Green Roof Intensive

Detailed description

Sometimes referred to as roof gardens, an intensive green roof can be as simple or as complex as required. Generally, an intensive green roof requires the same level of care as any traditional garden. Intensive green roofs consist of a deep layer of engineered growing media, typically 150–1500 mm. As a result of this soil depth there is a greater scope of planting available and the roof can be viewed very much like a garden area and may be landscaped to include trees, lawns, flower beds and paved areas.

With an intensive roof the only real limit to its scope is the weight of the system and the structure necessary to support it. Many modern developments incorporate landscaped roofs at ground level, for example above basement areas and underground car parks. These are commonly referred to as podium decks. The decked areas themselves create additional usable space in urban developments. For large areas it is imperative that consideration is given to the provision of adequate sub-surface drainage.

Intensive green roofs have a deeper layer of growing medium than extensive roofs. This increased depth has a greater capacity to retain water making it less likely to dry out. Utilizing a drainage composite such as Deckdrain, reduces the risk of over saturation of the plants during periods of heavy rainfall. The high strength core used in Deckdrain allows the product to be used in high load areas such as on podium decks with vehicular traffic.

Deckdrain consists of a combination of a cusped core with a geotextile fleece bonded to the upper face. It is manufactured in the UK from up to 95% recycled material bonded to the upper face.

Green Roof Intensive comprises:

- Engineered growing media:
  
  ABG peat free media derived from sustainable, recycled, UK sourced materials. Using a specifically developed growing media can help provide the right growing environment for the selected vegetation and also reduce the load on the roof.

- Vegetation/ Surfacing:

  On Intensive green roofs a wide variety of vegetation can be used from grasses to shrubs and trees as well as hard surfacing such as pavers and block paving.

- Deckdrain:

  Forms a lightweight high performance drainage layer with integrated filter geotextile that eliminates clogging within the drainage structure that provides a continuous drainage layer across the structure.

  It provides excellent drainage over the whole base area of the soil layer as well as providing additional waterproofing protection. With more emphasis
on reducing the amount of carbon used in construction, recycled materials can provide additional environmental benefits.

Features and benefits:

- Added protection for waterproofing layer.
- Scores BREEAM points.
- Reduces whole life costs of the building and its energy usages.
- Part of SuDS solutions acting as the first stage in the treatment train.
- Can create a useable space.
- Creates habitat to improve biodiversity.
- Noise reducing.
- Extracts pollutants and improves air quality.
- Extracts pollutants.

Product guidance - As Standard

Deckdrain 700:

- Flow rate: 0.67.
- Puncture resistance: 2400 N.
- Typical applications: Smaller podium decks and car parks where outlets are closely spaced.

Deckdrain 1200:

- Flow rate: 1.25.
- Puncture resistance: 2300 N.
- Typical applications: Larger podium decks and car parks where outlets are less frequent.

Deckdrain 2500:

- Puncture resistance: 4800 N.
- Typical applications: Applications where large volumes of water will be travelling over large distances in podium deck and green roofs.

Deckdrain 5000:

- Flow rate: 29.00.
- Puncture resistance: N/A.
- Typical applications: Used as part of a SUDS attenuation system.

Vegetation:

Dependent on the planting scheme.

Product specification

Manufacturer

ABG creative geosynthetic engineering
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Product reference
- Deckdrain 700 - 7 mm thickness.
- Deckdrain 1200 - 12 mm thickness.
- Deckdrain 2500 - 25 mm thickness.
- Deckdrain 5000 - 50 mm thickness.

Engineered growing media
- [__________]

Vegetation/ Surfacing
- [__________]

Root barrier
- Required
- Not required