

# BlueRoof SWB Geocells

## Product Data Sheet



# BlueRoof

## SWB Geocells



### General Information

The Radmat range of **SWB Blue Roof Geocells** provides attenuation as part of a Blue Roof system that is designed to manage and control incident rainfall at a rate in line with the SuDS strategy or the attenuation requirements for a development.

Manufactured from Polypropylene SWB Blue Roof Geocells are load bearing modular units that are clipped together to form a single or double layer attenuation cell that is wrapped in **Radmat G12 Geotextile Filter Fleece**. Used in conjunction with rainwater outlet restrictors to control discharge, the Blue Roof is designed to be half empty within 24 hours.

### Surface Finishes

SWB Blue Roof Geocells can be finished with a green roof, paving or rounded ballast as stated below. Where a support system is being used to support roof mounted plant or equipment each foot of the support system must be placed on a 1m x 1m spreader plate so as to ensure load distribution.

**Green roofs** can be installed over Radmat MedO D25, D40 or D80 reservoir/drainage boards can be installed directly onto the Radmat G12 geotextile.

**Rounded ballast** should be installed over Radmat DM12 drainage board to prevent the rounded ballast penetrating the Radmat G12 geotextile when trafficked.

**Bedded paving** should be installed over Radmat DM12 drainage board to prevent damage to the Radmat G12 geotextile when installing.

**Paving on supports** should be installed on paving supports with a minimum 200mm diameter base.

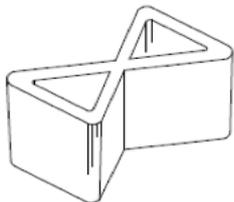
PROPERTY	UNIT	SWB50	SWB65	SWB80	SWB100	SWB150	SWB200
<b>Length</b>	mm	600	600	600	600	600	600
<b>Width</b>	mm	600	600	600	600	600	600
<b>Height</b>	mm	50	65	80	100	150	200
<b>Structure volume</b>	m <sup>3</sup>	0.018	0.023	0.029	0.036	0.054	0.072
<b>Storage volume</b>	m <sup>3</sup>	0.0171	0.0219	0.0276	0.0342	0.0513	0.0684
<b>Weight</b>	kg	1.0	1.21	1.4	1.8	2.7	3.6
<b>Short term compressive strength</b> BS EN 17150:2019							
<b>Vertical</b>	kN/m <sup>2</sup>	>750	>750	>1050	700	700	700
<b>Lateral</b>	kN/m <sup>2</sup>	200	200	200	200	200	200
<b>Long term compressive strength</b> BS EN 17151:2019							
<b>Vertical*</b>	kN/m <sup>2</sup>	>273	>273	>382	255	255	255
<b>Volume Void Ratio</b>	%	95	95	95	95	95	95
<b>Average effective perforated surface</b>	%	60	60	60	60	60	60

\*Based on a 2.75 Material Safety Factor in accordance with CIRIA C680 guidance.

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### Ancillaries



Cross Connector



Twin Connector



Control End Plate

### Installation

1. Install **Radmat G12 Geotextile Filter Fleece** over the roof surface and up all upstands, ensuring enough length is left around the installation for the G12 to wrap up the sides of the SWB Geocells, and enough to overlap a minimum 150mm onto the top of the SWB Geocells.
2. Lay **SWB Blue Roof Geocells**, clipping adjacent panels to each other using the SW Cross Connectors (butterfly clips) ensuring each SWB Blue Roof Geocell is correctly oriented for the clips to meet. The SW Cross Connectors (butterfly clips) do not provide any structural integrity, therefore only one (1) clip per side is required to aid the construction of the blue roof geocell tank.
3. Cover with Radmat G12 Geotextile Filter Fleece ensuring minimum 150mm overlaps.
4. Immediately cover with the specified roof finish (green roof/paviors/ballast).



### Delivery Conditions

#### Delivery form

**SWB Blue Roof Geocells** are supplied on a pallet 1200 (L) x 1200 (W) x 2500 (H) mm weighing approximately 250kg. Each pallet contains 4 number 600mm x 600mm Blue Roof Geocells boards in layers, number of layers as shown below. Pallet are pre-wrapped in an outer protection to form one block of Geocells with two banding straps across 2 sides.

Products	m <sup>2</sup> per pallet	No. boards	Layer per pallet
<b>SWB 50</b>	69.12	192	48
<b>SWB 65</b>	51.84	144	36
<b>SWB 80</b>	43.2	120	30
<b>SWB 100</b>	34.56	96	24
<b>SWB 150</b>	23.04	64	16
<b>SWB 200</b>	17.28	48	12

This information given in good faith and is based on the latest knowledge available to Radmat Building products Ltd. Whilst every effort has been made to ensure that the contents of the publication are current while going to press, customers are advised that products, techniques and codes of practice are under constant review and liable to change without notice.

For further information on Radmat products and services please call **01858 410372**, email [techenquiries@radmat.com](mailto:techenquiries@radmat.com) or visit our website [www.radmat.com](http://www.radmat.com)

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