# HADLEY UltraZED<sup>™</sup>2 Roof Purlin Systems

## Non-continuous (butted) system

This system is ideal for short spans, typically cost-effective for spans under 5 metres, or for roof designs that prevent continuous purlin lines. It can be installed between rafters and allows various section depths to be used across the roof area.

### Double spanning butt-jointed system

This configuration features purlins in double spanning lengths up to 16 metres (8 metre bays). Sleeve connections are required at alternate joints on the penultimate rafter to ensure continuity of these otherwise single spanning members.

This design minimises the use of sleeves, reduces the number of components, and enhances deflection performance, resulting in potential cost savings compared to other systems.



### **Sleeved system**

Purlins can be either single or double spanning. Using single spanning purlins provides a solution with part lengths kept to a minimum, and uses sleeves at every joint along the penultimate rafter and then staggered at every other joint. For double spanning applications, the double spanning butt-jointed system is likely to provide a more optimised solution.

# Heavy End Bay sleeved systems - single and double spanning

#### HEB - Single span system

Adding sleeves at every joint makes the roof purlins continuous, substantially increasing both load bearing capacity and deflection performance. The end bays utilise longer connecting sleeves and heavier gauge materials providing the greatest performance in these high wind pressure zones - this is the basis for the system's name. To realise the benefit of the HEB system, a minimum of five bays is required.



#### HEB - Double span system

This system optimises the performance of the secondary steelwork while reducing the number of components. Sleeves are included at every joint, but the double spanning configuration effectively halves the number of sleeves needed compared to the single span system.

