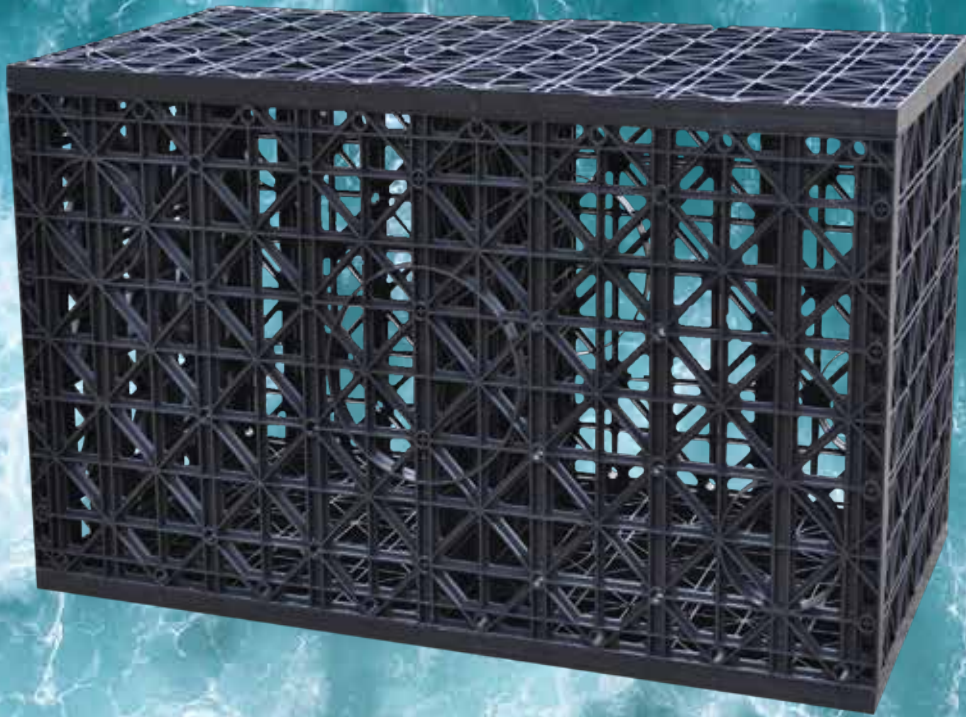




# DRAINWELL

*subsurface water management system*



**Stormwater  
Detention**

**Infiltration/  
Soakwells**

**Rainwater  
Harvesting**

**Septic Leach  
Drains/Effluent  
Waste**

# Company Profile

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Novaplas Australia is 100% Australian owned & operated and has been manufacturing Drainwell underground tanks for over 10 years.

Novaplas Australia is an environmentally conscious company doing our bit to save plastic from polluting our precious oceans and saving unnecessary landfill waste. That is why our Drainwell underground tanks are made from 100% Recycled Polypropylene which would otherwise end up in landfills or oceans.

**Drainwell underground tanks are used in many applications, including:**

- Infiltration/Absorption Tanks
- Stormwater Detention Tanks
- Rainwater Harvesting Tanks
- Roadside Swales
- Septic Leach Drains/Effluent Lines

**Drainwell underground tanks are installed below:**

- Shopping Centre Car Parking Areas
- Industrial Warehouse Driveways
- Sports Grounds
- Residential Gardens and Driveways

**Thank you for  
supporting  
Australian  
Manufacturing !**



# Features & Benefits

**Strong Structural Design**

Can be installed under driveways, carparks and other trafficable areas

**Infiltration**

Large permeable area including sides and ends

**UV Stabilised**

Increased product life

**Australian Owned & Manufactured**

Large stock inventory, minimal lead time

**Large Volume with Fewer Modules**

Projects require fewer modules resulting in less assembly time

**Detention**

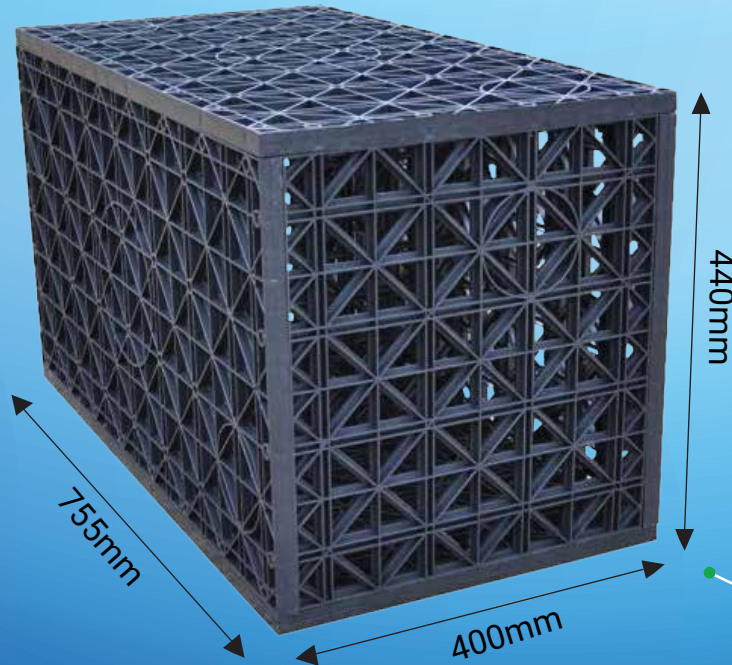
Alleviates on-site and downstream flooding

**Flat Pack Form**

Easy to transport, save on bulky transport expense

**Lightweight**

Easy to handle, no crane required



**Retention**

Collect, store and reuse precious rainwater

**Chemically Inert**

Increased product life, will not be affected by harmful chemicals

**150mm Cut Out Guide for DWV**

Simple pipe connection, less installation time



**Trafficable**

Increased utilisation of valuable land

**Modular**

Interlock vertically and position horizontally to create any shape and size

**90mm Cut Out Guide for DWV**

Simple pipe connection, less installation time



# Residential Soakwells

**Drainwell Plastic Soakwells** are a modular DIY stormwater drainage cell. They can be installed under either trafficable or non-trafficable areas assuming the minimum cover requirement is achieved.

**Drainwell Soakwells** are only 440mm high and are an ideal high water table soakage solution. They consist of panels which are simply clipped together by hand. **Drainwell Soakwells** are light weight for easy handling and installation.

**Drainwell Residential Soakwells** can be supplied in a flat-pack kit form.

## D.I.Y. Soakwell Kit



During Installation



Tank Wrapped, Ready For Backfill



# Commercial Infiltration Tanks

Drainwell **Infiltration Tanks** collect and release excess stormwater. The collected stormwater seeps back into the ground and recharges the natural aquifers.

Drainwell **Infiltration Tanks** are installed under concrete slabs, as well as under driveways, and under car parking areas. Drainwell **Infiltration Tanks** are a cube shape which is best for minimal excavation. You will **save up to 25% on excavation size** and **save up to 100% on graded stone purchases**.

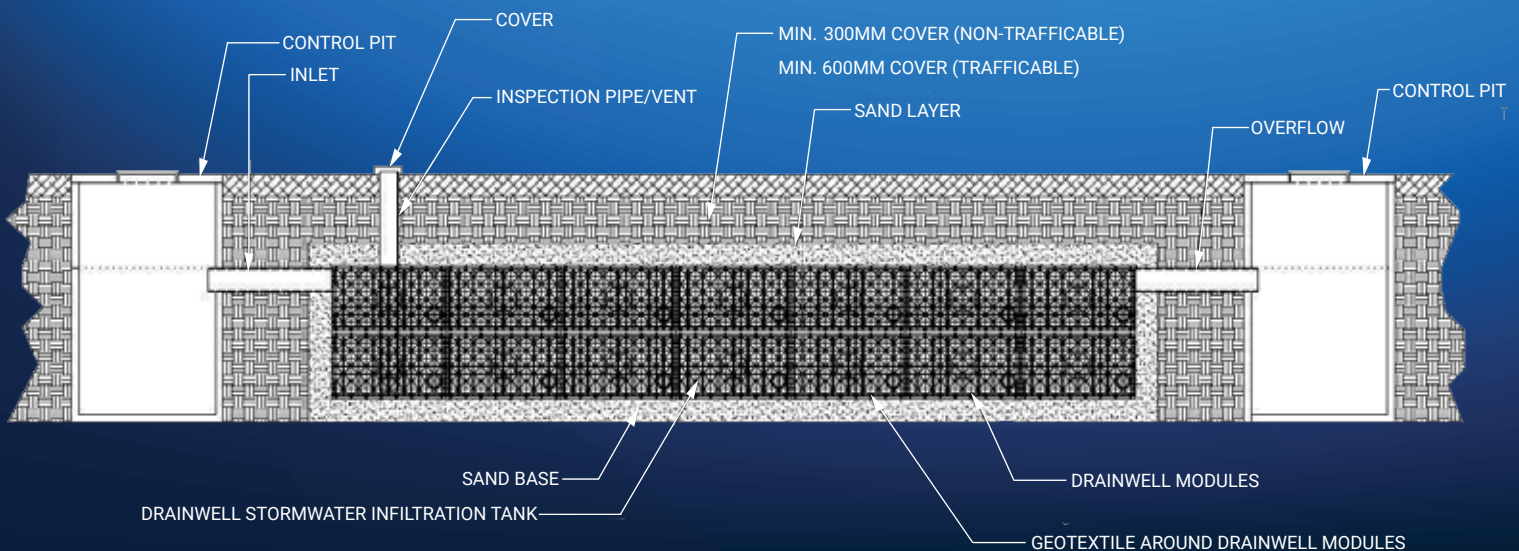
5,000m<sup>3</sup> Under Car Park



650m<sup>3</sup> Tank



## Infiltration Tank Cross Section



# Stormwater Detention Tanks

Drainwell **Stormwater Detention** Tanks are Made in Australia from 100% recycled materials. These tanks are easy to install, providing a solution to many constraints on building sites.

Drainwell **Stormwater Detention** Tanks are a cube shape which is best for minimal excavation. You will **save up to 25% on excavation size** and **save up to 100% on graded stone purchases**.

## What is Stormwater Detention ?

**Stormwater Detention** is the process of holding stormwater run-off from your site. The collection and slow release of stormwater is called **Stormwater Detention**.

Underground **Stormwater Detention** Tanks are used to control stormwater runoff. Stormwater runoff needs to be managed on commercial as well as residential sites. Excess runoff is a hazard especially during large rainfall events.

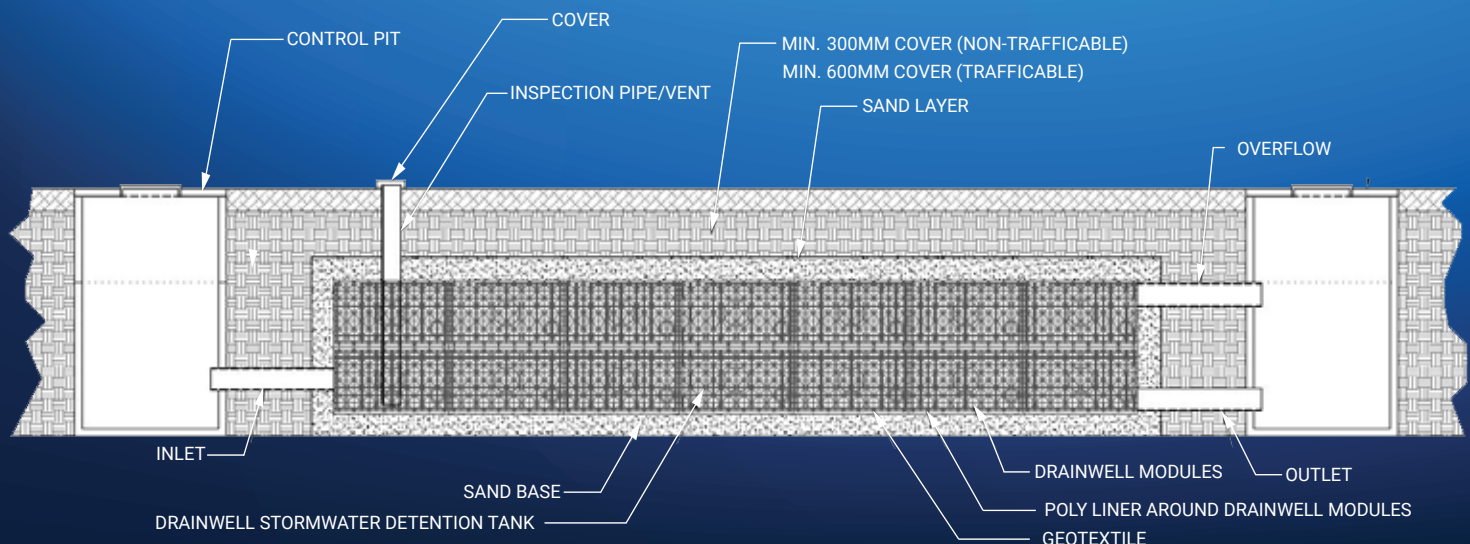
Maintenance/Inspection Access



150m<sup>3</sup> OSD Tank Under Carpark



## Detention Tank Cross Section



# Septic Leach Drains/Effluent Waste

**Drainwell Septic Leach Drains** are an absorption trench or bed that provide dispersal of **effluent** from **septic tanks**. **Effluent** dispersal can be through percolation or evapotranspiration (ETS). Seepage holes in the sides and base of the Drainwell modules assist with seepage of **effluent**.

**Drainwell Septic Leach Drains** are wrapped in geo cloth filter wrap to stop sand or debris from entering the leach drain modules.

The **Septic Leach Drain** design is governed by several factors. These factors can include:

- the size of the leach drain,
- amount of liquid waste to be disposed of,
- type of soil around it,
- how it is built.



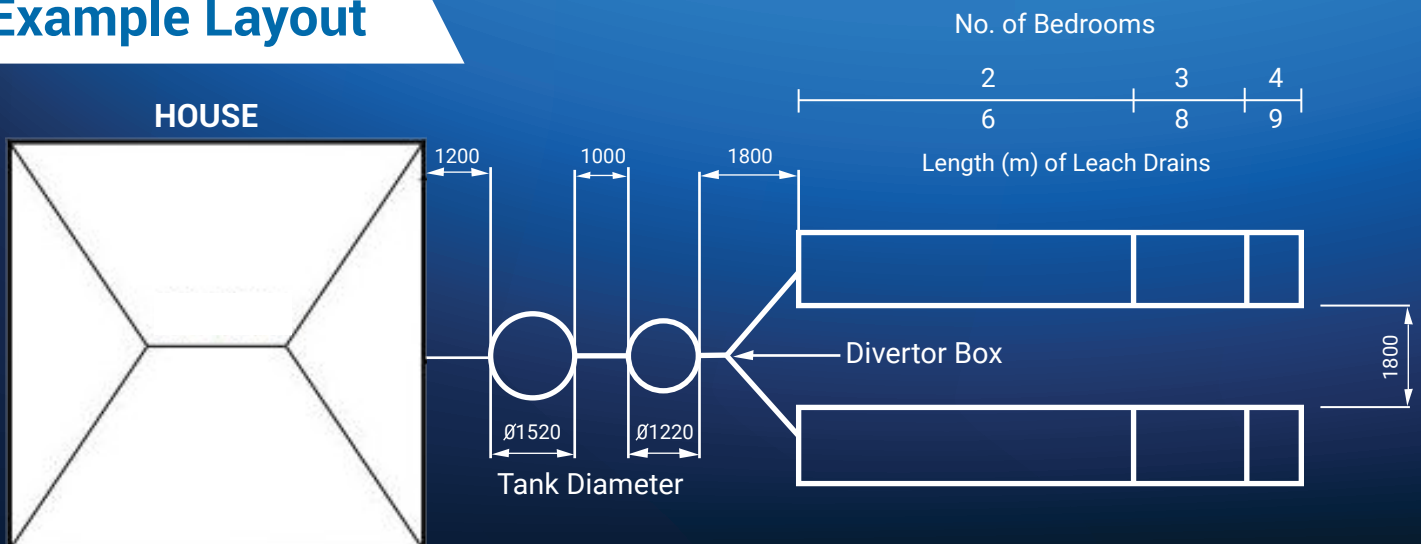
**Residential System**



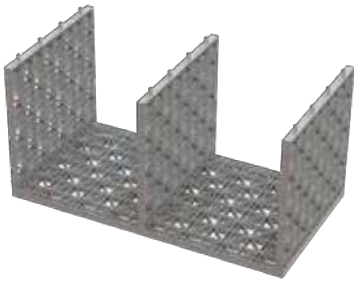
**Commercial System**



## Example Layout



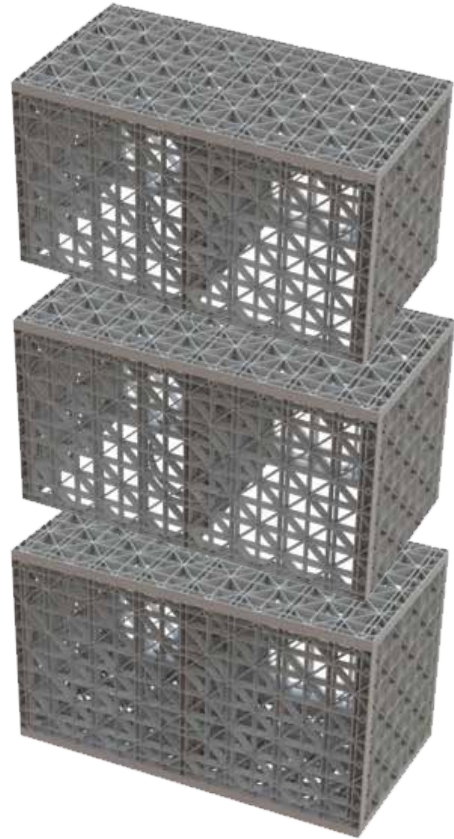
# Assembly Non-Trafficable



**STEP 1:**  
 Place 1 (One) Large Panel onto a firm flat surface. Insert 3 (Three) small panels with the 400mm side (side with long pins) into the large panel. Use a rubber mallet to lightly tap the panels together at every stage.

## STACKING MODULES:

Assemble 1 complete module. For every module to be stacked on top, stop at Step 3. Connect 'Step 3' module on to roof of module below.



**STEP 2:**  
 Place a large panel on to the top of the small panels and lightly tap together.



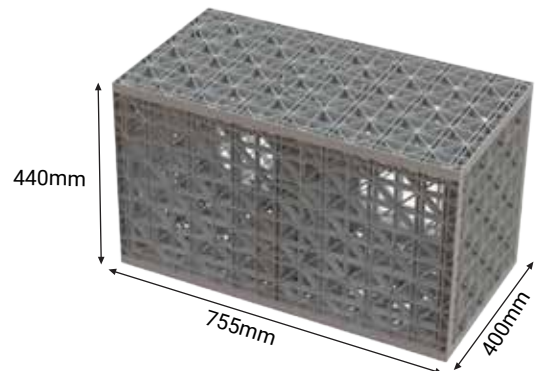
**STEP 3:**  
 Turn module over, place a large panel on to the top and lightly tap together.

## MODULE ORIENTATION:

When correctly assembled, the Drainwell module should be 755mm (Long) x 400mm (Wide) x 440mm (High). It is very important that the modules are installed the correct way up. IE. 440mm high.

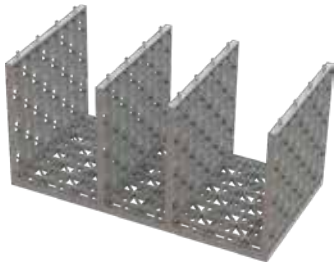


**STEP 4:**  
 Turn module over, place final panel on to the top and lightly tap together.





# Assembly Trafficable

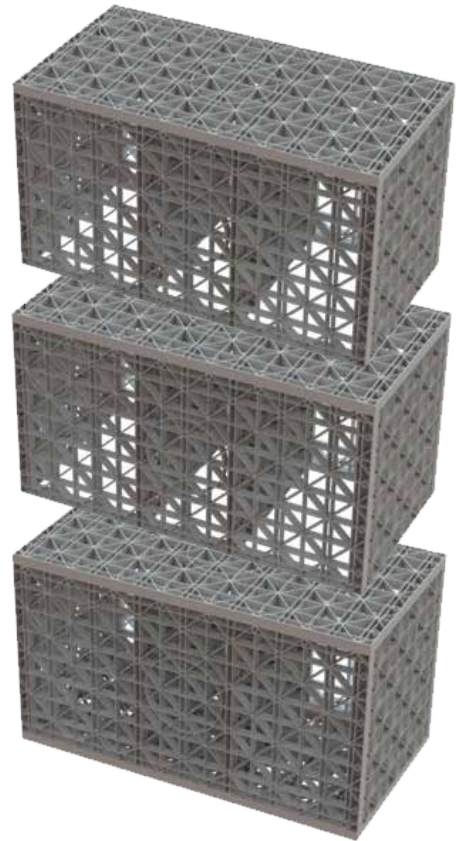


## STEP 1:

Place 1 (One) Large Panel onto a firm flat surface. Insert 4 (Four) small panels with the 400mm side (side with long pins) into the large panel. Use a rubber mallet to lightly tap the panels together at every stage.

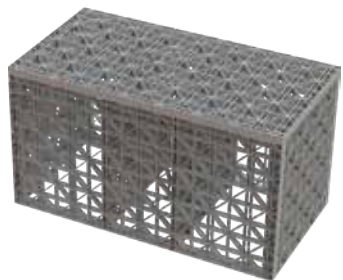
## STACKING MODULES:

Assemble 1 complete module. For every module to be stacked on top, stop at Step 3. Connect 'Step 3' module on to roof of module below.



## STEP 2:

Place a large panel on to the top of the small panels and lightly tap together.

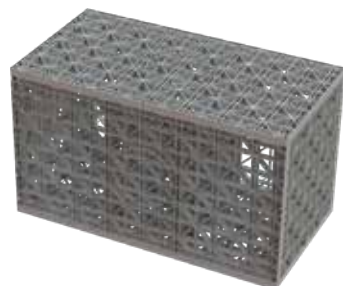


## STEP 3:

Turn module over, place a large panel on to the top and lightly tap together.

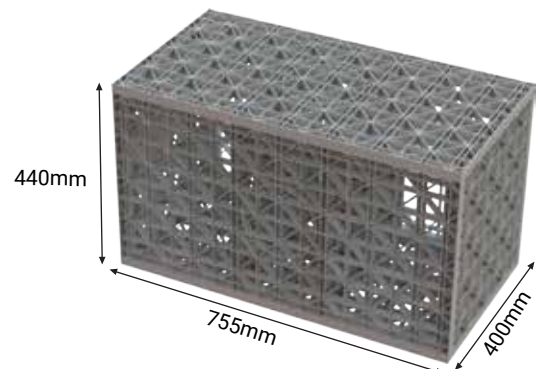
## MODULE ORIENTATION:

When correctly assembled, the Drainwell module should be 755mm (Long) x 400mm (Wide) x 440mm (High). It is very important that the modules are installed the correct way up. IE. 440mm high.



## STEP 4:

Turn module over, place final panel on to the top and lightly tap together.



# Basic Installation Guideline

## INFILTRATION SYSTEM

1. Form a pit by excavation, according to specified dimensions.
2. Level base of pit and compact.
3. Backfill pit with a minimum 100mm of coarse sand, and compact.
4. Line base and walls of pit with Geotextile ensuring that seams have a minimum 200mm overlap. If required, seal joints with adhesive PVC tape. Allow sufficient Geotextile length to cover the surface of the Drainwell modules once positioned in pit.
5. Place assembled Drainwell modules into position, on top of Geotextile, inside pit. Ensure modules are placed the correct way up. IE. 440mm high.
6. If required, secure Drainwell modules together with clips or heavy duty cable ties.
7. Cut holes in the correct position for inlet and outlet pipes as required.
8. Tightly cover the sides and top of modules with Geotextile. Inlet/outlet pipes can be sealed with adhesive PVC tape, if required.
9. Backfill around sides and top of modules with clean coarse sand and compact according to engineers specifications.
10. Backfill a minimum 600mm of clean fill on top of modules and compact according to engineers specifications.

## DETENTION/RETENTION SYSTEM

1. Follow steps 1-4 above.
2. Line base and walls of pit with Poly Liner. Seal joints with tape supplied. Allow sufficient liner length to cover the surface of the Drainwell modules once positioned in pit.
3. Install a second layer of Geotextile over the Poly Liner.
4. Follow steps 5-10 above.

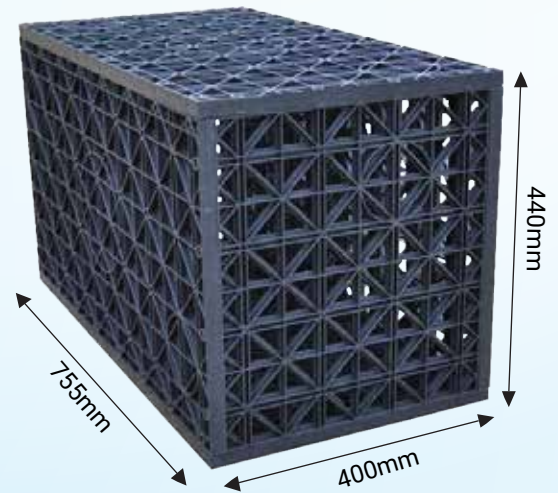
## ADDITIONAL INSTALLATION NOTES

1. It is important that every Drainwell installation is fitted with an overflow or vent.
2. Any connection of inlet or outlet piping through liner should be made with a good seal around penetration point.
3. If pre-filtration of stormwater is required, please contact manufacturer.

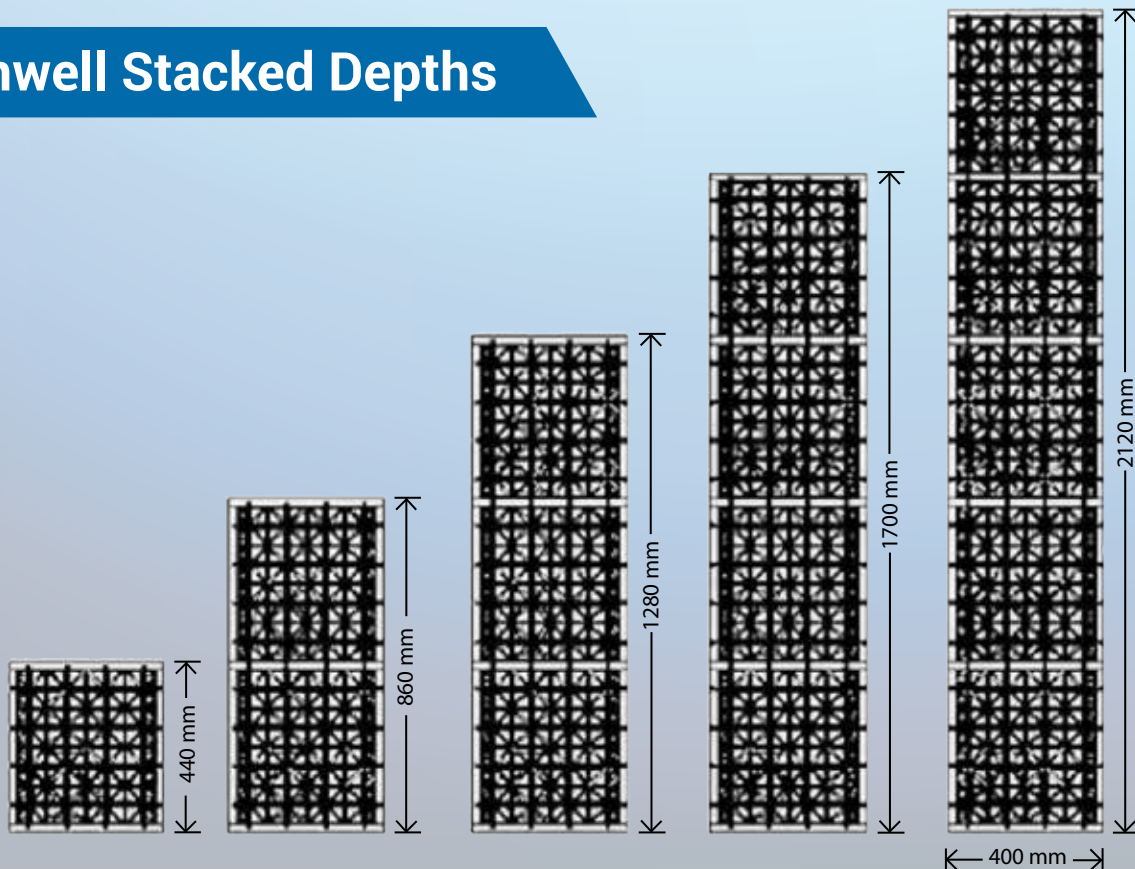


# Specification

Drainwell™ Module		DW1592
Dimensions (mm)	Length	755
	Width	400
	Height	440
Volume (m3)		.132
Tanks per m3		7.5
Weight (Kg)	3 Panels	6.65
	4 Panels	7.3
	5 Panels	7.9
Maximum Load (Tons/m <sup>2</sup> )	3 Panels (1 Internal)	23.66 t/m <sup>2</sup>
	4 Panels (2 Internal)	29.76 t/m <sup>2</sup>
	5 Panels (3 Internal)	32.42 t/m <sup>2</sup>
Internal Open Area		<95%
Polymer Type		Polypropylene UV Stabilised
Service Temp		-20°C to 120°C
Chemically inert and not affected by Moulds and Algae		



## Drainwell Stacked Depths



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**DRAINWELL**  
*subsurface water management system*

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