

# **INSTALLATION GUIDE**





Your Local Bushmans Distributor:

Preparing for delivery, this Installation Guide will help you prepare for the arrival of your Bushmans tank.

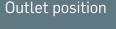
# CHECKLIST

#### On-site delivery

- Check you're prepared for our driver to position tank, drill outlets, fit taps and seals.
- **Check there is** suitable and safe site access (see Preparing for Delivery).
- Site **must be** prepared as per instructions.
- Check enough people are present to assist tank positioning (see table 'assistance required' on following page).
- □ I'm organised to instruct outlet positions (see diagram below).
- □ Water is immediately available to put 25mm in tank to prevent blow-away.

#### Roll-off delivery

- Check there is suitable and safe site access (see Preparing for Delivery).
- Check enough people are present to assist tank positioning (see table 'assistance required' on following page).
- □ Water is immediately available to put 25mm in tank to prevent blow-away.
- □ Note instructions **for roll-off** delivery (see Preparing for Delivery).



□ Centre of outlet should be at a height of 115mm to ensure proper sealing.



#### **Tools required**

#### Fitting & site preparation:

- Pick, shovel, crowbar, level, drill, hacksaw, multigrips, ladder, electrical conduit (12mm), thread tape (plumbers tape).
- Hole saws and arbour: 98mm (overflow), 63mm (2") or 46mm (1") (outlet), 22mm spade bit (1") (moulded outlet)
- Phillips screwdriver bit *(our driver is trained to install tank* fittings and carries the tools required for fitting).

# Tank installation steps

#### **ABOVE GROUND**

#### STEPS 1-3 (ON PAD)

- 1 Prepare a reinforced concrete pad that is level and 300mm wider than the diameter of tank OR prepare an earth ring 300mm wider than the diameter of the tank so that no part of the tank is bearing on the wall. Fill is to be consolidated fill with 50-75mm (2-3") of sand or crusher dust on surface.
- 2 Tank is rolled to position (if positioning requires a crane this will be at purchaser's expense).
- **3** Tank must be secured or water filled to 25mm to prevent blow-away (no responsibility taken for tanks being damaged in this manner).

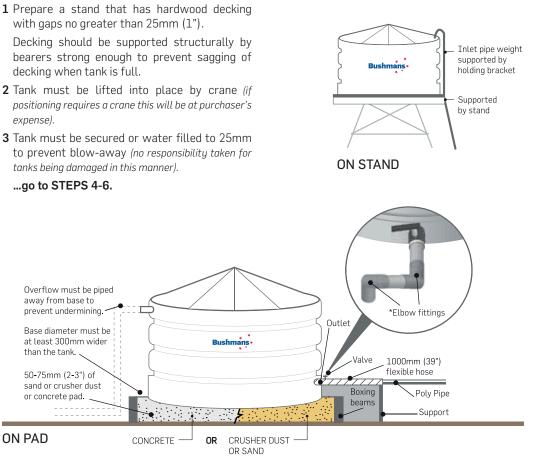
...go to STEPS 4-6.

#### STEPS 1-3 (ON STAND)

- with gaps no greater than 25mm(1").
- 2 Tank must be lifted into place by crane (if positioning requires a crane this will be at purchaser's expense)
- **3** Tank must be secured or water filled to 25mm tanks being damaged in this manner).

#### STEPS 4-6 (ON PAD or ON STAND)

- 4 Water Inlet Water should be directed into tank through the strainer. Fixed inlets must be supported and have flexible hose fitted (similar to outlet instructions). Inlet pipe must be supported by stand.
- 5 Water Outlet Connect your outlet with flexible hose 300mm (12") in length. The hose must be placed between the valve and all other plumbing or rigid pipe work. Elbow fittings must be used as shown (important: Water capacity of the inlet must equal water capacity of the overflow e.g. 2 x 100mm (4") inlets = same capacity overflow).
- 6 Water Outlet Overflow Connect overflow. Water must be piped away from the tank.



#### IF THE STEPS IN THIS GUIDE ARE NOT FOLLOWED GUARANTEE IS NULL AND VOID

PLEASE NOTE: Your tank cannot be unloaded without required assistance (table on the final page outlines the extra number of people required onsite at the time of delivery to assist in positioning tank). Do not work alone or enter tank, this is a confined space. Always wear safety gear and safety eye glasses when drilling. Do not lift tank with water inside. Remember, your tank must be installed correctly to ensure long life, and so you do not void your guarantee.

#### IN GROUND

#### STEPS 1-6

1 Before commencing, check for underground pipes and ensure excavation work does not infringe on the weight bearing capacity of adjacent structures.

Excavate the hole in depth to allow for 50-75mm of bedding material and a maximum depth of 1/3 of the tank wall height.

Excavate the hole in diameter to allow for a 150-200mm gap between the tank wall and the surrounding soil (*the site is not suitable if there is water or if the floor of the hole is unstable*).

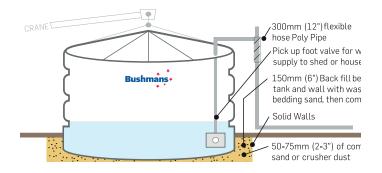
Spread washed river sand into the hole and compact it with a plate compactor, to provide a firm level base. Check that no rocks, roots or sharp objects penetrate the sand base.

- **2** Tank must be lowered into the hole squarely by crane (*if positioning requires a crane this will be at purchaser's expense*).
- **3** Prior to starting to backfill, the tank must be filled with water to a level marginally above ground height. The soil taken from the hole must not be used as the backfill under any circumstances.

Spread a 200-300mm layer of sand around the base of the tank. Manually compact the sand ensuring that all the voids are filled.

Continue adding sand in 200-300mm layers, ensuring each time that it is well compacted into all areas until it comes to within 150mm of the surface. Restore remaining 150mm with fresh soil.

- **4** Water Inlet Water should be directed into tank through the strainer. Fixed inlets must be supported and have **flexible hose fitted** (*similar to outlet instructions*). Inlet pipe must be supported by stand.
- **5** Water Outlet Connect your outlet with flexible hose 300mm (12") in length. The hose must be placed between the valve and all other plumbing or rigid pipe work. Elbow fittings must be used as shown (*important: Water capacity of the inlet must equal water capacity of the overflow e.g. 2 x 100mm (4") inlets = same capacity overflow*).
- **6** Water Outlet Overflow Connect overflow. Water must be piped away from the tank.



#### ROLL-OFF DELIVERY

#### **STEPS 1-13**

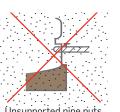
- 1 Make sure tank pad is level and position tank.
- **2** Mark outlet position on tank.
- **3** Drill outlet hole to suit tap or gate valve fitting with either a 22mm spade bit, or a 46mm (*1 inch outlet*) or 63mm (*2 inch outlet*) hole saw.
- 4 Next use a 98mm hole saw to drill out overflow as per *Overflow Installation* leaflet in the kit. The overflow must be positioned in the middle of the flat spot.
- **5** Insert overflow elbow into drilled hole until seal touches tank wall and screw into place using supplied screws. Push 'mozzie' screen or overflow strainer into overflow outlet hole until it bottoms out.

- 6 Remove strainer screws and remove strainer.
- 7 Place conduit in strainer hole, feed it through drilled outlet hole.
- **8** To insert brass fitting in outlet, undo nut off outlet and slide outlet and washer down conduit. Pull through from outside.
- 9 Screw nut on and tighten firmly by hand (left handed thread).
- **10** Place thread tape onto outlet thread and fit ball valve. Tighten with multigrips.
- **11** Loosen off hand tight outlet nut and move ball valve into upright position. Tighten outlet nut with multigrips.
- 12 Place strainer back into tank and screw back in to place so it is sealed and vermin proof.
- **13** Assemble flex hose using thread tape, attach elbow to ball valve.

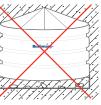
#### WARNING: THESE ERRORS WILL VOID YOUR GUARANTEE - DO NOT LEAVE TANK EMPTY, IT MAY BLOW AWAY



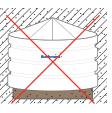
Tank base undermined, inadequate overflow length.



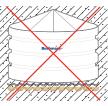
Unsupported pipe puts excess strain on the fitting and tank wall.



Rocky and uneven ground with little or no base preparation.



Must not have undersized base. Circumference must be supported.



Don't use wooden sleepers or corrugated iron under tank.

#### PREPARING FOR DELIVERY

**DELIVERY & SAFE ACCESS** To deliver your tank without damage please ensure that you notify Bushmans Customer Care if there is not sufficient space for an oversize semi-trailer to turn around or if there are any obstacles that the driver (Customer Care operator) will need to consider. Customer Care operators will conduct pre delivery site assessment and will require that an exclusion zone be set up for our larger tank offloading. Our Customer Care operator will need assistance at time of delivery to unload your tank from the truck. Please have able-bodied people available, if assistance cannot be provided then hire or use of any equipment is at purchaser's expense.

note: A minimum of 50m turning space is required, max dimensions of truck:  $21m(L) \times 2.5m(W) \times 5.2m(H)$ . Obstacles may include low power lines, gates, inaccessible roads, roundabouts, crossings, overhanging trees etc. Check our website to see our delivery areas. Equipment at purchaser's expense can include crane hire, 4WD tractor hire, backhoe hire, front end loader hire etc.

**DELIVERY ONSITE** is where our driver will help site the tank only if the provided conditions are met as per the Checklist, if you have followed the guidelines, the site is prepared and safe, our driver will install your tank.

## DELIVERY ROLL-OFF is if the site is not prepared so it can be installed at a later date.

Check it is possible to roll the tank off without damage, when moving into position, avoid rough and sharp surfaces, ensuring the area to unload the tank is level and clear of building material.

note: Due to OH&S drivers will not unload or transport the tank to the installation site, or leave the tank onsite if insufficient assistance or unsafe access is provided. The driver has the final decision to assess suitability of the site. Bushmans take no responsibility for tanks being damaged if site is unprepared. **If delivery cannot be made to your site Bushmans will automatically attempt delivery again at the purchaser's expense.** 

**PLUMBING FITTINGS** Please advise prior to delivery if you need any extra Bushmans fittings or valves. Extra fittings are available upon request at additional cost. Check with local council for regulations relating to rain water tank installations. See fittings & accessories for more information. When plumbing the inlet, overflow or outlets, ensure allowances are made for the poly tank to move position, expand and contract. Typical PVC or metal fittings are relatively rigid and inflexible.

note: Purchase and delivery of any additional plumbing fittings and pipes are responsibility of purchaser. Our guarantee specifies a 300mm flexible hose be fitted to the outlet.

**SECURING YOUR TANK** When your tank arrives you must put at least 25mm (1") of water into the tank, if water is not available ensure that the tank is tied down to secure it from blow-away and damage. Water tank stands can be used but must be designed by a qualified consulting engineer

note: Bushmans take no responsibility for tanks being damaged if the tank is not secured properly. Due to OH&S our drivers and service people are not permitted to work at heights and therefore cannot assist in placing or servicing tanks on stands.



#### ASSISTANCE REQUIRED FOR TANK DELIVERY

(Below outlines the extra number of people required onsite at the time of delivery to assist in positioning tank).

Capacity Litres	v Ordering Code	Number of people
660	TSL160	1 + driver
1000	TT210	1 + driver
1000	TSL200	1 + driver
1000	TSL220 Slim	1 + driver
1150	TSL230 Slim	1 + driver
1200	TT260	1 + driver
1500	T350	1 + driver
2450	TS540	1 + driver
2550	TT560	1 + driver
3250	TT650	1 + driver
4200	TXD910	1 + driver
5000	TT1100	1 + driver
5000	TXD1200	1 + driver
10000	TXD2200	2 + driver
15000	TXD3300	2 + driver
2000	TSL440 Slim	3 + driver
3000	TSL660 Slim	3 + driver
22500	TXD5000	3 + driver
25000	TXD5500	3 + driver
5000	TSL1100 Slim	4 + driver
30000	TXD6500	4 + driver
46400	T10500	6 + driver

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#### Victoria Cobden Rd Terang VIC 3264

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