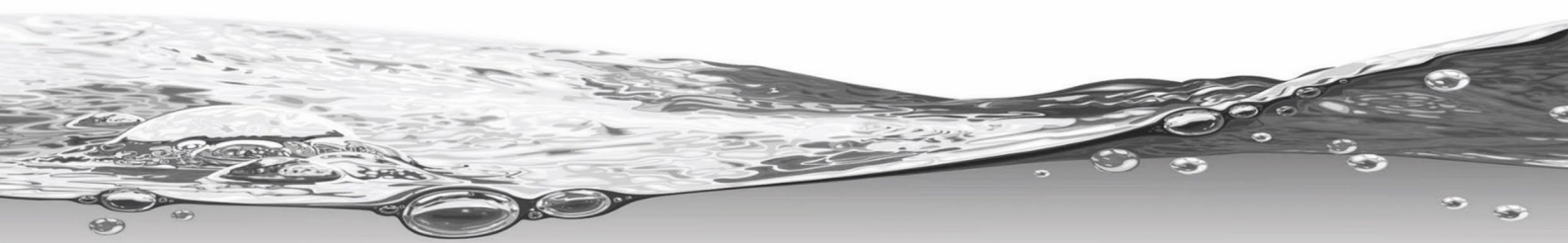




Taylex

WASTEWATER



Installation Manual

ADVANCED BLOWER SYSTEM
ABS4200 / 5000 Standard



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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 4200/5000 Secondary Treatment System is designed to be installed both in- ground and above ground, collecting all wastewater from a domestic residence or suitable commercial properties. This manual has been put together to explain the installation process of the ABS 4200/5000 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.

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 4200/5000. Excavated holes should be fenced if the ABS 4200/5000 is not immediately installed.
	SLIPPERY WHEN WET! 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 4200/5000 when these activities are being conducted.
	Use safe lifting techniques when installing/relocating the ABS 4200/5000. 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 4200/5000 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.
	WARNING - To reduce the risk of electrical shock, all works requiring access to the blower box MUST be carried out by a licenced electrician or Taylex® Accredited Service Agent (TASA) 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 Licensed 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.

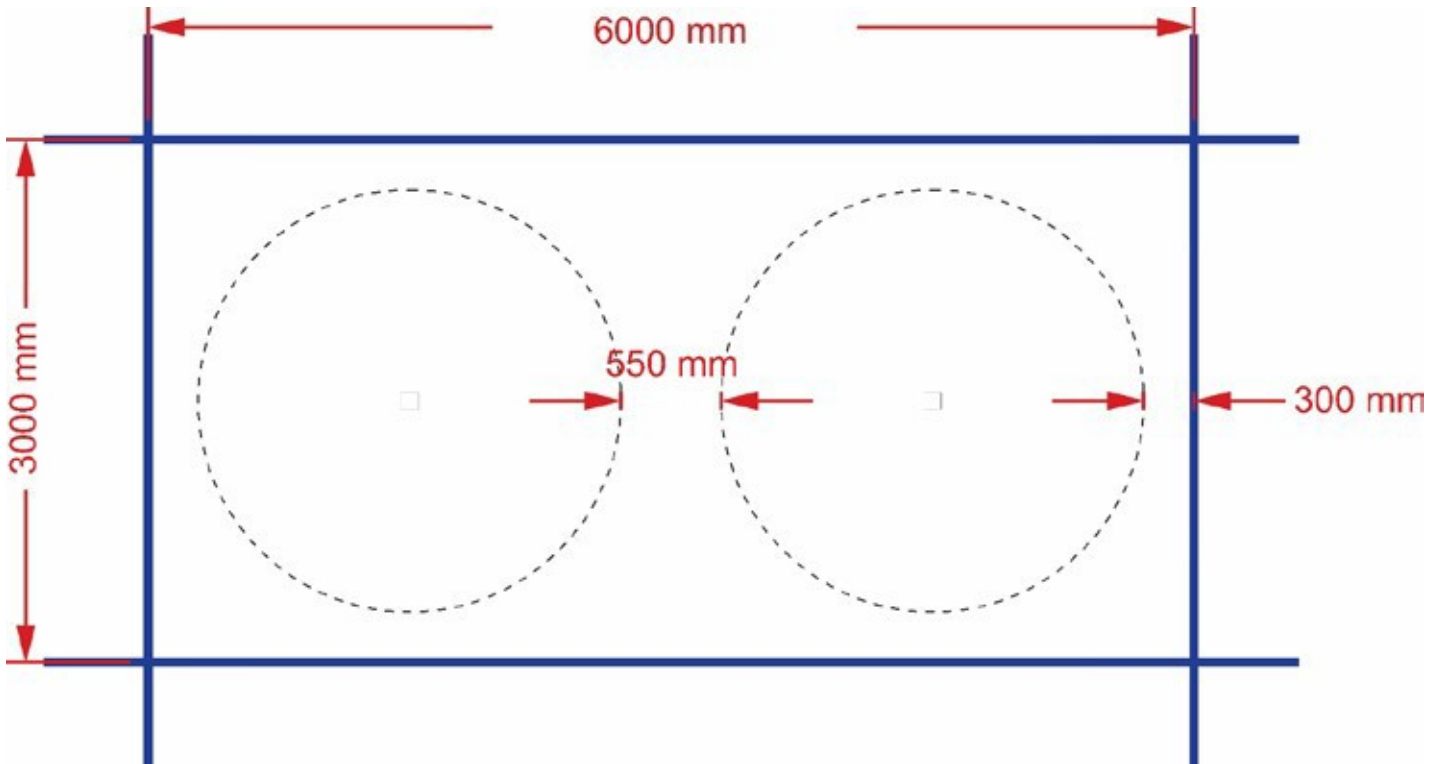
- Access requirements for excavation, Crane Truck, Truck or Crane.
 - A Crane Truck requires the following:
Access to site – 12m long x 4m wide x 4.5m
high Level Pad at the hole – 12m long x 7m wide
- Overhead obstructions
- Slope of site
- Soil moisture (for heavy equipment access)
- Weather conditions

5. MARK OUT

To ensure the ABS 4200/5000 is installed in the position nominated by the Home Owner/Builder, the location of the ABS 4200/5000 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 4200/5000 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 3000mm x 6000mm with line marking paint
- Place pegs on each of the corners as well as in the middle of the rectangle and spray it with white paint or a colour that is noticeable from a distance
- Indicate on the centre peg or by spraying on the ground, the type of system that is to be installed as a reference for the installer.
- Allow a minimum of 300mm between Tank and the edge of excavation.
- There should be a minimum gap of 550mm between the tanks.

Typical Taylex®-ABS 4200/5000 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 4200/5000 will vary depending on the size of the crane.

To enable the ABS 4200/5000 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 maneuvering of the ABS 4200/5000 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 propertyowner/builder.

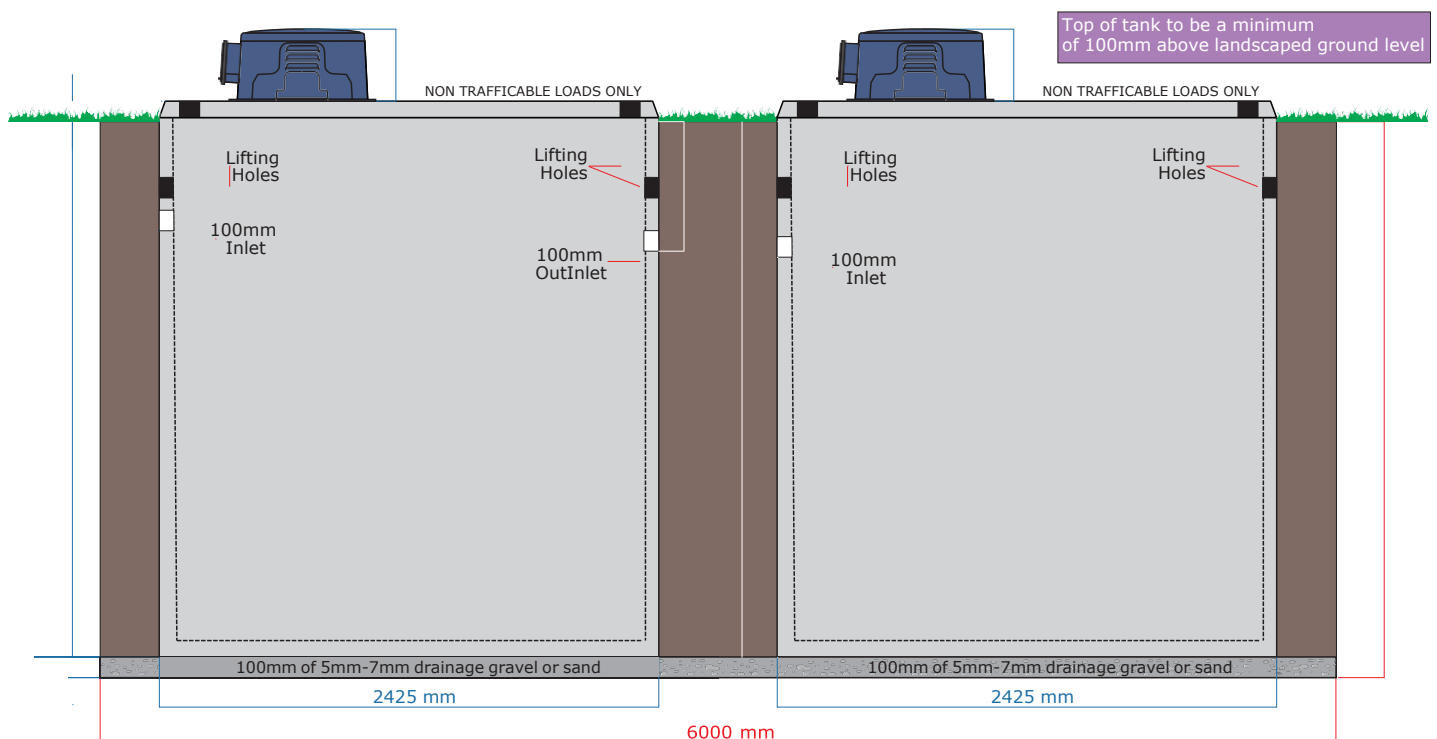
7. INSTALLATION

Always ensure the installation location including the future landscaping provision allows for the diversion of storm-water and surface waters away from the system.

	Width	Height	Inlet Height (from bottom of tank)	Inlet Depth (from ground level)	Required Base (5-7mm Drainage Gravel/ Sand)	Hole Width	Hole Depth
TANK 1*	2425	2700	2070	530	100	3000	2700
TANK 2*	2425	2700	1950	650	100	3000	2700

* Refer to Excavation & Lifting Instructions on Pages 9 & 10

STANDARD Taylex[®] ABS 4200/5000



- ⌚ 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 8 tonne.
- ⌚ The ABS 4200/5000 must be level in both inflow/outflow direction and 90° to the inflow/outflow direction (<1° deviation).
- ⌚ Backfilling - Use sand or excavated material/spoil with maximum particle size of 300mm. 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 4200/5000 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.
- ⌚ Evenly fill each system with approximately 5,000L of water through the centre Chambers to prevent movement through the ground as the waterpressure enters the system.
- ⌚ Organise drainage contractors to connect the main sewer line to the system and between Tank 1 & 2. The drainage connection is a standard 100mm PVC sewer inlet.

Refer to Excavation & Lifting Instructions on Pages 10 and 11

8. ELECTRICAL CONNECTION

- The electrical contractor must follow the electrical specification supplied with the ABS 4200/5000 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 12 & 13

9. COMMISSIONING

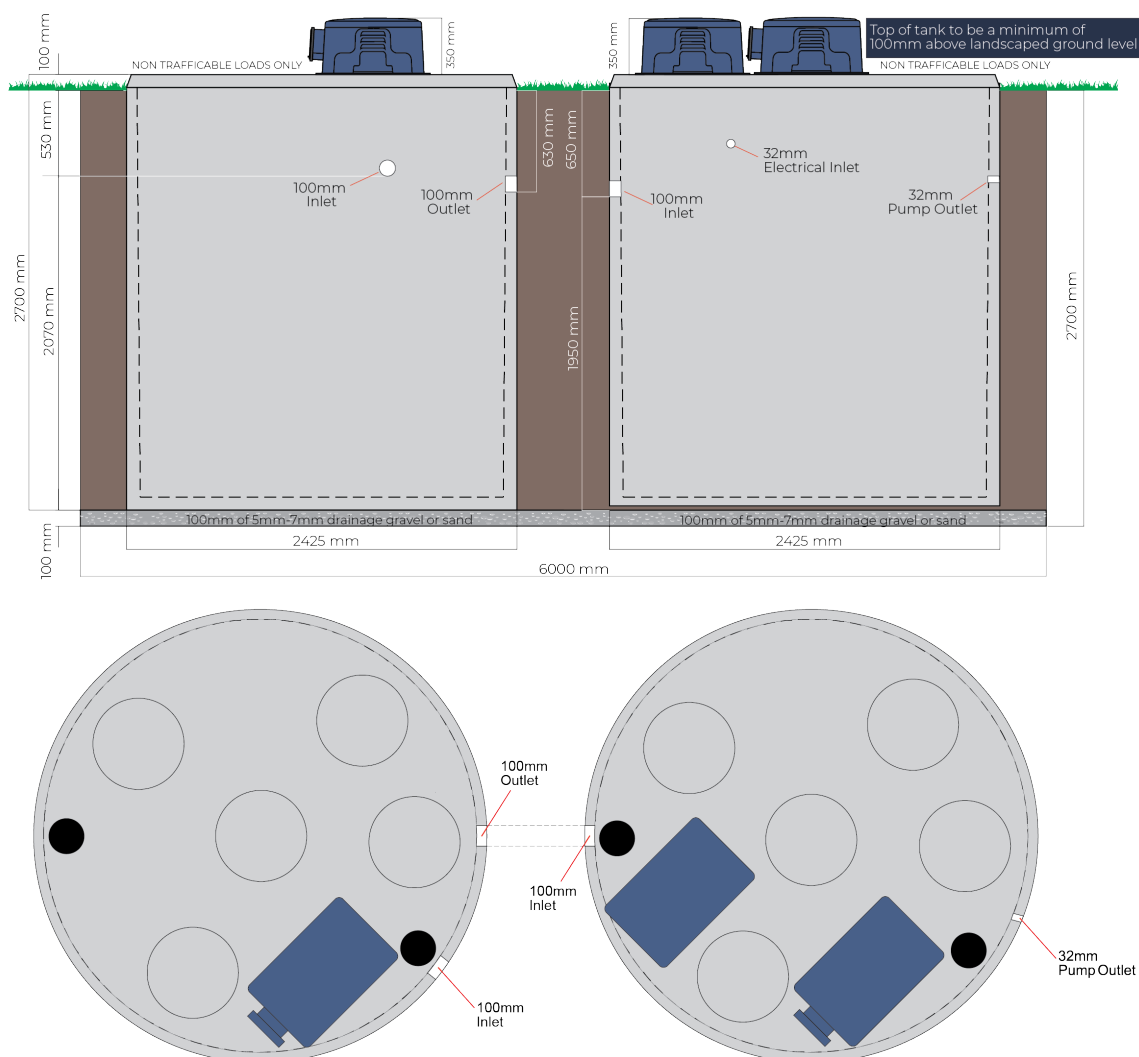
Please ensure the following is completed prior to having the system commissioned

- ✓ Tanks is full of water (5,000lt each)
- ✓ Effluent Disposal area is installed
- ✓ Effluent Disposal Area feed line is connected to ABS 4200/5000 (Tank 2)
- ✓ Electrical power is connected (Tank 1 & 2)
- ✓ Drains connected (main sewer into tank 1 and connection between Tank 1 & 2)

IMPORTANT: *The Taylex® ABS 4200/5000 System cannot be commissioned unless power is connected to the system.*

The ABS 4200/5000 will then be switched on (commissioned) by an Employee of Taylex® Industries, a Taylex Accredited Wastewater Specialist (TAWS) or a Taylex® Accredited Service Agent (TASA).

Concrete ABS4200/5000 Excavation Instructions



Excavation Instructions

1. Dig hole 6000mm x 3000mm & 2700mm Deep.
2. Ensure drainage has a 1/60 fall to the inlet of ABS4200/5000. 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 each tank with 5,000lt of water immediately through center hole (see diagram below).

Ensure the installation location including the future landscaping provision allows for the diversion of stormwater and surface waters away from the system.

Electrician

A power feed is required to both tanks. Connect conduit to the flexible conduit fitted to both tanks and extend the cable (Minimum 2.5mm 2C+E) through the flexible conduit and up into the blower boxes. Refer to Electrical Diagram for further detail.

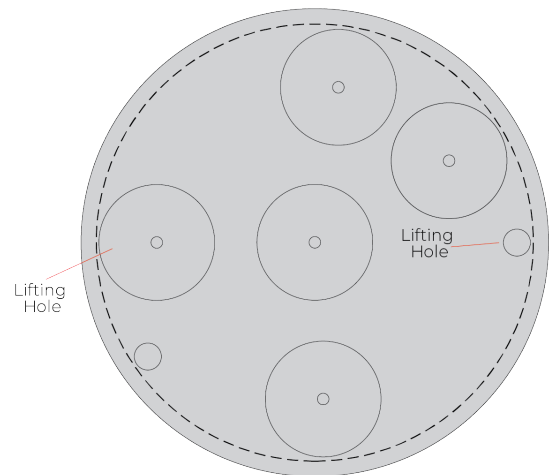
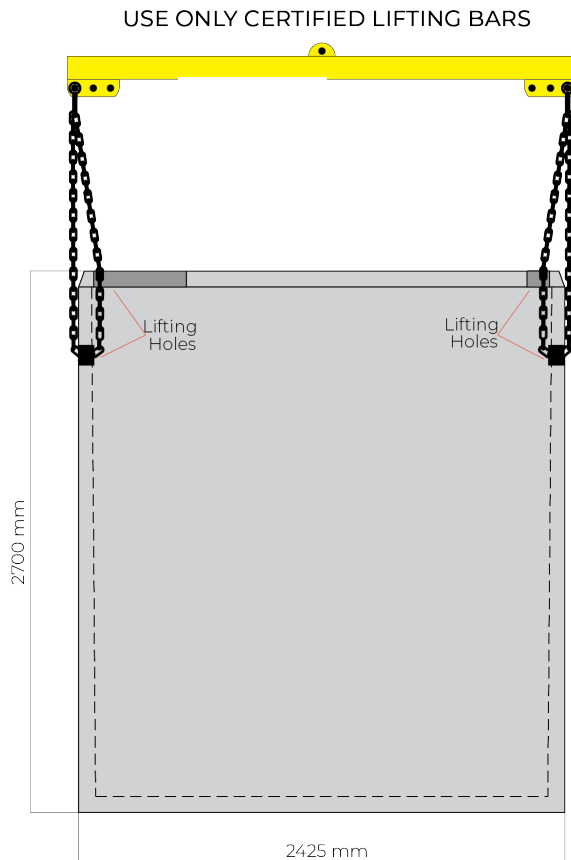
Truck Access

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 ABS4200/5000 Lifting Instructions (Tank 1 & 2)



Lifting Instructions

1. Always use a Spreader Bar and ensure it is certified.
2. Lower chains through TOP lifting holes provided in the lid of the ABS4200/5000.
3. Loop chains through the lifting holes directly below on the inside wall of the ABS4200/5000.
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 ABS4200/5000.
6. Ensure the tank is empty before lifting.

	ABS4200	ABS5000
TOTAL MASS	8.00T	8.0T
TOTAL HEIGHT	2700mm	2700mm
TOTAL WIDTH	2425mm	2425mm

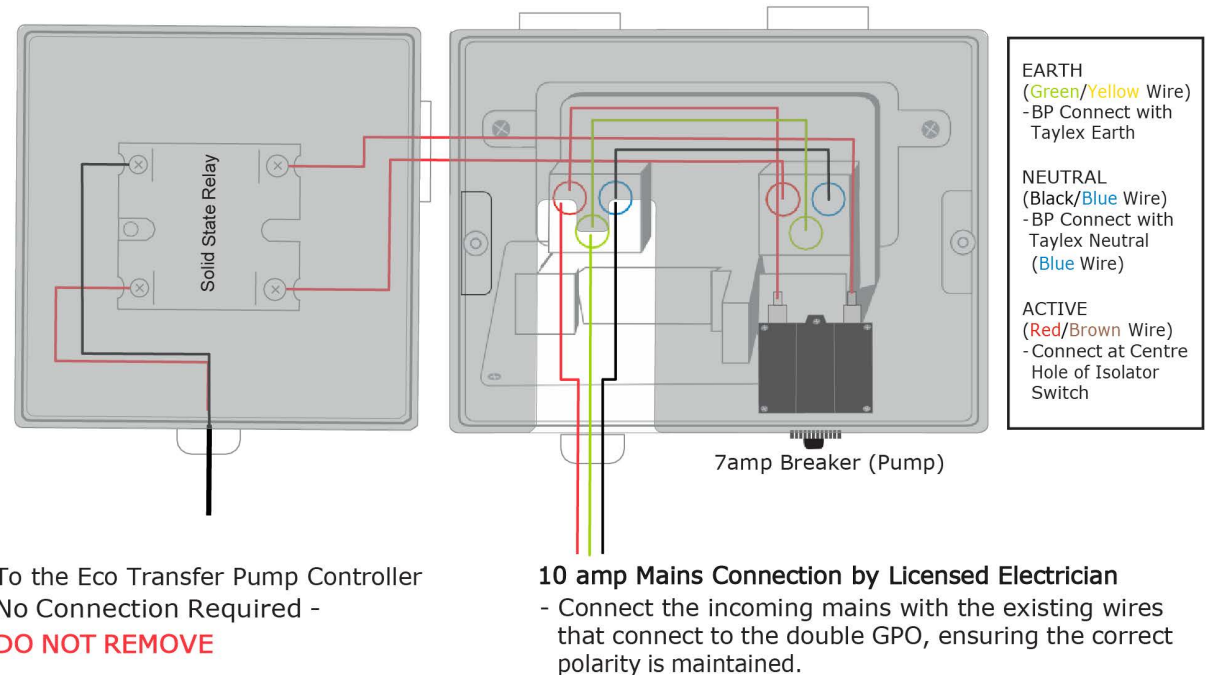
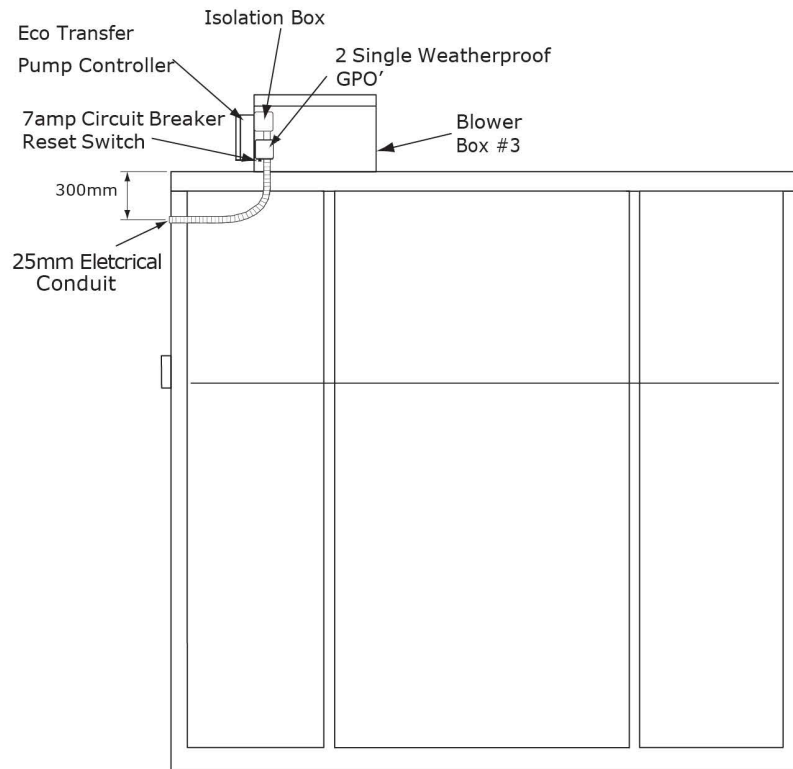
Reach of Crane / Crane Truck

To be determined by your crane/ crane truck operator.

Taylex ABS4200/5000 Electrical Connection Diagram

IMPORTANT INSTRUCTIONS

- Dedicated 10amp Circuit Breaker in power board (Taylex Best Practice)
- Hardwired with 2.5mm wire (ANE) Active, Neutral, Earth to Weatherproof GPO on the right, located in blower box
- Connect the Eco Transfer Pump Controller Plug to the right side GPO
- Connect the Pump Plug to the left side GPO
- Turn both GPO Switches ON



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TITLE:

TAYLEX ABS4200 / 5000 ELECTRICAL
CONNECTION DIAGRAM

DATE:

01/01/2023

Tank 1

Taylex ABS4200/5000 Electrical Connection Diagram

IMPORTANT INSTRUCTIONS - ISOLATION BOX

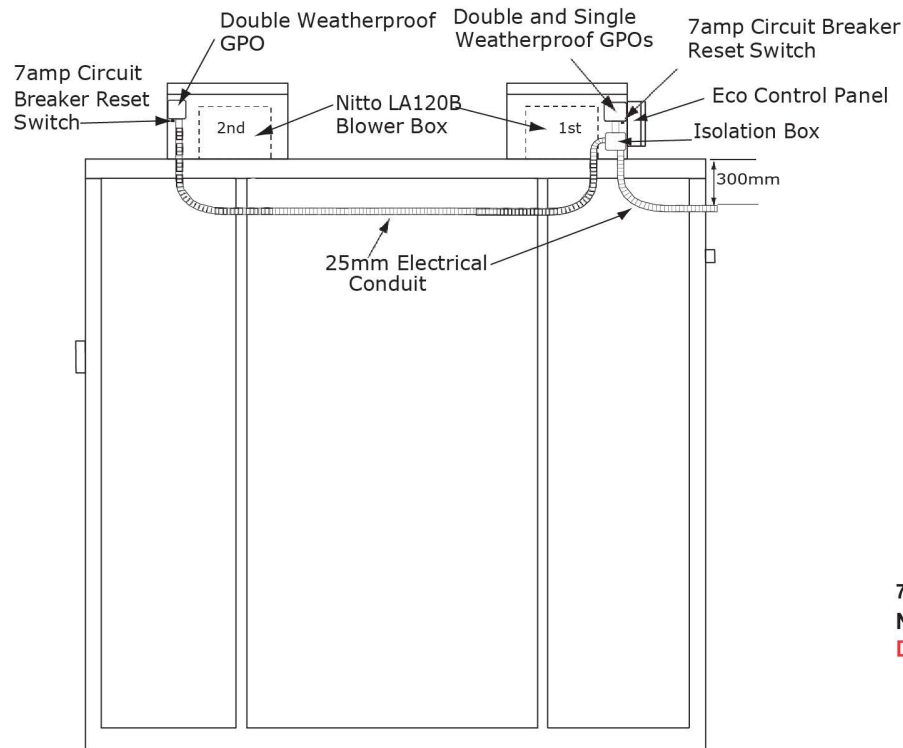
- Dedicated 20amp Circuit Breaker in power board (Taylex Best Practice)
- Hardwired with 2.5mm wire (ANE) Active, Neutral, Earth to electrical connectors (REFER TO DIAGRAM)

1st BLOWER BOX

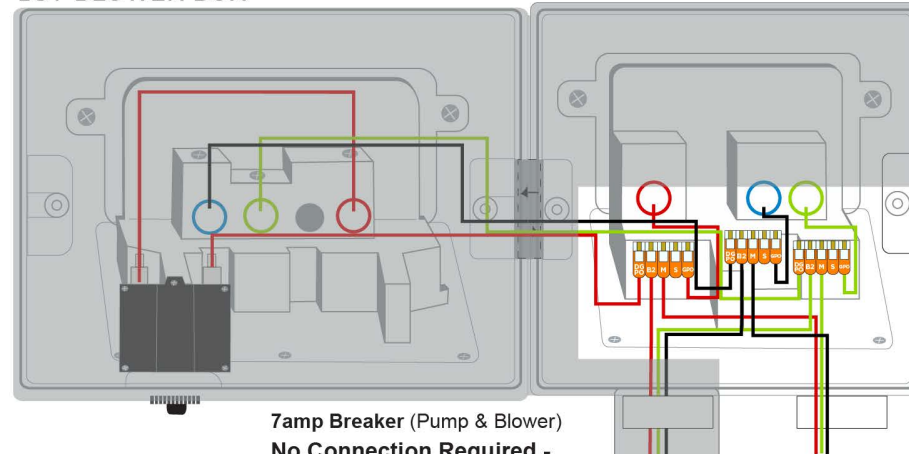
- Connect the 12V to 240V power supply plug to the single GPO
- Plug the pump and blower to the double GPO's (as marked)
- Turn all 3 GPO Switches ON

2nd BLOWER BOX

- Plug for the blower in to the GPO (as marked).
- Turn GPO Switch ON



1ST BLOWER BOX



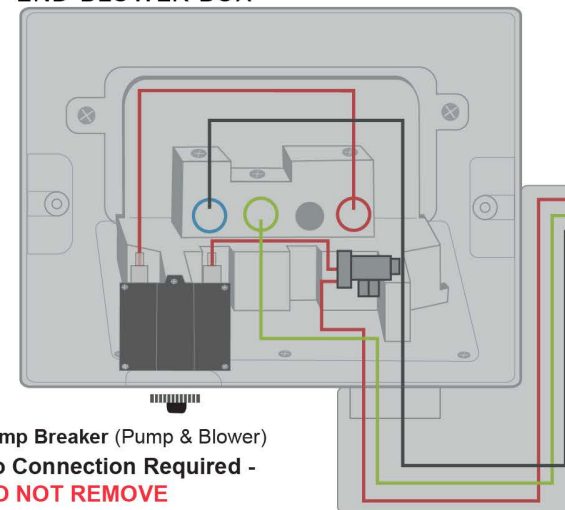
EARTH
(Green/Yellow Wire)
-BP Connect with
Taylex Earth

NEUTRAL
(Black/Blue Wire)
-BP Connect with
Taylex Neutral
(Blue Wire)

ACTIVE
(Red/Brown Wire)
-Connect at Centre
Hole of Isolator
Switch

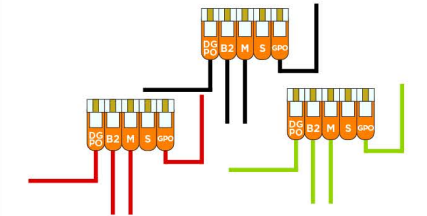
7amp Breaker (Pump & Blower)
No Connection Required -
DO NOT REMOVE

2ND BLOWER BOX



7amp Breaker (Pump & Blower)
No Connection Required -
DO NOT REMOVE

Magnified View of Connectors



KEY (LEFT TO RIGHT)



DGPO - Double GPO connection
B2 - Blower Box (Blower box, tank 2 connection)
GPO - GPO connection
M - Mains Power Connection
S - Spare (to remain unused)

20 amp Mains Connection by Licensed 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 ABS4200 / 5000 ELECTRICAL
CONNECTION DIAGRAM

DATE:

01/01/2023

Tank 2