

Permeable Roof Tile Underlay – Guide to Good Site Practice

All Agrément Certificates for permeable roof tile underlays for use in warm, cold, and cold non-ventilated pitched roof systems, include the following statement:

‘The product resists penetration of liquid water and consequently may be used as temporary waterproofing prior to the installation of slates or tiles. The period of such use should, however, be kept to a minimum’.

It should be noted that the main function of a roof tile underlay is to provide a secondary barrier to the roof covering (tile or slate), and prevent the ingress of wind-driven rain, snow and dust into the roof space and reduce the wind uplift forces acting on the slates/tiles. In addition, the underlay can be used to provide temporary weather protection; however, an exposed underlay will be subjected to UV light which may lead to premature failure; therefore, the exposure period should be kept to a minimum. An underlay is not a total waterproof barrier and if used as a temporary waterproof covering, some rain penetration may occur. In certain conditions, particularly if there is persistent heavy rainfall combined with subsequent severe freeze/thaw conditions, an underlay should not be exposed for more than a few days.

An underlay can be installed either draped or taut. It is good practice to use clout nails to avoid water tracking through nail holes. When installed as an unsupported system, it must be fixed in the traditional method for roof tile underlays, ie draped by 10 mm to 15 mm between the rafters to allow drainage of liquid water under the tiling battens. To reduce the risk of noise created in the roof, where possible, overlaps in the roof tile underlay should be extended to coincide with tiling battens. When laid taut, the underlay must be used in conjunction with counter battens, minimum 10 mm thick, fixed to the rafters to assist drainage. Where batten space ventilation is also required, ie with tight fitting roof coverings, the counter batten should be a minimum 25 mm thick.

Certain timber preservatives can adversely affect some underlays. If treated timber or preservatives are used, they should be allowed to dry out before the tiling and slating battens are installed. The manufacturers of the preservative materials and the roof tile underlay should be consulted to ensure compatibility.

To avoid unnecessary damage to the underlay, care must be taken where high winds persist.

Moisture-sensitive internal materials and/or finishes should not be installed until the external roof covering has been completed.