

# JACKODUR®

*Over-rafter insulation.*



Installation instructions

**JACKON**  
by BEW/

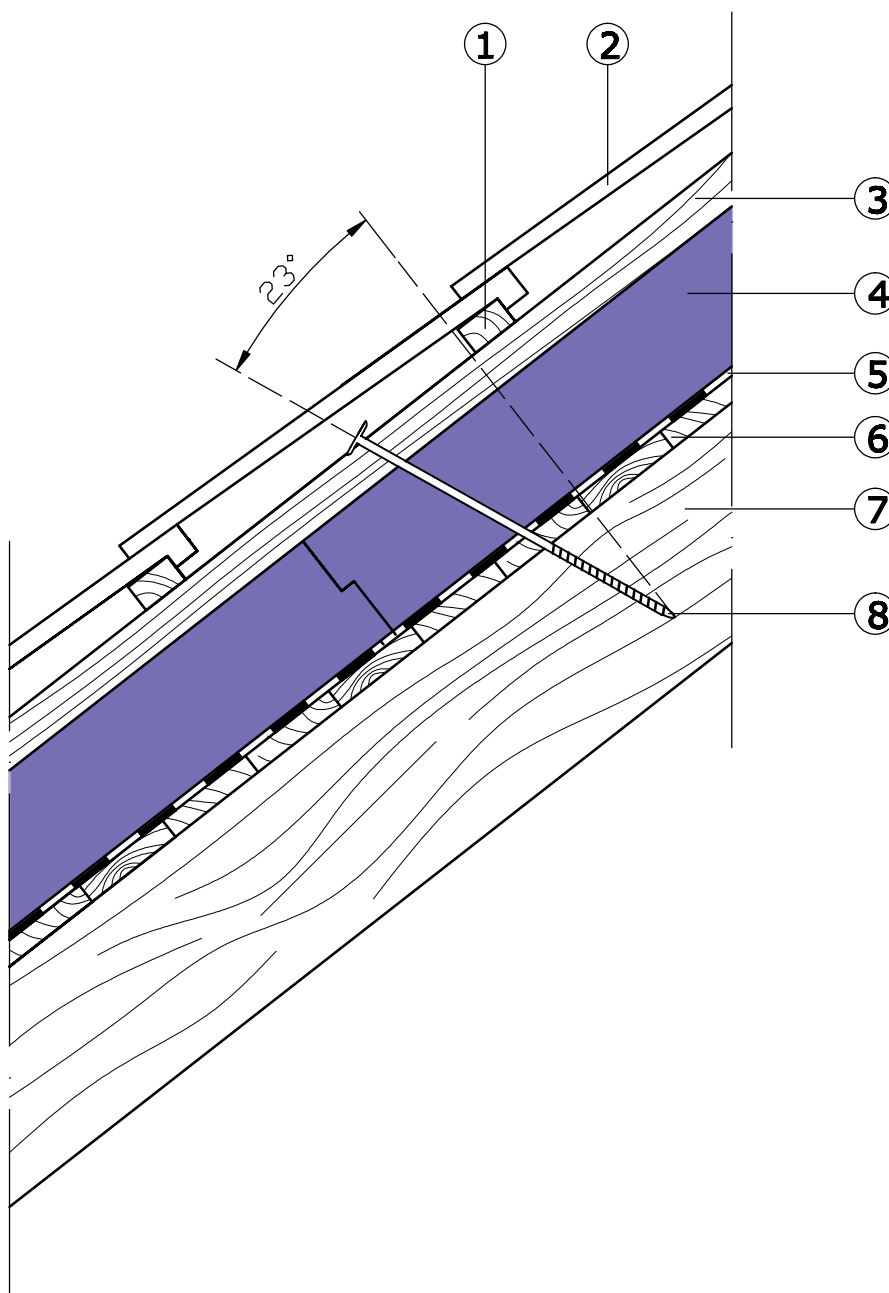
## General information

In contrast to thermal insulation laid between the rafters, in an over rafter system the thermal insulation boards are laid on boarding over the rafters. This has the advantage that considerable insulation layer thicknesses can be achieved

(over-rafter insulation plus full rafter insulation). The roof structure for this application is generally constructed as follows:

## Pitched roof structure

- ① Roof battens
- ② Roof covering
- ③ Counter battens
- ④ JACKODUR® thermal insulation
- ⑤ Diffusion open breather membrane
- ⑥ Wooden boarding
- ⑦ Rafters
- ⑧ Fixings (e.g. Bierbach fixing method)



## Wooden boarding

Full boarding made from tongue and groove boards or composite wooden boards is laid onto the rafters and mechanically fixed to the rafters. It acts as a load-bearing substrate for the next layers of the structure.

## Diffusion open breather membrane

The purpose of the diffusion open breather membrane is to create a rainproof layer underneath the insulation layer. It constitutes both windproofing and protection for the insulation beneath it.

## Thermal insulation layer

JACKODUR® thermal insulation boards used as over-rafter insulation meet the minimum requirements of DIN 4108-10 DAD. The insulation boards with shiplap or tongue and groove edges are laid across the whole of the boarding without adhesive. They are laid in a bond whereby the insulation boards are laid tightly against one another on a clean and level substrate. Imperfections and open joints can be filled with cut strips of insulation material or if appropriate with PU foam. The insulation boards must be protected from increased sun exposure so the roof covering should be installed in a short time.

Because very high temperatures can be expected under the roof covering in the summer, it is recommended to arrange squared timber at the verges to prevent the linear expansion of the insulation boards caused by the rise in temperature. The selected squared timber should be the thickness of the over-rafter insulation and be mechanically fixed to the substrate (e.g. with metal brackets).

## Counter battens and roof battens

The purpose of the counter battens is to fix the JACKODUR® insulation boards whilst allowing back ventilation of the roof covering. For the counter battens, timber battens measuring 40/80 mm for example are laid directly onto the JACKODUR® insulation boards parallel to the rafters. The loads from the roof covering and snow (roof shear) above the insulation must be transferred into the rafters via the counter battens. It is therefore extremely important for the counter battens to be fixed to professional standards. There are various fixing systems available for this purpose (e.g. Bierbach Befestigungstechnik GmbH & Co. KG) which will ensure a continuous transfer of the loads. Timber battens measuring 24/48 mm can be used for the roof battens. These must be arranged at right angles to the counter battens and mechanically fixed to them.

## Roof covering

Generally, roof tiles according to DIN 456 or DIN 1115 are used as the roof covering. These must be fixed to the roof battens to a professional standard.

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