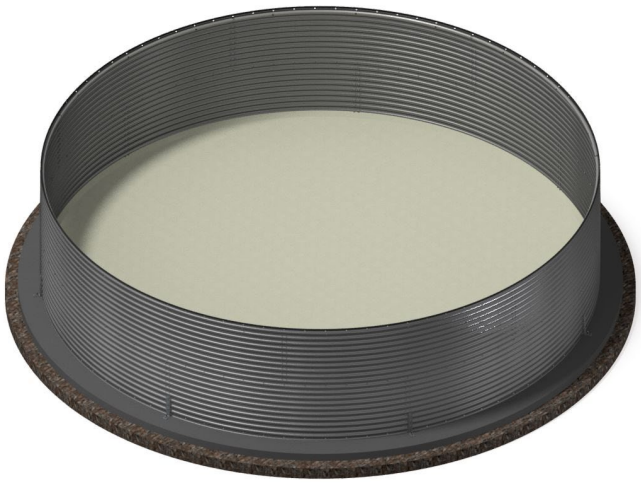
Evenproducts

WATER FOR LIFE

Reinforcing Ring Installation Guide

For 27ft (8.23m) - 48ft (14.63m) Diameter tanks



Please read entire manual before starting installation

December 2021

Use of the Reinforcing Ring

- The Evenproducts reinforcing ring has been developed to prevent deterioration / damage to the top ring of tank panels caused by the movement of Anti Algae / PVC Cover structures. This usually occurs on covers that have not been maintained correctly or that have been affected by wind or other environmental factors.

- Proper maintenance and installation of AA covers, including the assembly of the correct number of tensioned ropes, should still be adhered to. AA Covers should be taken down in high winds and/or snow.

- The reinforcing ring is a mandatory requirement for warranty to be valid on any of the following tank sizes:
    - 6 panels high – 18ft diameter and above
    - 5 panels high – 24ft diameter and above
    - 4 panels high – 30ft diameter and above
    - 3 panels high – 39ft diameter and above

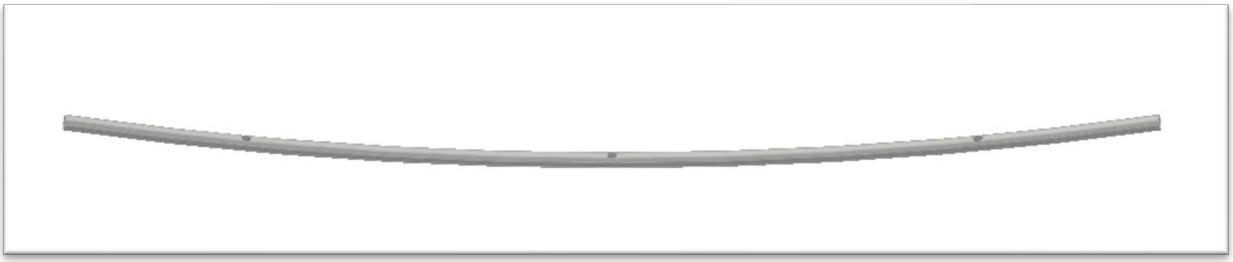
  Evenproducts reserve the right to mandate its use outside of these parameters at the point of quotation.

Component List

	Description
A	Galv Light ST Tube 1.25 NB 42.4 O/D Curved Tube Sections
B	Curved Tube Section Short
C	1.25 Internal Joint 150-42
D	1.25 External Sleeve 150-42
E	M10 Hex Full Nut
F	M10 x 20 HD HD set screw ZP
G	M10 MS Washer 19SWG Galvanised

Size	**A**	**B**	**C**	**D**	**E**	**F**	**G**
27' (8.23m)	9	1	8	2	27	27	27
30’ (9.14m)	10	1	9	2	30	30	30
33’ (10.06m)	11	1	10	2	33	33	33
36’ (10.97m)	12	1	11	2	36	36	36
39’ (11.89m)	13	1	12	2	39	39	39
42' (12.80m)	14	1	13	2	42	42	42
45’ (13.72m)	15	1	14	2	45	45	45
48' (14.63m)	16	1	15	2	48	48	48

Parts

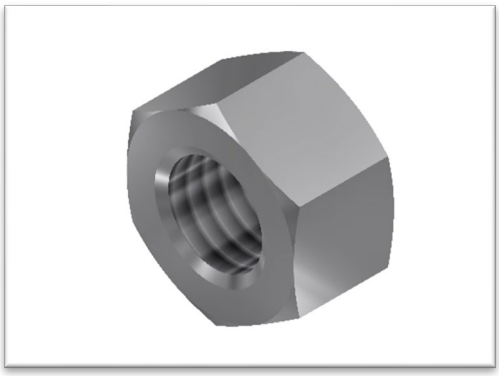


Galv Light ST Tube 1.25 NB 42.4 O/D Curved Tube Sections (A)
(THIS WILL BE PRE-DRILLED IN THREE PLACES TO ACCEPT FIXINGS)

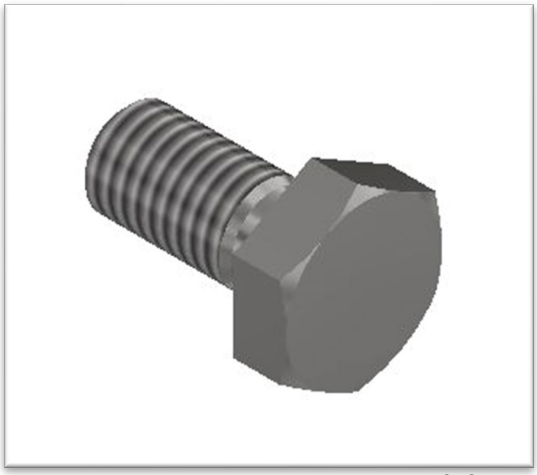
Curved Tube Section Short (B)

1.25 Internal Joint 150-42 (C)
WILL COME IN TWO HALF PIECES

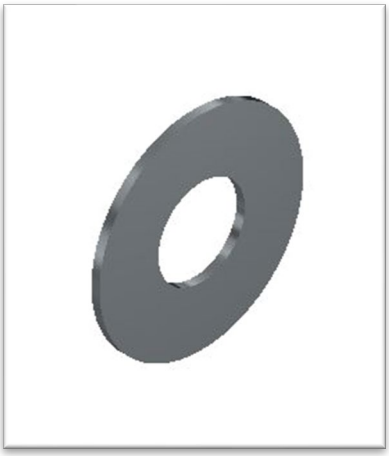
1.25 External Sleeve 150-42 (D)



M10 Hex Full Nut (E)



M10 x 20 HD HD set screw ZP (F)



M10 MS Washer 19SWG Galvanised (G)

Tooling Requirements & Safety Advice

- Extreme care should always be taken when working near or on the surface of a tank liner. Step Ladders or Short Ladders with protected feet and tops, are recommended to ensure no damage to the tank liner is caused.

- Protective Gloves are also recommended when handling the sharp-edged steel panels or roof segments and purlins etc. Gloves with an index finger and thumb missing are ideal for protection whilst still being able to fit fastenings.

- A Re-Chargeable Torque Driver (Speed Bit) is required with Long Reach 17mm and 19mm Sockets and/or Tube Spanners are required. An Angle Grinder / Saw (to cut the short tube to size) may also be required. Both a 4.0mm Drill bit (for use as a Pilot) and an 11.0mm Drill bit (for clearance for M10 fixings) are required. Allan Keys for internal clamp and tube sleeve clamp.

- A Safety Harness is recommended for working at height but you should conduct the necessary HSE checks recommended within your region.

- Ensure the appropriate footwear is worn and if assembling in bright daylight, a hat and sunglasses are recommended to reduce glare from the steel.

- Ensure that someone is always available to help on the outside of the tank whilst others are working within the structure and that escape ladders are in place at all times.

- Always ensure that weather conditions are such to ensure safe installation and working at height.

Note: The advice above is for guidance only. Installers should always refer to any Health and Safety Executive published recommendations or local health & safety guidelines and laws.

Construction of the Reinforcing Ring

Installation should take place after the tank panels have been erected and prior to the hanging of the liner. If retro fitting the Reinforcing Ring to an existing tank, take care to protect liner once the tank has been drained and liner has been dropped. Strap tooling and parts to a toolbelt to prevent falling onto liner.

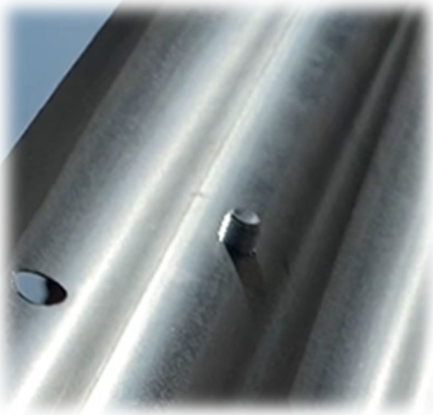
1. Place the sections of Galv Light ST Tube around the inside of the tank so that each one lines up with a panel – this reduces handling during installation.
   The number of curved sections (Part A) will be the same as the number of panels in the top ring.
   There will also be one shorter length (leave this until the end) (Part B).
   Each tube section will have 3 pre-existing holes drilled in it

2. Position the first tube section inside the top corrugation of the top panel and mark the steel panel through each hole.

Place the tube section back on the floor and drill three holes where previously marked in the panel. Use a 4mm pilot hole and then widen to an 11mm hole.

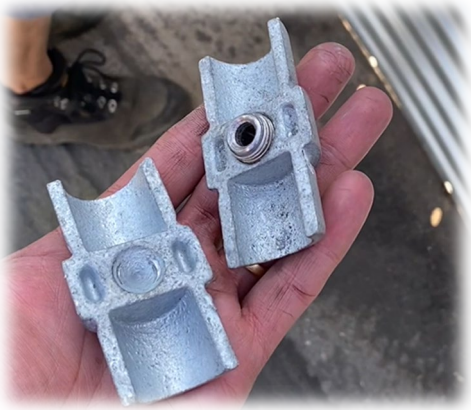
3. Reposition the tube section and secure in place with the M10 x 20 set screws, washers and nuts provided. (Parts E/F/G)

   There are 2 washers per hole. One for each side.
   ALL SCREWS SHOULD FACE OUT OF THE TANK.



4. With the first tube section in place, place two halves of an internal joint (part C) together and fit inside one end of the tube.




5. Place the second section of tube on to this end so the internal joint fits between both sections. Mark through the holes on the second section of tube before following the same process as before to drill the steel panel and fit the tube section.

6. Once fitted, tighten the internal joint with an Allen Key.

7. Repeat the process on all remaining sections until the final section.

8. <u>The final connection</u>

Due to the nature of tank manufacturing and installation, there is always a small variance in the diameter (and thus circumference of a tank). This may mean that the final section of tube does not fully meet the first section.

In these instances, Evenproducts have provided a short section of tube (Part B) that can be cut to length and fitted with 2 external sleeves (Part D)

First measure the short piece of tube and cut to fit. Then place an external sleeve over each end and covering each adjoining tube section. Tighten with an Allen Key.

Ensure all fixings are fully tightened.