



# BREEAM – Ecology

Ecology – opportunities at this stage



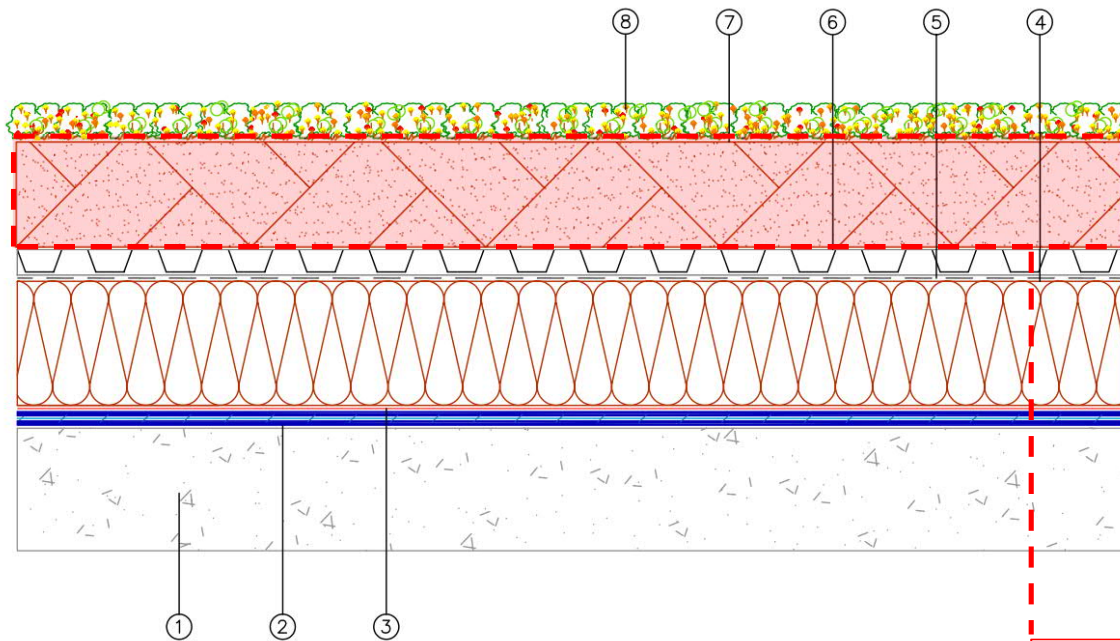
Established Sandy Heath Roof System (>5 years)  
Teufelssee, Berlin-Gruenwald (Germany)



Sandy Heath Roof System at Kings Cross (~2 years)  
Kings Cross B6 (3 Pancras Square)

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## Section Key

1. Concrete deck primed with PermaTEC Primer
2. 2 coats of PermaTEC ECOWRAP incorporating PermaFLASH-R reinforcement
3. Permatorch Anti-root
4. Dow SLX/SLA extruded polystyrene insulation board (or equal)
5. Dow M-K separating layer (or equal)
6. Plasfeed ND 5+1 drainage/moisture retention layer
7. IKO Growing Medium
8. IKO sedum blanket

Substrate depth can be as little as 50mm to be 'successful'.



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**Bauder example – brown roof with plug plants**

- Height of system typically 150-200mm
- Plant selection is bespoke to project and can accommodate variety of ‘plug plants’
- Similar system and plants used at 3 Pancras Square
- Dual ecology and surface water runoff benefits

Product	Thickness (mm)	Saturated Weight (Kg/m <sup>2</sup> )
Vegetation *	N/A	N/A
Bauder Extensive Substrate	100.0 (varies)	120.0
Bauder Filter Fleece	1.0	0.125
DSE40 Drainage Layer	40.0	15.3
Bauder FSM600 Protection Mat	4.0	0.6
Bauder PE Foil Separation Layer	0.2	0.190
<b>Totals</b>	<b>145.20</b>	<b>136.215</b>

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## Kings Cross B6 (3 Pancras Square) Sandy Heath Roof

- Admittedly at first glance not the most aesthetically pleasing finish, but this is still early in it's establishment.
- Considered a success by London Wildlife Trust in latest review report of Kings Cross roofs.
- Increase from 24 to 47 species of plant diversity between year 1 and year 2.
- Noted to be attracting a variety of invertebrates

## Lessons learned from KXB6

- Addition of stones/log piles to increase biodiversity
- Provision of water in shallow bowl/equivalent
- Artificial irrigation for prolonged dry periods (not essential)

