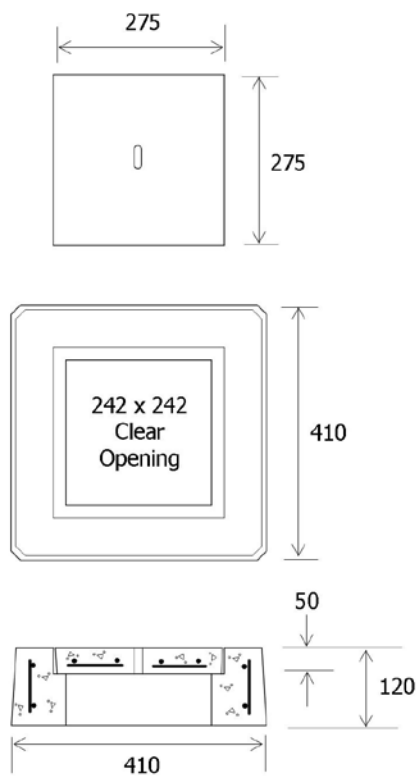
Precast concrete inspection cover

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



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

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

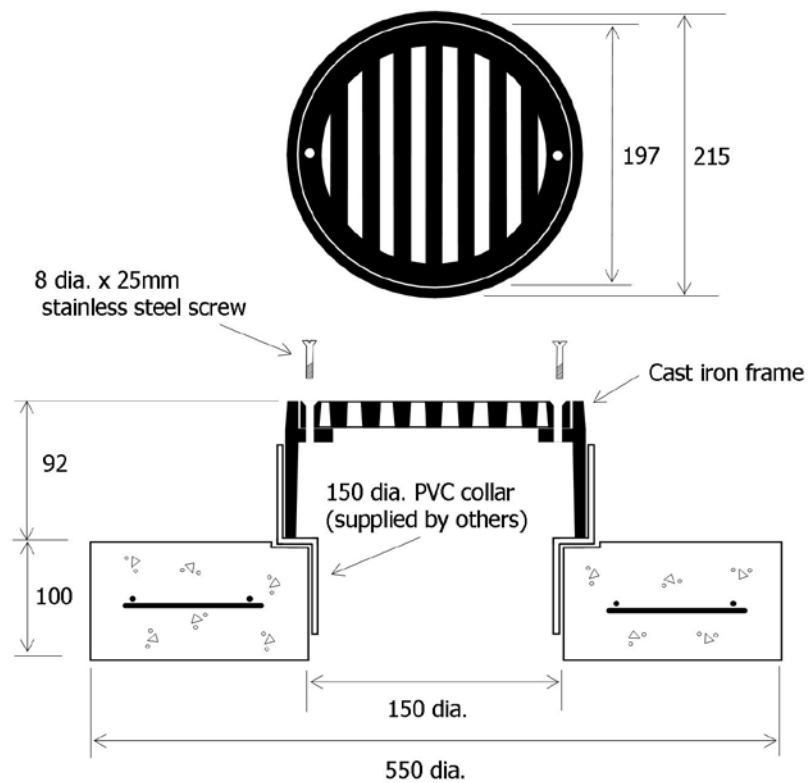


Grated stormwater collection point

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

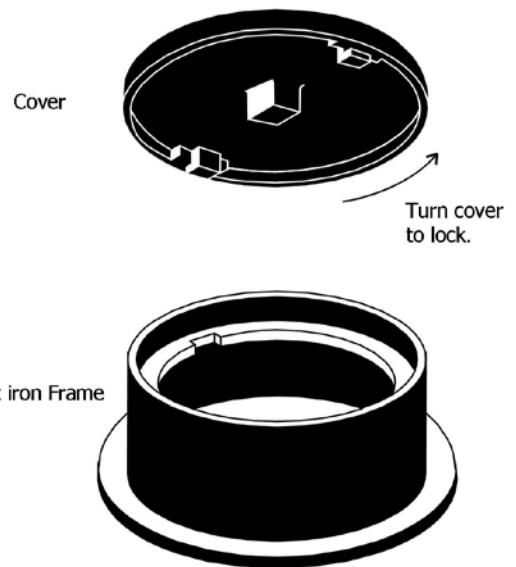
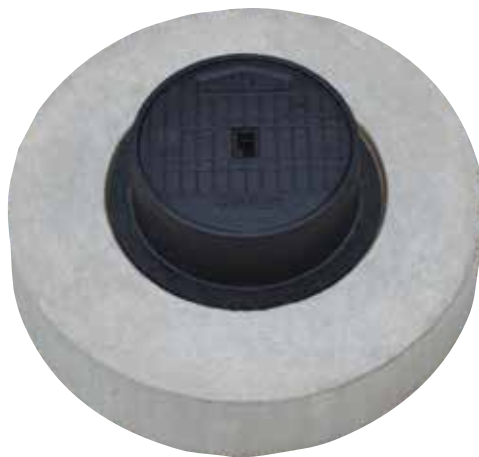


| Item | Approx Mass |
|-----------------|-------------|
| Grate and frame | 5kg |

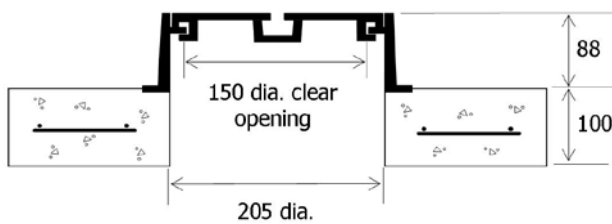


Flanged I.O. cover and frame • Type 1

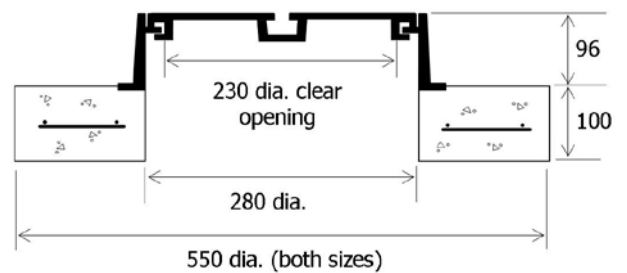
- Suitable for use in concreted and paved areas
- Available in two sizes to suit 100 mm or 150 mm risers
- Cast iron frame and cover are tar dipped
- Available in bolt down
- Minimum concrete strength 32 MPa at 28 days
- Available for sewer or stormwater



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

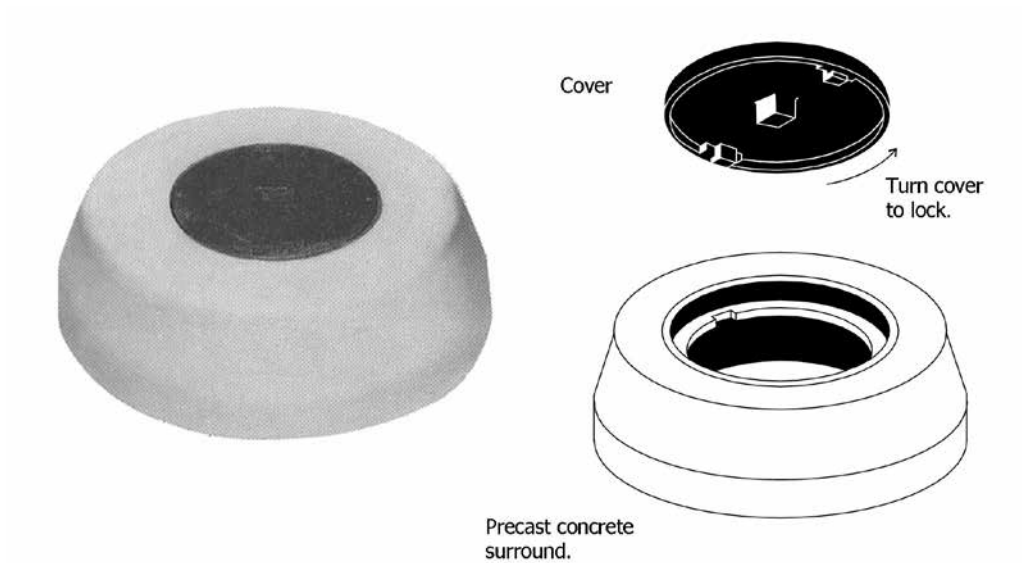


| Item | Approx Mass |
|---------------|-------------|
| Cover & frame | 14.5kg |
| Support block | 40kg |

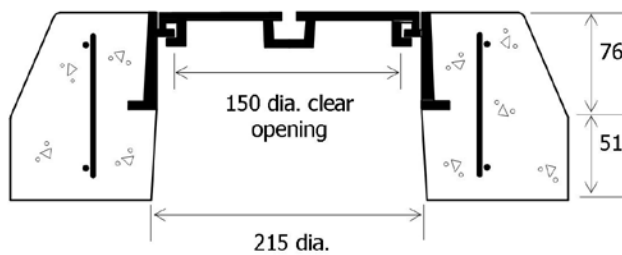


I.O. cover and frame • Type 2

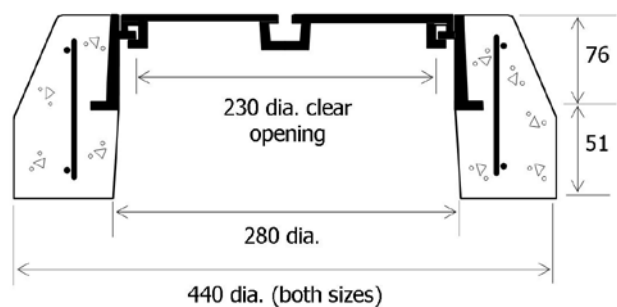
- Suitable for use in paved, bituminised and grasses areas
- Available in two sizes to suit 100 mm or 150 mm risers
- Cast iron frame and cover are tar dipped
- Available in bolt down
- Minimum concrete strength 32 MPa at 28 days
- Available for sewer or stormwater



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



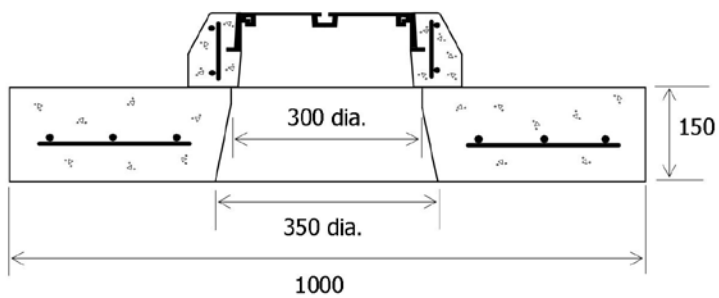
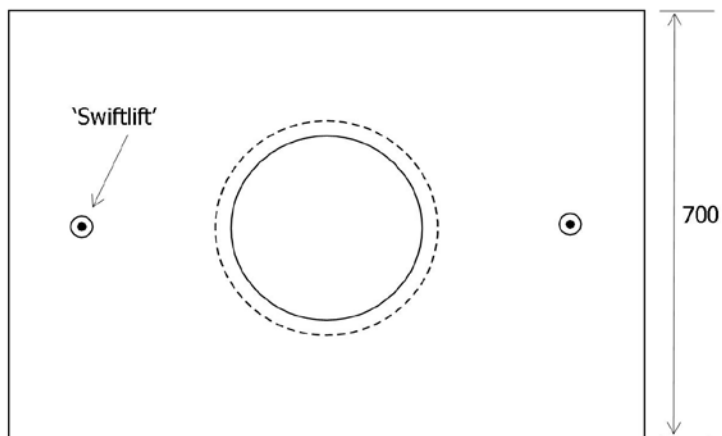
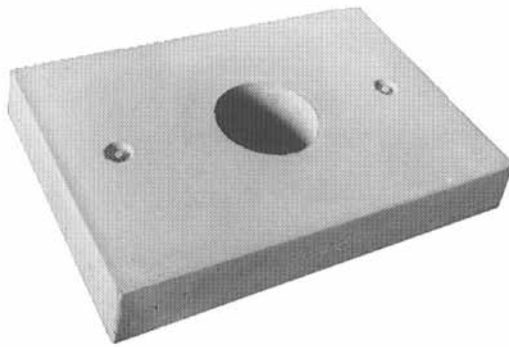
| Item | Approx Mass |
|------------------|-------------|
| Cover & surround | 29kg |



Precast concrete flushing point support block

- For heavy surface installation with common effluent drains
- Will suit both 100 mm and 150 mm 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 | 185kg |
| 600 x 600 | 100kg |



Cast iron grates & frames

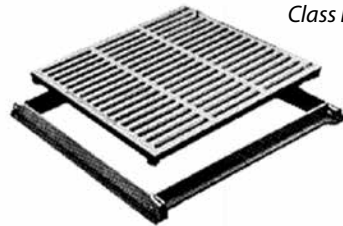
Sump grates standard sizes

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

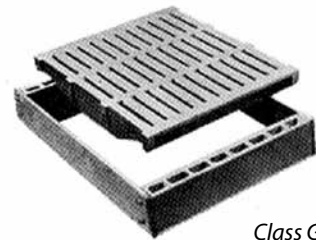
Non standard sizes available on request



Class D



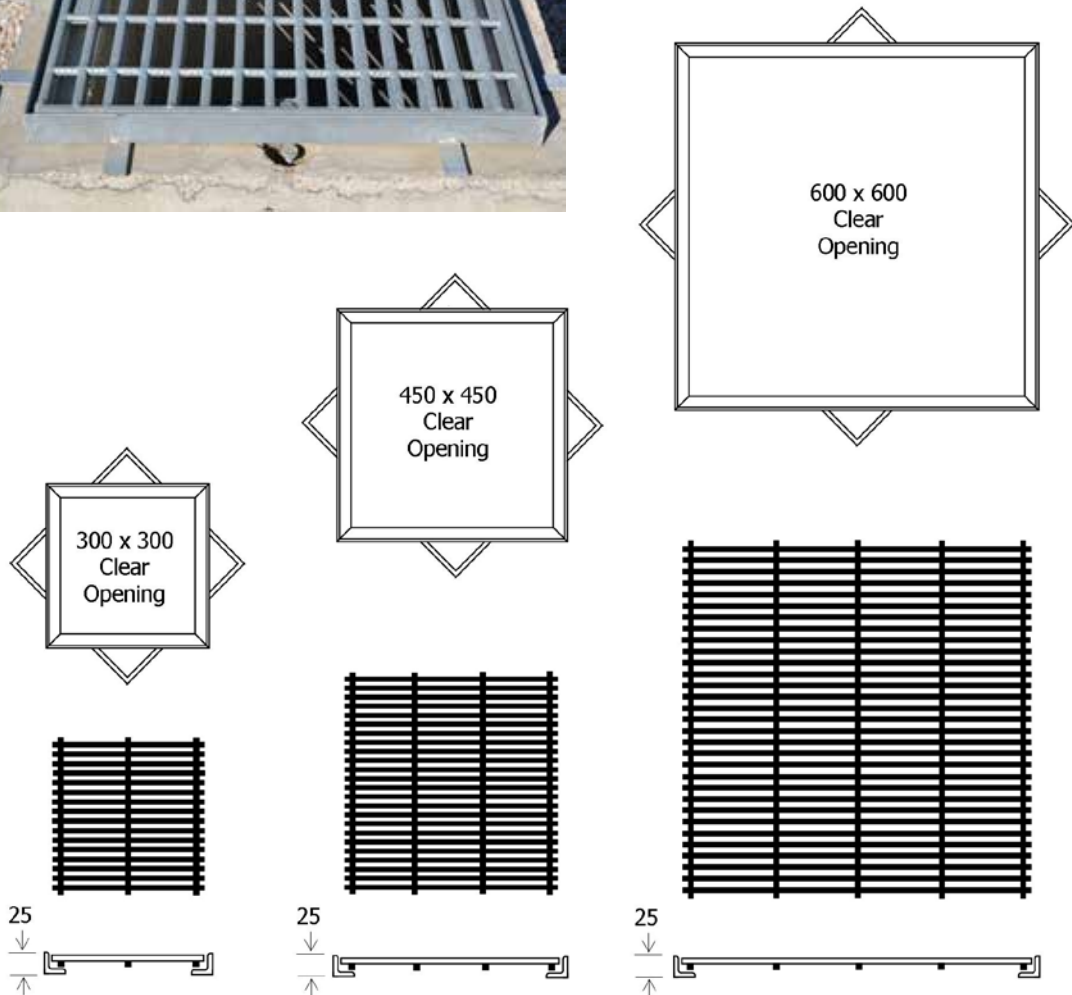
Class B



Class G

Light duty galvanised grates & frames

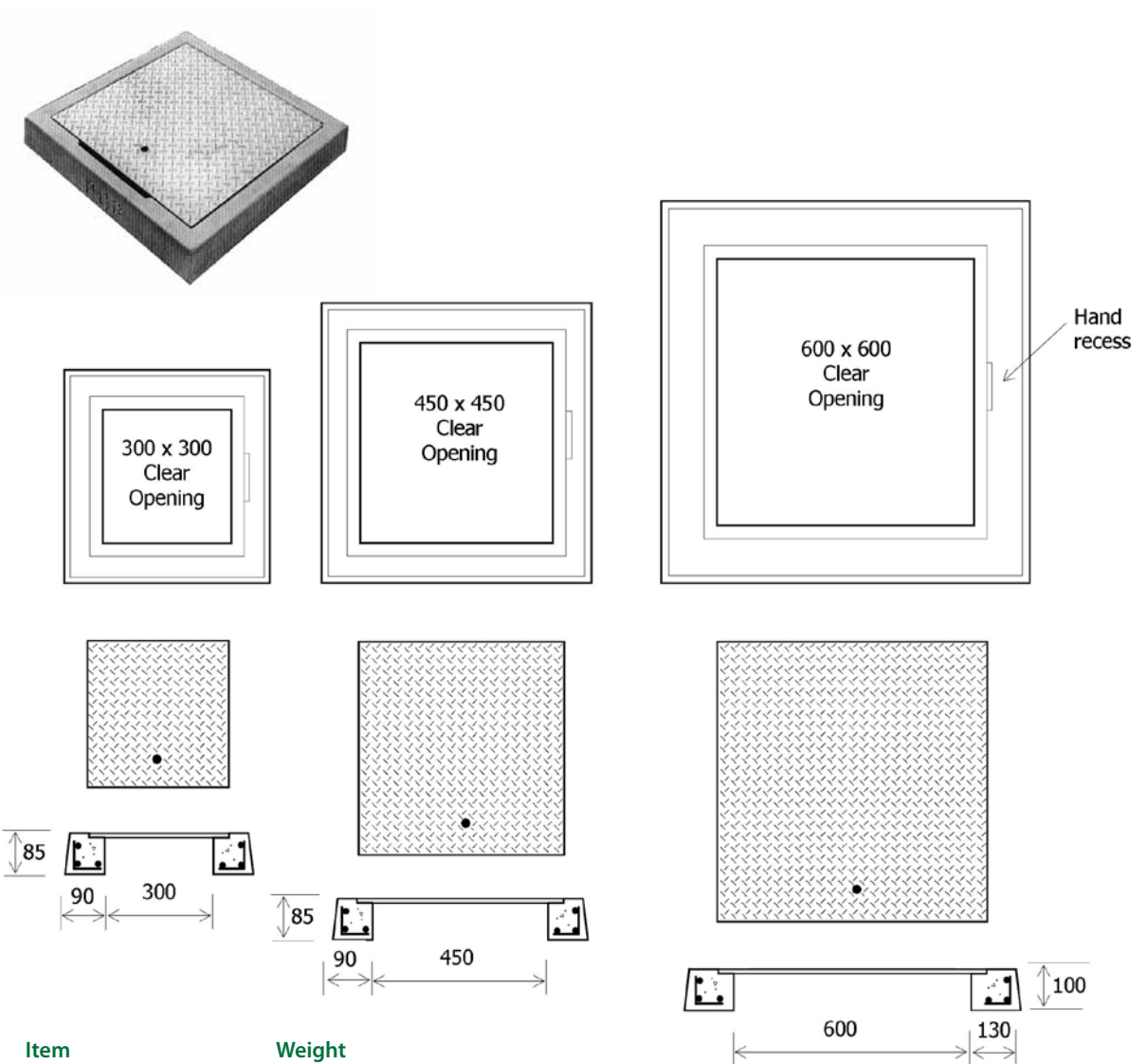
- Also available for heavy duty application
- Hot dipped galvanised after fabrication
- Suitable for use in concreted or bitumised areas servicing pedestrian traffic
- Special sizes to suit other pits supplied to order



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

Chequerplates & sump finishing collars

- 6 mm 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 |

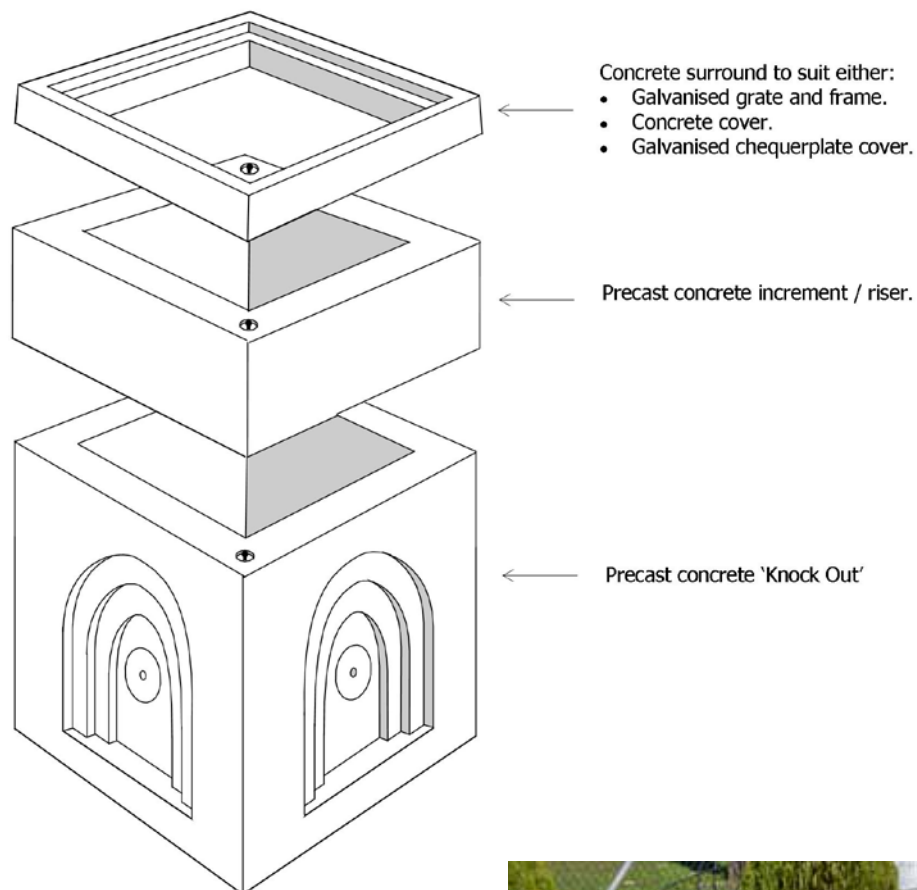
| Item | Weight |
|--------------------|--------|
| 450 x 450 Plate | 13.5kg |
| 450 x 450 Surround | 21.5kg |

| 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 |
|--------|---------|--------|-------------|
| 300 mm | 300 mm | 300 mm | 120kg |
| 450 mm | 450 mm | 500 mm | 420kg |
| 600 mm | 600 mm | 600 mm | 570kg |
| 600 mm | 600 mm | 900 mm | 775kg |





Industries

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that enhance the environment**

Ri-Industries was established 1947.
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in all that we do, which is why South Australian
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