



Technical Bulletin

No. 2301

Application of SA-Modified Bitumen Membranes to Wood Decks

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The following are Mule-Hide's recommendations and requirements for attachment of Self-Adhering Modified Bitumen (SA Mod Bit) membranes to various wood deck types:

A. Wood Plank Decks

1. Mule-Hide does not approve the direct adhesion of SA Mod Bit membrane direct to a wood plank substrate.
2. Mule-Hide requires the installation of an approved rigid insulation or cover board prior to the installation of any SA Mod Bit membrane. Attachment of the insulation or cover board must be by mechanical attachment with types and quantities of fasteners and plates positioned as required by local code or project requirements.
3. Attachment of insulation using Helix Max Low-Rise Adhesive requires that an approved base sheet be mechanically fastened in place, with the insulation adhered to the base sheet.

B. Plywood and OSB Decks

1. Acceptable plywood decks shall be a minimum CDX, APA Rated Exterior grade (minimum of 15/32" thick).
2. Acceptable Oriented Strand Board (OSB) shall be an APA Rated Exterior Rated (Grade) (Minimum of 7/16" thick). OSB sheathing must always be installed with the rough side of the board facing up. If the smooth side is facing up, Mule-Hide Nail Base or insulation must be mechanically attached. Direct adhesion to the smooth face of the OSB is not approved.
3. Mule-Hide recommends a layer of Mule-Hide Nail Base to be mechanically attached prior to the installation of the SA Mod Bit membrane over Plywood or OSB decks.
4. The installation of insulation, cover board, or Mule-Hide Nail Base is required if a system warranty is requested. Direct application is not approved.
5. In a non-warranted or material only warranty installation, adhering directly to the plywood or OSB deck is acceptable if the decking is secured with screws or back-out resistant fasteners. Priming of the deck with Mule-Hide 121 Asphalt Primer or an equivalent ASTM D41 primer is required on re-roof applications and recommended on new construction.
6. Decks attached with common or cement coated nails or staples are required to be covered with an approved insulation or cover board. Check with local building code requirements as adhering an SA Mod Bit membrane direct to a wood deck may not meet local fire codes.

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7. Attachment of insulation using Helix Max Low-Rise Adhesive requires that an approved base sheet be mechanically fastened in place, with the insulation adhered to the base sheet.
8. APA Rated Exterior (Grade) Plywood and OSB with an under-side radiant barrier may create a double vapor barrier in direct to deck membrane applications. This type of sheathing has been seen to create an enhanced risk of buckling of the underlayment and entrapment of moisture, possibly leading to sheathing degradation. Mechanically attaching the Mule-Hide Nail Base sheet (or equivalent) to the deck sheathing is strongly recommended.
9. It is the contractor's sole responsibility to ensure the plywood or OSB deck is structurally sound and in acceptable condition to receive the SA Mod Bit roof system. Deficiencies in the wood deck must be corrected by the contractor prior to installing the mod bit membranes.
10. In direct application installations, non-supported gaps in wood decking and sheathing laps may adversely affect product performance or result in wrinkles in the adhered membranes. Potential solutions to addressing gaps include the application of a bond-breaker over the joints, installing blocking under the open joints, installing insulation, or Mule-Hide Nail Base over the substrate.
11. Not all substrates may qualify for manufacturer's warranties or may be subject to certain limitations or exclusions.
12. All surfaces to receive SA Mod Bit membranes are to be clean, dry, and free of any contaminants that could adversely affect adhesion of the membrane.

For any questions or clarifications related to these requirements, please contact the Mule-Hide Technical Department.