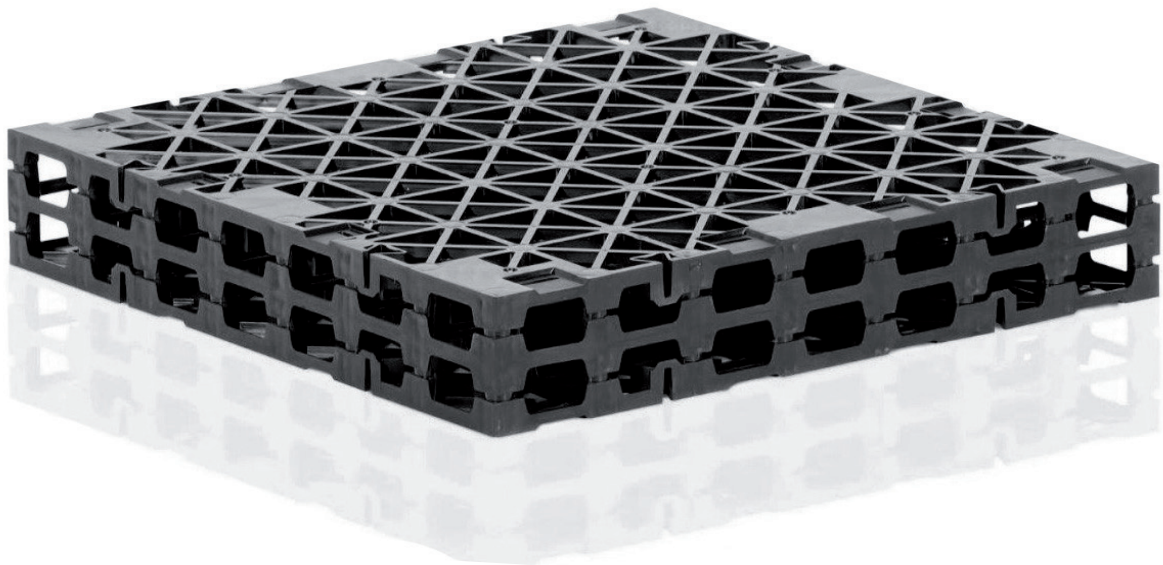


BlueRoof SWB Geocells

Product Data Sheet



SWB Geocells provide 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 attenuation for a development.

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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 |
|--------------------------------------|-------------------|--------|--------|--------|--------|--------|--------|
| Length | mm | 600 | 600 | 600 | 600 | 600 | 600 |
| Width | mm | 600 | 600 | 600 | 600 | 600 | 600 |
| Height | mm | 50 | 65 | 80 | 100 | 150 | 200 |
| Structure volume | m ³ | 0.018 | 0.023 | 0.029 | 0.036 | 0.054 | 0.072 |
| Storage volume | m ³ | 0.0171 | 0.0219 | 0.0276 | 0.0342 | 0.0513 | 0.0684 |
| Weight | kg | 1.0 | 1.21 | 1.4 | 1.8 | 2.7 | 3.6 |
| Short term compressive strength | | | | | | | |
| | Vertical | >750 | >750 | >1050 | 700 | 700 | 700 |
| | Lateral | 200 | 200 | 200 | 200 | 200 | 200 |
| Long term compressive strength | | | | | | | |
| Vertical* | kN/m ² | >273 | >273 | >382 | 255 | 255 | 255 |
| Volume Void Ratio | % | 95 | 95 | 95 | 95 | 95 | 95 |
| Average effective perforated surface | % | 60 | 60 | 60 | 60 | 60 | 60 |

*Based on a 2.75 Material Safety Factor in accordance with CIRIA c630 guidance.

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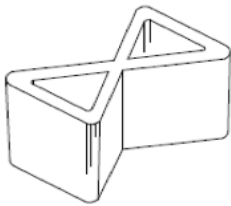
SWB Geocells



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).

Ancillaries



Cross Connector



Twin Connector



Control End Plate

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 tech enquiries@radmat.com or visit our website www.radmat.com **OCT 2020**