

## AXTER Q37 – HYDROSOIL® SEDUM/80 System

Project N° – 8583

Specification Reference N° –2.Rev2

Project Name – WATES HOUSE (Green Roof Areas)

Date – 25<sup>th</sup> January 2017



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## **Q** **Waterproofing**

### **Q37** **Extensive Sedum Green Roof Covering**

## Q37 Liquid applied waterproof roof coatings

To be read with Preliminaries/ General Conditions.

## General Extensive Sedum Green Roof System with additional wildflower seeding

### 130A EXTENSIVE SEDUM & WILDFLOWER GREEN ROOF COVERING

To be read with Section J41 CITYFLOR Warm roof specifications for Green / Brown Roofs.

#### **HYDROSOIL® SEDUM/80 with Wildflower seed**

HYDROSOIL® A traditional built-up green roof system comprising of a water retention / drainage board layer, integral filter layer, growing medium and planting to suit the biodiversity requirements - providing a habitat for invertebrates, butterflies, moths and birds. A variety of engineered soil mixtures, plant types and planting options are available to suit the project requirements.

System manufacturer: Axter Ltd, West Road, Ransomes Euro Park, Ipswich, IP3 9SX  
Tel: 01473 724056, Fax 01473 723263, email [info@axterltd.co.uk](mailto:info@axterltd.co.uk), internet [www.axter.co.uk](http://www.axter.co.uk)

- Roof Type and thermal insulation as per J41
- Moisture control layers: HYDRODRAIN 20
- Filter layer: As per HYDRODRAIN 20
- Growing medium: Axter HYDROSOIL Substrate, above the HYDRODRAIN 20 or as per architect's drawings.
  - Depth: 80mm.
- Vegetation: Axter pre-grown Mixed Sedum vegetation blanket with additional Wildflower and native provenance seed sown in.
  - Installation as clause 801A.

#### **ACCESSORIES**

- AXTER RETAIN 120 perforated edge retaining profile, corners and connectors.
- AXTER EROSION SQUARE / SPIKE erosion barriers.
- AXTER Rainwater Outlet Inspection Chambers.
- 20 to 40 rounded washed river gravel to all abutments, perimeters and protrusions (maintain a minimum 500mm wide sterile margin).
- 500 x 500mm square micro habitat areas to be created in 20 to 40 rounded washed river gravel / shingle to same depth as brown roof system
- Maintenance and irrigation strategy designed in accordance with Axter Green/ Brown Roof maintenance guide and implemented by Axter Ltd maintenance partners.
- Watering points must be provided to all Green/ Brown Roof areas.
- Roof Access strategy must be determined by project architect

### 140 PAVING AND DECKING SYSTEMS

- Type: As drawing / architects specification.
- Paving support: Axter paving slab supports.

## PERFORMANCE

### 210 GENERAL DESIGN

- Green roof and associated features: Complete the detailed design.
- Proposals: Submit drawings, technical information, calculations and manufacturers' literature.
- Performance criteria: as required.

### 255 MAXIMUM PERMITTED GREEN ROOF LOADS:

- Dead loads:
  - Green roof layers: Submit proposals
- Imposed loads:
  - Activity: Submit proposals
  - Vegetation: Submit proposals
  - Allowance for additional loads during construction: Submit proposals
- Service loads: Submit proposals
  - Requirement: Restrict site activities to ensure that design loads are not exceeded, or submit proposals for temporary supports.

## PRODUCTS

### 340A MOISTURE CONTROL LAYER

- Manufacturer: Axter Ltd.
  - Product reference: HYDRODRAIN 20.
- Material: Recycled HDPE.
  - Capacity: 5.5 litres/m<sup>2</sup>
  - Depth: 20mm

### 390 EXTENSIVE GREEN ROOF GROWING MEDIUM

- Manufacturer: Axter Ltd.
  - Product reference: Axter Hydrosol substrate.
- Material: Crushed virgin recycled brick, pumice and organic compost substrate to a depth of approximately 80mm graded.
- Ameliorant/ conditioner: As manufactured.
  - Coverage: as required.
- Declaration of analysis: Submit.
  - Parameters: pH value.

### 400A VEGETATION BLANKET To green roof areas

- Manufacturer: Axter Ltd.
  - Product reference: Sedum blanket.
- Planting mix: As required.
  - Thickness: As manufactured.
- Vegetation coverage (minimum):80%.

### 400B WILDFLOWER SEED MIX

- Manufacturer: Axter Ltd.
  - Product reference: Axter Seed Mix
- Planting mix: 34 Species of British wildflowers, mixed seeds, 100% native provenance.
- Vegetation coverage (minimum): 3grms per m2 over sow into sedum vegetation blanket

### 420 EDGE RETAINING PROFILE To exposed edges of greening.

- Manufacturer: Axter Ltd.
  - Product reference: Axter edge profile.
- Material: Aluminium.
- Height: 120mm / depth of planting.

### 430 INSPECTION CHAMBERS To all internal rainwater outlets.

- Manufacturer: Axter Ltd.
  - Product reference: Axter inspection chamber.
- Material: Polyester powder coated steel.
- Size: 300 x 300 mm.
  - Depth: To suit planting.
- Access covers: integral into the unit.
- Features: perforated base.

**460      SUPPORT PEDESTALS for paving slabs.**

- Manufacturer: Axter Ltd.
  - Product reference: Axter adjustable paving slab supports.
- Type: Screw jack pedestal.
- Material: Recycled polypropylene.
- Dimensions: As required.
- Additional pedestals: Adjacent to perimeters.
- Accessories: Not required.

## EXECUTION GENERALLY

### 710 INSTALLATION GENERALLY

- Preparation: Clear all surfaces of debris.
  - Timing: After certification of waterproof 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.

### 720 ADVERSE WEATHER

- Unfinished work: Secure from damage and wind uplift.
- Conditions: Do not install or work with frozen materials.

### 780 FILTER MEMBRANE INSTALLATION

- Joints: Minimize.
  - Overlaps (minimum): 150 mm.
- Fitting: Loose laid.
- Upstands: Extend to top of growing medium.

### 790 GROWING MEDIUM INSTALLATION

- Handling: Minimize
  - Conditions: Handle in the driest condition possible. Do not handle or install when wet or frozen.
- Layers:
  - Depth: 80mm or as determined by the landscaping consultant.
  - Sequence: Gently firm each layer before spreading the next.

### 801A SEED MIX INSTALLATION

- Timing: following blanket installation and after watering of surface pre-seeding.
- Handling: mix seed with fine damp sand as carrier/marker
- Application: 3gms/m<sup>2</sup> even spread over blankets, particular attention to bare patches/joints between blankets
- Watering: immediately before seeding. Do not water after seeding as seed may be washed away.

### 820 EDGE RETAINING PROFILE INSTALLATION

- Cutting: Neat, accurate and without spalling.
  - Junctions: vertical, secured using proprietary connectors.
- Position: True to line and level. Smooth continuous lines.
- Fixing: Overlapped by roof coating.



#### **830      INSPECTION CHAMBER INSTALLATION**

- Location: Install centrally over drain outlet.
  - Orientation: Align parallel with adjacent features.
- Bedding: Proprietary support base.
- Backfill: Ballast.
- Surround: Growing medium.

#### **840      PEDESTAL INSTALLATION**

- Ensure that surface to accept pedestals is clean and free of debris.
- Setting out: Mark centre-point of pedestal on substrate surface, with perpendicular guidelines to ensure square layout.
  - Orientation: Align parallel with adjacent features.
  - Spacing: To suit paving material and dimensions.
- Overall movement tolerance (maximum): 3 mm.

## COMPLETION

### 910 INSPECTION

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

### 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.

### 930 DOCUMENTATION

- Timing: Submit at handover.
- Contents:
  - Growing medium declaration of analysis.
  - Manufacturers' guarantees and warranties.
  - Procedures for maintenance of the green roof.
  - Record drawings showing the location of planting and associated features.
- Number of copies: as required.

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