



# Technical Guidance

## Ventilation of small roofs

### Question

Do all insulated roof voids, including small roof voids to porches and bay windows, need to be ventilated?

### Considerations

- Ventilation is required to cold roof voids to disperse water vapour and reduce the risk of condensation within the structure.
- Providing cross-ventilation to small roofs can be difficult and unsightly.
- NHBC Standards clauses 7.2 - D11(a) and 7.2 - S11(a) state the ventilation requirements for cold pitched roofs.
- NHBC Standards clause 7.1 - S8 and 7.2 - D11(c) states the ventilation requirements for cold flat roofs.
- Approved Document C (England and Wales), Technical Handbook - Domestic 3 (Scotland) and Building Regulations Part C (Northern Ireland) refer to ventilation of cold roof spaces.
- BS 5250 "Code of practice for the control of condensation in buildings" gives recommendations for ventilation of roof spaces and methods for calculating the risk of interstitial condensation within roof structures.

### Answer

Cross-ventilation should normally be provided for insulated cold pitched roofs. However, where the roof area is very small (3m<sup>2</sup> or less) ventilation need not be provided.

Cross-ventilation should be provided for all insulated cold deck flat roofs, regardless of size.

Alternative roof designs, e.g. warm roofs or unventilated cold pitched roofs, using a vapour permeable underlay, may be preferable for small roofs.