

WESTWOOD TECHNICAL GUIDELINES

SBS-MODIFIED BITUMEN ROOFING INSTALLATION GUIDE

GENERAL

This guide provides installation requirements and recommended practices for WestWood WePly SBS-modified bitumen roofing membranes used in conventional roofing assemblies and hybrid SBS/PMMA systems.

Refer to the applicable WestWood Product Data Sheets for product-specific information, including membrane characteristics, classifications, and limitations. All installations shall comply with approved project specifications and applicable WestWood technical requirements.

PRE-INSTALLATION REQUIREMENTS

Before beginning installation, verify that substrates and environmental conditions are suitable for the specified WePly membrane and application method.

Substrates must be clean, dry, structurally sound, and free of dust, debris, loose materials, oil, grease, and other contaminants that could impair membrane adhesion. Remove or correct surface irregularities, damaged materials, and conditions that could prevent uniform membrane contact.

Roof insulation and cover boards must be properly secured, with stable, even surfaces and joints prepared in accordance with the board manufacturer's requirements. Replace damaged, deteriorated, or moisture-compromised materials before membrane installation.

Apply compatible asphalt primer where required by the substrate and membrane installation method. Allow primers to dry completely before installing membranes. Verify compatibility between the receiving substrate, primer, and specified WePly membrane.

Do not install membranes during precipitation or when precipitation is imminent. Installation temperatures and environmental limitations shall comply with the requirements of the specified membrane and application method.

MEMBRANE LAYOUT AND PREPARATION

Begin membrane installation at the lowest point of the roof and proceed toward higher elevations, positioning membrane laps to shed water in the direction of drainage.

Before installation, unroll and position membranes to allow the material to relax and minimize wrinkles, curling, or distortion. Allow sufficient relaxation time based on membrane reinforcement, ambient conditions, and manufacturer requirements. Once relaxed, align the membrane in its intended position before proceeding with installation.

Maintain a minimum 3-inch (76 mm) side lap and 6-inch (152 mm) end lap, unless otherwise specified for the membrane being installed. Align side laps with the manufacturer's designated selvage or lap area, where provided. Stagger end laps between adjacent courses. When installing multiple plies, offset the laps of successive layers to prevent overlapping seams.

Avoid four-way membrane intersections. At T-joints, trim the concealed membrane corner at approximately 45 degrees to minimize excessive membrane buildup and facilitate proper seam adhesion.

HEAT-APPLIED MEMBRANE INSTALLATION

Heat-applied WePly membranes shall be fully bonded to the prepared substrate or underlying membrane using an approved propane roofing torch. Direct the torch flame toward both the underside of the membrane and the receiving surface, applying sufficient heat to achieve proper melting of the modified bitumen and full adhesion to the receiving surface.

Ensure complete burn-off of the polyethylene film, where present. Adjust heat application techniques to accommodate changes in ambient temperature, humidity, and wind conditions, maintaining sufficient heat to achieve proper membrane adhesion without overheating or damaging the material.

Using a roofing hook, gradually advance the membrane onto the heated receiving surface, maintaining consistent contact to achieve uniform adhesion. Avoid wrinkles, air pockets, and other conditions that could compromise membrane bonding.

SEAM WELDING

Apply sufficient heat to fully bond side and end laps, ensuring continuous adhesion across the entire lap width. A uniform bleed-out of modified bitumen, not exceeding ¼ inch (6 mm), should be visible along heat-welded seams. Dry laps are unacceptable and must be corrected.

Use a weighted roller or roofing trowel, as appropriate, to consolidate seams and ensure proper adhesion. Avoid excessive heating, which can result in membrane distortion or excessive bitumen displacement.

Where membrane laps overlap granulated surfaces, heat the receiving surface to soften the modified bitumen. Using a roofing trowel, embed the granules into the softened bitumen to provide a suitable bonding surface before completing the seam.

Inspect completed seams for uniform adhesion, voids, or areas of insufficient bonding. Reheat and reseal deficient seams as necessary.

SELF-ADHERED MEMBRANE INSTALLATION

Install self-adhered WePly membranes over approved, properly prepared substrates. Apply compatible primer where required and allow it to dry completely before membrane installation.

Unroll and allow membranes to relax before installation. Position and align the membrane, then fold it back lengthwise to progressively remove the release film and adhere the membrane to the receiving surface. Maintain proper alignment and avoid wrinkles, folds, or trapped air.

Apply firm, consistent pressure during installation. Use a weighted roller to ensure full contact and adhesion across the membrane surface, paying particular attention to side laps, end laps, and transitions.

Remove protective selvage film, where present, immediately before completing side laps. Ensure continuous adhesion across the full lap width.



ROOFING SOLUTIONS



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End-Lap Treatment

At end laps and T-joints, trim opposing membrane corners at approximately 45 degrees to prevent excessive buildup and potential capillary voids. Apply compatible SBS flashing cement across the full 6-inch (152 mm) end lap, spreading uniformly with a roofing trowel before adhering the overlapping membrane.

Where necessary, use a hot-air welding device and hand roller to promote adhesion at side laps, end laps, and T-joints. Inspect completed seams for full adhesion and correct any voids or inadequately bonded areas.

Temperature Requirements

Install self-adhered membranes only when ambient temperatures are at least 50°F (10°C), with a minimum of two hours of direct sunlight to promote adhesion. Membrane material temperatures must be at least 70°F (21°C) at the time of installation.

Store membrane rolls at temperatures of at least 70°F (21°C) for a minimum of 24 hours before installation. When overnight temperatures fall to 50°F (10°C) or below, allow substrate temperatures to rise above 55°F (13°C) before beginning installation.

Postpone installation when required temperatures or environmental conditions cannot be maintained.

STEEP-SLOPE CONSIDERATIONS

When installing WePly membranes on roof slopes greater than 2:12, install membrane rolls parallel to the direction of the slope. Provide mechanical securement at the head laps to prevent membrane slippage.

Secure membranes to the roof deck or approved nailers using 1-inch (25 mm) tin-capped, ring-shank nails. Back-nailing requirements shall be determined by roof slope as follows:

Roof Slope	Maximum Back-Nailing Interval
0:12 to 2:12	Not required
Greater than 2:12 to 3:12	24 feet (7.3 m)
Greater than 3:12 to 6:12	16 feet (4.9 m)
Greater than 6:12 to 12:12	12 feet (3.7 m)
Greater than 12:12	4 feet (1.2 m)

Ensure all mechanically secured head laps are fully covered and sealed by the overlapping membrane.

SAFETY AND PRECAUTIONS

Follow all applicable safety regulations and established roofing industry practices when installing WePly SBS-modified bitumen membranes. Review the applicable Safety Data Sheets (SDS) before handling or installing materials.

Use appropriate personal protective equipment (PPE) and implement necessary measures to control exposure to fumes, vapors, and other workplace hazards.

When performing heat-applied installations, maintain appropriate fire prevention measures, including readily accessible fire extinguishers and protection of adjacent combustible materials. Follow applicable fire safety requirements for roofing operations.

Maintain a clean, organized work area and properly dispose of packaging, release films, and other installation waste.



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