



# VapourGuard<sup>TM</sup>



## FABRICATORS GUIDE



**PLASTIPACK LIMITED**

Manufacturers of Energy and Resource Saving Products

# Fabricators guide

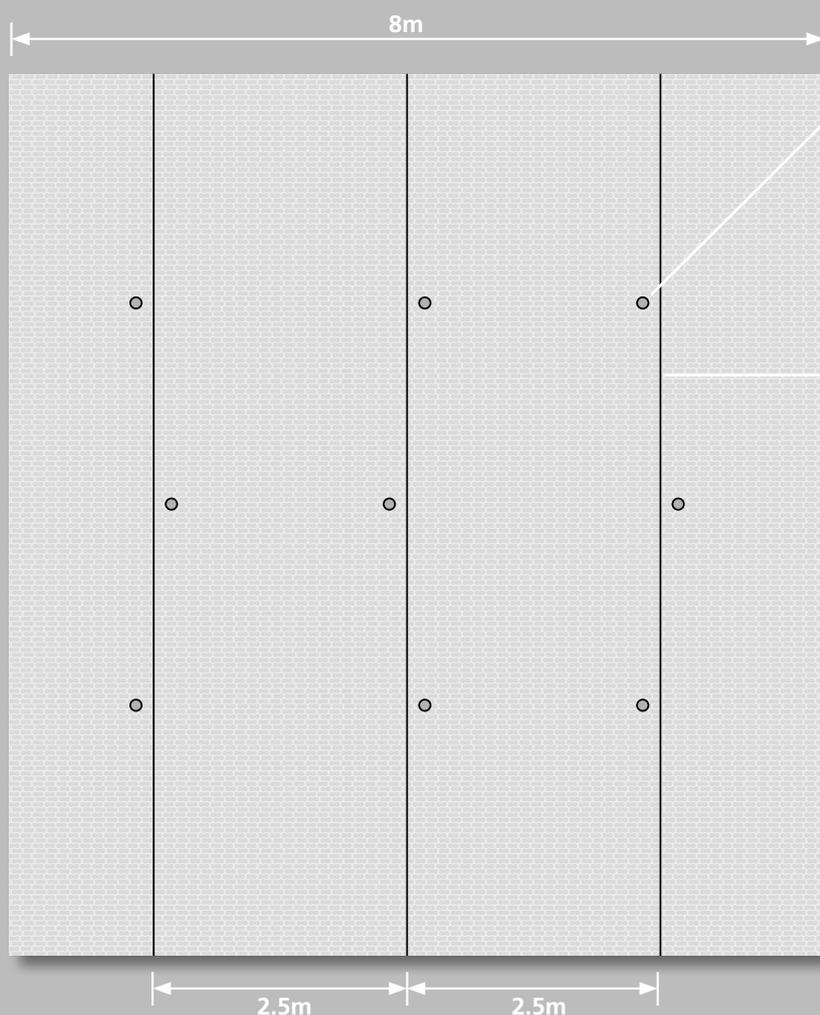
Domestic or agricultural water storage tank covers can be made from VapourGuard™. These can vary in size and shape but are predominantly round covers and can be up to 20 meters in diameter. This guide is a recommended best practice to make and install VapourGuard™ covers of various sizes.



## Welding



The material can be welded by hot wedge welding.



Rainwater harvesting holes are 12mm or 1 bubble: these should be formed complete using a 12mm hole puncher.

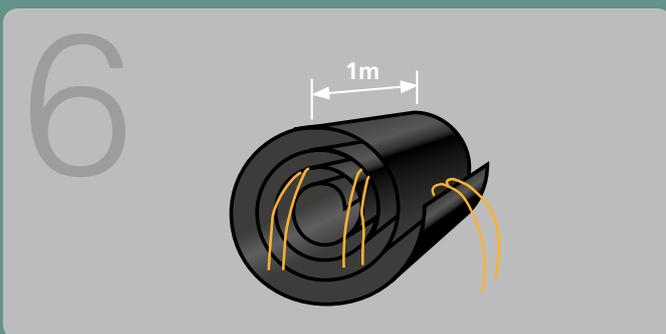
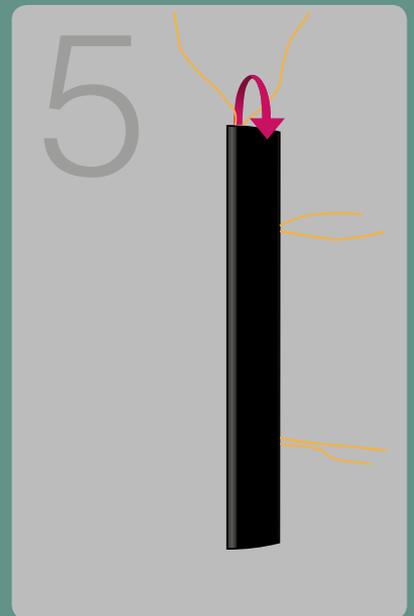
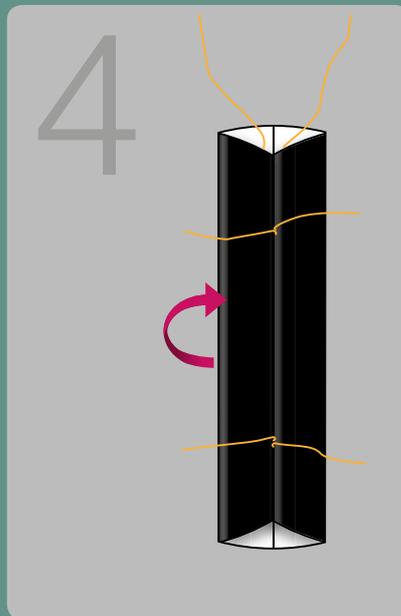
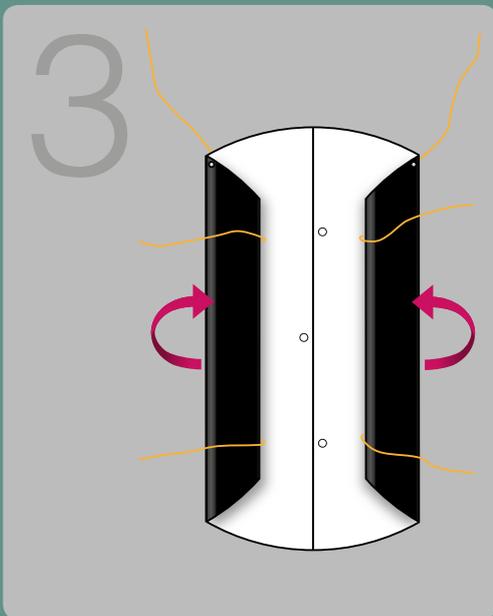
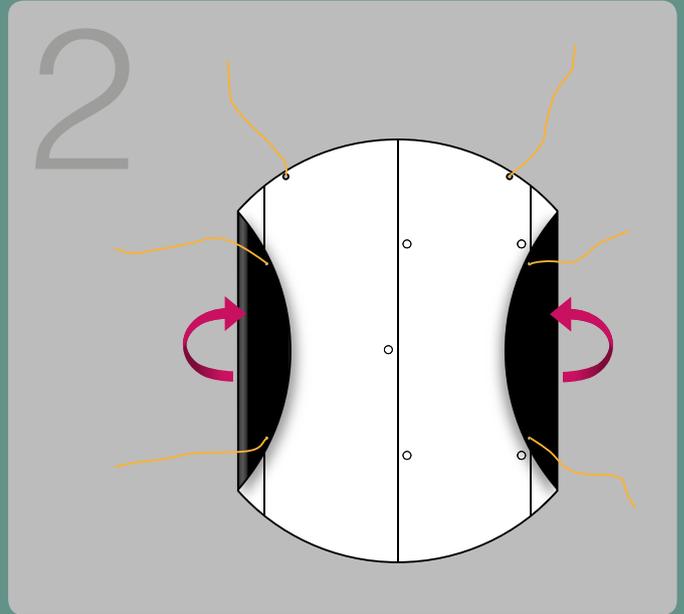
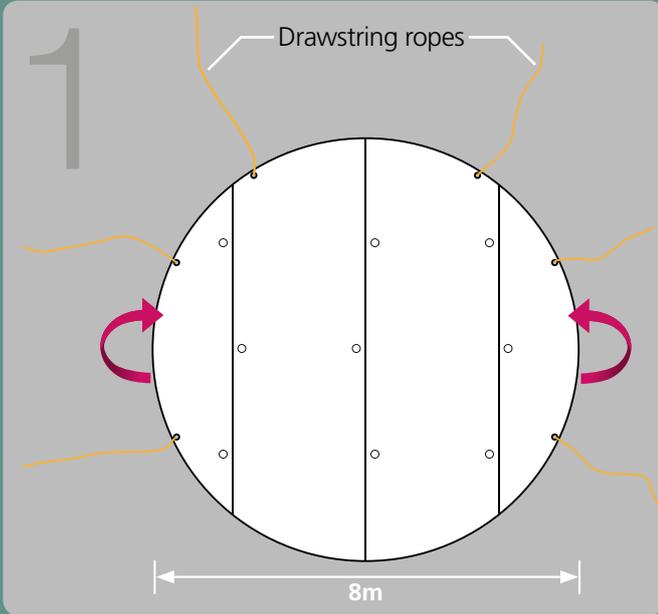
Weld seam (every 2.5m)

This can then be trimmed to 8 meters diameter and ropes can be added for unfurling. These can be attached using the blue solar clips used in swimming pool cover leading edge systems.

# Folding

Care must be taken when folding the cover up, as it must unfurl easily. An example of a 8 metre round cover is shown below

The rope length is required to be the diameter of the tank plus the height of the installation. So an 8 metre diameter tank at 4 metre height should have 12 metre length drawstring ropes.



The material must be folded in a specific way to allow for simple unfurling on site. This is using 1 metre concertina or z folds as shown in the above steps. At this point the material is ready for the protective wrapping to be added and be shipped to the end customer. Protective wrapping must be added to prevent the material being torn or damaged during transit.

# Customer Installation guide

## Consumer installation instruction guide for a 8m diameter VapourGuard™ tank cover

1

→ The water storage tank must be within 30cm freeboard (12 inch) or highest possible point of water capacity during the VapourGuard™ cover installation.

2

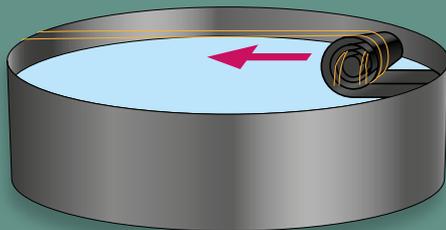
→ Remove the protective wrapping carefully.

3

→ Lift the cover up in the full water storage tank. Two people will be required to lift the cover into position.

4

→ When the cover is placed in the water (white surface up), the installers must be at 12.00 and 6.00 o'clock respectively and the rope must be gently pulled with the cover being manually unfurled at the other end. This is shown in **sequence 1**.



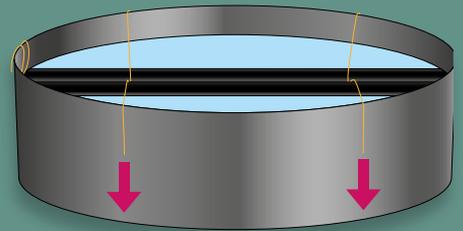
Sequence 1

5

→ While unrolling two/four ropes will appear in the centre section. These must be moved to outside diameter to allow for **sequence 2**.

6

→ **Sequence 2** will consist of the cover being unfurled in one direction then in the other direction. The result of this is that the cover will then half cover the water surface. The Installers will now need to change positions and use the same method to unfurl the other half and cover the entire water surface.



Sequence 2

7

→ Remove all fittings from the cover.

8

→ Maintain a water board of 0.2m (8 inches) at all times. An appropriate overflow system is required that will not interfere with the floating cover system.

9

→ A warning sign stating the cover cannot be walked on must be placed in the area and access points to the area can only be accessed by relevant trained persons.

10

→ The ropes used during the installation can be used to form a mesh across the tank to ensure the cover cannot be removed by wind, although this will not occur if freeboard is maintained.

**Note:** The above is for an 8 metre installation only and more people and lifting equipment are required for larger installations. Alternatively for much smaller diameter tanks the material can be simply rolled up and unfurled manually but in all cases this must be done while in the tank and not taken up as a single sheet.