

No development shall commence until details of a scheme for a "vegetated" or "brown" roof (s) for the development hereby permitted have been submitted to and approved in writing by the Local Planning Authority. The details shall include its (their) type, vegetation, location and maintenance schedule. The development shall be implemented in accordance with the approved scheme prior to its first occupation and the vegetated or green roof shall be retained thereafter. No alterations to the approved scheme shall be permitted without the prior written consent of the Local Planning Authority.

Reason: To ensure a sustainable development consistent with Policy G5 of the London Plan 2021 and Policies SP0, SP4 and SP11 of the Haringey Local Plan 2017 and Policies DM21 and DM12 of The Development Management DPD 2017,

General maintenance procedures

These practices should be carried out annually as part of a structured maintenance regime.

General Maintenance

The appearance of the vegetation on an extensive green roof will change over the year. The growth and flowering of the individual species within the vegetation mix will be dependent upon fluctuations in the seasonal weather. Extensive green roof and sedum plants will not always be green. In the winter, sedum will become smaller and turn red/brown in colour as they prepare themselves to withstand the coming winter months.

Boulder recommends that all green roofs have a way of watering during prolonged periods without rain. All green roofs will benefit from water during droughts. Generally, sedums are much more drought tolerant than native wildflowers but both will benefit from a prolonged soaking (not little and often) to prevent them from fully drying out (see Boulder's Watering guide).

All green roofs will require feeding from time to time. Boulder's lightweight Xero Flor Sedum Blanket contains little in the way of natural nutrient, so fertiliser must be applied annually to ensure that the plants become resistant to extremes of weather and temperature.

The Boulder Sedum Blanket contains approximately 14-17 different plant species. Not every species incorporated will survive and the more dominant will prevail over time dependent on location. General maintenance is best carried out annually during spring/summer. However, increasing the number of visits will improve the aesthetics of the roof.

Preliminary Maintenance Procedures

The following procedures should be carried out in order to ensure the roof is maintained in good condition and to protect the validity of the waterproofing system guarantee:

- Ensure that relevant health and safety procedures are followed when working at roof level, this includes making sure that safe access can be gained to the roof. It is advised that the contractor should always seek proof of current maintenance for any man-made roof access systems prior to proceeding with the work on site.
 - Remove all dead vegetation and debris from the roof surface, taking particular care to ensure that all drains outlets, gutters and downpipes are clear.
 - Please note: Roots in the vicinity of taller trees will need more frequent maintenance. Boulder recommend removing dead leaves during the spring and again in the autumn, to ensure that they do not damage the roof vegetation.
 - Remove the lids of all inspection chambers, ensure that all odourate outlets and downpipes are free from blockages and that water can flow freely away.
 - Ensure that any protective metal flashings and termination bars remain securely fixed in place. Remove or replace as necessary.
 - Examine all mastic sealant and mortar pointing for signs of degradation. Repair or replace as necessary.
 - Check that all permeable tiles and paving slabs remain in position, secure and in good condition.
- The building owner should keep a record of all inspections and maintenance carried out on the roof. Any signs of damage, contamination or degradation to the waterproofing should be reported to Boulder immediately. In order that arrangements can be made for remedial work to be carried out if necessary.

General maintenance procedures

Vegetation Maintenance Tasks

Fertiliser for Boulder XF301 sedum blankets

- Boulder Sedum Blankets are grown in a shallow growing medium which contains very little nutrient, so the annual application of fertiliser is crucial to ensure the plants remain healthy.
- Fertiliser should ideally be applied during March/April, as it helps the plants to prepare for extreme weather conditions. Organic fertiliser can be obtained direct from Boulder in 20kg bags.
- Always apply the fertiliser at the given rate on the instructions. It is recommended that the fertiliser is lightly watered in immediately after application, to avoid 'burning' of the foliage. Dung-based organic fertilisers should be avoided.

Irrigation Boulder XF301 systems

Boulder always advises that there should be a way to water any green roof during times of dry weather. This might be a manual supply point adjacent to the green roof, or a long automatic irrigation system. Boulder recommends that the system is installed, but there is provision of either a sprinkler or drip line irrigation system if the following conditions apply:-

- All roof with a slope exceeding a 2° pitch.
 - Windy or exposed site locations.
 - Sites up to 50 miles inland of the east coast of the UK mainland.
- Irrigation should only be activated during periods of dry weather, or if the sedum plants are showing signs of distress. The irrigation system is best run at night or at dawn or dusk to minimise unnecessary evaporation. There must every 4-6 days for the duration of the hot weather. This can be easily managed by using an inexpensive battery-powered, programmable timer.

General maintenance procedures

- When carrying out maintenance to sloping areas, care must be taken not to damage either the landscaping or the waterproofing system. If it is considered that either element has been affected, Boulder should be contacted for advice. Any waterproofing damage caused after completion of the original installation may invalidate the guarantee. Any unauthorised alterations to the waterproofing system will invalidate the guarantee. If such a situation should arise, Boulder should be contacted to advise on the alteration and how it should be incorporated without affecting the guarantee.

Vegetation Maintenance Tasks

Application of Fertiliser to the vegetation: As a general rule all sedum based green roofs require feeding annually to promote strong growth in the sedum and make them more drought tolerant.

Plant encroachment

Any vegetation which has invaded into drainage outlets, inspection chambers, walkways and the vegetation barriers (gabbers) should be removed. Additional washed stone gabbers, similar to existing can be added if movement or settlement of the gabble vegetation barrier has occurred.

- If an irrigation system is fitted, it is best to run it only during prolonged dry weather and for limited periods – see Irrigation information.
- Only a relatively few species of sedum and other plants suitable for an extensive green roof installation will persist in partial and full shade, and they will generally be greener in colour and grow in these locations.
- If problems with the vegetation are suspected, Boulder may be contacted for advice and, if necessary, a suggested course of action.

Weeding

- With the exception of saplings, which should always be removed, weeds in an extensive green roof should be considered as a problem only of aesthetics. If considered excessive, they can be removed either manually or by using a spot weed wipe.

Repeating Bare Patches

- Bare patches can be easily repaired and this is best done during the main growing seasons of March/April or from May to July. It is best to use a good quality topsoil or growing medium to replace the lost vegetation.
- Using vegetation cuttings from surrounding areas of abundant growth and either Boulder substrate or a sand soil mix following the guidance of Boulder's Sedum Patching Maintenance Guide.

General maintenance procedures

Vegetation Maintenance Tasks

Fertiliser for Boulder XF301 sedum blankets

- Boulder Sedum Blankets are grown in a shallow growing medium which contains very little nutrient, so the annual application of fertiliser is crucial to ensure the plants remain healthy.
- Fertiliser should ideally be applied during March/April, as it helps the plants to prepare for extreme weather conditions. Organic fertiliser can be obtained direct from Boulder in 20kg bags.
- Always apply the fertiliser at the given rate on the instructions. It is recommended that the fertiliser is lightly watered in immediately after application, to avoid 'burning' of the foliage. Dung-based organic fertilisers should be avoided.

Irrigation Boulder XF301 systems

Boulder always advises that there should be a way to water any green roof during times of dry weather. This might be a manual supply point adjacent to the green roof, or a long automatic irrigation system. Boulder recommends that the system is installed, but there is provision of either a sprinkler or drip line irrigation system if the following conditions apply:-

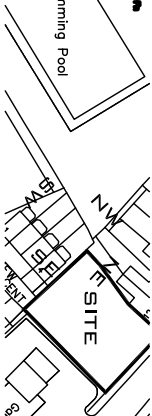
- All roof with a slope exceeding a 2° pitch.
 - Windy or exposed site locations.
 - Sites up to 50 miles inland of the east coast of the UK mainland.
- Irrigation should only be activated during periods of dry weather, or if the sedum plants are showing signs of distress. The irrigation system is best run at night or at dawn or dusk to minimise unnecessary evaporation. There must every 4-6 days for the duration of the hot weather. This can be easily managed by using an inexpensive battery-powered, programmable timer.

COPYRIGHT RESERVED.
ALL DIMENSIONS TO BE CHECKED ON SITE BEFORE WORK COMMENCES.
FIGURED DIMENSIONS TO BE TAKEN IN PREFERENCE TO SCALED DIMENSIONS.
IF IN DOUBT PLEASE ASK.

NOTES

1. LIGESTER MULTI YELLOW STOCK BY BISTOCK BRICK
2. RECONSTITUTED STONE SAND
3. 100mm POLYURETHANE INSULATION WITH POLYESTER FIBRE COATED
4. ETERNIT FIRE CEMENT SHEET CLADDING PANELS IN LIGHT GREY COLOUR
5. OBSOURED GLASS TO ALL BALCONIES
6. BALCONY
7. JULIET BALCONY
8. FL - FLUE
9. ALL PROPOSED WINDOWS/DOORS/CLADDING AND BALUSTRADING WILL BE SIMILAR TO THOSE ON THE LOWER FLOORS

DIAGRAM



REVISIONS

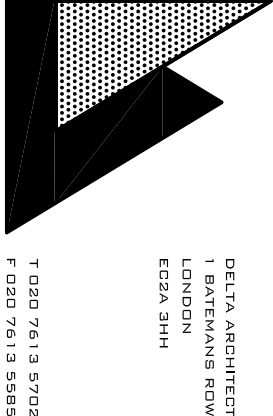
PROJECT
115-119 PARK ROAD, NB BUN
ROOF TOP EXTENSION

DRAWING

PROPOSED VEGETATED ROOF DETAILS

PROJECT ARCHITECT	CB
DRAWN	MK
CHECKED	CB
DATE	NOV 23
SCALE	1:100@ A3
STATUS	PLANNING
PROJECT NUMBER	20025
DRAWING NO	0401B
SHEET	2

DELTA ARCHITECTS
1 BATEMANS ROW
LONDON
EC2A 3HH



T 020 7613 5702
F 020 7613 5585
WWW.DELTARCHITECTS.CO.UK