

Installation Guidelines

This guideline provides a general step-by-step methodology on how to install Sky Garden Ltd Green roof systems. This installation method applies to Sky Garden's standard products.

Step 1 – Roof Waterproofing and Site Checks.

Ensure the roof is complete and watertight. Check that the roof is a safe working environment (edge protection/scaffold or man safe system is in place). Have lifting equipment ready to lift materials to the roof. Ensure all other trades have finished working on the roof before starting if roof is a new build.

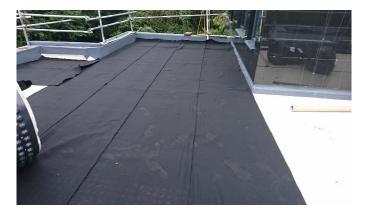


Step 2 – Protection Fleece and Riverstone Installation

Place Protection fleece roll onto the roof and lay over the waterproof layer in strips from one side to the other, ensuring there is an overlap of at least 100 mm for each strip of protection fleece to prevent any gaps in the fleecing that may expose part of the waterproofing, which may risk subsequent damage to the waterproofing during the installation of the green roof.

If Riverstone border has been requested, place the 25l sacks along the roof perimeter with a general spacing of 1 bag per 800 mm. Slit bags open and hand place the pebbles evenly along the border at a width of 300 mm (or otherwise specified at the site location).

Products applicable to this step: PF01, RS01.





Step 3 – Aluminium Edging Installation

The aluminium edging should be installed on roofs with a pitch to help retain the system on the roof, it would not be required on flat roofs but is recommended for an aesthetic finish.

The aluminium edging is placed underneath the Riverstone border, the weight of the Riverstone will hold the aluminium edging in place. Ensure that there are gaps in the aluminium to allow for drainage of excess water in the system. Retention edges can be glued together using a special aluminium glue, make sure there is an overlap when gluing to avoid gaps in which the Riverstone and other parts of the border can avoid falling off the roof.

Products applicable to this step: RE100/AG01.



Step 4.1 – Drainage Board with Filter Fleece

Sky Garden Ltd's drainage boards come in two varieties. A drainage sheet with a filter fleece already attached, and then there are drainage rolls that require a separate roll of filter fleece.

For the drainage sheets with filter fleece already attached, place the sheets across the roof surface with an overlap of at least 100mm where the excess filter fleece is located. This will prevent exposure of the waterproofing membrane and reduce the risk of any damage to it. Cut the sheets that overlap the 300mm Riverstone border, as well as around any protruding units attached to the roof to form neat edges. The adhered filter fleece is built to overlap to ensure substrate does not get into the drainage cups.

Product applicable to this step: DRRD20-1.





Step 4.2 – Drainage Board and Separate Filter Fleece Installation

Please note that all products supplied from Sky Garden Ltd will receive the necessary components for install.

Roll out the drainage board onto the roof, creating a continuous drainage layer, cut the drainage board along the perimeter edges of the roof neatly. Leave a 300mm spacing between the drainage board and the edge of the roof for Riverstone border. Where there are protruding sky lights or other roof components, cut the drainage board up to and around the object to form a neat edge. Be careful to not damage the water proofing layer.

The filter fleece is applied in a similar fashion to the protection fleece, follow the same method as the protection fleece, allow for a minimum 100mm overlap for drainage board protection from being filled with substrate.

Products applicable to this step: DRRD20, DRRD25, DRRD40, DRRD60, HGDL01, SSV800, and FF01.

Step 5 – Substrate Installation

Place 25I substrate bags onto roof over the filter fleece. This will prevent the fleece from being lifted by the wind and maximise homogeneity of the substrate depth across the roof. Cut bags at edge of the bag and spill the substrate evenly over the filter fleece, use a rake to create an even spread of the substrate. Measure depth of the substrate to check that the substrate is at a minimum depth of 50mm for sedum blanket and 100mm for wildflower blanket (if deeper substrate is specified, measure to the indicated depth).

If bulk bags are being used, lifting equipment will be needed to hang the bulk bags over the roof. You can either slit the bottom of the bag or shovel the material from the bag onto the roof evenly to the depth specified by the project. Great care must be considered when emptying bulk bags to prevent excessive loads of substrate onto one point of the roof, which could lead to damage to the roof systems if weight exceeds the restrictions of the roof.

Products applicable to this step: MS50, BD01, SBS01, SBL01, SBUL50, IS01, and TS01.





Step 6 – Vegetation Installation

Unroll the blankets on top of the substrate, butting each roll close to the other. Cut rolls at the roof perimeter and use extra pieces to complete the roof, also cut parts where skylights protrude from the roof. Excess debris blanket and/or soil left after installation can be used to fill in any bare patches where the blanket system has deteriorated during transportation.

Products applicable to this step: VGSB30 and VGWFB30.



Considerations: Green roof systems include living products which must be installed on day of delivery and watered immediately upon installation. If watering is not implemented immediately and for the first 12 weeks in situ, Sky Garden Ltd cannot take responsibility for the growth and success of the vegetation. This is especially important during the Spring and Autumn period each year. For pitched roofs over 7.5 degrees, we would recommend an irrigation system to be installed with the roof.



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Installation notes:

- All materials supplied will be delivered directly to the site. All living materials must be unloaded immediately and installed within the 24-hour period after delivery to the site.
 Failure to do so will risk the vegetation deteriorating and create a poor roof finish
- If it is a large roof, it would be recommended that the supporting build-up of the drainage layers, filter fleece and substrate is completed before the live material is delivered to the site, minimising vegetation stand time.
- The optimum period to install a living system is Spring/Autumn. Extra care must be taken during the summer period to ensure that the blanket system does not overheat during transportation or standing period. Extra irrigation may be required during the summer months, these are discussed below.
- The installed green roof systems must be thoroughly watered in, initially at a rate of 10-15 litres/m². Irrigation should take the form of complete system saturation at least once a week in the first 12 weeks following installation. These same steps should be taken during prolonged periods of hot and dry weather.
- Should temporary irrigation be in place, Sky Garden Ltd recommends the following:
 - Regularly check that the sprinklers are correctly positioned, prevailing wind may affect coverage.
 - Regularly check that the tank water is suitable for the roof irrigation.
 - If the water becomes contaminated, turn off the irrigation immediately and drain the system.
 - With the onset of winter, the system will need to be drained and decommissioned.



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