



All Weather Roofing Products
INSTALLATION GUIDE



Self Adhered Contractor Grade Materials

INTRODUCTION

Benefits of Self Adhesive Modified Bitumen

All Weather® SA modified bitumen membranes offer a safe installation option where torch welding, hot asphalt and/or the odors of cold adhesive or asphalt fumes are not desired. Some other significant advantages are:

- Appearance: Neat and clean to install, several color options available.
- Odor Friendly: No fumes or offensive odors.
- Less Equipment: No torches or kettles required.
- Speed of Installation: Faster and less labor intensive, ease of installation.

Ideal Uses

All Weather® SA membranes are ideal for almost any low-sloped roof. Whether your project is a small residential tie-in, sunroof, garage, or carport, All Weather® SA membranes are designed for easy, faster installation, and helping you achieve a better bottom line and giving the roofing professional what they *want* and *need* out of a quality product.

All Weather® SA membranes have the following characteristics:

- Superior impermeability to water.
- Flexibility at low temperatures.
- High resistance to thermal degradation.
- Greater tensile and tear resistance, elongation which helps to accommodate certain building movements.
- With insulation, provides an even better-performing building component.
- Top surfacing options – reflective film or granule option for color design aesthetics.
- Better resistance against foot traffic and common rooftop abuse when needed.

Service

All Weather Roofing Products believes in giving the roofing professional what they want and need out of a quality product. For technical assistance please call us at 817-413-0103. All Weather Roofing products can provide recommendations to architects, engineers and roofing contractors for specifying, detailing, and installing All Weather modified bitumen roofing systems.

WARRANTY

All Weather Roofing offers several types of warranties. All warranties are “limited” unless they are termed or titled “unlimited warranty”. Any one limitation makes a warranty “limited” in one respect or another. All Weather Roofing Products Limited Material Warranty Limited Material Warranties cover the repair of All Weather roof membranes that cause leaks as a result of manufacturing defects in material for the duration of the warranty period, from the date of purchase, subject to the exclusions and exceptions described in the limited material warranty. On non-warranted roofs, All Weather Roofing acts only as the seller of materials and has no control of the application of materials or the conditions under which they are applied. Under these conditions, All Weather Roofing is not responsible for the performance of the roof beyond the obligation to manufacture and ship quality materials which comply 15 with All Weather Roofing published specification standards. On non-warranted roofs, All Weather Roofing will accept no responsibility for claims regarding defective materials except as described below. Every claim for defective materials must be made in writing and received by All Weather Roofing Products, ATTN: Technical Services Department, P.O. Box 163980 Fort Worth, Texas 76161 within thirty (30) days of the date that the claimed defect is or should have been discovered. Because all factors creating abnormal wind conditions on a roof cannot be entirely anticipated by a roofing manufacturer, All Weather Roofing is not liable in any event for wind damage. All Weather Roofing Products warrants that, at the time of delivery, the All Weather Roofing Material delivered shall conform to seller’s specifications therefore free and clear of all liens and encumbrances. THIS WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ALL OTHER WARRANTIES EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, and of any other obligations or liability on the part of ALL WEATHER ROOFING PRODUCTS whether any claim against it is based upon STRICT LIABILITY, NEGLIGENCE, BREACH OF WARRANTY OR ANY OTHER THEORY OR CAUSE OF ACTION. In no event shall All Weather Roofing Products be liable for CONSEQUENTIAL OR INCIDENTAL DAMAGES of any kind, including but not limited to interior damage. Recommendations made by All Weather Roofing Products are believed to be reliable, but All Weather Roofing Products makes no warranty of results to be obtained. If any of the All Weather Roofing material fails to conform to the foregoing warranty, SELLER’S SOLE AND EXCLUSIVE REMEDY shall be the replacement of such non-conforming material, provided that such material has been handled and installed in accordance with seller’s published handling

procedures and installation specifications. This warranty does not apply to, and seller shall not be liable for, labor costs or any other damages resulting from improper or faulty installation of material. The Seller shall also not be liable for labor costs or any other damages resulting from failure of the material itself. Regardless of the theory on which a claim may be made including, without limitation, negligence, contract, breach of warranty, strict liability in tort, misrepresentation, or otherwise, with respect to material delivered or for failure to deliver any material, no claims of any kind whatsoever shall be greater in amount than the purchase price of the material in respect of which damages are claimed. In NO event shall All Weather Roofing Products be liable for INCIDENTAL, CONSEQUENTIAL, SPECIAL, INDIRECT OR PUNITIVE DAMAGES.

GENERAL INFORMATION

Material Handling and Storage

All Weather roofing products roofing materials leave the factory dry and in good condition. Unload and handle all roofing and construction materials with care.

Materials must display legible labels, which identify the materials and applicable reference standards. Immediately notify carrier and All Weather or other manufacturer of damaged, wet, or defective materials. Reject delivery of materials that show evidence of contact with moisture. Do not use any materials that are damaged, unlabeled or otherwise appear to be unfit for use.

Store All Weather® products in original cartons indoors on pallets, protected from the elements. Store above 70°F (21.1°C).

If stored outside, remove manufacturer’s plastic covers and protect from weather under breathable tarps such as canvas tarpaulins to allow venting and protection from weather and moisture. Cover and protect materials at the end of each day work. Do not remove any protective tarpaulins until immediately before material will be installed.

For best results, store all materials in a shaded area at the job site, even if provisions for covering and ventilation have been performed. When no shaded areas exist for storage, it is recommended to place a layer of minimum 1” thick polyisocyanurate insulation over the top of the rolls under the tarpaulins to reduce the heat on the rolls and in order to reduce the possibility of rolls sticking.

Do not store All Weather® or other SA rolls on the rooftop during extremely high temperatures or when temperatures will fall below 50°F (10°C). If it is necessary to store materials on the rooftop, no more material should be stored on the roof than can be used within a few days. Also refer to cool weather precautions in the application section within this manual.

Store above 70°F (21.1°C) for a minimum of 24 hours, prior to application. Do not store at temperatures above 110°F (43.3°C). Keep in cartons until ready for use. Rolls that are improperly stored or have been warehoused for prolonged periods of time may lose their tack.

Do not double stack modified bitumen products.

All Weather will not accept responsibility for damage to its products due to circumstances and events beyond our control; including damage in transit, storage at distribution or warehouses or on jobsites.

In the unlikely event that obviously defective or damaged material reaches the job site or damage to the material occurs from improper storage on the job site, these materials must not be used; they must be replaced. Do not use any materials that appear to be unfit for use. All Weather should be notified immediately about material that has apparent manufacturing defects. Installation of defective material can result in additional costs above the cost of supplying replacement material. If the roofing contractor chooses to install material with apparent defects, this added cost is not the responsibility of All Weather.

ROOF DECKS

All Weather Roofing Products does not design or manufacture structural roof decks and is not responsible for their selection, design, and/or performance. The responsibility for roof deck system design, including roofing system selection, vapor retarder, thermal insulation, slope and drainage layout and expansion joints, lies with the architect, roof consultant, engineer, owner or contractor and not with the roofing materials manufacturer.

Acceptance of the deck for application of the roof system is the responsibility of the architect and/or designer.

The minimum roof deck construction and deck surface preparation recommendations which follow are provided as a supplementary guide for the roof deck designer and erector.

Decks must be adequately smooth and level to provide support and maximum contact surface for roofing materials. The surface of the roof deck must be dry

(free of moisture in any form), firm, smooth, clean, free of debris, sharp projections and depressions.

Remove electrical conduits, bolts, and other small items from the surface of the roof deck as these areas cannot be properly insulated and roofed.

All depressions, holes, deformations, etc. shall be made smooth prior to the roofing application.

All decks must be properly designed and constructed in accordance with the deck manufacturer's requirements and specifications, must be installed by applicators approved by deck manufacturer, must be able to support and secure the All Weather Roof System, and must be properly related to the rest of the building.

None of the foregoing factors is the responsibility of All Weather Roofing Products which under no circumstances will assume any such responsibility.

Complete all openings or projections (all pipes, vents, ducts, stacks and openings, etc.) through the deck prior to roof system installation. No projections shall be constructed through the flashing cant and projections shall be located a minimum 18" (46 cm) from the intersection of the cant and roof deck.

Do not install electrical conduit or piping immediately above the roof deck. Roof systems cannot be properly installed and adhered around and/or over conduit.

All roof decks shall be designed and constructed:

1. To support maximum loads which may be imposed during and after construction without excessive deflection (1/240 of the span at mid span is the rule for maximum allowable deflection);
2. To provide a minimum 1/4" (6 mm) per-foot slope and/or designed so that ponding water dissipates within a 48 hour period.
3. Decks should be designed and constructed to resist wind uplift forces anticipated in the area, and provide satisfactory base to which the roofing can be attached.
4. Interior drains should be sumped below roof level to allow immediate water runoff.
5. Provisions to prevent asphalt drippings must be given consideration where joints, cracks, or holes occur.
6. On slopes 3/4" per foot (6 cm per meter) or greater, provisions must be made for insulation stops and/or back nailing of built-up felts or SBS membranes. Insulation stops and/or backing nailing must be used on slopes greater than 1" (8 cm per meter) when adhered single ply membranes are used;
7. Use with suitable expansion joints to accommodate structural expansion and contraction. Expansion joints must extend through the structural system to be acceptable, and must separate adjoining units, or additions.
8. Deck materials must be fastened to supporting members by clips, welding or other mechanical devices to prevent lateral and vertical movement of the elements;
9. To be consistent with applicable trade associations, as well as any code or insurance requirements.

Only wolmanized lumber should be used for blocking. The use of petroleum treated lumber is not acceptable.

When mechanically attaching insulation or base sheets, plywood decks should have a fastener withdrawal resistance of 300 lb. (1.8 kN) per fastener.

When nailing a base sheet, wood decks are required to have a fastener withdrawal resistance of 40 lb. (0.24 kN) for cap nails per fastener.

Higher withdrawal resistance values and denser patterns may be necessary to achieve higher uplift ratings. Decks which cannot provide the minimum withdrawal resistance are not suitable to receive a roof system.

Preservatives or fire retardants used to treat decking must be compatible with roofing materials.

Buildings should be heated gradually after roof system installation is completed.

The roof decks mentioned in this section are those most widely used in residential construction in the United States. Many decks are used on a regional basis or are not commonly used. Contact All Weather Roofing Products at 817-413-0103, for deck types or conditions not addressed in this Manual.

Wood Plank Decks

The following minimum guidelines are recommended by All Weather Roofing Products when installing a roof system over wood decks:

1. Lumber should be a minimum of 4" (10 cm) and a maximum of 8" (20 cm) wide and a minimum of 3/4" (18.7 mm) thick (nominal).

2. Any knotholes or large cracks in excess of 1/4" (6 mm) should be covered with strips of sheet metal nailed firmly in place.

3. Lumber boards must be securely fastened to the joists or trusses and must be firmly supported on at each end.

Plywood Decks

The following minimum guidelines are recommended by All Weather Roofing Products when installing a roof system over Plywood Decks:

1. Each panel of soft plywood shall be identified with APA grade trademarks owned by the American Plywood Association and shall meet the requirements of Product Standard PS-1 for soft plywood construction.
2. All plywood which has any edge or surface permanently exposed to the weather shall be of the exterior type.
3. Install with face grain across supports, except where noted. Suitable edge supports shall be provided where indicated on drawings (or in recommendations of the American Plywood Association) by use of ply clips, tongue and groove panels or lumber blocking between joists.
4. Exterior grade plywood should be used for commercial deck construction.
5. Minimum recommended deck thickness is 15/32" (12 mm), over joists not greater than 24" o.c. (61 cm).
6. Must be installed so that all four sides of each plywood panel bear on and are secured to joists and cross blocking; the plywood must be secured in accordance with the American Plywood Association (APA) recommendations. In the absence of cross-blocking, two-ply clips per 24" max joist spacing, should be used.
7. Wood decks must be kept dry prior to the application of the roofing system. Store on raised skids or platforms, and roofed promptly after installation.
8. Panels must be installed with a 1/8" to 1/4" (3mm - 6mm) gap between panels and must match vertically at joints to within 1/8" (3mm).
9. Knotholes or large cracks in excess of 1/4" (6mm) should be covered with securely nailed sheet metal.

Oriented Strand Board (OSB) – Waferboard

The following minimum guidelines are recommended by All Weather Roofing Products when installing a roof system over oriented strand board (OSB) decks:

1. Use only OSB decks with the Structural 1 – APA rating and are a minimum thickness of 7/16" (10.5mm), over joists not greater than 24" o.c. (61 cm).
2. Install with face grain across supports, except where noted. Suitable edge supports shall be provided where indicated on drawings (or in recommendations of the American Plywood Association) by use of ply clips, tongue and groove panels or lumber blocking between joists.
3. Exterior grade plywood should be used for commercial deck construction.
4. Must be installed so that all four sides of each plywood panel bear on and are secured to joists and cross blocking; the plywood must be secured in accordance with the American Plywood Association (APA) recommendations. In the absence of cross-blocking, two-ply clips per 24" max joist spacing, should be used.
5. OSB decks must be kept dry prior to the application of the roofing system. Store on raised skids or platforms, and roofed promptly after installation.
6. Panels must be installed with a 1/8" to 1/4" (3mm - 6mm) gap between panels and must match vertically at joints to within 1/8" (3mm).

Recover and Re-Roofing

The term "recover", as referenced in this Manual, is meant as the installation of a new roof system over an existing roof system. The term "reroof" is meant as the removal of the existing roof, prior to the installation of a new roof system.

Every roofing project has its own unique problems that require assessment on an individual basis. The determination of whether to tear-off or recover an existing roof system is the responsibility of the architect, engineer, roofing contractor, or owner. All Weather Roofing Products is not responsible for damage of its roof systems in any way caused by recovering an existing roof system.

Due to the complexity of recover and reroofing specification and varying field conditions, contact All Weather Roofing Products, 817-413-0103 for requirements when an All Weather Warranty is required.

The existing roof system must be compatible with the proposed new roof assembly. Sprayed-in-place urethane foam, coal-tar pitch BUR, shingles, shakes, tile and metal roofs are not eligible for recover using the products described in this Manual.

The deck must be structurally sound to receive a new roof system. Substrates must be inspected and accepted by the deck contractor, roof contractor or owner as being ready to receive and hold the roof system as specified.

All irregularities in the existing membrane and deck system can and are repaired in accordance with good roofing practices in order to attain a surface which is smooth, dry, clean and free of sharp projections and depressions and make the substrate ready to receive the new roofing system.

All damaged and/or wet insulation areas must be identified. The affected insulation must be cut out and removed. The removed insulation must be replaced with new insulation of the proper size to fill the space flush with existing surface and obtain a relatively smooth surface to accept the installation of the new roof system.

If the old roof is a coal tar BUR, the roof must be removed. If the old roof is an asphalt BUR with a gravel surface, the gravel must be completely removed unless an approved cover board is installed over the existing roof.

The existing detail conditions are readily adaptable to the increased thicknesses imposed by the recover system (especially in edge details and the height of perimeter nailers) and comply with All Weather Roofing Products specifications and requirements.

The existing structure is capable of supporting the new loads imposed by the recover system.

All applicable code requirements must be met for recover over an existing roofing system.

Inspect roof drains and outlets. Remove existing drain flashings and replace broken or stripped bolts, clamping rings and strainers. Drains must have metal type clamping rings. **Plastic drains are not acceptable.** All drains, including retrofit or insert drains, must be sumped to promptly remove water from the roof surface and meet code requirements.

For tear-off project, all existing roofing and flashings must be removed to provide a sound substrate for the installation of a new roofing system and correct existing design deficiencies.

Roof systems having existing vapor retarders must be addressed with our Technical Services at 817-413-0103.

All Weather Roofing Products does not recommend partial recover or reroofing of a single roof area due to the potential for defects in the portion of the roof system not replaced, to damage or negatively affects the performance of the new membrane. When required by project conditions or budget considerations, All Weather Roofing Products requires full separation of the old and new roof areas by means of a full curb mounted expansion joint or area divider installed to provide a complete watertight seal or break between areas. Tie-in constructions in which the old and new membranes are adhered directly to each other and stripped in are not acceptable for use in All Weather roof systems.

For recover installations (installation of a new roofing system over an existing system), any additional surface preparation relative to inspection and treatment of decks in the existing roofing system must be conducted in accordance with good roofing practices. Preparation includes, but is not limited to, removal of existing flashings, replacement of wet/damaged existing roofing materials, removal of loose aggregate, removal of abandoned equipment, supports and penetrations, replacement of damaged decking, etc.

The substrate must present a suitable surface to receive and hold the new roofing materials. Also refer to All Weather Roofing Products recommendations on reroofing in the Roof Design section of this Manual.

If the existing roof membrane is to remain on the roof when the new roof membrane is applied, and there is any doubt as to the adequacy of the attachment of the existing roof membrane, mechanically fasten through the existing roof to the deck. Stainless steel or corrosive resistant fasteners are recommended when fastening through existing roof systems.

A recovery board must be used over the old roof membrane. Mechanically fasten the recovery board to the deck.

All existing composition and metal flashing must be removed and replaced.

All metal counter-flashing, metal coping and other metal work above the roof system must be inspected, and replaced or repaired as necessary to provide a watertight assembly.

All metal flashing must be primed where it will come in contact with the All Weather membranes.

One way pressure relief vents must be used when recovering. Install a minimum 4" (10 cm) diameter one way pressure relief vent every 10 squares (9.29 sq./m). Cut 4" (10 cm) holes for one way pressure relief vents through the existing roof system to deck.

All liquid applied coatings, mastics or gravel must be completely removed if the All Weather membrane is to be directly adhered to a smooth surfaced asphalt roof.

For reroofing installations: All old roofing must be removed down to the deck. The deck shall be cleaned, repaired, and otherwise conditioned to conform to the requirements of a new deck. All old flashing must be removed and stripped from all walls, curbs, and etc. All existing composition and metal flashing must be removed and replaced.

Prime all masonry, metal and existing asphalt surfaces and substrate with asphalt primer where All Weather membranes are to be adhered.

Flashing

General Rules for the Construction of Flashing should follow the general procedures outlined below. Refer to "Construction Details".

1. Ensure that water drains immediately away from all flashing.
2. Minimum height of base flashing should be 8" (20.3 cm) above the roof surface level and the maximum height should be 24" (61 cm) above the roof level. Wall coverings above the base flashing [24" (61 cm)] are not a part of the roofing system and are not included in All Weather roofing system warranties unless specifically endorsed by an addendum to the Warranty.
3. Wood nailers should be installed at open perimeter edges and secured to the roof deck.
4. When metal cap or counterflashing cannot be installed on the same day as the membrane base flashing, the top edge of all base flashings must be stripped-in using flashing cement and glass fiber reinforcement. All stripped-in material must be removed prior to torch welding of any membrane.
5. Termination bar may only be used in conjunction with an appropriate counter flashing extending a minimum of 4" (10 cm) below the termination bar.
6. All base flashings must be mechanically fastened at the top edge of the flashing with 1" (25 mm) round or square metal cap nails or appropriate fastener on a maximum of 8" (20.3 cm) centers for flashings up to 12" (30.5 cm) in height and on 4" (10 cm) centers for flashings up to 24" (61 cm) in height. Termination bars may only be used in conjunction with proper counter-flashing and the fastener spacing shall not exceed the spacing of cap nails.
7. Apply flashing details after the installation of the roofing membrane, but before the application of any surfacing materials.
8. Metal flashings are considered a maintenance items that can easily become sources of leaks if not maintained or improperly used or installed.
9. Metal drip eave flanges must be primed, properly nailed to a wood nailer or suitable deck material, and installed between a stripping ply of modified bitumen membrane and the field of the roof. Where metal drip eave flanges are flashed to the roof membrane, leaks caused by metal movement are not covered by All Weather warranties, and are the responsibility of the building owner.
10. Piping and conduit should not run across the roof; where no alternative exists, the piping/conduit should be elevated at least 8" (20.3 cm) above the surface of the roof on properly flashed supports that are secured to the structural roof members. Lightweight piping/conduit, less than 2" (5 cm) in diameter may be set on wood blocks with pads over the finished membrane.

Surfacing

All Weather® Nail Base and All Weather® SA Base are not intended to be left exposed to the weather or overnight and must be covered the same day with All Weather® SA Cap.

Safety Considerations and Warnings

Roofing is a hazardous construction. Workers should be properly trained in a manner to avoid falls, burns, back injuries, heat related afflictions, etc. It is the sole responsibility of the roofing applicator to enforce safety precautions and to ensure safety at all times. All appropriate OSHA and local codes should be followed in the application of roofing. All personnel involved in roofing should wear safety equipment at all times on the job site. There are several publications which addresses numerous safety concerns. Some of them are:

- Asphalt Roofing Manufacturer's Association (ARMA)
- National Roofing Contractors Association (NRCA)
- Roofing Contractor Magazine
- Occupational Safety & Health Administration (OSHA)

Installation of a roof system is a construction process. As with any construction process safety is a key element; therefore, All Weather recommends that all applicable safety standards and good roofing practices be followed.

Although All Weather® Self-Adhesive membranes do not require the use of a torch, it is permissible to use hot-air welding techniques at end laps and flashing details where SBS flashing cement is not desired; therefore, if hot-air welding techniques are used, fire prevention safeguards should be incorporated.

General Precautions

READ AND UNDERSTAND ALL WEATHER'S SPECIFICATION MANUAL before starting application. Follow all precautions and direction. WEAR PERSONAL PROTECTIVE GEAR. Always use approved safety hard hat, goggles, heavy duty gloves, snug fitting clothing (long pants and long sleeved shirt) and boots. THOROUGHLY TRAIN ALL PERSONNEL ON PREVENTING AND EXTINGUISHING FIRES. THOROUGHLY TRAIN ALL PERSONNEL IN FIRST AID PROCEDURES. NEVER ALLOW CONTACT between the heated surface of the product, hot asphalt, open flame and hair, skin or clothing. Always COMPLY WITH ALL APPLICABLE OSHA SAFETY STANDARDS and fire codes. AVOID PHYSICAL CONTACT WITH PRODUCT FOR AT LEAST ONE HOUR after application to surface. NEVER APPLY built-up or modified bitumen products DIRECTLY OVER EXPOSED CONDUITS OR PIPES LAYING ON THE ROOF DECK. USE EXTREME CAUTION when working around equipment, such as gas lines or HVAC units, which have electrical and/or gas connections. PROVIDE in the immediate work area at least one (1) ABC-rated FIRE EXTINGUISHER for each welding device.

APPLICATION INFORMATION

Work Conditions

Work shall only begin when the contractor has decided to his satisfaction, that all specifications are workable as specified, and that the contractor can meet project and code requirements.

The contractor shall only begin roofing work when the substrates have been prepared as necessary, and are ready and acceptable to have materials installed as specified.

Do not begin work when inclement weather is forecast to occur prior to the anticipated time of completion of the work item.

Do not install materials during inclement weather, except for temporary work necessary to protect materials that are already installed. Remove all temporary work before installing permanent materials.

Do not install materials when ice, snow, moisture or dew, in any form, is present on the roof deck, or substrate to which the materials are to be applied, or when foaming of hot asphalt or membrane occurs.

Protect the building, contents, surrounding area, building occupants and contractor personnel during work. Coordinate all work operations with the building owner and building occupants so that adequate interior protection, as necessary, is provided and disruption to normal building operations is minimized. Provide adequate exterior protection to prevent damage to the building owner's property.

Roof system installation should not begin until all roof openings, curbs, pipes, sleeves, ducts, vents or other penetrations through the roof are solidly set, and that all tapered edges and cant strips, reglets, and wood nailers are secure and tight to the building as per this specification manual.

Where wheeled or other traffic over the partially completed roofing is unavoidable, provide and use adequate plank or plywood, set over a minimum thickness of rigid board insulation to protect the newly installed roofing.

Follow the general and application requirements of this Manual.

Provide temporary water cut-offs and tie-ins at the end of each workday. Remove all temporary work at the beginning of the next workday.

When tearing off an existing membrane, limit removal to the area that will be completely re-roofed that day with the new roofing system.

If conditions are uncovered or created which would be detrimental to the proper conduct of specified work, immediately notify the building owner and All Weather of these conditions for consultation on acceptable treatments.

Observe fire and safety precautions as recommended by the Asphalt Roofing Manufacturers Association, the National Roofing Contractors Association, OSHA and this Manual.

All work shall be performed in compliance with local code requirements.

The beginning of roof system installation signifies the contractor accepts the existing conditions as being in compliance with project requirements and code requirements.

Quality Control of Application

All Weather recognizes the crucial role of workmanship in the construction of a reliable roofing membrane designed to perform for its anticipated service life. Material delivery, storage, and handling, and control over material application procedures are also of great importance.

There are recommendations and requirements, which must be considered in the roof system construction process. The following include, but are not limited to:

1. Contractors develop and present a verifiable in-house contractor quality control program to the building owner, which can be followed during the construction of the roof system.
2. Visual inspection of the deck surface; conditions of the materials being installed; use of the proper and specified number of fasteners (if required); that the correct type of membrane(s) are being used and application procedure(s) are correct; and all applicable roof related components are being used.
3. Careful visual examination of all side, end and T-Laps of each ply of membrane for proper adhesion.
4. Oversight monitoring of the progress of work for compliance to project specifications and drawings. Such monitoring minimizes the potential for problems, provides for resolution and correction of errors, provides participants with documentation of work in-place, and allows for inspection of work which cannot be examined by standard tests, such as flashing and sheet metal installations.
5. Roofing products and other associated roof system materials shall be installed according to the minimum guidelines set forth in this Manual, NRCA standards, and to individual project requirements.

Contact All Weather at 817-413-0103 for further information about quality control concerns.

Cool Weather Application

Warm weather conditions and exposure to direct sunlight are essential for proper adhesion of All Weather® SA membranes. Application should only be made when ambient temperatures are 50°F (10°C) or higher and there is sufficient exposure to direct sunlight to thermally activate the bond.

In cooler weather, unrolling and relaxing modified bitumen rolls and base sheet rolls prior to installation will reduce the potential for wrinkles to form in the finished roof. The rolls can be cut into shorter lengths for easier handling when rerolling and installing.

When water in any form is present on the deck, application procedures must be suspended until the deck has dried. Any moisture present at the time the roofing is applied may result in poor adhesion and blistering of the membrane.

Store membrane rolls and adhesives in an area heated at a minimum temperature of 70°F (21.1°C) when the ambient temperature and wind chill factor is below 50°F (10.6°C).

During installation, if surface cracking appears in the membrane, discontinue installation immediately and contact All Weather Roofing Products at 817-413-0103.

If temperature at night is at or below 50°F (10.6°C); do not start installation first thing in the morning. The surface over which the membrane is to be installed must be allowed to warm to a temperature above 55°F (12.8°C). Membrane application to cold substrates may result in an improper bonding.

On those days when the ambient temperature is greater than 55°F (12.6°C), remove from the protected storage area only those rolls that will be installed the same day. These rolls must be unrolled, with the back side up and allowed to relax and warm. Then re-roll to apply. If the outside temperature is less than 55°F (12.6°C), then installation should be postponed until warmer temperatures can be maintained.

Step Slope Requirements

All Weather® Self-Adhesive membranes may be applied perpendicular to the slope on slopes up to 2" per foot (16.7 cm per meter) or less. Where roof slope exceeds 2" per foot (16.7 cm per meter) membranes are to be installed parallel to the slope.

Additionally, where roof slope exceeds 2" per foot (16.7 cm per meter), "back-nailing" of the membrane is required. For non-insulated nailable decks, back-nail the plies directly to the deck at the intervals listed.

Sloped roofs when insulation is used

For roofs with slopes where insulation is to be used. Insulation stops are necessary at the eave, at the ridge and at intermediate spacing of no more than 16 feet (4.9 m). All dimensions are from inside face to inside face of the wood nailer(s). Contact All Weather Roofing at 817-413-0103 for more information.

Slopes greater than 3" per foot

For roofs with slopes greater than 3 inches per foot (25.0 cm per meter); Contact All Weather Roofing Products at 817-413-0103.

Back-Nailing of Membrane

Install all self-adhesive base and ply sheets vertically on slopes as indicated above. Back nail sheets into wood nailers or nailable decks approximately 1 inch (2.5 cm) from the leading edge of the sheets. All end laps must be at wood nailers and blind nailed into the wood nailer on 6-inch center (15.2 cm). The nails shall be staggered across the width of the nailer to reduce the risk of the sheet tearing along the nail line. Use nails with integral metal heads at least 1 inch (25 mm) round or square.

At ridges, an additional layer of membrane shall be centered over the ridge overlapping the fasteners at least 6 inches (15.2 cm).

Terminate membrane at wood nailer and fasten the top edge of each sheet with screws and 3-inch (7.6 cm) plates on 8-inch (20.3 cm) centers across the top of the sheet. The overlapping sheet must extend at least 9 inches (22.9 cm) past the top of the underlying sheet. All end laps must be staggered to the closest wood nailer, spaced a minimum of 4 feet (1.22 m).

For non-insulated wood decks, terminate and fasten the end of the membrane to the deck with the same fasteners, on the same spacing indicated above.

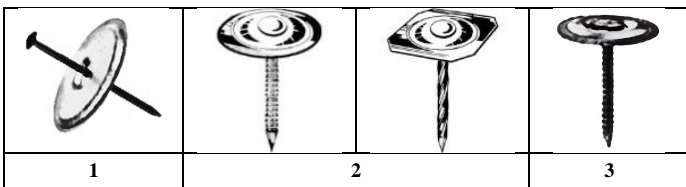
At ridges, cap sheet must extend across opposite sides of ridge over the nailer and be fastened with screws and 3-inch (7.6 cm) plates on 8-inch (20.3 cm) centers. An additional full width ply of cap sheet shall be centered over the ridge to form a ridge cap overlapping the fasteners at least 6 inches (15.2 cm).

Nailers must also be used around the roof perimeter, openings and penetrations, for nailing felts, drip eave stops, roof fixtures and fascia systems.

Fastening

The following fasteners are acceptable for use with All Weather® roofing systems when manufactured to meet the specifications listed and installed over the appropriate roof deck/substrate.

1. Drill or Thread Point Coated Fastener with Metal Plate - carbon steel, corrosion resistant fastener meeting the requirements of FM 4450/4470. Driven through a minimum 3" (7.6 cm) plate for use over insulated and non-insulated wood board, wood plank or plywood decks. PlyFast® #12 Fastener, PlyFast® #14 Fastener, PlyFast® #15 Fastener or equal.
2. Cap Head Nail – 1" (25 mm) diameter round or square cap, or annular threaded roofing nail with 3/8" (10 mm) diameter head/11 gauge, annular or spiral threaded shaft. For use over non-insulated wood decks.
3. Threaded Roofing Nail - 3/8" (10 mm) diameter head/11 gauge, annular or spiral threaded; must be driven through minimum 1" (25 mm) diameter or square cap plate. For use over non-insulated wood decks.



Contact All Weather for recommendations for fasteners not listed above or for decks not addressed in this manual.

Fasteners must be installed to secure the roof assembly to the structural substrate to provide a wind uplift resistance equal to -60 psf or higher if the design requirements dictate. Where design requirements, local code, insurance or other regulatory requirements dictate higher wind resistance values, a design professional must advise of fastener type and density.

Do not install fasteners into/through wet or deteriorated insulation and/or substrates. This may cause the fasteners to back out through the installed membrane in the future.

Fastener pullout tests are recommended for all deck types.

Metal stress plates, minimum 3" (7.6 cm) in diameter, are required when mechanically attaching insulation or the base sheet and insulation simultaneously. Metal stress plates must be used in lieu of plastic plates for self-adhesive applications.

For insulation attachment guidelines, refer to the insulation installation section regarding mechanically fastening insulation.

For base sheet attachment guidelines, refer to the base sheet installation section regarding mechanically fastening base sheets.

Nailable Substrates

Where insulation is fastened to the roof deck, a minimum -60 psf attachment is recommended. Where design requirements, local code, insurance or other

regulatory requirements dictate higher wind resistance values, the fastening pattern must be enhanced as required by the authority having jurisdiction.

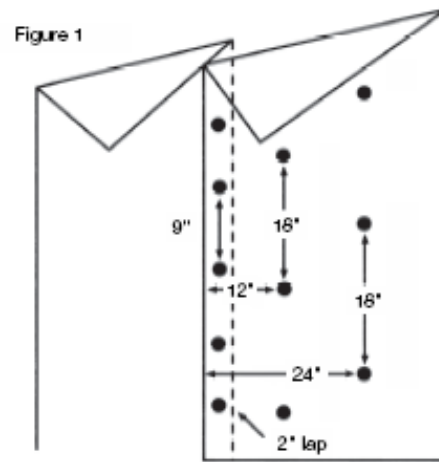
Refer to the authority having jurisdiction for all other fastening patterns.

The fastener density should be increased along the perimeters and in the corners in accordance with design or regulatory requirements.

All Weather® Nail Base Sheet Application

All Weather® Nail Base sheets should be cut into lengths short enough to be easily handled and allowed to warm and relax prior to installation. Appropriate maximum membrane length will vary depending upon temperature conditions. The base sheet must be warmed to a temperature sufficient to allow expansion and relaxation of the asphaltic coating, prior to application, otherwise wrinkles may form. The applicator must evaluate weather conditions to determine maximum functional length and relaxation time to avoid wrinkling. Place tension on the end of the base sheet during installation to ensure that the sheet lays flat.

Mechanical Attachment: On decks of wood, plywood, and OSB, (Figure 1): the minimum base sheet pattern required for the field of the roof shall be as follows: Start with a half roll width to offset the side laps of subsequent membrane sheets. Lap the base sheet 2" (5.1 cm), and mechanically fasten with three rows of fasteners. The first row (on the seam) will be 1" (2.5 cm) from the leading edge and on 9" (22.9 cm) centers. Locate the second row of fasteners 12" (30 cm) from the leading edge and on 18" (45.7 cm) centers. The third row of fasteners shall be 24" (60 cm) from the leading edge on 18" (45.7 cm) centers. The centers for the second and third rows should be staggered from each other.



Turn base over fascia and roof edges and extend up to the top of cants at all roof to curb and roof to wall junctures.

Note: When fastening base sheets using screws and plates without insulation, the plate must be of a design that allows it to lie flat on the deck.

Where design requirements, local code, insurance or other regulatory requirements dictate higher wind resistance values, the fastening pattern must be enhanced as required by the authority having jurisdiction.

For non-nailable substrates where the use of asphalt to adhere the base sheet is not appropriate, then All Weather® SA Base may be used in lieu of the All Weather® Nail Base on properly primed surfaces with SA Primer.

Stagger adjacent end laps a minimum of 18" (45 cm) apart. All laps must be parallel or perpendicular to the slope of the roof so that the flow of water is never against the lap.

Do not leave installed base exposed. Cover in the same day with All Weather® SA Base or one of the All Weather® SA Cap membranes.

All Weather® SA Membrane Application

Substrates must be inspected and accepted by the contractor as suitable to receive and hold roof membrane materials. All decks must have positive drainage. Ponding or standing water conditions are excluded from warranty coverage.

Substrates must be clean, dry and free of moisture and dust or other bonding inhibitors that affect proper adhesion.

Primer, when required, must be applied at the specified rate and must be allowed adequate time to dry.

Store rolls in original cartons indoors on pallets, protected from the elements above 70°F (21.1°C) for a minimum of 24 hours, prior to application. If stored outside, protect from extreme heat and weather by covering with a light colored

breathable opaque tarp to allow venting and protection from weather and moisture. Cover and protect materials at the end of each day's work. Do not remove any protective tarpaulins until immediately before material will be installed.

For best results, store all materials in a shaded area at the job site, even if provisions for covering and ventilation have been performed. When no shaded areas exist for storage, it is recommended to place a layer of minimum 1" thick polyisocyanurate insulation over the top of the cartons under the tarpaulins to reduce the heat on the rolls and in order to reduce the possibility of rolls sticking or experiencing difficulty in removing the poly release film backing.

DO NOT STORE product in direct sunlight or on the rooftop during extremely high temperatures (over 110°F [43.3°C]) or when temperatures will drop below 50°F (10°C). If it is necessary to store materials on the rooftop, no more material should be stored on the roof than can be used within a few days. Keep in cartons until ready for use.

Rolls that are improperly stored or have been warehoused for prolonged periods of time may lose their tack or may experience difficulty removing the poly release film backing. Do not apply membrane that has been improperly stored, exposed to moisture, or has lost its tack. If the material does not bond, STOP the application.

Ambient temperature must be 50°F (10.6°C) or above with a minimum of 2 hours of exposure to direct sunlight. Warm weather conditions and exposure to direct sunlight are essential for proper adhesion. The self-adhesive compound will not activate if installed below the recommended temperatures and/or if the material temperature is below 70°F. Conditions without exposure to direct sunlight may not allow sufficient thermal heating and may affect adhesion. If product is applied in temperatures above 110°F (43.3°C), it may result in difficulty in removing the poly release film backing from the underside. If this situation should occur, move the product to a shaded area until the product has cooled sufficiently. Once cooled, the poly release film backing can be easily removed. Note: Exposure to excessive heat may cause sagging of compound on vertical surfaces.

Start the installation of all membrane plies at the low point or drains, so the flow of water is over or parallel to the ply laps, but never against the laps.

Refer to "Steep Slope Requirements" and "Back-nailing of Membrane" on slopes 2" per foot (16.7 cm per meter) or greater.

When applying All Weather® membranes directly to the substrate, allow for adequate roof ventilation into the system through the use of roof relief vents.

All Weather® SA BASE membrane cannot be mixed with other type of membranes other than All Weather® SA membranes. Non SA Cap membranes are unacceptable. The top film surfacing cannot receive torch, hot asphalt, cold adhesive or other applications other than self-adhesive application.

Do not use cold adhesives with All Weather® SA membranes other than for flashing details and cap sheet end laps as described herein and as shown in the Flashing Details of this Manual.

Chemicals such as oils, petroleum distillates, greases, liquid gases, solvents, and carbon tetrachloride are not compatible with the All Weather® membranes.

Recommended Tools:

1. Hammer
2. Utility knife with hooked blade
3. Screw gun (¾ horsepower or stronger)
4. Detail roller (2" – 4" width)
5. 75 lb. field roller (long handled)
6. Roofer's or masonry trowel with rounded tip
7. Caulk gun
8. Seam probe
9. Nails and/or roofing fasteners as required
10. Tin snips for cutting metal
11. Sheet metal and metal accessories as required
12. Flashing Cement (pail or caulk grade).
13. SA Primer
14. #41 Standard Asphalt Primer (where required)
15. Hot-air welder (110 volt power hand-held device) and electrical cord
16. ABC type fire extinguisher is required if a hot-air welding device is present.

All Weather® SA BASE Application

All Weather® SA Base may be applied to properly installed All Weather® Nail Base, primed structural concrete, and properly installed approved ISO insulation. No other substrates are suitable for direct membrane application without prior written approval from All Weather Roofing Products.

Sweep the surface of the insulation boards to remove any dust, dirt, sand or other bond inhibiting particles that could interfere with adhesion.

1. Roll out All Weather® and allow the base to relax prior to application. Cut rolls into manageable lengths for best results.
2. Keep the box for storage on the roof to use as a receptacle for discarding release film.
3. Start with a half roll width at low point of roof or drains for maximum offset between base and cap. Roll sheet out and set to align.
4. Fold the membrane back halfway lengthwise to remove the half of the poly release film on the underside from the up slope side of the roll and set in place then flip back the other half of the roll and remove the down slope side of the second half of the release film on the underside of the roll in a smooth continuous process.
5. Firmly adhere the membrane by direct contact pressure to the desired substrate.
6. Use a weighted field roller to assure maximum contact of the membrane with the substrate working out all voids and un-adhered areas.
7. Continue installing the membrane up slope lapping the side laps 3" (7.5 cm) and 6" (15.2 cm) on the end laps. Stagger all end laps a minimum of 18" (45.7 cm) from one another.
8. Check all joints and laps for full adhesion before the end of each day. If the membrane can be lifted in any area, it is not properly adhered. A seam probing tool can be helpful to check for small voids at laps.
9. At end laps, additional care must be taken to ensure complete bonding at T-laps. Before adhering laps, cut the selvage edges of the upper and lower sheet at opposing diagonal corners at 45° degree angles to prevent a capillary void. Corners should be trimmed on a diagonal angle from outside edge to top of the end of the roll. The width of trim should be equal in width to the side lap specified. Apply a bead of Flashing Cement to the angle cut and within the end lap area in a serpentine pattern and spread the adhesive with a trowel along the entire 6" lap width before setting the end lap in place. Trimmed corners should be completely covered by application of succeeding roll course.
10. Note: Warm weather conditions and exposure to direct sunlight are essential for proper adhesion. The self-adhesive compound will not activate if installed below the recommended temperatures and/or if the material temperature is below 70°F. If necessary, a hot air welding device designed for sealing modified bitumen seams and a hand-held seaming roller may be used to seal the side and end laps areas and enhance adhesion prior to the application of the Flashing Cement at end laps.
11. In cooler weather, a hot air welding device may be used to warm the lap areas and enhance adhesion prior to the application of the Flashing Cement.
12. Use product box for discarding poly release film. After completion of job discard product box.
13. Do not leave the All Weather® SA Base membrane exposed to the weather, cover with All Weather® SA CAP the same day.

All Weather® SA CAP Membrane Application

All Weather® SA Cap may be applied to properly installed All Weather® Nail Base, and All Weather® SA Base. No other membranes or substrates are suitable for direct application of All Weather® SA Cap.

1. Roll out All Weather® and allow the membrane to relax prior to application. Cut rolls into manageable lengths for best results
2. Keep the box for storage on the roof to use as a receptacle for discarding release film.
3. Start with a full roll width at low point of roof or drains for maximum offset between base and cap. Roll sheet out and set to align.
4. Fold the membrane back halfway lengthwise to remove the half of the poly release film on the underside from the up-slope side of the roll and set in place then flip back the other half of the roll and remove the downslope side of the second half of the release film on the underside of the roll in a smooth continuous process. Do not remove the release film from the selvage edge as yet.
5. Firmly adhere the membrane by direct contact pressure to the desired substrate.

6. Use a weighted field roller to assure maximum contact of the membrane with the substrate working out all air pockets, voids and un-adhered areas that will prevent bonding of membrane to underlying substrate.

7. Continue installing the membrane up slope lapping the side laps 4" (10.2 cm) and 6" (15.2 cm) on the end laps. Stagger all end laps a minimum of 18" (45.7 cm) from one another.

8. Remove the release film from the selvage edge of the in-place adjacent sheet and the poly release film from the underside of the roll being installed to simultaneously bond the side lap together.

9. At end laps, additional care must be taken to ensure complete bonding at T-laps. Before adhering laps, cut the selvage edges of the upper and lower sheet at opposing diagonal corners at 45° degree angles to prevent a capillary void. Corners should be trimmed on a diagonal angle from outside edge to top of the end of the roll. The width of trim should be equal in width to the side lap specified. Apply a bead of Flashing Cement to the angle cut and within the end lap area in a serpentine pattern and spread the adhesive with a trowel along the entire 6" lap width before setting the end lap in place. Trimmed corners should be completely covered by application of succeeding roll course.

10. Note: Warm weather conditions and exposure to direct sunlight are essential for proper adhesion. The self-adhesive compound will not activate if installed below the recommended temperatures and/or if the material temperature is below 70°F. If necessary, a hot air welding device designed for sealing modified bitumen seams and a hand-held seaming roller may be used to seal the side and end laps areas and enhance adhesion prior to the application of the Flashing Cement at end laps.

11. In cooler weather, a hot air welding device may be used to warm the lap areas and enhance adhesion prior to the application of the Flashing Cement.

12. Use product box for discarding poly release film. After completion of job discard product box.

FLASHING INFORMATION

General

Refer to the construction details in this section, which depict flashing requirements for typically encountered conditions. Install flashing materials as shown in the construction details.

Base flashing for roof systems must be a minimum two-ply modified bitumen construction.

All penetrations should be at least 18" (45.7 cm) from curbs, walls, and edges to provide for proper flashing.

Prime all metal and masonry with SA Primer or #41 Asphalt Primer and allow time to dry before being fully adhered to with flashing sheets.

Install flashing sheets starting at low points. Where indicated by All Weather construction details, install All Weather® SA membranes using the self-adhesive method.

At all vertical and other flashing overlaps onto mineral surfaced membranes, set top layer of All Weather® membrane in a bed of Flashing Cement.

Use only modified bituminous membranes that are designated by All Weather for use as base and wall flashings.

Do not use metal base flashing. Damage to the roofing system caused by metal base flashing is not the responsibility of All Weather.

Base flashing should extend a minimum of 8" (20.3 cm), and a maximum of 24" (61 cm) above the roofline. When wall exceeds 24" in height, construct wall flashing in a 2-piece construction as indicated in All Weather® High Wall Flashing Details.

Corner membrane flashings, such as "bow ties" for outside corners and "footballs" for inside corners or other membrane reinforcements are required to ensure that base flashing corners are sealed at cant areas.

Note: Mastic and fabric coursing is not an acceptable alternate for proper flashing and counter-flashing details.

Cant Strips

Cant strips must be installed at the intersection of the roof and all walls, parapets, curbs, or transitions approaching 90° that are to be flashed. They shall be approximately 4" (10 cm) in horizontal and 4" (10 cm) in vertical dimension. The face of the cant shall have an incline of not more than 45° with the roof.

Wood cants shall be solid and pressure treated for rot resistance. Use solid wood cants when mechanical securement to cants is required or when solid wood cants

will help stabilize the vertical wood nailers at projections or expansion joint openings.

Perlite based cant strips must comply with ASTM C-728.

Masonry cants shall be integrally cast to the wall and deck. They shall be finished and prepared with the same care as the deck. The cant shall be constructed so that it provides a vertical offset equal in thickness to the roof insulation.

Do not use metal cant or metal curb strips. Cants shall always be installed on top of the roof insulation, or wood nailers and mechanically fastened in place. Neatly fit all joints and miters.

Wood Nailers

When insulation is installed over the deck. Wood nailers must be incorporated at all roof edges to allow for insulation abutment. Wood nailers must be 3-1/2" (8.9 cm) minimum width or 1" (25 mm) wider than perimeter metal flange and minimum 1" (25 mm) thick and securely fastened to the deck.

Wood nailers shall be the same thickness as tapered edge strip or insulation.

Sheet Metal

Fabricate and install all sheet metal materials as shown in applicable construction in the Flashing Detail Section. Refer to SMACNA (Sheet Metal and Air Conditioning Contractors National Association, Inc.) for guidance on sheet metal treatments not addressed in this Manual.

Metal accessories (gravel stops, counter flashing, or etc.) should be a minimum 16 oz. (0.56 mm) copper, 24 gauge (0.71 mm) galvanized or stainless steel, or 0.032" (0.81 mm) aluminum.

Metal counter-flashing shall have a minimum 4" (10 cm) face with a drip lip. The bottom edge of the counter-flashing shall cover the roofing membrane and/or base flashing by a minimum of 4" (10 cm). Metal counter-flashing used for masonry walls, wooden walls or through wall metal flashings should be two piece designs to allow for installation and later removal. Metal counter-flashings for stucco, EIFS, wood siding or similar materials should be designed to receive and set as a base for those materials, such as "Z" type flashing, while providing for securement of separate metal counter-flashing to cover base flashings. Metal end joints shall be lapped 3" (7.6 cm) or more. Adequate fasteners must be provided to secure against effect of wind forces. Skirt fasteners shall be watertight.

Metal termination bars shall be a minimum of 1/10" (3 mm) thick x 1" (2.5 cm) wide with preformed sealant edge lap. Bar should have 1/4" (6 mm) x 3/8" (10 mm) slotted holes on 4" (10 cm) centers to facilitate mechanical anchorage.

Note: Termination bars are not suitable in all base flashing and wall flashing conditions. Termination bars may only be used in conjunction with an appropriate counter-flashing extending a minimum of 4" (10 cm) below the termination bar.

Metal flanges for drip eave strips, vent stacks and other flashings such as pitch pockets that are to be used in conjunction with roofing shall be primed (both sides). Flanges shall be a minimum of 3-1/2" (8.9 cm) wide for drip eave strips and 4" (10 cm) wide for projections and extensions through the roof. Always set metal over a strip of All Weather® SA Base and embed metal flanges in a bed of Plastic Roof Cement or Flashing Cement, and nail 4" (10 cm) o.c. staggered in two rows, to the wood nailers or roof deck as applicable. Use fastener types compatible with the sheet metal type.

Stacks shall have metal sleeve flashing a minimum 8" (20.3 cm) high. Pitch pockets for brackets, supports, pad-eyes, etc., shall have a 4" (10 cm) minimum height metal sleeve. Flanges shall be set over a layer All Weather® SA Base membrane in a bed of Flashing Cement and tops of metal flanges shall be primed with SA Primer or #41 Asphalt Primer. The field layer of All Weather® SA Cap shall cover the primed flashing flange as shown in Construction Detail contained herein.

All Weather assumes no responsibility for damage to the roofing system caused by the movement of accessory metal.

All Weather® SBS Flashing Membrane Application

All Weather® SA CAP membrane used for flashing materials can only be installed using the self-adhered method. Refer to the construction details in this section.

Wood curbs and walls must be covered with a layer of All Weather® Nail Base prior to installing the two-ply flashing system. Secure Nail Base 8" o.c. in all directions with approved fasteners with minimum 1" diameter or square caps. All vertical laps shall be 2" (5 cm). The Nail Base must extend down to the bottom of the cant prior to the installation of the roof membrane.

The finish flashing sheet of selected base flashing detail must be run vertically to maintain selvage edge at all vertical laps. All vertical laps shall be 3" (7.5 cm).

The finish flashing sheet shall be installed over the field membrane and extend up the wall and over the outside edge or up to its determined termination point and also must extend down and out onto field of roof as shown in applicable All Weather construction detail, and must be extended a minimum of 6" (15.1 cm) beyond the base of the cant or angle change.

At all vertical and other flashing overlaps onto mineral surfaced membranes, set top layer of All Weather® membrane in a bed of Flashing Cement. Install a finish bead of mastic along the edge of the seam.

Perimeter Flashing Application:

When roof edges utilize perimeter edge metal, the metal shall be installed over a strip of All Weather® SA Base as follows:

1. Metal perimeter flanges shall be set over the All Weather® SA Base membrane in a 1/8" – 1/4" thick bed of Flashing Cement.
2. Nail 4" (10 cm) o.c. staggered in two rows, to the wood nailers or wood roof deck as applicable.
3. Remove any oily substances from the metal flange and prime the topside of metal flange with SA Primer or #41 Asphalt Primer. Allow primer to dry.
4. Apply an additional bead of Flashing Cement between the roof edge side of the metal flange and the All Weather SA Base.
5. Proceed with the All Weather® SA Cap Installation. Refer to cap sheet installation instructions.

Wall and Curb Flashing Application:

1. Install the finish flashing sheet vertically so that the selvage edge is in a vertical fashion. Remove half of the poly release film on the underside from the upslope side of the roll and set in place then flip back the other half of the roll and remove the downslope side of the second half of the release film on the underside of the roll in a smooth continuous process. Do not remove the release film from the selvage edge as yet.
2. Firmly adhere the membrane by direct contact pressure to the desired substrate to ensure maximum contact with the substrate working out all voids and un-adhered areas.
3. Continue installing the membrane in an upslope flashing fashion, lapping the side laps 3" (7.5 cm). Extend a sheet a minimum of 6" (15.1 cm) out onto the roof.
4. Remove the release film from the selvage edge and the poly release film from the underside of the roll simultaneously to bond the side lap together. Firmly press the sheet onto the substrate.
5. Where flashing membrane overlaps onto mineral surfaced membranes, set top layer of All Weather® membrane in a bed of Flashing Cement and firmly press the sheet into place.
6. Nail the top of the flashing as specified in the flashing detail.

Penetration Flashing Application:

1. Metal flashing flanges shall be set over the All Weather® SA Base or a target sheet of the All Weather® SA Base membrane. The target sheet shall extend a minimum of 6" beyond the edge of the metal flange base.
2. Set the metal flange in a 1/8" – 1/4" thick bed of Flashing Cement. Remove any oily substances from the metal flange and prime the topside of metal flange with SA Primer or #41 Asphalt Primer. Allow primer to dry.
3. Nail the flange 4" (10 cm) o.c. staggered in two rows and approximately 1-1/2" in from the edge of the metal.
4. Apply an additional bead of Flashing Cement between the roof edge side of the metal flange and the All Weather SA Base.
5. Proceed with the All Weather® SA Cap Installation. Refer to cap sheet installation instructions.

For flashing details not addressed in this guide, please contact All Weather Roofing at 817-413-0103.

SURFACING INFORMATION

All Weather® SA Cap is covered with factory applied surfacing and do not require additional surfacing materials. Do not use liquid surface coatings over these membranes when new. Allow weathering of the membrane for at least 30 days to avoid asphalt bleed through.

Install all surfacing to provide proper membrane, wind uplift and fire protection as required by All Weather in conjunction with local code, insurance and project requirements.

All Weather shall not be liable or responsible for ballast and paver surfacing systems.

COMMERCIAL ROOF INSTALLATION INFORMATION

This manual does not address commercial roof installations. For more information concerning commercial roofs Contact All Weather Roofing at 817-413-0103.

PRODUCT INFORMATION

All Weather® SBS Self-Adhesive Cap Membrane Information

MEMBRANE	DESCRIPTION	FUNCTION	APPLICATION METHOD	UNIT	NOMINAL SIZE	NOMINAL WEIGHT
All Weather® SA CAP SBS	Mineral surfaced, fiberglass mat, release back, SBS self-adhesive cap sheet	SBS Cap	Self-Adhering	Roll	1 Square	75 lbs./roll

¹ The sizes and weights listed are approximate, and for unapplied rolls.

All Weather® SBS Base & Ply Sheet Information

MEMBRANE	DESCRIPTION	FUNCTION	APPLICATION METHOD	UNIT	NOMINAL SIZE	NOMINAL WEIGHT
All Weather® SA BASE SBS	Smooth permanent film top, release back, fiberglass mat, SBS self-adhesive sheet	Base/Ply	Self-Adhering	Roll	2 Squares	85 lbs./roll
All Weather® NAIL BASE	Smooth permanent film top, with sand back, glass fiber base	Anchor Sheet/Base Sheet	Mechanical	Roll	2 Squares	82 lbs./roll

¹ The sizes and weights listed are approximate, and for unapplied rolls.

ADHESIVES, CEMENTS & PRIMER Information

PRODUCT	DESCRIPTION	FUNCTION	UNIT SIZE	NOMINAL WEIGHT
41 Standard Asphalt Primer	An asbestos free penetrating asphalt primer used for prime coating concrete, metal and existing asphaltic surfaces which are to receive asphalt based materials. Applied using a brush or roller.	Primer	5 gal pail	38 lbs. (17.7 kg)
Plastic Roof Cement	A contractor grade asbestos free, trowel grade mastic formulated especially for contractor use. Consists of a high grade asphalt, petroleum solvents, mineral additives and selected non-asbestos fibers and plasticizers. Exceeds ASTM D4586. Maximum VOC content does not exceed 300 grams/liter.	Plastic Cement	5 gal pail	49 lbs. (22.2 kg)
Flashing Cement	Professional grade asbestos free, SBS modified cement for bonding SBS flashing membranes. Applied using a trowel. Exceeds ASTM D4586. Maximum VOC content does not exceed 300 grams/liter.	Modified Cement	5 gal pail	49 lbs. (22.2 kg)
SA Primer	A water-based pressure sensitive primer intended to enhance the bonding of self-adhesive membranes to concrete and wood. VOC compliant.	Primer	5 gal pail	42 lbs. (19.1 kg)

SURFACINGS & WALKWAYS Information

PRODUCT	DESCRIPTION	FUNCTION	UNIT SIZE	NOMINAL WEIGHT
WalkBoard	A composite adhered modified bitumen sheet consisting of a smooth underside and a granule top side. WalkBoard-SBS may be adhered with SBS flashing cement.	Walkway Pad	32" x 32"	12 lbs. (5.3 kg)
Granules	Made from 3M™ Classic Roofing Granules and are designed to match the granule surfacing of All Weather® SA membranes. Colors: White, Black, Cedar Blend, Hickory, Tan, and Weathered Wood	Granules	5 gal pail	45 lbs. (20.4 kg)



White



Black



Tan



Cedar Blend



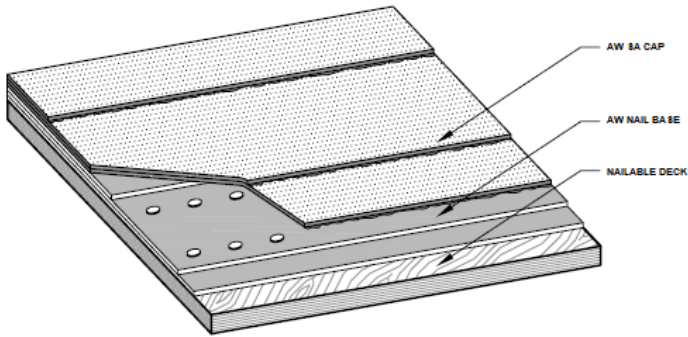
Hickory



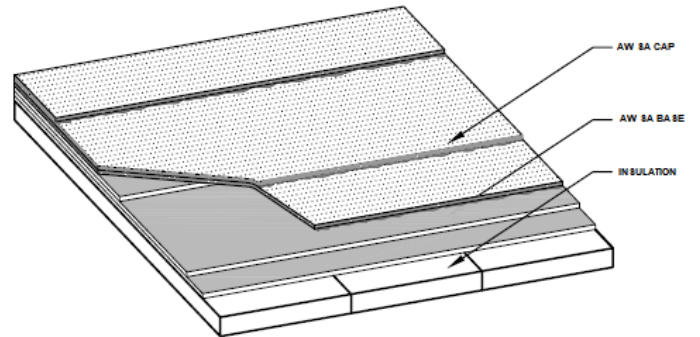
Weathered Wood

ALL WEATHER® SA LAYOUT & FLASHING DETAILS

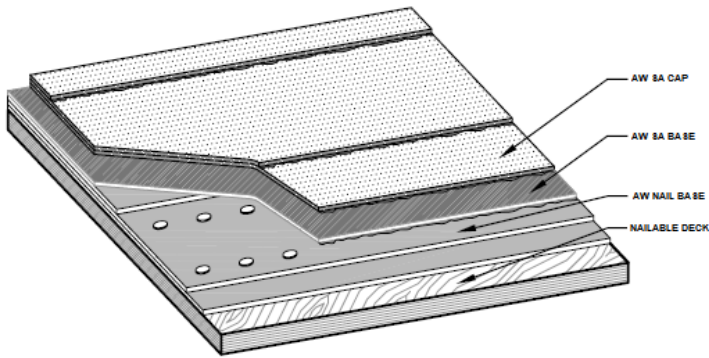
All Weather® SA Cap over Nail Base/Nailable Deck



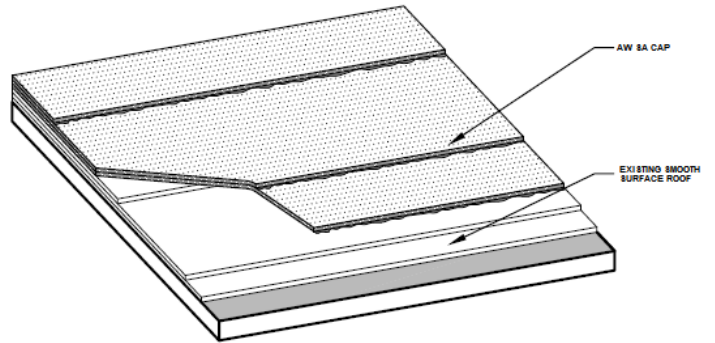
All Weather® SA Cap over SA Base/Insulated Deck



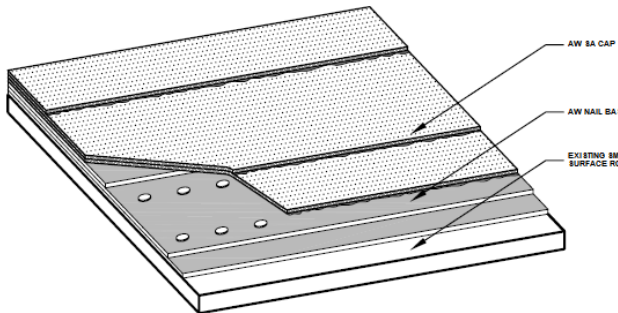
All Weather® SA Cap and SA BASE over Nail Base/Nailable Deck



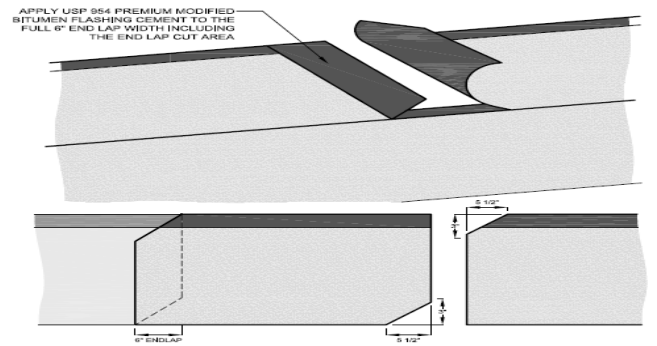
All Weather® SA Cap over Smooth Recover



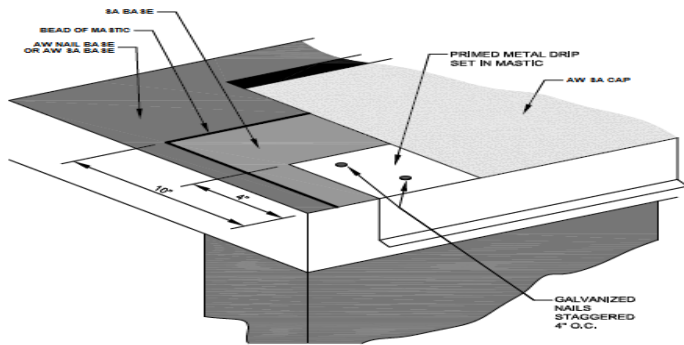
All Weather® SA Cap over Nail Base/Smooth Recover



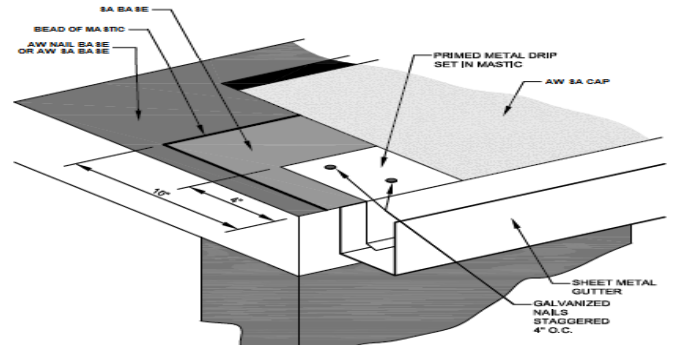
All Weather® SA Cap End Lap Detail

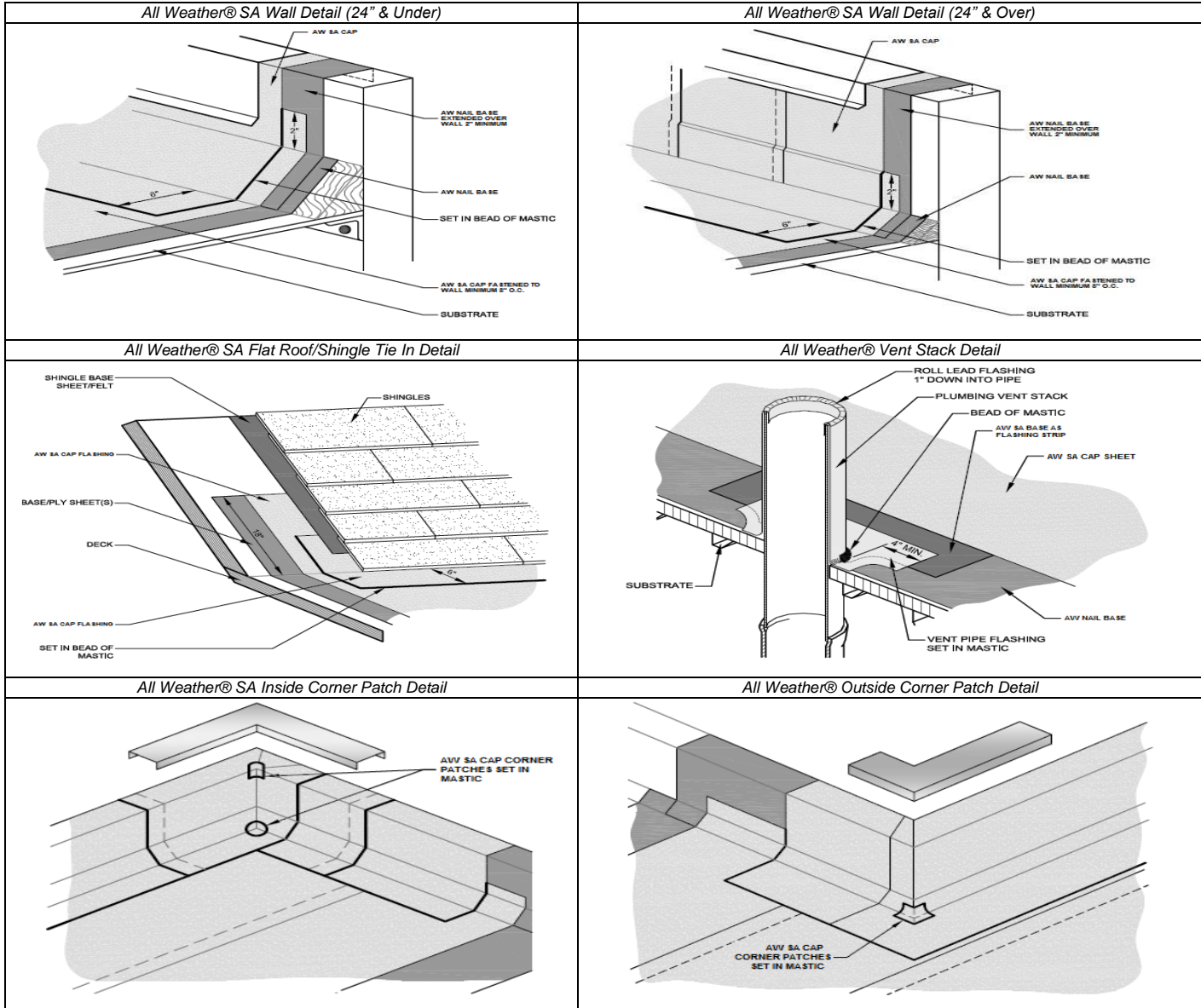


All Weather® SA Drip Edge Detail



All Weather® SA Drip Edge with Gutter Detail







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