



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 (3m² 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.