



# I-BEAM ROOF CASSETTE

## TECHNICAL SPECIFICATIONS

The Ideal choice for Passivhaus projects, this panel offers exceptional levels of insulation and air-tightness. 300m of mineral wool is packed tightly between the structural I-beam members of the frame creating an exceptionally well insulated roof panel achieving U-values as low as 0.08W/m<sup>2</sup>K and capable of easily achieving Passivhaus standard. The density and vapour open properties of the mineral wool insulation help control indoor temperatures and significantly reduce the likely hood of summer overheating. The slender web of the I beam significantly reduces repeating thermal bridge that can be further reduced by adding an insulated batten layer to the internal face and a wood fibre board to the external face. This panel comes with an intelligent VCL creating a breathable external roof structure that allows vapour to safely pass through the roof panel to the exterior further enhancing indoor comfort. The panel is supplied in lengths up to 9m. Panel junctions on this panel allow for taping enabling you to easily achieve air-tightness levels required for Passivhaus construction. Homes built using this system benefit from minimal heating costs, have a comfortable internal environment and are quick to build. I-Beam roof panels are suitable for over I-beam & timber frame as well as most other methods of construction. Most new home structural packages can be installed on site within a week.

### BENEFITS

- **Exceptional thermal efficiency**
- **Low thermal bridge**
- **Quality engineered construction**
- **Enhanced indoor comfort.**
- **Excellent air tightness**
- **Panel junctions allowing taping.**
- **Quick installation**
- **Factory fit insulation**
- **U-values from 0.120 to 0.080 W/m<sup>2</sup>K**
- **Factory fit service battens**
- **Minimise on site waste**
- **Manufactured in the UK**
- **Recyclable**