

# StormCrate55

Stormwater Retention, Attenuation & Infiltration Crate



- Cellular stormwater crate
- 4 crates per 1 m³ storage capacity
- Lightweight and easy to install
- High strength crate with load bearing of 562kN per m<sup>2</sup>
- Cost-effective and space saving





## Stormwater Management

Brett Martin's StormCrate55 modular cellular crates are used in storm water retention, attenuation and infiltration applications. The crates are designed to be simply and easily stacked together to create a below ground storm water holding tank or to allow the infiltration of storm water into the ground around them. The void created by the crates can then fill up with storm water during heavy rainfall conditions. The collected storm water then drains away slowly into the drainage system when the crate is used for attenuation, or, soaks away slowly into ground water table when the crate is used for infiltration. Extensive use of this type of storm water attenuation/infiltration module has helped relieve pressure on conventional surface water drainage systems in line with the Sustainable Urban Drainage Systems (SUDS) program advocated by the Environment Agency.

### **Benefits**

- StormCrate55 provide a highly effective means of managing storm water, contributing to reducing the risk of flooding.
- Rainwater Infiltration: StormCrate55 can be wrapped in a geotextile which allows stored water to slowly seep into the surrounding ground and back into the water table.
- Rainwater Attenuation: another common practice is to surround StormCrate55 with an impermeable geomembrane to create a sealed underground tank. The outlet from this tank is then controlled to facilitate a slow release of the stored water back into the drainage system over a longer period.

| PROPERTIES          | VALUE                  |         |
|---------------------|------------------------|---------|
| PHYSICAL PROPERTIES |                        |         |
| Volume              | 0.25m³                 |         |
| Cube Storage Volume | 0.2375m <sup>3</sup>   |         |
| Void Ratio          | 95%                    |         |
| Dimensions          | 1200mm x 600mm x 347mm |         |
| Connections         | 12 x pipe inlets       |         |
| Weight              | 15.5kg                 |         |
| Material            | Polypropylene          |         |
| STRENGTH            | VERTICAL               | LATERAL |
| Short Term Strength | 562kN/m <sup>2</sup>   | 70kN/m² |
| Long term Strength  | 153kN/m²               | 19kN/m² |

#### STORM WATER CAPACITY

- The volume of each crate is 0.25m³ with a 95% void ratio. Due to the modular nature of StormCrate55 the system can be scaled appropriately depending on the size of installation, for example 16 StormCrate55 are required for a 4m³ installation.
- The cellular structure of StormCrate55 maximises water holding capabilities with its 95% void ratio meaning that each crate can store up to 237.5L or 0.2375m³ of storm water.



#### QUICK & EASY TO INSTALL

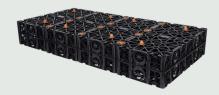
- Comprising modular units, StormCrate55 are quick and easy to install.
- Weighing in at only 15.5kg per module, StormCrate55 can be easily lifted and set in place by hand without the need for heavy lifting equipment on site.
- The shallow installation depths required for StormCrate55 means less ground working and site spoil.
- The individual modules are joined using connectors and shear pins in a brick bond pattern, a very simple but effective jointing method, which allows crates to fit together quickly and with ease providing stability in both vertical and horizontal plains.



MODULAR DESIGN StormCrate55 are designed to be easily laid in a brick bond pattern.

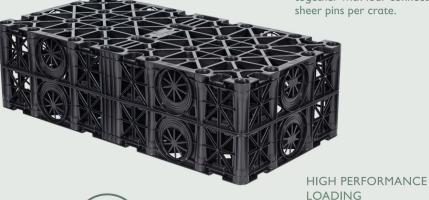


QUICK AND EASY TO INSTALL At only 15.5kg per module, StormCrate55 are easily lifted by hand.



**EASY CONNECTION** 

StormCrate55 fit quickly and simply together with four connectors and two sheer pins per crate.



#### STORM WATER MANAGEMENT

StormCrate55 steadily disperse high intensity storm water by infiltration or attenuation. Each crate has a capacity of 237.5L or 0.2375m<sup>3</sup>







#### **COMPONENTS**



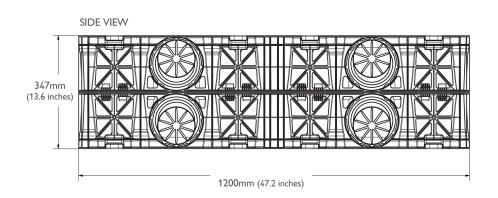
SHEAR PIN CONNECTOR Code B8252 (2 INCLUDED)



STORMCRATE55 CONNECTOR Code B8251 (4 INCLUDED)



#### PRODUCT DIMENSIONS



#### FRONT VIEW

