

CASE STUDY

Suffolk Design Carrowbreck Meadow, Norwich

Location: Greater Norwich

No. of units: 14 Passivhaus Homes, 43% affordable

Architect: Hamson Barron Smith

Developer: Broadland Growth

<http://passthrough.eastsuffolk.gov.uk/download/189158/http://broadlandgrowth.co.uk/wp/wp-content/uploads/2016/05/brochure.pdf>

BACKGROUND

Carrowbreck Meadow, a low-density settlement of Passivhaus certified homes with an over-provision of affordable homes which have been thoughtfully grouped so the development sits comfortably in its idyllic woodland setting. The positioning and orientation of the homes maximises the access to solar gain in winter and prevents over heating in summer.

The development that was commissioned by Norfolk County Council aimed to promote the Passivhaus standard.



KEY LEARNINGS

- The design response at Carrowbreck Meadow is a contemporary rendition of a well-established and local typology, a 'Norfolk style' – defined by a number of references to the historic barn vernacular seen throughout the county.
- Position and orientation of housing for maximum passive solar gain.
- To ensure the development was environmentally friendly a system, Porotherm blocks, were used rather than standard building materials such as concrete and timber. The blocks use around 95% less water than traditional blockwork, with 30% of materials from alternative, recycled or secondary sources or that can be recycled at end-of-life. For example, the roof is filled with brown recycled paper.
- Material pallet of white render, black stained timber cladding & slate/plain red roof tiles reflects materials used in adjacent Carrowbreck House