## **System summary**



# **Blue Roof Biodiverse System**

### BauderBLUE STORMsub green roof

The BauderBLUE STORMsub system combines a seeded or plug planted biodiverse (or brown roof) with the water retention and flow control of a blue roof. The open blue roof substrate (Bauder SUB-RE UK) and RE drainage board provides a large void ratio allowing good water storage. In addition the system benefits the vegetation as typically substrate depths are greater allowing deeper rooting.

The system uses 84% less plastic compared to the BauderBLUE STORMcell system and for low storage volumes can offer a thinner build up.

	Function	Product name	Thickness (mm)	Weight (kg/m²)
1	Vegetation Layer	Typically Bauder's range of native, seed and plug mixes are used in combination with other habitat features.	Thickness and weight vary with season	
2	Substrate	SUB-BM UK biodiverse substrate	Varies 100-150	120-180
3	Filtration layer	FV 300 filter fleece	2	0.6
4	Attenuation	BauderGREEN SUB-RE UK blue roof substrate (*depth varies with the water storage required)	100-300*	45-135
5	Drainage Board	RE 40 drainage and attenuation board	40	11.7
6	Protection Layer	FSM 600 protection mat	6	3.6
7	Underlying Waterproofing	Bauder's underlying waterproofing system	Not included	Not included
8	Flow Restrictor	ST flow restrictor and overflow	N/A	N/A
System build-up (saturated) Fully saturated excluding the water held in the SUB-RE UK substrate and RE board during a rain event and the underlying waterproofing			228-498	181-331

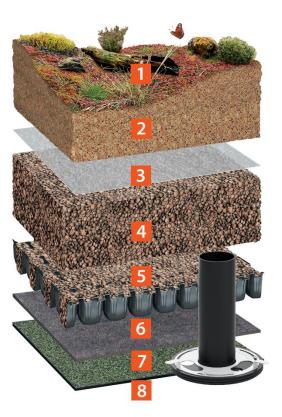
In-depth and up-to-date product specific technical data is available for each element within a system.

Download from our website bauder.co.uk/technical-centre

Please note: Blue roof require careful design, the underlying deck must be designed to zero falls with no back falls away from outlets as per BS6229

Please note: All green roofs require water during times of drought.

Indicative STORMsub blue roof system



## System summary



#### **Characteristics of the system**

- Primarily used when Biodiversity and habitat creation are the primary goals, such as for BREEAM or to comply with a local planning requirement.
- Environmentally friendly system using 84% less plastic than attenuation crates.
- Bauder RE 40 drainage board and ST flow restrictor are made from 100% recycled plastic.
- Provides an effective SuDS solution with good water holding capacity (over 55 l/m²) per 100mm layer of SUB-RE UK blue roof substrate. Typically, up to 300mm depth of substrate can be used.
- Fully integrated system that enables a single source for all waterproofing and green roof products
- The BauderBLUE STORMsub system can be used with other Bauder systems such as sedum and wildflower green roofs.
- System can be laid on the following Bauder waterproofing solutions: Bituminous Membrane, Hot Melt systems.
- Comprehensive system guarantee packages including waterproofing and blue roof performance to meet project requirements. Bauder's "Green Roof Promise" is available for this system.

### **Accreditations and approvals**









### **OPTIONS AVAILABLE**

Bauder supply detailed hard and soft landscaping solutions for blue roofs, see other system summaries on our website: https://www.bauder.co.uk/technical-centre/system-summaries/blue-roof-systems

In-depth and up-to-date product specific technical data is available for each component within a system. Download from our website bauder.co.uk/technical-centre

#### System fire performance

The system arrangements tested or classified without further testing that achieve standards for fire performance are defined and verified in the relevant BBA certificate. When using an Extensive green roof system compliance to Broof(t4) is met by either Bauder system testing or the guidance in the relevant BBA certificate and the DCLG document "Fire Performance of Green Roofs and Walls" (2013)."

Bauder continually tests its systems for fire performance and so if the permutation of products you are specifying is not stated in our latest BBA certificate please contact <u>technical@bauder.co.uk</u> for clarification.