



# BAUDER

# IMPROVE DRAINAGE FALLS

## CREATE COST EFFECTIVE FALLS ON A FLAT ROOF WITH TAPERED INSULATION.

Tapered insulation can be retrofitted as part of the waterproofing system during the refurbishment of a flat roof where drainage falls are insufficient. A tapered scheme is quick to install as the insulation upgrade and falls are applied in a single operation.

Bauder has a patent-pending tapered insulation system, with innovative ridge and valley infill formations that enable both simplistic designs and the creation of complex fall configurations without the need to modify the building structure, creating cost savings for your client.

### Key Benefits

- Incorporated within the warm roof construction of a refurbishment flat roof system.
- Suitable for use with bituminous membrane, single ply or cold applied waterproofing systems to suit the project requirements.
- Flexibility to create complex configurations with multi-directional falls.
- Creates 1:60 falls to comply with BS 6229:2018 Flat Roofs with Continuously Supported Flexible Roof Coverings.
- Granted B<sub>ROOF</sub> (t4) to TS1187 and BS EN 13501-5 when used in a Bauder warm roof system.
- Good compressive strength to resist physical damage.
- Foil-faced for improved thermal efficiency.

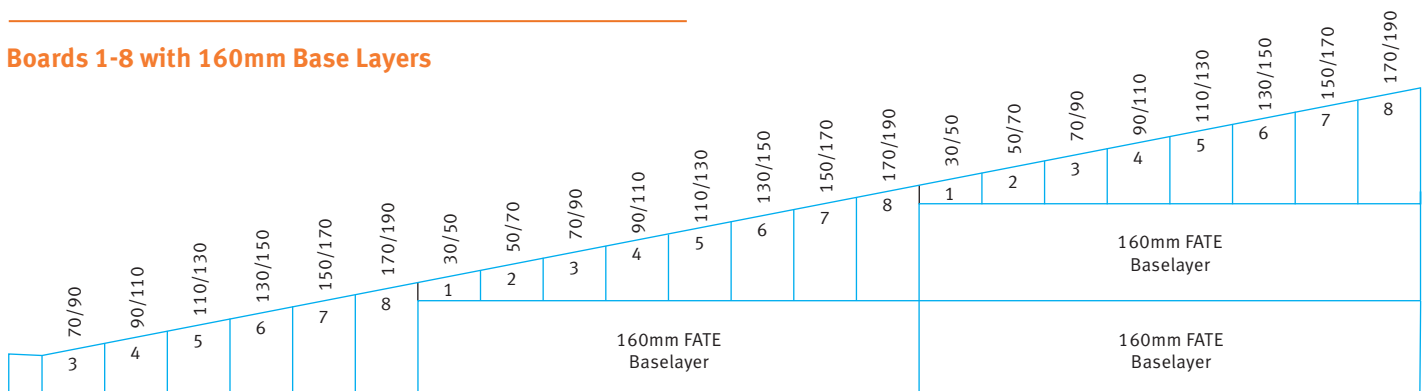
### Complying to the new British Standards Falls

The BS 6229:2018 update, effective from November 2018, considers it good practice for flat roofs to be designed to clear surface water as quickly as possible. It is also required in Building Regulations Part H that 'adequate provision is made for rainwater to be carried from the roof of the building'. According to BS 6229 & BS 8217, flat roofs should be designed with minimum falls of 1:40 to ensure a finished fall of 1:80 can be achieved. This applies to all roof areas including internal gutters and sumps.

### Thermal performance

The minimum U-value levels permitted at any point of a heated building is 0.35W/m<sup>2</sup>K, including the thinnest areas of a tapered roof and gutters. Insulated outlets are required to maintain thermal continuity at drainage points. All Bauder designed schemes take these factors into account to adhere to the BS 6229:2018 update.

### Boards 1-8 with 160mm Base Layers



## Bauder Tapered Insulation Design

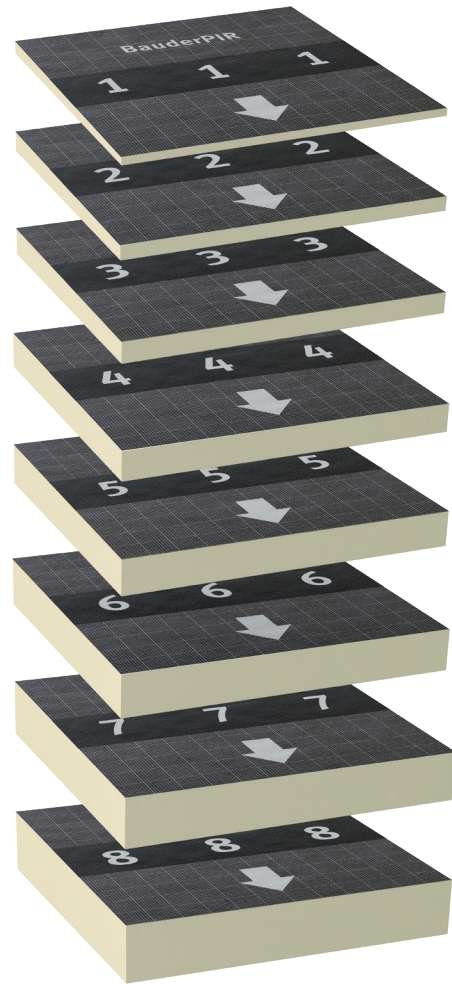
Every roof will require a bespoke layout according to location of outlets or the drainage system which will dictate the direction of falls, maximum heights, acceptable weight loading, U-value to be achieved and budget costs.

BauderPIR FA Tapered Insulation is faced on both sides with black aluminium foil which increases thermal efficiency. The boards are available in a variety of thickness from a 1-board up to an 8-board to achieve the desired pitch and thermal requirements for each project. Using only one layer of tapered board atop 160mm FATE base layer of insulation makes for an easier, quicker and more cost-effective method of applying a tapered scheme.

## How to specify a tapered scheme

As part of its refurbishment project package to surveyors, Bauder offers a tapered insulation design service with every scheme designed to match the needs of the project and meet building regulations - BS 6229:2018 for minimal thermal performance of the roof and thermal bridging resolution, BS 5250:2011+A1:2016 Code of Practice for Control of Condensation in Buildings and U-value calculations in accordance with BS 6946 Annex E (Calculation method) to confirm the thickness required and/or U value achieved.

To arrange a meeting with your Bauder area technical manager to discuss your flat roof project call Alex Body on 0845 271 8800.



## Fundamental tapered scheme layout

