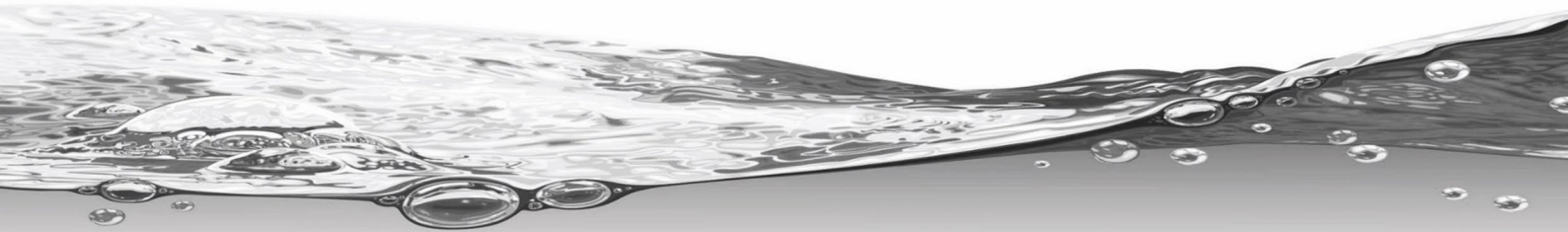




# Taylex

WASTEWATER



## INSTALLATION MANUAL

CONCRETE ADVANCED BLOWER SYSTEM (ABS/ABSNR)



## **TABLE OF CONTENTS**

1. INTRODUCTION .....	2
2. SAFETY INSTRUCTIONS .....	2
3. STANDARDS & LICENCING .....	3
4. PRE SITE INSPECTION .....	3
5. MARK OUT .....	3
6. DELIVERY AND PLACEMENT .....	4
7. INSTALLATION .....	6
8. ELECTRICAL CONNECTION .....	7
9. COMMISSIONING .....	7
10. EXCAVATION & LIFTING INSTRUCTIONS .....	8
a. ABS Standard Excavation Instructions .....	8
b. ABS Standard Lifting Instructions .....	9
c. ABS Tall 400 Excavation Instructions .....	10
d. ABS Tall 400 Lifting Instructions .....	11
e. ABS Tall 600 Excavation Instructions .....	12
f. ABS Tall 600 Lifting Instructions .....	13
11. ELECTRICAL CONNECTION DIAGRAM .....	15

**Note:** Do not act solely on the basis of the material contained in this document. Items herein are general comments only and do not convey advice per say. We therefore recommend that formal advice be sought before acting in any of these areas.

## 1. INTRODUCTION

The Taylex ABS Sewage Treatment System is designed to be installed both in-ground and above ground, collecting all wastewater from a domestic residence. This manual has been put together to explain the installation process of the ABS system as a guide only. Some sites may differ in access and slope which need to be taken into account when delivering and installing the system.

**\*Please note "ABS" refers to both ABS & ABSNR systems throughout the rest of the document**

## 2. SAFETY INSTRUCTIONS

	Follow all safety instruction provided by the onsite builder and ensure you have all the relevant licences to perform this work.
	Ensure the correct measurements are in place to prevent the general public from entering the site during the installation of the ABS. Excavated holes should be fenced if the ABS is not immediately installed.
	<b>SLIPPERY WHEN WET!</b> During cleaning, maintenance & repair work, the surrounding area may become extremely slippery due to spilt water. Caution is to be taken when walking/standing near the ABS when these activities are being conducted.
	Use safe lifting techniques when installing/relocating the ABS. Ensure that all lifting equipment is in a safe working order and the area is clear of obstructions. Ensure all lifting equipment used has a suitable capacity and current testing/compliance.
	The waste water contained in the ABS may contain harmful bacteria. Persons coming in contact with wastewater must immediately wash and disinfect all exposed areas. Contact your personal physician for all health concerns.
	<b>WARNING</b> - to reduce the risk of electrical shock, a licenced electrician or Taylex Accredited Service Agent (TASA) <b>MUST</b> carry out all works requiring access to the blower box prior to final commissioning.

### 3. STANDARDS & LICENCING

- All Installations must be completed in accordance with AS/ANZ 3500.1 and AS/ANZ 3500.2
- Irrigation Areas/Land Application Areas (LAA) must be installed as per AS1547 and all relevant State/Local Codes or Guidelines
- Ensure the appointed Licenced trades only complete this work – Plumbers/Drainers/Electrical

### 4. PRE SITE INSPECTION

A pre site inspection should be conducted the day prior to installation. During this inspection the following details should be checked.

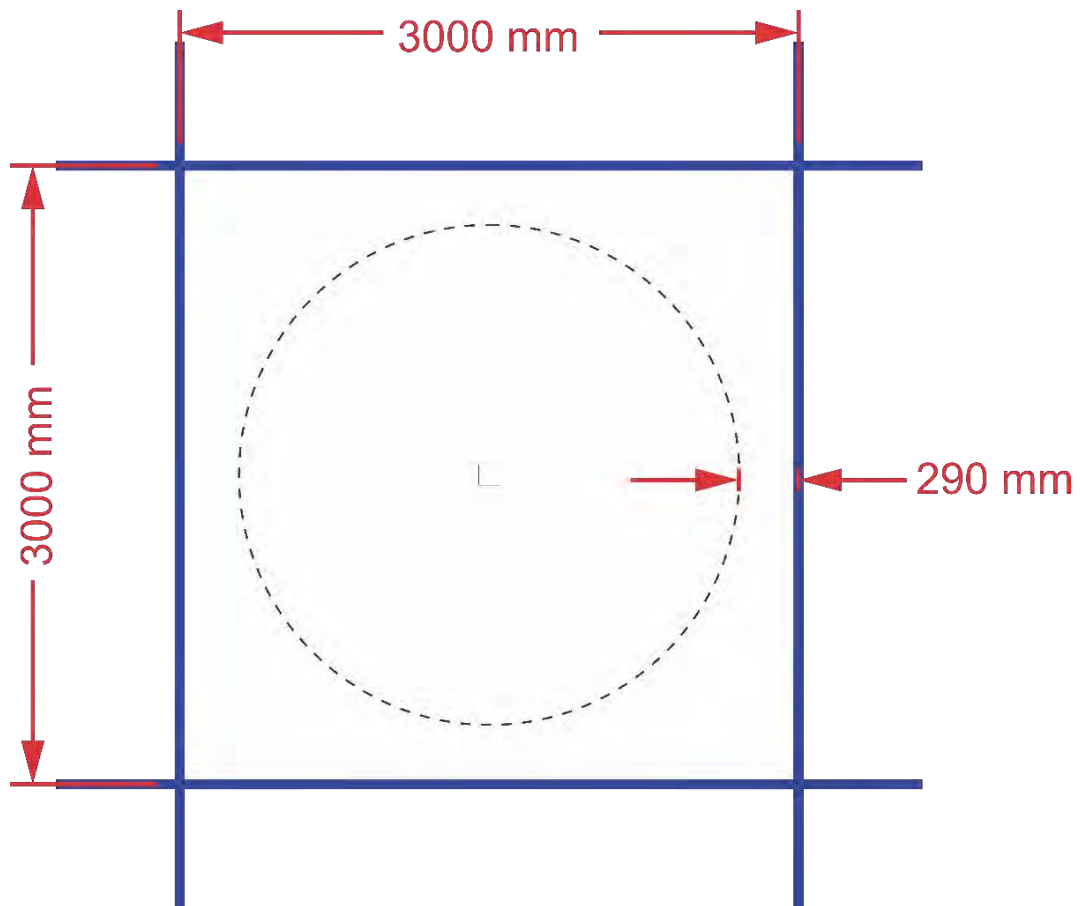
- Access requirements for excavation, Crane Truck, Truck or Crane.
  - A Crane Truck requires the following:  
Access to site – 12m long x 4m wide x 4.5m high  
Level Pad at the hole – 12m long x 7m wide
- Overhead obstructions
- Slope of site
- Soil moisture (for heavy equipment access)
- Weather conditions

### 5. MARK OUT

To ensure the ABS is installed in the position nominated by the Home Owner/ Builder, the location of the ABS should be marked out prior to excavation. The installer at this stage should have a copy of the approved site plans showing the location of the ABS as well as the required local authority approval. If not, it is advised to delay the installation until the plans have been received.

- Mark out a 3m x 3m square with line marking paint
- Place a centre peg in the middle of the square and spray it with white paint or a colour that it noticeable from a distance
- Indicate on the centre peg or by spraying on the ground, which ABS system is being installed e.g. STD, Tall 400 and Tall 600. This will ensure that the installer installs the tank to the correct depth (refer to point 7 for depths)
- Allow a minimum of 290mm between Tank and the edge of excavation.

## Taylex ABS Excavation Mark Out



### 6. DELIVERY AND PLACEMENT

In most areas, tanks will be delivered by a truck equipped with a crane located at the rear of the vehicle. Such vehicles will back up to the hole, lift and slew the tank into position behind the vehicle before placing it into the prepared hole. Maximum reach from the rear of the truck to the centre of ABS will vary depending on the size of the crane.

To enable the ABS to be unloaded, a minimum width of 7m (may vary depending on crane truck) will be required at the hole. This distance allows for the width of the crane truck, the width of the tank itself, and clearance for safe and free manoeuvring of the ABS into the excavated hole.





## PLEASE NOTE

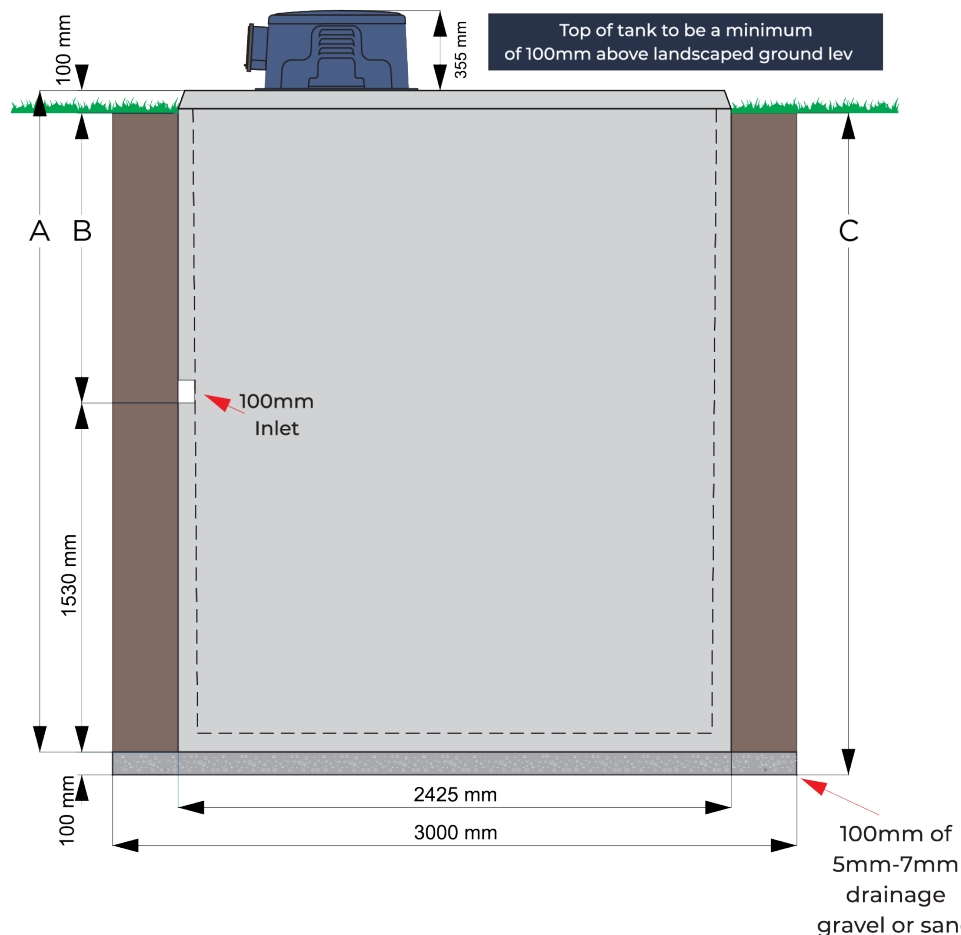
- Tanks should not be lifted over houses, sheds or other property of value, nor should they be lifted under low power lines
- Tank sites that are cut out of sloping hills will require enough flat area for the truck to be unloaded
- Unloading on awkward and dangerous sites will be at the driver's discretion. Safe and clear access is the responsibility of the property owner/builder.

## 7. INSTALLATION

Always ensure the installation location include the future landscaping provision allow for the diversion of stormwater and surface waters away from the system.

The ABS comes with 3 different heights to accommodate invert levels as deep as 1270mm below ground level.

TANK SIZE	TOTAL WEIGHT	A HEIGHT OF TANK	B GROUND LEVEL TO BOTTOM OF INLET	C EXCAVATED HOLE DEPTH
STANDARD	6.25T	2,300mm	670mm	2,300mm
TALL 400	8T	2,700mm	1,070mm	2,700mm
TALL 600	8T	2,900mm	1,270mm	2,900mm





- Except for person/s responsible for lifting and positioning of the tank in the excavated hole, there must not be any person within 20m of the installation site during the lifting and positioning of the tank.
- Excavation Instructions show excavated walls to be perpendicular. However, depending on the soil conditions, the excavator may need to batter or retain the side walls to ensure they don't cave in during installation.
- Level the base of the hole using an excavation bucket with a laser level attached.
- Ensure that the excavated ground or base material is capable of carrying loads of approximately 7 tonne (standard ABS).
- The ABS must be level in both inflow/outflow direction and 90° to the inflow/outflow direction (<1° deviation).
- Evenly fill the system with approximately 5,000L of water through the centre Aeration Chamber to prevent movement through the ground as the water pressure enters the system.
- Backfilling - Use sand or excavated material/spoil with maximum particle size of 50mm. Backfilling of excavation to be completed in not more than 500mm equally distributed layers around the tank perimeter. Ensure that sand or excavated material does not fall on the lid of the ABS as this will fall into the system through the manholes and clog the system and irrigation pump. Ensure that the backfill material is kept at least 100mm below the surface of the systems lid.
- Organise drainage contractors to connect to the system. The drainage connection is a standard 100mm PVC sewer inlet.

*Refer to Excavation Instructions on Pages 8-13*

## 8. ELECTRICAL CONNECTION

- The electrical contractor must follow the electrical specification supplied with the ABS system
- Ensure all electrical works are only completed by licenced persons.
- Ensure all electrical work is completed and compliant with AS/ANZ 3000.

*Refer to Electrical Specifications on Page 15*

## 9. COMMISSIONING

**Please ensure the following is completed prior to having the system commissioned**

- ✓ Effluent Disposal area is installed
- ✓ Effluent Disposal Area feed line is connected to ABS
- ✓ Electrical power is connected
- ✓ Drains connected

**IMPORTANT:** *The Taylex ABS System cannot be commissioned unless power is connected to the system.*

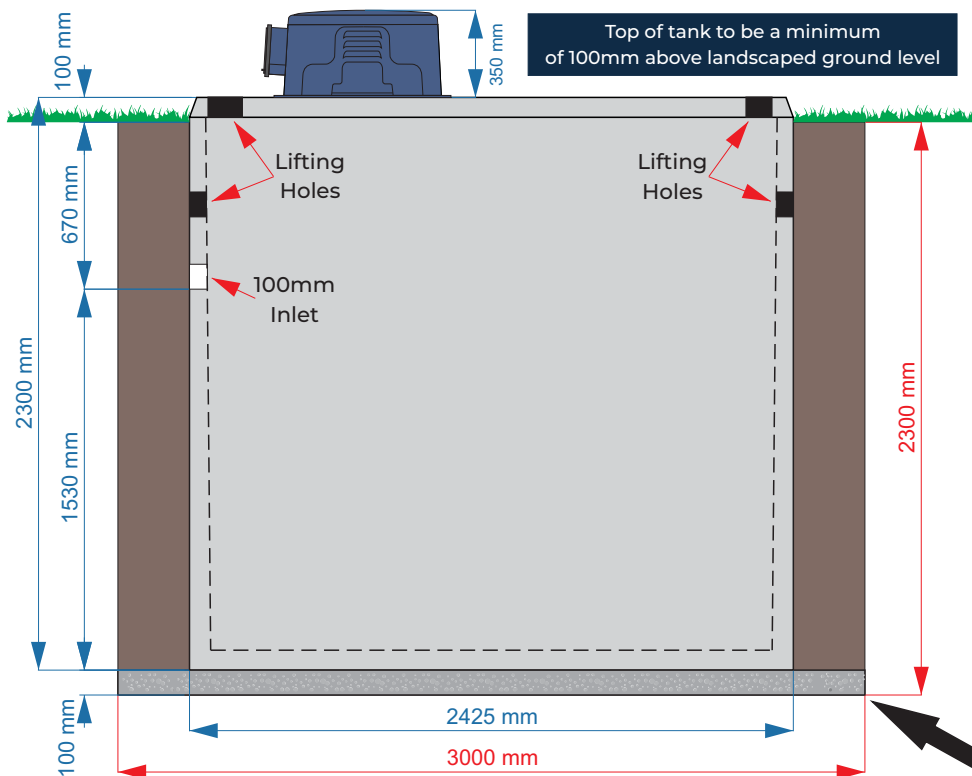
The ABS will then be switched on (commissioned) by an Employee of Taylex Australia, a Taylex Accredited Wastewater Specialist (TAWS) or a Taylex Accredited Service Technician (TASA).





## ABS CONCRETE STANDARD Excavation Instructions

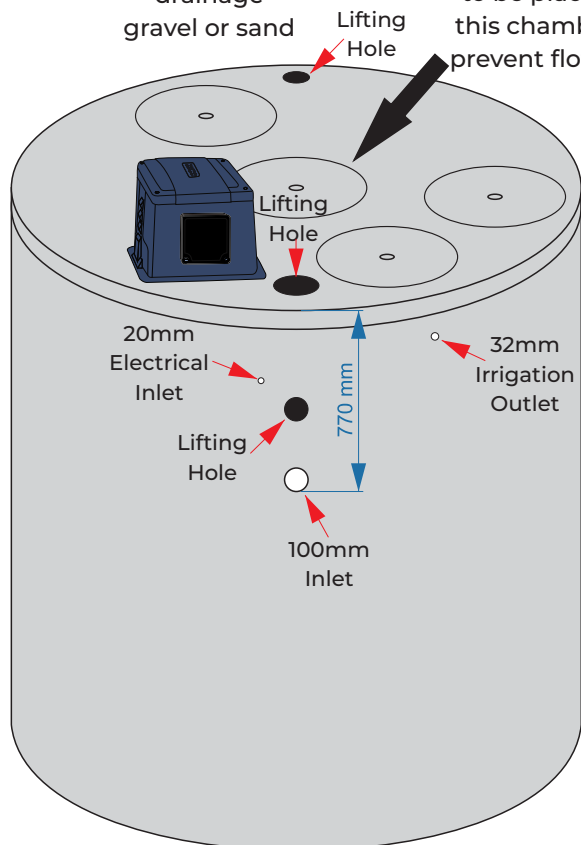
Tank Total Mass = 6.25 Tonne



1. Dig hole 3000mm square & 2300mm Deep
2. Ensure drainage has a 1/60 fall to the inlet of ABS. Risers are available if the tank needs to be installed deeper in the ground to maintain fall
3. Cover base of hole with 100mm of 5mm to 7mm drainage gravel or sand
4. Ensure bottom of hole is level
5. Backfill with soil from Excavation in no more than 500mm equally distributed layers around the tank. Avoid backfilling with rocks over 300mm.
6. To prevent flotation, fill the ABS with 5,000lt of water immediately through hole above the aeration chamber (see diagram below)
7. Ensure top of gravel/sand is 1530mm to bottom of inlet

100mm of  
5mm-7mm  
drainage  
gravel or sand

**Please Note:**  
5,000lt of water  
to be placed in  
this chamber to  
prevent flotation



### ELECTRICIAN

Connect through conduit on side of ABS. Run wire (min 2.5mm) through the flexible conduit provided and up into the switch located in the blower box.  
Active - Neutral - Earth.

### TRUCK ACCESS

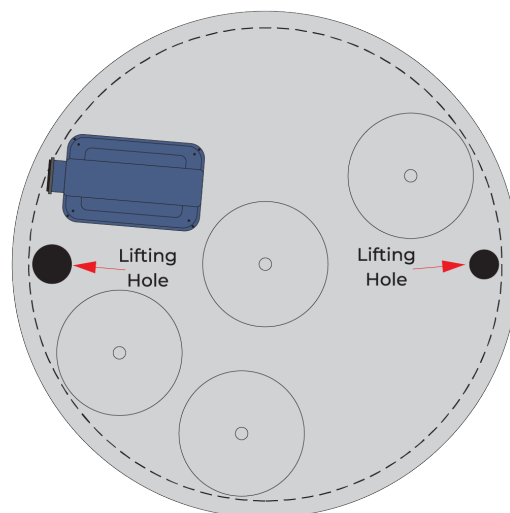
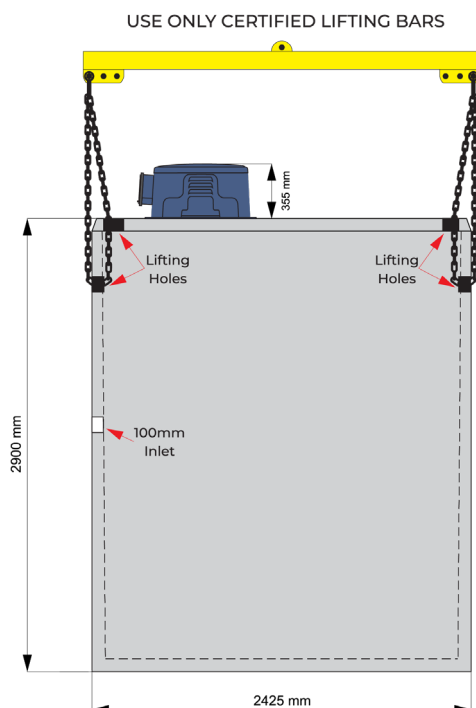
Unloading of ABS via the back of the truck  
NOT SIDE. Ensure BACK of truck has clear level 6m wide access to the edge of the hole.

### REACH OF CRANE/ CRANE TRUCK

To be determined by your crane/ crane truck operator.



# Concrete ABS Lifting Instructions



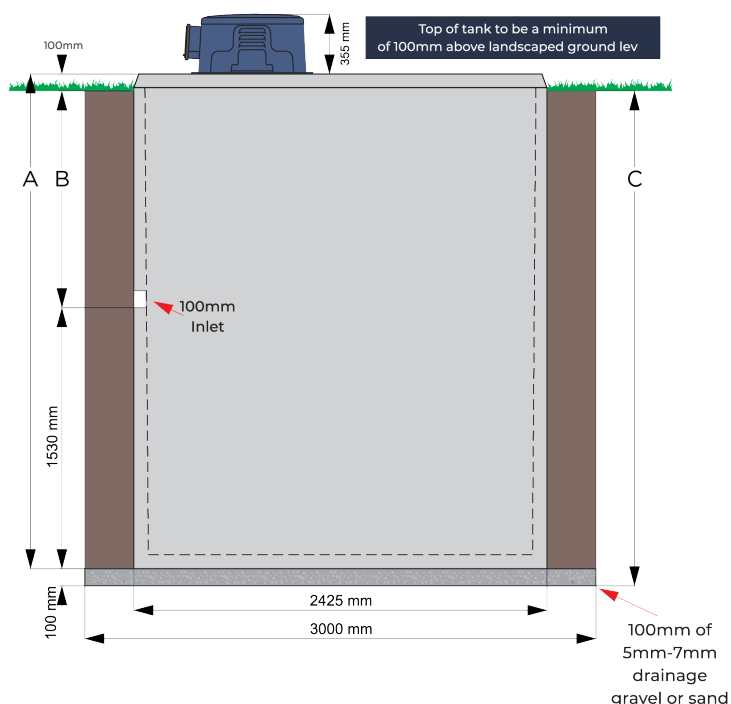
\* Unless stated otherwise, all measurements in above diagrams are universal on all concrete ABS

TANK SIZE	TOTAL WEIGHT	A TOTAL HEIGHT	TOTAL WIDTH
STANDARD	6.25T	2,300mm	2,425mm
TALL 400	8T	2,700mm	2,425mm
TALL 600	8T	2,900mm	2,425mm

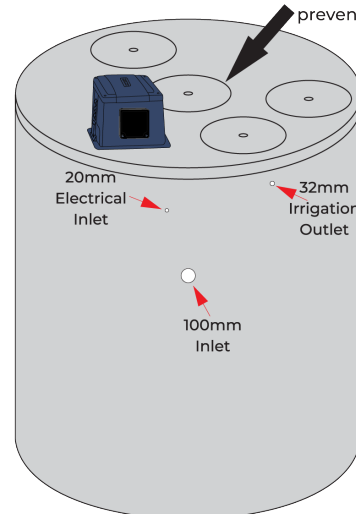
## Lifting Instructions

1. Always use a certified Spreader Bar for lifting.
2. Lower chains through TOP lifting holes provided in the lid of the ABS.
3. Loop chains through the lifting holes directly below on the inside wall of the ABS.
4. Steel reinforcing bars have been installed inside the concrete for lifting purposes. Only lift this tank from these holes.
5. If you don't use a Spreader Bar, you risk damaging the ABS.
6. Ensure the tank is empty before lifting.

# Concrete ABS Excavation



Please Note:  
5,000lt of water  
to be placed in  
this chamber to  
prevent flotation



\* Unless stated otherwise, all measurements in above diagrams are universal on all concrete ABS

TANK SIZE	TOTAL WEIGHT	A HEIGHT OF TANK	B GROUND LEVEL TO BOTTOM OF INLET	C EXCAVATED HOLE DEPTH
STANDARD	6.25T	2,300mm	670mm	2,300mm
TALL 400	8T	2,700mm	1,070mm	2,700mm
TALL 600	8T	2,900mm	1,270mm	2,900mm

## Excavation Instructions

1. Dig hole 3000mm square & (**refer to value of A\* in the table**) mm deep.
2. Ensure inlet drainage has a 1/60 fall to the inlet of ABS. Risers are available if the tank needs to be installed deeper in the ground to maintain fall.
3. Cover base of hole with 100mm of 5mm to 7mm drainage gravel or sand.
4. Ensure bottom of excavated hole is level.
5. Backfill with soil from Excavation in no more than 500mm equally distributed layers around the tank. Ensure there is no backfilling with rocks over 300mm.
6. To prevent flotation, fill the ABS with 5,000lt of water immediately through hole above the aeration chamber (see diagram above).
7. Ensure top of gravel/sand is 1530mm to bottom of inlet.

### Electrician

Connect through conduit on side of ABS. Run wire (min 2.5mm) through the flexible conduit provided and up into the switch located in the blower box. Active - Neutral - Earth. (Electrical Connection Diagram Available).

### Truck Access

Unloading of ABS via the BACK of the truck NOT SIDE. Ensure BACK of truck has clear level 6m wide access to the edge of the hole.

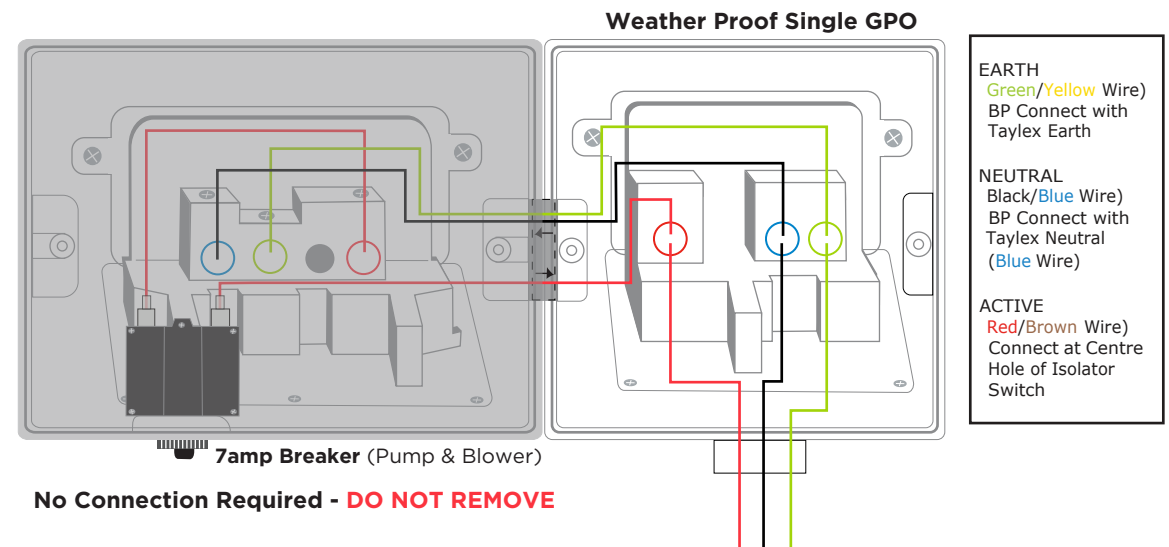
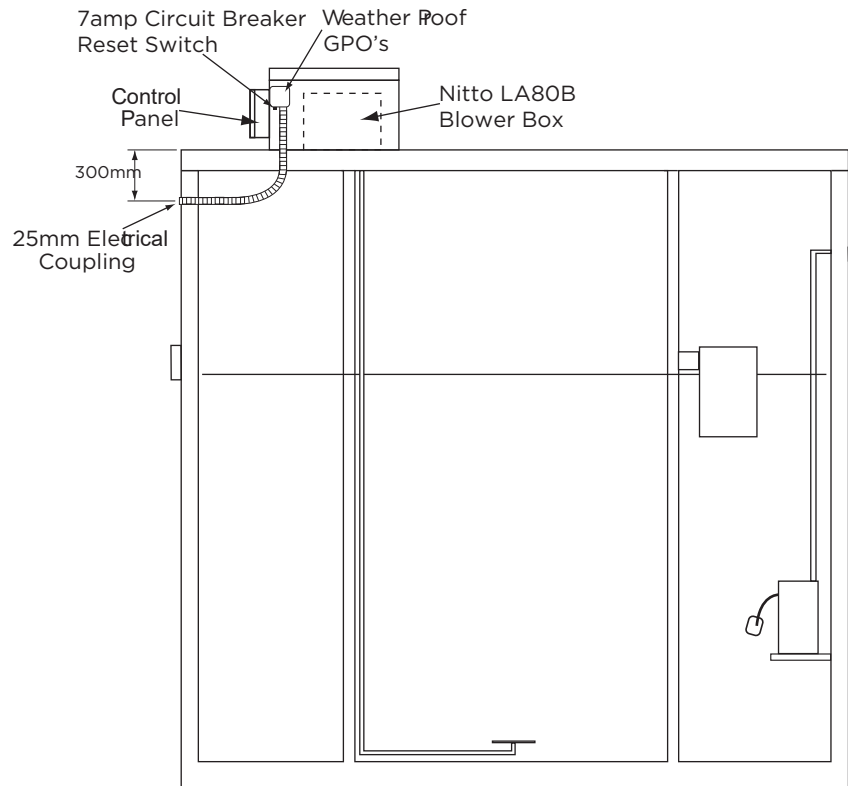
### Reach of Crane / Crane Truck

To be determined by your crane/ crane truck operator.

# Taylex Electrical Connection Diagram

## IMPORTANT INSTRUCTIONS

- Dedicated 10amp Circuit Breaker in power board (Taylex® Best Practise)
- Hardwired with 2.5mm wire (ANE) Active, Neutral, Earth to Weatherproof GPO located in blower box
- Connect the 12V to 240V power supply plug to the single GPO
- Connect the 2 plugs (pump and blower) to the double GPO's
- Turn all 3 GPO Switches ON



### Electrician

- Connect the incoming mains with the existing wires that connect to the double GPO, ensuring the correct polarity is maintained.



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**TITLE:**

TAYLEX ABS+ABNSNR ELECTRICAL  
CONNECTION DIAGRAM

**DATE:**

01/01/2023

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