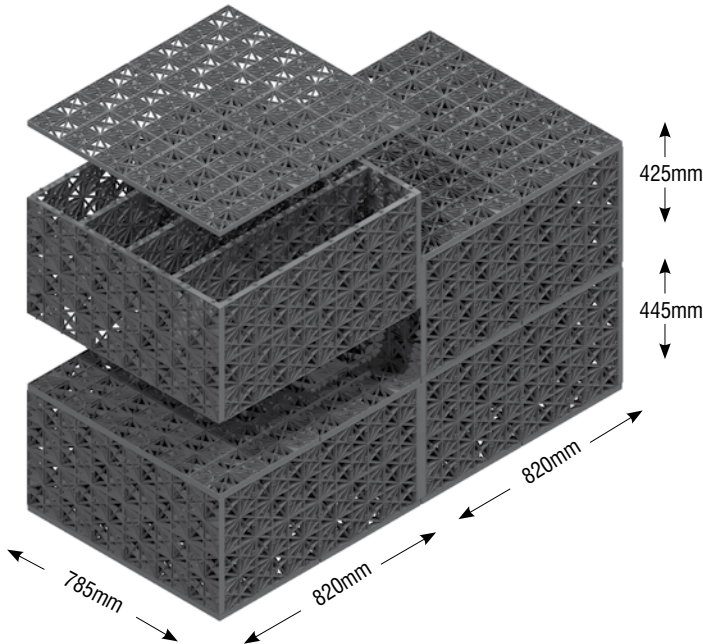


# CelluTank®

## Stormwater Management Modules



CelluTank® stormwater tanks provide an efficient at-source management system for rainwater from roofs and other impermeable surfaces such as parking areas, driveways and playgrounds.

CelluTank®, high strength plastic modules function to allow either sub-surface stormwater infiltration, detention or re-use for irrigation or other non-potable purposes. The large CelluTank® modules once positioned in-situ, produce greater stability compared to smaller competitive products, especially under driveways and parking lots. CelluTank® stormwater tanks are available in several load-bearing capacities and cater for the requirement of individual houses up to the largest commercial and industrial developments. The load-bearing capacity is increased with the use of additional proprietary “stabilisers”.

CelluTank® modules are easily assembled on site by clipping together lightweight, high strength large interlocking panels, thereby substantially reducing assembly costs compared to competitive products. Assembled units can be interlocked vertically, thereby ensuring the system remains stable even under trafficable areas.

CelluTank® modules cater for the insertion of a 90mm flushing pipe at the base of installed systems.

A minimum of 5 Stabiliser bars are required for tanks being installed under light trafficable areas (cars) and a minimum of 7 Stabiliser bars for trafficable areas with heavy vehicle traffic (large trucks).

### Advantages

- Use under trafficable areas
- Extra large unit volume capacity
- Less panels to assemble compared to other products
- Fewer modules to install compared to alternative products
- Easy on-site assembly
- Interlock vertically
- Caters for insertion of flushing pipe



Area excavated to required dimensions.



Assembled modules installed and enveloped with geotextile and membrane.

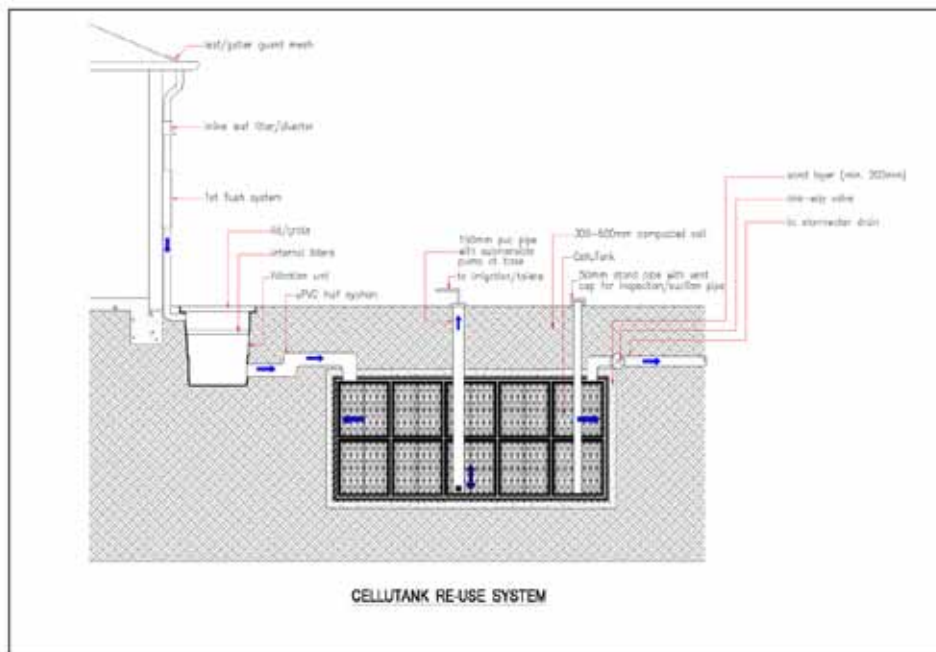
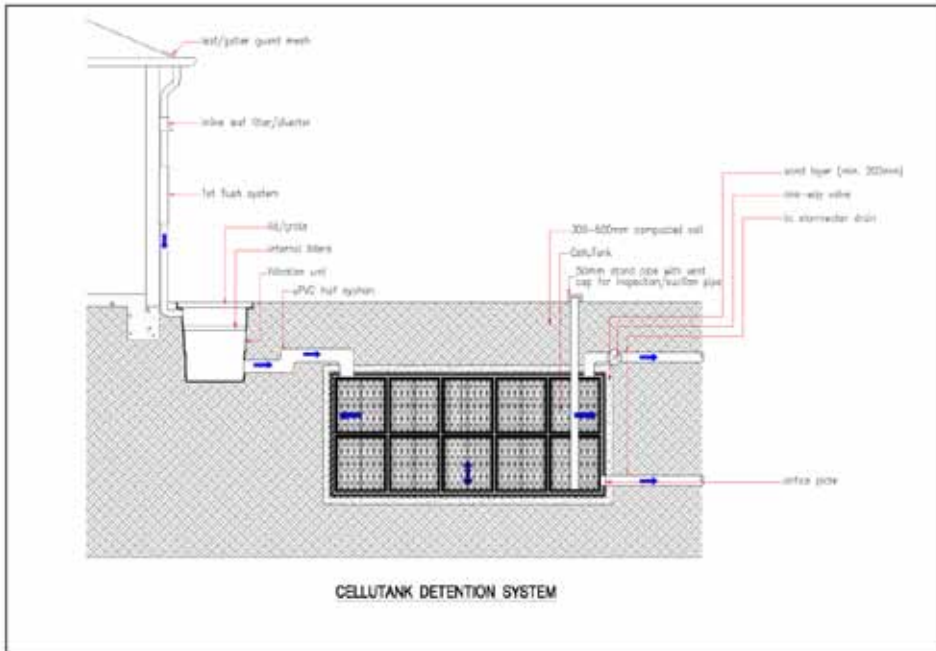
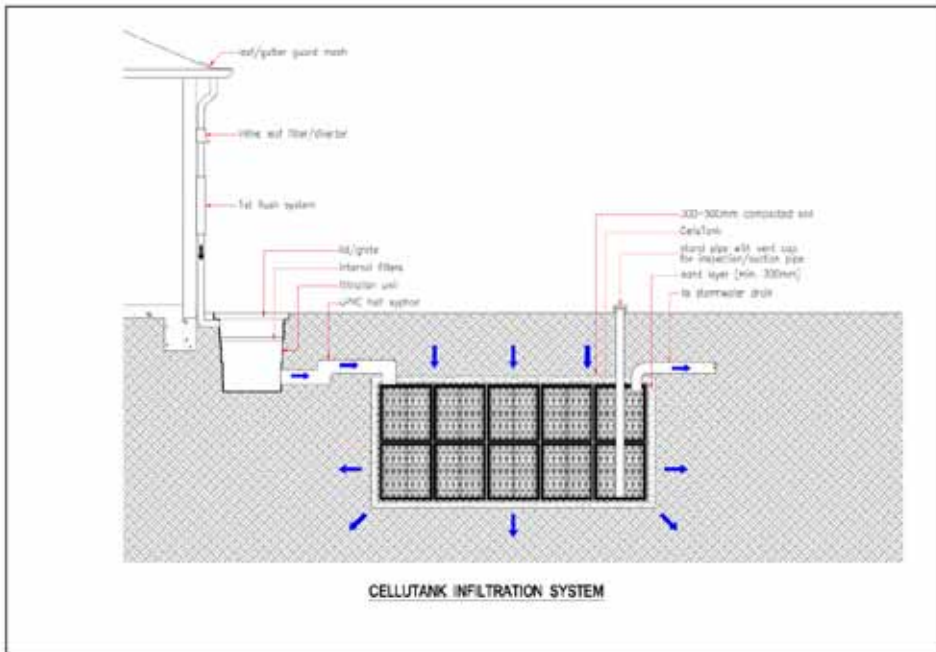


Completed installation under trafficable area.

## Enhancing Our Environment

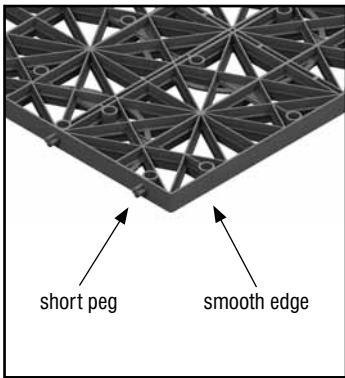
Cellutank enhances our environment by providing efficient stormwater management.



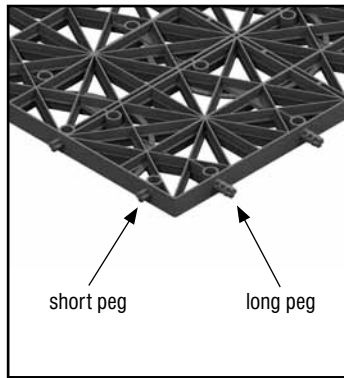


# Panel Details

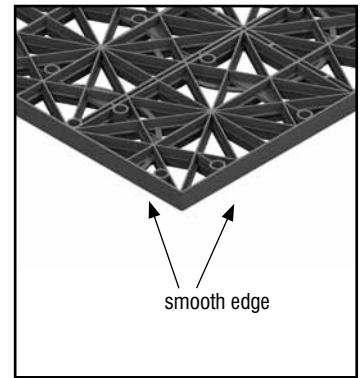
CelluTank has 3 similar modules **W**, **S** and **T** each with different edge details.



Wall **W** panel

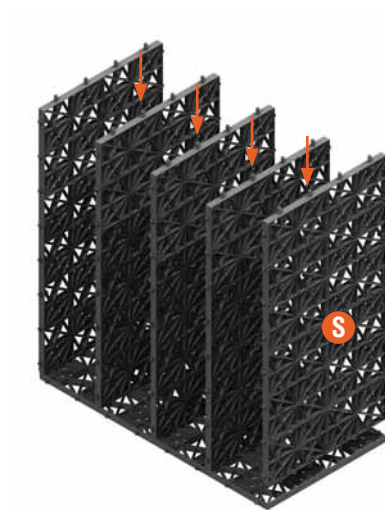
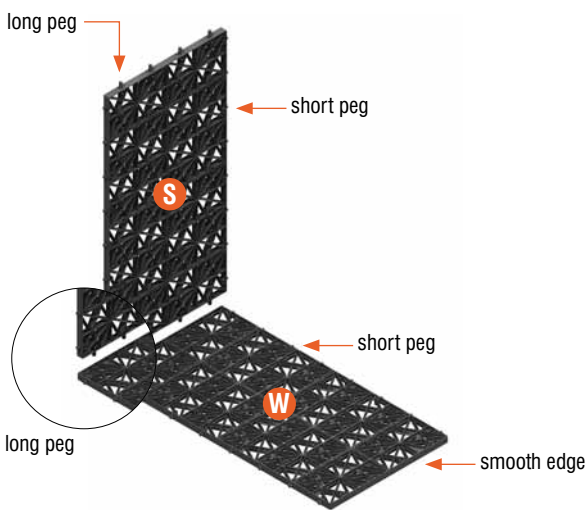


Stabilizer **S** panel



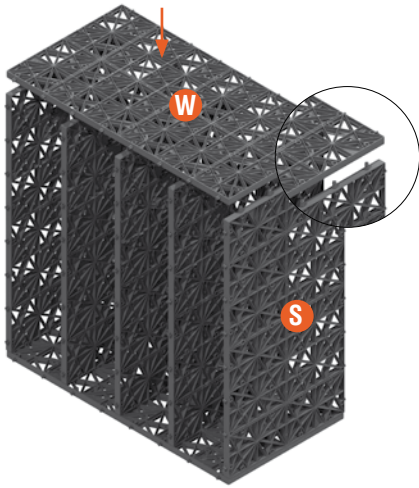
Top and Bottom **T** panel

# Assembly procedures

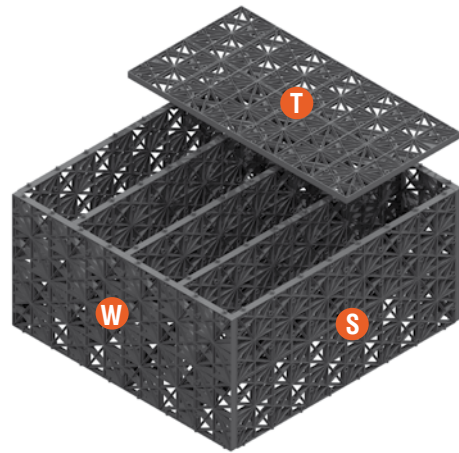


1. Insert Stabilizer **S** panel into Wall **W** panel. Tap in with a rubber mallet, if necessary to ensure the panel is fully engaged.

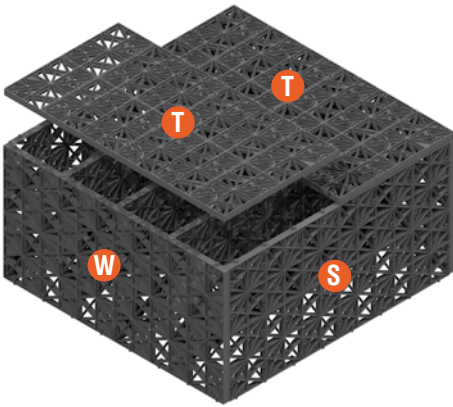
2. Repeat for up to seven additional Stabilizer **S** panels.



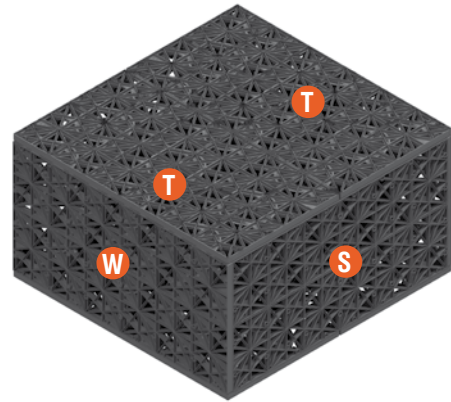
3. Attach remaining Wall **W** panel.



4a. Position partially assembled module horizontally and align on **T** panel and tap in with a rubber mallet, if required.



4b. Position on another **T** panel and tap in with a rubber mallet, if necessary.



5. Invert the module and position on and engage **T** panels as detailed in 4a and 4b, to complete the assembly of a module.



CelluTank® Re-use System  
Hawthorn Victoria.

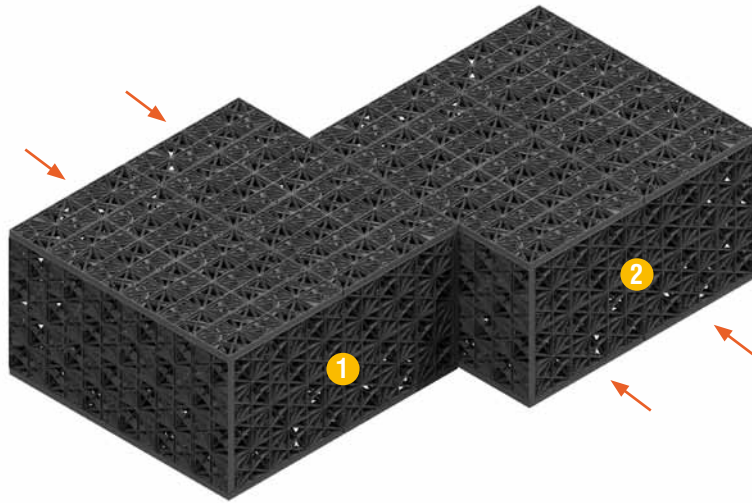


CelluTank® Re-use System  
Bailik College Victoria.

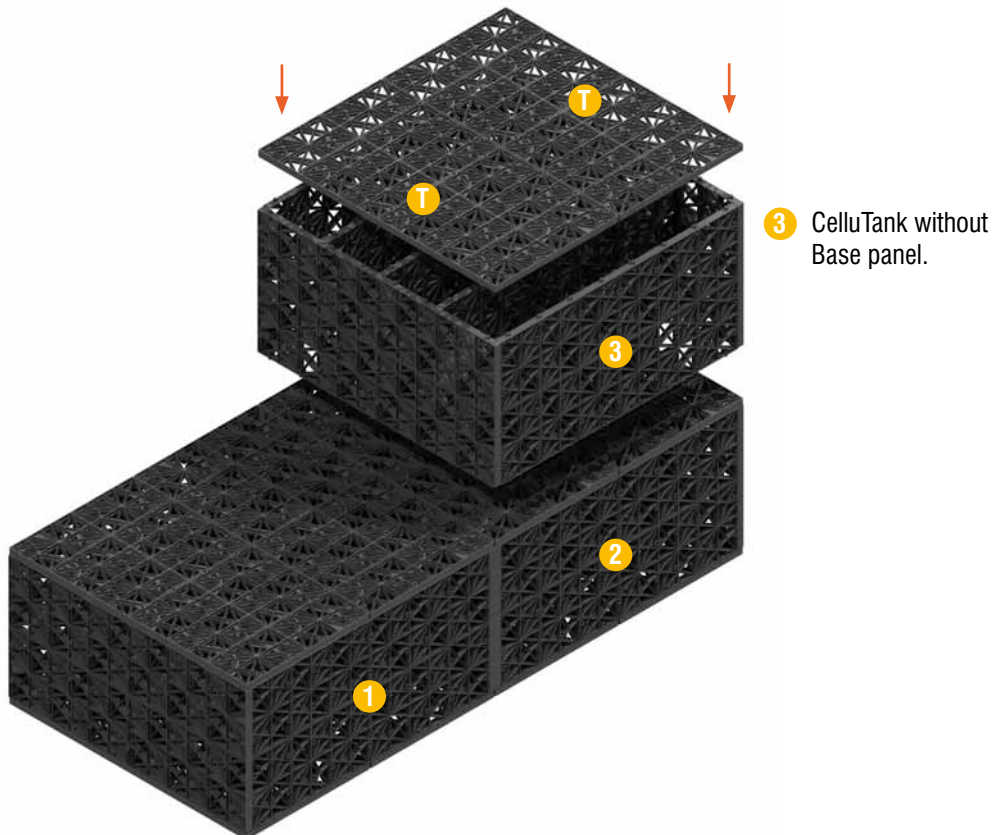


CelluTank® Re-use System  
Eaglemont Victoria.

## Multiple CelluTank Units



6. Position CelluTank ① and ② against each other. Repeat for additional tanks where required.



7. To join vertically, insert CelluTank ③ without the Base panels onto CelluTank ② and then position on and engage two ④ panels.

# Installation Procedures

## Infiltration System

1. Excavate an area to design specifications.
2. Ensure the base of the excavated area is level and compacted.
3. Lay down, level and compact a minimum 150 mm of coarse sand.
4. Place geotextile (minimum 120g / m<sup>2</sup>) over the base and up the walls of the excavated area. Provide for a minimum 200 mm overlap and seal joints with adhesive PVC tape. Ensure sufficient geotextile overhang is available to cover the surface of the CelluTank® units after placement in the excavated area.
5. Position CelluTank® units on the geotextile in the excavated area.
6. Secure installed units with stainless steel fixing clips, tie wire or high strength plastic cable ties if necessary.
7. If required, another layer of CelluTank® units may be placed on top of the already positioned and secured units.
8. Form holes in the correct positions to receive both inlet and outlet pipes. Insert flanged connectors into both the inlet and outlet positions. Ensure that the outlet is positioned lower than the inlet.
9. Cover the sides and tops of the installed units with geotextile and seal overlaps around the inlet and outlet pipe areas with adhesive PVC tape.
10. Backfill on the sides and over the top of the CelluTank® units with a minimum 150 mm of clean coarse sand and compact using hand tools to engineering specifications.

11. Where specified under trafficable areas ensure a minimum 350 mm free-draining compacted aggregate/soil cover is applied on top of the 150 mm of clean coarse sand layer on the surface of the installed units to meet engineering and design authority specifications .

## Retention System ( Water Storage)

1. Follow steps 1-4 above.
2. Ensure a minimum 280g / m<sup>2</sup> geotextile is used.
3. Carefully position the impermeable membrane on the geotextile. The membrane must either be pre-fabricated to the required dimensions or be in sheet form of sufficient dimensions to completely envelop the installed CelluTank® units.
4. Install a second layer of a minimum 280g / m<sup>2</sup> geotextile over the impermeable membrane. Care must be taken to ensure that the membrane is not damaged during installation.
5. Follow steps 5-8 above.
6. Ensure that the membrane joins on the top surface of the CelluTank® units and that inlet and outlet pipes are well sealed using techniques recommended for the specific membrane.
7. Follow steps 9-11 above.

CelluTank® retention systems must be installed by competent contractors skilled in the art of installing impermeable sheet membranes.

## Specifications

Property	Value	Property	Value
Material	Recycled polypropylene	Void internal volume	
Dimensions (mm) 1 +/- 2 mm	785L x 820W x 445H	4 x stabilisers	96.4%
Volume (external) m <sup>3</sup>	0.286	5 x stabilisers	96.0%
Tanks per m <sup>3</sup>	3.5	7 x stabilisers	95.3%
Weight per m <sup>3</sup>		Compressive strength unconfined	
4 x stabilisers	approx. 38.5kg	4 x stabilisers	≤ 10.7tm <sup>2</sup>
5 x stabilisers	approx. 42.3kg	5 x stabilisers	≤ 13.0tm <sup>2</sup>
7 x stabilisers	approx. 50.0kg	7 x stabilisers	≤ 15.8tm <sup>2</sup>
Maximum installed height	1.78m	Surface void %	≤ 45
Service temperature	-30°C to 50°C		

Note: The information provided in this brochure is based on current knowledge and experience and does not infer any legally binding assurance or warranty, expressed or implied. Intending purchasers should verify whether any changes to specifications or applications or otherwise have been made since this literature was issued. The products in this brochure are manufactured using specified recycled plastics under detailed quality control standards and procedures. Factors including source of raw material and manufacturing processes may impact slightly on the strength and dimensions of the modules.

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