Green Roof Technology

Bringing Nature into the Built Environment

Traditional methods

Sedum

* Drought resistant – regulates water flow
* Provide nectar in June & July
* Can help to initiate a native wildflower habitat

Living Walls

Wild Flower Roofs

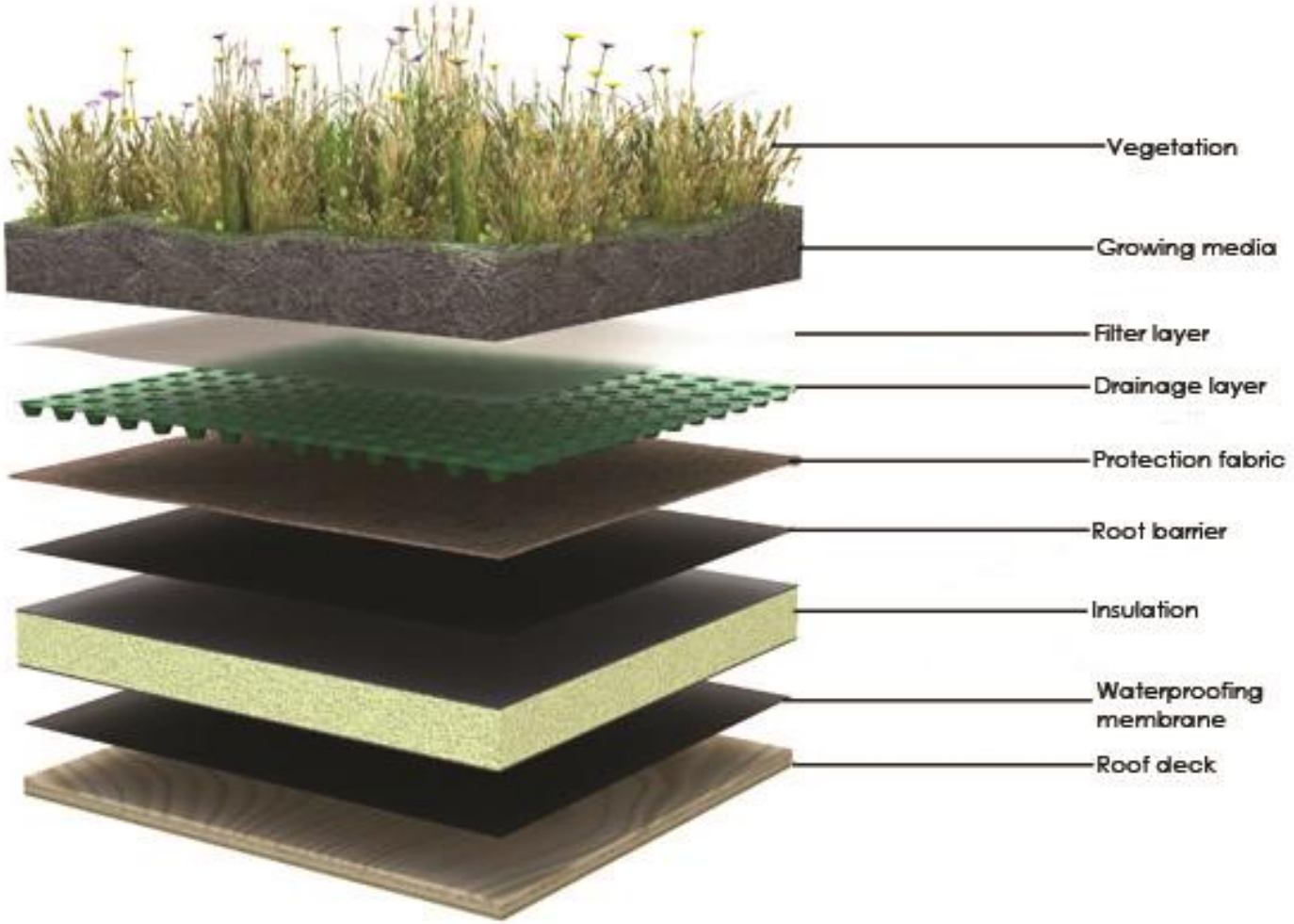
Wild Flower Roofs

* Providing habitat at roof level, especially within urban areas, can have significant benefits for wildlife, notably invertebrates and birds
* Bug Life supporting as best practice due to richness of nectar sources
* Appropriately designed biodiverse roofs can support Local, Regional and National BAP objectives, and contribute to mitigation plans.

Replacement Habitat

* Brown field sites provide a nutrient poor habitat mosaic important to rare invertebrate species
* Green roofs can closely replicate habitat and mitigate for brown field site loss
* Using local substrate supports local native species of flowering plants and their dependant animal species

Construction



Practical Application

* Integrated into the London Plan Policy
* Supported by key national policies and organisations
* Complements PV installations

Economic Value

* Provides ecosystem services
* Lower energy bills
* Lower water bills
* Lower maintenance bills
* Attracts attention – providing advertising and expression of the ethicality of a business
* Provides greater planning opportunities
* Between £60 -£140 per m^2

Sustainable Drainage

* Retention of water in the substrate reduces and slows run off
* Can help reduce flooding and local drainage issues
* Improving water quality through filtration providing high quality water for use in toilets, irrigation and cleaning

Improved building performance

* Increasing the life span of the roof by protecting it from frost, high temperatures, UV and mechanical damage
* Reducing energy consumption by reducing the need for heating and cooling through temperature stability
* Reduces noise impacts

Climate change

* Vegetation on a roof removes carbon from the atmosphere as part of photosynthesis and releases oxygen;
* Evapo-transpiration can reduce the urban heat island effect (caused by the absorption and re-radiation of heat from dense and dark building materials).

Amenity

* Roofs can provide areas for recreation and relaxation

* Roofs can be aesthetically pleasing therefore limiting opposition of local people to new builds
* Provides a tourist attraction

Smaller spaces

Larger Plans
Chicago City Hall

Canon Street Station London

Local projects

* Otter Brewery
* Salty Monk – created by themselves
* Darts Farm



Promotion

* Newspaper articles
* Speakers from experience and trade
* Inspire through a visual display
* Approach EDDC and planning
* Aim to influence commercial and new build projects