

LIGHTWEIGHT SEDUM SYSTEM

Extensive green roof XF301



ST LUKE'S CHURCH

Location: **Reigate, Surrey**

The new annex, featuring two barrel vault green roofs, was added to the west end of the original church building to provide a new entrance, two large meeting rooms, toilets and a kitchen. The revitalised church was opened to the community by the Bishop of Croydon.



This is the lightest weight all in one system available. It comprises mature sedum on 20mm of extensive substrate and incorporating a multifunctional water retention and filter layer. The system is suitable for both new build construction and retrofit refurbishment projects.

Our extensive XF301 Sedum System is constructed using low maintenance drought resistance planting (sedum species) that provide excellent cover and increased protection to the waterproofing system.

The plants are grown on a 'blanket' that is harvested like turf and installed by rolling out on top of the waterproofing. The blankets are very lightweight, easy to maintain and provide instant greening to the roof.

The XF301 sedum system is a very versatile green roof system and is suitable for both new build and refurbishment projects.

Key Features

- The most lightweight green roof system available, making it ideal for retrofitting or refurbishment projects.
- Delivers instant greening of a roof with mature sedum species.
- Ideal solution where a green roof needs to be specified to meet planning requirements.
- Ideal for projects where there are weight, height or cost constraints.
- Sedum blankets are grown on our farm in the UK and delivered to site within 24 hours of harvesting.
- Fire classification B_{ROOF} (t4) and verified by the BBA as 'unrestricted' and suitable for use on any part of a roof in conjunction with Bauder Total Green Roof System.




The system features up to 14 species of sedum together with some mosses and grasses which ensures plant diversity regardless of location; species are selected to suit our climate and keep weight and maintenance to a minimum.

All our green roof systems comply with GRO and FLL guidelines.

GREEN ROOFS

Specification Support

Specification downloads:
www.bauder.co.uk/technical-centre

Telephone helpline:
 0845 271 8800



LIGHTWEIGHT SEDUM SYSTEM

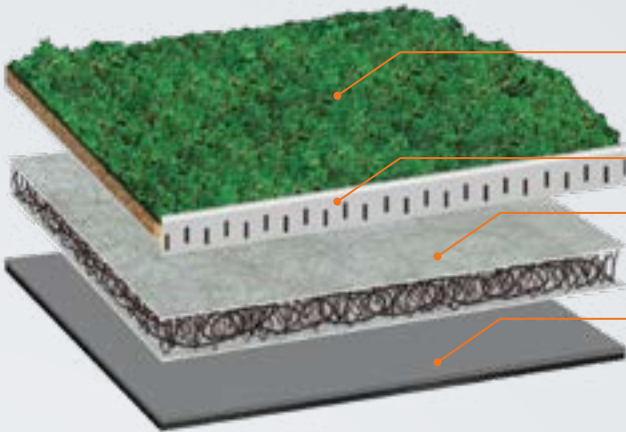
System Configuration

The multi-functional XF301 combines the vegetation support layer with a moisture retention fleece to provide the perfect base for all roofing scenarios with a labour efficient installation.

Our patented geo-textile carrier fleece with its ultraviolet resistant nylon loops provides a support base for the specially developed substrate growing medium and gives stability to the established vegetation whether on a flat roof or up to 25° degrees.

The integral fleece is a unique feature of our XF301 sedum system, retaining moisture after rainfall and thus allowing the plants to take up the water for future use. The sedums are grown to maturity before being harvested, thus ensuring that they acclimatise quickly to their new rooftop location.

We currently cultivate 60,000m² of XF301 and are able to harvest the sedum and deliver to site within 24 hours.



Bauder XF301 Sedum System

pre-cultivated vegetation blanket on a patented nylon loop and geo-textile base carrier with special substrate and a pre-attached integral 8mm moisture retention fleece.

AL40 Sedum Blanket Edge Trim

perforated edge/drainage trim.

Bauder SDF Mat

multifunctional drainage, filtration and protection layer manufactured from ultraviolet resistant nylon woven loops which are thermally bonded to geo-textile filter fleece facings.

Bauder Waterproofing (all four types are suitable)

System Installation



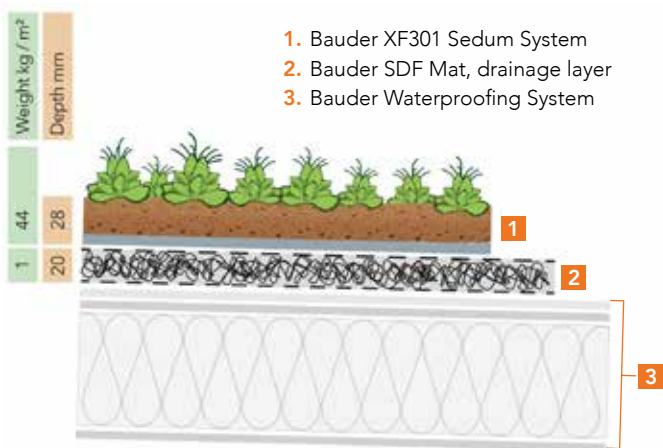
Long length rolls are used to speed up installation process.



Short 2m rolls of XF301 Sedum System installed by hand.

DESIGN & WEIGHT LOADINGS

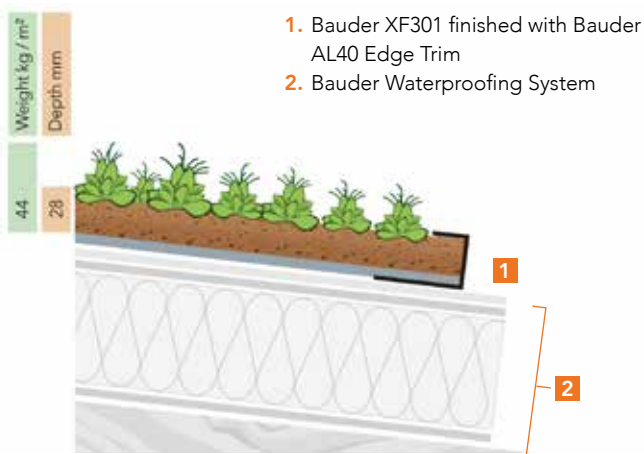
XF301 Lightweight sedum system



Flat Roofs

Extensive green roofs should be designed with a minimum fall of 1:60, and even then, small areas of standing water may still occur. This water will rot and kill the vegetation.

Bauder SDF Mat drainage layer is specified within the system to lift the blanket clear of any standing water, allowing it to disperse during periods of prolonged heavy rain. It is lightweight, weighing only 0.6Kg/m².



Roof slopes 2° and up to 9°

For roof slopes exceeding 2° standing water should not be an issue, allowing the SDF Mat drainage layer to be eliminated and the Bauder XF301 Sedum System installed directly over the waterproofing.

Standard 2 x 1m rolls can be used up to 5° but on larger roofs above this pitch, long rolls in lengths up to 10m reduce the number of joints and are more wind resistant. A crane that is capable of reaching all areas of the roof is imperative when using long rolls.

When installed over either a 'barrel vault or 'dual-pitched' roof, the long length blanket may be applied over the ridge as the forces imposed are counterbalanced. For all other situations, Bauder sedum blanket retention strip should be used.

In some instances it is not possible to use the long length roll, i.e. if there are numerous rooflights or interruptions or if crane access is impossible. In these situations the standard 2x1m lengths may be used in conjunction with the Sedum Blanket Retention Strips to mechanically prevent slippage of the blanket, (see facing page).



AL40 Sedum Blanket Edge Trim