

OSB User Guide

ROOFING & WALL SHEATHING

General

OSB - Oriented Strand Board is a structural panel for wider ranging roofing & wall sheathing solutions. OSB 3 and OSB 4 provide a cost-effective and certified solution for roof decking, sarking and flat roofing applications. OSB 3 is an engineered wood product that can satisfy the same applications in loading and structural conditions as plywood. Precisely engineered strands of wood are compressed with exterior resins at high temperature. The result is a wood panel that achieves a reliable distribution of strength, stiffness and spanning capacity across the board. Its moisture resistance makes it suitable for interior / humid conditions.



Fit for Purpose

OSB 3 is incredibly tough. It is free from knot holes and core voids, can be easily cut, routed, planed and bored with consistent results. It can be glued with wood adhesives and nailed up to 10mm from the edge without splitting - making it easy to work with and reducing waste.

OSB 3 is a conditioned panel product with a minimum moisture content of 5% to limit expansion and contraction in use. It is however recommended that boards should be conditioned on-site for at least 48 hours to ensure a moisture content close to operating conditions. Please ensure that the OSB 3 material used complies with the necessary building standards.

ROOFING

FIXING

18mm square-edge or T&G OSB 3 panels are recommended for roofing applications.

Recommended support of OSB 3 in flat / pitch roof construction: Maximum joist / rafter spacing = 610mm.

Provision should be made for possible expansion by allowing for a gap at the rate of 2mm per metre run. A perimeter gap of minimum 10mm should be incorporated. In addition, for square-edged boards, a gap of 3mm should be left around the perimeter of each board. Boards should ideally be fixed directly to the supporting structure by nailing at 100mm centres. Length of nails should be at least 2.5 x the board thickness.

Follow the guidance in Eurocode 5 or consult a structural engineer for more detailed specification.



WALL SHEATHING

FABRICATION

square-edge OSB 3 panels are recommended for wall sheathing applications. OSB 3 has a high structural racking strength - ensuring stability in transport and erection and the inherent strength required in the completed timber frame structure. Possible expansion should be allowed for by providing a 3mm gap between adjacent panels and between the panel and any abutment. This gap should not be less than 10mm wide. Longer walls may need a wider gap and intermediate expansion gaps in addition to the 3mm gap required between each panel. It is highly recommended that users consult a technical engineer for more detailed specification.

9mm



STORAGE AND HANDLING

See respective user guide