



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



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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

618 South Rd, Angle Park, SA 5010
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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

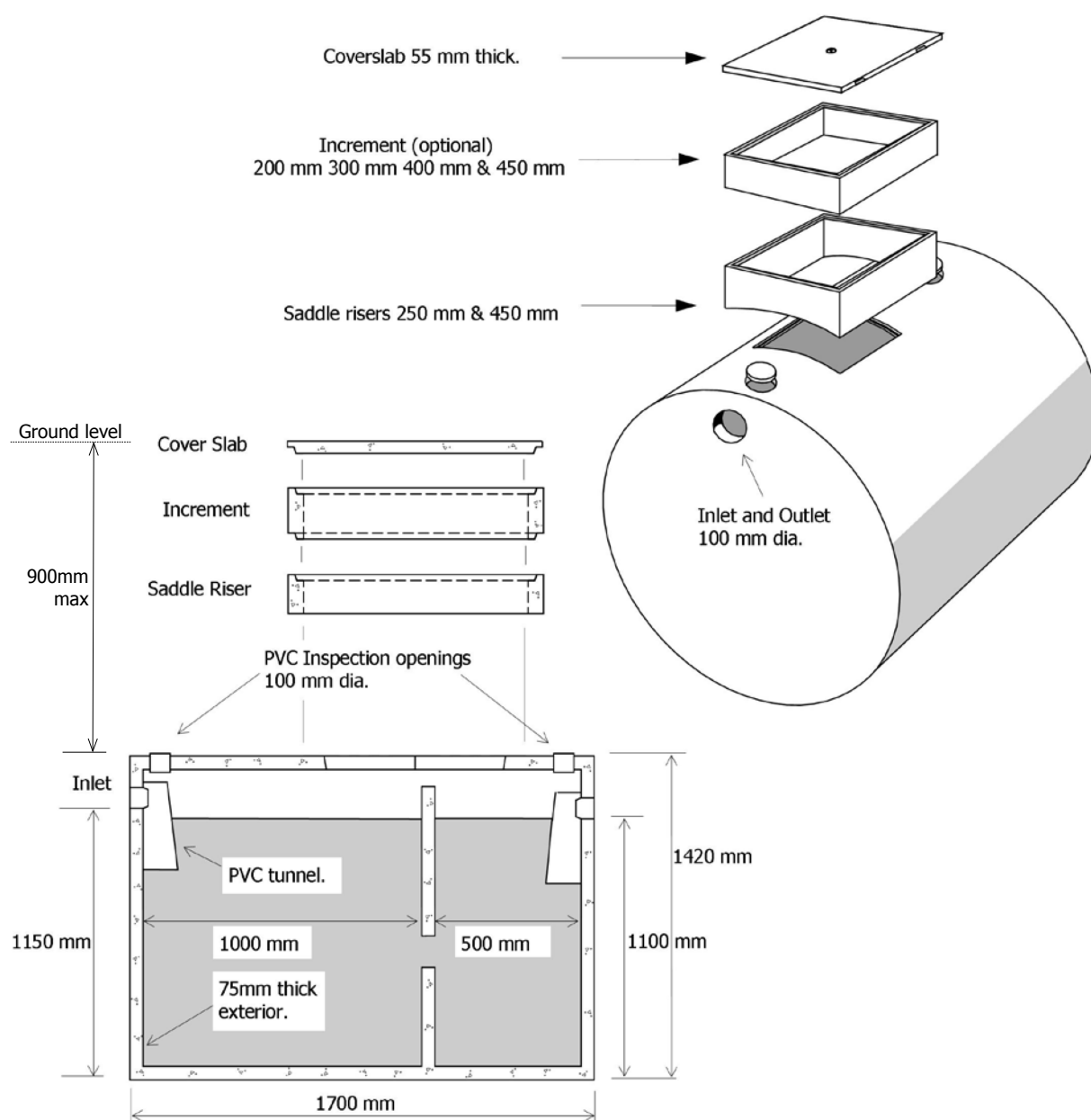
Installation and design of septic systems are regulated by the SA Health Department. Local Council Health Inspectors will have relevant area specific information.

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

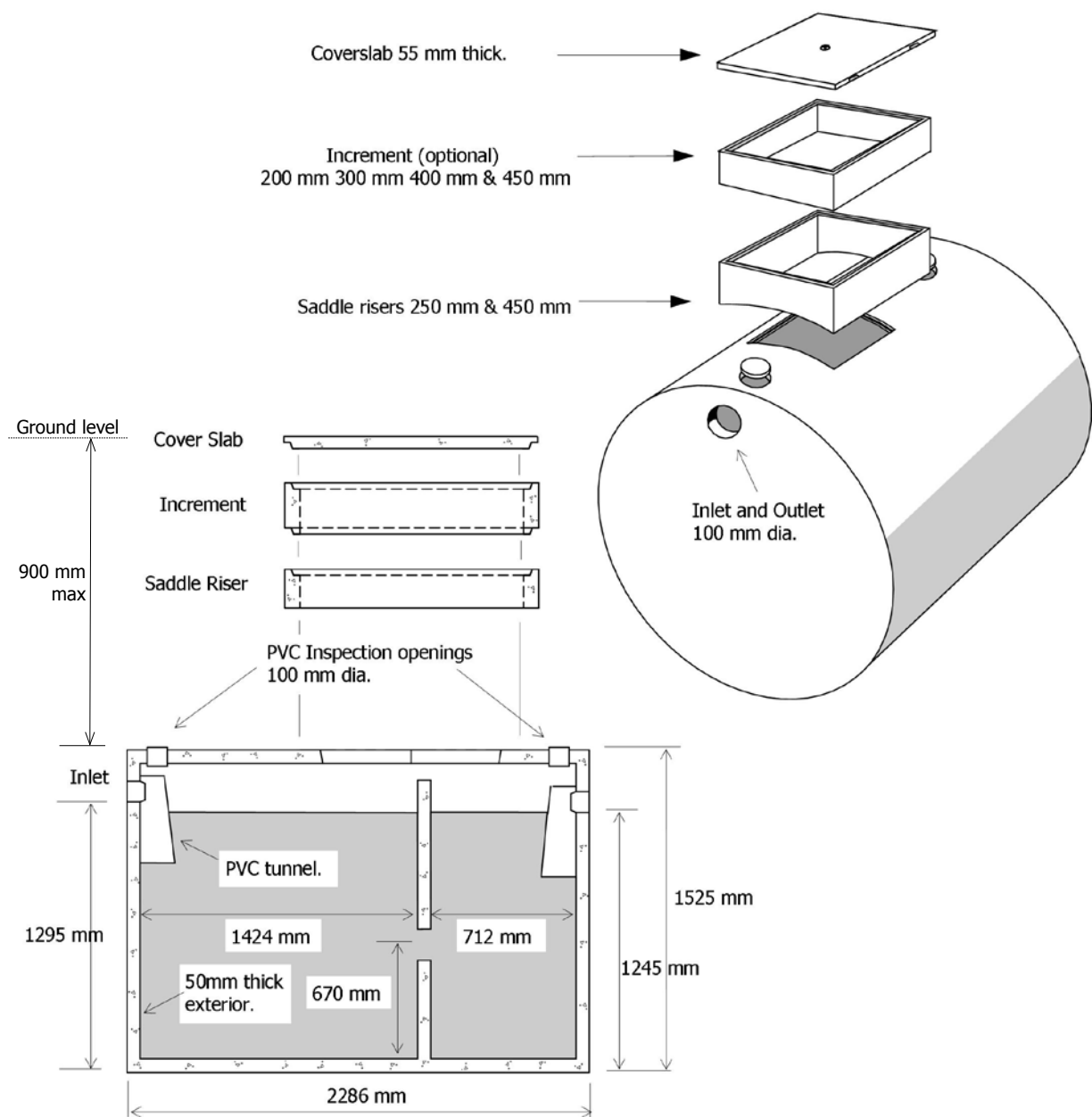
Item	Approx Mass
1,620 litre septic tank	1,875kg



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

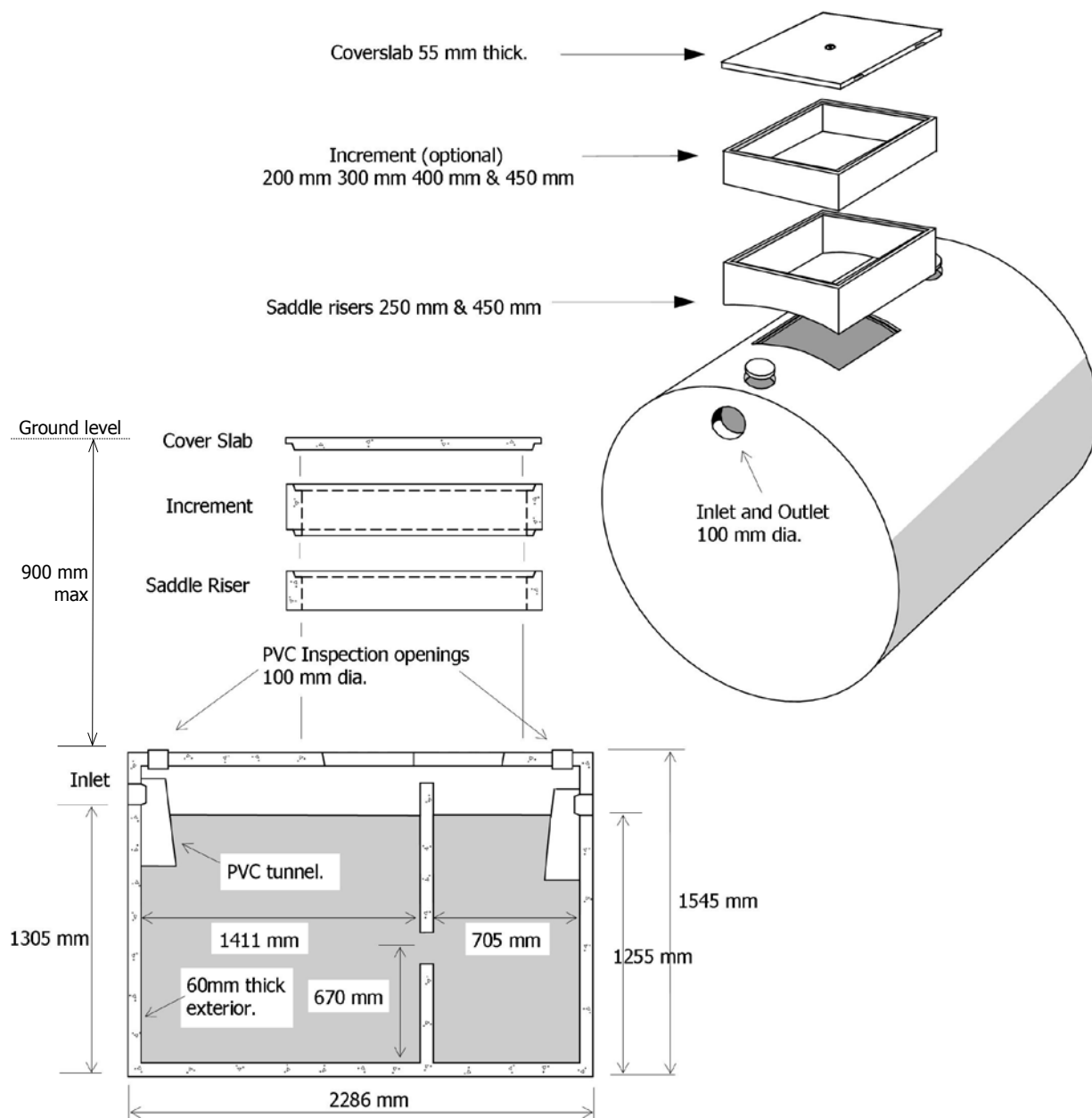
Item	Approx Mass
3,000 litre septic tank (50mm wall)	2,000kg



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

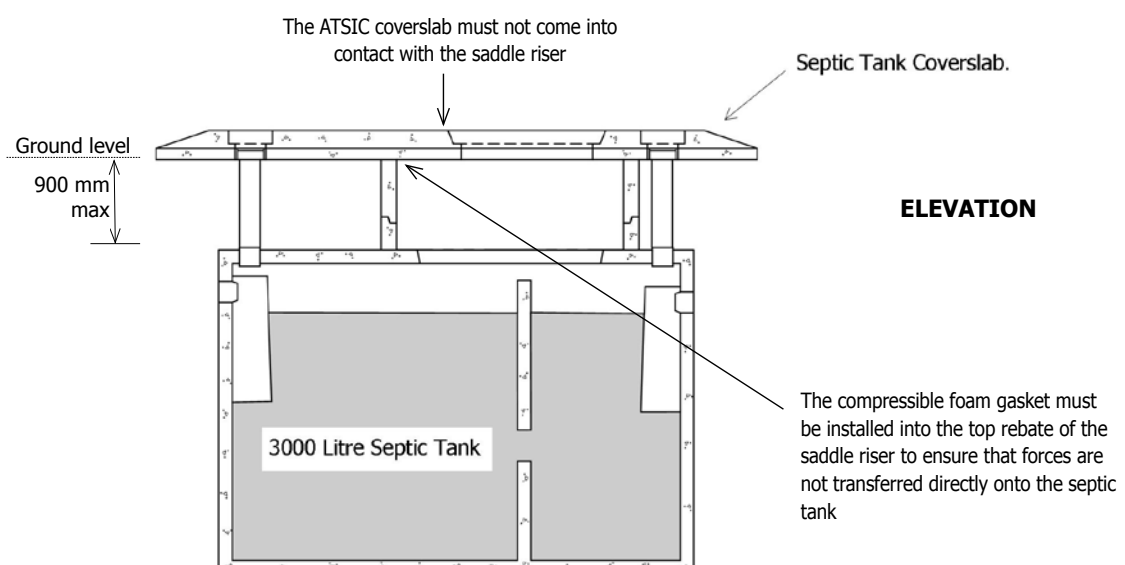
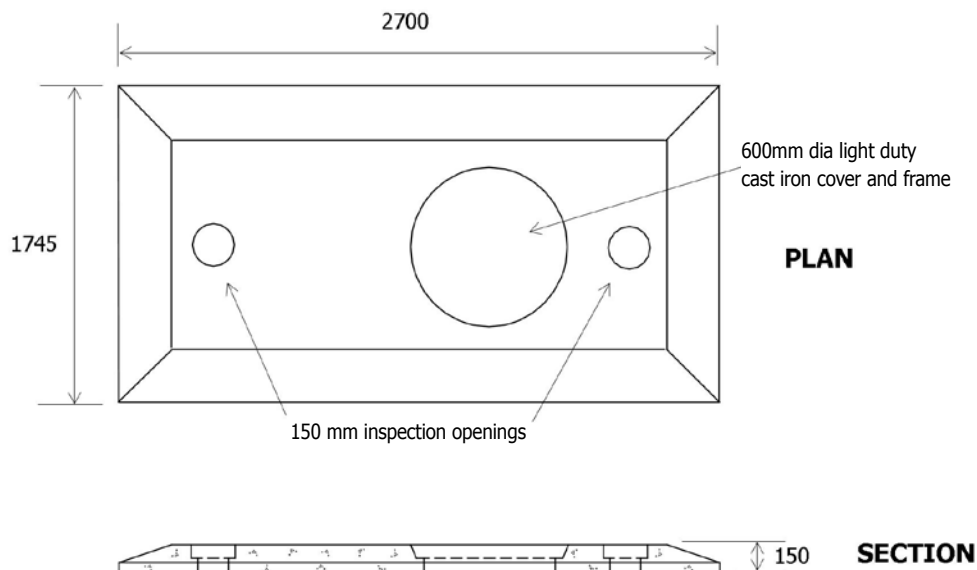


The tanks have been designed to be buried with the top of the tank located 900mm maximum below ground level and with the cover slab at ground level.

ATSIC coverslab • 3,000 litre septic tank

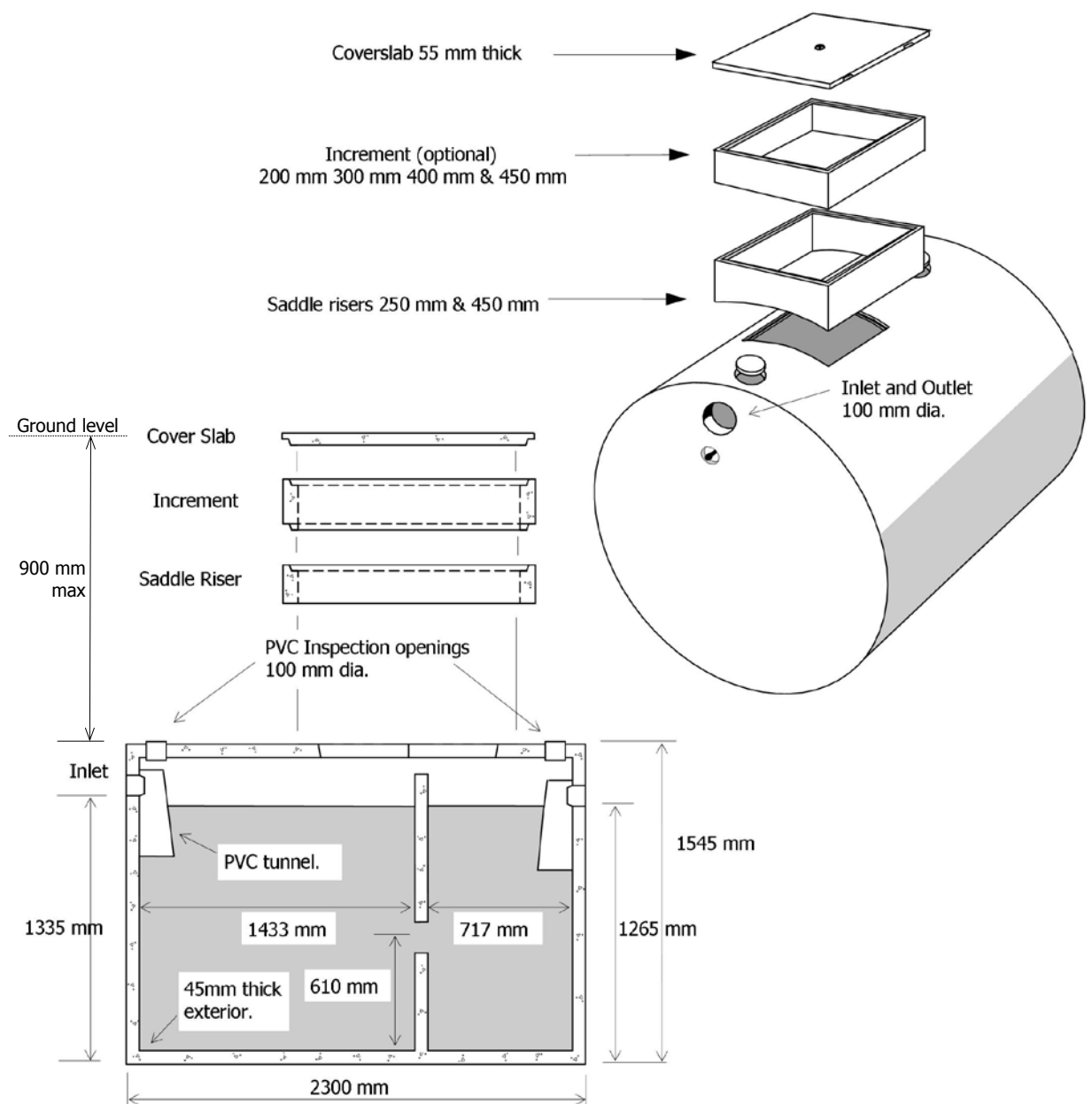
- Class B - light duty unit for use in areas accessible only by cars and light 4WD vehicles with a gross maximum mass of 2670kg
- Designed to span across the saddle riser bearing onto the ground each side of it

Item	Approx Mass
Septic tank coverslab	1,800kg



Septic tank • 3,250 litre

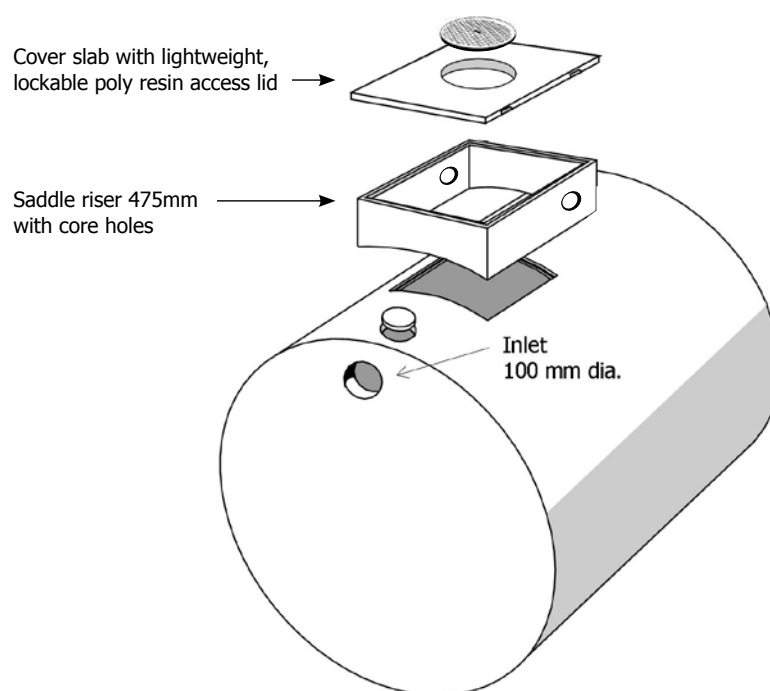
Item	Approx Mass
3,250 litre septic tank	2,140kg



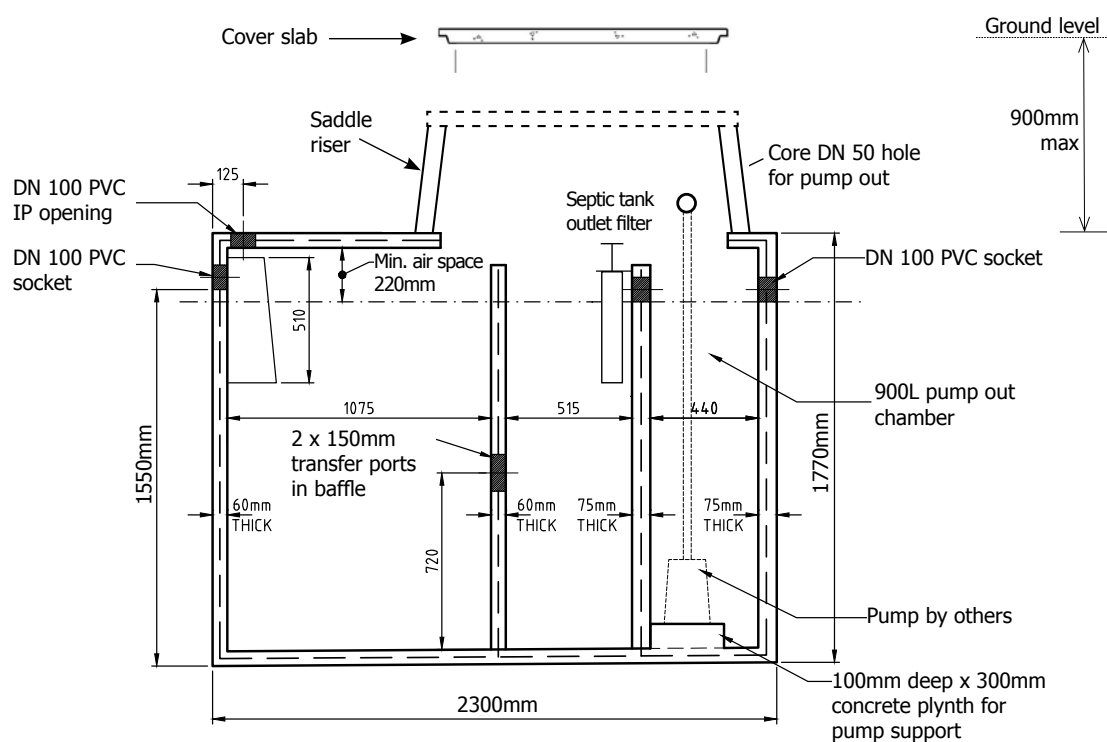
The tanks have been designed to be buried with the top of the tank located 900mm maximum below ground level and with the cover slab at ground level.

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

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

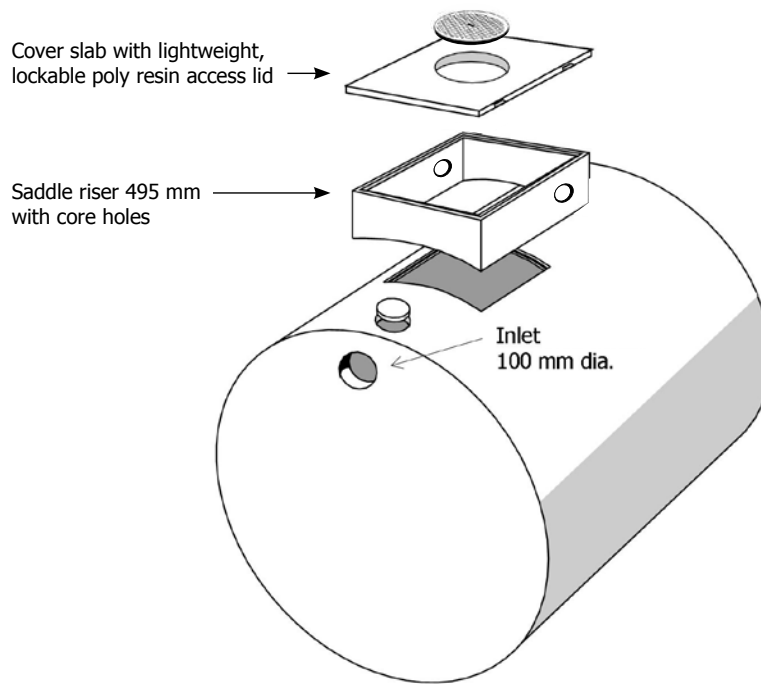


The tanks have been designed to be buried with the top of the tank located 900mm maximum below ground level and with the cover slab at ground level.

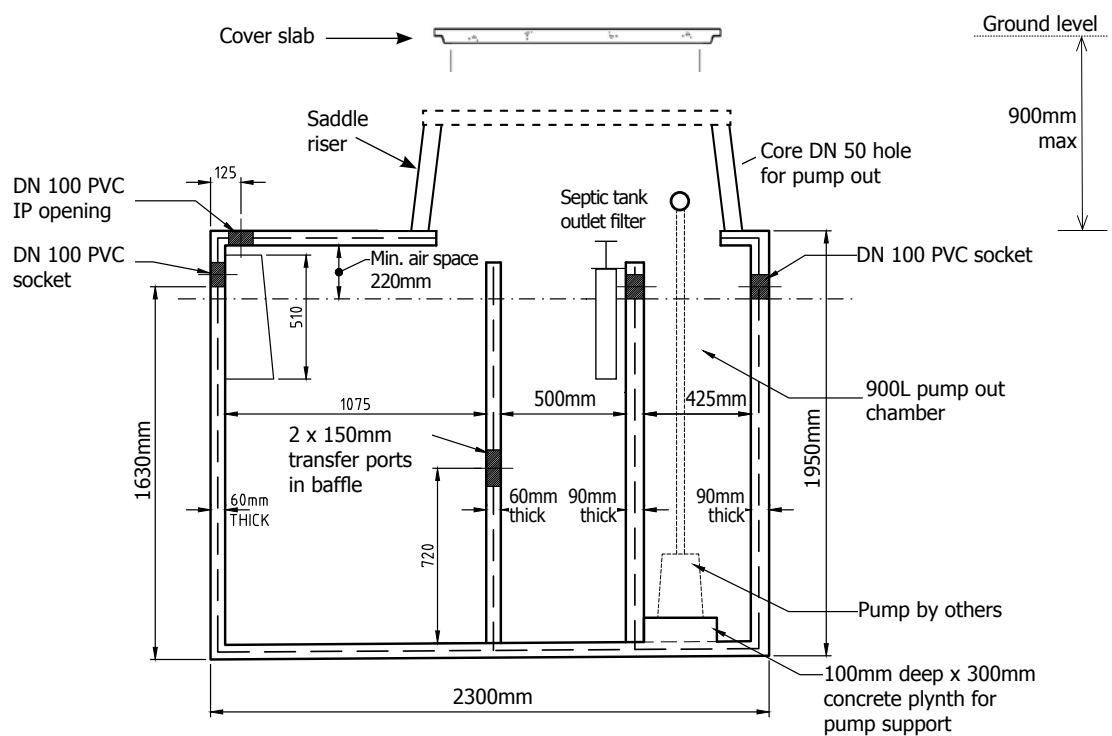


Ri-Scape tank • 4,000 litre with 900L pump chamber

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

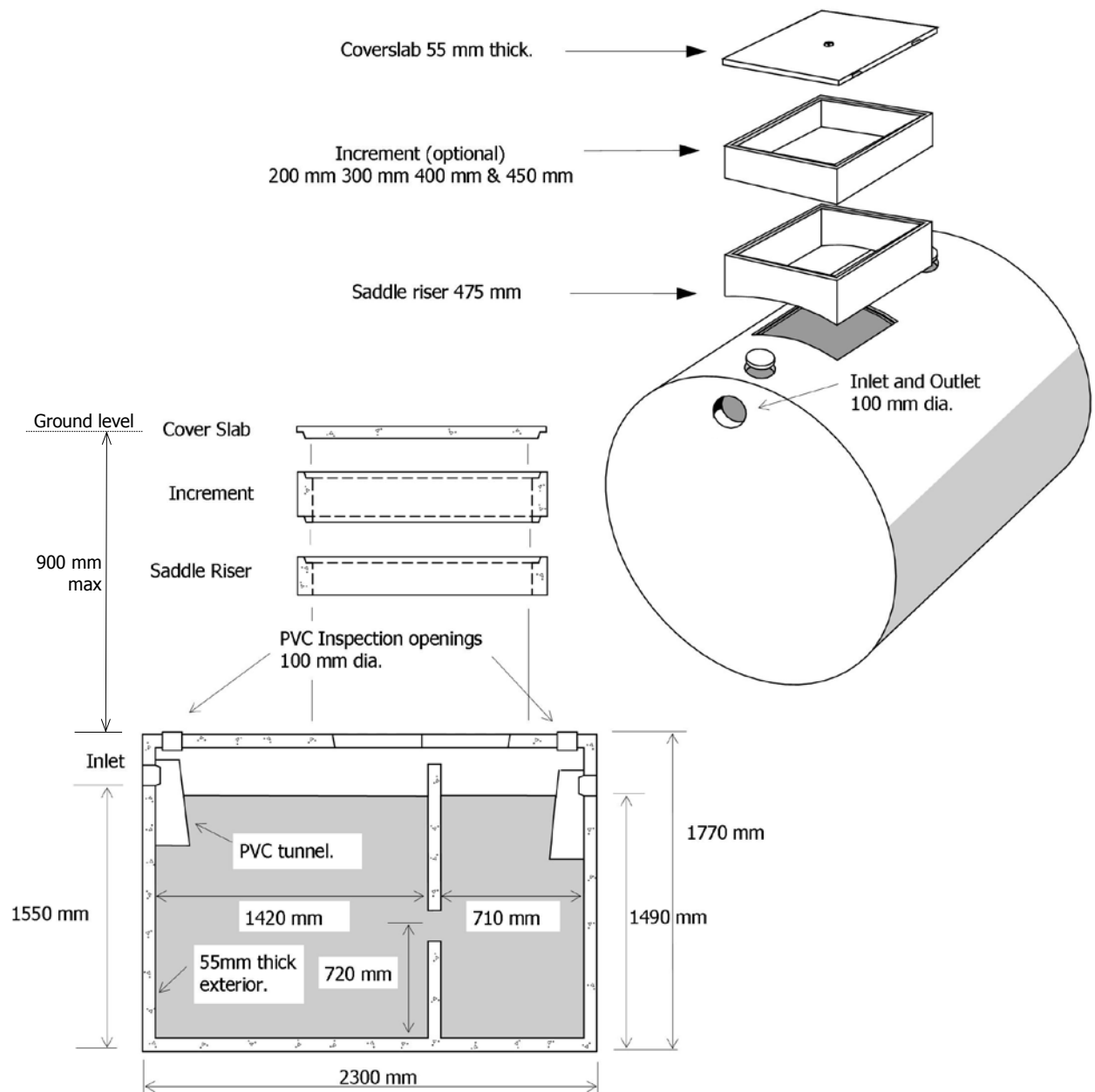


The tanks have been designed to be buried with the top of the tank located 900mm maximum below ground level and with the cover slab at ground level.



Septic tank • 4,300 litre

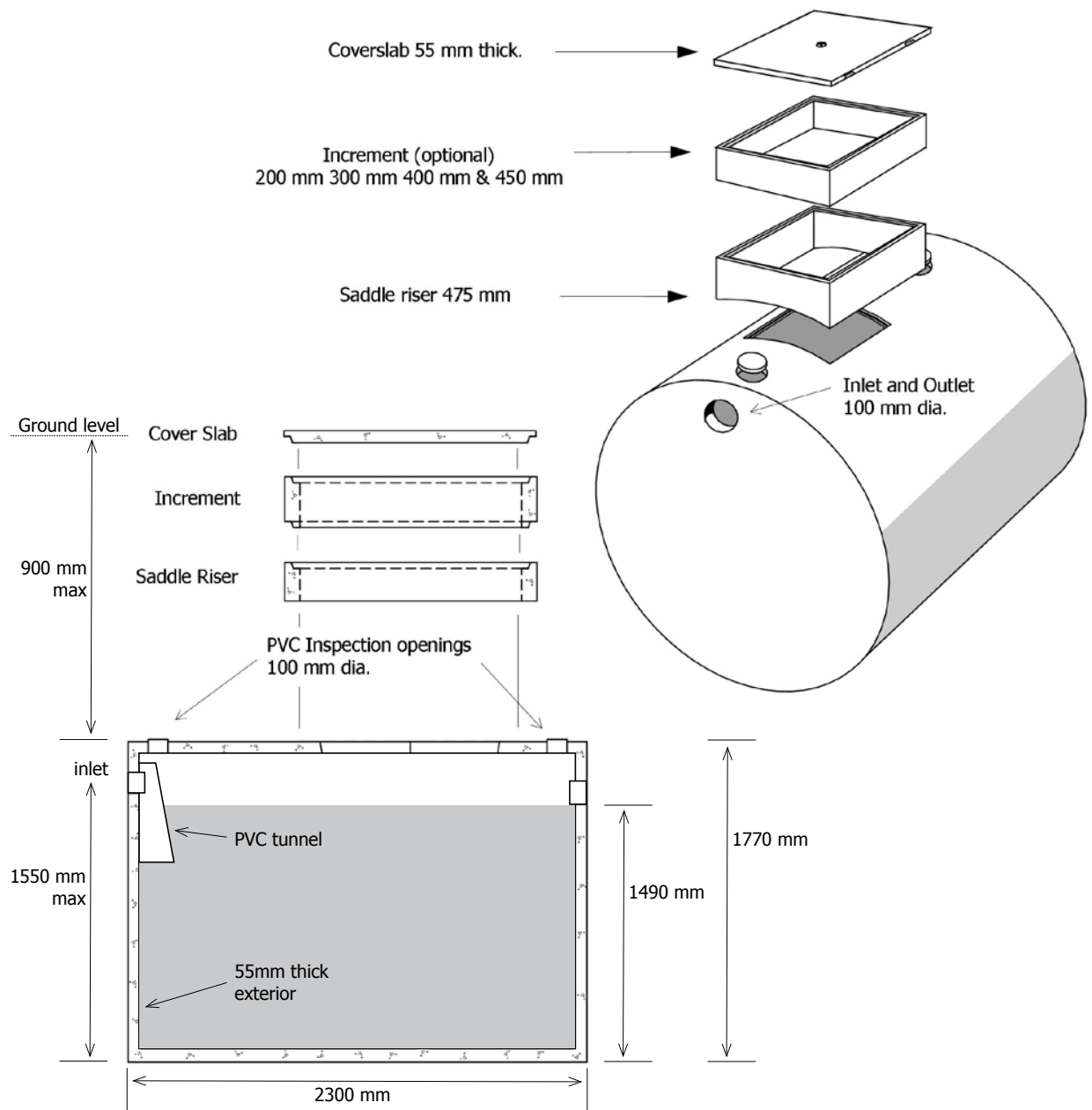
Item	Approx Mass
4,300 litre septic tank	2,700kg



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

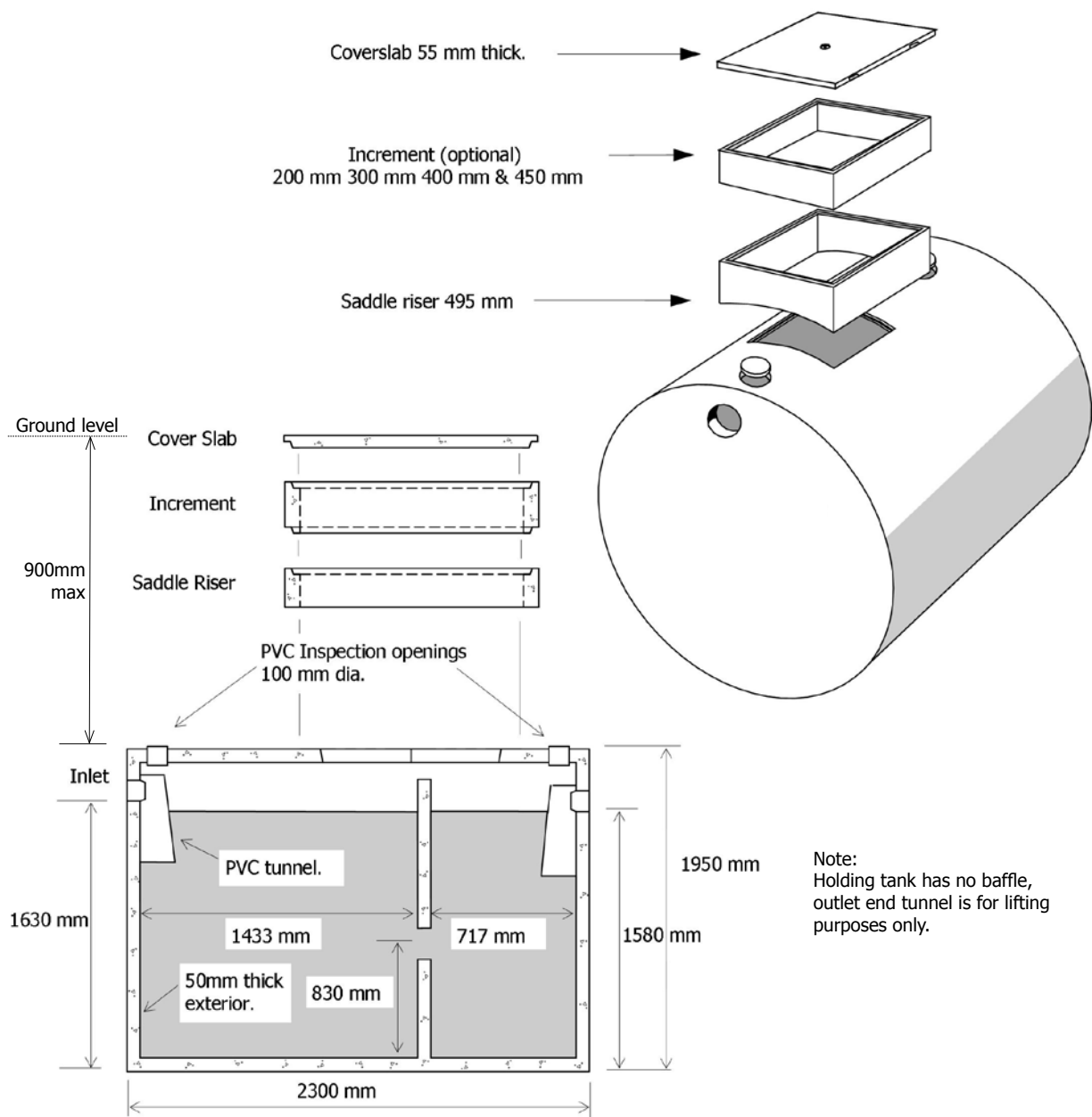
Item	Approx Mass
4,300 litre holding tank	2,200kg



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

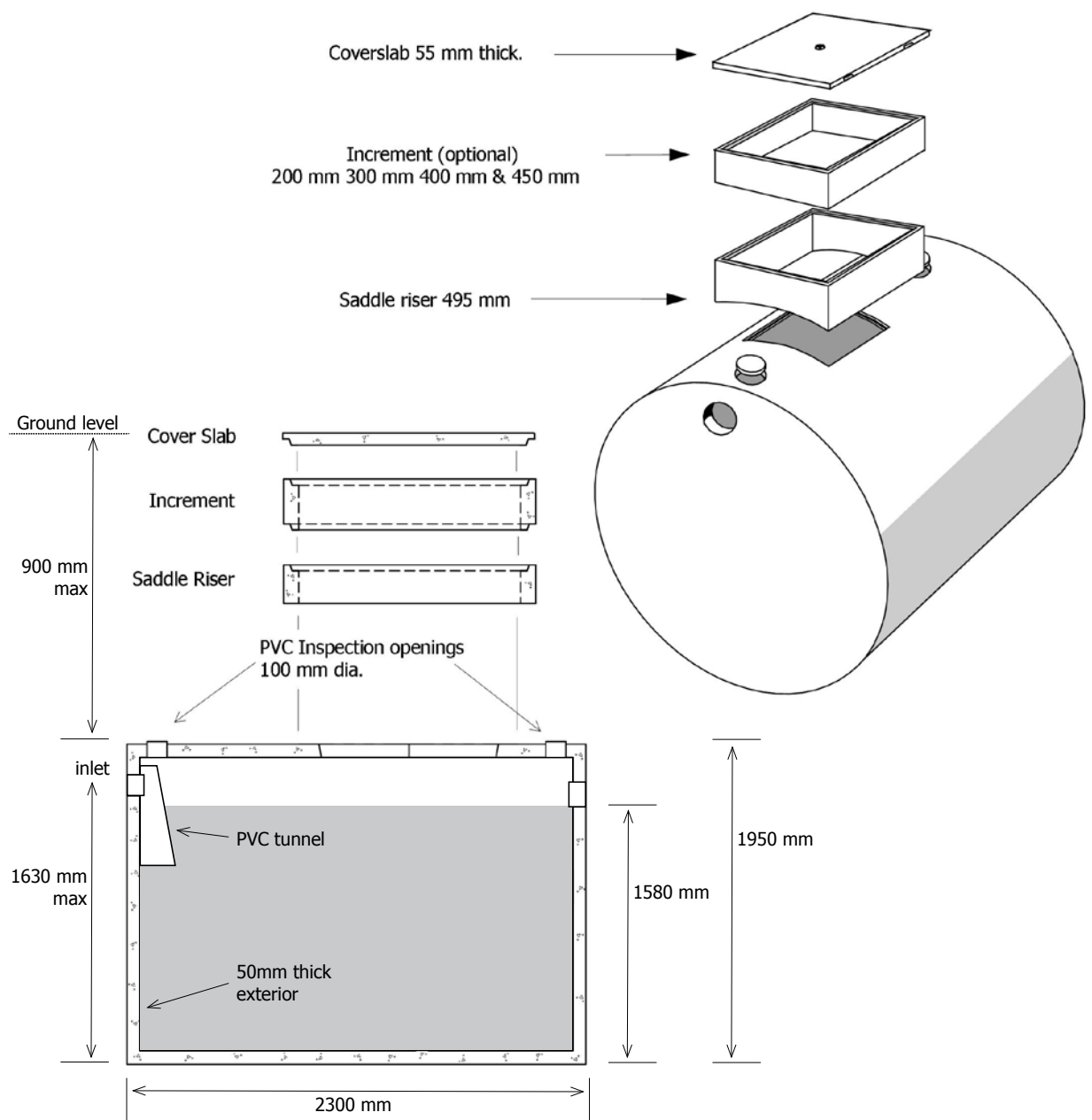
Item	Approx Mass
5,000 litre septic tank	3,000kg



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



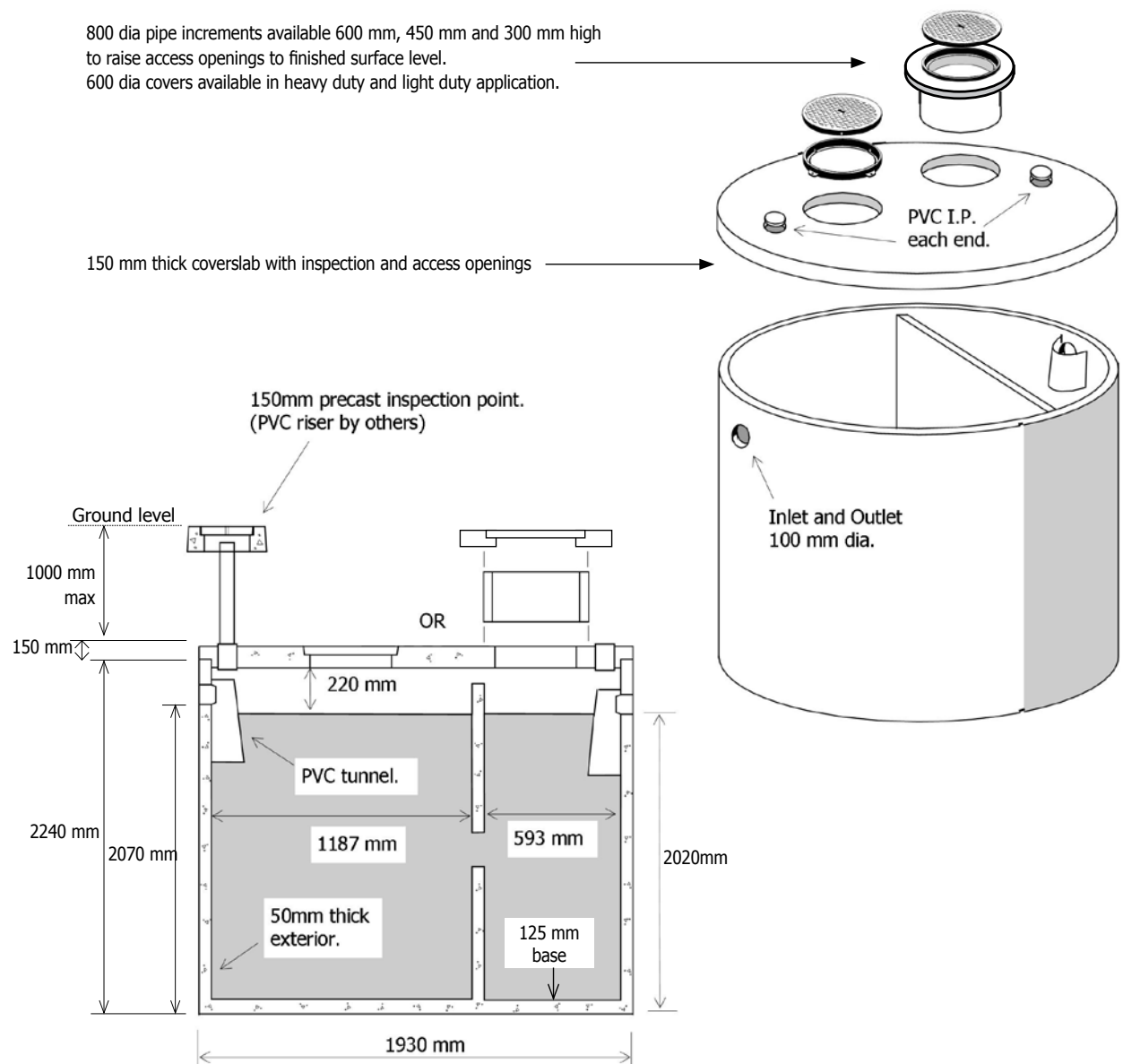
The tanks have been designed to be buried with the top of the tank located 900 mm maximum below ground level and with the cover slab at ground level.

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.

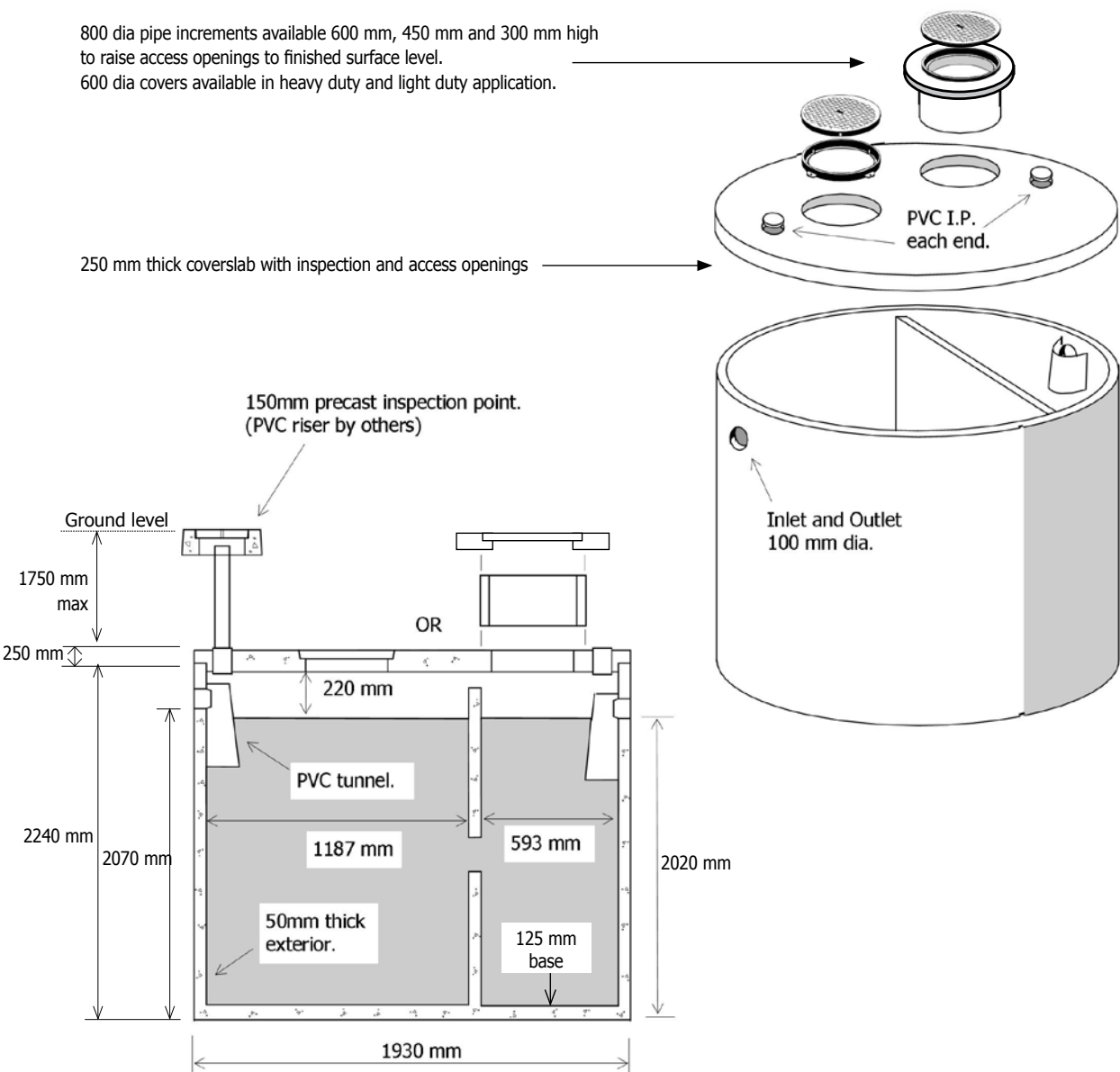
150 mm thick coverslab with inspection and access openings



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

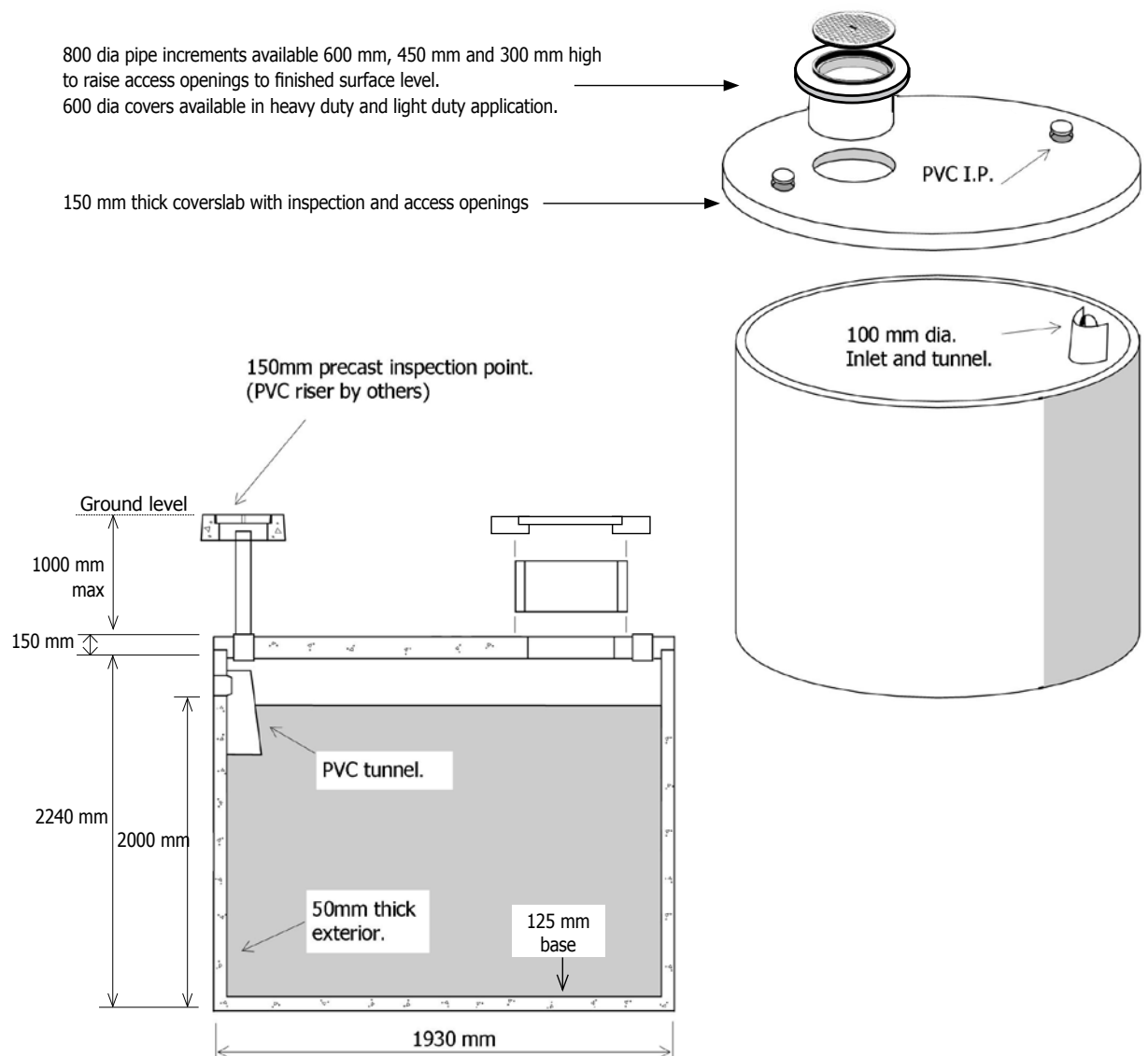
Item	Approx Mass
5,000 litre vertical septic tank base with baffle	3,500kg
5,000 litre vertical septic tank lid	2,000kg



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

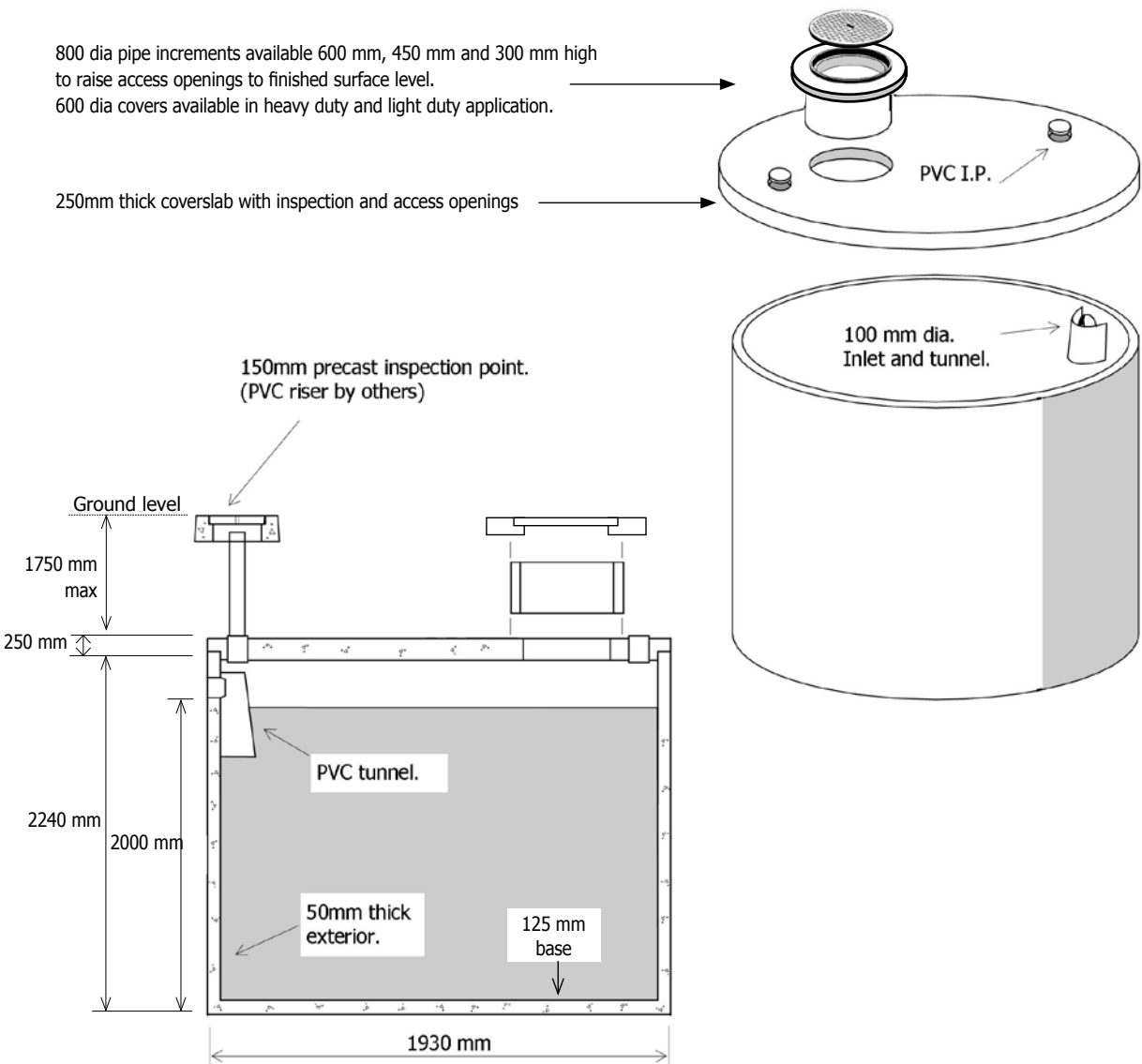
Item	Approx Mass
5,000 litre vertical holding tank base	3,000kg
5,000 litre vertical holding tank lid	1,100kg



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



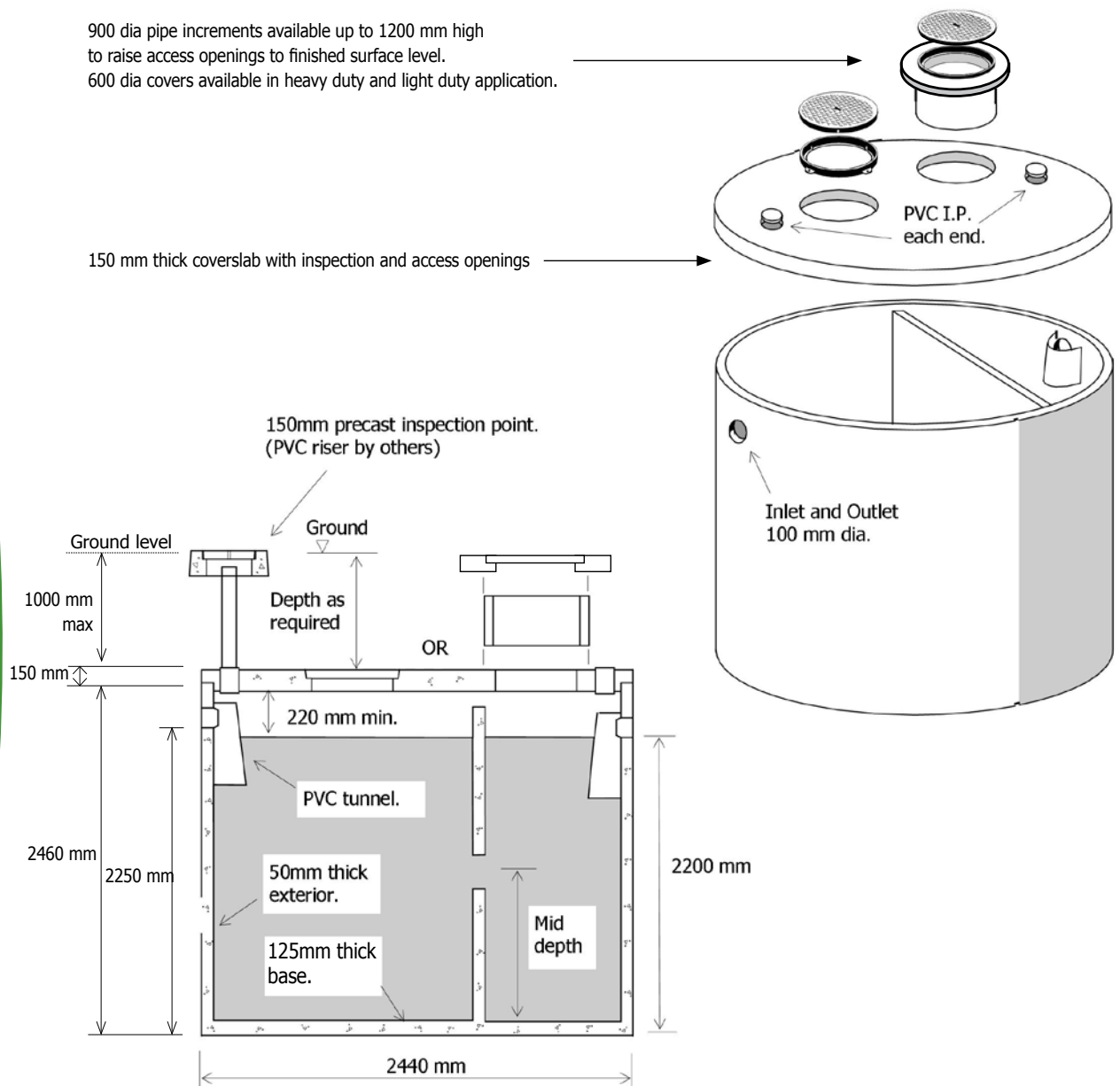
The trafficable cover slabs (250 mm thick) have been designed to be buried a maximum of 1750 mm below ground level.

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



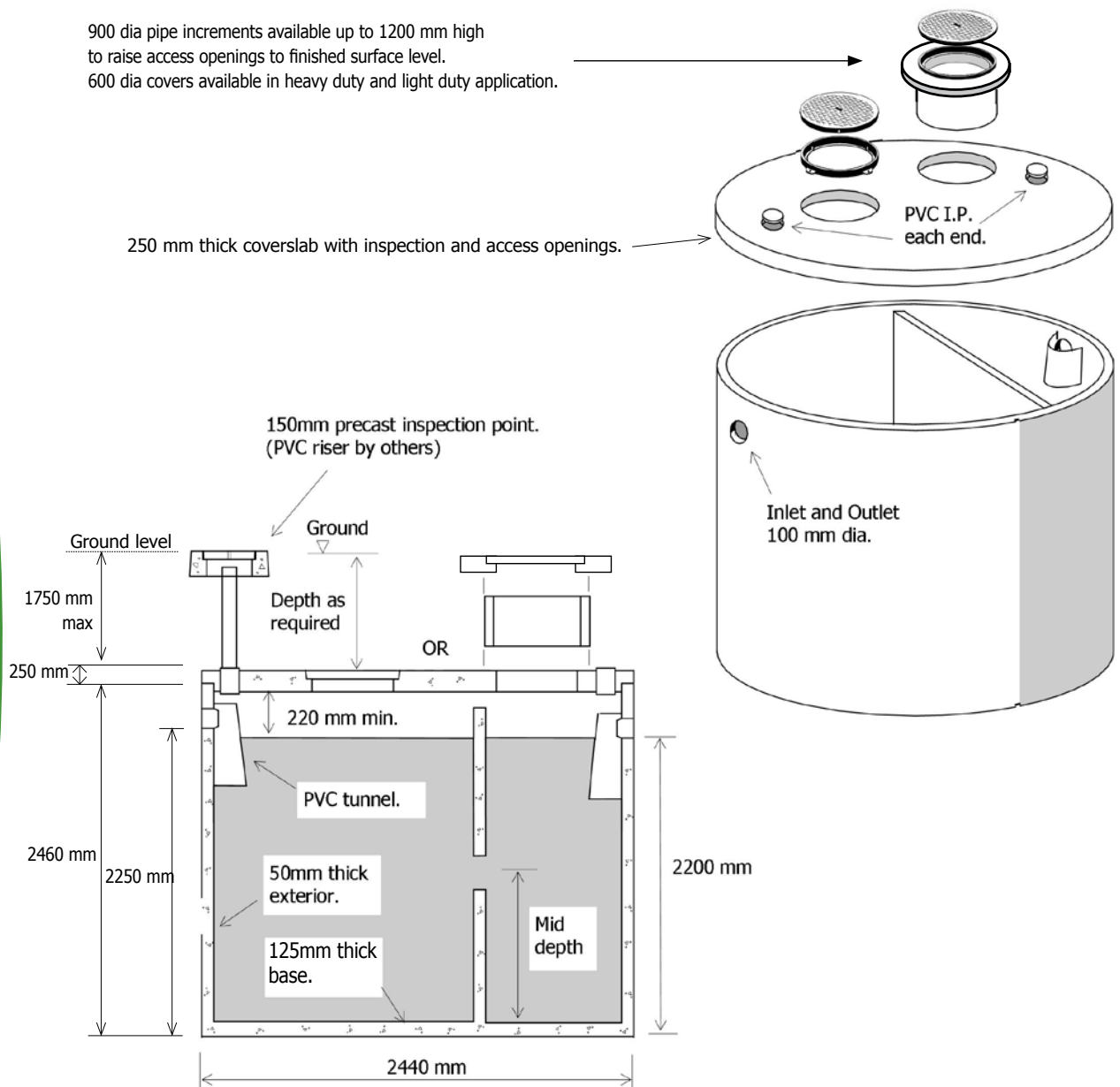
The non-trafficable cover slabs (150mm thick) have been designed to be buried a maximum of 1000mm below ground level.

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

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.

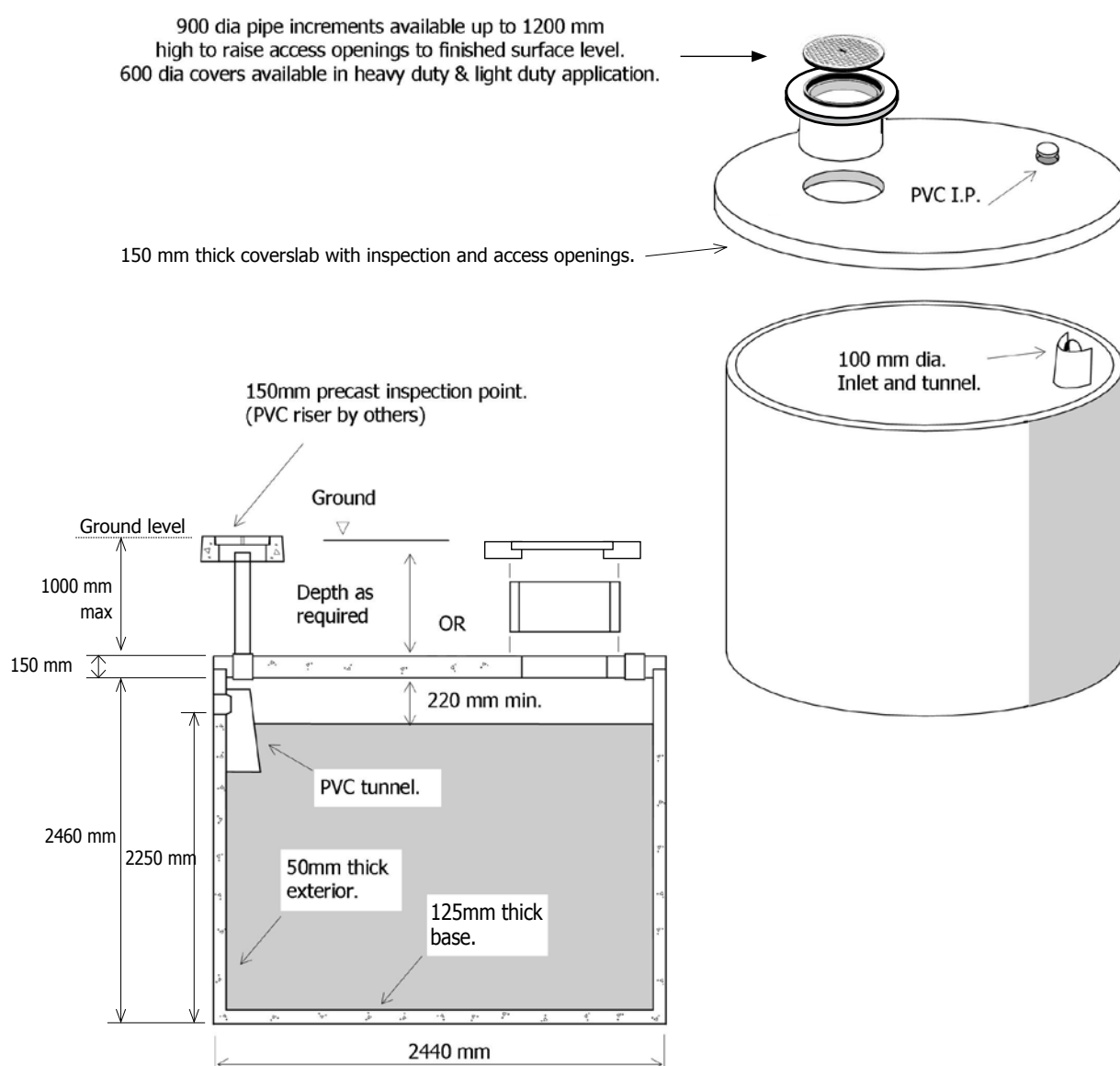
250 mm thick coverslab with inspection and access openings.



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

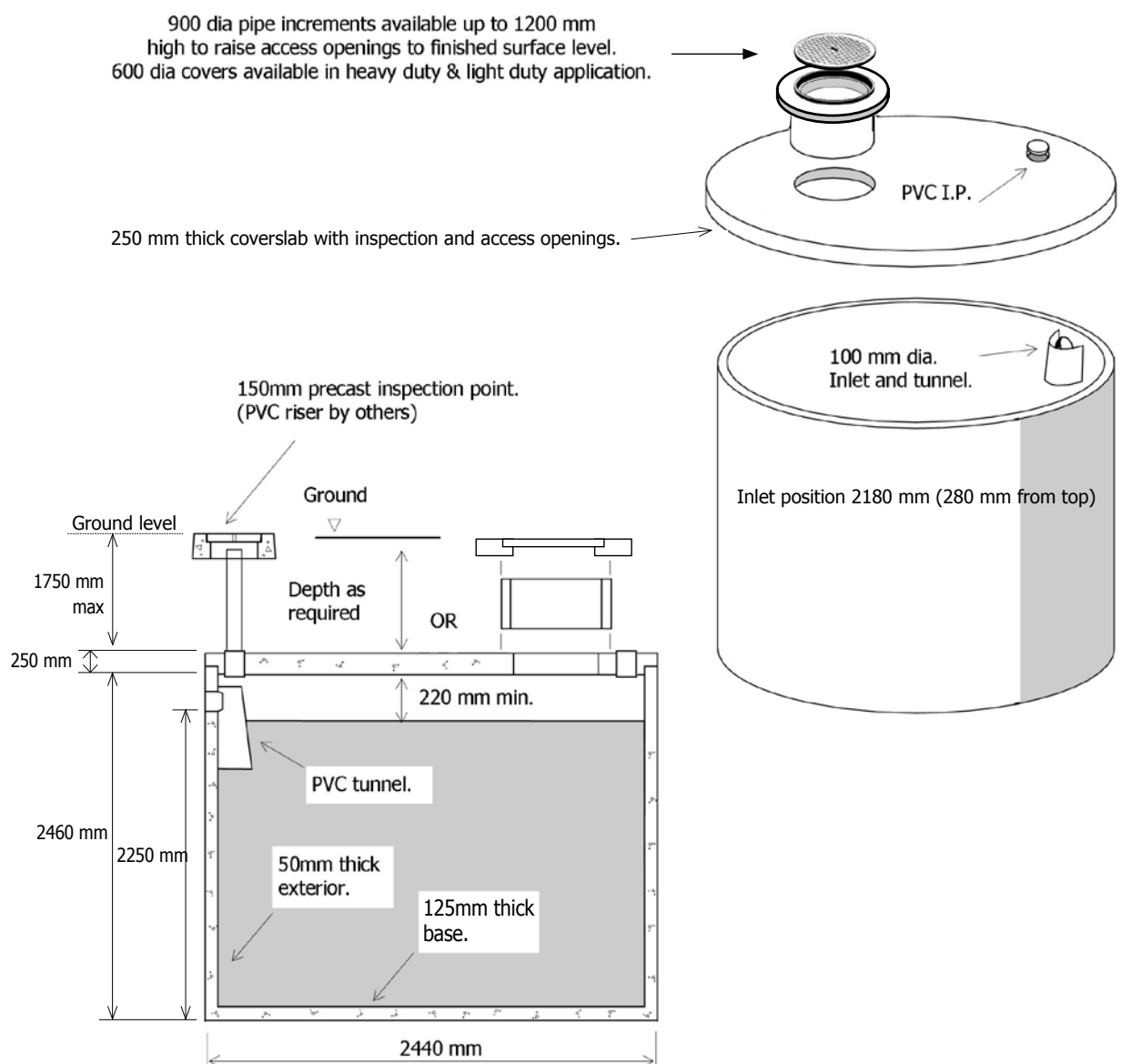
Item	Approx Mass
8,000 litre vertical holding tank base	4,000kg
8,000 litre vertical holding tank lid	1,800kg



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

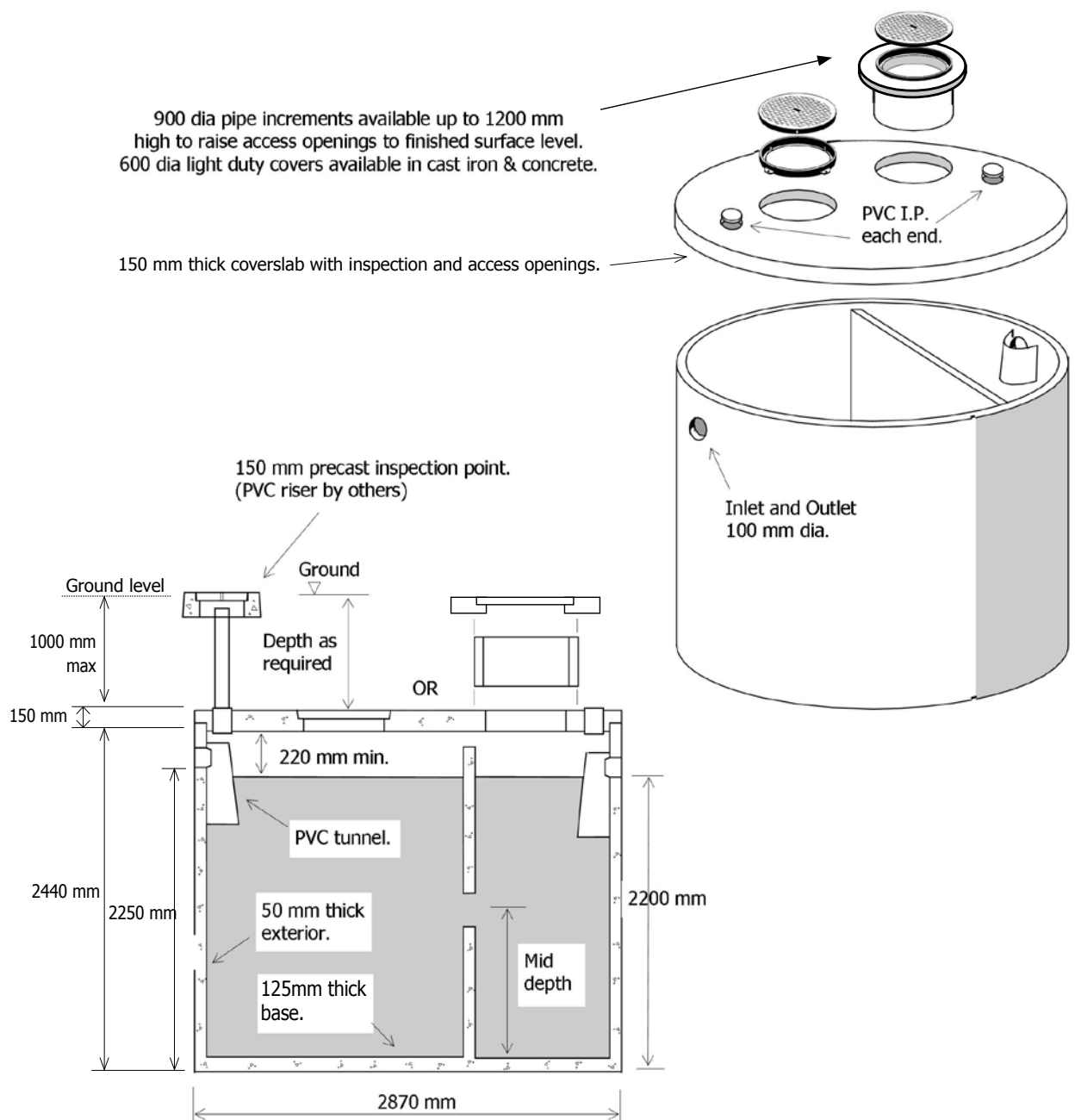
Item	Approx Mass
8,000 litre vertical holding tank base	4,000kg
8,000 litre vertical holding tank lid	2,900kg



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

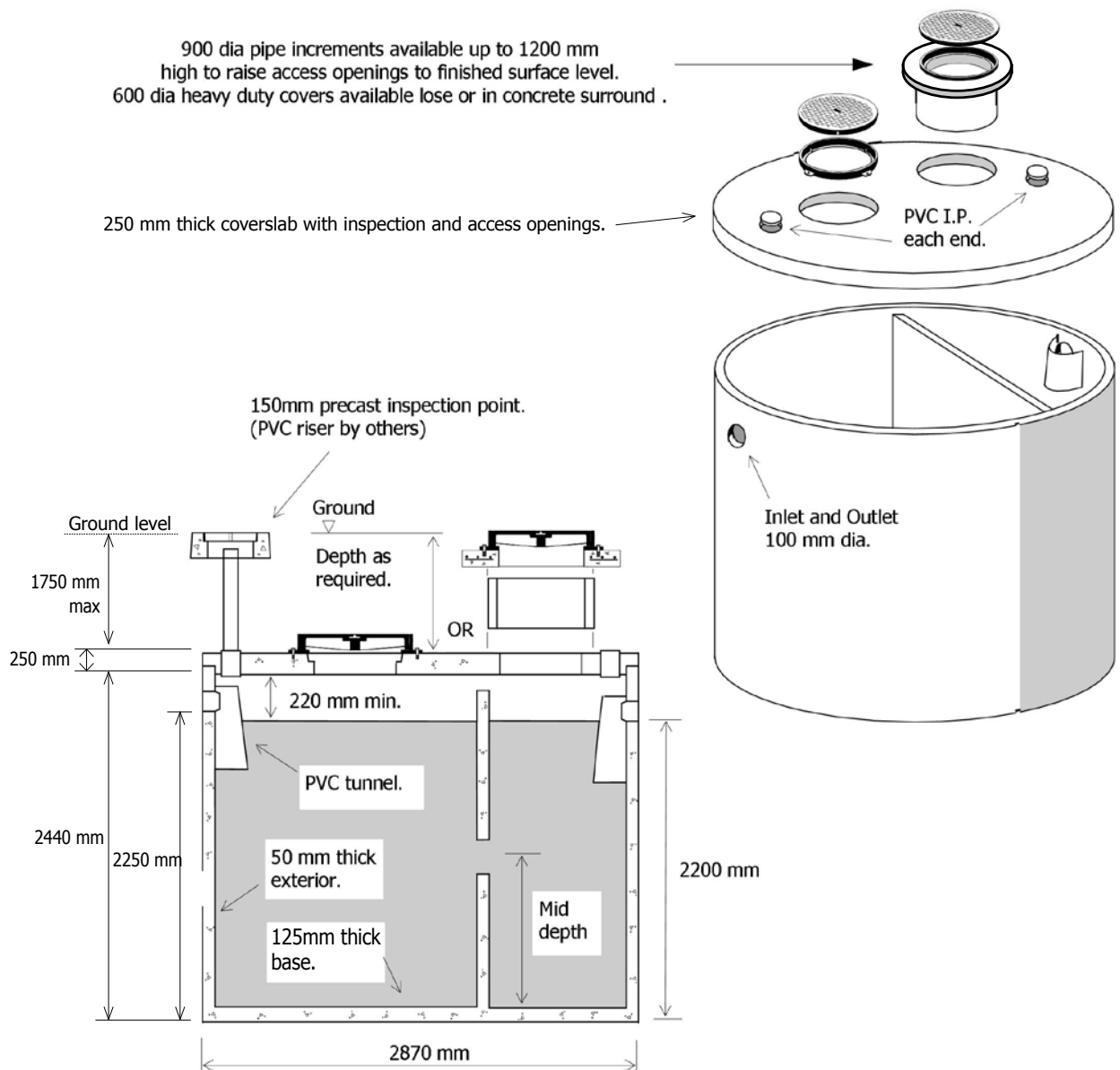
Item	Approx Mass
12,000 litre vertical septic tank base with baffle	6,300kg
12,000 litre vertical septic tank lid	2,500kg



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

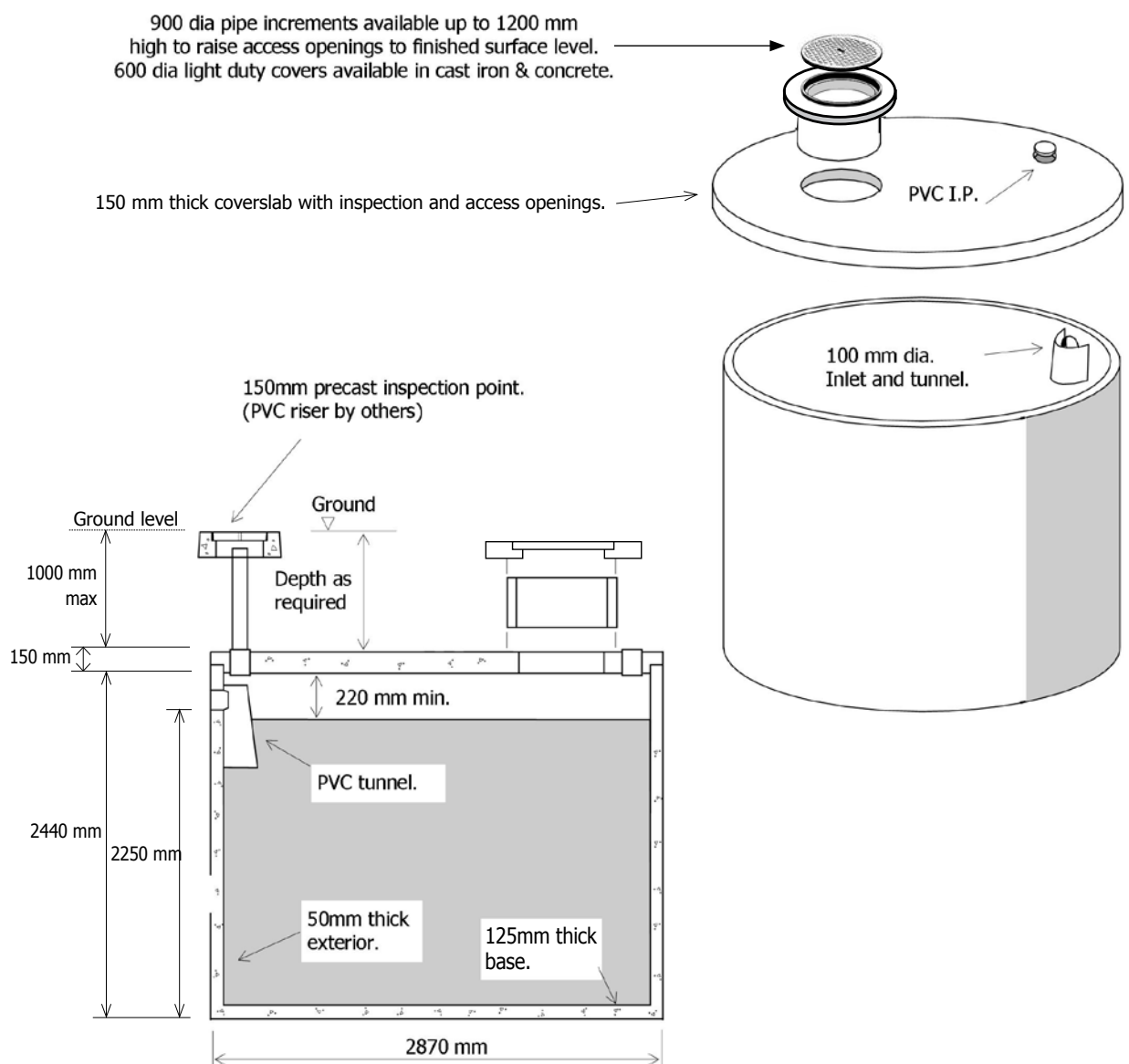
Item	Approx Mass
12,000 litre vertical septic tank base with baffle	6,300kg
12,000 litre vertical septic tank lid	3,850kg



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

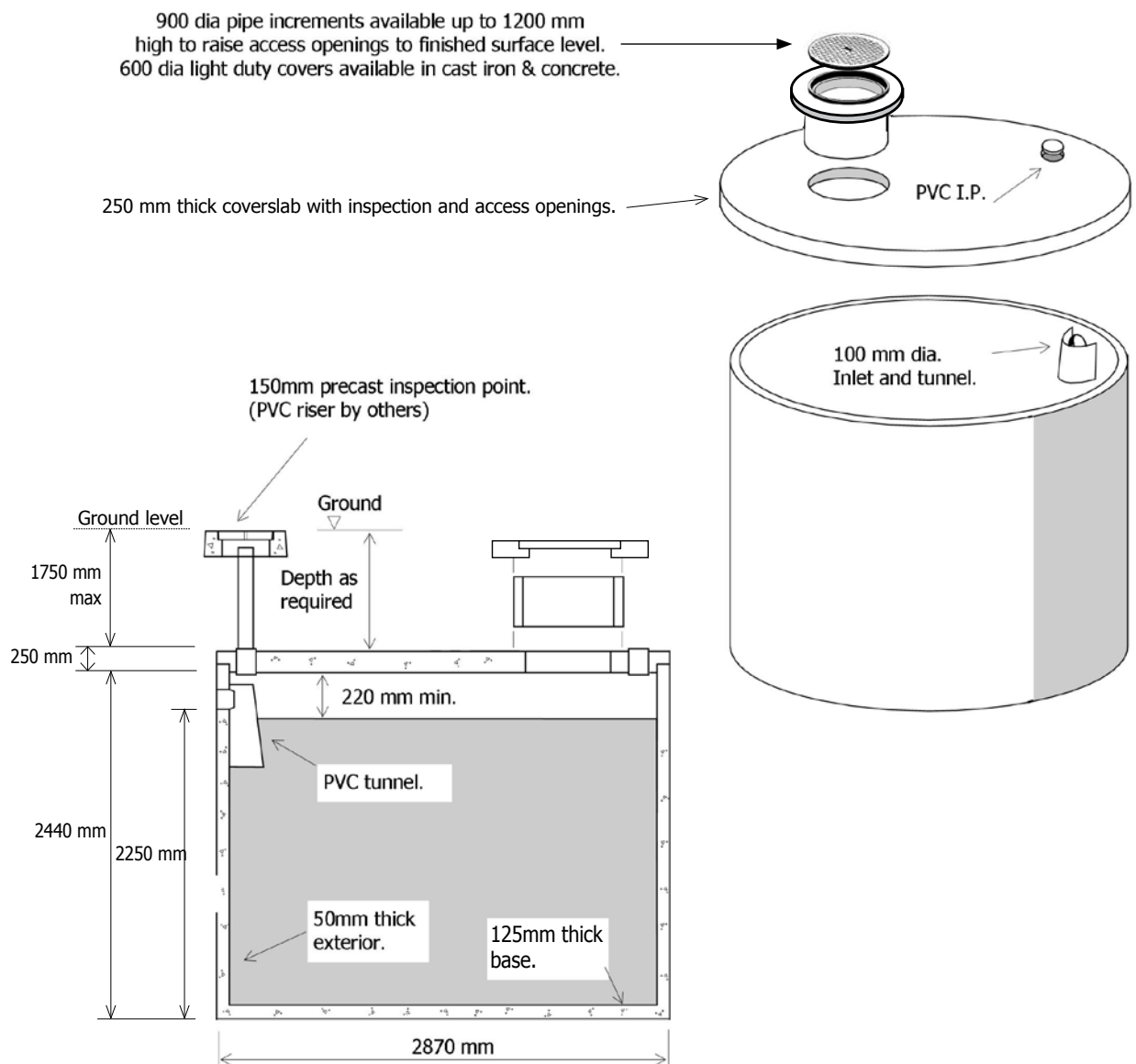
Item	Approx Mass
12,000 litre vertical holding tank base	5,300kg
12,000 litre vertical holding tank lid	2,450kg



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

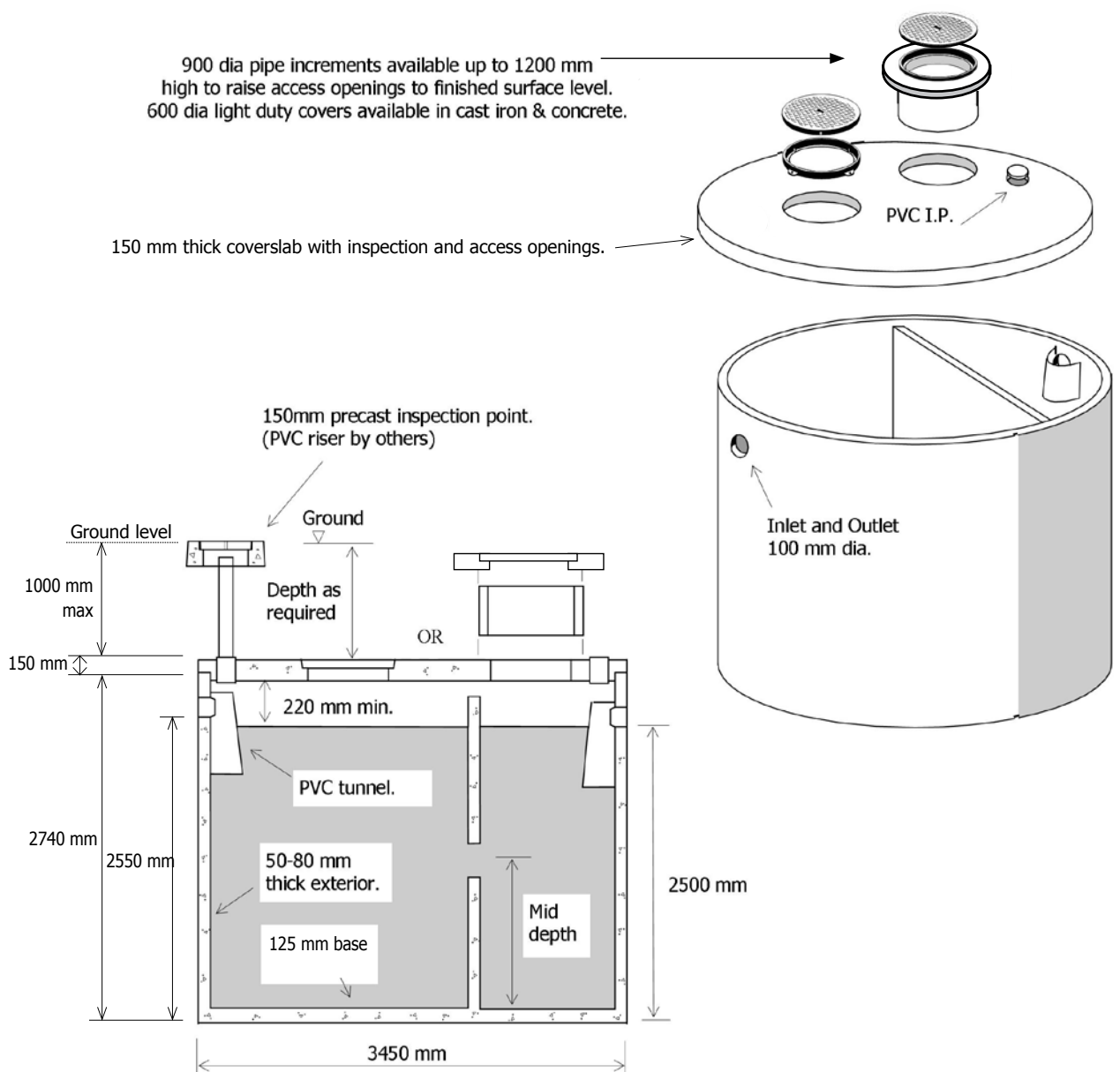
Item	Approx Mass
12,000 litre vertical holding tank base	5,300kg
12,000 litre vertical holding tank lid	3,800kg



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

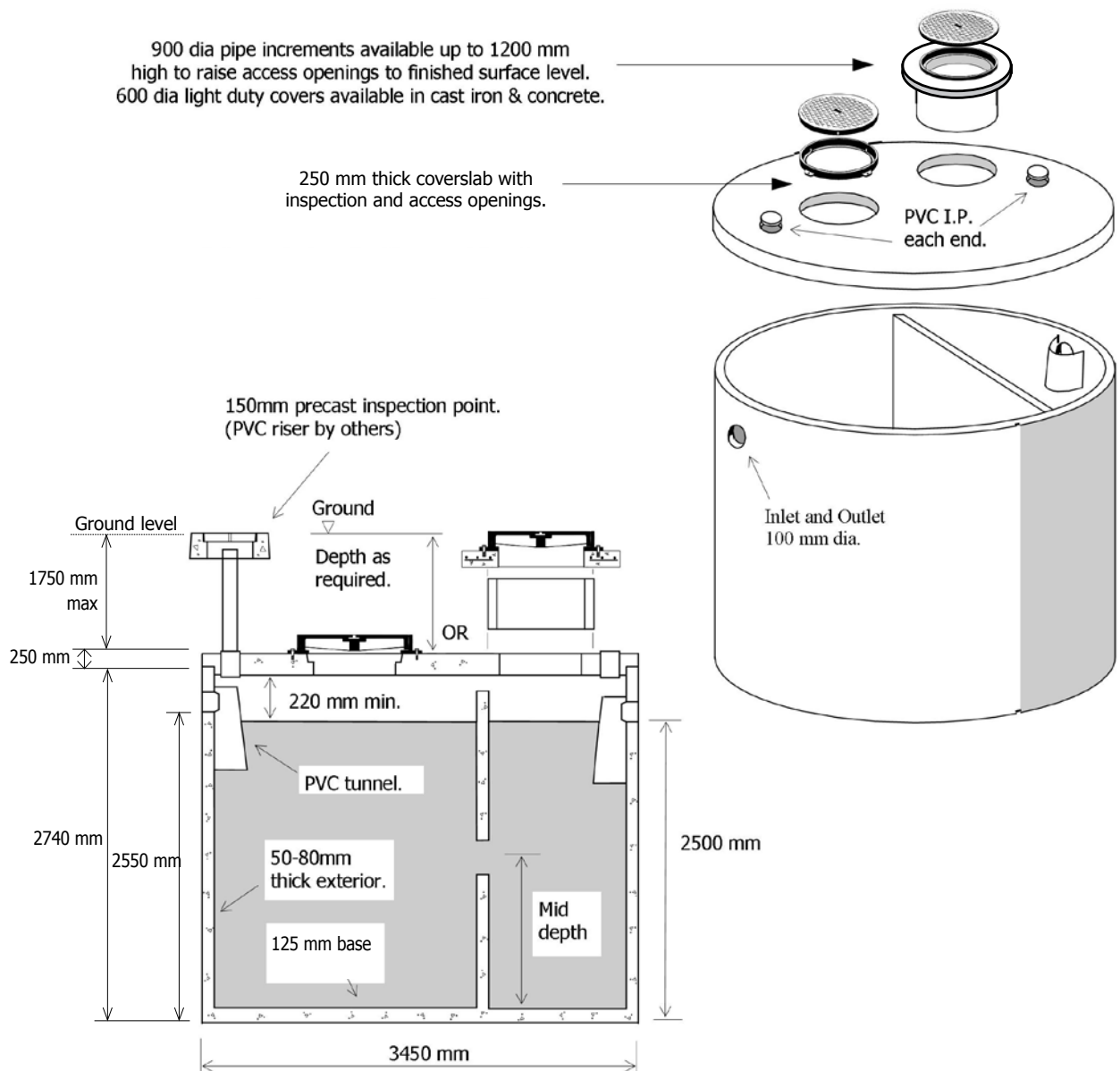
Item	Approx Mass
20,000 litre vertical septic tank base with baffle	9,400kg
20,000 litre vertical septic tank lid	3,300kg



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

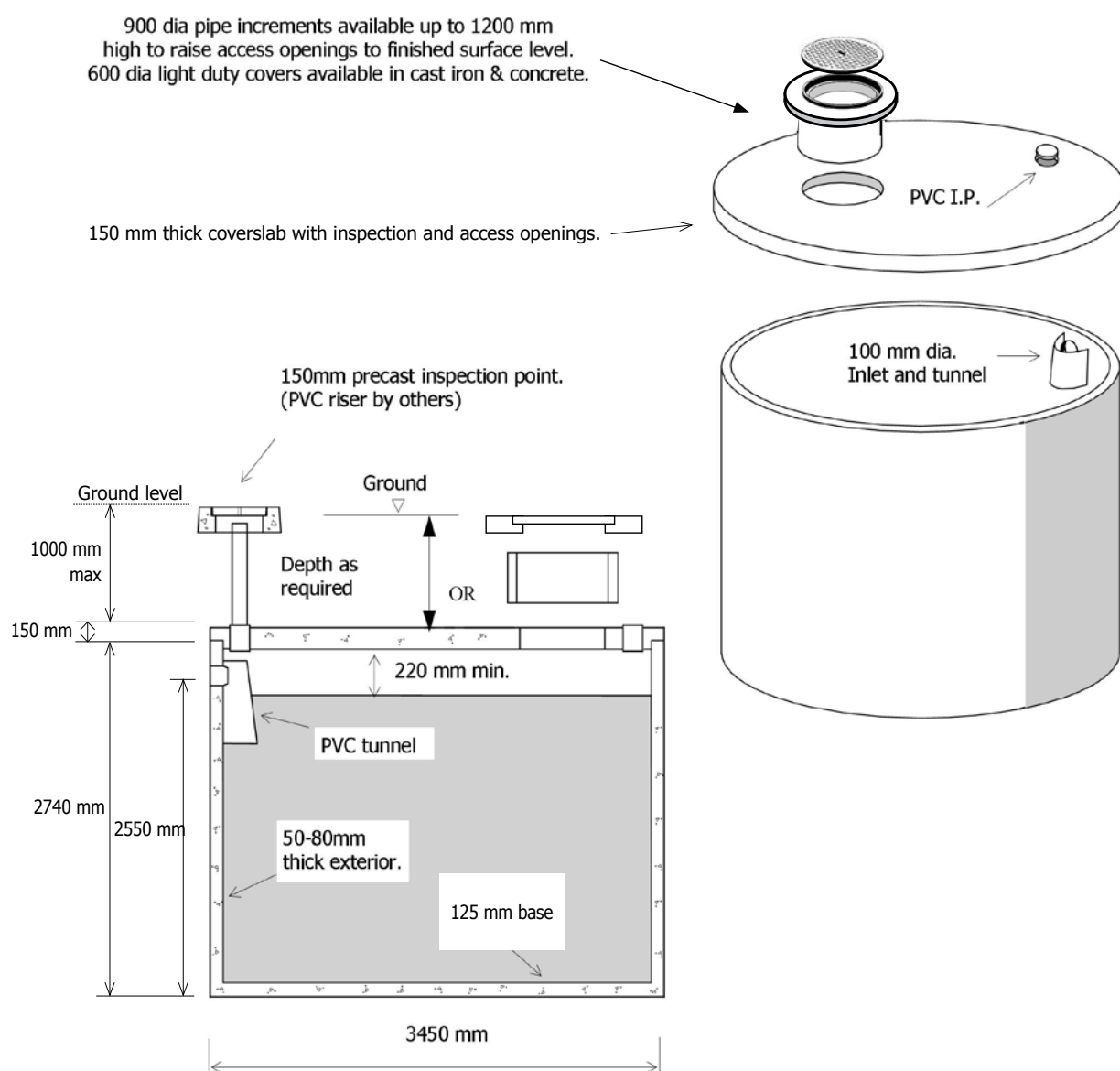
Item	Approx Mass
20,000 litre vertical septic tank base with baffle	9,400kg
20,000 litre vertical septic tank lid	5,800kg



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

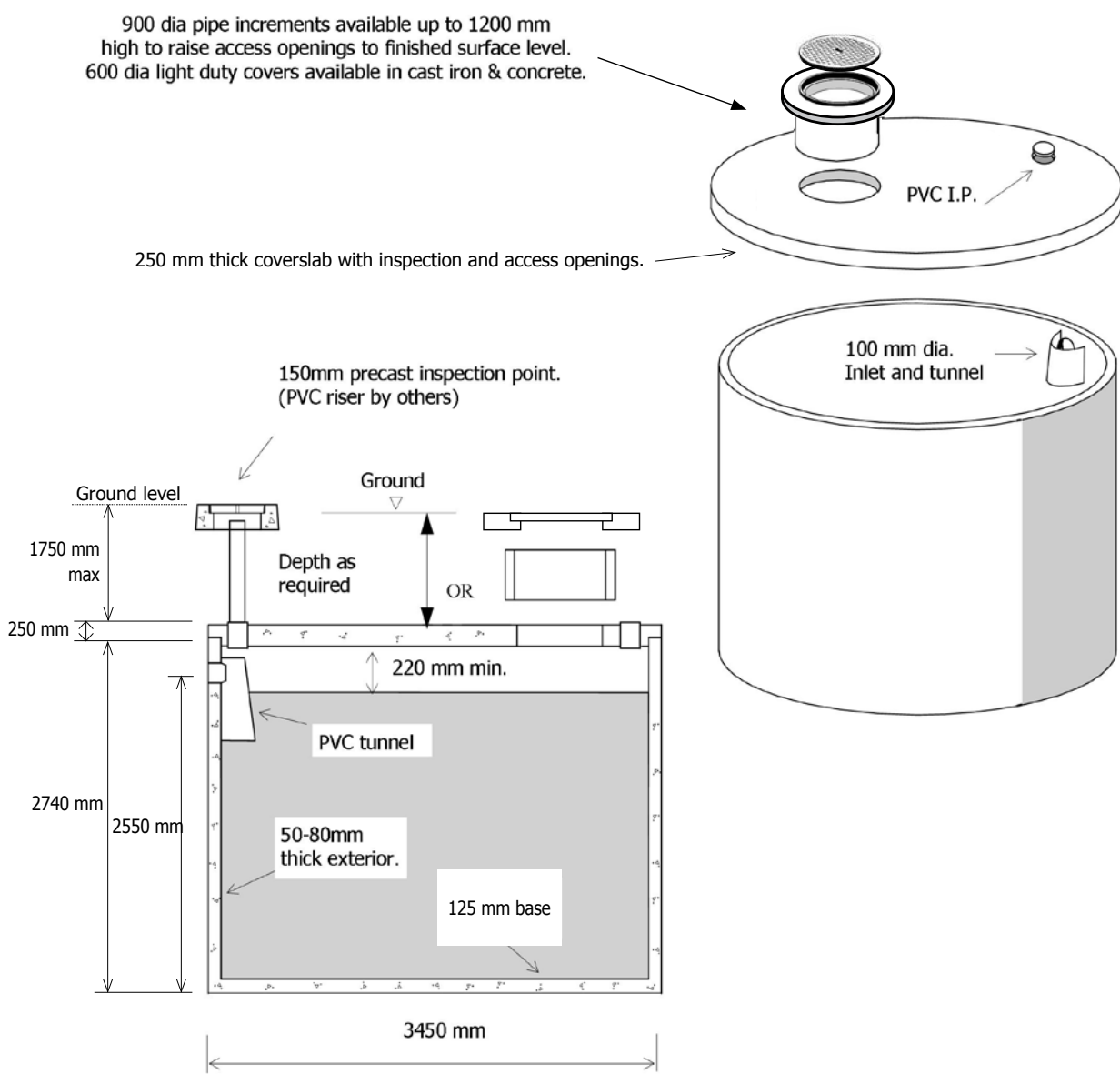
Item	Approx Mass
20,000 litre vertical holding tank base	7,500kg
20,000 litre vertical holding tank lid	3,300kg



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



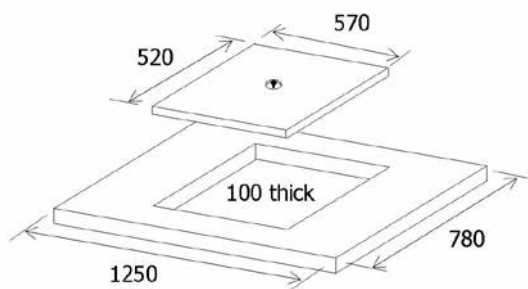
The trafficable cover slabs (250 mm thick) have been designed to be buried a maximum of 1750 mm below ground level.

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

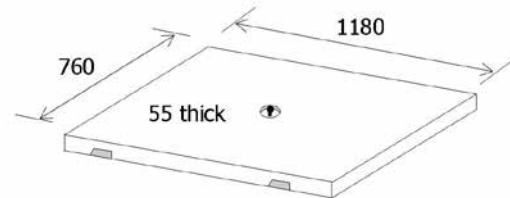
Suitable for 622L pump chamber.



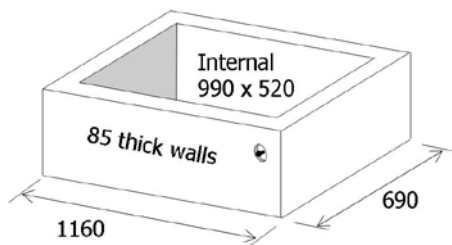
Weight 192kg

TYPE 33

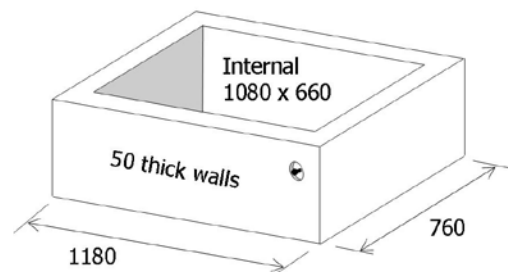
Suitable for all other horizontal tanks.



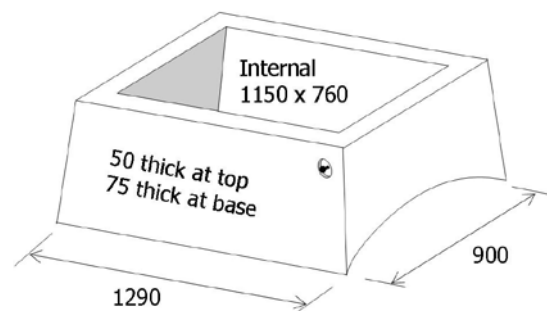
Weight 100kg



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



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

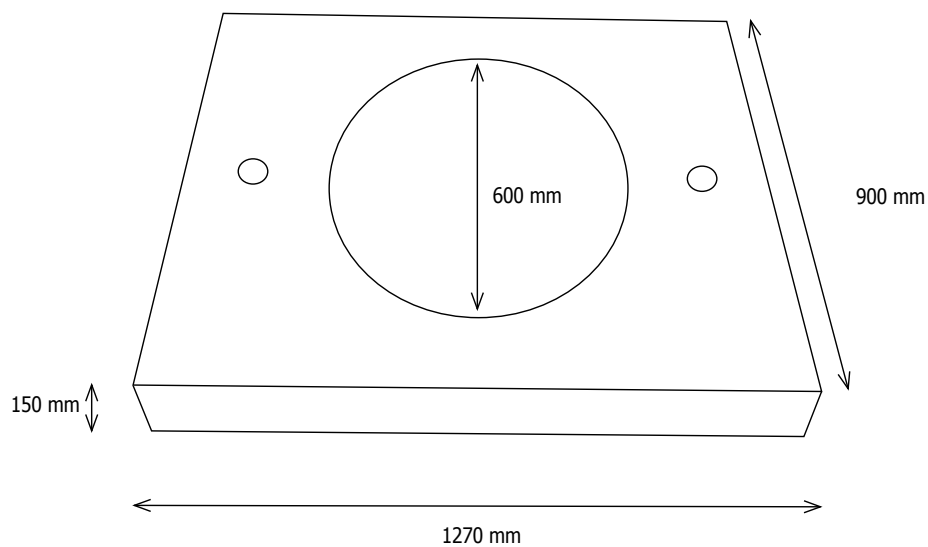


250 mm - weight 235kg
450 mm - weight 320kg
475 mm (4,300 litre) - weight 320kg
495 mm (5,000 litre) - weight 335kg

Small ATSIC coverslab (non-trafficable)

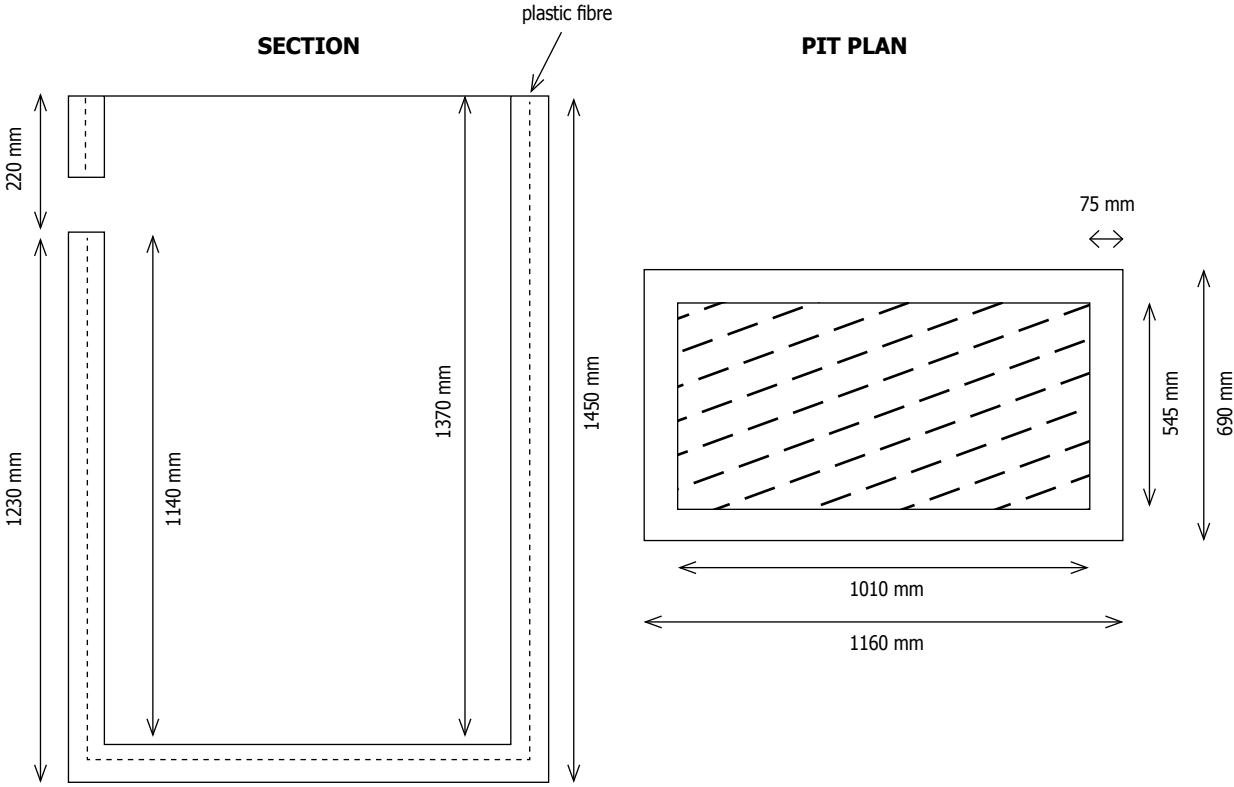
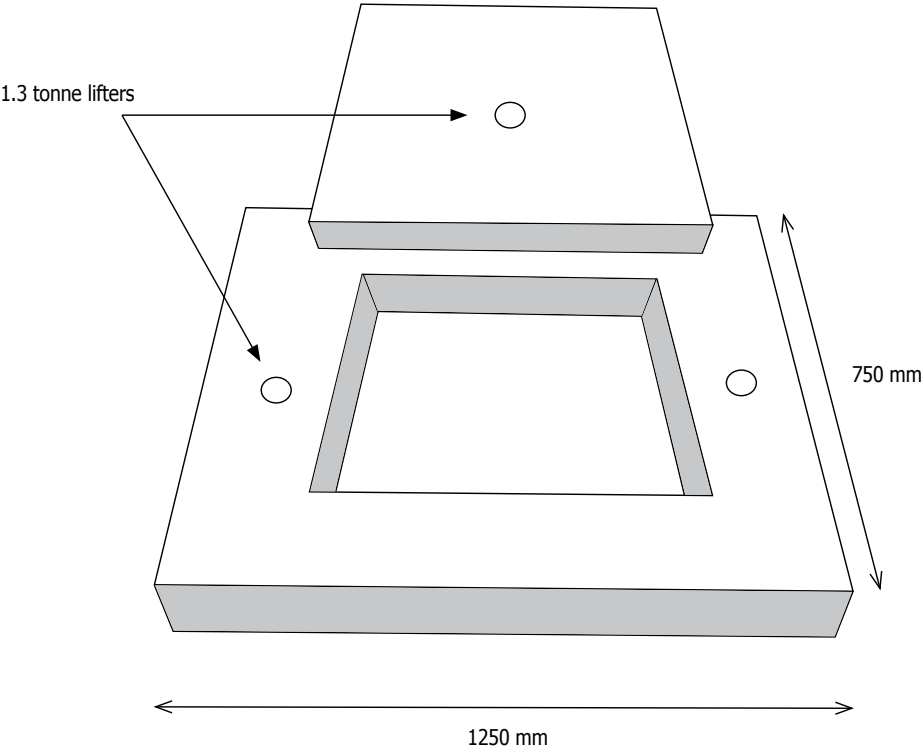
- Precast concrete saddle riser coverslab with 600 mm dia cast iron Class B light duty cover
- Designed to suit 250 mm and 450 mm high saddle risers and increments
- There is width overlap on saddles and width and length overlap on the increment - cover is rebated to suit either saddle or increment

Item	Approx Mass
Septic tank coverslab	340kg



Precast pump chamber • 622 litre

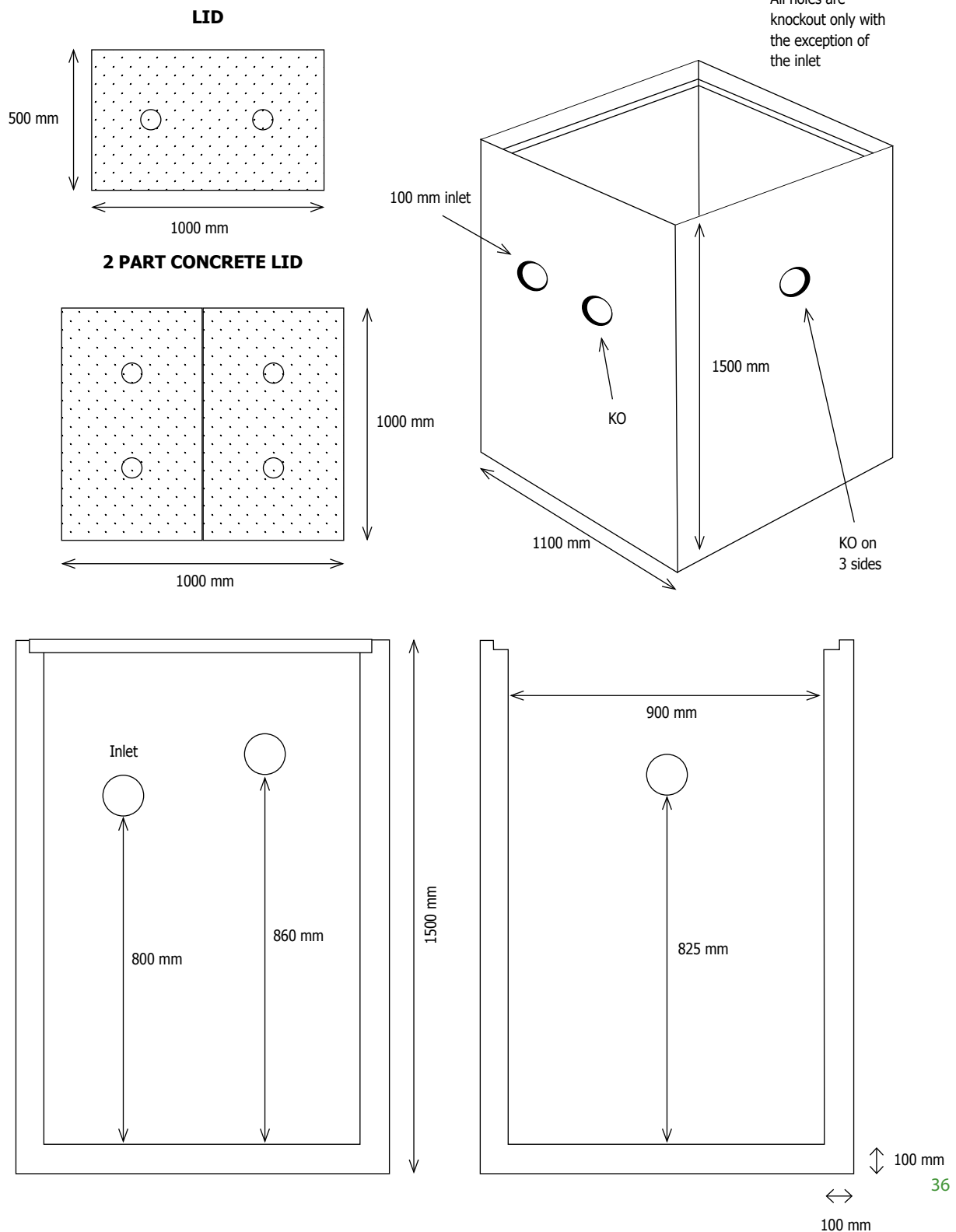
Item	Approx Mass
622 litre precast pump chamber	1,264kg



Precast pump chamber • 1,100 litre

- Constructed using concrete with plastic fibre

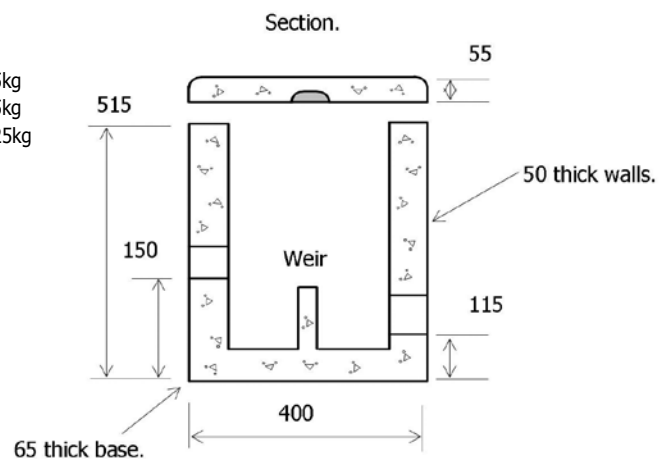
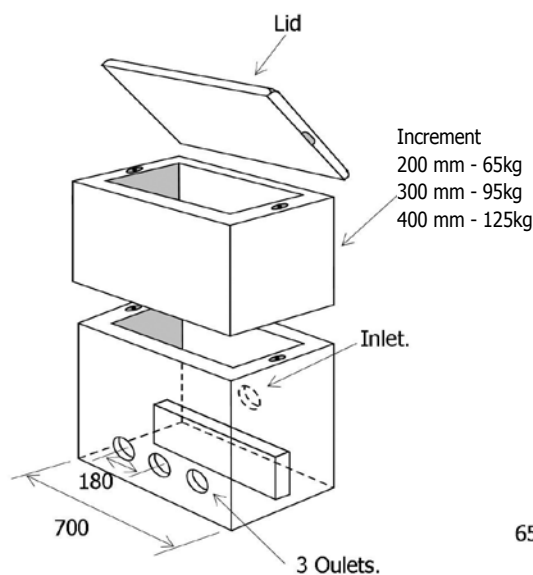
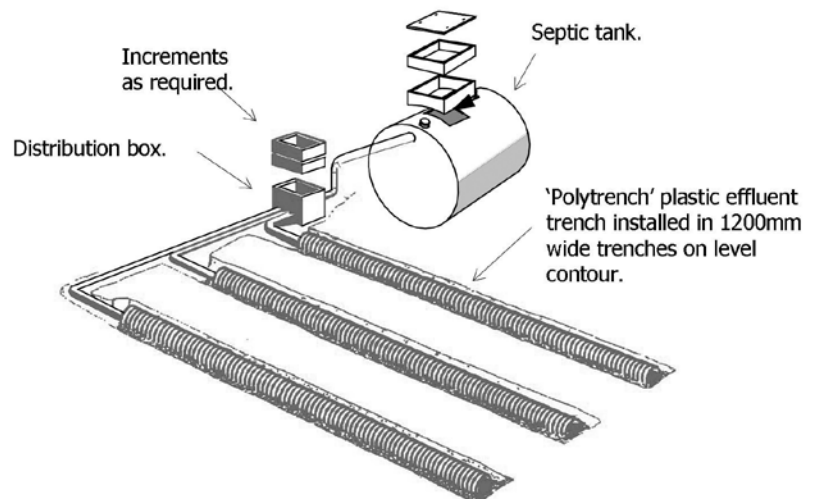
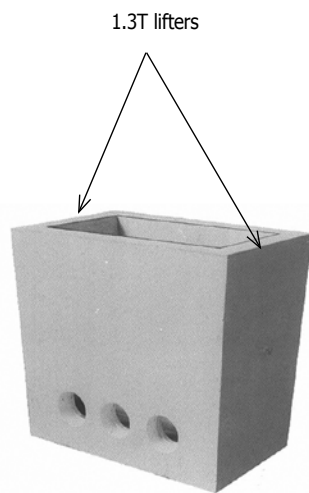
Item	Approx Mass
1,100 litre precast pump chamber	1790kg



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
- 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

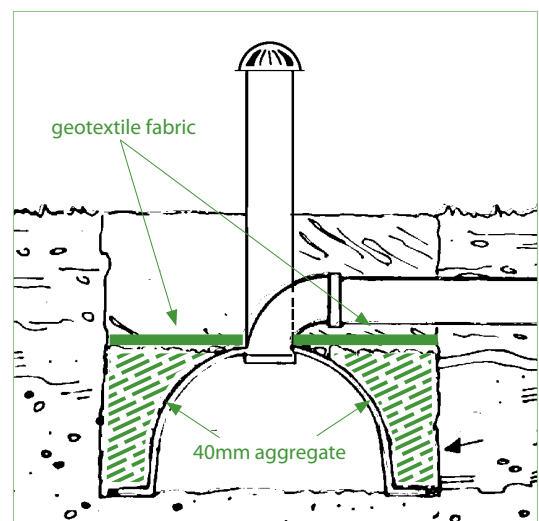
Check with the SA Health Department before starting to lay Polytrench.

- 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

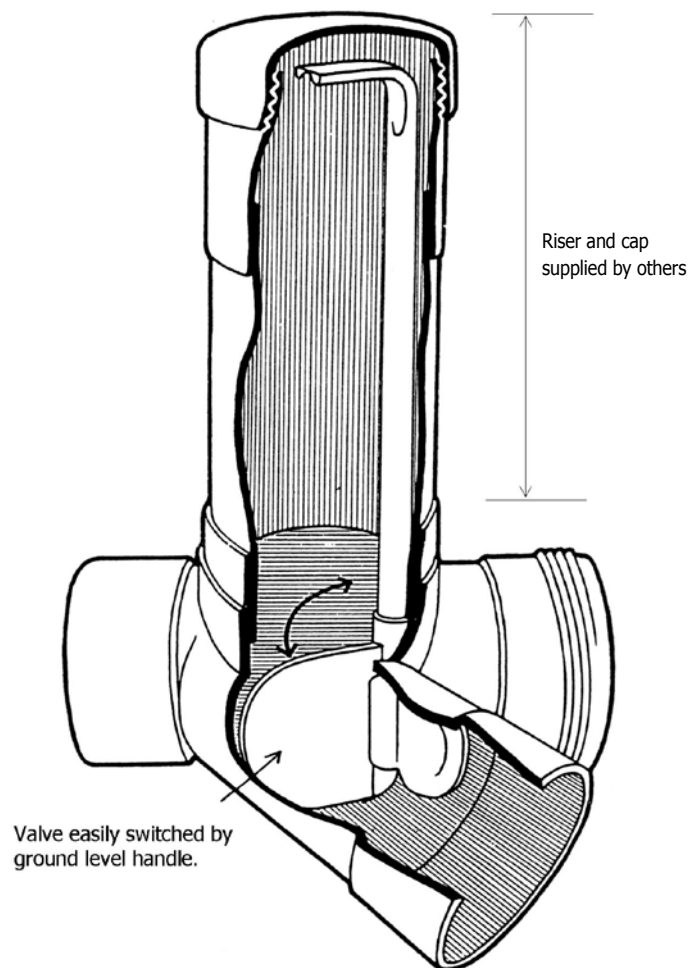
Our Polytrench has interlocking sections, supplied in manageable lengths:

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



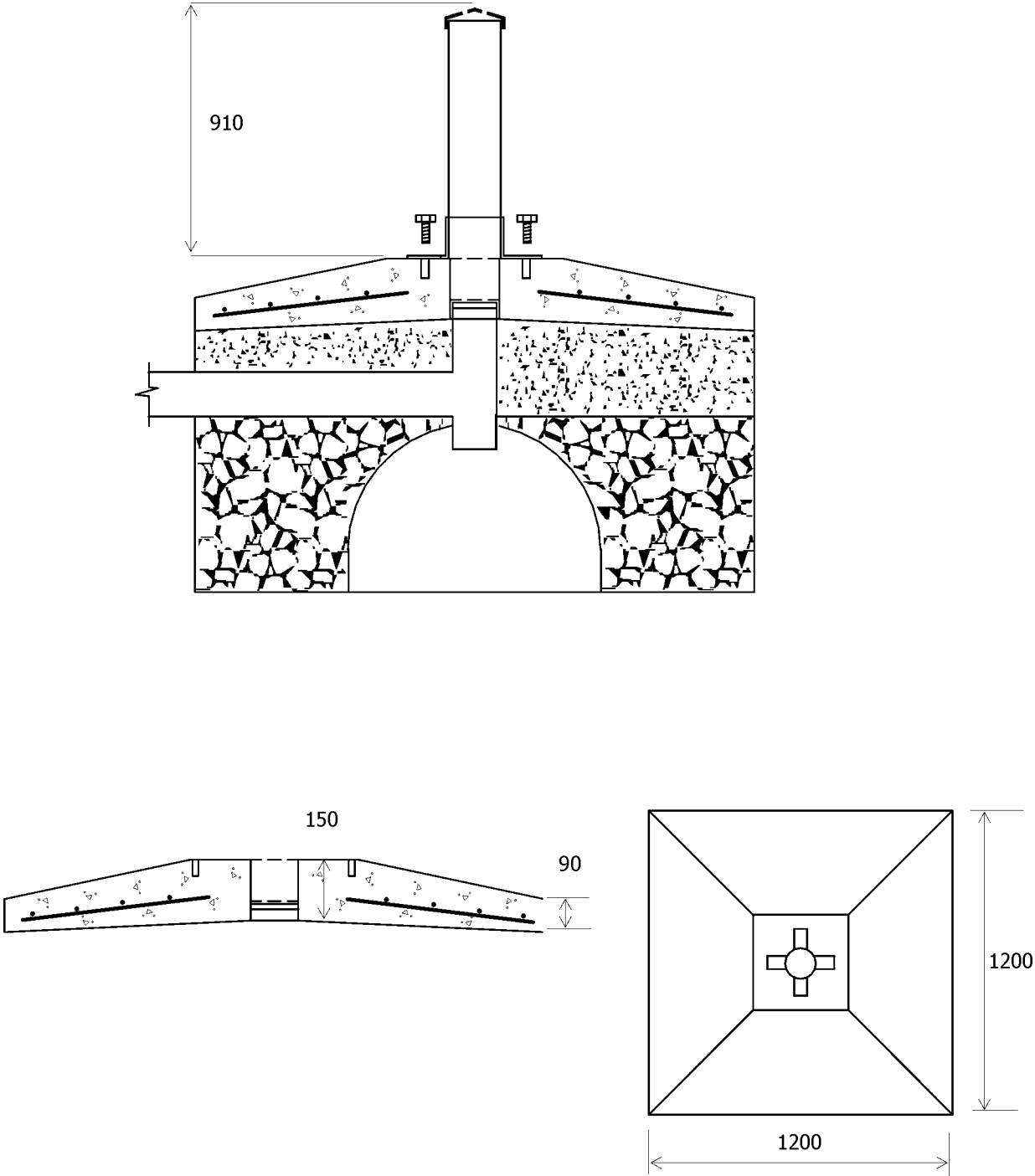
PVC effluent diverter junction

- 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.

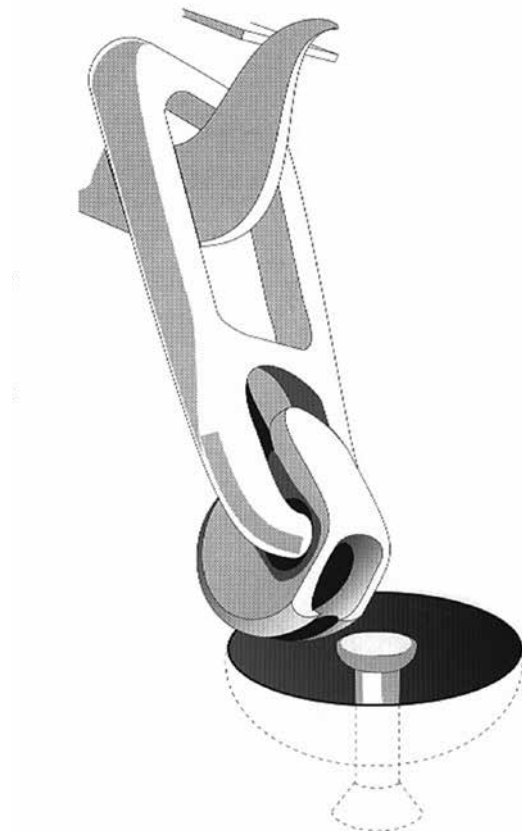
The system uses forged steel anchors which are normally hot dipped galvanised. Each anchor has its capacity, in tonnes, clearly marked on the head to ensure maximum safety on site.

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.

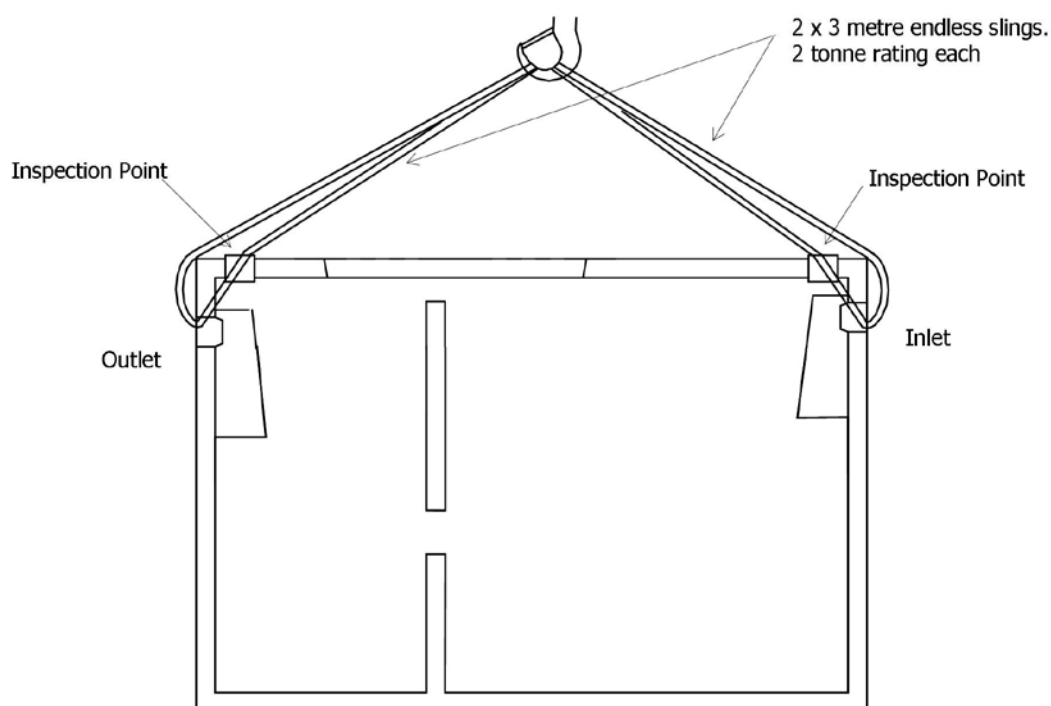
Available in 1.3, 2.5, 5.0 and 10 tonnes.



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**

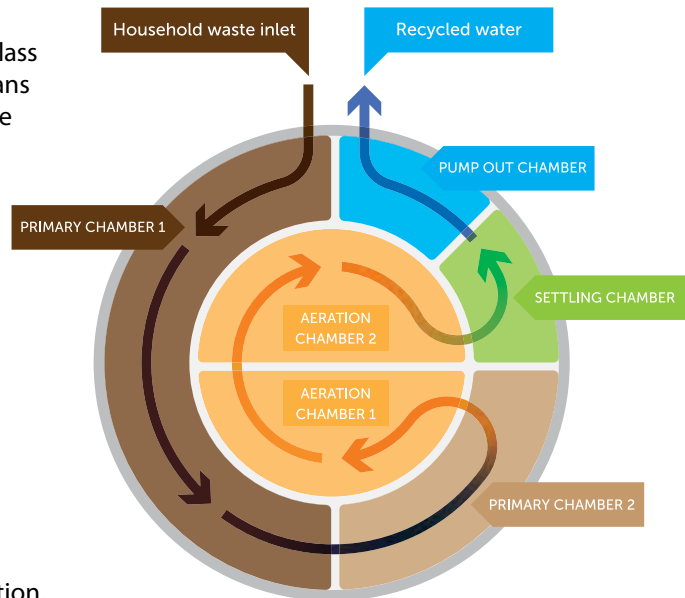
- Guaranteed superior quality • Engineer-designed with a 15 year warranty
 - The only SA-manufactured secondary treatment system that's been tested, certified and approved to the Australian Standard (AS/NZS 1546.3:2017) for South Australian conditions



Ri-Treat EP10

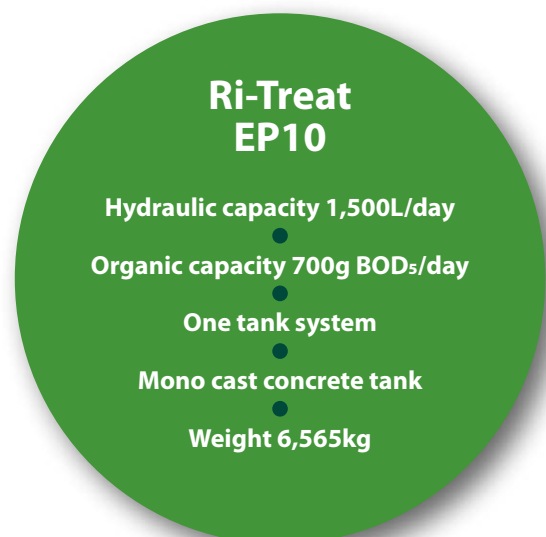
Features of our superior secondary treatment system

- 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.
- Tanks must be half filled with water through sewer inlet (all chambers) to stop flotation.
- 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.
- Tanks must be half filled with water through sewer inlet (all chambers) to stop flotation.
- 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.

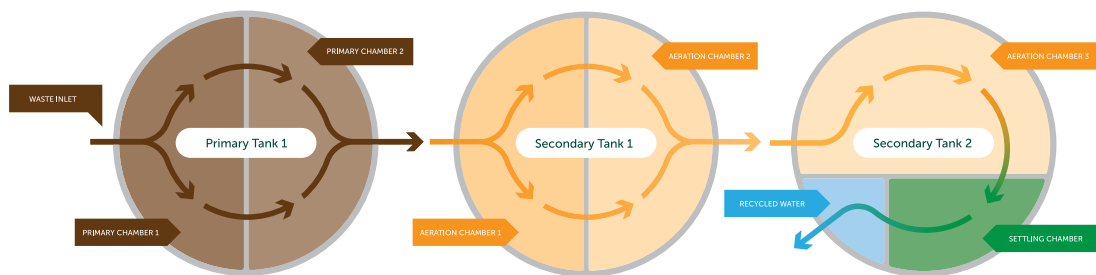
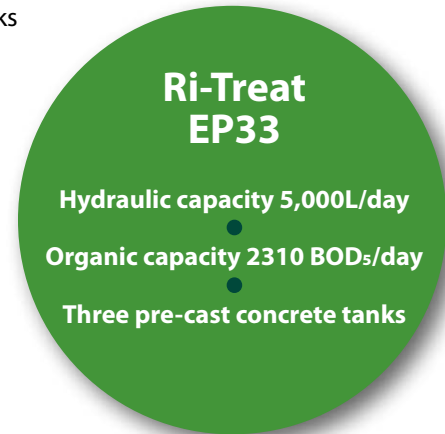
Ri-Treat EP10



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.



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.
- Tanks must be half filled with water (all chambers) to stop flotation.
- 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

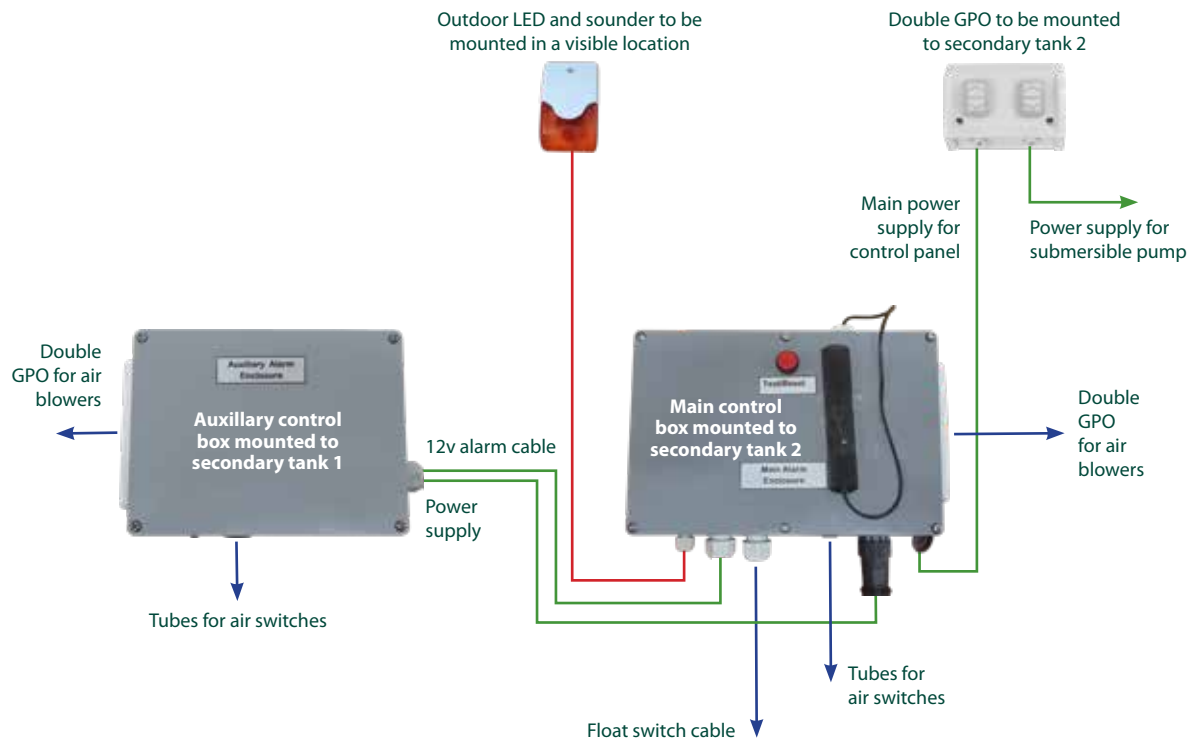
Installation

Installation of a Ri-Treat EP33

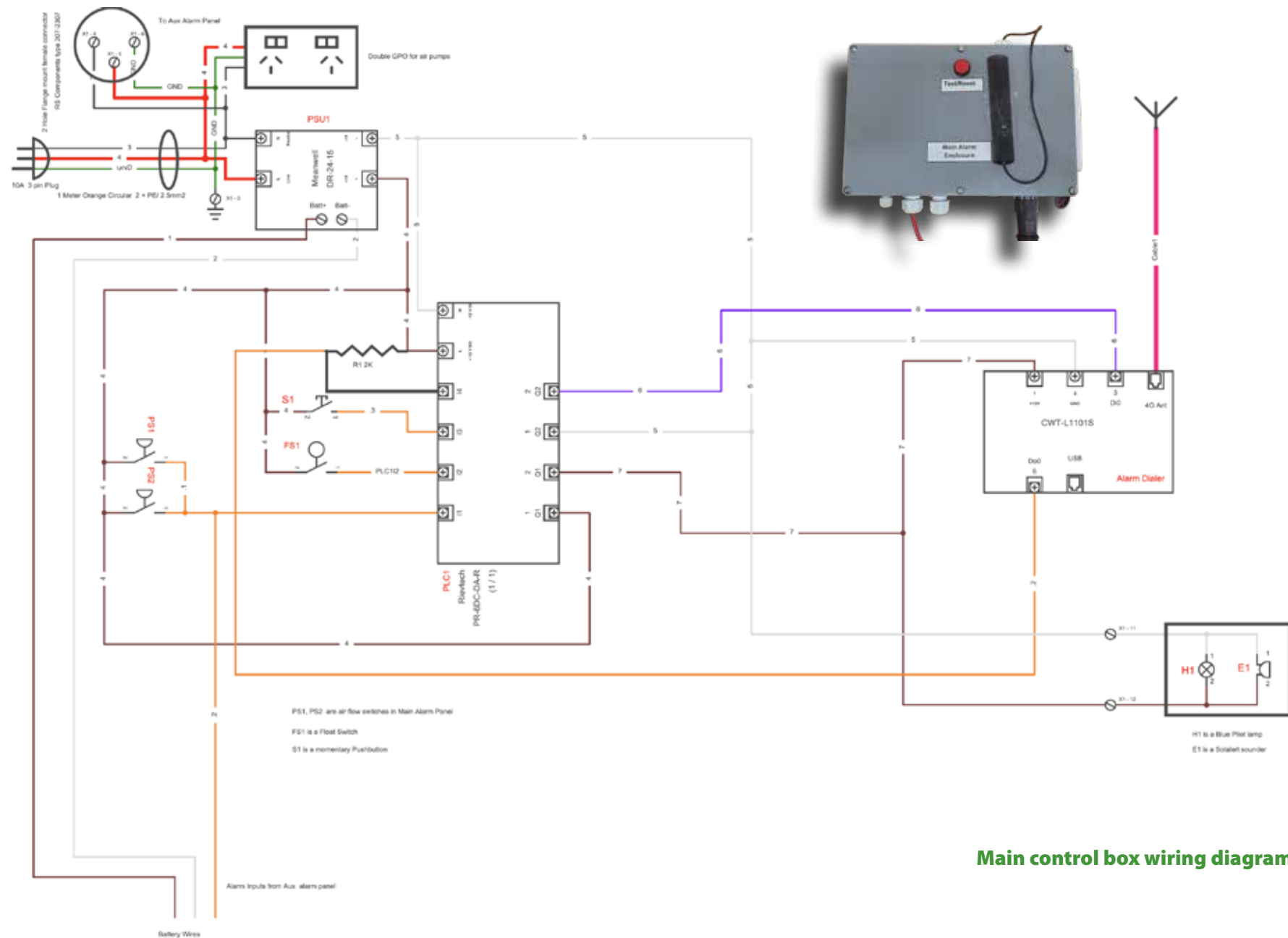
- The Ri-Treat EP33 must be installed by a licensed plumbing contractor.
- The tanks must be level when installed.
- Care must be taken to ensure that excavated material does not fall onto the lid of the tanks, as material may fall into the tanks, clogging the diffusers and irrigation pump.
- The inlet 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.**

Electrical installation

Electrical layout to be installed by a qualified electrician. See the EP33 Installation Manual for more details.

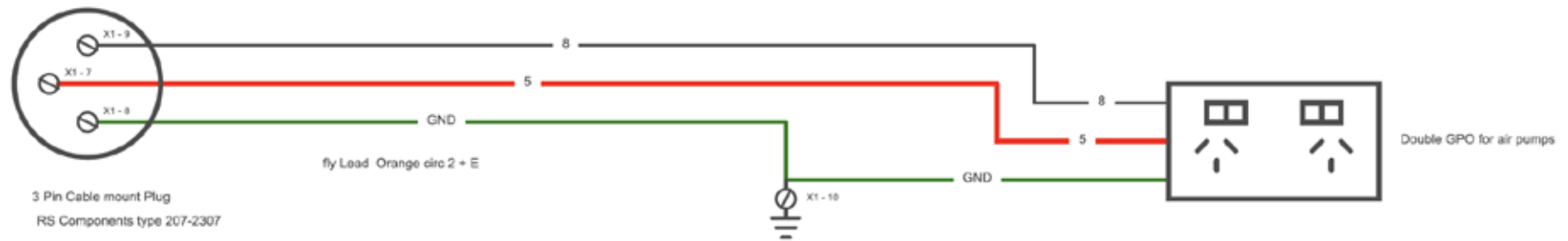


Electrical technical specifications

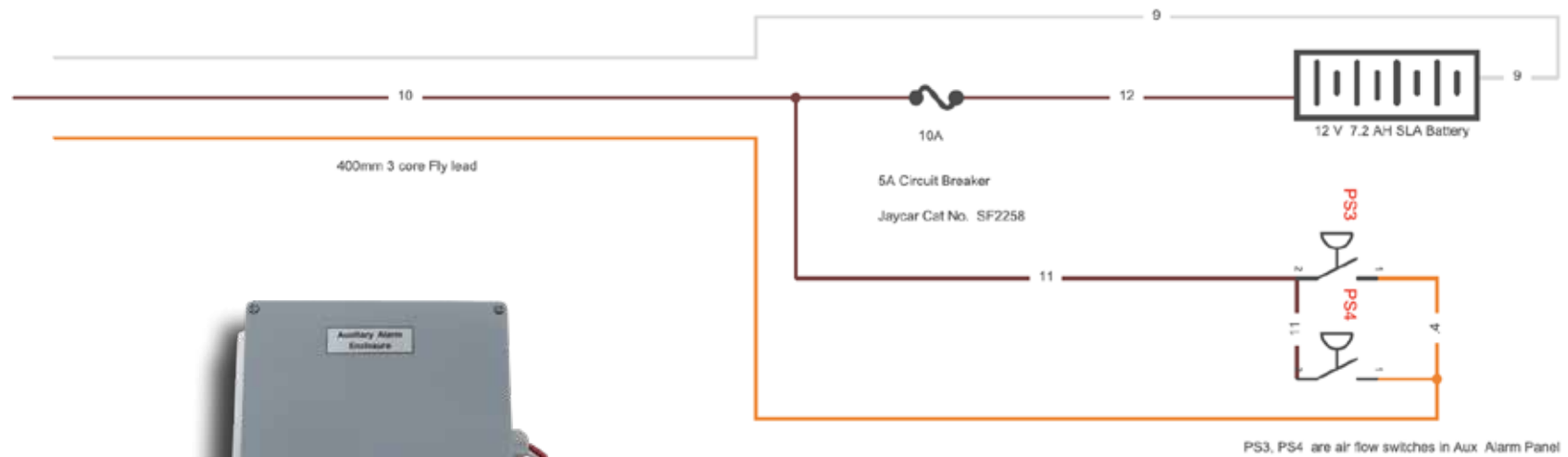


Main control box wiring diagram

Electrical technical specifications



3 Pin Cable mount Socket
RS Components type 207-2327



Auxillary alarm panel

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 Cunninghamiana	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	Geraldton Wax	2 - 4 metres
Dryandra Formosa	-	1 - 3 metres
Eremophila 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."*

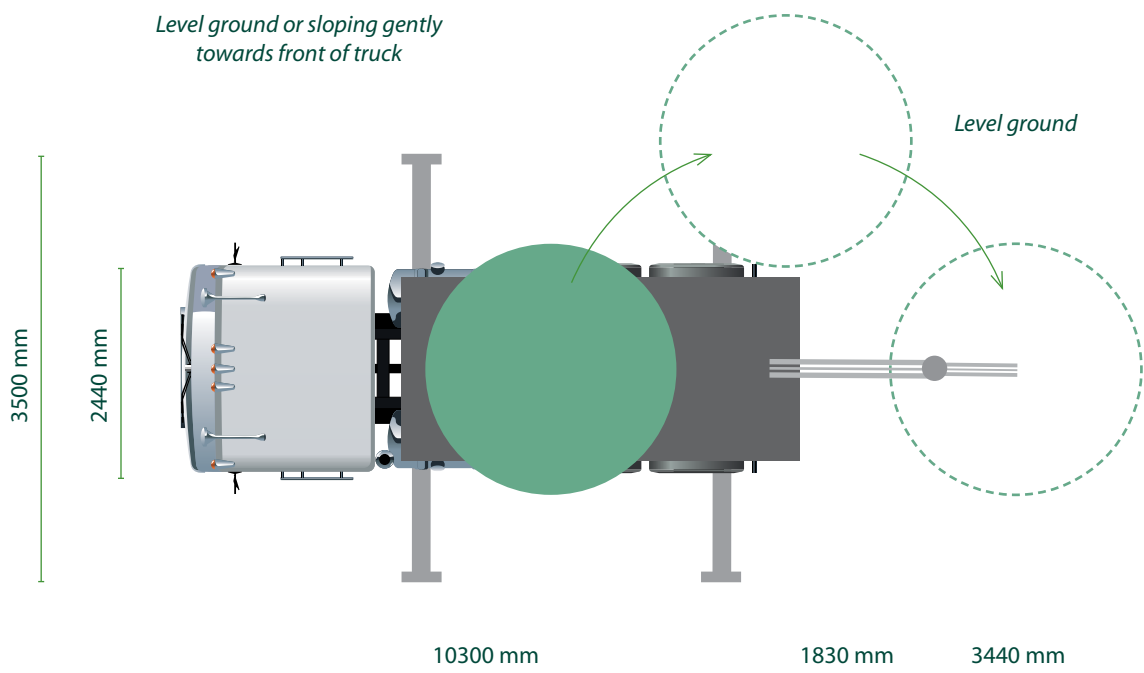
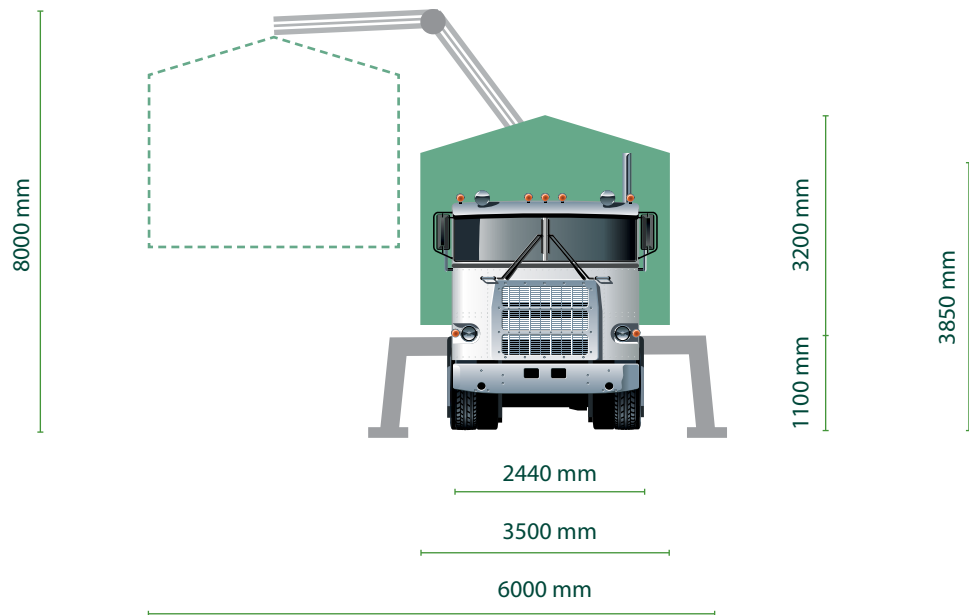
SA plumber

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	
*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.

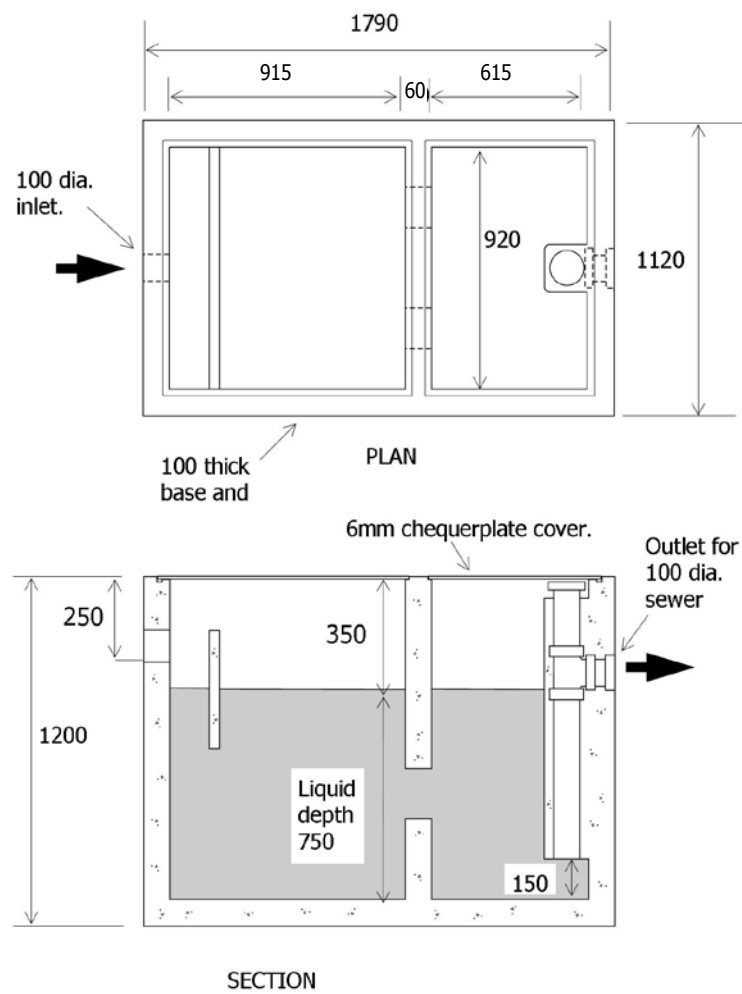
Please note: Where circular gas-tight inspection covers are fitted a minimum of 600 mm vertical clearance between the underside of the cover slab and the static water level in the arrester is necessary to facilitate routine servicing.

Maintenance

Our trade waste arrestors 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

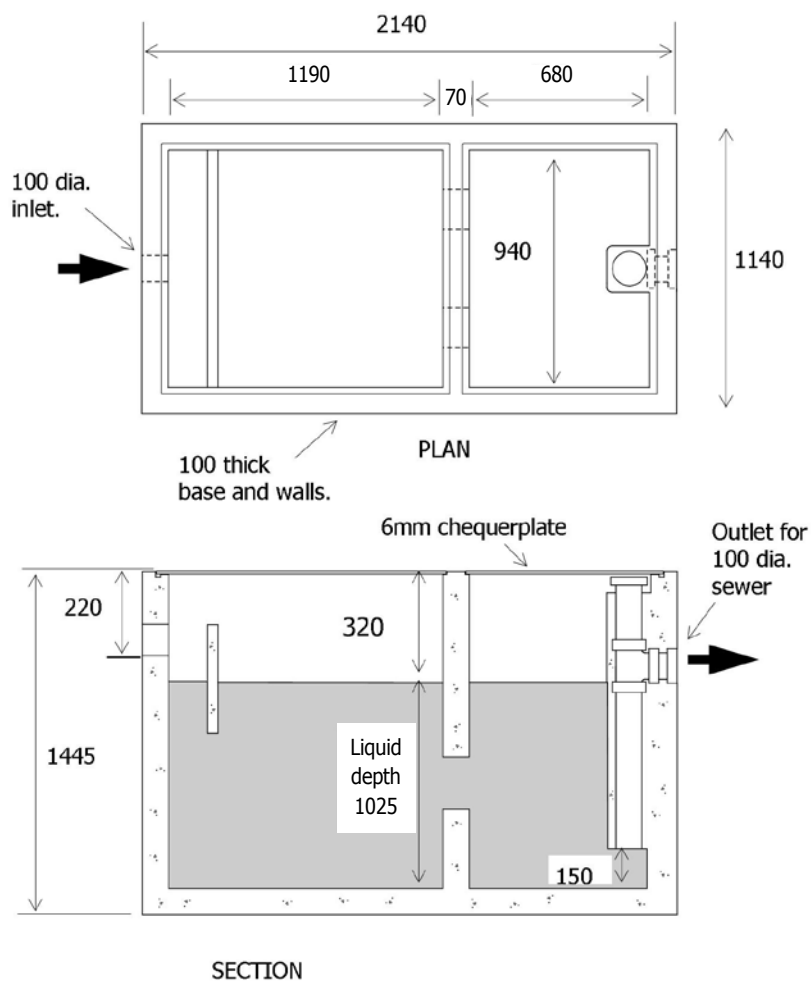
Item	Approx Mass
1,200 mm base unit	2,200kg



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

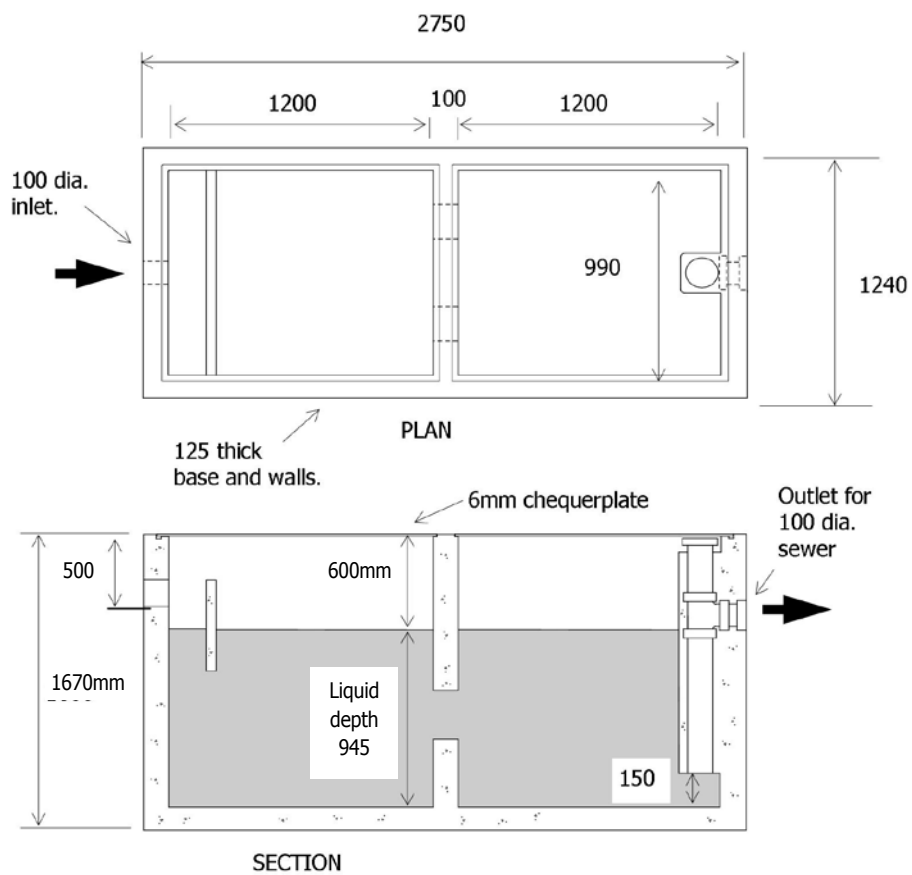
Item	Approx Mass
1,445 mm base unit	2,900kg



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

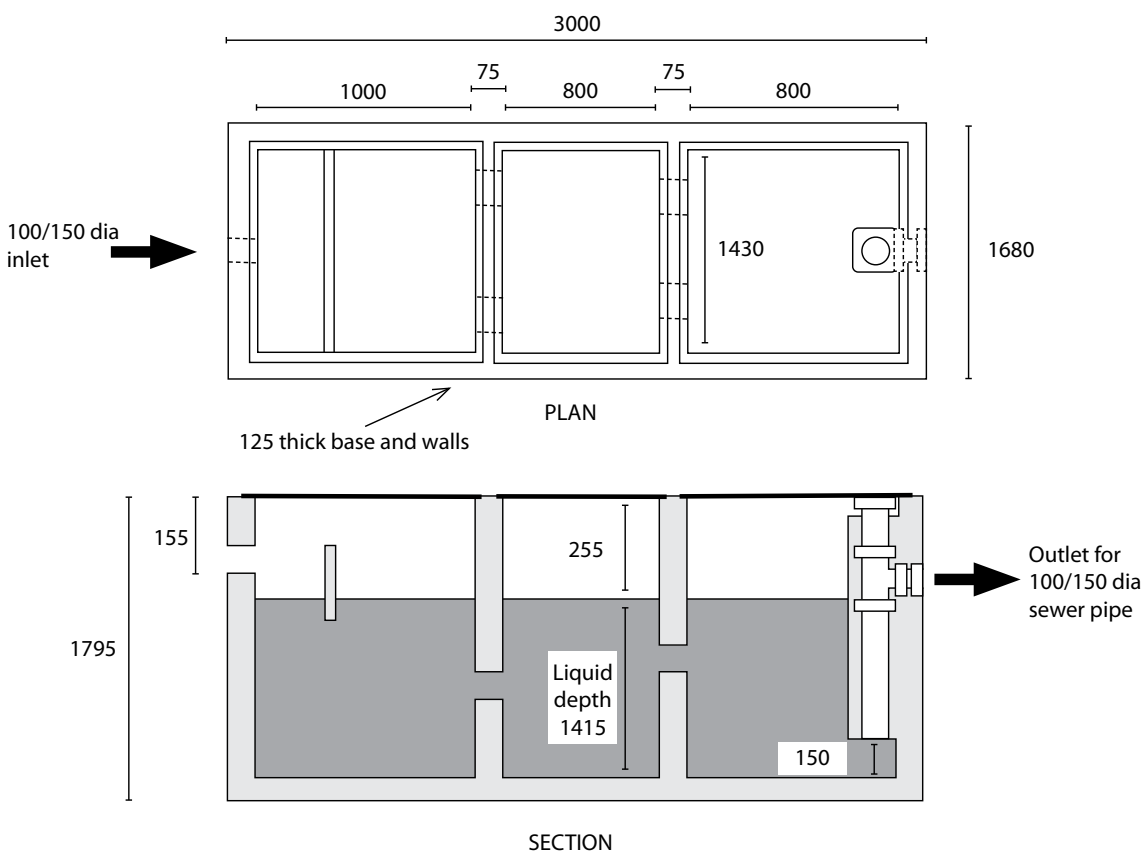
Item	Approx Mass
1,670mm base unit	5,150kg



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.

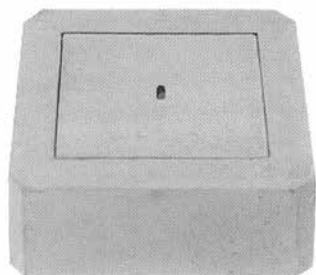
Inspection openings



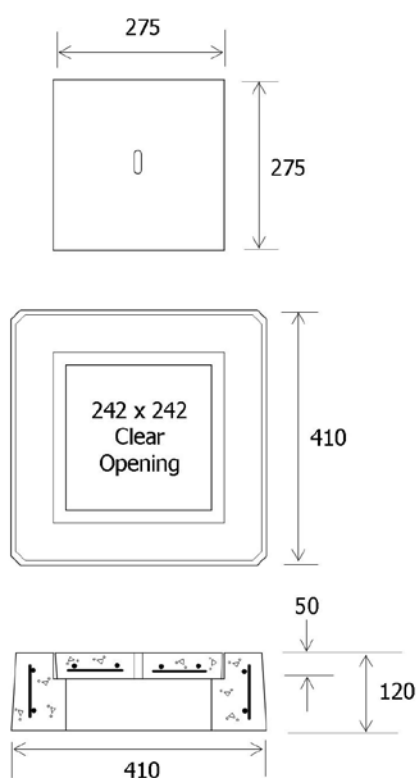
Industries

Precast concrete inspection cover

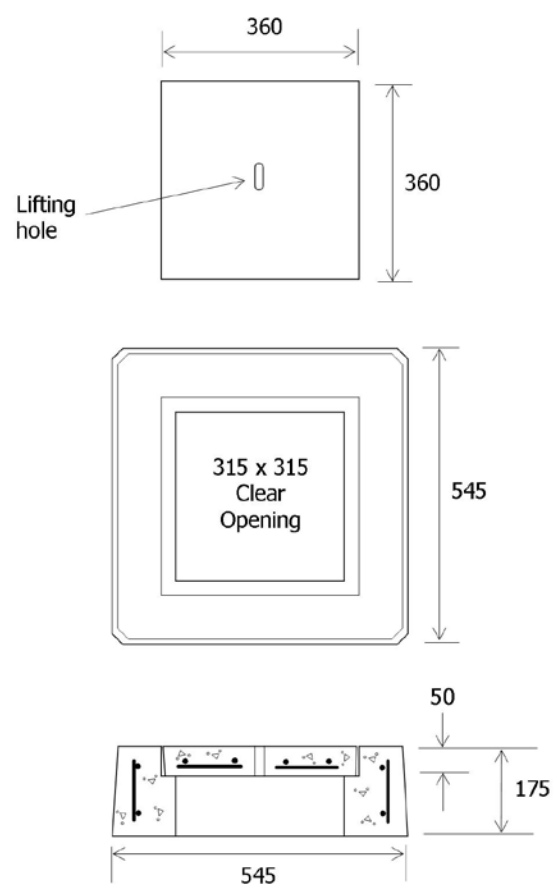
- Suitable for grassed, bituminised and paved areas
- Available in two sizes to suit 100 mm or 150 mm risers
- Minimum concrete strength 32 MPa at 28 days



Item	Approx Mass
100 mm IP	33kg



Item	Approx Mass
150 mm IP	83kg

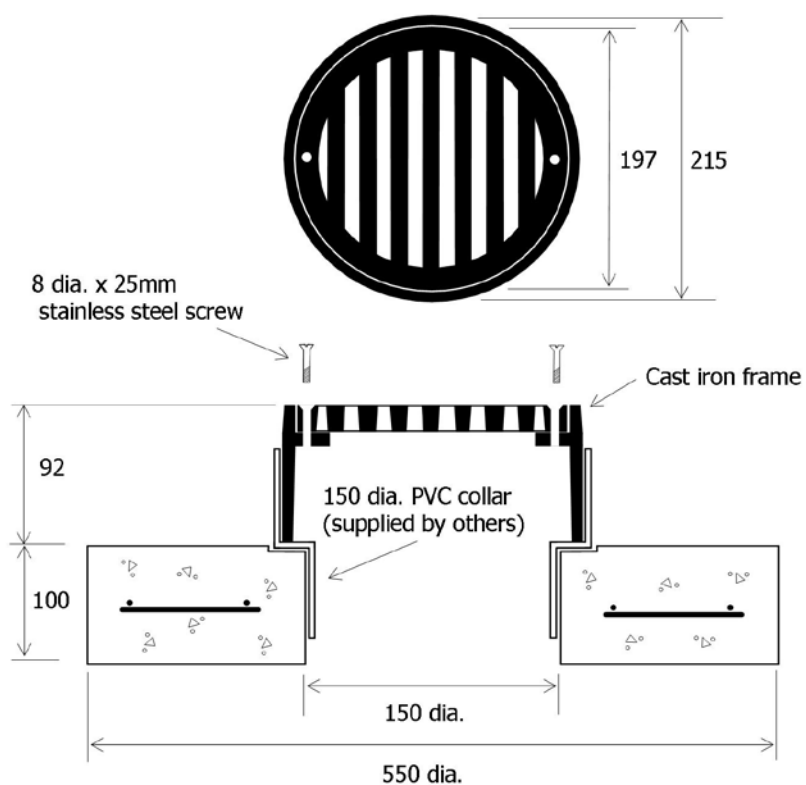


Grated stormwater collection point

- 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

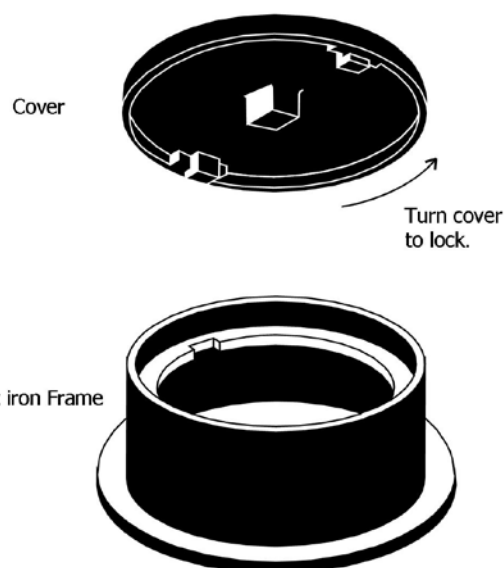
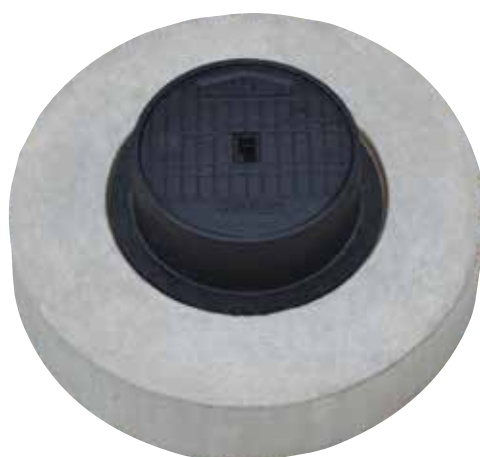


Item	Approx Mass
Grate and frame	5kg

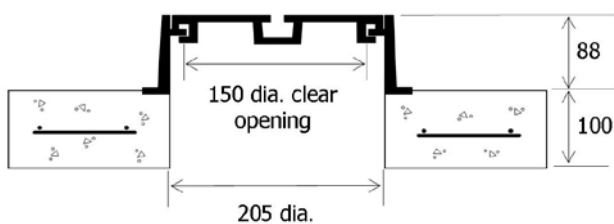


Flanged I.O. cover and frame • Type 1

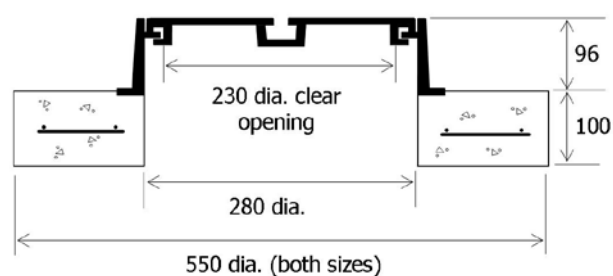
- Suitable for use in concreted and paved areas
- Available in two sizes to suit 100 mm or 150 mm risers
- Cast iron frame and cover are tar dipped
- Available in bolt down
- Minimum concrete strength 32 MPa at 28 days
- Available for sewer or stormwater



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

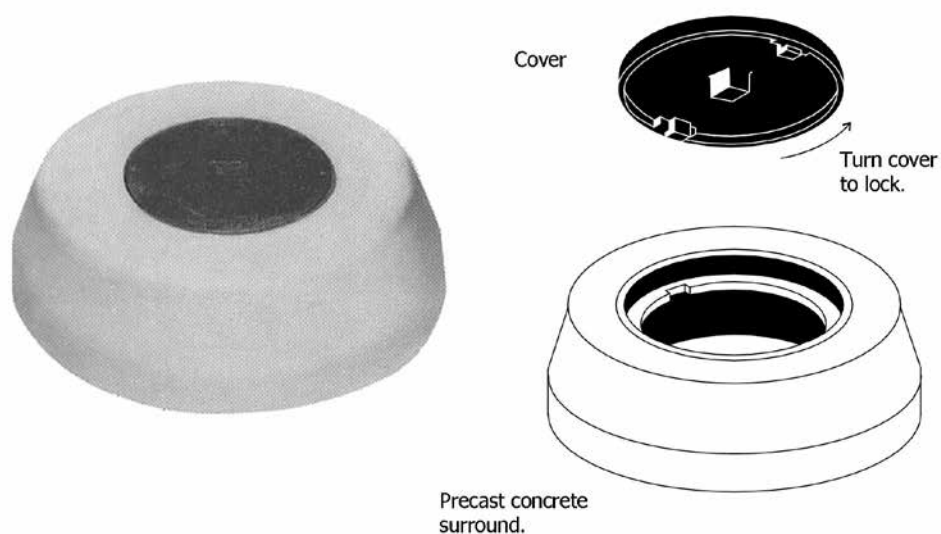


Item	Approx Mass
Cover & frame	14.5kg
Support block	40kg

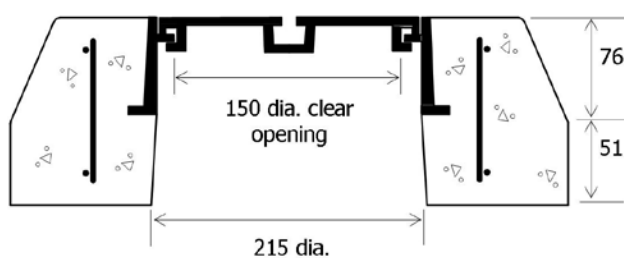


I.O. cover and frame • Type 2

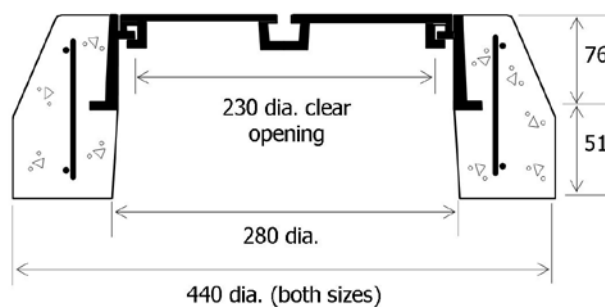
- Suitable for use in paved, bituminised and grasses areas
- Available in two sizes to suit 100 mm or 150 mm risers
- Cast iron frame and cover are tar dipped
- Available in bolt down
- Minimum concrete strength 32 MPa at 28 days
- Available for sewer or stormwater



Item	Approx Mass
Cover & surround	32kg



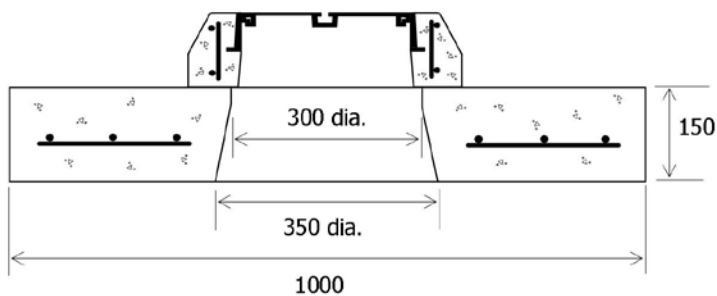
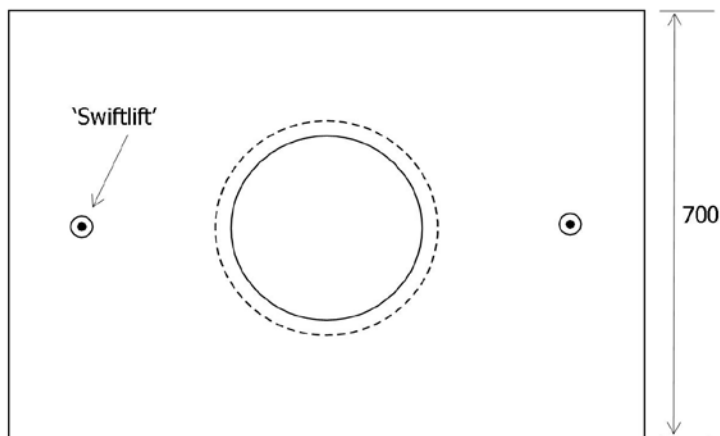
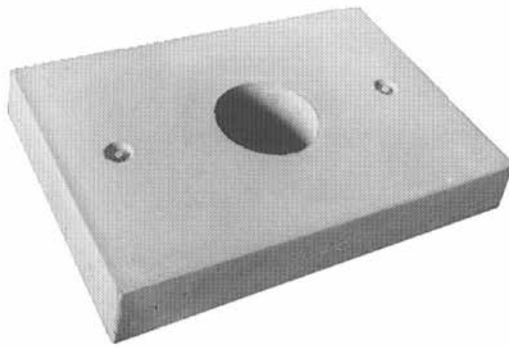
Item	Approx Mass
Cover & surround	29kg



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

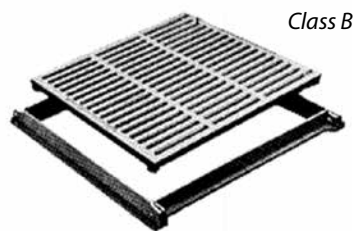
Sump grates standard sizes

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

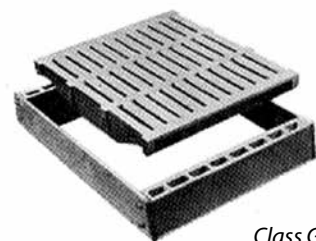
Non standard sizes available on request



Class D



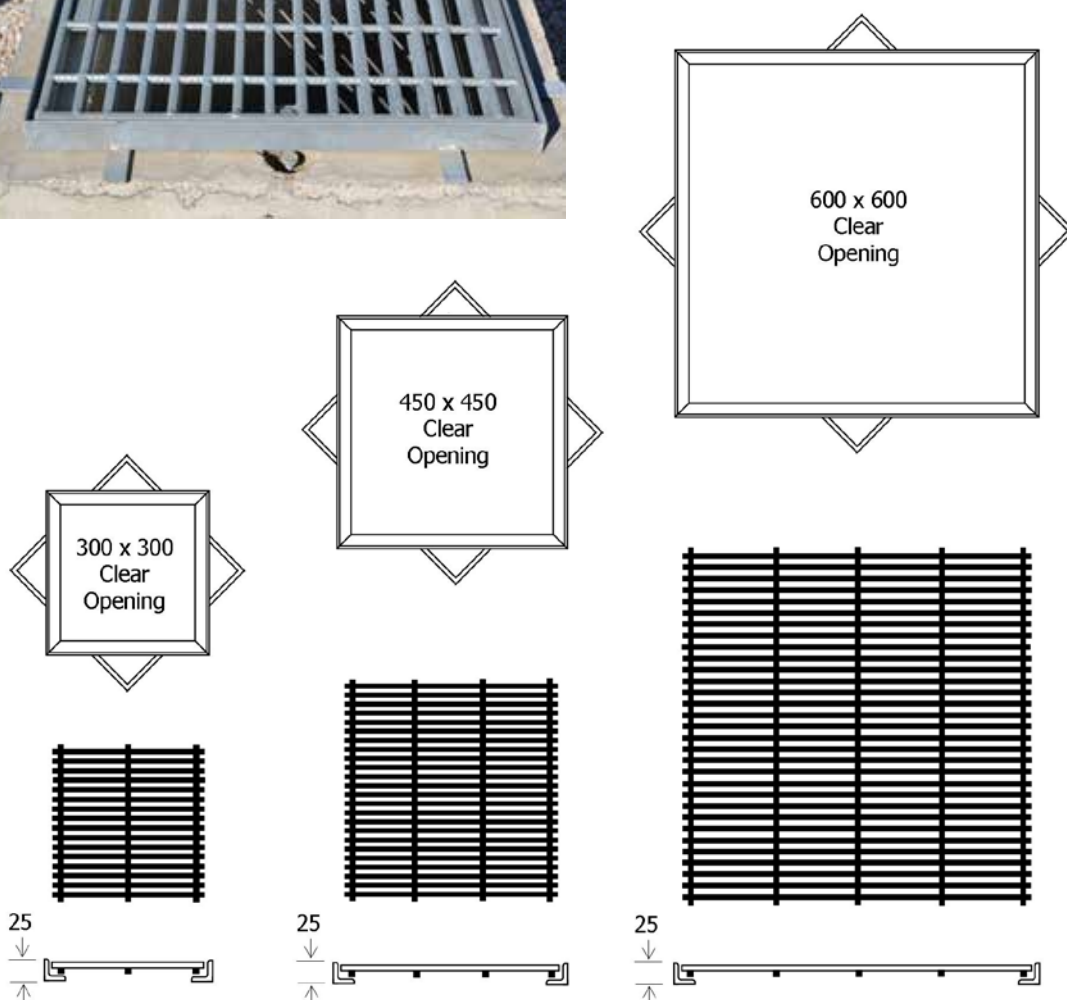
Class B



Class G

Light duty galvanised grates & frames

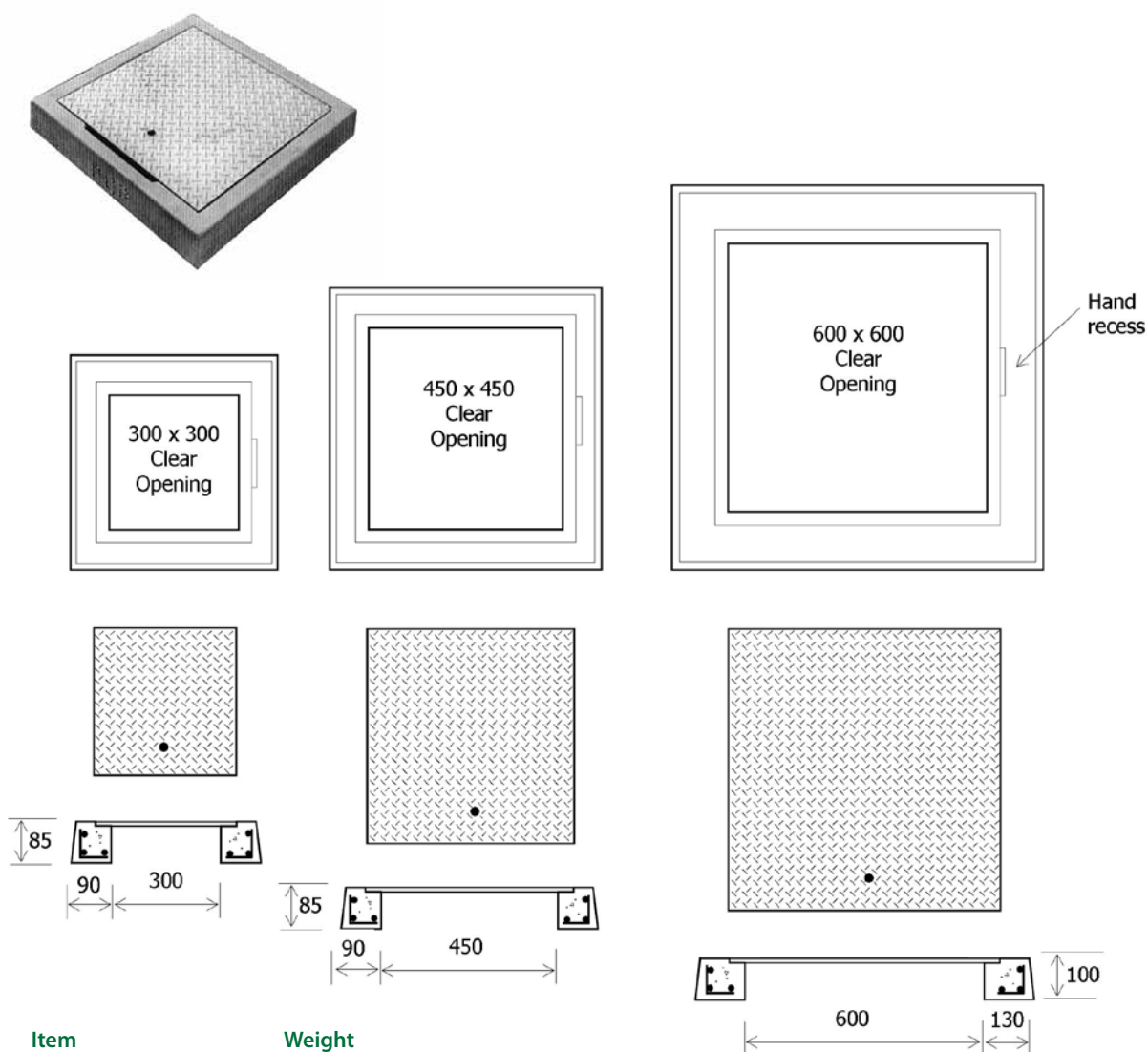
- Also available for heavy duty application
- Hot dipped galvanised after fabrication
- Suitable for use in concreted or bitumised areas servicing pedestrian traffic
- Special sizes to suit other pits supplied to order



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

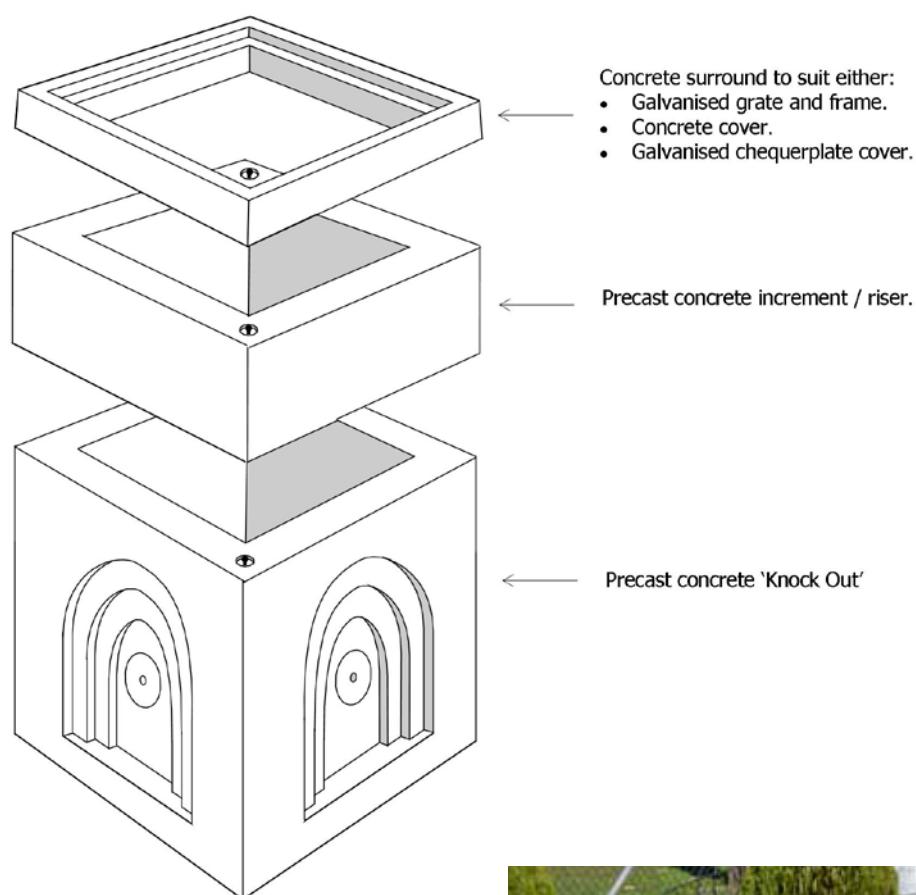
Item	Weight
450 x 450 Plate	13.5kg
450 x 450 Surround	21.5kg

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





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