



# GREEN ROOFERS

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Green Roofers Ltd. 1st Floor, 17 Whitehall Park, London, England, N19 3TS

## Q37 | GR SMAT | 860 - SEDUM GREEN ROOF SYSTEM

NBS SPECIFICATION

# 28 Kings Mews

## OVERVIEW

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Client Details:

Company Name: **SW Solutions**

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## GUARANTEE PERIOD:

10 years with approved **Maintenance Contract**

## ROOF TYPE:

### Roof Substrate:

Unknown

### Slope:

Flat

**0u** underlayer, **300g/m<sup>2</sup>** (supplied by Green Roofers Ltd), if required by waterproofing contractor.

### Drainage Layer:

**GRD8** nominal **8mm** rigid compression cell multi flow drainage/water retention layer with mechanically fixed **105g/m<sup>2</sup>** filtration layer supplied by Green Roofers Ltd.

### Growing Medium:

Green Roofers Ltd engineered **Extensive** green roof substrate. The material will contain a mixture of pumice, expanded clay and crushed brick amongst other ingredients such as fillers of coarse sand. It will contain organic peat free compost and have a bulk dry weight of **936kg/m<sup>3</sup>**. Installed to a finally settled depth of **60mm** including an allowance for **20% settlement** in accordance with the **GRO Code** of Best Practice.

### Vegetation Layer:

**25mm** thick pre-grown Sedum mat containing a minimum of **11 species** of sedum at 80% coverage upon delivery and harvest.

### Vegetation Break:

**300mm** wide, Coastal 20, 20/40mm washed rounded pebble margin, free from sharp edges and contaminants.

### **Perimeter Trim:**

**80mm** high aluminium slotted trim, mechanically fixed to underlayer to serve as a separation barrier to perimeters, where appropriate and required.

### **Habitat Spaces:**

Not required.

## **210. ROOF PERFORMANCE**

- General: Firmly adhered, free draining and completely weather tight
- Will have limited access for annual maintenance, be low maintenance and/or self sustaining
- All vegetation be suitable for the location and climate

May form part of the SUDs strategy within the scheme

## **355. MOISTURE RETENTION & DRAINAGE LAYER**

- Green Roofers *GR300u* underlayer with 300g/m<sup>2</sup>
- *GRD8* rigid compression cell multi flow drainage layer, with mechanically bonded 105g/m<sup>2</sup> filtration fleece
- Manufactured containing recycled plastics
- 8mm nominal thickness
- Inflow system storage of circa 1.65l/m<sup>2</sup>

## **390. EXTENSIVE GROWING MEDIUM**

- Green Roofers **GRX60**, engineered lightweight extensive green roof substrate
- Minimum of finally settled thickness of **60mm** thickness for sedum mat roof

- Detailed nominal thickness as average thickness to allow biodiversity of the planting medium to thrive
- A declaration that it contains no hazardous materials and comes from a peat free source

## 400. VEGETATION

- **GRS38 Sedum Mat**, average 25mm thick pre-grown mat containing a minimum of 11 species of sedum (sourced from 38 different varieties) at 90% coverage upon delivery and harvest
- Supplied as a system by Green Roofers Ltd. Manufactured and grown from various sources

## 420. STONE BALLAST / WHERE REQUIRED AS A VEGETATION BARRIER.

- Green Roofers Ltd Coastal 20 Washed, rounded aggregate graded 20/40mm free from fines and sharp angles
- Ensure that aluminium gravel guards are fitted to all outlets
- Spread evenly to a minimum depth of 50 mm

It is assumed that the building owner or his advisors have satisfied themselves that the roof structure and deck are suitable to receive the dead load of the above described system and any associated loadings.

# EXECUTION

## 710. INSTALLATION GENERALLY

- Once waterproofing is complete, clear all surfaces of debris
- Visually inspect waterproofing and report any apparent defects or damage
- Do not use material which are detrimental to healthy plant growth
- Protect drainage outlets
- Do not store materials which may be too heavy for the anticipated roof loadings

## 720. ADVERSE WEATHER

- Secure all unfinished work and protect from wind uplift
- Do not install frozen materials
- Take care during period of dry weather to ensure that any planting structure is kept sufficiently moist to all it to be worked with

## 770. INSTALLATION OF THE COMBINED ATTENUATION AND DRAINAGE LAYER

- Loose lay drainage board in a stagger bond fashion over the entire roof
- Keep cuts to a minimum

## 790. INSTALLATION OF THE SUBSTRATE

- Lay at depths not exceeding 150mm
- Gently compact layers to achieve a level area
- Thoroughly water substrate and drainage board after completing this stage to ensure retained moisture within this system

## 800. VEGETATION INSTALLATION

- Lay within 36 hours of harvesting
- Do not stack on site
- Do not use excessively dry, frozen or waterlogged mats
- Stagger the blankets
- Finish the edges with whole blankets and do not roller

# COMPLETION

## 910. INSPECTION

- Give a minimum of 3 days notice prior to handover

## 920. COMPLETION

- Leave area clean and tidy and free of obstacles and debris

## 930. DOCUMENTATION

- Growing medium declaration of analysis
- Maintenance procedures
- Roof map of planting and features

## NOTES

(a) It is essential that the supporting build-up of drainage layer, filter sheet, substrate and any hard landscaping is completed before installing the Sedum based vegetation blanket.

(b) Thoroughly water the substrate prior to laying the Sedum Based Vegetation Blanket

(c) Lay Sedum Based Vegetation Blanket perpendicular to the direction of the drainage panels.

(d) Gently tamp blanket as laying proceeds to ensure contact with the drainage protection board.

(e) After handover gently water the Sedum based vegetation blanket for a period of 12 weeks, or more as necessary, to ensure that the planting structure is allowed to adhere

fully to the drainage board. Water and labour to be supplied by others unless agreed with Green Roofers as part of the agreed contract.

(f) Fertilise slow release nutrient fertilizer at a rate of 25 grams per square metre.

## MAINTENANCE NOTES

Undertaken with a Green Roofers Ltd Maintenance Contract

### Autumn -

- Remove airborne weed seedlings and leaf litter and apply a slow-release fertiliser in accordance with the manufacturer's instructions (If required).

### Spring -

- General inspection of plant health.
- Repair of any scars or damaged areas of planting.
- Removal of any invasive weeds, tree saplings, nettles, unwanted grasses, thistles and general unwanted vegetation on the roof.
- Irrigation/watering if required, depending on weather conditions (*a local water outlet with high pressure is required to be within 20m of the roof area*).
- Removal of airborne weed seedlings.
- Apply Green Roofers fertiliser (spring inspection only).
- Inspect roof drainage to ensure functioning correctly and remove any debris.
- Ensure all Green Roofers aluminium trim is secure.

## MAINTENANCE PACKAGE:

- Minimum 2 visits per year, and includes all of the above maintenance requirements.

**Annual Cost:** Please Enquire Here: [Get an Annual Maintenance Quote](#)

### TERMS & CONDITIONS

- **Additional maintenance may be required depending on the type of Green Roof system installed.**
- Please be aware that we will not accept the responsibility of any green roof that is not maintained by Green Roofers Ltd.

## GENERAL

Provision must be made to carry out a leak test before the landscape is installed. The method and responsibility for carrying out the test must be decided on and written into the tender documents.

It is assumed that the building owner or his advisors have satisfied themselves that the roof structure and deck are suitable to receive the dead load of the proposed green roof system and landscape both during construction and on completion of the works.

Provision should be made to estimate the number of site visits required of the green roof contractor to enable them to complete the contract. The number of visits estimated should be entered into the tender documents in order to facilitate accurate pricing.

Although the system is designed to withstand drought conditions and is not an irrigated system, it is advisable to allow for a water point to be installed in case of extreme conditions.

The waterproofing should be taken up all upstands, protrusions etc. a minimum of 150mm above substrate level.

Ideally, a maintenance contract should be included with the Green Roof to ensure that the roof flourishes and performs as expected at the outset of the project.