

| Axter specification reference: | 8583 - 2 /43/ABJ - 6 AUGUST 2014 - Q37 |
|--------------------------------|---|
| | HYDROSOIL EXTENSIVE GREEN ROOF SYSTEM |
| Project: | WATES HOUSE, BARTLETT SCHOOL OF ARCHITECTURE, UCL |

Q37 Green roofs

To be read with Preliminaries/General conditions

GENERAL HYDROSOIL EXTENSIVE GREEN ROOF SYSTEM

- 130 EXTENSIVE GREEN ROOF To be read with Section J 41 ALPAFLORE for Green Roofs
 - · Roof type: Warm.
 - Substrate: As Section J 41.
 - Slope: As Section J 41.
 - Waterproofing: ALPAFLORE as Section J 41 Clause 110 A.
 - Thermal insulation: HYTHERM as Section J 41 Clause 110 A.
 - Protection: None.
 - · Moisture control layers: HYDRODRAIN 20
 - · Growing medium: Axter Extensive Substrate.
 - Depth: 80mm.
 - Vegetation: As required: sedum mat, wildflower mat, grass mat, hydroseeding, plug planting, etc.
 - Accessories: Axter edge retaining profile
 20 to 40 rounded washed river gravel to all perimeters and major protrusions
 Axter rainwater outlet inspection covers
 Irrigation system (supplied and installed by others) in accordance with requirements.

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.



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PRODUCTS

340A MOISTURE CONTROL LAYER To extensive green roof areas.

- · Manufacturer: Axter Ltd.
 - Product reference: HYDRODRAIN 20.
- Material: Recycled HDPE.
 - Capacity: 5 litres/m2.

360 FILTER MEMBRANE Factory bonded to HYDRODRAIN

- · Manufacturer: Axter Ltd.
 - Product reference: Axter Filter layer.
- · Material: Polyester.
 - Mass: 200 g/m².

390 EXTENSIVE GROWING MEDIUM To green roof areas

- · Manufacturer: Axter Ltd.
 - Product reference: Axter extensive substrate.
- · Material: As manufactured.
- · Ameliorant/ conditioner: As manufactured.
 - Coverage: not 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%.

420 EDGE RETAINING PROFILE To exposed edges of greening

- Manufacturer: Axter Ltd.
 - Product reference: Axter edge profile.
- · Material: Aluminium.
- · Height: To depth of planting.



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430 INSPECTION CHAMBERS To all internal rainwater outlets

- Manufacturer: Axter Ltd.
 - Product reference: Axter inspection chamber.
- · Material: Polyester powder coated steel.
- Size: 300 x 300mm.
 - 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.



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EXECUTION

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 HYDODRAIN RESEVOIR 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 (maximum): 80mm
 - Sequence: Gently firm layer.



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800 VEGETATION BLANKET INSTALLATION

- Handling blankets:
 - Timing: Lay within 36 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: 2-5mm horticultural grit.
 - Application: Brush in to fill joints.
- · Watering: Thorough, immediately after laying and dressing.

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.



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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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