



W & M Kiely Ltd

CONCRETE PRODUCTS

COURTBRAK, BLARNEY, CO. CORK
TEL: (021) 4385872 | Email: info@wmkiely.ie
www.wmkiely.ie

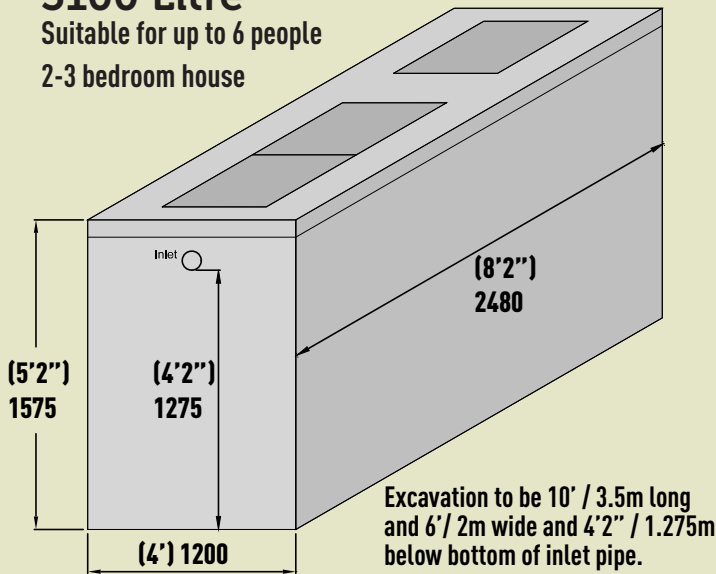


A family run business for over 40 years

SEPTIC TANKS EN12566-1 CERTIFIED

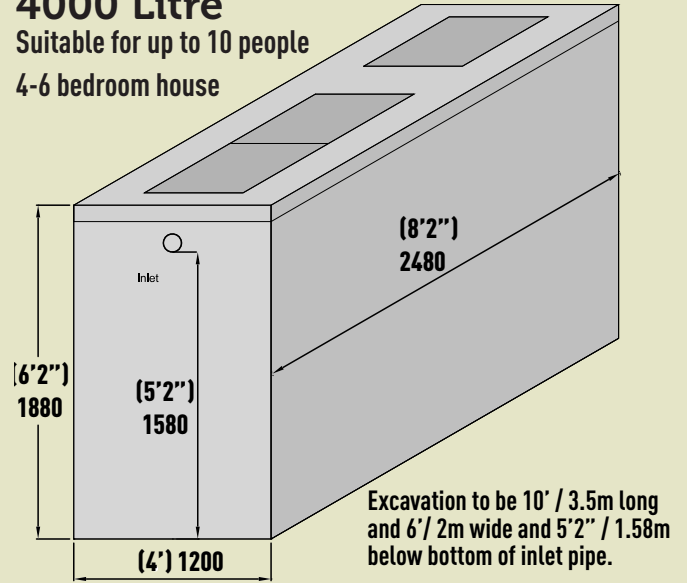
3100 Litre

Suitable for up to 6 people
2-3 bedroom house



4000 Litre

Suitable for up to 10 people
4-6 bedroom house



RETRO FITTING

If you need to:

- Replace an old cesspit or septic tank
- Replace a damaged or defective tank
- Upgrade an old septic tank to a bio tank
- Add on a Bio system to your existing tank

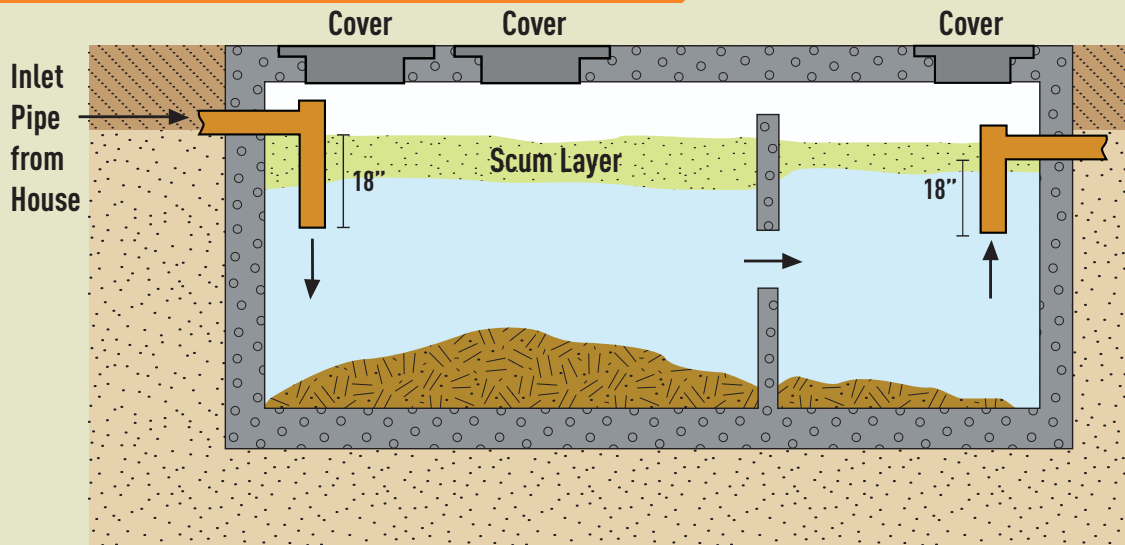
KIELYS HAVE MANY SOLUTIONS



KIELY ADVANTAGES

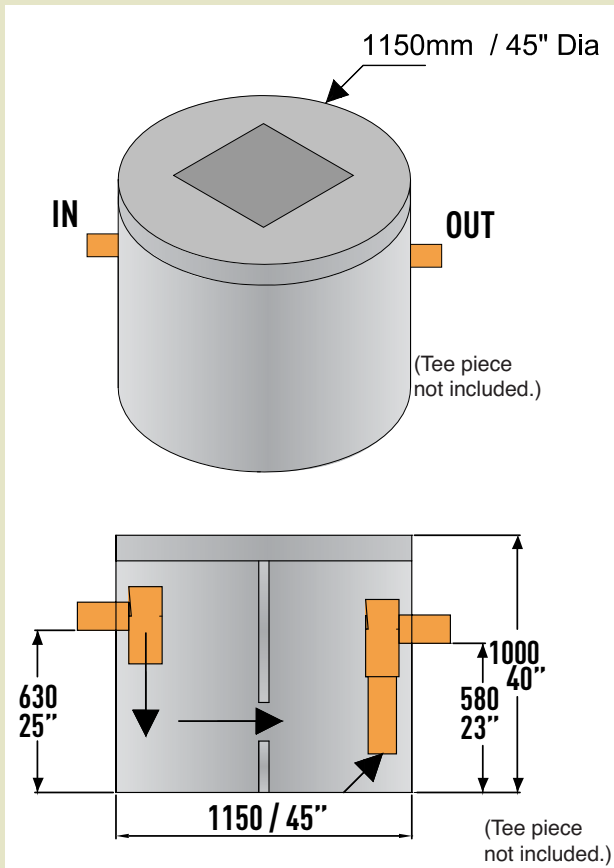
- Precast concrete double chamber tank
- EN 12566-1 certified
- Complies with EPA COP regulations
- Tank installed by our unique machine
- No need for expensive concrete base or backfill

HOW THE SEPTIC TANK WORKS



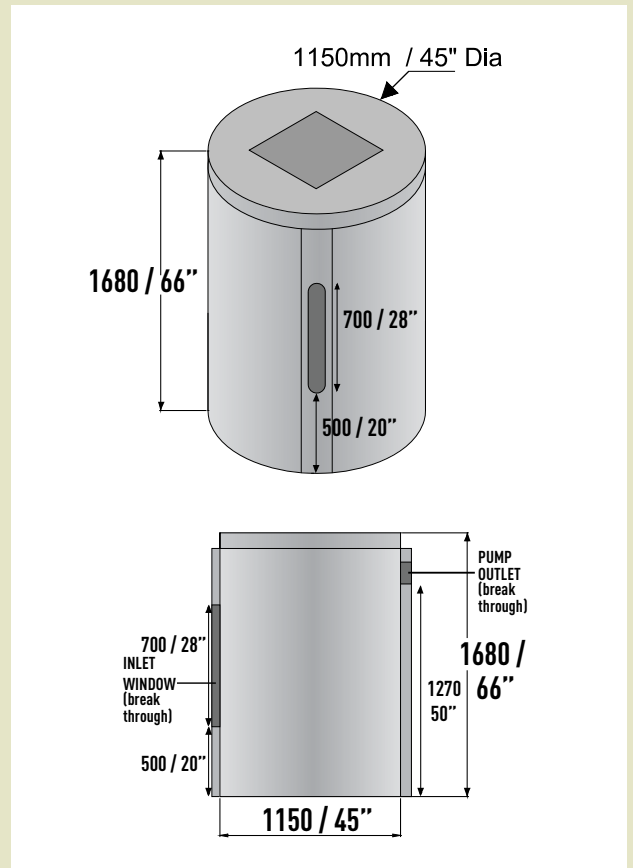
Wastewater from the house enters the tank through the inlet pipe and tee piece. The pipe aims the liquid down so the gross solids settle to the base. The lighter floating debris rises to the surface leaving a clearer liquid in the center. The center baffle wall helps to slow the process and retain most of the solids in the first chamber and the tee piece pipe on the outlet prevents solids floating on the surface from exiting the tank to your percolation area.

GREASE TRAPS & PUMP CHAMBERS



Grease Trap (700 litre)

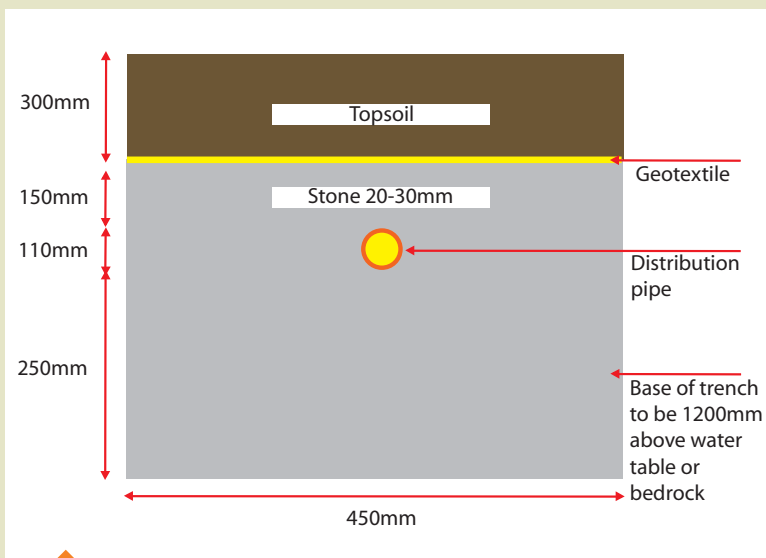
Recommended to trap grease and silt from washing machines, dishwasher and kitchen sink wastewater. For effective operation keep grease trap as close to house as possible to prevent grease from cooling and lodging in sewer pipes. As fat and grease floats to surface Tee pipes must be fitted to prevent grease from floating out. Desludge as necessary.



Pump Chamber Tank (1,200 litre)

This tank is recommended if you need to pump effluent to a higher percolation area/pressurised filter bed or to main sewer. This tank can also be used for water/effluent storage.

PERCOLATION TRENCH



Typical cross section of standard percolation trench

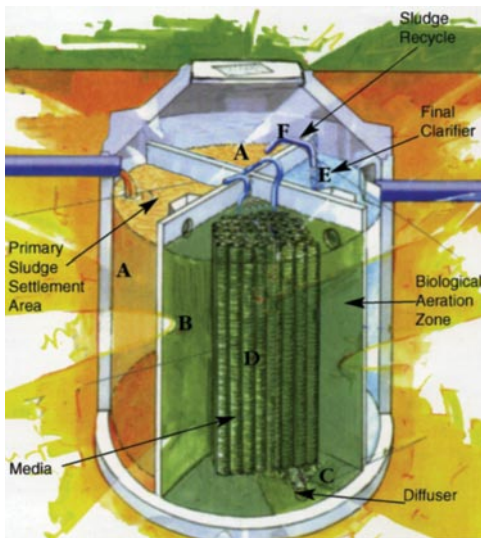
Your engineer will specify length, type and size of percolation area.

DISTRIBUTION BOX



6 outlet distribution box complete with flow adjusters which ensures even distribution to each trench. (This box is required for sampling and inspection by environmental inspectors.) The box is 400mm x 400mm and 350mm high. The risers come in 150mm sections.

BIOKAST TREATMENT SYSTEM EN12566-3 CERTIFIED



How the system works:

The Primary Area: All wastewater from the dwelling enters this area (A) first. Unique to the biokast the primary area consists of 2 separate chambers similar to a standard septic tank. In this chamber some anaerobic biodegradation takes place.

The Aeration Area: The settled wastewater now enters this area (B) where a fine bubble air diffuser (C) continuously aerates the effluent which creates a biomass. This biomass grows on the plastic media (D) which in turn breaks down the organic pollutants.

The Clarifier Area: In this area (E) the effluent settles and allows fine particles of humus to settle to the bottom which is then recycled (F) back to the primary area. This suppresses the activities of micro organisms which emit odours

KIELY BIOKAST P-10 SYSTEM

- Reinforced concrete tank
- Large 8500l capacity system
- Standard domestic tank for 2 - 10 people
- EN 12566-3 certified
- Complies with EPA Code of Practice guidelines
- Irish and UK patented design
- Tank placed in excavation by our truck and crane



COST SAVING ADVANTAGES

- Large capacity ensures infrequent desludging
- Concrete tank – no need for concrete base or backfill
- Electrical components on simple energy saving timer
- Unique cover design gives access to all chambers
- Unlike SBR systems (which have computer controlled solenoids) the Biokast is a SIMPLE RELIABLE SYSTEM



KIELYS MANUFACTURE A RANGE OF BIOKAST TREATMENT SYSTEMS FOR ALL APPLICATIONS UP TO 250PE.

Minimum Separation Distances (m)

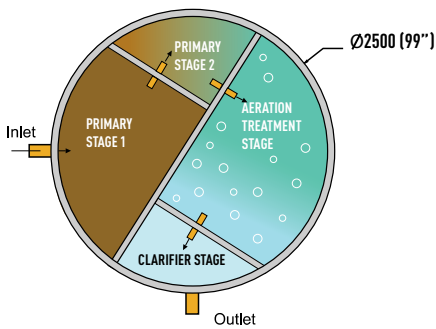
Feature	BioKast Unit	Percolation Area
Any Dwelling	7	10
Wall	3	3
Road	4	4
Site Boundary	3	3
Well/Spring	10	30-100
Watercourse	10	10
Lake	50	50
Surface Water Soakaway	5	5



CLIENT REQUIREMENTS

- Clear access for truck to back up to hole
- Hole Dug to correct dimensions with a level base
- Tank to be filled with clean water after installation
- Client electrician to bring 3 core 2.5 swa cable to tank with 2 metres spare at tank
- Client to contact Kielys prior to use so our service team can commission the system
- Client is responsible to call Kielys for annual maintenance of the system

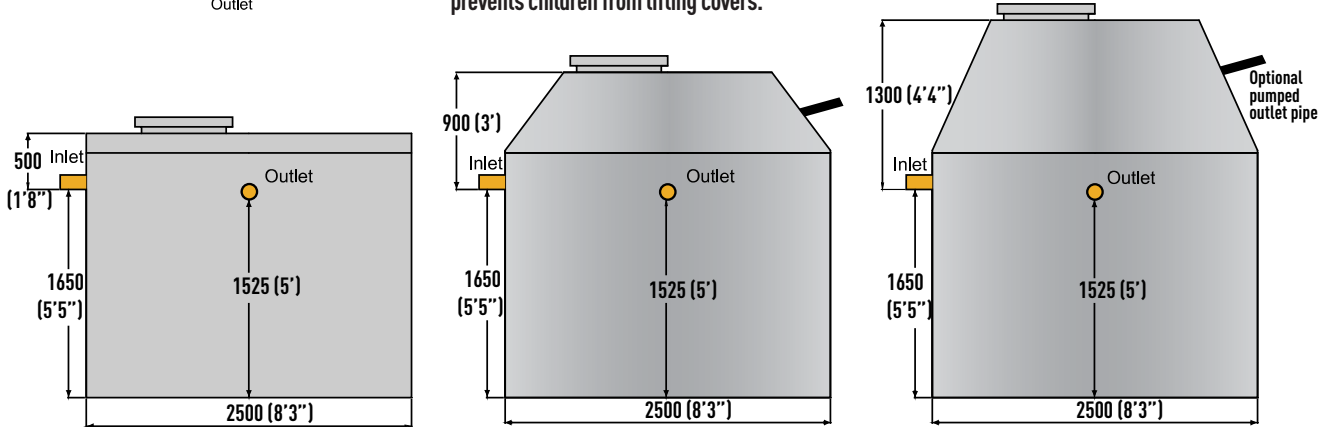
BIOKAST COVER OPTIONS & DIGGING DIMENSIONS



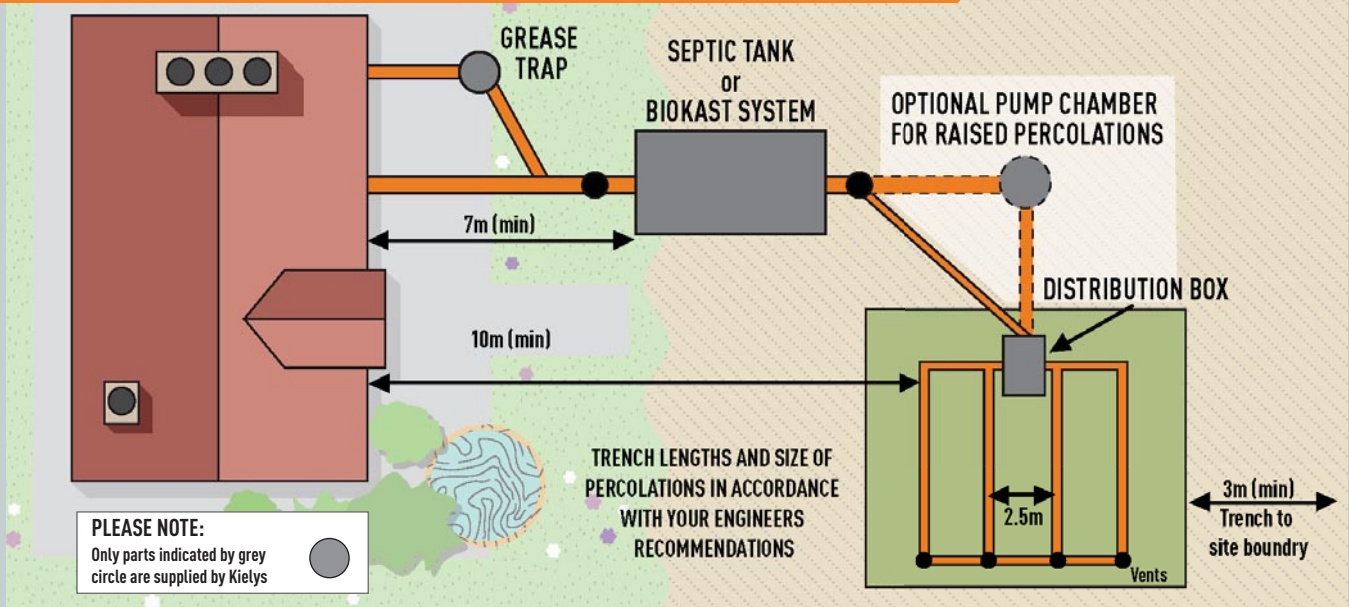
When excavating the hole you must dig 3m (10 feet) square and dig 1.65m (65 inches) down from the inlet invert. The base of the hole must be screened level with sand or grit. The Kiely biokast tank can be supplied with a choice of covers to suit your site. The aim is to have access at ground level for maintenance purposes. The choice of cover depends on the depth of the pipe entering the tank up to finished garden level. It is very important to pick the correct cover to

- 1: eliminate surface water entering the tank if cover too low
- 2: if cover is too high it may be unsightly

The advantage of the Kiely cone cover is it eliminates building block risers on top of the tank to bring the access cover to garden level. The cone cover gives our service team complete access to inside of the tank for trouble free maintenance. The Kiely cone cover is sealed on to the tank and the galvanised safety strap prevents children from lifting covers.



BIOKAST / SEPTIC TANK TYPICAL LAYOUT



PERCOLATION AREAS

From your engineers site suitability assessment report result a decision is made on the method of percolation system. Your engineer will recommend in accordance with the EPA Code Of Practice the appropriate percolation system. The common types are Standard Trenches, Raised Areas, Soil or Sand Polishing Filter Areas.

Sometimes an extra pump is needed to supply the treated water to a raised area or pump it evenly around a polishing filter (sometimes referred to as a pressurised system). Whatever your site requirement is Kielys have the experience and the answers to your needs.

RAINWATER HARVESTING SYSTEMS

Kiely rainwater harvesting systems come in many sizes to suit domestic houses, schools, commercial, industrial and agricultural applications a typical standard household system is 6500 litre capacity but we have a range of sizes from 4000 up to 18000 litre and bigger if required.

How it works

Water is taken from your roof and flows through a leaf filter which eliminates unwanted debris entering the tank.

The water is pumped from the tank into the dwelling house. There are two options:

- 1: Pump to a header tank in attic and **GRAVITY** flow down to point of use or
- 2: Pump **DIRECT** into point of use

In long spells of wet weather the overflow from the tank and the inlet leaf filter goes to a soakaway

In long spells of dry weather when the tank is empty your system must be topped up by your mains supply either in your house (if attic tank is used) or out at the tank (if it is direct into point of use.)

Rainwater harvesting is only recommended for toilets, car wash and garden use. Optional UV filter treatment is available.

1 Leaf filter **2** Calmed inlet **3** Pump **4** Floating intake **5** Overflow Siphon **6** Outlet from Tank and Leaf Filter to Soakaway **7** Pressure Switch **8** Water Tank in Attic **9** Top Up in Attic Tank (Gravity) **10** Mains feed out to tank top up (direct)

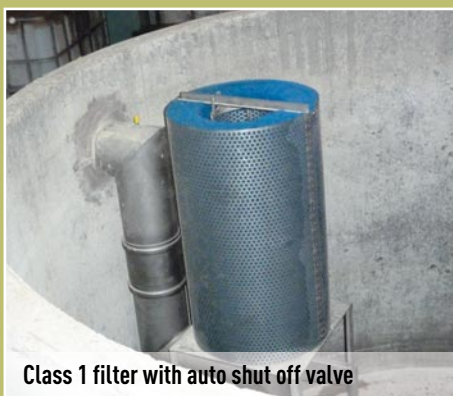


CLIENT REQUIREMENTS

- Clear access for truck to back up to hole → Client to connect roof water to filter and filter to tank
- Clients electrician to wire pressure switch and run cable from pressure switch out to tank
- Clients electrician to mount a junction box in the tank and join the cable from the pressure switch to the pump in the tank
- Clients plumber to connect and check all pipe connections

OIL SEPERATORS

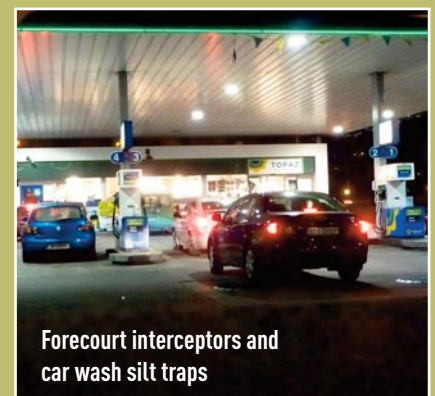
We manufacture a range of Multi Chamber – By pass – Full Retention and Forecourt oil seperators and interceptors . From 3 litres per second up to 50 litres per second and weather it's class 1 or class 2 we have the seperator to suit your needs . Our oil separator filters come with the EN 868-1 Oil Seperator standard.



Class 1 filter with auto shut off valve



Filter access for maintenance

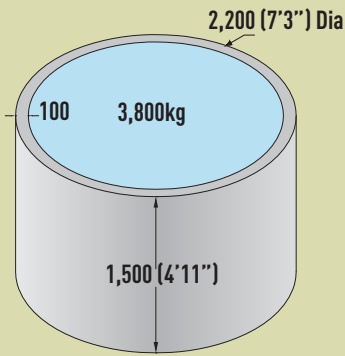


Forecourt interceptors and car wash silt traps

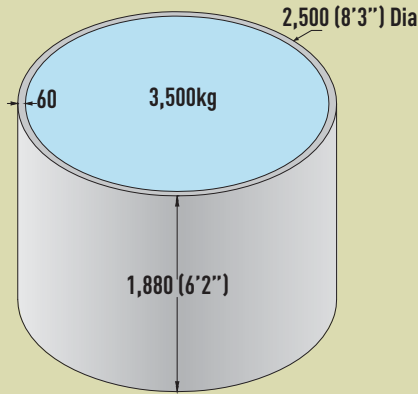
EN-EN 868-1 Oil seperators en silt traps – Part 1: Design, demands and testing, trademarks and quality-control, edition June 2002, amendment-sheet NEN_EN 858-1:2002/A1:2002/A1:2004 according to the specifications of Regulation 89/106/EEG, for construction intended products.

PRECAST TANKS

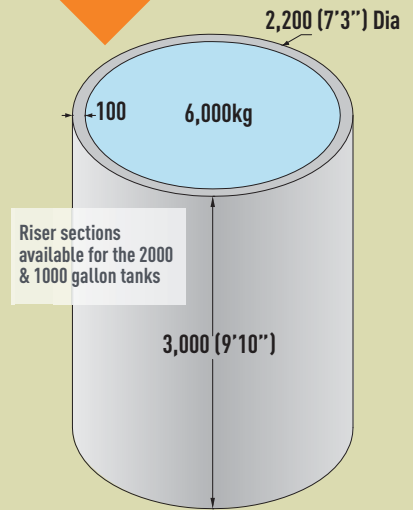
1,000 GALLON TANK 4500 ltrs



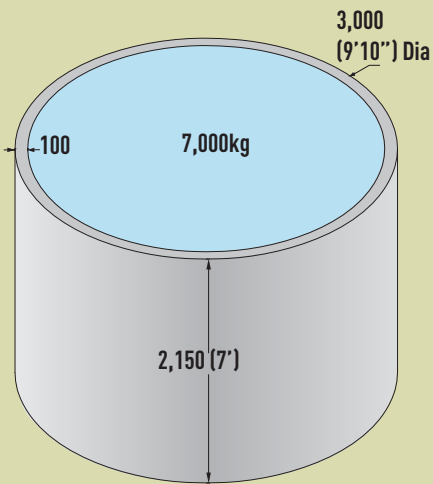
1,650 GALLON TANK 7500 ltrs



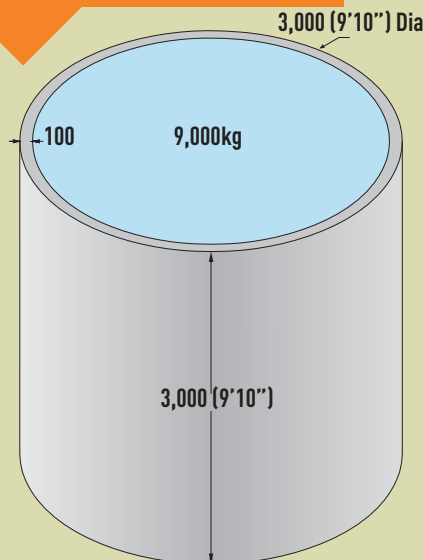
2,000 GALLON TANK 9000 ltrs



2,700 GALLON TANK 12250 ltrs



4,000 GALLON TANK 18000 ltrs



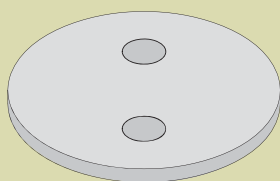
For larger capacities we can link tanks

THESE TANKS ARE USED FOR:

- Soiled Water and Slurry Holding Tanks
- Mains Sewer Storage and Pumping Tanks
- Oil/Water Interceptors and Separators
- Silt/Grit/Grease Traps
- Vehicle Washing Stations
- Water and Effluent Storage
- Large Septic Tanks
- Wastewater Treatment
- Precast Slatted Tanks

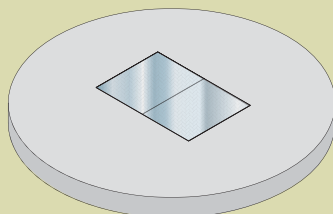
COVERS

Standard covers 6" (150mm) deep. Slatted and heavy duty covers 9" (230mm) deep.



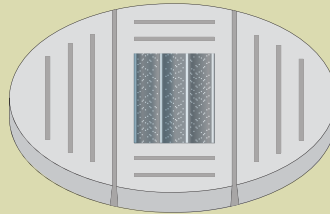
1,800kg

Plain Access Cover for Vacuum Suction



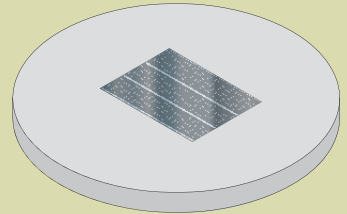
2,500kg

Galvanised Double Door Cover Suitable for Dual Pump Station



3,000kg

Galvanised Slatted Door in Totally Slatted Concrete Cover H. Duty (2,700/4,000 only)



2,500kg

Galvanised Slatted Door in Plain Cover

PRECAST WALLS

Kielys manufacture both solid and pre insulated precast walls for domestic, commercial, industrial and agricultural applications. We can make a wall with various exterior finishes, thickness of insulation, reinforcement and window and door openings with a smooth interior finish.

Installation is efficient fast and safe for example a piggerie with 400 sq meters of insulated precast walls with all vent/window/door opes was complete from start to finish in one day with 4 men and one crane.

With kiely precast walls you are assured of quality, accuracy, minimal site disturbance, speed of installation and above all safety.



Casting Stage



Tilting Stage



Special Trailer Delivery



Installation



Insulated Pig Wall Installed



Piggery Building Complete



Commercial Building



Residential Extension

AGRICULTURAL SLATTED FLOORING

Kielys have been manufacturing all types of slatted flooring since 1990. We now have a full range of Cattle and Tractor Slats, Passage Slabs, Beams, Cubicles and Manholes from 7'-6" up to 16'-6".

We also have a wide range of Calf, Sheep and Pig slats in all sizes. All products are tested, grant approved and comply with the latest animal welfare standards.



Tractor Slats On Tank



Replacing Old Slats



Cattle Slat



Pig Slats and Beams



Single and Double Cubicles



Passage Slabs



Beams



Galvanised Manhole