REF No: B160592 **PROJECT NAME: NEW END, 29**

NBS SECTION Q37 - DESCRIPTION OF WORKS

Section Q37 deals with the design and installation of the Bauder Green Roof landscaping system, including the various related elements i.e. separation, protection, and drainage layers, substrates, Bauder supplied planting and accessories such as inspection chambers, trims etc. It invokes clauses from related sections for waterproofing, insulation, landscaping and maintenance as necessary for a complete system.

It is intended for use on projects where the detailed design is completed by the specifier (architect or landscape architect) with technical assistance from the manufacturer as required and should be read in conjunction with any project specific drawings provided.

SCOPE OF WORKS

This section includes:

- Bauder Extensive green roof system components/ landscaping.
- Bauder Intensive green roof system components/ landscaping.
- Related Bauder system accessories

This section does not include:

- Construction of the structural deck
- Bauder waterproofing system – refer NBS Section J41-110D/H.
- Irrigation– refer NBS section S__.
- Kerbs / edgings, channels/ paving accessories – refer NBS section Q10.
- In situ concrete roads / paving / bases – refer NBS section Q21.
- Interlocking brick / block roads / cobble paving – refer NBS section Q24.
- Slab / brick / sett / cobble paving – refer NBS section Q25.

Q37 GREEN ROOFS
To be read with Preliminaries / General Conditions.

GENERAL

110 INTENSIVE GREEN ROOF

- **Roof Area:** RT2-C
- **Landscape finish:** Intensive Hard Landscaping
- **Substrate:** New Concrete Deck
- **Slope:** Level
- **Waterproofing System:** BAUDER TOTAL ROOF SYSTEM SYSTEM - as per J41-110D
- **Slip Layer:** Bauder PE Foil (loose laid) rolled out in single layer. Installation as clause 745.
- **Protection layer:** Bauder FSM600 - 4mm protection fleece. Installation as clause 750C.
- **Water storage/drainage layer:** Bauder DSE20 - drainage / water storage panel. Installation as clause 770C
- **Bedding layer:** Suitable bedding screed supplied and installed by others, strictly in accordance with the landscape designers specification. Refer clause 832B.
- **Landscaping depth:** TBC

- **Surfacing: Paving slabs:** Supplied by others to the landscape designers requirement as clause 465, installed over the specified bedding screed (refer clause 832B). Installation of the paving as clause 841C.
- **Accessories: TBA**
- **Additional requirements:** 210, 710, 715A, 720, 910, 920, 930.

130 EXTENSIVE GREEN ROOF

- **Roof Area:** RT-5
- **Landscaping finish:** Pre-cultivated UK Native species wildflower blanket
- **Substrate:** New Concrete Deck
- **Slope:** Level
- **Waterproofing system:** BAUDER TOTAL GREEN ROOF SYSTEM – as per J41-110H
- **Slip Layer:** Bauder PE Foil (loose laid) rolled out in single layer. Installation as clause 745.
- **Protection layer:** Bauder FSM600 - 4mm protection fleece. Installation as clause 750C.
- **Drainage layer:** Bauder DSE40 - drainage / water storage panel. Installation as clause 770E.
- **Filter membrane:** Bauder Filter Fleece. Installation as clause 780A.
- **Growing Medium:** Bauder Biodiverse Substrate (FLL compliant), depth 100mm above the filter fleece. Installation as clause 790A.
- **Landscaping depth:** TBC
- **Vegetation:** Bauder WB Native Wildflower Blanket. Installation as clause 800A.
- **Accessories:**
  - Bauder AL150 drainage and retention trim, fitted to all open perimeters to contain a pebble vegetation barrier. Installation as clause 820B.
  - Project specific drip line irrigation system (designed and supplied by others), as clause 463A. Installation of irrigation pipe work to the waterproofing as clause 825.
  - Bauder ALU 250 Inspection chamber, to be installed over all internal rainwater outlets within soft landscaping areas. The lid of the chamber must be level with, or higher than the surrounding landscaping. For landscaping exceeding 100mm, additional height adapter units (available in 50mm or 100mm depths) must be used to achieve the required chamber depth, with the chamber lid being at least level with the surrounding landscaping or higher. Installation as clause 830.
  - 20 - 40mm round washed pebble vegetation barrier provided around all protrusions and in conjunction with AL150, where used at perimeters, as clause 460. Installation as clause 840.
- **Additional requirements:** As clauses 210, 710, 715A, 720, 910, 915F, 916, 920, 930.

PERFORMANCE

210 GENERAL DESIGN

- **Green roof and associated features:** Complete the detailed design.
- **Proposals:** Submit drawings, technical information, calculations and manufacturers literature.

PRODUCTS

460 PEBBLE BALLAST

- **Type:** Washed, round pebbles.
- **Size:** Graded 20-40mm and free from fines and sharps.
- **Supplier:** Locally sourced.

463A IRRIGATION

- **Supplier:** Access Irrigation Ltd. Crick, Northampton NN6 7XS
  Tel: 01788 823811, Fax: 01788 824256, E-mail: sales@access-irrigation.co.uk
- **Product reference:** Permadrip Pro - drip line irrigation system with anti-syphon design to resist clogging and pressure regulation.
- **Material:** Perforated UV resistant plastic - Colour: Dark Brown
- **Height:** 10mm
- **Operating range:** 0.8 -4.3bar.
- **Wall thickness:** 1.2mm
- **Nozzle output:** 1.6L/h
- **Spacing:** 150mm.
- **Pipe connection:** For Bauder Green/Blue Roofs, all irrigation systems using Permadrip Pro must use PoziLock compression fittings for both the dripline and water feed pipework. Barbed connectors are not permitted.
- **Location:**
  - **Bauder Vegetation Blankets:** Irrigation system to be installed flush with the surface of the vegetation blanket and tested to ensure that it is fully operational.
  - **Bauder Plug Plants, Flora Seeded Systems & Biodiversity:** Irrigation system to be installed flush with the surface of the growing medium and tested to ensure that it is fully operational prior to installation of the vegetation.
- **Design:** The design, water pressure, positioning and spacing of the drip line is critical to the performance and effectiveness of the system. Therefore, the irrigation scheme for each project should be designed accordingly to ensure it is fit for purpose. Irrigation is a specialist subjects and Access Irrigation Ltd provide a design service and can assist with information pertaining to any individual project upon request.
- **IMPORTANT NOTE:** These are permanent irrigation systems and do not negate the need for the establishment watering regime.

465 PRECAST CONCRETE PAVING SLABS

- **Standard:** To BS 7263-1, hydraulically pressed.
- **Manufacturer:** _____ .
- **Product reference:** _____ .
- **Colour/ Finish:** _____ .
- **Size:** _____ .
- **Recycled content:** _____ .

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 (these can be omitted where Bauder inspection chambers are used, if

the grille cap height obstructs the closing of the chamber lid).

715A LANDSCAPED ROOF RELATED REQUIREMENTS

- **The following are vital to the accurate pricing, correct installation, and ultimately the long-term life of a green/blue roof, and must, therefore, be included within the specification and tender documents: -**
- **Loadings:** It is assumed that the architect or his advisors have satisfied themselves that the roof structure and deck are suitable to receive the dead load of the proposed green/blue roof system and landscape both during construction and on completion of the works.
- **Additional protection:** A planned or contractual delay between the installation of the waterproofing and landscape will almost certainly necessitate additional/increased protection to the waterproofing. This protection may be temporary or permanent. The responsibility and cost of this possible extra protection should be clearly included within the tender documents.
- **Detailed drawings:** Correct detailing design and construction is essential to the long-term life of the green/blue roof. It is essential, therefore, that detail drawings illustrating for the construction are included with the tender documents, in order to enable the contractor to tender accurately.
- **Minimum upstand height requirements**: The waterproofing should be taken up all abutment upstands, pipes, detailing protrusions etc. a minimum of 150mm above finished landscape surface level to comply with British Standards and current code of practice BS8217:2005.
- **Provision for living products in hot weather conditions:** During hot weather conditions, living products such as plants, turf, sedum blankets etc. must be laid on the day of delivery to site. With regard to sedum blankets or turf, any rolls not installed should be laid out and kept watered prior to final installation.
- **Watering / Irrigation:** Initial watering should be by surface sprinklers to ensure that the plants are kept moist until established. Adequate provision for watering the installed planting must be in place on site before the product is installed. Irrigation systems if fitted should be operational. Surface sprinklers should be used to water in the fertiliser. All watering should be carried out in strict accordance with the Bauder watering requirements and guidance document.
- **Final Inspection:** No landscaping work should be installed until Bauder have carried out a final inspection to the waterproofing and have passed this as suitable for guarantee. It is the responsibility of the roofing contractor to advise and organise this inspection with Bauder. We cannot guarantee any waterproofing that has been landscaped without this inspection having been carried out and passed as acceptable.
  Please note, there are/maybe further 'sign-off' inspections required to complete the roof(s) for this specification.
- **Sign-off Inspections:**
  Bauder Extensive Green Roofs: Bauder Extensive or Biodiverse soft landscaped green roof installations require an inspection and it is the responsibility of the installing contractor to inform Bauder Ltd when the installation has been completed.
  Bauder Blue Roofs: Landscaped roofs designated as 'Blue Roofs' and featuring outlets fitted with Bauder Blue roof flow rate restrictors, must be inspected and signed off by Bauder. This is to ensure correct installation of integral 'Blue Roof' components. Safe access to carry out this inspection must be provided.
- **Damage risk form other trades:** No landscaping should be installed while the roof area is subject to other site traffic. Bauder will carry out an inspection of the completed roof 4-6 weeks following installation and any site related damage by others will be reported to the client. Bauder accept no responsibility whatsoever for damage to the product or the installation caused by site work carried out by others after the landscaping has been installed.

- **First year maintenance:** The contractor must price into his tender the cost of post installation maintenance for a minimum period of 1 year to ensure the handover of a flourishing soft landscaped roof.

720 ADVERSE WEATHER

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

LANDSCAPING INSTALLATION

745 SLIP LAYER INSTALLATION

- **Installation:** to be rolled out loose over the root resistant layer as specified (one layer for Extensive landscaping and two layers for Intensive landscaping).
- This product is only required for roofs with a fall between 0-3º (A slip layer is not necessary or advisable for slopes above 3º).
- **Joints:** Minimize.
- **Overlaps (minimum):** All laps to be 150mm with care being taken to ensure that roll sides join between layers.
- **Upstands:** Extend to top of growing medium. Sufficient foil must be allowed for to enable it to be taken up all upstand and edge details prior to installation of the protection layer.

750C PROTECTION LAYER INSTALLATION

- **Installation:** Protection fleece rolled out and laid loose. Laps to be sealed by lightly heating overlap area with a propane gas torch / hot air welding gun to melt the polypropylene fibres and then press seal the two fleece sheets together.
- **Joints:** Minimize.
- **Overlaps (minimum):** Laps to be 150mm
- **Upstands:** Sufficient protection fleece must be allowed for so that it may be installed to all abutment upstands and edge details, in accordance with the manufacturer's instructions. Extend to full height of the upstand and secure in place by using a lead or fabricated metal counter-flashing.
- **Outlets:** Should be trimmed well back from ALL outlets.
- **Openings in landscape restraint kerbs:** Where these kerbs are present (roof slopes above 5º), the protection layer should be cut away from the openings/ gaps to avoid impeding drainage.

770C DRAINAGE LAYER INSTALLATION

- **Extent:** Continuous over designated roof area.
- **Fitting:** Loose laid over the protection layer. Boards are to be interlocked by a minimum of one profile cup and all board joints staggered.
- **Upstands:** Carefully cut to fit closely around penetrations and outlets.
- **Construction of planter walls:** The drainage/water storage board provides a suitable base surface for building concrete or brick kerbs/walls. The specified infill haunching should be installed over the board to required depth of cover, poured directly into the cells of board. These should be constructed to provide an adequate support for the raised masonry planters
  For the specification of the type of infill and all kerb/wall construction elements – please refer to the structural engineer's plans and the specification. An internal surface of the planter wall may be primed using bituminous primer and then lined with single layer of torch applied Bauder root resistant capping sheet. The bright green slate finish may be considered undesirable, but the slate is necessary for long-term UV protection of the bitumen. To

disguise and blacken the slate colour, paint exposed areas above anticipated soil level with a light coat of bituminous primer.

770E DRAINAGE / WATER STORAGE LAYER INSTALLATION

- **Extent:** Continuous over entire designated roof area.
- **Fitting:** Loose laid over the protection layer. Boards to overlap and interlock by one cup profile at sides and ends and each row be laid staggered. The 'X' stamped impression on the highpoint of the cup moulding indicates where boards overlap.
- **Upstands:** Carefully cut to fit closely around penetrations and outlets.
- **Construction of planter walls:** The drainage/water storage board provides a suitable base surface for building concrete or brick kerbs/walls. The specified infill haunching should be installed over the board to required depth of cover, poured directly into the cells of board. These should be constructed to provide an adequate support for the raised masonry planters
  For the specification of the type of infill and all kerb/wall construction elements – please refer to the structural engineer's plans and the specification. An internal surface of the planter wall may be primed using bituminous primer and then lined with single layer of torch applied Bauder root resistant capping sheet. The bright green slate finish may be considered undesirable, but the slate is necessary for long-term UV protection of the bitumen. To disguise and blacken the slate colour, paint exposed areas above anticipated soil level with a light coat of bituminous primer.

780A FILTER MEMBRANE INSTALLATION

- **Joints:** Minimize.
- **Overlaps (minimum):** 150mm
- **Fitting:** Loose laid over drainage layer in accordance with manufacturer's recommendation.
- **Upstands (soft landscaping):** Extend up, between vegetation barrier and growing medium and trim flush with finished surface level.
- **Upstands (Hard landscaping):** Extend to top of perimeter abutments and trim flush just below finished surface level.

790A GROWING MEDIUM INSTALLATION

- **Handling:** Minimize.
- **Conditions:** Handle in the driest condition possible. Do not handle or install when wet or frozen.
- **Layers:** Start by applying two equal layers, building up to required maximum depth.
- **Sequence:** Gently firm each layer before spreading the next. Allowance should be made for any settlement that may occur. It is recommended that measuring stick markers of the required depth be used around the roof area to ensure that a minimum acceptable thickness of growing medium is achieved.
- **Supply:** Depending on size and access of the project the 'substrate' can be supplied by various methods i.e. Tipper, Silo lorry (pumping directly onto the roof area), Big bags, or sacks. Prior to costing this element of the installation the 'Approved Contractor' must contact Bauder Ltd so that they may advise on the best solution on any specific contract.
- ***Important note regarding alternative substrates:*** If alternative substrates are required (e.g. topsoil…etc.), Bauder does not take any responsibility for the performance of such substrates supplied from an alternative source. We recommend that alternative substrates should be covered by a technical data sheet and certified in writing as suitable to support the system and plants specified. Saturated weight loadings must be provided directly from the supplier of the substrate and should be the subject to a structural engineer's approval.

800A WILDFLOWER VEGETATION BLANKET INSTALLATION

- **Planting mix:** Non-invasive selected wildflowers (see manufacturer's literature)
- **Thickness:** 25mm.
- **Roll size:** 2m x 1m
- **Handling blankets and timing:** Lay within 24 hours of delivery. Watering and installation over large areas should be carried out in sections that could be completed within 4 hour time frame.
- **Laying blankets:** Dry, damaged, frosty or waterlogged blankets: Do not lay.
- **Excessive stacking:** Not permitted.
- **Method:** Laid manually / two-man operation
  Pre-grown wildflower blankets should be supplied and installed in strict accordance with the manufacturer's recommendations.
- **Material loss (maximum):** 3% of total surface area.
- **Growing medium condition:** Immediately prior to planting, the whole system should be thoroughly watered to ensure that the water storage/drainage board is filled and the substrate growing medium saturated
- **Layers:** Pre-grown wildflower blankets should be typically applied directly over a minimum of 100mm of prepared level or gently undulating substrate.
- **Orientation:** Perpendicular to slope of roof.
- **Joints:** Staggered/tight abut together to minimize any gaps. Do not stretch blankets. All excess vegetation should be removed from the overlap and the opposite leading edge of the blanket to ensure that the joints abut together tightly (as per the manufacturer's installation guideline).
- **Edges:** Finish with whole blankets.
- **Consolidation:** N/A
- **Dressing:** Bauder biodiverse substrate.
- **Application:** Brush in to fill joints.
- **Watering:** Thoroughly water using surface sprinklers immediately after installation and substrate dressing, ensuring that the blankets and substrate are fully saturated before moving on to the next area.
- **Slopes:** When applying the system on roof slopes above 10°, on large or exposed areas, the vegetation blankets should be secured in place by suitable bio-degradable landscaping pegs. Great care should be taken to prevent any damage to the waterproofing.
- **Please note** - Bauder Ltd does not take any responsibility for the design, performance or maintenance of any planting schemes.

820B EDGE RETAINING PROFILE INSTALLATION

- **Cutting:** Neat, accurate and without spalling.
- **Junctions:** Use the supplied connection pieces to reinforce and support the abutment of trim sections.
- **Corners:** The trim is cut to the length required. The supplied aluminium connection pieces have a perforated vertical line in the centre of the component to enable folding the unit through 90° to form the corner reinforcement.
- **Position:** True to line and level. Smooth continuous lines.
- **Fixing:** The AL150 Sedum blanket edge trim is to be secured in place using additional strips/sections of capping sheet/membrane/waterproofing system the same as the main field area of the roof.
    - **Bitumen Membrane Green Systems** - Bauder capping sheet cut into strips 500mm x 200mm, these bituminous flashings should be torched through the holes in the trim to the waterproofing surface and set at intervals of 400mm between each flashing piece, bonding onto the main capping sheet by a minimum 100mm.
    - **Bauder Single Ply Green Systems** - Reinforced single ply membrane cut into strips

1000mm x 200mm. These retention flashings should be aligned to the vertical inner face of the trim and then welded into position starting with the holes in the fixing arm, then proceed to complete the full welding of the back edge of the retention flashing and the sides. The retention flashings to be set at intervals of 400mm between each flashing piece, bonding onto the main membrane by a minimum 100mm.

- **Bauder LiquiTEC Roofing System** - Secured in place using a bed of LiquiPASTE.

- **Location:** To contain soft landscaping at abutments and open perimeters, used in conjunction with the vegetation barrier.
- **Precautionary note:** When cutting metal, please ensure that appropriate tools and personal protection equipment are used.

825 INSTALLATION OF IRRIGATION PIPEWORK

- Pipe work should be installed and connected in accordance with the irrigation supplier's installation guidelines and set as per the plan provided.
- **Bauder Vegetation Blankets** - Pipework should be secured at intervals to the vegetation blanket using wire or cable ties, as required. Over time the planting will cover the pipework, visually hiding it.
- **Bauder Plug Plants / Bauder UK Native Plug Plants / Flora Seed Mixes / Biodiversity** - Pipework should be secured at intervals to the substrate as required using plastic pegs (available from irrigation supplier). Please note pegs should be installed in a manner so as not to cause damage to the waterproofing.

830 INSPECTION CHAMBER INSTALLATION

- **Location:** Install centrally over rainwater outlets.
- **Orientation:** Align parallel with adjacent features.
- **Surround:** Using 20/40mm grade washed pebbles; the inspection chamber must be surrounded by a 500mm vegetation barrier surround to prevent unwanted growth obstructing the drainage system.
- **Positioning:** Never place directly on the waterproofing membrane – see options below-
  Intensive / extensive soft landscaping: Placed directly on to the drainage / water storage layer.
  Inverted roof with pebble ballast: Placed directly on the vapour permeable membrane or filter layer.
  Decorative aggregate finishes: Placed directly on the protection layer or vapour permeable membrane / filter layer
  Important Note: Ensure that a suitably sized hole has been cut out of the underlying drainage board / protection layer to allow water to flow freely into the outlet.
- **Chamber Height:** The contractor should also allow for the installation of additional Bauder height adapter units as required, in order to bring the inspection chamber up to at least the height of the surrounding landscaping. These are available in either 50mm or 100mm units.
- **Box gutters and gullies:** Where a box gutter is to be constructed, provision should be made to accommodate the 250mm diameter of the inspection chamber. The front support leg of the chamber will need to be removed (see installation guide) for the unit to fit inside a box gutter /gully. We recommend that all box gutters are constructed to a minimum finished width of 500mm to ensure that the support feet of the inspection chamber sufficiently clears the angle fillets within the gutter sole and leaves space to dress the pebble vegetation barrier around the main body of the chamber.
- **Precautionary note:** When cutting metal, please ensure that appropriate tools and personal protection equipment are used.

832B BEDDING SCREED LAYER

- **Type:** As specified by the Landscape designer/architect.
- **Extent:** To designated areas beneath Concrete paving – See landscape designers plan.
- **Installation:** Apply directly into the profiled cups of the specified drainage board, spread evenly and then additionally to the required finished depth. Provision should be made for containing the bedding screed layer at all abutments to ensure that material does not drop or leech into the area beneath the drainage layer and wash through to the outlets i.e. bedded concrete abutment kerbs or similar. The waterproofing should be isolated from any direct contact with the screed.

840 VEGETATION BARRIER / DRAINAGE BARRIER

- A vegetation barrier must be provided to all perimeters, abutments penetrations including protrusions i.e. man-safe posts etc. We recommend 20/40mm rounded river washed pebbles. Stones/ aggregates with sharp edges must not be used i.e. flint.
  In accordance with current GRO guidelines, the specified barrier widths are as follows: -
- Minimum 300mm, but increasing to 500mm at vertical walls with opening windows or doors or to abutments with opening rooflights.
- Every 40m, there is a 30mm high barrier constructed of non-flammable materials or a one metre wide strip of solid paving, gravel or pebbles.
- At all open drainage perimeters, drainage trim must be used to contain the vegetation barrier.
- For extensive green/blue roofs where Bauder XF301 Sedum Blanket is specified, the vegetation barrier must cover the edges of the blanket by a minimum of 100mm in order to protect the exposed edge of the blanket against wind uplift and substrate erosion. Please refer to Bauder standard green roof detailing for other extensive green roof systems.
- **Vegetation barriers removal or reduction of the recommended width:** Pebble vegetation barriers function as a fire break between potentially flammable dry vegetation and abutting construction materials that are also potentially flammable, to prevent fire spreading. These can be seen as an aesthetic issue for smaller green/blue roof areas and for this reason some clients/designers choose to reduce this width or otherwise remove the barrier altogether.
  The current barrier guidelines are set by the GRO codes of practice that Bauder follows and promotes. These are guidelines and not currently a legal requirement under British Standards or Building Regulations. However, not following these guidelines may affect an insurance claim in the unlikely event of a fire. Consequently, Bauder Ltd cannot accept liability for issues arising from non-compliance with the current GRO guidelines.

841C LAYING PRECAST PAVING SLABS

- **Extent:** To designated areas – See landscape designers plan.
- **Condition of substrate:** Clean.
- **Paving installation:** Slabs to be laid in suitable bedding screed, as specified by the architect / landscape designer and strictly in accordance with their specific recommendations regarding the layout in keeping with the landscape design.
- **Setting out:** Minimize cutting.
- **Joints:** Grouted in accordance with the clients requirements.
  - **Joint Width:** 10mm
  - **Perimeter upstands:** 10mm.
- **Completion:** Slabs must be level and stable.

COMPLETION

910 INSPECTION

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

915F ESTABLISHMENT WATERING REQUIREMENTS

- For wildflower blankets, it will be necessary to keep the blanket substrate damp for a period of at least 10 weeks during the period of vegetation establishment. It should be established at tender stage, whom should carry out this task and that they have all relevant information available regarding watering requirements.
- It is the responsibility of the roofing contractor to liaise with the main contractor/ building owner to provide water and ensure that the planted growing medium is thoroughly irrigated immediately after installation.
- An adequate mains water supply of sufficient pressure must be available and operational prior to the planting being delivered and installed. Initial watering must be by surface mounted sprinklers. For larger roofs this will likely entail more than one watering point at roof level.

916 POST INSTALLATION MAINTENANCE

- The installing contractor should price into the tender, the cost of carrying out post-installation maintenance for a contract period to be agreed with the client's representative. Following completion of the landscaping installation and handover, the responsibility for future on-going maintenance of the green/blue roof planting becomes the responsibility of the building owner or the Main Contractor, where this element forms part of the contract.
- **Blue Roof Outlet Maintenance:** It is important that the Bauder Bitumen Blue Roof Vertical Outlets and Bauder Blue Roof Flow Restrictors are checked and maintained regularly to ensure there are no blockages that will affect the calculated flow rate. In addition to regular maintenance inspections the outlets should be inspected after a storm event.
- **Maintenance services:** Bauder Ltd offers a professional maintenance service using experienced green/blue roof technicians and would be pleased to provide an estimate for carrying out on-going maintenance. Please contact our green roof maintenance team on Tel: 01473 257671. Alternatively, the work can be contracted to experienced landscape contractors of your choice.
- **Period of maintenance contract:** *Insert requirement i.e. one year, two years etc.*
- **Scope of maintenance procedure:** as per manufacturer's recommendations.

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:**
- Manufacturer's guarantees and warranties.
- Procedures for maintenance of the green/blue roof.
- Record drawings showing the location of planting and associated features.
- **Number of copies:** as required by client.