## Technical data sheet



## BauderECO FF Flatboard Insulation

V3 30.10.2024

**Product description** 

BauderECO FF is a rigid foam thermoset Polyisocyanurate (PIR) board for the thermal insulation of flat roofs. The boards consist of a biomass balanced insulation core comprised of 80% biomass and renewable inorganic raw materials, recycled raw materials from milling/sawing (1%) and utilises calcium carbonate from crushed shell which is waste from the food industry, incorporated with a glass fleece for the facing on both sides. The insulation board has rebated edges to reduce the risk of thermal bridging at the board



Application fields

Thermal insulation for use within Bauder Total Roof System & Bauder Thermofol mechanically fixed warm roof system to provide efficient thermal insulation.

The insulation can be used on a variety of deck types and with a range of appropriate Bauder waterproofing systems. Can be adhered to the AVCL or mechanically fixed through to the deck.

Facing Crushed shell/glass fleece top:

bottom: Crushed shell/glass fleece

Board edge Rebated 15mm

**Article Number (Thickness)** 4891 0080 (80 mm) 4891 0125 (125 mm) 4891 0160 (160 mm)

| Characteristic                                                                                                               | Test method                | Unit  | Value                                                               |
|------------------------------------------------------------------------------------------------------------------------------|----------------------------|-------|---------------------------------------------------------------------|
| External dimension                                                                                                           | EN 822                     | mm    | 1200 length x 600 width (1185 x 585 with rebate)                    |
| Thickness*                                                                                                                   | EN 823                     | mm    | 80, 125, 160                                                        |
| Weight                                                                                                                       |                            | Kg/m³ | 30                                                                  |
| Reaction to fire                                                                                                             | EN 13501 - 1               | -     | E                                                                   |
| Compressive strength (with 10% compression)                                                                                  | EN 826                     | kPa   | ≥120                                                                |
|                                                                                                                              |                            | N/mm² | 0.12                                                                |
|                                                                                                                              |                            | Kg/m² | 12,000                                                              |
| Compressive strength (with 2% compression expected) (Figure to be used for permanently sited loads with adequate protection) | EN 1606                    | kPa   | ≥24                                                                 |
|                                                                                                                              |                            | N/mm² | 0.024                                                               |
|                                                                                                                              |                            | Kg/m² | 2,400                                                               |
| Thermal conductivity (λ <sub>D</sub> ) - (EU)                                                                                | EN 13165                   | W/mK  | λ <sub>D</sub> = 0,024: 80mm<br>λ <sub>D</sub> = 0,023: 125 & 160mm |
| Water absorption                                                                                                             | EN 12087                   | Vol%  | max. 3                                                              |
| PIR Index                                                                                                                    | -                          | -     | > 250                                                               |
| Dimensional Stability                                                                                                        | EN 13165: 2012+<br>A1:2015 |       | DS (70,90) 3<br>DS (-20,-) 2                                        |

<sup>\*</sup>These are the only thicknesses available and can be used in combinations of the three thicknesses to hit specific U Values. The insulation is a non-stock item, so please allow a minimum of 20 working days for delivery.

Safety Data Sheets are designed to provide the necessary information to recipients of substances and mixtures in the EU & UK. This product is classed as an article, therefore this product does not have a requirement for a Safety Data Sheet.



Notified body: FIW Munchen, 0751

EN 13165

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Storage/ Transport Thermal insulation has to be transported and stored protected from moisture, open flames and direct sunlight.

Product storage guidance All insulation boards must be kept dry, on pallets and off the ground. The packaging of Bauder Insulation products

should not be considered adequate for outside protection. Ideally boards should be stored inside a building. If outside storage cannot be avoided the boards should be stacked clear of the ground and covered with an opaque

polythene sheet or weatherproof tarpaulin.

Packaging material The product will be delivered on EPS skids or wooden pallets with polythene overwrap (30% re-cycled content) to

protect the product.

Handling/PPE All persons using the product should be fully aware of the manual handling methods as roofing materials are heavy

and can cause serious injury. When using the product, installers should be provided with, and wear, suitable personal protective equipment.

Shelf life When stored correctly, the product has no stated shelf life.

Disposal guidance Rigid polyurethane foam waste can be disposed of with household waste or commercial waste similar to

household waste (European waste catalogue EWC number 170604 "Insulation material").

Please refer to EPD stated below in Certification and environmental information. Re-use options of product

Further information/ documents Current documents such as brochures, installation guides, DoP's etc. can be found by visiting

www.bauder.co.uk

Certification and environmental information **Environmental Product Declaration** EPD-BAU-20220209-CBC1-EN

REDcert<sup>2</sup>

REDcert<sup>2</sup> sustainability certification - 3rd party auditing for a voluntary certification scheme for the use of sustainable materials in the chemical industry. This is for the chemicals used to make PIR insulation and the finished product itself.

REDcert<sup>2</sup>-904-39352401-P-0006

International Standards Organisation (ISO)

ISO 9001:2015 Quality Management

Certificates EN1271 (UK) and 70499/03-15\_e (Germany)

ISO 14001:2015 Environmental Management Certificates

A10552 (UK) and 70499/03-15\_d (Germany)

ISO 50001: 2011 Energy Management Certificate 70499/03-15\_c (Germany)

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specifications, installation techniques and any applicable laws and regulations.