

TL-0012 — Use on Oriented Strand Board (OSB) Roof Sheathing Technical Letter

Oriented Strand Board (OSB) has become a common material used as structural roof sheathing. OSB is a structural panel made of wood strands sliced in the long direction and bonded together with a binder under heat and pressure. The product is manufactured with a textured surface for use in roofing applications to improve surface traction and a wax is added to the binder formulation to enhance the moisture resistance.

GCP's underlayments (GRACE ICE & WATER SHIELD®, GRACE ICE & WATER SHIELD® HT, GRACE ULTRA™, GRACE SELECT™, GCP granular underlayment, Roof Detail Membrane™, TRI-FLEX® and TRI-FLEX® 15) are recommended for use over OSB substrates. However, in some instances the ability of the self-adhered membranes to adhere to the substrate may be compromised by the level of surface texture, the amount of wax added to the panel, and job site wind conditions.

In applications where membrane adhesion to the OSB is found to be marginal, or windy conditions are likely prior to covering with the exposed roofing materials, nail off the perimeter of the membrane with roofing or cap nails at intervals of 12 inches (300 mm) on center. If moderate or high wind conditions are likely, additional nailing in the field of the sheet may be necessary. Staples should not be used in place of nails.

As an alternative to using nails, apply PERM-A-BARRIER® WB Primer to the roof deck at a coverage rate of 250–350 ft²/gal (6–8 m²/L). PERM-A-BARRIER® WB Primer and the surface of GCP's underlayments are slippery when wet. Allow the PERM-A-BARRIER® WB Primer to dry thoroughly before walking on the OSB surface. Cover the membrane with the exposed roofing material as soon as possible.

The long-term adhesion of GCP's self-adhered underlayments to the textured surface of OSB is excellent and membrane performance is not affected.

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