

### Q37 GREEN ROOFS SYSTEM RG3

Extensive Green Roof with 5 - 25 degree Pitch, Approx 85kg/m<sup>2</sup> Saturated weight

Project:

To be read with Preliminaries / General conditions.

#### DRAINAGE LAYER AND FILTER FLEECE ROOFGREEN UK TYPE 8 DRAINAGE/RESERVOIR BOARD

Roofgreen Type 8 Drainage – 10mm high drainage composite 100% polypropylene fleece which acts as a partition and protection layer. A water drainage layer and a water reservoir of 6 litres / m<sup>2</sup>.

Dimensions – 2 metres x 20 metres x 0.4 metres.

#### ROOFGREEN EXTENSIVE GROWING SUBSTRATE (INORGANIC)

Roofgreen UK Extensive Growing Substrate is a specially formulated mixture of composted green waste, crushed brick, expanded clay and pumice stone. The carefully selected components optimize the balance of water retention, plant sustenance and drainage requirements, to ensure sustained plant development and long term performance of sedum finishes.

## Supply Sizes:-

1m<sup>3</sup> Bag – Standard Size (1.0 Tonne) – Single Lift

## Substrate Information:-

Make-up Composted Green Waste, Crushed Brick, Expanded Clay and Pumice Stone

Average Dry Weight	Approximately 900kg/m <sup>3</sup>
Maximum Saturated Weight	Approximately 1200kg/m <sup>3</sup>
Typical pH	6.5 – 8.0

NB. Please use the above figures as guidelines only, as values may vary slightly from batch to batch.

## Typical Substrate Depths:-

Sedum Finishes	Minimum 50mm (Laid 50mm)
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Compaction allowance of 20% should be made for calculation purposes.

## HORTICULTURAL FINISHES

### ROOFGREEN SEDUM BLANKETS Type R

Sedum (vegetation) blankets are supplied with a selection of sedum plants including Lydium, Hybrium, Album, Acre, Refexum, Sexangulare and Spurium, already grown on to a root retention/substrate layer. The varieties are carefully selected to provide colour and interest throughout the year and offer an ‘instant greening’ of the roof finish. The root retention/substrate comprises a coir-backed membrane, crushed lava rock and specially formulated soil compound. NB. Sedum blankets require the maximum of long-term maintenance and are the most popular approach to the construction of an extensive green roof. Sedum Blankets are supplied in rolls 1.2 m wide x 2 m long.

Thickness (including root zone) is 25 mm. Excludes vertical sedum growth, which could be up to 100mm. Typical saturated weight 25kg/m<sup>2</sup>.

Plug plants are also available and be grown to order to include herbs, wild flowers and grasses.

## ACCESSORIES

### Roofgreen UK DRAINAGE AND EDGE RETENTION TRIM

Roofgreen UK Drainage and Edge Retention Trim comprises perforated galvanized angle section 100mm (base) x 60mm (perforated upstand) x 2.5m (long). It is specifically designed to retain the extensive landscaping system at roof edges and at intermediate positions on the roof, whilst allowing full drainage to external rainwater systems.

## VEGETATION BARRIER

Vegetation Barrier comprises 20/40mm rounded washed stones approximately 300mm wide, to the depth of the growing medium and sedum blanket. Used around all perimeter upstands, rooflights vents, and outlets etc, to aid drainage, provide resistance to wind uplift, and restrict the spread of vegetation to unwanted areas.

## GENERAL

- Q37/130 EXTENSIVE GREEN ROOF
- Roof type:
  - Substrate: Concrete
  - Slope: not exceeding 25° pitch
  - Waterproofing: As per J31
  - Thermal insulation: As per J31
  - Protection: As per J31
  - Moisture control layers: As per 355
  - Growing medium: As per 390
  - Depth: 50mm
  - Vegetation: As per 400
  - Accessories: As per 420 & 430

## PRODUCTS

- Q37/355 COMBINED LAYERS  
Manufacturer: Roofgreen UK  
Product reference: Type 1B  
Depth: 11mm
- Q37/360 FILTER MEMBRANE  
Manufacturer: Roofgreen UK  
Product reference: Roofgreen UK filter fleece
- Q37/390 EXTENSIVE GROWING MEDIUM
- Manufacturer: Roofgreen UK
  - Product reference: Roofgreen Extensive Growing Medium
  - Depth: 50mm
- Q37/400 VEGETATION BLANKET to specifiers instructions
- Manufacture: Roofgreen UK
  - Product reference: Roofgreen UK Pre Grown Sedum Blankets Type R
  - Planting Mix: Type R – UK mix (6 – 8 varieties)
  - Thickness: 30mm
  - Vegetation coverage (minimum): 75%

- Q37/420      **EDGE RETAINING PROFILE**
- Manufacturer: Roofgreen UK
  - Product reference: RG UK Gravel Edge Strip

- Q37/430      **INSPECTION CHAMBERS**
- Manufacturer: Roofgreen UK
  - Product reference: Extensive Inspection Chambers
  - Size: 300mm x 300mm
  - Depth: 80mm
  - Access covers: Allow for grids where required.

- Q37/440      **VEGETATION BARRIER**
- Material: 20mm / 40mm rounded washed stones
  - Depth: min50mm
  - Width: min 300mm

## INSTALLATION

- Q37/710      **INSTALLATION GENERALLY**
- Preparation: Clear all surfaces of debris.
  - Timing: After certification of waterproofing membrane integrity.
  - Surface condition: Visually inspect waterproof membrane, report any damage.
  - Faults in waterproof membrane: Report
  - Contamination: Do not use materials detrimental to healthy plant growth.
  - Storage: Do not overload
  - Point loads: Avoid
  - Outlets: Do not block
  - Outlet grilles: Installed

- Q37/720      **ADVERSE WEATHER**
- Unfinished work: Secure from damage and wind uplift.
  - Conditions: Do not install or work with frozen materials.

- Q37/770      **DRAINAGE LAYER INSTALLATION**
- Extent: Continuous over entire roof area.
- Install Roofgreen Type 8 unrolled and loose laid directly over the Waterproofing System abutting drainage and edge retention system and outlet protection grilles. Rolls should be laid overlapping the geotextile layer on to the previously laid roll. Install material under all green roof areas (including the vegetation barrier). In windy conditions, it may be necessary to temporarily weight down areas installed, prior to the surface finishes being applied.

- Q37/790      **GROWING MEDIUM INSTALLATION**
- Handling: Minimize
  - Conditions: Handle in the driest condition possible. Do not handle or install when wet or frozen.
  - Lay Roofgreen UK Extensive Growing Substrate (Inorganic), directly on the surface of the Type 8 to a depth of 50mm and includes the application of slow release fertilizer.
  - Sequence: Gently firm each layer before spreading the next.
- Q37/800      **VEGETATION BLANKET INSTALLATION**
- Handling blankets:-
  - Timing: Lay within 24 hours of lifting from growing position.
  - Excessive stacking: Not permitted.
  - Material loss (maximum): 3% of total surface area.
  - Growing medium condition: Thoroughly watered.
  - Laying blankets:-
  - Dry, damaged, frosty or waterlogged blankets: do not lay
  - Orientation: Diagonal or perpendicular to slope of roof.
  - Joints: Stagger. Butt together or slightly overlap to prevent gaps. Do not stretch blankets.
  - Edges: Finish with whole blankets
  - Consolidation: Firm as laying proceeds to ensure full contact with the growing medium. Do not use rollers.
  - Dressing: EXTENSIVE SUBSTRATE
  - Application: Brush in to fill joints.
  - Watering: Thorough, immediately after laying and dressing
- Q37/820      **EDGE RETAINING PROFILE INSTALLATION**
- Cutting: Neat, accurate and without spalling.
  - Position: True to line and level. Smooth continuous lines.
  - Fixing: Install at open roof edges and at intermediate positions on the roof as specified. Drainage and Edge Retention Trim, including connector and corner sections as applicable. The retention trim is to be banded with compatible waterproofing material as per main roof area.
- Q37/830      **INSPECTION CHAMBER INSTALLATION**
- Location: Install centrally over drain outlet.
- Orientation: Align parallel with adjacent feature
- Allow for installation of additional extension elements as required to bring the inspection up to at least the height of the planting build up.
- Surround: Install vegetation barrier as per 440
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## COMPLETION

### Q37/910 INSPECTION

- Timing: Before handover
- Give notice (minimum): 3 days

### Q37/920 COMPLETION

- General: Leave the works in a clean, tidy condition
- Surfaces: Clean immediately before handover
- Outlets: Clean and clear of obstructions.
- Completed green roof: Protect from adjacent or high level working.

### Q37/930 DOCUMENTATION

- Timing: Submit at handover
- Contents:-
- Manufacturers' guarantees and warranties
- Procedures for maintenance of the green roof.
- Record drawings showing the location of planting and associated features.

For further information contact:

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