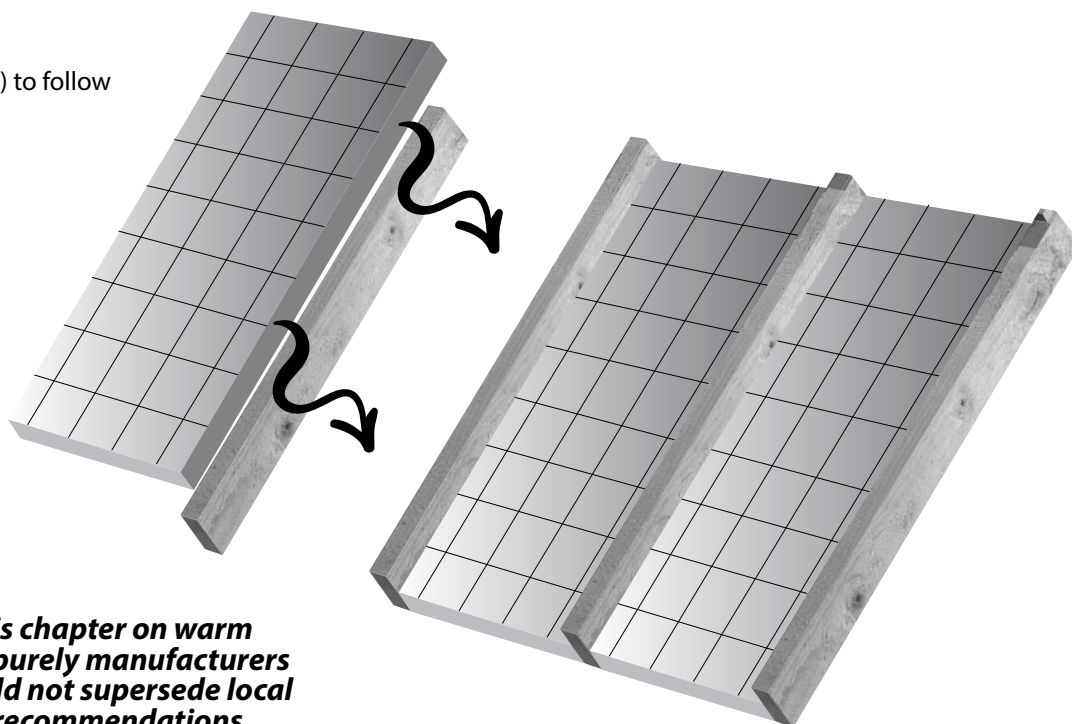


– Warm & Cold Roof Structures –

Warm Roof Installation

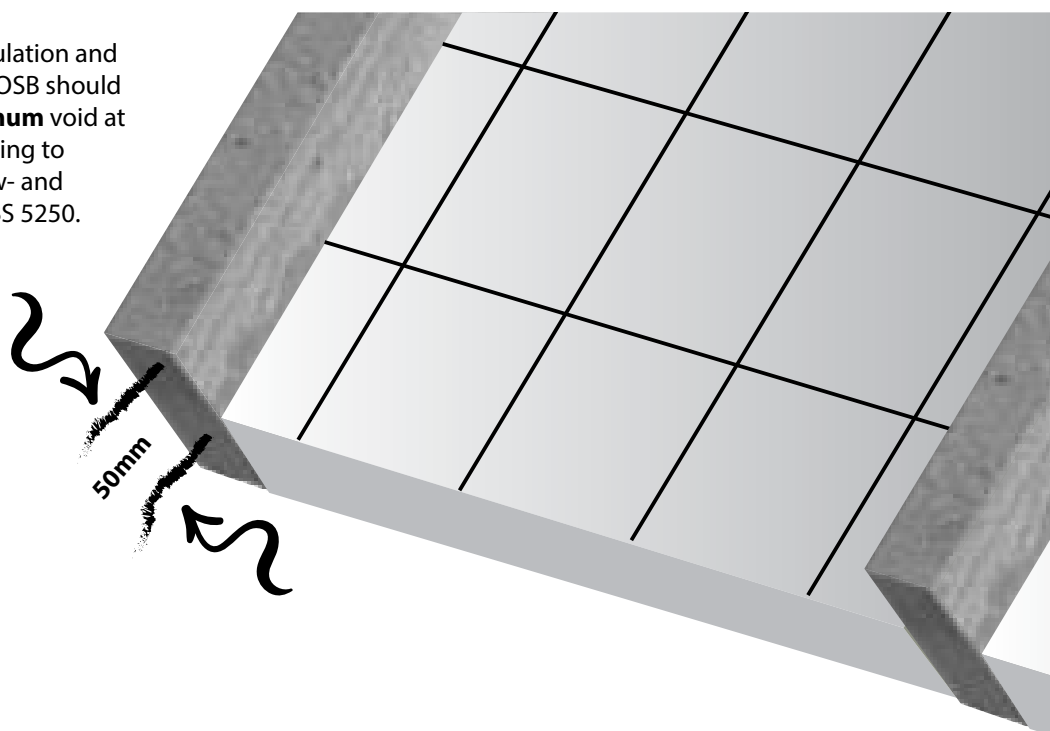
When installing TapcoSlate Classic onto either battens or directly onto OSB a **vapour impermeable (type HR)** roof membrane/underlay should be used. Insulation should follow the line of rafters, with a 50mm deep void between the top of the insulation and the underside of the underlay/OSB. This void to be ventilated in accordance with BS 5250. An air and vapour control barrier membrane to the warm side of the insulation must also be installed, we recommend the *Protect VC Foil Ultra* – low emissivity air and vapour control layer product.

Insulation (usually PIR) to follow the line of the rafters.



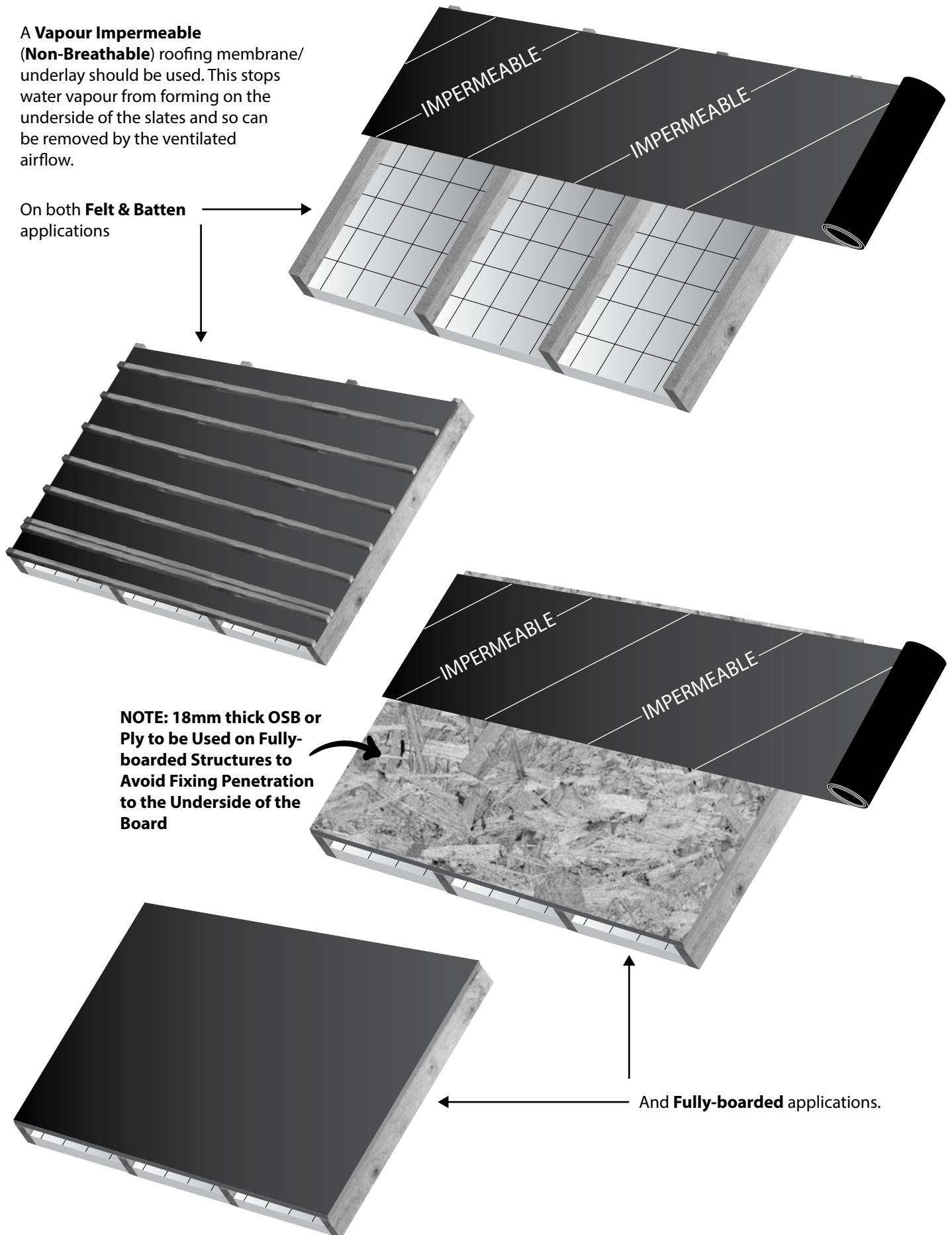
Please note that this chapter on warm roof installation is purely manufacturers guidance and should not supersede local building authority recommendations.

A **50mm** void between the insulation and the underside of the underlay/OSB should be maintained (a **25mm minimum** void at the **drape** of the underlay if fitting to felt & battens), ventilated at low- and high-level in accordance with BS 5250.



A **Vapour Impermeable (Non-Breathable)** roofing membrane/ underlay should be used. This stops water vapour from forming on the underside of the slates and so can be removed by the ventilated airflow.

On both **Felt & Batten** applications

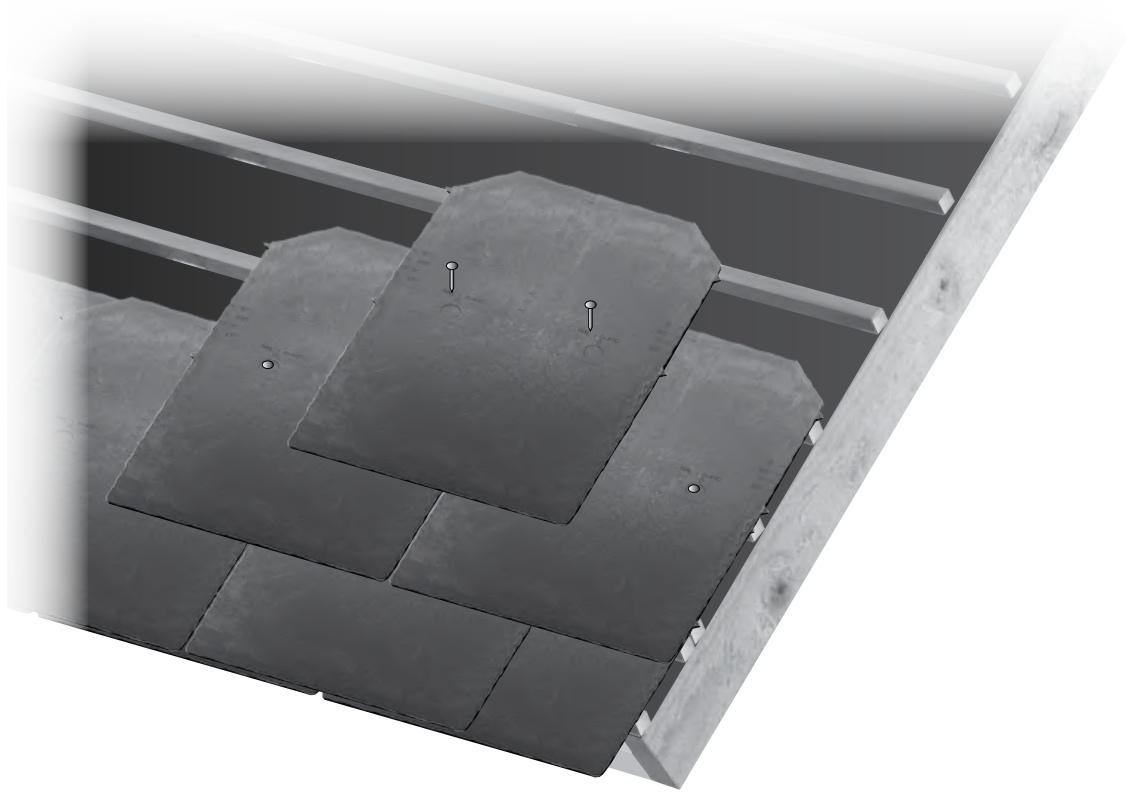


NOTE: 18mm thick OSB or Ply to be Used on Fully-boarded Structures to Avoid Fixing Penetration to the Underside of the Board

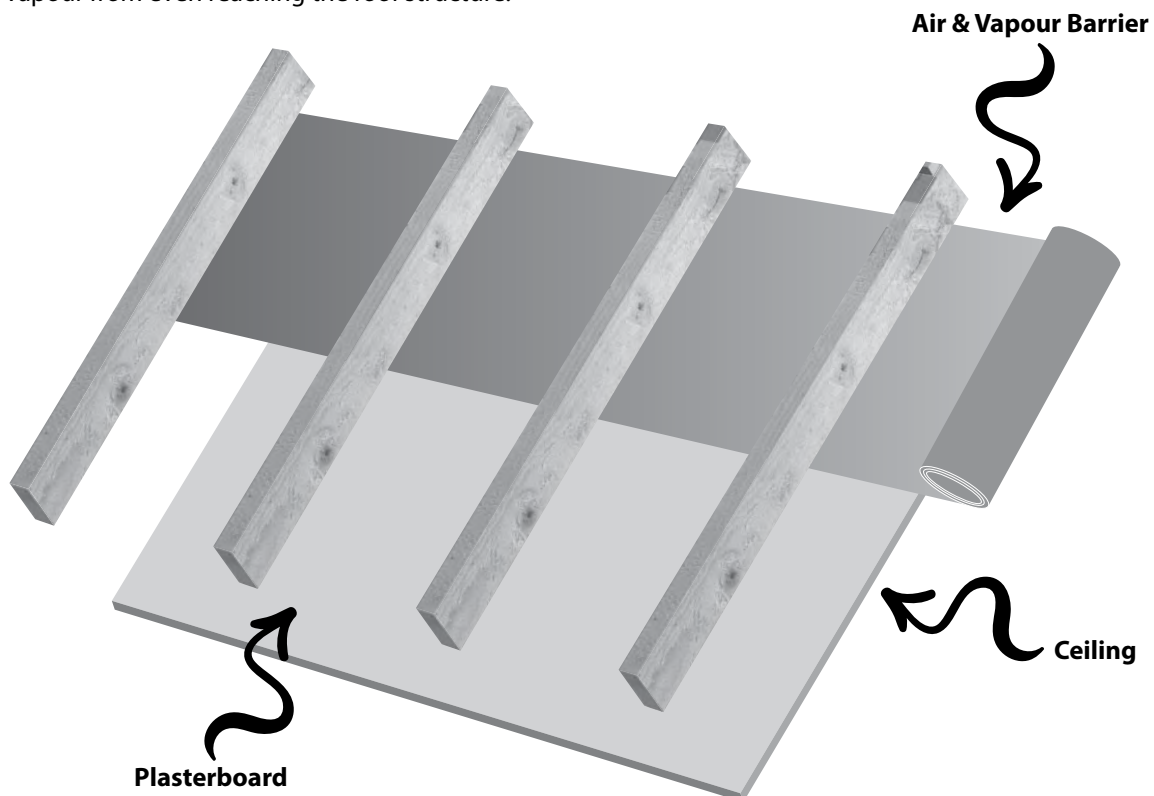
And **Fully-boarded** applications.

TapcoSlate Classic can then be fitted **directly** to board or battens if using an **impermeable** roofing membrane.

Use the pre-formed fixing holes, spacers at each side of the slates and slate exposure guides for layout in broken-bond. Remember to use a starter or eaves course to begin slate courses.



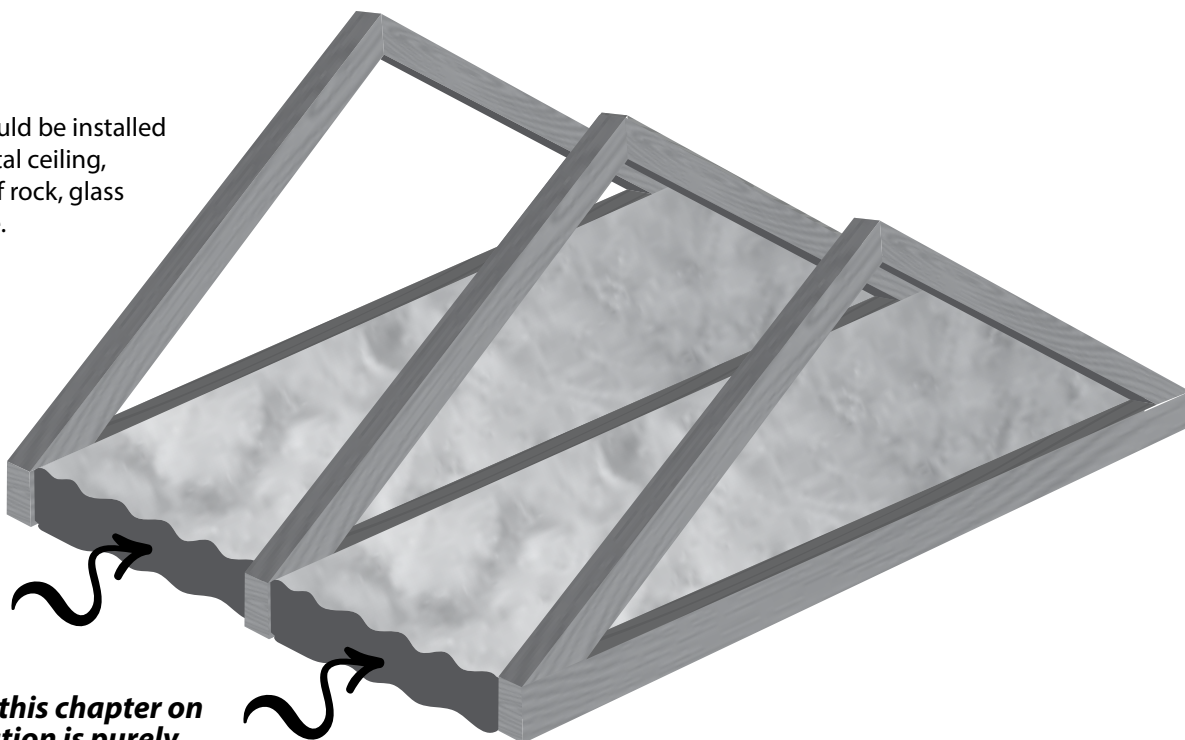
An **Air & Vapour Control Barrier** membrane to the warm side of the insulation (underneath the ceiling plasterboard) **must** be installed. This helps to prevent water vapour from even reaching the roof structure.



Cold Roof Installation

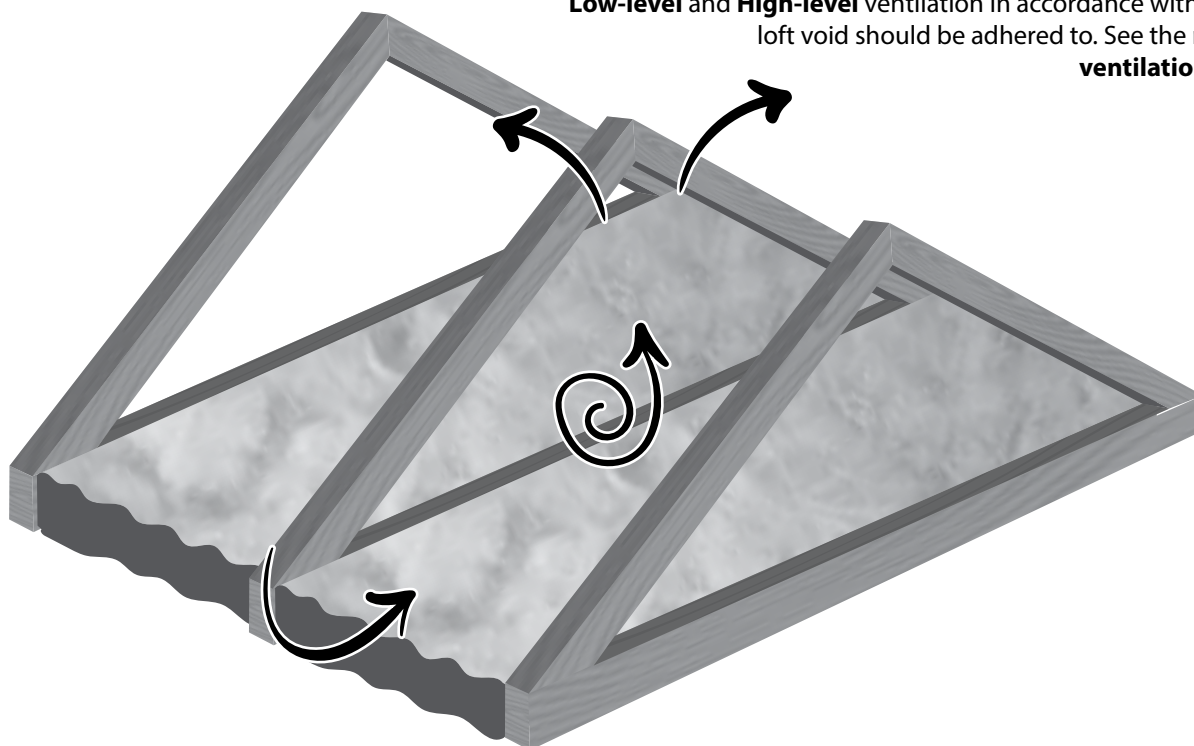
When installing TapcoSlate Classic onto either battens or OSB a **vapour impermeable (type HR)** roof membrane/underlay should be used. When installing directly onto OSB, ventilation in accordance with BS 5250 to the loft void should be adhered to. Insulation should be installed on the horizontal ceiling below. To further enhance this construction, improving thermal performance of all insulation by reducing convection flow and help to avoid interstitial condensation risk within insulation in accordance with BS 5250, we would recommend installing an air barrier on the warm side of the insulation, a suitable product would be *Protect BarriAir* – an air barrier membrane with some vapour control properties.

Insulation should be installed on the horizontal ceiling, typically rolls of rock, glass or mineral fibre.



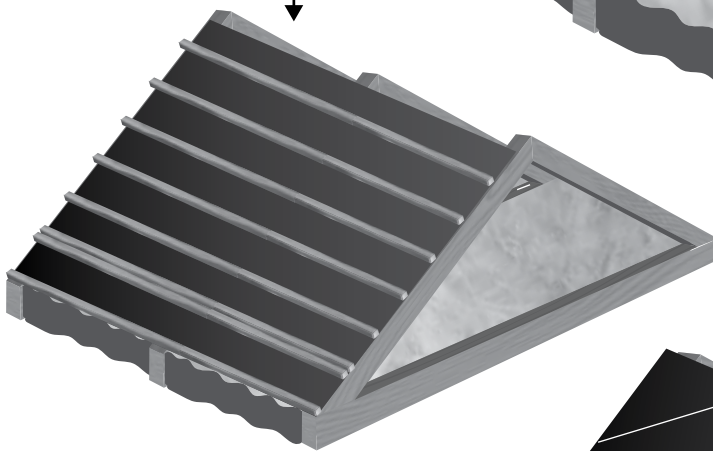
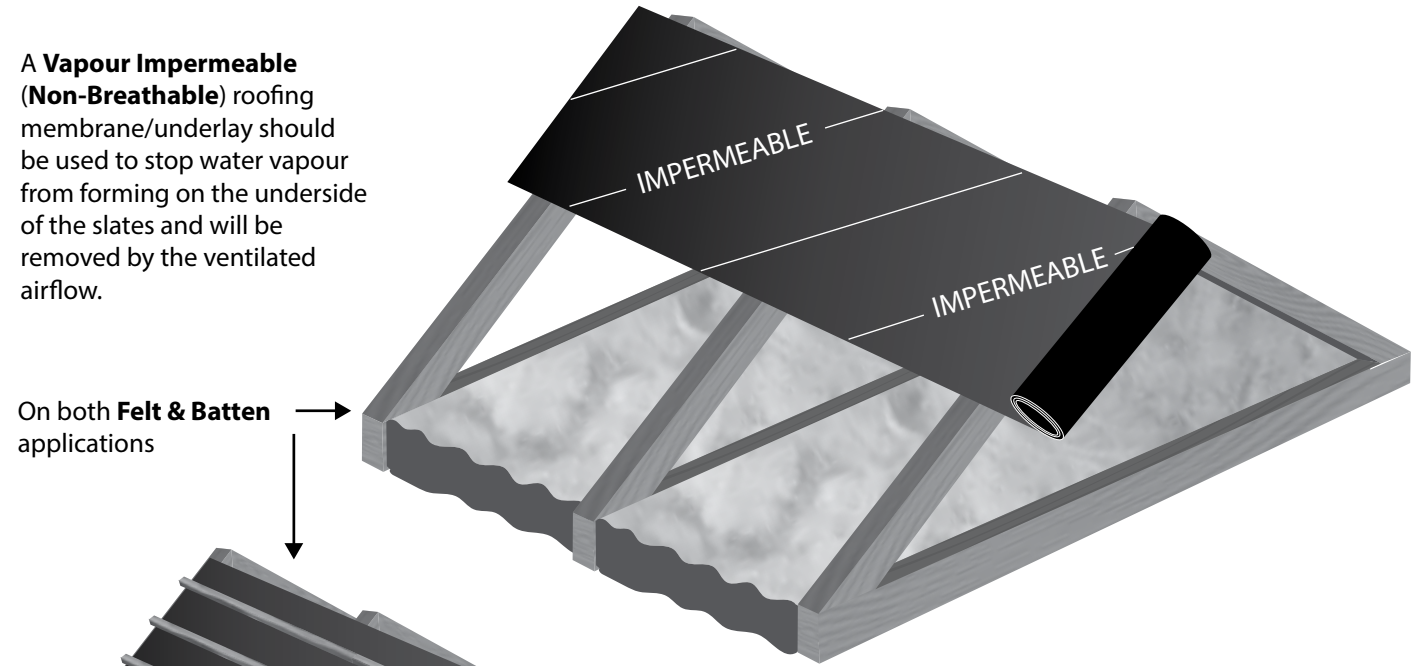
Please note that this chapter on cold roof installation is purely manufacturers guidance and should not supersede local building authority recommendations.

Low-level and **High-level** ventilation in accordance with **BS 5250** to the loft void should be adhered to. See the next Section on **ventilation** for guidelines.

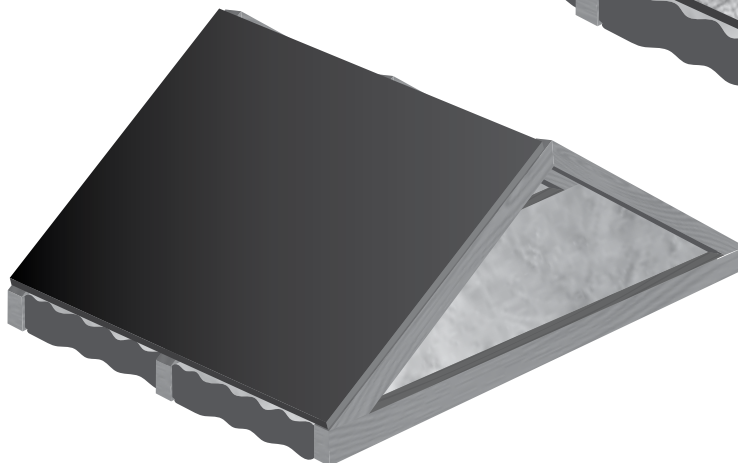
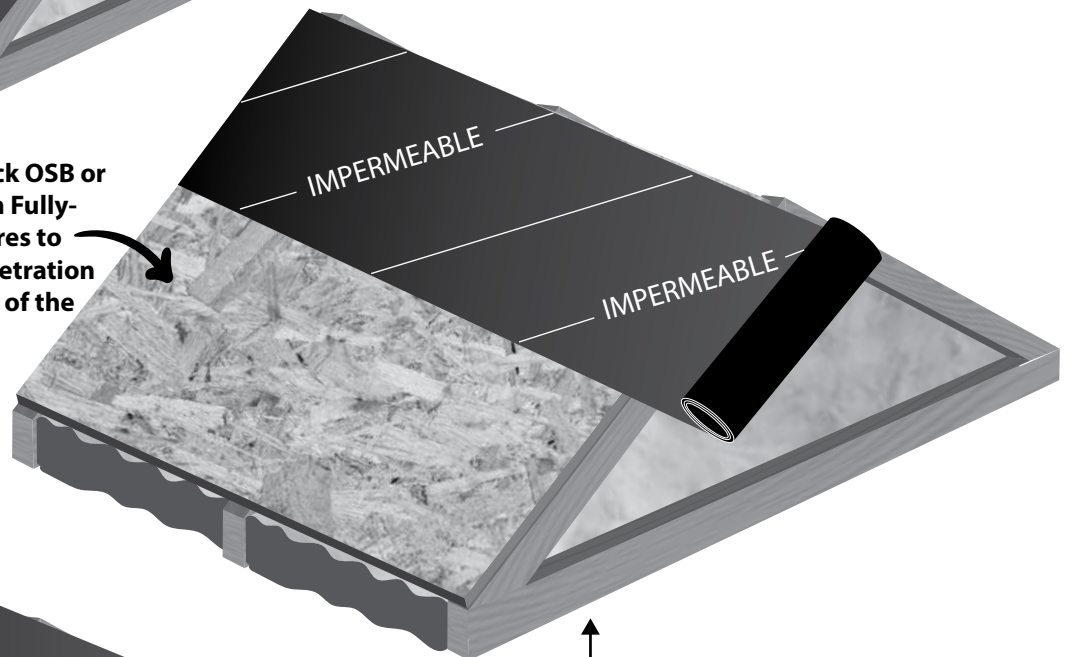


A **Vapour Impermeable (Non-Breathable)** roofing membrane/underlay should be used to stop water vapour from forming on the underside of the slates and will be removed by the ventilated airflow.

On both **Felt & Batten** applications



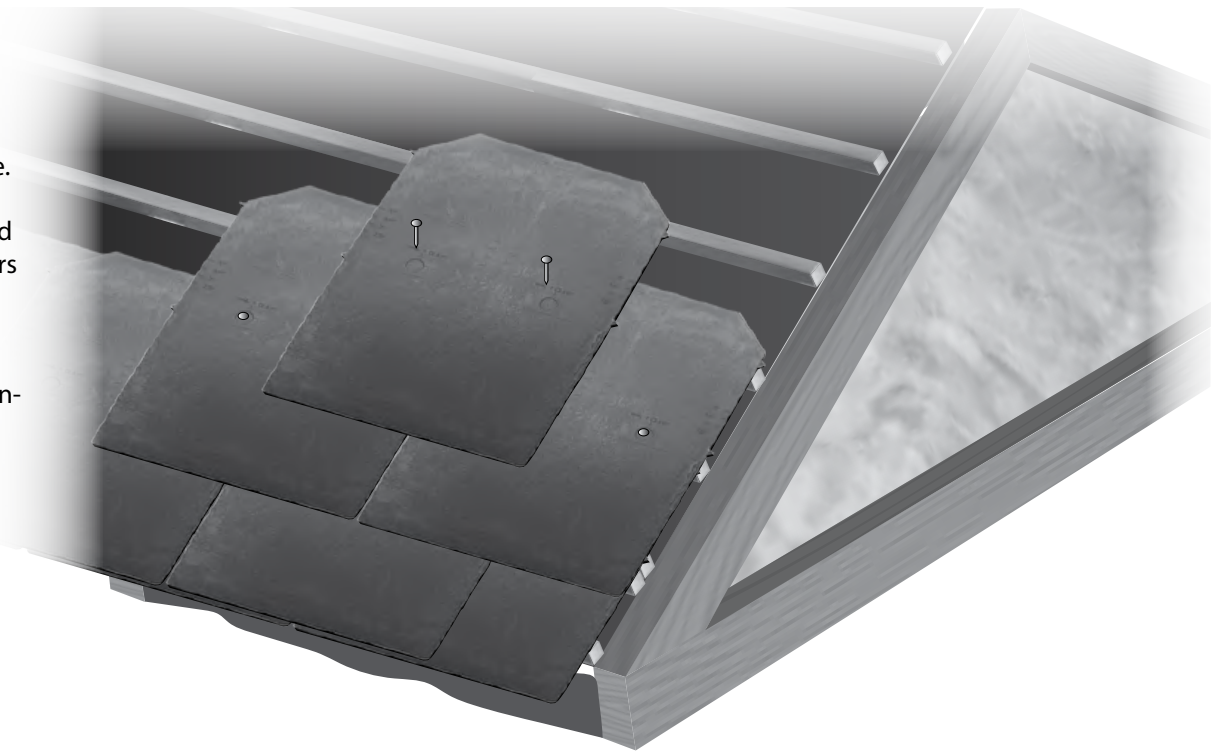
NOTE: 18mm thick OSB or Ply to be Used on Fully-boarded Structures to Avoid Fixing Penetration to the Underside of the Board



And **Fully-boarded** applications.

TapcoSlate Classic can then be fitted **directly** to board or battens if using an **impermeable** roofing membrane.

Use the pre-formed fixing holes, spacers at each side of the slates and slate exposure guides for layout in broken-bond. Remember to use a starter or eaves course to begin slate courses.



To improve thermal performance of the insulation, an **Air Barrier Membrane** fitted to the **warm side** of the insulation (underneath the ceiling plasterboard) is recommended.

