



20th October 2017

Mr Steven Chapple

**GCM London Limited**

3 Belsize Place

London

NW3 5AL

Dear Mr Chapple,

Please find below a comprehensive garden maintenance to which includes the maintenance specific to the green roof requirements.

### **1 Plant encroachment**

Any planting, which has encroached into drainage outlets and walkways should be removed. This removed vegetation can be used to repair any bare patches if required.

### **2 Monitor the colour and rate of growth**

The colour and rate of growth should be examined, to establish the health of the plants. It must be stressed that many things can affect the growth and colour of the sedum plants. Generally, plants tend to be greener in wetter mild conditions (springtime) and where the roof pitch is shallow.

During May, June and July the plants flower and you will see a mixture of colours - whites, pinks, yellows and even some purple. Some species of sedum blush red naturally during the summer and autumn, (e.g. *Sedum album* 'coral carpet') and so the roof takes on a more 'red/brown appearance. This is particularly the case once plants have flowered, leaving remnants of dry brown seed heads. The best visible indication of health is if the leaves are fleshy and contain plenty of water.

When exposed to extreme conditions, sedum plants tend to turn a deep red colour. Please note that that this is a natural phenomenon and that this behaviour is important to the plant to acclimatise for surviving through a cold winter or hot summer. This usually occurs during climate extremes e.g. extreme hot or cold weather, prolonged drought or in very exposed conditions or when the plants are in distress, for example through lack of nutrient (fertiliser).

Plants affected by a severe lack of water shrink back and the leaves will tend to be small and very tight. In distress, the plants change gradually to a deep crimson red.

In shade, Sedums tend to grow greener and leggier. In general, sedums do not like permanent shade, so either avoid areas under larger trees or surrounded by buildings, or make it possible for more natural light to reach the roof. There may be noticeable differences in the growth of similar sedums in a different area of the same roof. This emphasises the living nature of each individual roof.

### **3 Weeding**

Sedum blankets will at times include moss and grass. If considered excessive, provision should be made to remove any unwanted vegetation, e.g. weeds/ grasses/ saplings. These can be removed manually by hand, or by using a 'spot weed wipe', although care should be taken to follow specific instructions regarding the use of any proprietary products. Weeds are a problem of aesthetics rather than damaging the roof, but large areas of weed or grass should be removed, as should saplings. After removal of weeds treat area as if it were a bare patch (see below). Dead head the sedum if required.

### **4 Repairing Bare Patches**

Bare patches can be repaired easily, but only during the growing season (ideally during March/April or late August until the end of September). Take clumps of Sedum from areas of abundant growth and place on bare patches pressing gently into the soil. They can then have a light sprinkling of sand mixed with compost or planting substrate to improve uptake of cuttings.

The Sedum cuttings will grow best if this is carried out during spring maintenance and kept moist and free of temperature extremes (frost and intense sun). Compost or topsoil can be used for smaller bare patches.

### **5 Fertiliser**

Sedum Blankets are grown in a very shallow growing medium that contains very little nutrient, so the annual application of fertiliser is crucial to ensure that the plants remain healthy. Fertiliser should be applied during March/April. It is important to carry out this task during this time, because it helps to prepare the plants for extreme weather conditions and flowering and also because it allows the different species to gain all their nutrients without competing against each other.

This should be applied at the rate of 80gm/m<sup>2</sup>. Small areas (up to 30m<sup>2</sup>) can be applied using a hand-held spreader or strewn by hand from a bucket. Apply fertiliser at the given rate written on bag.

Fertiliser pellets settling on damp leaves may have a detrimental effect i.e. burning the leaves. It is therefore recommended that the fertiliser is lightly 'watered in' immediately after application. Dung based organic fertilisers should be avoided.

### **6 Irrigation**

Sedum plants absorb and store water in their leaves. They use this water to survive during times of drought. A moisture retention fleece is incorporated into the system beneath the blanket, but the function of this is to hold water after rainfall for sufficient time for the plants to take on the water. It is not a water storage medium; so, don't be concerned if it is dry. Check the leaves to see if they are fleshy and not dried out.

Sedum roofs require no artificial watering following establishment. Please note - continuous daily watering is neither recommended or necessary, as this will only promote weeds and other unwanted plant species. Water after installation and during prolonged dry periods or periods of high temperatures.

## **7 Safe Access**

It is a fundamental requirement of the design of the roof structure that safe access is provided for. The two important points are; safe access on to the roof by people and maintenance equipment and the safety of individuals once on the roof.

As discussed and stated above there will also be visual inspections made by the garden supervisor prior to the gardener's visits

Kind Regards

Adam Evans BSc Hort

General Manager