

# **Green Roofing Systems**

Green roof systems can add many aesthetic, environmental and sustainable features to a building. There are many types of green roof systems now available on the market, however green roofs are generally broken down into two forms – intensive and extensive. Intensive green roofs are typically recognized as landscaped areas that can also incorporate public spaces such as terraces and recreational areas. Whereas extensive green roofs are generally buildings that do not require roof access and incorporate expanses of vegetation such as sedum, mosses and wildflowers.

Green roofs have grown in popularity over the last ten years, due to improvements in system availability, greater knowledge of green roof requirements and successful green roof installations across the UK. They are now recognised as one of the most efficient methods of 'urban- greening' amongst commercial developments within towns and cities and even the more adventurous amongst us are converting our out-buildings and garages to green roofs.

Green roofs have many benefits including their positive impact on sustainability, biodiversity and the attenuation of storm water. They provide much needed habitats for birds and insects, whilst providing a form of SUDS (Sustainable Urban Drainage Systems) in built-up areas.



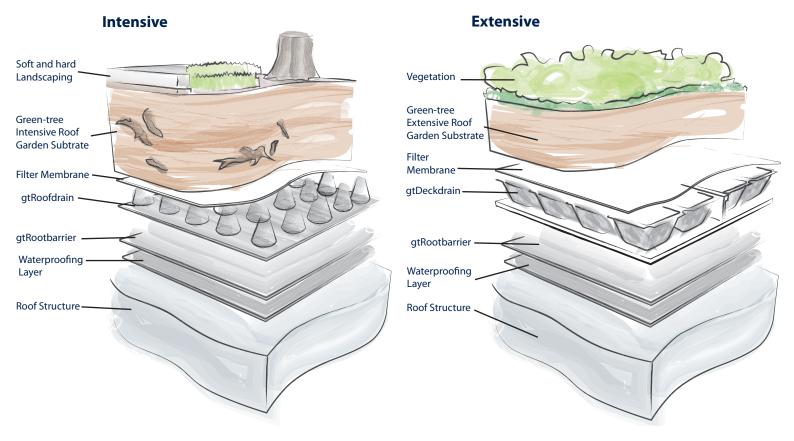
Green-tech endeavour to ensure that the information given on this technical data sheet is accurate, but accept no liability for its use or its suitability for particular application.





#### Installation

A typical build-up of an intensive and extensive green roof is illustrated below, highlighting the essential formation of a green roof to allow for adequate drainage, the success of plants and the future establishment of the roof.



## gtRootbarrier

Provides permanent protection of the roof's waterproof covering. gtRootbarrier prevents plant roots' growing through to the waterproofing layer and damaging the roof structure.

### 2. gtDrainage Board

Forms a lightweight, high performance drainage layer with an integrated filter geotextile. There are two types of drainage board designed for green roofs each incorporating a filter geotextile to prevent clogging. Further information on the types of drainage board available and their applications can be found *here*.

### 3a. Green-tree Extensive Roof Garden Substrate

Ideal for incorporation into expansive green roof projects that require very little maintenance.

Lightweight in texture and manufactured from the award winning Green-tree topsoil, Green-tree extensive roof garden substrate has a balanced nutrient content, ensuring quick plant establishment in harsh rooftop environments.

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Rabbit Hill Business Park, Great North Road, Arkendale, Knaresborough HG5 0FF



#### 3b. Green-tree Intensive Roof Garden Substrate

A blend of lightweight aggregate and the award winning Green-tree topsoil, the intensive roof garden growing media is ideal for green roof construction projects and particularly containerised planting. Lightweight in texture with good water holding capabilities, Green-tree Intensive Roof Garden Substrate guarantees healthy plants and trees in a roof garden environment.

## 3. Vegetation

Extensive roofs will normally require low growing plants that will improve storm water retention such as the sedum species. Sedum is particularly hardy and tolerant to most extreme weather conditions, requiring little maintenance making it ideal for a roof with limited access.

Intensive roofs can range from bio-diverse roofs that incorporate wildflowers, shrubs and habitats to managed landscape gardens that include lawns, terraces and a wide range of planting. Consultation with a Landscape Architect or Horticulturist should be taken when specifying your particular plant requirements.

For further information and guidance on planning a green roof project contact a member of the Green-tech team direct on 01423 332 100 or marketing@green-tech.co.uk

