OUTLET INSTALLATION

WPACK08 TANKLINER INSTRUCT8 -07-25

Once the liner is in place, you need to re-fit the outlets you removed before fitting the liner. Don't cut into the liner until you are sure the liner is fitted well. Ensure there is enough slack around the area to be cut to prevent the liner from over-stressing around the fitting. There should be no tension on the liner at the fitting point. You can release any tension by adjusting the overhang above the fitting.

The fitting needs to clamp the liner against the tank wall to create a watertight seal.

FOR CORRUGATED & CONCRETE TANKS WITH REMOVEABLE OUTLETS

STEP 1 – CUT HOLE IN LINER
Cut a neat hole though the liner, slightly smaller than the diameter of your fitting. If the fitting is 50mm (2") in diameter, cut a hole around 45mm (1¾") in size (9)

STEP 2 – APPLY SILICONE
a) Squeeze a good bead of silicone between the liner and the tank wall (10)

b) Between the flange and the liner, use a rubber gasket if supplied with the fitting (11)

c) Insert the fitting from the inside, through the liner and the wall of the tank and tighten it from the outside. As it tightens (12), some silicone will squeeze out between the liner and the tank, to provide a watertight seal.

FOR CONCRETE TANKS WITH FIXED OUTLETS

STEP 1 – MAKE FACEPLATE
a) To create a watertight seal around a fixed outlet, make a faceplate to fix to the wall around the outlet and seal the liner. The best material to use for this is stainless steel but you can use a rigid PVC sheet 6–10mm thick. Cut it out about 100mm (4") larger than the outlet all around. (eg; if the outlet hole is 50mm (2"), make the faceplate 250mm (10") in overall size).

b) Pre-fasten the template to the inside wall of the tank so any drilling is done before the liner is installed. (13) The faceplate will squeeze the liner and the silicone tight to the surface of the wall. You will need to add some silicone between the plate and the liner to prevent leakage through the fastening holes. Make sure you use a non-corrosive fastener like stainless steel dynabolts, nylon rawl plugs and stainless steel PK screws, or other expanding nylon anchors.

STEP 2 – CUT HOLE IN LINER
Cut a neat hole through the liner, slightly smaller than the diameter of your fitting (14). If the fitting is 50mm (2") in diameter, cut a hole around 45mm (1¾") in size.

STEP 3 – APPLY SILICONE AND FIX FACEPLATE
a) Squeeze plenty of silicone between the liner and the tank wall around the hole you have just cut. (15) Push the liner against the silicone sealant and against the wall around the outlet.

b) Put a small ring of silicone around the fastener holes on the back of the faceplate and position over the outlet hole and against the liner. (16) Locate the pre-drilled fastening holes with a nail or small screwdriver. Secure the plate firm against the wall of the tank so the silicone forms a waterproof gasket.

c) Re-trim the liner inside the flange and remove any excess silicone.

STEP 4 – APPLY MORE SILICONE

After the plate is completely fixed to the wall, run a bead of silicone around the edge of the plate and over the fasteners to ensure a watertight seal. (17)

(9)

(10)

(11)

(12)

(13)

(14)

(15)

(16)

(17)

FINAL STEP – CHECK LINER
Fill the tank with a small amount of water. Climb inside and check the liner for any high stress points around the base. Release tension if needed by repositioning the liner slightly.

Once satisfied, its a good idea to use a small amount of mild soap (ie liquid softly) with a soft, clean mop to wash down the inside surface of the liner. Rinse well with clean water. Drain the tank, then fill with fresh water to the required level.

Doing this avoids a 'plastic' taste that can be associated with a new liner if initially only filling to a shallow level.
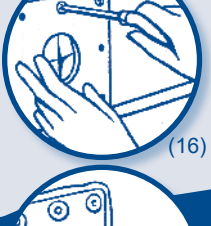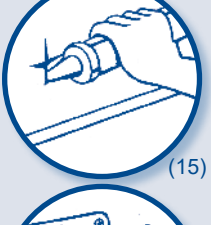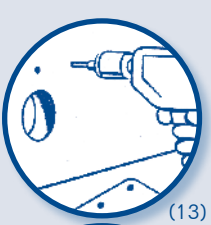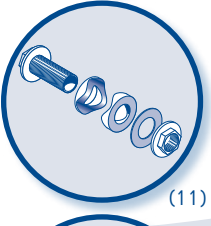
WARRANTY INFORMATION

Made in Australia by ABGAL Liners & Covers, this Tank Liner is warranted against defective material and workmanship. For terms and conditions scan the QR code on the right, or go to www.shop.abgal.com.au/tank-liner-warranty-terms-and-conditions
When registering your warranty, you will need the product information on the label below.

INSTALLATION INSTRUCTIONS

YOU WILL NEED:

- Fixing extrusion (or other fastening method)
- Ladder
- Stanley knife
- Rubber mallet
- Hacksaw
- File (for removing sharp edges)
- Sand / newspaper or geotextile

- Drill (preferably cordless) with 5mm bit
- 1 cartridge of silicone natural cure sealant per 6m of tank perimeter when using extrusion
- Wet/dry vacuum or dust pan and brush
- Heavy-duty PVC tape
- Chalk Stick (optional)

- 5mm pop rivets & rivet gun (or other suitable fasteners)
- Screwdriver/stillson for removing outlet fittings
- Old garden hose and wire (optional)
- Outlet fitting (optional)
- Faceplate to seal around existing outlets (optional)

IMPORTANT: The type of tank you have determines the installation method. Please determine which style of tank you have, and use the appropriate method (CLOSED TOP or OPEN TOP TANK).

A CLOSED TOP TANK has a lid or roof which cannot be removed. These will usually have a manhole for access - as long as you can get inside your tank, you can fit the liner.
An OPEN TOP TANK has a roof or lid that can be removed, or has no top at all.

IMPORTANT: PREPARATION FOR LINER INSTALLATION

1 - READ THESE INSTRUCTIONS & WATCH THE VIDEO OVERVIEW
You'll find it at www.abgal.com.au/videoGallery or you can scan the QR code at the bottom of this page.

2 - EMPTY TANK & PATCH ANY ROUGH OR SHARP AREAS
Empty your tank and remove all debris from inside. Carefully inspect the condition of the tank walls and floor and identify any sharp objects or protrusions which may damage your liner if left unpatched. Cover any rough or sharp areas with something that will smooth the tank surface (eg; heavy-duty tape) and therefore protect your liner.

Holes larger than 5mm dia. need to be covered with something strong like duct tape, which will prevent the liner from poking through the hole. A rough tank floor requires a geotextile pad (or other protective layer) laid over it, to protect your liner during installation and beyond.

3 - REMOVE OUTLETS
Outlets are removed to achieve a smooth surface. If the outlets wont unscrew, you can saw them off.

If the fittings are not removable, prepare the holes for new flanged fittings or faceplates before installing the new liner. The outlet installation process is explained in detail on the back page - please read it in full before starting the installation process.

WARNING: Do not leave PVC Tank liners empty as PVC will shrink. Potable liners must be protected from UV exposure. Liners must be installed within 6 months of manufacture.

ABGAL
Liners & Covers

INSTALLING INTO A CLOSED TOP TANK

Using Water Line Fixing Extrusion Suits Corrugated Iron and Concrete tanks

NOTE: For closed-top tanks, we recommend that you install a vent (eg; 'whirlybird' type) into the roof, to allow the build-up of heat in the tank to escape. This will increase the life of your liner.

STEP 1 – LINER FIXING SYSTEM
For a closed top tank, you need a liner fixing method which enables you to 'hang' the liner from the internal tank wall. We recommend 'Waterline extrusion' (1). It is a 2 part fixing system used to hold the liner in place around the perimeter of the tank, near the top. Simple to use, it is supplied in 3m lengths and may be cut shorter for ease of handling inside the tank.
Alternatively you can use a baton strip or special reinforced edge to fasten the liner. The baton strip can be a semi rigid plastic or non corrosive metal flat bar, a minimum of 25mm wide x 3mm thick.
Some liners are supplied with a specially welded reinforced edge to secure the liner. These are fastened using TEK screws or other mechanical fasteners so they clamp the liner fabric against the tank wall. On reinforced edge liners, use a large diameter washer with the fastener to increase the clamping surface area against the liner.

(1)

STEP 2 – ATTACH FIXING EXTRUSION
a) The tank liner is usually hung just below any overflow outlets, at the top of the tank. Mark a chalk line around the perimeter of the tank where your fixing extrusion is to be fastened. (2)

b) Position the first piece of extrusion strip just under this line then drill a hole 150mm in from the end, through the extrusion and into the tank. (3)

c) Remove the strip and squeeze a bead of silicone sealant 20mm under the line, long enough for the first piece of extrusion. (4)

d) Now, place the extrusion strip on top of the silicone, using a rivet in the drill hole to locate the exact position. Pop the rivet to secure the strip and continue to drill along the rest of the length of strip, at 150mm intervals.

e) Repeat for each length of strip around the perimeter of the tank, ensuring the butt joins are neatly aligned (making a good fit for the insert strip). To fit the last piece of strip, drill the first hole as before in d) then use a rivet to hold one end in place. Mark the exact length you need, remove the strip and trim down with a hacksaw. Remove any burrs from the saw cut then attach the strip to the wall of the tank to finish.

(2)

(3)

(4)

STEP 3 – REMOVE ALL DEBRIS FROM INSIDE TANK
With a vacuum or dustpan & brush, remove all debris from the installation of the fixing extrusion. Prepare the floor with a layer of fine sand, newspaper or an ABGAL "TankPad" geotextile, to protect your liner during installation and beyond.
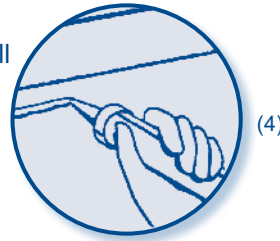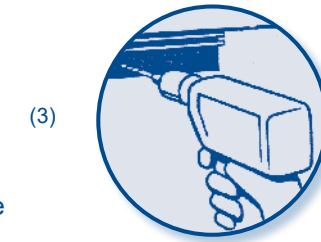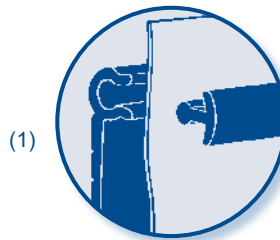
STEP 4 – REMOVE LINER FROM BOX
On the lawn, put down a protective sheet, then remove your ABGAL Tank Liner from the box. Unfold it then roll it into a long roll which you will pass through the manhole and into the tank. (Use an old towel draped around the manhole to protect the liner from sharp metal edges if necessary). Pass the liner through the manhole into the tank.

STEP 5 – UNFOLD THE LINER
Once inside the tank, unfold the liner across the floor. You'll need to find the seam perimeter where the floor of the liner meets the wall. This will enable you to centre the liner in the tank before you attach the wall of the liner to the top of the wall of the tank.

STEP 6 – HANG THE LINER
Take the top of the wall of the ABGAL liner and lift it up to meet the extrusion strip which is fastened against the tank wall (5). Make sure there are no diagonal wrinkles, as these mean that the top of the liner is not square with the base. If diagonal wrinkles appear, move the top of the liner in the opposite direction to correct the wrinkle. Ensure there is sufficient slack in the wall of the liner so there will be no stress on the liner around the tank fittings or where it meets the floor.

(5)

STEP 7a – CLIP INTO PLACE USING EXTRUSION
a) Using the male insert part of the Waterline extrusion, clip the liner into place (6). Do not hammer the insert into the extrusion as it may cut the liner. If it is aligned properly it will 'slip' into position by pushing on it with your two thumbs.

   Once you have inserted the start with your thumbs, you can use the rubber mallet to gently 'tap' the male insert into place.

b) Start the next length with your thumbs then use the mallet. It is important to align the male insert with the female extrusion before pushing it into place. If it is not aligned and you
   force it, you can damage the liner.

c) Continue around the perimeter of the tank until the liner is completely fastened. You may have to gather the vinyl a little as you go. If there is too much to stretch or gather in any one area, you'll need to unclip part or all of the liner and refasten it.

(6)

STEP 7b – FASTENING LINER WITH BATON STRIP OR SPECIAL REINFORCED EDGE
Using fasteners like TEK screws or rivets, drill through the baton/liner and secure the fastener at four evenly spaced points around the perimeter of the tank. (Eg. 3 o'clock, 6 o'clock, 9 o'clock & 12 o'clock) This will ensure the liner wall is even in perimeter. Work between the points to secure the liner with even looseness until the liner is fastened at approximately 200mm intervals. You may have to gather the liner a little as you go. If there is too much to stretch or gather in any one area, you'll need to un-fasten part of the liner, adjust and re-fasten it. That is why it is important to use the 3, 6, 9 & 12 o'clock method to evenly position the wall. This spacing of 200mm between fasteners will provide adequate support for the liner around the perimeter of the tank if done correctly. The objective is to provide enough support on the top edge of the liner for when the tank is filled - if you have any doubt, use more fasteners.

INSTALLING INTO AN OPEN TOP TANK

Using the Overhang Method Suits Corrugated Iron / Concrete tanks

This install method is much simpler (liner overhang can be secured around the outside of the tank) but for a more professional finish, you may opt to follow the closed-top installation instructions above.

1 – CHECK FOR (AND REMOVE) SHARP EDGES
In addition to the initial tank preparation, check the rim (top of the tank) for rough/sharp edges that could damage the liner. We suggest covering the edge with a few layers of heavy duty PVC tape. For corrugated iron tanks, an old garden hose slit down the centre, opened up and pushed onto the top edge of the tank works very well.

2 – INSERT LINER INTO TANK
Place the liner inside the tank. Open it up, unroll it, and position the base of the liner centrally on the floor of the tank. Locate the seam perimeter where the floor of the liner meets the wall, to assist with alignment.

3 – HANG THE LINER
Take the edge of the liner and fold it over the top of the tank, with an overhang of at least 100mm (4"). As you fold it over, ensure there are no diagonal wrinkles, as these mean that the top of the liner is not square with the base. If diagonal wrinkles appear, move the top of the liner in the opposite direction of the wrinkle to correct it. Adjust the overhang so the liner is loose in height, to allow for any take up when the tank fills with water.

(7)
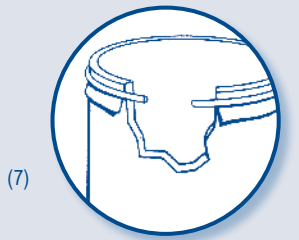
4 – FASTEN LINER TO TANK TOP
Fencing wire is very good for securing a liner to a tank (7). The wire should be threaded through a garden hose, then tightened around the outside of the tank on top of the liner overhang. (8)

Threading the wire through a flexible garden hose prevents the wire from cutting into the liner, plus it has the added benefit of being weatherproof. You can also use rope, but rope is not as durable as the wire/hose method.

(8)