



ROOF COATINGS TECHNICAL MANUAL

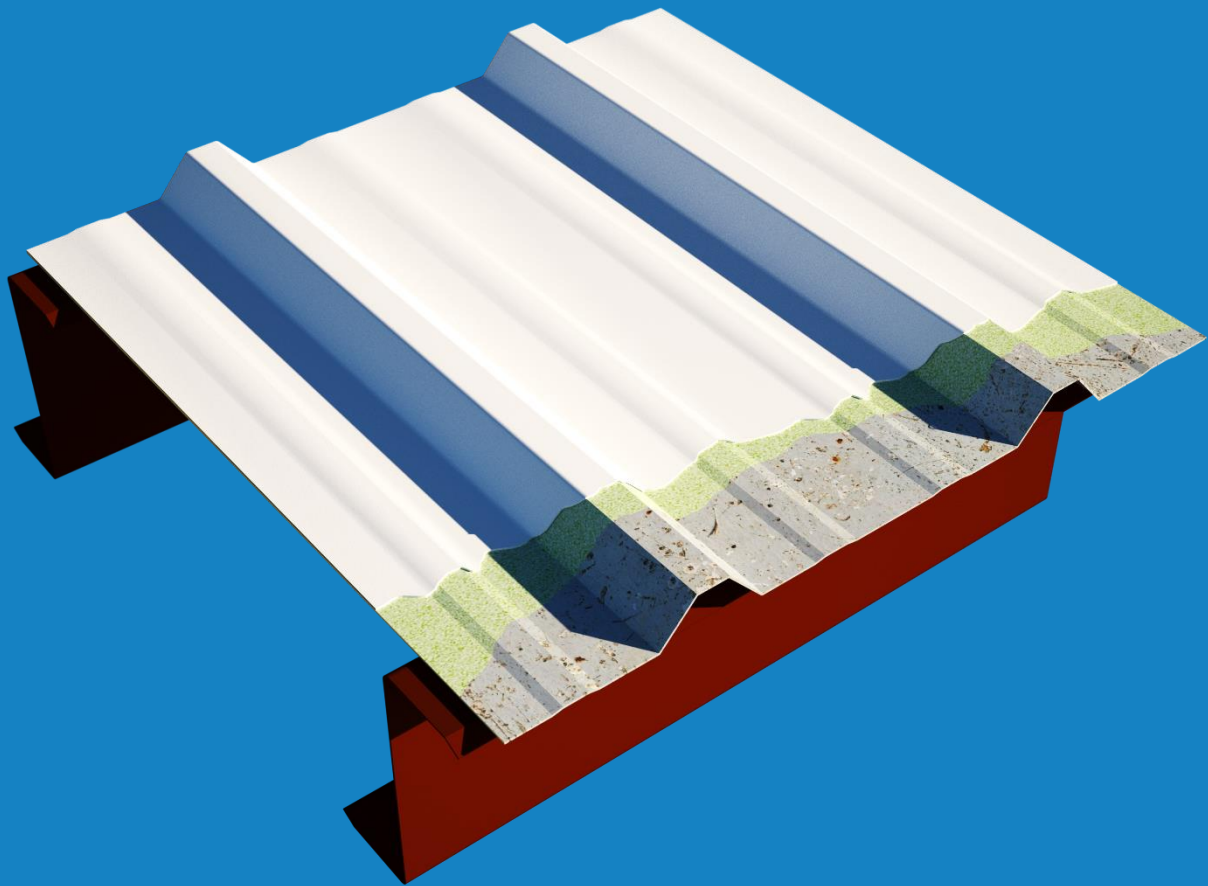


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INTRODUCTION

[SOPREMA®](#) ALSAN® coatings are highly reflective roof coatings that provide weather protection for new and existing roofing systems. ALSAN® coatings provide a durable roof surfacing intended for application over watertight roofing and flashing substrates. ALSAN® primers, coatings and flashing products consist of low VOC one-part materials that may be spray-applied, roller-applied or applied using brushes.

[ALSAN® COATING AC 401](#) is a water based acrylic elastomeric roof coating that provides a highly flexible surfacing for a variety of metal, single-ply, modified bitumen, smooth-surface asphalt built-up and other properly prepared roofing substrates. [ALSAN® COATING AC 401](#) accessories include [#652 ULTRAGREEN ROOF WASH ALL PURPOSE CLEANER](#), [ALSAN® COATING UNIVERSAL PRIMER](#), [ALSAN® COATING ASPHALT BLEED BLOCKING PRIMER](#), [ALSAN® COATING AC 401 FLASHING](#) brush/trowel-grade mastic, and [POLYFLEECE](#) non-woven polyester reinforcement.

[ALSAN® COATING SIL 402](#) is a high solids silicone roof coating that provides a highly flexible surfacing resistant to ponding water, UV and natural weathering exposures. [ALSAN® COATING SIL 402](#) is suitable for a variety of metal, single-ply, modified bitumen, smooth-surface asphalt built-up and other properly prepared roofing substrates. [ALSAN® COATING SIL 402](#) accessories include [#652 ULTRAGREEN ROOF WASH ALL PURPOSE CLEANER](#), [ALSAN® COATING UNIVERSAL PRIMER](#), [ALSAN® COATING ASPHALT BLEED BLOCKING PRIMER](#), [#652 ULTRAGREEN ROOF WASH ALL PURPOSE CLEANER](#), [ALSAN® COATING SIL 402 FLASHING](#) brush/trowel-grade mastic, and [POLYFLEECE](#) non-woven polyester reinforcement.

The “[SOPREMA®](#) ROOF COATINGS TECHNICAL MANUAL” is intended to offer guidance to [SOPREMA®](#) authorized contractors and design professionals. The manual provides specific instructions and details for [SOPREMA®](#) roof coatings and related accessories. Refer to applicable building codes, standards and roof coating industry publications for additional requirements and best-practice guidelines. Refer to current [SOPREMA®](#) product data sheets and safety data sheets for specific product data and product-related requirements. For additional information refer to www.soprema.us or contact [SOPREMA®](#) at 800.356.3521.

DISCLAIMER

This manual is intended for use by [SOPREMA®](#) authorized roofing contractors and design professionals in order to provide instructions and details for the application of [SOPREMA®](#) roof coatings when a [SOPREMA®](#) warranty will be requested upon project completion. The contents of this manual are consistent with good roofing practices but are not specific to any particular project's needs and are not a substitute for professional design services. [SOPREMA®](#) bears no liability nor responsibility for the evaluation or design of any particular project.

The roofing material applicator is responsible for ensuring compliance with contract documents, project specifications, roofing industry standards and jurisdictional codes necessary to meet the requirements for specific project applications.

1 SUBSTRATES FOR ALSAN® ROOF COATINGS

1.1 SUBSTRATE EVALUATION, REPAIR AND CLEANING

General:

- [SOPREMA®](#) ALSAN® coating primers, asphalt bleed blocking primer, coatings and accessories are suitable for a variety of roofing substrates. Refer to [Table 3.2a](#) for an outline of coating materials and accessories.
- Before beginning work, evaluate conditions to ensure the project is appropriate for [SOPREMA®](#) ALSAN® coatings and related materials.
- Ensure the new coating materials are appropriate for the roofing substrate, building, occupancy, site, environment and weather conditions.
- Existing roofing, flashing and accessories must be clean, dry and watertight prior to applying new coating materials.
- Comply with all project-related health, safety and environmental requirements.
- Comply with all personal protective equipment (PPE) requirements when handling and applying [SOPREMA®](#) coating materials.
- Review project conditions and determine when and where conditions are appropriate to utilize the specified coatings and accessories. When conditions are determined to be unsafe or undesirable to proceed, take all necessary measures to prevent or eliminate the unsafe or undesirable exposures and conditions before proceeding.
- The contractor and/or applicator is responsible for managing and controlling all exposures related to chemical hazards, toxic substances and odors. This includes personal protective equipment (PPE), administrative and work practice controls, and engineering controls. The contractor is responsible for the elimination or substitution of products as necessary to manage and control exposures related to chemical hazards, toxic substances and odors.
- Refer to product Safety Data Sheets (SDS) for health, safety, and environment related hazards, and take all necessary measures and precautions to comply with exposure requirements.

Evaluation:

- Examine project conditions to ensure conditions are satisfactory to proceed before proceeding with preparation work and before installing new coating materials.
- Refer to [Section 1.2](#) and [Table 1.2a](#) for substrate options, primer application and related requirements.
- For specific material storage, handling and application requirements, refer to [Section 2.1](#) for silicone roof coatings and [Section 2.2](#) for acrylic roof coatings.
- Moisture Survey:
 - Moisture surveys are recommended for the applicator to ensure subsurface conditions are dry and suitable to proceed.
 - The moisture survey may include a visual examination, test cuts, infrared cameras, capacitance meters, probes and/or other means as determined necessary by the applicator to identify all wet materials.
 - Complete a moisture survey to identify wet insulation for single-ply, modified bitumen and built-up roofing.
 - Ensure all wet materials have been replaced with appropriate dry materials before installing new coating materials.
- Ponding Water:
 - All roofing substrates should have positive slope and adequate roof drainage.
 - Ponding water is defined herein as isolated water accumulations that dissipate within 48 hours of precipitation.
 - [ALSAN® COATING SIL 402](#) silicone coating may be applied to acceptable roofing substrates where ponding water exists.

- [ALSAN® COATING AC 401](#) acrylic coating should not be applied where ponding water exists. Roofing substrates should have positive slope and adequate drainage to eliminate ponding water. Treat ponding water areas with [ALSAN® COATING SIL 402](#) silicone coating or [SOPREMA® ALSAN® RS](#).
- Adhesion:
 - Ensure the new coating materials will properly adhere to all substrates.
 - Conduct 180 degree peel tests to examine adhesion.
 - Choose three (3) or more representative substrate areas to test.
 - Clean and prepare the substrates as specified and indicated herein, allow to fully dry.
 - Cut minimum 1 in (2.54 cm) wide by 12 in (30.48 cm) long strips of [POLYFLEECE](#) fabric.
 - Apply primer where required, allow primer to fully dry.
 - Embed an 8 to 9 in (20.32 to 22.86 cm) long section of the strip into [ALSAN® COATING AC 401](#) acrylic coating or [ALSAN® COATING SIL 402](#) silicone coating. Leave a 3 to 4 in (7.62 to 10.16 cm) long portion un-adhered in order to grip and pull.
 - [ALSAN® COATING AC 401](#) acrylic coating may require up to 1 week based upon satisfactory environmental conditions to sufficiently cure and [ALSAN® COATING SIL 402](#) silicone coating may require 2 days or more.
 - Grip the un-adhered portion of the sample and pull 180 degrees, parallel with the surface. Use a small scale to measure results in pounds of resistance where quantitative results are desired.
 - Results should demonstrate strong resistance to peel. A strong bond will result in significant residual coating materials remaining on the substrate.
 - Samples that peel away easily from the substrate may indicate further preparation is needed, or alternate materials and/or application methods may be necessary.
 - Where quantitative measurements of peel resistance are desired, peel resistance of 1 in wide samples should exceed 2lb/in (0.35 N/mm) when tested. Wider fabric samples over 1 in wide should measure no less than 2 pounds per lineal inch of fabric width.
- Weather:
 - Weather conditions should be dry and remain dry during material application. Refer to each material product data sheet for specific weather-related requirements. For specific material storage, handling and application requirements, refer to [Section 2.1](#) for silicone roof coatings and [Section 2.2](#) for acrylic roof coatings.
 - Adjust storage, handling and the application of coating materials as necessary to accommodate varying conditions.
- Building, site and occupancy:
 - ALSAN® coatings are low VOC, low odor materials. Refer to safety data sheets for specific information related to safety and precautions.
 - Coordinate all work with the building owner's representative
 - Examine conditions that may impact the application/adhesion of new roof coating materials.
 - Examine all building equipment and rooftop equipment that may have an impact on the application of new coating materials such as HVAC equipment, intake and exhaust vents.
 - Examine equipment that discharges water, condensation, steam and other materials onto the work area.
 - Take all necessary measures necessary to ensure conditions are satisfactory during storage, handling and application of the new coating materials.

Repairs:

- Repair all damaged and deficient roofing, flashings and accessories to ensure conditions are watertight prior to applying new coating materials.

- Repairs vary for each roofing substrate type. Refer to the existing roofing manufacturer's published repair procedures and/or refer to roofing industry repair guidelines such as the *NRCA Guidelines for Roof Coatings*, or the *SPRI/NRCA Manual of Roof Inspection, Maintenance and Emergency Repair for Existing Single-ply Roofing Systems*, or the *Repair Manual for Low-slope Membrane Roof Systems* by the NRCA.
- Below are general repair requirements for each existing roofing substrate type.
 - Modified Bitumen/Built-up Roofing repairs:
 - Comply with the existing roofing manufacturer's published repair and/or installation guidelines.
 - Remove all loose surfacing materials, clean and prepare the repair area.
 - Seal all open and partially-open modified bitumen membrane and flashing laps and seams.
 - Repair or replace damaged modified bitumen membrane, flashings and accessories with like materials as necessary to ensure conditions are watertight and satisfactory to apply the new coating materials.
 - EPDM Roofing repairs:
 - Comply with the existing EPDM roofing manufacturer's published repair and/or installation guidelines.
 - Remove all loose surfacing materials, clean and prepare the repair area.
 - Seal all open and partially open EPDM membrane and flashing laps and seams.
 - Repair or replace damaged EPDM membrane, flashings and accessories with like materials as necessary to ensure conditions are watertight and satisfactory to apply the new coating materials.
 - TPO, CSPE, PVC and other approved thermoplastic single-ply roofing repairs:
 - Comply with the existing single-ply roofing manufacturer's published repair and/or installation guidelines.
 - Remove all loose surfacing materials, clean and prepare the repair area.
 - Seal all open and partially open membrane and flashing laps and seams.
 - Repair or replace damaged membrane, flashings and accessories with like materials as necessary to ensure conditions are watertight and satisfactory to apply the new coating materials.
 - Standing Seam and Lap Seam Metal Roofing repairs:
 - Comply with the existing metal roofing manufacturer's published repair and/or installation guidelines.
 - Remove all loose surfacing materials and existing loose/deteriorated coatings. Clean and prepare the repair area.
 - Replace all damaged and deteriorated metal panels and other roofing components that are no longer water-tight and/or not suitable for new coating materials.
 - Use a wire brush or mechanically abrade surfaces as necessary to remove all loose rust.
 - Replace all missing, stripped and deteriorated fasteners using new properly sized, corrosion resistant fasteners with EPDM-backed washers. New fasteners and washers should be sized larger than the old existing fasteners where appropriate.
 - Fasten all metal roofing and flashings at lapped seams as required to limit panel movement and prevent seams from opening when the seams are under foot traffic.
 - Repair or replace all damaged and deficient foam closures, pipe flashings and other metal roofing accessories.
 - Repair or replace all other damaged flashings and accessories with like materials as necessary to ensure conditions are watertight and satisfactory to apply the new coating materials.

Cleaning:

- Cleaning requirements vary for each roofing substrate type. Refer to existing roofing manufacturer's published cleaning guidelines and/or roofing industry guideless where appropriate.
- Prior to cleaning, evaluate the roofing substrates, building, occupancy, site and environment to prevent leaks and other damages during cleaning. Adjust cleaning materials and methods as necessary.
- Use water and diluted cleaning solutions to clean roofing substrates and ensure satisfactory adhesion of the new primers, coatings, sealants, mastics and all other new coating materials.
- [#652 ULTRAGREEN ROOF WASH ALL PURPOSE CLEANER](#) is a water-based surface cleaner used to clean, degrease, and deodorize various roofing substrates. Dilute cleaner with clean water.
- Do not use soap to clean roofing substrates. Use only approved roof cleaner indicated herein.
- Comply with all jurisdictional requirements when using cleaners. Refer to material product data sheets and safety data sheets.
 - Modified Bitumen/Built-up Roofing cleaning:
 - Dilute one (1) part of [#652 ULTRAGREEN ROOF WASH ALL PURPOSE CLEANER](#) with ten (10) parts of water.
 - Use a pressure washer (3,000 psi) to clean and remove loose granules, dirt, biological growth and other residue as necessary to produce clean roof surfaces. Hold nozzles back from the roof surface as necessary to ensure pressure and water does not damage roofing substrates.
 - Apply [#652 ULTRAGREEN ROOF WASH ALL PURPOSE CLEANER](#) with a stiff bristle broom or brush to remove petroleum, grease or other contaminants to clean surfaces. Dilute as needed.
 - Remove all residual cleaner using clean water.
 - EPDM Roofing cleaning:
 - Dilute one (1) part of [#652 ULTRAGREEN ROOF WASH ALL PURPOSE CLEANER](#) with ten (10) parts of water.
 - Use a pressure washer (3,000 psi) to clean and remove loose granules, dirt, biological growth and other residue as necessary to produce clean roof surfaces. Hold nozzles back from the roof surface as necessary to ensure pressure and water does not damage roofing substrates.
 - Apply [#652 ULTRAGREEN ROOF WASH ALL PURPOSE CLEANER](#) with a stiff bristle broom or brush to remove petroleum, grease or other contaminants to clean surfaces. Dilute as needed.
 - Multiple applications are required to sufficiently clean EPDM. Clean and rinse EPDM at least twice.
 - Remove all residual cleaner using clean water.
 - TPO, CSPE, PVC and other approved thermoplastic single-ply roofing cleaning:
 - Dilute one (1) part of [#652 ULTRAGREEN ROOF WASH ALL PURPOSE CLEANER](#) with ten (10) parts of water.
 - Use a pressure washer (3,000 psi) to clean and remove loose granules, dirt, biological growth and other residue as necessary to produce clean roof surfaces. Hold nozzles back from the roof surface as necessary to ensure pressure and water does not damage roofing substrates.
 - Apply [#652 ULTRAGREEN ROOF WASH ALL PURPOSE CLEANER](#) with a stiff bristle broom or brush to remove petroleum, grease or other contaminants to clean surfaces. Dilute as needed.
 - Remove all residual cleaner using clean water.

- Standing Seam and Metal Lap Seam Roofing cleaning:
 - Dilute one (1) part of [#652 ULTRAGREEN ROOF WASH ALL PURPOSE CLEANER](#) with ten (10) parts of water.
 - Use a pressure washer (3,000 psi) to clean and remove loose granules, dirt, biological growth and other residue as necessary to produce clean roof surfaces. Hold nozzles back from the roof surface as necessary to ensure pressure and water does not damage roofing substrates.
 - Apply [#652 ULTRAGREEN ROOF WASH ALL PURPOSE CLEANER](#) with a stiff bristle broom or brush to remove petroleum, grease or other contaminants to clean surfaces. Dilute as needed.
 - Remove all residual cleaner using clean water.
- Existing Coating cleaning:
 - Dilute one (1) part of [#652 ULTRAGREEN ROOF WASH ALL PURPOSE CLEANER](#) with ten (10) parts of water.
 - Use a pressure washer (3,000 psi) to clean and remove loose granules, dirt, biological growth and other residue as necessary to produce clean roof surfaces. Hold nozzles back from the roof surface as necessary to ensure pressure and water does not damage roofing substrates.
 - Apply [#652 ULTRAGREEN ROOF WASH ALL PURPOSE CLEANER](#) with a stiff bristle broom or brush to remove petroleum, grease or other contaminants to clean surfaces. Dilute as needed.
 - Remove all residual cleaner using clean water.

Inspection:

- After cleaning and before applying the new coating materials, inspect conditions to ensure the following are satisfactory:
 - Ensure all repairs have been made to provide satisfactory, watertight substrates.
 - Ensure all existing wet roofing materials have been identified, removed and replaced with new/dry materials.
 - Inspect all roofing substrates each day to ensure all substrates are clean and dry.
 - Confirm adhesion is satisfactory for the new coating materials on all prepared substrates.
 - Coordinate storage, handling and application of the new coating materials with the owner's representatives to ensure the building, site, occupancy and environmental conditions are satisfactory to begin work.
 - Each day, ensure weather conditions are satisfactory to store, handle and apply the new coating materials.
 - For specific application requirements, refer to [Section 2.1](#) for silicone roof coatings and [Section 2.2](#) for acrylic roof coatings.

1.2 PRIMERS FOR ALSAN® ROOF COATINGS

General:

- Refer to [Table 3.2a](#) for an outline of coating materials and accessories.
- [ALSAN® COATING ASPHALT BLEED BLOCKING PRIMER](#) is a water-based acrylic primer applied at 1.5 gallons per 100 sq ft. The primer improves adhesion to bitumen substrates and prevents discoloration from bitumen bleed-through into ALSAN® coatings. The primer is required for ALSAN® coatings applied over clean, prepared modified bitumen and built-up roofing substrates.
- [ALSAN® COATING UNIVERSAL PRIMER](#) is a water-based primer applied at 1 gallon per 100 sq ft. The primer improves adhesion to EPDM, PVC, CSPE, TPO, galvalume, galvanized steel, and aluminum substrates. The primer also imparts corrosion resistance to metal substrates.
- The contractor and/or applicator is responsible for managing and controlling all exposures related to chemical hazards, toxic substances and odors. This includes personal protective equipment (PPE), administrative and work practice controls, and engineering controls. The contractor is responsible for the elimination or substitution of products as necessary to manage and control exposures related to chemical hazards, toxic substances and odors.
- Refer to product Safety Data Sheets (SDS) for health, safety, and environment related hazards, and take all necessary measures and precautions to comply with exposure requirements.

Preparation:

- Refer to [Section 1.1](#) for guidelines required to prepare substrates prior to applying primer and other new coating materials.

Application:

- Refer to [Table 1.2a](#) for primer application rates.
- Evenly apply primer using a heavy duty sprayer, paint roller, or brush.
- Do not leave primed substrates exposed during periods of dew, precipitation, or other inclement weather within 72 hours of application.
- Apply the ALSAN® coating to primed substrates during the same day or within 24 hours after priming.
- [ALSAN® COATING ASPHALT BLEED BLOCKING PRIMER](#):
 - Weather and environmental conditions:
 - For long-term storage of [ALSAN® COATING ASPHALT BLEED BLOCKING PRIMER](#), materials should be stored in original sealed containers at temperatures between 40°F (4.4°C) and 70°F (21°C). Do not store over 120°F (49°C)
 - [ALSAN® COATING ASPHALT BLEED BLOCKING PRIMER](#) must not be exposed to freezing temperatures during storage, handling, and within 72 hours after application.
 - During application, the ambient temperature should be above 50°F (10°C) and less than 110°F (43.3°C).



- For optimum application conditions, the substrate temperature should be between 50°F (10°C) and 120°F (49°C), and the [ALSAN® COATING ASPHALT BLEED BLOCKING PRIMER](#) material temperature should be between 40°F (4.4°C) and 70°F (20°C).
 - Conditions must be dry when applying [ALSAN® COATING ASPHALT BLEED BLOCKING PRIMER](#).
 - Other ambient conditions such as sun, cloud cover, wind, humidity, and shade may impact the application and drying time of [ALSAN® COATING ASPHALT BLEED BLOCKING PRIMER](#).
 - Monitor substrate and material temperatures, as well as all environmental conditions such as ambient temperature, moisture, sun, cloud cover, wind, humidity, and shade to ensure conditions remain satisfactory.
 - Ensure all materials and substrates remain above the dew point temperature to prevent condensation from forming during application. Ambient temperature should be well above the dew point temperature, with no dew, fog or condensation present.
 - [ALSAN® COATING ASPHALT BLEED BLOCKING PRIMER](#) is sufficiently dry and ready to apply coating within about 4 hours during warm conditions. The primer dries quickly during hot, dry, sunny weather. The primer dries slower during cool, cloudy and humid weather.
- [ALSAN® COATING UNIVERSAL PRIMER](#):
 - Weather and environmental conditions:
 - For long-term storage of [ALSAN® COATING UNIVERSAL PRIMER](#), materials should be stored in original sealed containers at temperatures between 40°F (4.4°C) and 70°F (21°C). Do not store over 120°F (49°C).
 - [ALSAN® COATING UNIVERSAL PRIMER](#) must not be exposed to freezing temperatures during storage, handling, and within 72 hours after application.
 - During application, the ambient temperature should be between 50°F (10°C) and 110°F (43.3°C).
 - For optimum application conditions, the substrate temperature should be between 50°F (10°C) and 120°F (49°C), and the [ALSAN® COATING UNIVERSAL PRIMER](#) material temperature should be between 40°F (4.4°C) and 70°F (20°C).
 - Conditions must be dry when applying [ALSAN® COATING UNIVERSAL PRIMER](#).
 - Other ambient conditions such as sun, cloud cover, wind, humidity, and shade may impact the application and drying time of [ALSAN® COATING UNIVERSAL PRIMER](#).
 - Monitor substrate and material temperatures, as well as all environmental conditions such as ambient temperature, moisture, sun, cloud cover, wind, humidity, and shade to ensure conditions remain satisfactory.
 - Ensure all materials and substrates remain above the dew point temperature to prevent condensation from forming during application. Ambient temperature should be well above the dew point temperature, with no dew, fog or condensation present.



- [ALSAN® COATING UNIVERSAL PRIMER](#) is sufficiently dry and ready to apply coating within about 4 hours during warm conditions. The primer dries quickly during hot, dry, sunny weather. The primer dries slower during cool, cloudy and humid weather.

Inspection:

- Examine the primed areas to ensure the primer is evenly applied.
- Ensure primer is dry before applying ALSAN® coating as accessories. Primer drying and curing times vary based upon actual project conditions.
- Examine adhesion of the ALSAN® coating to primed areas. Refer to [Section 1.1](#) for adhesion (peel) test requirements.

Table 1.2a Primers for ALSAN® Roof Coatings		
Substrate	Primer	¹ Coverage
Modified Bitumen and Built-up Roofing	ALSAN® COATING ASPHALT BLEED BLOCKING PRIMER	² 1.5 gallons per 100 SF
EPDM Roofing	None	n/a
	ALSAN® COATING UNIVERSAL PRIMER	1.0 gallons per 100 SF
PVC, CSPE, TPO Roofing	None	n/a
	ALSAN® COATING UNIVERSAL PRIMER	1.0 gallons per 100 SF
Standing Seam Metal Roofing	None	n/a
	ALSAN® COATING UNIVERSAL PRIMER	1.0 gallons per 100 SF
Metal Lap Panel Roofing	None	n/a
	ALSAN® COATING UNIVERSAL PRIMER	1.0 gallons per 100 SF

¹ Coverage rates may vary based on substrate and project conditions. Refer to primer product data sheets for additional information.

² New fresh bitumen and recently repaired areas should receive two coats of [ALSAN® COATING ASPHALT BLEED BLOCKING PRIMER](#).

2 ALSAN® ROOF COATINGS

2.1 ALSAN® COATING SIL 402 SILICONE ROOF COATING

General:

- Refer to [Table 3.2a](#) for an outline of coating materials and accessories.
- [ALSAN® COATING SIL 402](#) is a high solids silicone roof coating that provides a highly flexible surfacing resistant to ponding water, UV and natural weathering exposures.
- [ALSAN® COATING SIL 402](#) is suitable for a variety of metal, single-ply, modified bitumen, smooth-surface asphalt built-up, existing coatings and other properly prepared roofing substrates. Refer to [Table 2.1a](#).
- [ALSAN® COATING SIL 402](#) accessories include [#652 ULTRAGREEN ROOF WASH ALL PURPOSE CLEANER](#), [ALSAN® COATING ASPHALT BLEED BLOCKING PRIMER](#), [ALSAN® COATING UNIVERSAL PRIMER](#), [ALSAN® COATING SIL 402 FLASHING](#) brush/trowel-grade mastic, and [POLYFLEECE](#) non-woven polyester reinforcement.
- The contractor and/or applicator is responsible for managing and controlling all exposures related to chemical hazards, toxic substances and odors. This includes personal protective equipment (PPE), administrative and work practice controls, and engineering controls. The contractor is responsible for the elimination or substitution of products as necessary to manage and control exposures related to chemical hazards, toxic substances and odors.
- Refer to product Safety Data Sheets (SDS) for health, safety, and environment related hazards, and take all necessary measures and precautions to comply with exposure requirements.
- Refer to the PDS and SDS for additional information.
- For optimum long-term storage of [ALSAN® COATING SIL 402](#), materials should be stored in original sealed containers at temperatures between 50°F (10°C) and 80°F (26.7°C).



Preparation:

- Refer to [Section 1.1](#) for guidelines required prior to applying new coating materials.
- Ensure project conditions are satisfactory, and will remain satisfactory, during the application of new coating materials.
- Weather and environmental conditions:
 - [ALSAN® COATING SIL 402](#) is a silicone-based material and is not subject to freezing. Optimum long term storage conditions should be maintained between 55°F (12.8°C) and 80°F (26.7°C).
 - During application, the ambient temperature should be between 40°F (4.4°C) and 110°F (35°C).
 - Ambient conditions such as sun, cloud cover, wind, humidity, and shade may impact the application and cure time of [ALSAN® COATING SIL 402](#).
 - Monitor substrate and material temperatures, as well as all environmental conditions such as ambient temperature, moisture, sun, cloud cover, wind, humidity, and shade to ensure conditions remain satisfactory.
 - Weather and substrate conditions must be dry when applying [ALSAN® COATING SIL 402](#).

- Ensure all materials and substrates remain above the dew point temperature to prevent condensation from forming during application. Ambient temperature should be well above the dew point temperature, with no dew, fog or condensation present.
 - [ALSAN® COATING SIL 402](#) is tack-free and dry to the touch within 2 to 8 hours. Ambient conditions such as sun, cloud cover, wind, humidity, and shade impact the application and cure time. [ALSAN® COATING SIL 402](#) cures and dries quickly during hot, dry, sunny weather, and dries slower during cool, cloudy and humid weather.
 - During warm conditions favorable conditions [ALSAN® COATING SIL 402](#) is walkable within 72 hours of application.
- Monitor weather forecasts to ensure conditions are dry and satisfactory before, during and up to 24 hours after the application of new coating materials.
- Ensure primers and sealants are dry and ready to install subsequent materials. Plan accordingly to install materials in proper sequence.
- Modified Bitumen and Built-up membrane laps and flashings:
 - Ensure [ALSAN® COATING ASPHALT BLEED BLOCKING PRIMER](#) is dry before applying new coating and flashing materials. Refer to [Section 1.2](#).
 - Pre-treat all side and end-laps with [ALSAN® COATING SIL 402 FLASHING](#) using a brush or roller.
 - Apply [ALSAN® COATING SIL 402 FLASHING](#) at membrane terminations such as roof penetrations and edge metal.
 - Refer to flashing detail guidelines indicated in [Figures 2.1a through 2.1d](#).
- EPDM laps and flashings:
 - If primed, ensure [ALSAN® COATING UNIVERSAL PRIMER](#) is dry before applying new coating and flashing materials. Refer to [Section 1.2](#).
 - Pre-treat all side and end-laps with [ALSAN® COATING SIL 402 FLASHING](#) using a brush or roller.
 - Apply [ALSAN® COATING SIL 402 FLASHING](#) at membrane terminations such as roof penetrations and edge metal.
 - Refer to flashing detail guidelines indicated in [Figures 2.1e through 2.1h](#).
- TPO/CSPE/PVC laps and flashings:
 - If primed, ensure [ALSAN® COATING UNIVERSAL PRIMER](#) is dry before applying new coating and flashing materials. Refer to [Section 1.2](#).
 - Pre-treat all side and end-laps with [ALSAN® COATING SIL 402 FLASHING](#) using a brush or roller.
 - Apply [ALSAN® COATING SIL 402 FLASHING](#) at membrane terminations such as roof penetrations and edge metal.
 - Refer to flashing detail guidelines indicated in [Figures 2.1i through 2.1l](#).
- Standing Seam Metal laps and flashings:
 - If primed, ensure [ALSAN® COATING UNIVERSAL PRIMER](#) is dry before applying new coating and flashing materials. Refer to [Section 1.2](#).
 - For horizontal (flat) end laps, apply 1" wide bond breaker tape (painter's tape) and pre-treat the seam using [ALSAN® COATING SIL 402 FLASHING](#). Alternatively, a three-course application of [ALSAN® COATING SIL 402](#) reinforced using [POLYFLEECE](#) can be used to pre-treat end laps.
 - Apply [ALSAN® COATING SIL 402 FLASHING](#) to seal all exposed fastener heads.
 - Apply [ALSAN® COATING SIL 402 FLASHING](#) to seal side laps and terminations.
 - Refer to flashing detail guidelines indicated in [Figures 2.1m through 2.1p](#).
- Metal Lap Panels laps and flashings:
 - If primed, ensure [ALSAN® COATING UNIVERSAL PRIMER](#) is dry before applying new coating materials. Refer to [Section 1.2](#).
 - For horizontal (flat) end laps, apply 1" wide bond breaker tape (painter's tape) and pre-treat the seam using [ALSAN® COATING SIL 402 FLASHING](#). Alternatively, a three-course application of [ALSAN® COATING SIL 402](#) reinforced using [POLYFLEECE](#) can be used to pre-treat end laps.
 - Apply [ALSAN® COATING SIL 402 FLASHING](#) to seal all exposed fastener heads.
 - Apply [ALSAN® COATING SIL 402 FLASHING](#) to seal side laps and terminations.
 - Refer to flashing detail guidelines indicated in [Figures 2.1q through 2.1t](#).

Application:

- Ensure primers, pre-treated laps, flashings and sealants are dry, cured and ready to install [ALSAN® COATING SIL 402](#).
- When [ALSAN® COATING SIL 402](#) has been stored for long periods of time, stir the contents using a power mixer to ensure uniform consistency.
- Apply [ALSAN® COATING SIL 402](#) up to 40 wet mils (2.5 gals/100 ft²) in one single pass application. When total coating thickness is over 40 wet mils, multiple coats of [ALSAN® COATING SIL 402](#) are recommended to prevent runs and sags.
- [ALSAN® COATING SIL 402](#) is applied using rollers, brushes, or single-component sprayers.
- Brush application:
 - Disposable brushes are generally needed for small/confined areas, seams, touch-up work and flashings.
- Roller application:
 - Rollers include heavy-duty hand-held rollers and natural roller-covers with ½ to 1 in nap. Apply [ALSAN® COATING SIL 402](#) to ensure an even, uniform coating thickness.
 - Roll side-to-side, up-and-down. Always roll into the seams.
 - Profile rollers are recommended for metal roofing to conform to metal rib and seam profiles.
- Squeegee and roller application:
 - Dispense coating onto the roof, then use a flat blade squeegees to apply the coating to the desired thickness, then back-roll the coating using a roller as indicated herein.
- Spreader Cart and roller application:
 - Tank spreader carts are used to dispense coating onto the roof surface, then rollers are used to back-roll the coating as indicated herein.
- T-bar and roller application:
 - Using spray pumps to deliver coating to T-bar at low pressure to dispense coating onto the roof surface.
 - Rollers are used to back-roll the coating as indicated herein.
- Spray application:
 - Refer to Coating Preparation, Weather and Environmental Conditions, for acceptable weather conditions.
 - When spraying [ALSAN® COATING SIL 402](#), the spray tip should be located approximately 12 in above the roof substrate to ensure a 12 in spray fan pattern. Spray perpendicular to the surface, moving steady in one direction.
 - Spray techniques vary for each substrate. Ensure the minimum coating thickness is achieved at membrane laps, standing seams, metal panel ribs, roof penetrations, at fasteners, etc.
 - Hose size, length, weather conditions, [ALSAN® COATING SIL 402](#) material temperature and other variables will affect spray pattern. Adjust application techniques as necessary to accommodate varying conditions to produce a uniform coating, and meet minimum thickness requirements.
 - To avoid runs and sag on steep slopes and vertical surfaces, multiple coats may be required.
- Spray equipment options for [ALSAN® COATING SIL 402](#) include the following:
 - Dedicated equipment for silicone roof coatings only.
 - Recommended sprayers: Graco 933 or Graco King X-70, fed by a 5:1 transfer pump.
 - Recommended pump output: 3 gpm, 7,000 psi (483 bar).
 - Hoses: High-pressure, moisture-resistant, ¾ in diameter minimum.
 - Recommended minimum pressure at spray gun: 4,000 psi (276 bar) at spray gun head.
 - Tip: Heavy Duty 529 to 635
- [ALSAN® COATING SIL 402](#) wet mil thickness requirements are based on the roofing substrate and SOPREMA warranty required. Refer to [Table 2.1a](#) for SOPREMA warranty terms, required coating thickness and approximate coverage rates.
- For [ALSAN® COATING SIL 402](#) flashing detail guidelines, refer to [Figures 2.1a through 2.1t](#).

- Use [#653 ULTRASOLVE VIRGIN MINERAL SPIRITS](#) or other moisture-free virgin mineral spirits to clean hoses and equipment components.
- Remove spills and clean tools using VM&P Naphtha or Rule 66 Mineral Spirits.

Inspection:

- During application, take frequent measurements of the [ALSAN® COATING SIL 402](#) wet mil thickness to ensure the minimum wet mil thickness is maintained throughout the project.
- Upon completion of work, if coating thickness is in question, remove slit samples of fully cured coating and evaluate coating thickness using an optical comparator.
- After [ALSAN® COATING SIL 402](#) has cured sufficiently for 72 hours or more, walk the roof and examine flashings, sealants and coating to ensure work has been completed as required. Repair all deficiencies.

Table 2.1a ALSAN® COATING SIL 402 Warranty Term & Roof Coating Thickness			
Substrate	¹ Warranty Term	Minimum Thickness	Approximate Coverage Rate
Modified Bitumen & Built-up Roofing	10 years	24 wet mils/ 22 dry mils	1.5 gals/100 ft ²
	15 years	32 wet mils/ 30 dry mils	2.0 gals/100 ft ²
	20 years	40 wet mils/ 38 dry mils	2.5 gals/100 ft ²
EPDM Roofing	10 years	24 wet mils/ 22 dry mils	1.5 gals/100 ft ²
	15 years	32 wet mils/ 30 dry mils	2.0 gals/100 ft ²
	20 years	40 wet mils/ 38 dry mils	2.5 gals/100 ft ²
TPO, PVC, CSPE Roofing	10 years	24 wet mils/ 22 dry mils	1.5 gals/100 ft ²
	15 years	32 wet mils/ 30 dry mils	2.0 gals/100 ft ²
	20 years	40 wet mils/ 38 dry mils	2.5 gals/100 ft ²
Standing Seam Metal Roofing	10 years	24 wet mils/ 22 dry mils	1.5 gals/100 ft ²
	15 years	32 wet mils/ 30 dry mils	2.0 gals/100 ft ²
	20 years	40 wet mils/ 38 dry mils	2.5 gals/100 ft ²
Metal Lap Panel Roofing	10 years	24 wet mils/ 22 dry mils	1.5 gals/100 ft ²
	15 years	32 wet mils/ 30 dry mils	2.0 gals/100 ft ²
	20 years	40 wet mils/ 38 dry mils	2.5 gals/100 ft ²
Existing Silicone Coating	10 years	24 wet mils/ 22 dry mils	1.5 gals/100 ft ²

¹ Refer to www.SOPREMA.us for the [SOPREMA®](#) Standard Roof Coating Warranty, Form C100, or contact [SOPREMA®](#) at 800.356.3521 for more information.

Drawings and detail guidelines:

- [SOPREMA®](#) roof coating drawings and detail guidelines are provided as general guidelines and fundamental requirements for [SOPREMA®](#) roofing coating and flashing details.
- All detail drawings and related installation guidelines are provided by [SOPREMA®](#) for the sole purpose of issuing a [SOPREMA®](#) warranty. Accordingly, the drawings and detail guidelines are not offered, and should not be considered, as a substitute for professional design services.
- Refer to www.SOPREMA.us for [SOPREMA®](#) CAD drawings and customizable PDF drawing details.
- Contact [SOPREMA®](#) at 800.356.3521 for more information.

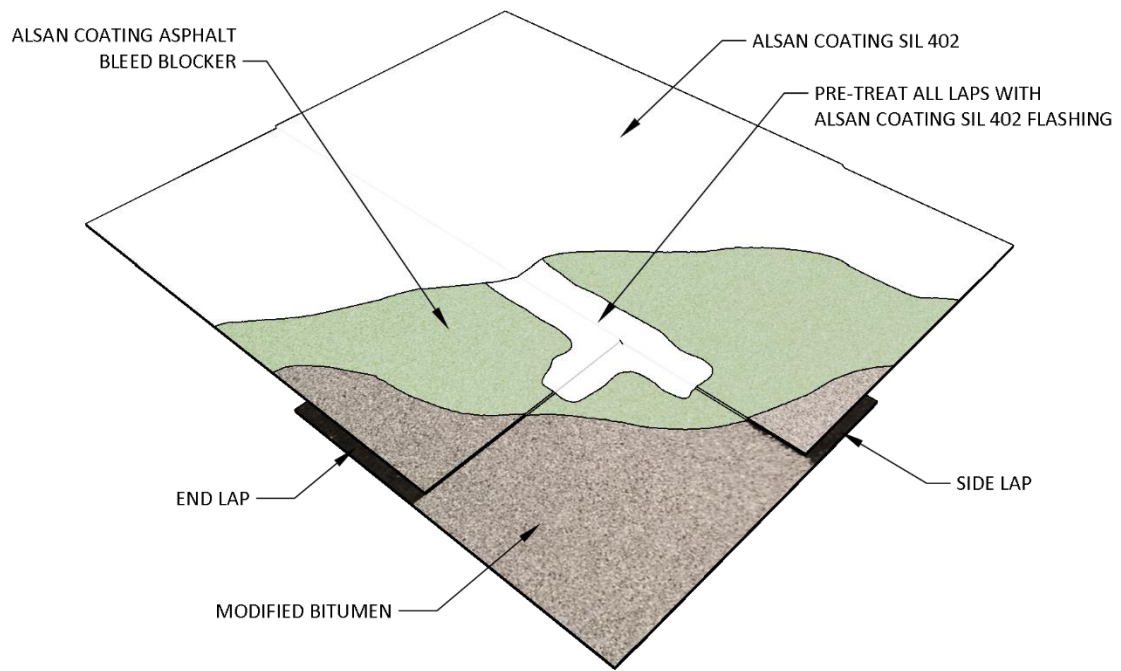


Figure 2.1a Silicone Roof Coating Over Modified Bitumen, Side/End Laps

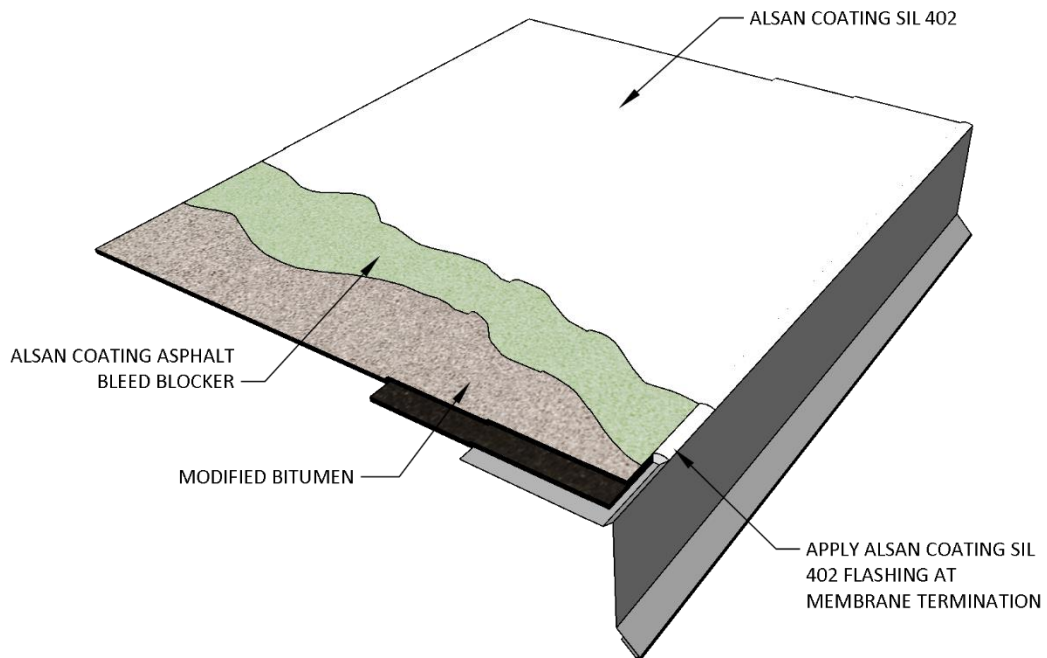


Figure 2.1b Silicone Roof Coating Over Modified Bitumen, Edge

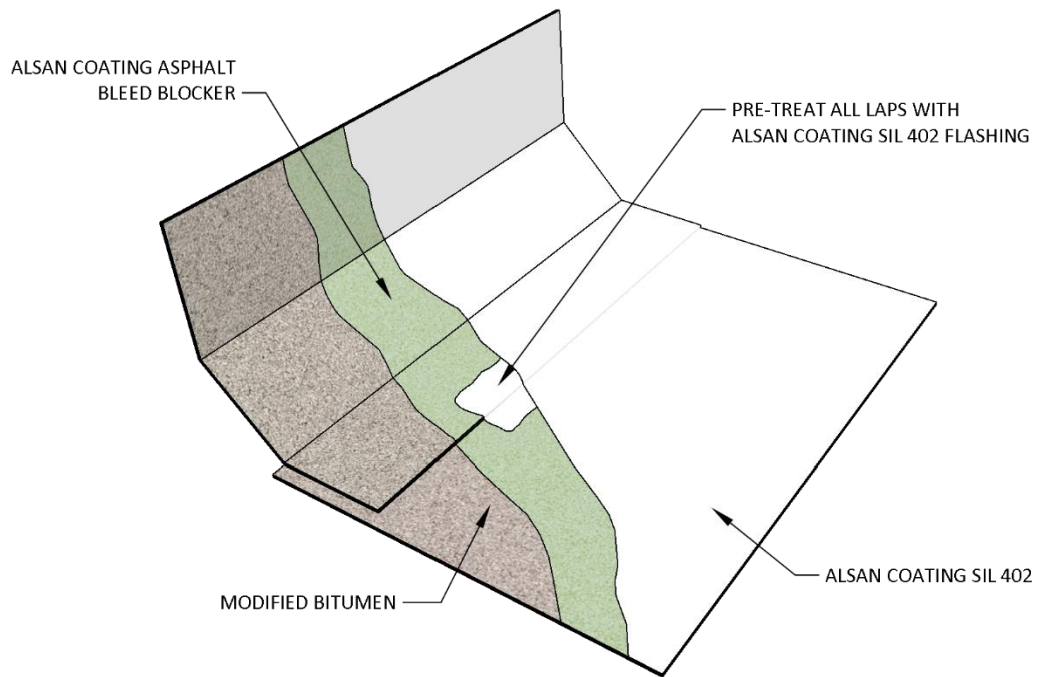


Figure 2.1c Silicone Roof Coating Over Modified Bitumen, Wall/Curb

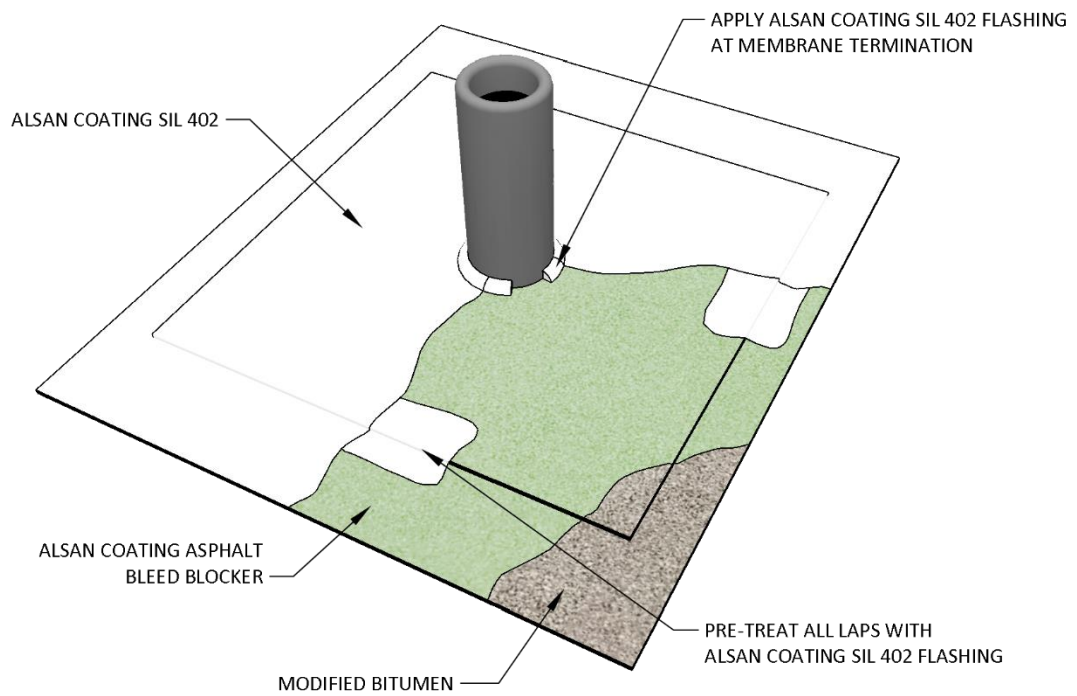


Figure 2.1d Silicone Roof Coating Over Modified Bitumen, Penetration

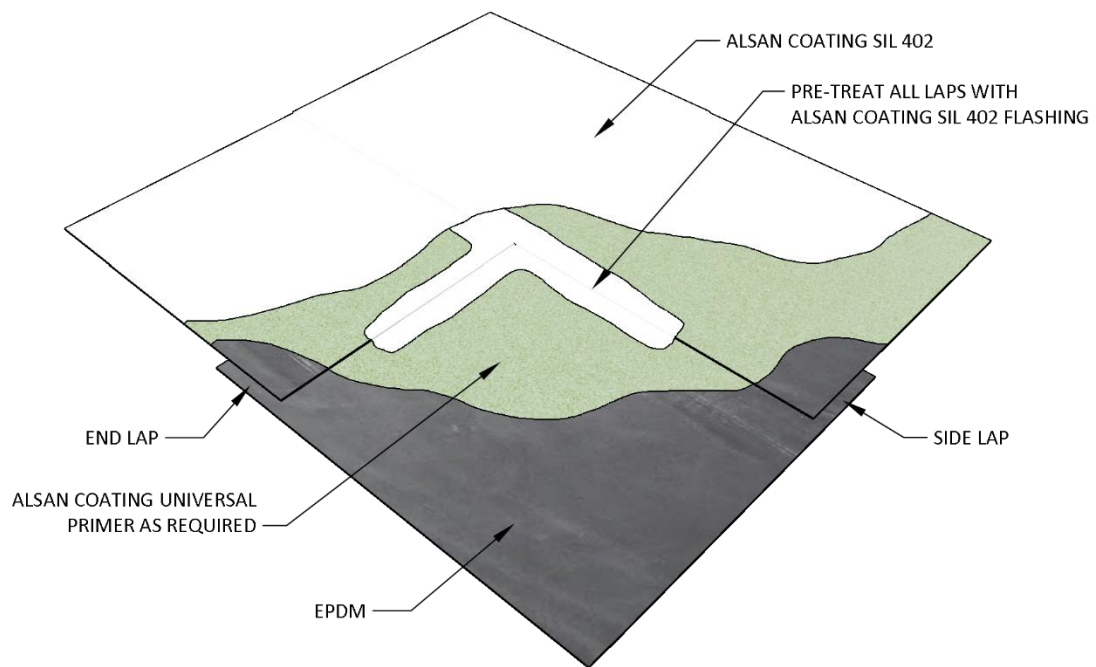


Figure 2.1e Silicone Roof Coating Over EPDM, Side/End Laps

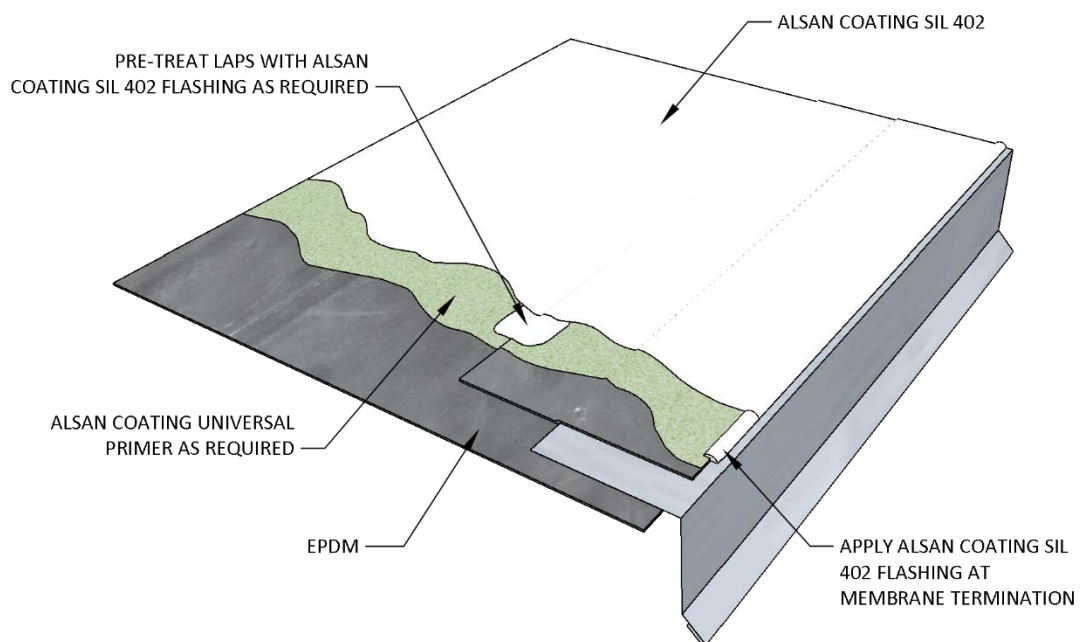


Figure 2.1f Silicone Roof Coating Over EPDM, Edge

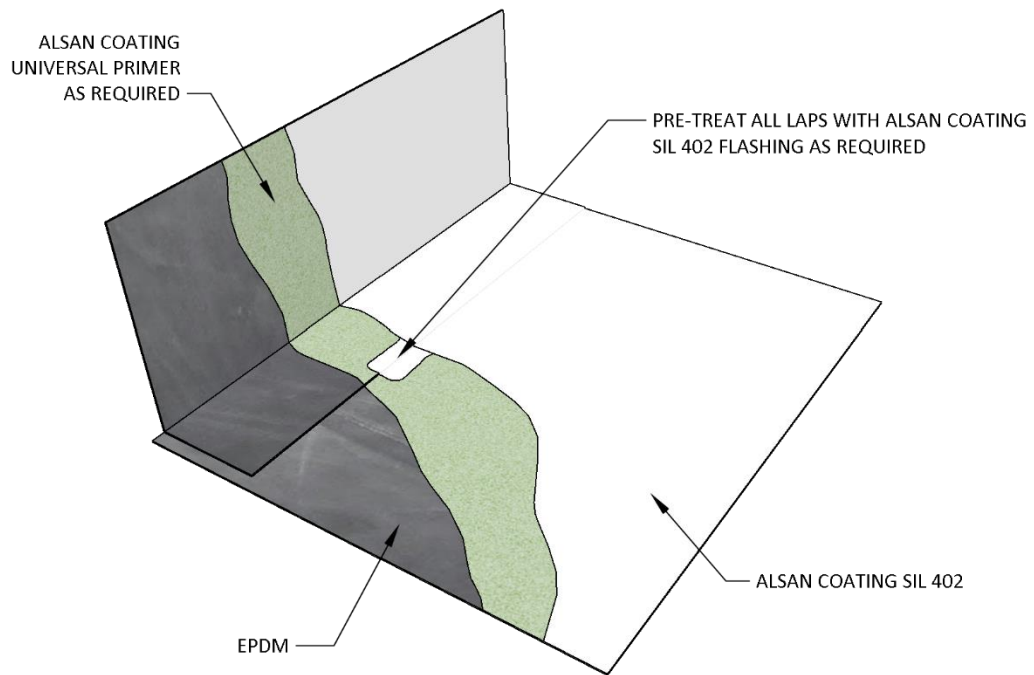


Figure 2.1g Silicone Roof Coating Over EPDM, Wall/Curb

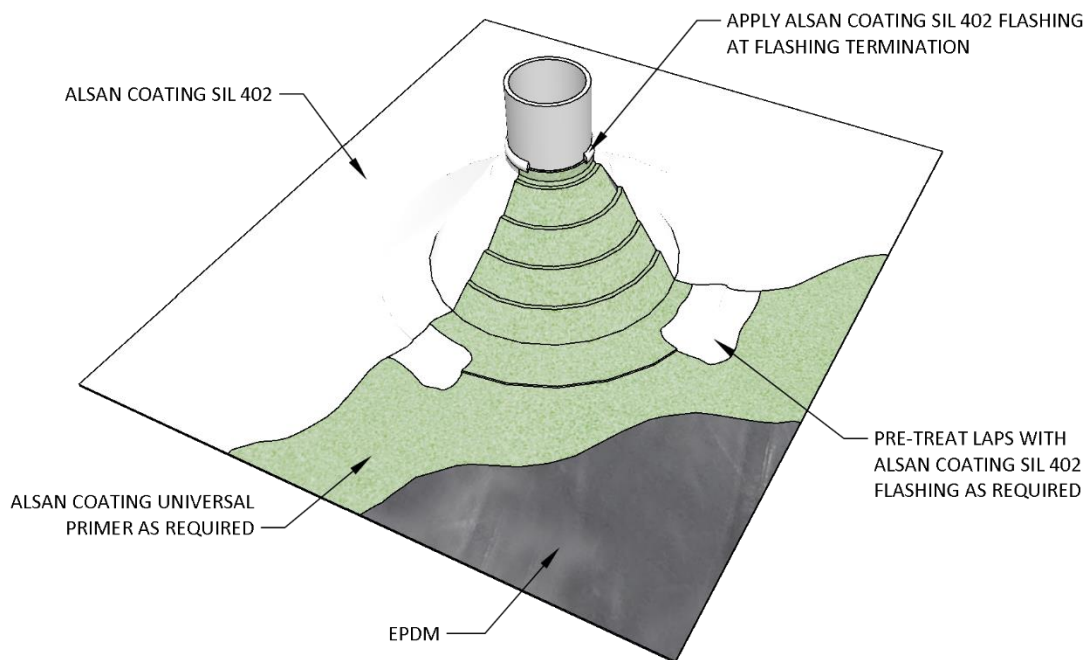


Figure 2.1h Silicone Roof Coating Over EPDM, Penetration

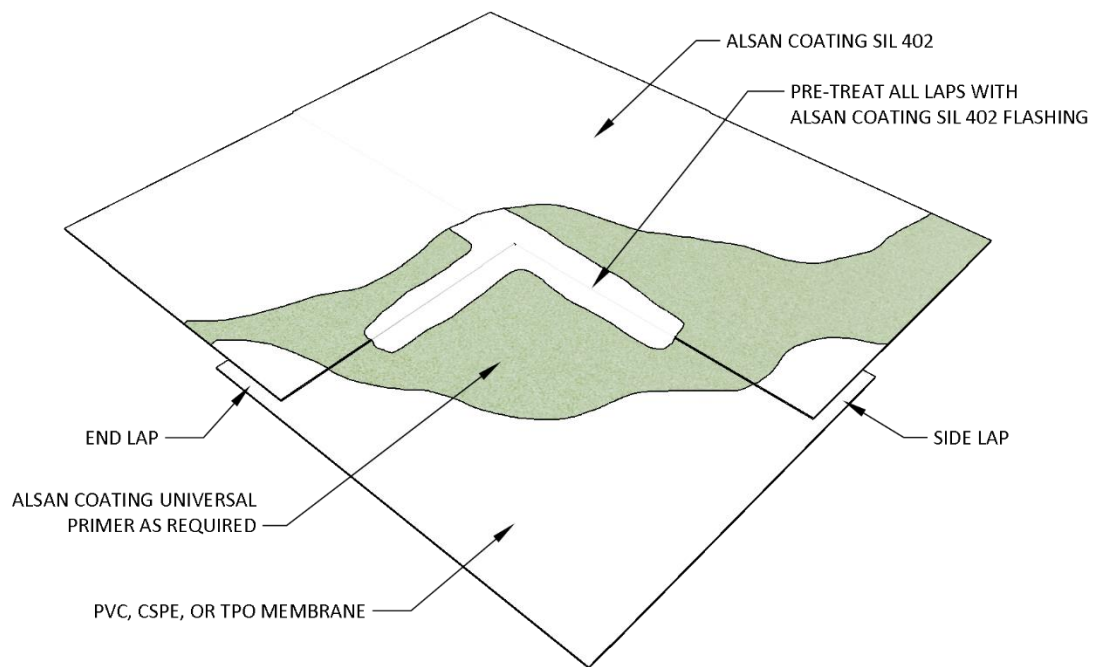


Figure 2.1i Silicone Roof Coating Over TPO/CSPE/PVC, Side/End Laps

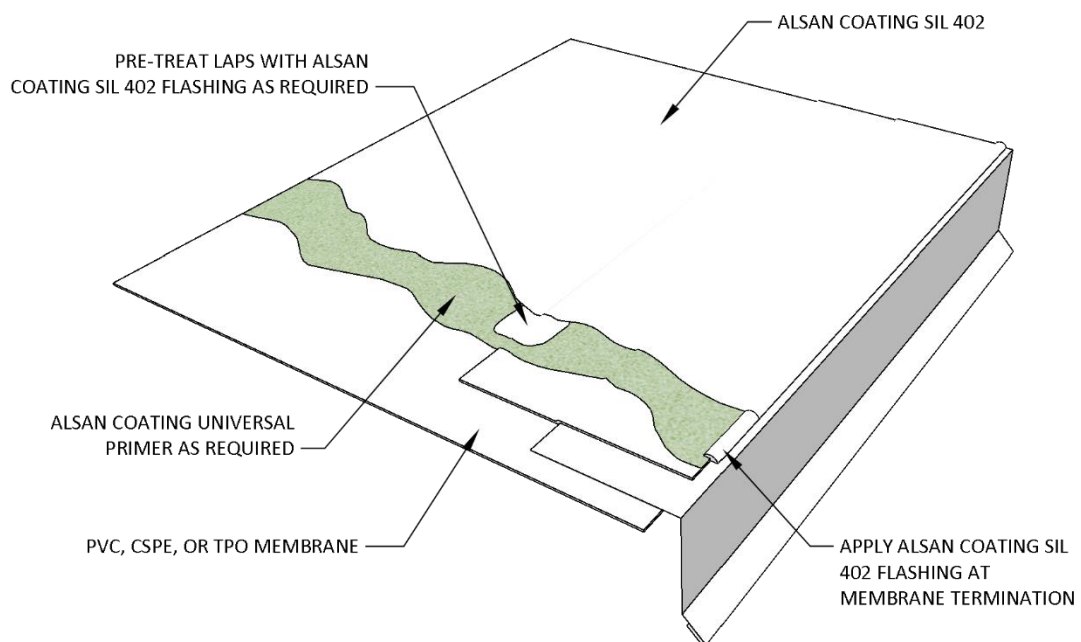


Figure 2.1j Silicone Roof Coating Over TPO/CSPE/PVC, Edge

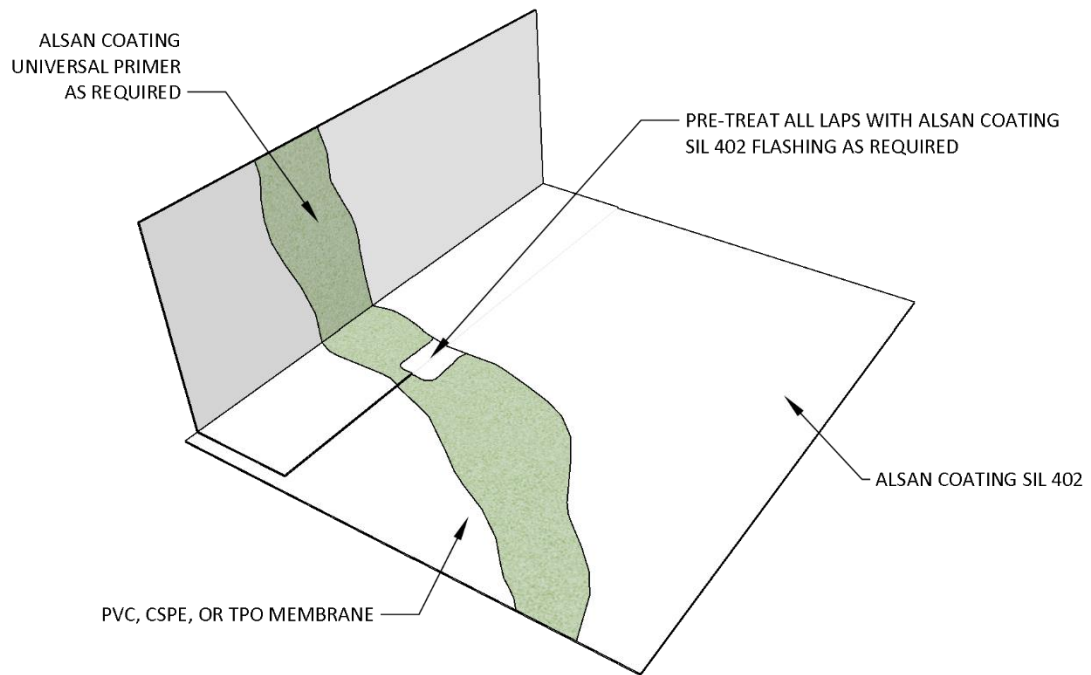


Figure 2.1k Silicone Roof Coating Over TPO/CSPE/PVC, Wall/Curb

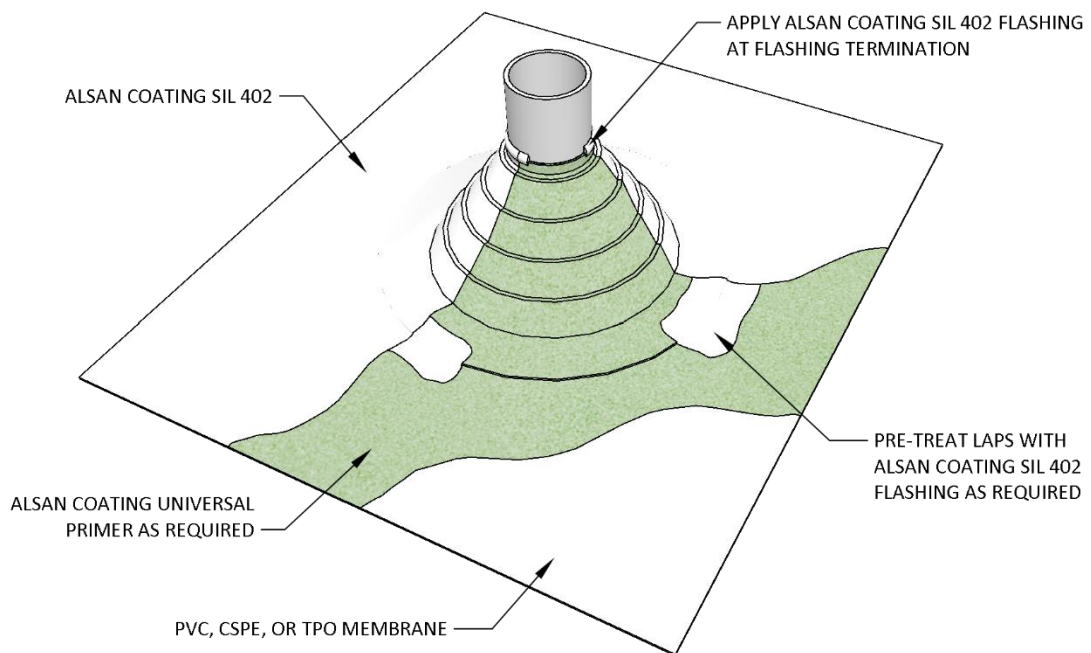


Figure 2.1l Silicone Roof Coating Over TPO/CSPE/PVC, Penetration

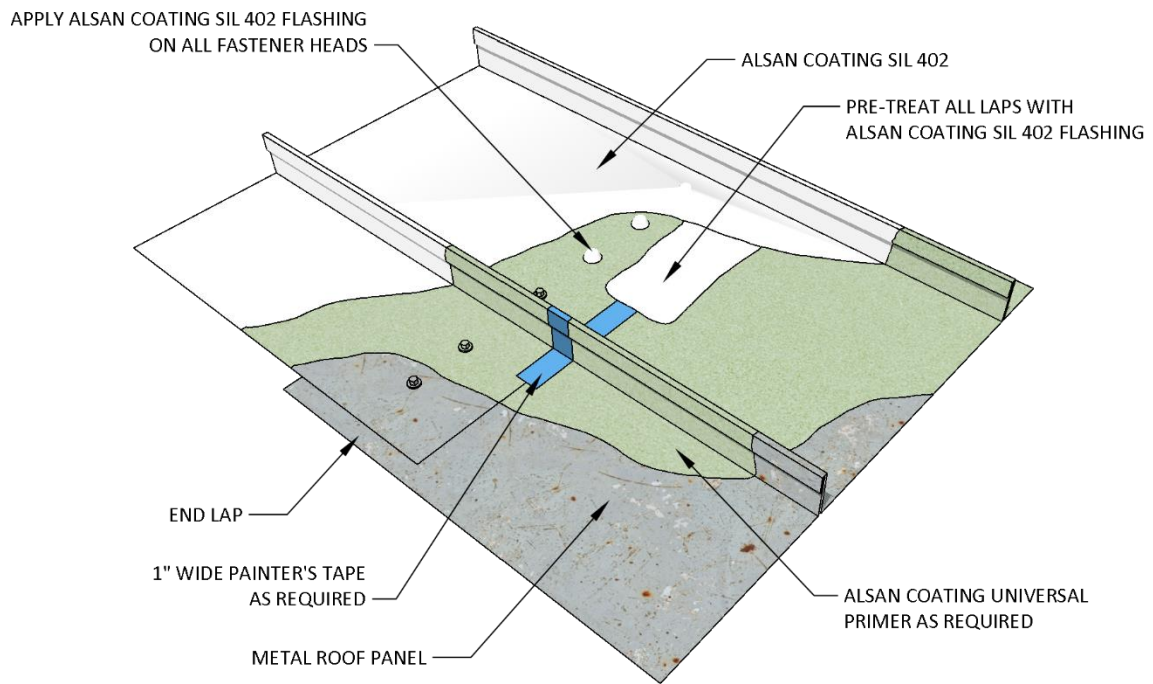


Figure 2.1m Silicone Roof Coating Over Standing Seam Metal, Side/End Laps

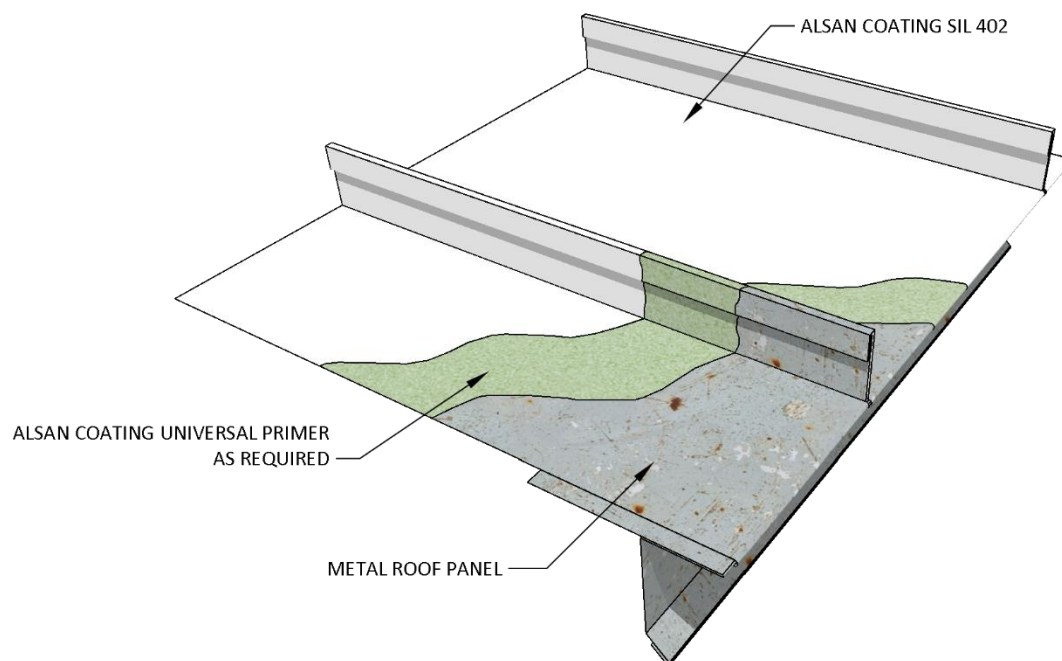


Figure 2.1n Silicone Roof Coating Over Standing Seam Metal, Side/End Laps

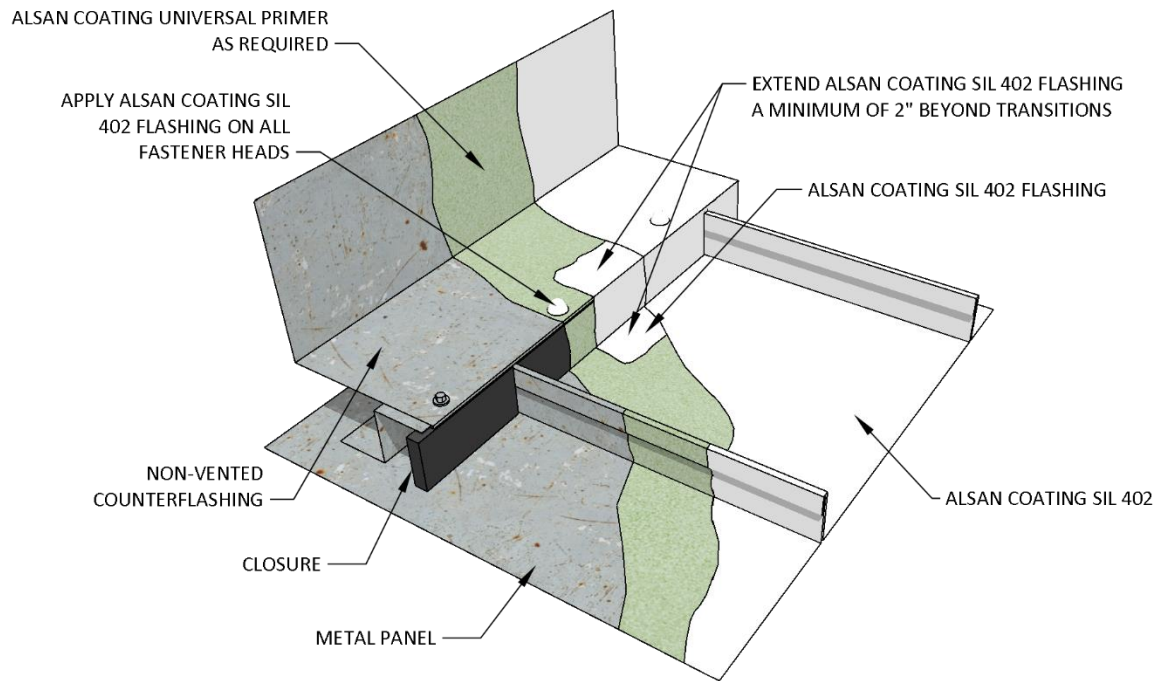


Figure 2.1o Silicone Roof Coating Over Standing Seam Metal, Wall/Curb

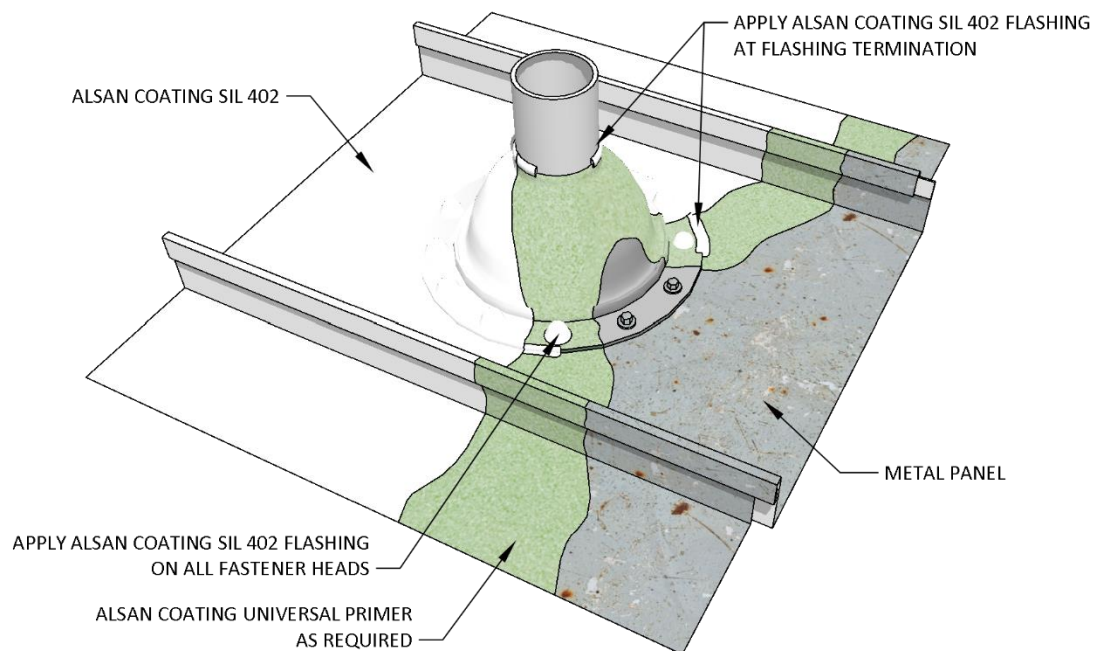


Figure 2.1p Silicone Roof Coating Over Standing Seam Metal, Penetration

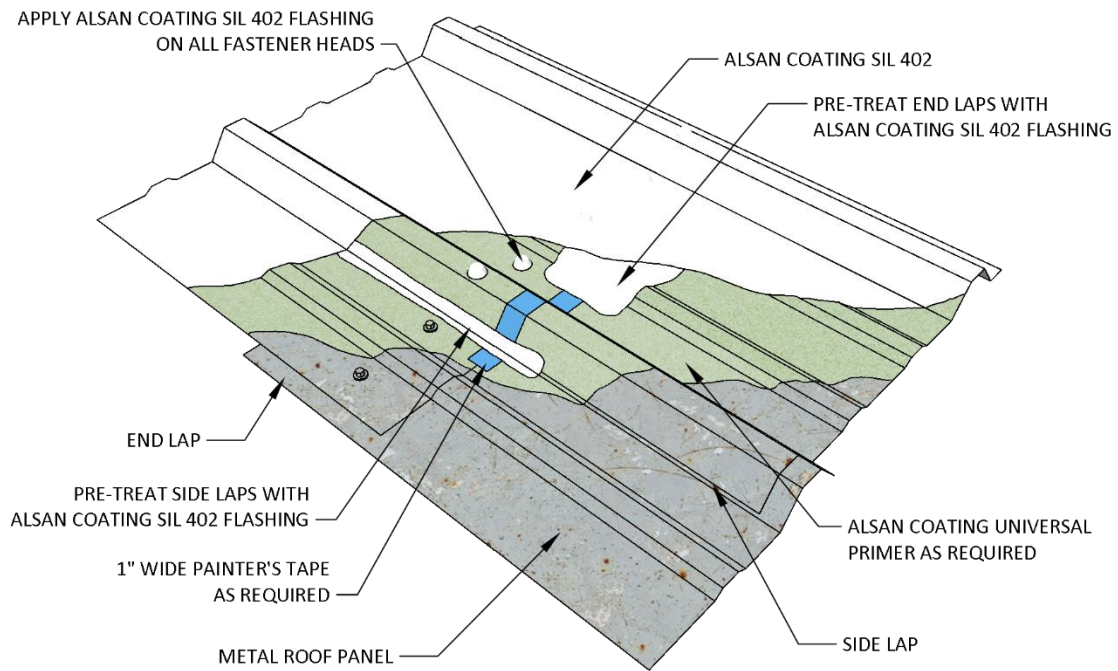


Figure 2.1q Silicone Roof Coating Over Metal Lap Panels, Side/End Laps

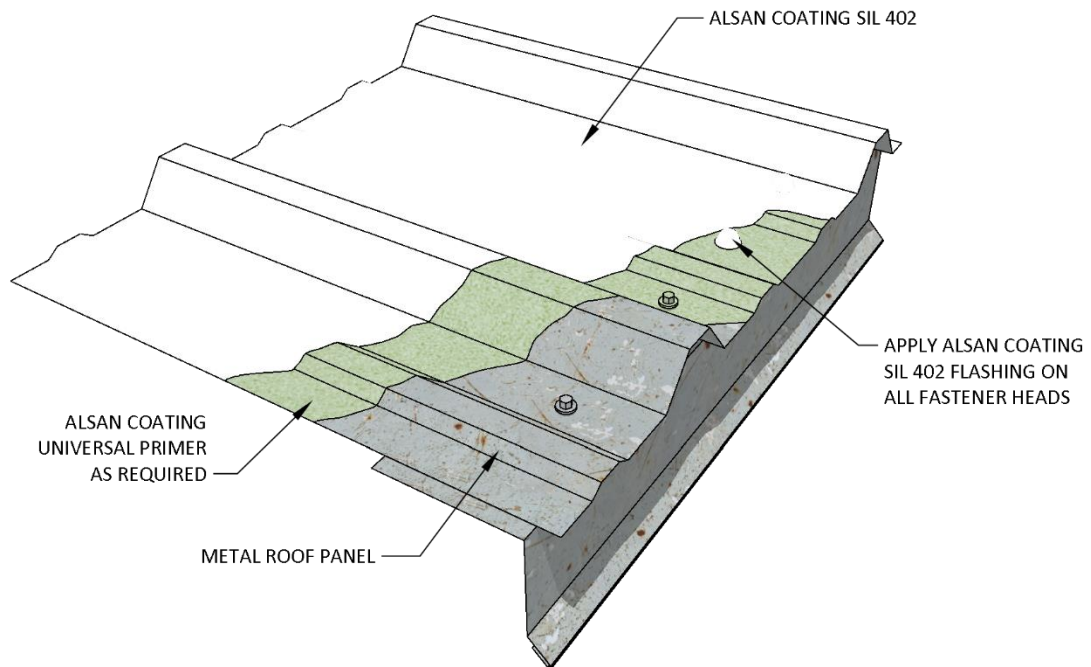


Figure 2.1r Silicone Roof Coating Over Metal Lap Panels, Edge

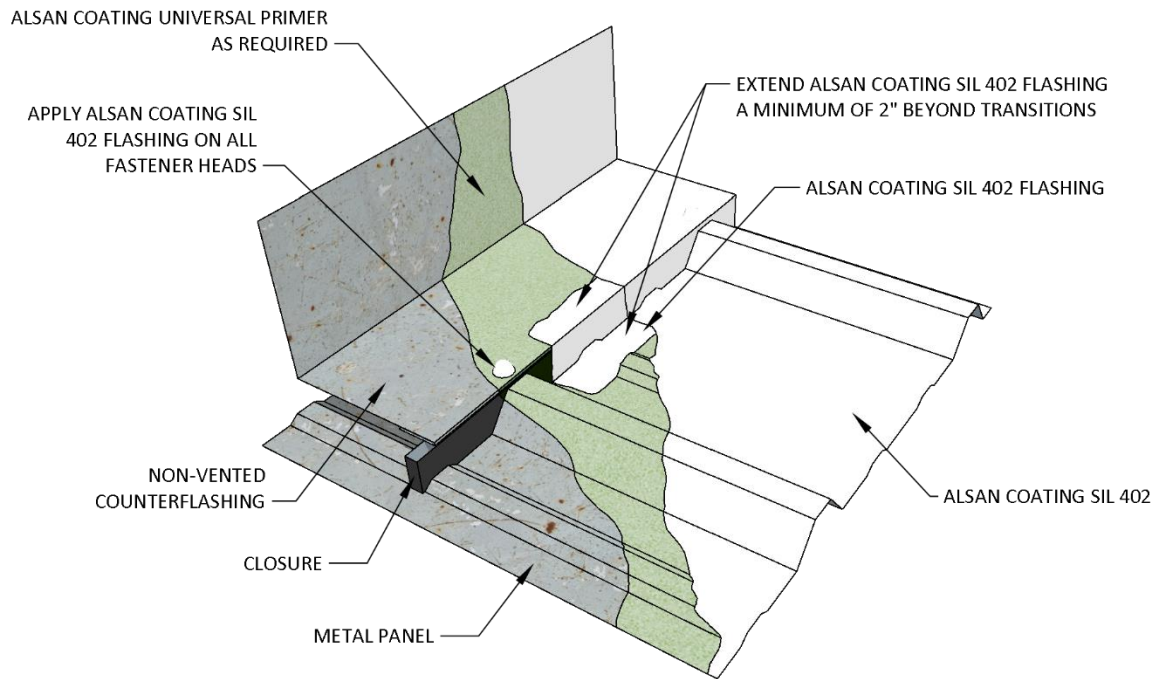


Figure 2.1s Silicone Roof Coating Over Metal Lap Panels, Wall/Curb

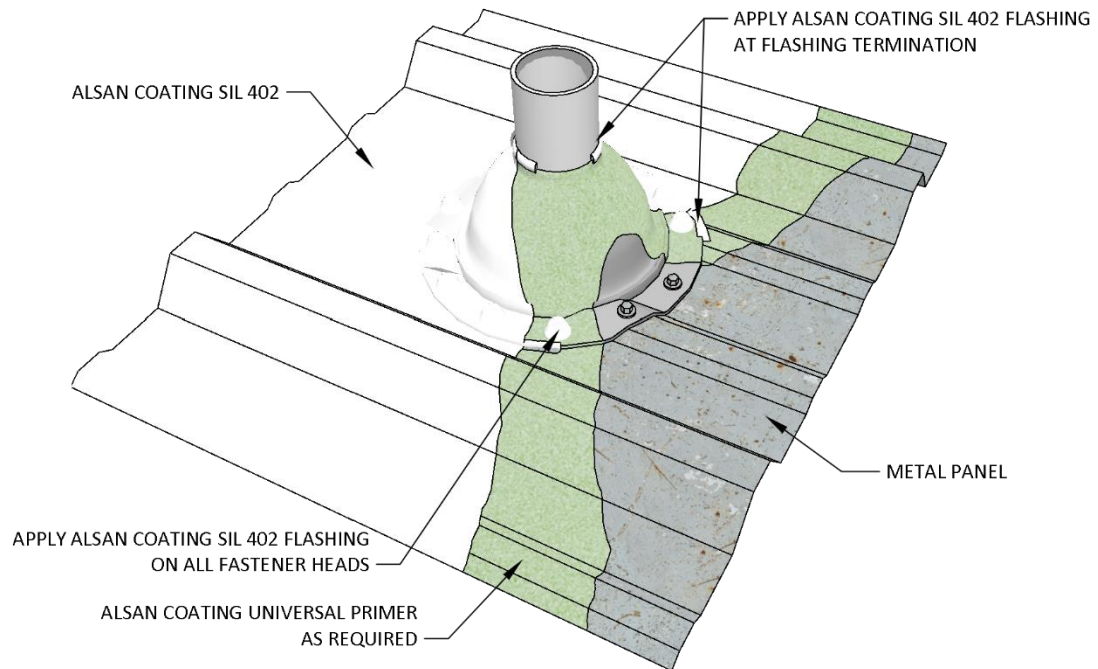


Figure 2.1t Silicone Roof Coating Over Metal Lap Panels, Penetration

2.2 ALSAN® COATING AC 401 ACRYLIC ROOF COATING

General:

- Refer to [Table 3.2a](#) for an outline of coating materials and accessories.
- SOPREMA [ALSAN® COATING AC 401](#) is a water based acrylic elastomeric roof coating that provides a highly flexible surfacing for a variety of metal, single-ply, modified bitumen, smooth-surface asphalt built-up, existing coatings and other properly prepared roofing substrates. Refer to [Table 2.2a](#).
- [ALSAN® COATING AC 401](#) and acrylic coating accessory products should be applied to roofing substrates that have positive slope and adequate drainage to eliminate ponding water.
- [ALSAN® COATING AC 401](#) should NOT be applied to silicone roof coatings and sealants.
- [ALSAN® COATING AC 401](#) accessories include [#652 ULTRAGREEN ROOF WASH ALL PURPOSE CLEANER](#), [ALSAN® COATING UNIVERSAL PRIMER](#), [ALSAN® COATING ASPHALT BLEED BLOCKING PRIMER](#), [ALSAN® COATING AC 401 FLASHING brush/trowel-grade mastic](#), and [POLYFLEECE](#) non-woven polyester reinforcement.
- The contractor and/or applicator is responsible for managing and controlling all exposures related to chemical hazards, toxic substances and odors. This includes personal protective equipment (PPE), administrative and work practice controls, and engineering controls. The contractor is responsible for the elimination or substitution of products as necessary to manage and control exposures related to chemical hazards, toxic substances and odors.
- Refer to product Safety Data Sheets (SDS) for health, safety, and environment related hazards, and take all necessary measures and precautions to comply with exposure requirements.
- Refer to the PDS and SDS for additional information.



Preparation:

- Refer to [Section 1.1](#) for guidelines required prior to applying new coating materials.
- Ensure conditions are satisfactory, and will remain satisfactory, during the application of new coating materials.
- Monitor weather to ensure conditions are satisfactory before, during and up to 72 hours after the application of new coating materials.
- Do not apply [ALSAN® COATING AC 401](#) when temperatures will fall below 50°F (10°C).
- Do not apply [ALSAN® COATING AC 401](#) if precipitation is forecast within 72 hours of application.
- Ensure primers, pre-treatments, flashings and sealants are dry and ready to install subsequent materials. Plan accordingly to install materials in proper sequence.
- Weather and environmental conditions:
 - For optimum long-term storage of [ALSAN® COATING AC 401](#), materials should be stored in original sealed containers at temperatures between 55°F (12.8°C) and 80°F (26.7°C).
 - During application, the [ALSAN® COATING AC 401](#) the ambient temperature should be above 50°F (10°C) and below 110°F (43°C).

- [ALSAN® COATING AC 401](#) acrylic coating and water-based accessories must not be exposed to freezing temperatures during storage, handling nor applied within 72 hours of freezing conditions.
- During cold weather below 50°F (10°C), [ALSAN® COATING AC 401](#) and all accessory materials should be stored in a heated area to maintain the material temperature between 55°F (12.8°C) and 80°F (26.7°C).
- Other ambient conditions such as sun, cloud cover, wind, humidity, and shade may impact the application and drying time of [ALSAN® COATING AC 401](#).
- Monitor substrate and material temperatures, as well as all environmental conditions such as ambient temperature, moisture, sun, cloud cover, wind, humidity, and shade to ensure conditions remain satisfactory.
- Conditions must be dry when applying [ALSAN® COATING AC 401](#).
- Ensure all materials and substrates remain above the dew point temperature to prevent condensation from forming during application. Ambient temperature should be well above the dew point temperature, with no dew, fog or condensation present.
- [ALSAN® COATING AC 401](#) is sufficiently dry for a second coat within 4 hours during warm conditions. The coating dries quickly during hot, dry, sunny weather. The coating dries slower during cool, cloudy and humid weather.
- When [ALSAN® COATING AC 401](#) has been stored for long periods of time, mix the contents using a power mixer to ensure a uniform consistency.
 - [ALSAN® COATING AC 401](#), [ALSAN® COATING AC 401 FLASHING](#) and primers ready to apply subsequent materials within 4 hours during sunny, hot dry conditions. Ambient conditions such as sun, cloud cover, wind, humidity, and shade may impact the application and drying time
- Modified Bitumen and Built-up laps and flashings:
 - Ensure [ALSAN® COATING ASPHALT BLEED BLOCKING PRIMER](#) is dry before applying new coating and flashing materials. Refer to [Section 1.2](#).
 - Pre-treat all side and end-laps with [ALSAN® COATING AC 401 FLASHING](#) using a brush or roller.
 - Apply [ALSAN® COATING AC 401 FLASHING](#) at membrane terminations such as roof penetrations and edge metal.
 - Refer to flashing detail guidelines indicated in [Figures 2.2a through 2.2d](#).
- EPDM laps and flashings:
 - If primed, ensure [ALSAN® COATING UNIVERSAL PRIMER](#) is dry before applying new coating and flashing materials. Refer to [Section 1.2](#).
 - Pre-treat all side and end-laps with [ALSAN® COATING AC 401 FLASHING](#) using a brush or roller.
 - Apply [ALSAN® COATING AC 401 FLASHING](#) at membrane terminations such as roof penetrations and edge metal.
 - Refer to flashing detail guidelines indicated in [Figures 2.2e through 2.2h](#).
- TPO/CSPE/PVC laps and flashings:
 - If primed, ensure [ALSAN® COATING UNIVERSAL PRIMER](#) is dry before applying new coating and flashing materials. Refer to [Section 1.2](#).
 - Pre-treat all side and end-laps with [ALSAN® COATING AC 401 FLASHING](#) using a brush or roller.
 - Apply [ALSAN® COATING AC 401 FLASHING](#) at membrane terminations such as roof penetrations and edge metal.
 - Refer to flashing detail guidelines indicated in [Figures 2.2i through 2.2j](#).
- Standing Seam Metal laps and flashings:
 - If primed, ensure [ALSAN® COATING UNIVERSAL PRIMER](#) is dry before applying new coating and flashing materials. Refer to [Section 1.2](#).
 - For horizontal (flat) end laps, apply 1" wide bond breaker tape (painter's tape) and pre-treat the seam using [ALSAN® COATING AC 401 FLASHING](#). Alternatively, a three-course application of [ALSAN® COATING AC 401](#) reinforced using [POLYFLEECE](#) can also be used to pre-treat end laps.
 - Apply [ALSAN® COATING AC 401 FLASHING](#) to seal all exposed fastener heads.
 - Apply [ALSAN® COATING AC 401 FLASHING](#) to seal side laps and terminations.

- Refer to flashing detail guidelines indicated in [Figures 2.2m through 2.2p.](#)
- Metal Lap Panels laps and flashings:
 - If primed, ensure [ALSAN® COATING UNIVERSAL PRIMER](#) is dry before applying new coating materials. Refer to [Section 1.2.](#)
 - For horizontal (flat) end laps, apply 1" wide bond breaker tape (painter's tape) and pre-treat the seam using [ALSAN® COATING AC 401 FLASHING](#). Alternatively, a three-course application of [ALSAN® COATING AC 401](#) reinforced using [POLYFLEECE](#) can be used to pre-treat end laps.
 - Apply [ALSAN® COATING AC 401 FLASHING](#) to seal all exposed fastener heads.
 - Apply [ALSAN® COATING AC 401 FLASHING](#) to seal side laps and terminations.
 - Refer to flashing detail guidelines indicated in [Figures 2.2q through 2.2t.](#)

Application:

- Ensure primers, pre-treatments, flashings and sealants are dry, cured and ready to install [ALSAN® COATING AC 401](#).
- Apply [ALSAN® COATING AC 401](#) up to 24 wet mils (1.5 gals/100 ft²) in one single application. Avoid heavy, thick applications.
- When coating thickness is over 24 wet mils, multiple coats of [ALSAN® COATING AC 401](#) are required.
- Allow at least 4 hours before applying the second coat.
- Apply the second coat perpendicular to the first coat.
- When multiple coats of [ALSAN® COATING AC 401](#) are required, drying times vary based on weather and project conditions.
- Allow 24 to 48 hours to fully cure before allowing heavy traffic.
- [ALSAN® COATING AC 401](#) is applied using rollers, brushes, or single-component sprayers.
- Brush application:
 - Disposable brushes are generally needed for small/confined areas, seams, touch-up work and flashings.
- Roller application:
 - Rollers include heavy-duty hand-held rollers and natural roller-covers with ½ to 1 in nap. Apply [ALSAN® COATING AC 401](#) to ensure an even, uniform coating thickness.
 - Roll side-to-side, up-and-down. Always roll into the seams.
 - Profile rollers are recommended for metal roofing to conform to metal rib and seam profiles.
- Squeegee and roller application:
 - Dispense coating onto the roof, then use a flat blade squeegees to apply the coating to the desired thickness, then back-roll the coating using a roller as indicated herein.
- Spreader Cart and roller application:
 - Tank spreader carts are used to dispense coating onto the roof surface, then rollers are used to back-roll the coating as indicated herein.
- T-bar and roller application:
 - Using spray pumps to deliver coating to T-bar at low pressure to dispense coating onto the roof surface.
 - Rollers are used to back-roll the coating as indicated herein.
- Spray application:
 - Refer to Coating Preparation, Weather and Environmental Conditions, for acceptable weather conditions.
 - When spraying [ALSAN® COATING AC 401](#), the spray tip should be located approximately 12 in above the roof substrate to ensure a 12 in spray fan pattern. Spray perpendicular to the surface, moving steady in one direction.
 - Spray techniques vary for each substrate. Ensure the minimum coating thickness is achieved at membrane laps, standing seams, metal panel ribs, roof penetrations, at fasteners, etc.

- Hose size, length, weather conditions, [ALSAN® COATING AC 401](#) material temperature and other variables will affect spray pattern. Adjust application techniques as necessary to accommodate varying conditions to produce a uniform coating, and meet minimum thickness requirements.
- To avoid runs and sag on steep slopes and vertical surfaces, multiple coats may be required.
- Spray equipment options for [ALSAN® COATING AC 401](#) include the following:
 - Dedicated equipment for acrylic coatings.
 - Recommended sprayers: Graco 933 or Graco King X-70, fed by a 5:1 transfer pump.
 - Recommended pump output: 3 gpm, 7,000 psi (483 bar).
 - Hoses: High-pressure, moisture-resistant, ¾ in diameter minimum.
 - Recommended minimum pressure at spray gun: 4,000 psi (276 bar) at spray gun head.
 - Tip: Heavy Duty 529 to 635
- [ALSAN® COATING AC 401](#) wet mil thickness requirements are based on the roofing substrate and SOPREMA warranty required. Refer to [Table 2.2a](#) for [SOPREMA®](#) warranty terms, required coating thickness and approximate coverage rates.
- For [ALSAN® COATING AC 401](#) flashing detail guidelines, refer to [Figures 2.2a through 2.2h](#).
- Clean tools, equipment and minor spills using clean water.

Inspection:

- During application, take frequent measurements of the [ALSAN® COATING AC 401](#) wet mil thickness to ensure the minimum wet mil thickness is maintained throughout the project.
- Upon completion of work, if coating thickness is in question, remove slit samples of fully cured coating and evaluate coating thickness using an optical comparator.
- After [ALSAN® COATING AC 401](#) has cured sufficiently for 24 to 48 hours or more, walk the roof and examine flashings, sealants and coating to ensure work has been completed as required. Repair all deficiencies.

Table 2.2a ALSAN® COATING AC 401 Warranty Term & Roof Coating Thickness			
Substrate	¹ Warranty Terms	Minimum Thickness	Coverage Rate
Modified Bitumen & Built-up Roofing	5 years	2 coats @ 16 wet mils totaling 16 dry mils	2 coats @ 1.0 gals/100ft ² totaling 2.0 gals/100ft ²
	10 years	2 coats @ 24 wet mils totaling 24 dry mils	2 coats @ 1.5 gals/100ft ² totaling 3.0 gals/100ft ²
EPDM Roofing	5 years	2 coats @ 16 wet mils totaling 16 dry mils	2 coats @ 1.0 gals/100ft ² totaling 2.0 gals/100ft ²
	10 years	2 coats @ 24 wet mils totaling 24 dry mils	2 coats @ 1.5 gals/100ft ² totaling 3.0 gals/100ft ²
TPO, PVC, CSPE Roofing	5 years	2 coats @ 16 wet mils totaling 16 dry mils	2 coats @ 1.0 gals/100ft ² totaling 2.0 gals/100ft ²
	10 years	2 coats @ 24 wet mils totaling 24 dry mils	2 coats @ 1.5 gals/100ft ² totaling 3.0 gals/100ft ²
Standing Seam Metal	5 years	2 coats @ 16 wet mils totaling 16 dry mils	2 coats @ 1.0 gals/100ft ² totaling 2.0 gals/100ft ²
	10 years	2 coats @ 24 wet mils totaling 24 dry mils	2 coats @ 1.5 gals/100ft ² totaling 3.0 gals/100ft ²
Metal Lap Panels	5 years	2 coats @ 16 wet mils totaling 16 dry mils	2 coats @ 1.0 gals/100ft ² totaling 2.0 gals/100ft ²
	10 years	2 coats @ 24 wet mils totaling 24 dry mils	2 coats @ 1.5 gals/100ft ² Totaling 3.0 gals/100ft ²
² Existing Coating	5 years	2 coats @ 16 wet mils totaling 16 dry mils	2 coats @ 1.0 gals/100ft ² totaling 2.0 gals/100ft ²
	10 years	2 coats @ 24 wet mils totaling 24 dry mils	2 coats @ 1.5 gals/100ft ² totaling 3.0 gals/100ft ²

¹ Refer to www.SOPREMA.us for the [SOPREMA®](#) Standard Roof Coating Warranty, Form C100, or contact [SOPREMA®](#) at 800.356.3521 for more information.

² [ALSAN® COATING AC 401](#) should not be applied to existing silicone coatings.

Drawings and detail guidelines:

- [SOPREMA®](#) roof coating drawings and detail guidelines are provided as general guidelines and fundamental requirements for [SOPREMA®](#) roofing coating and flashing details.
- All detail drawings and related installation guidelines are provided by [SOPREMA®](#) for the sole purpose of issuing a [SOPREMA®](#) warranty. Accordingly, the drawings and detail guidelines are not offered, and should not be considered, as a substitute for professional design services.
- Refer to www.SOPREMA.us for [SOPREMA®](#) CAD drawings and customizable PDF drawing details.
- Contact [SOPREMA®](#) at 800.356.3521 for more information.

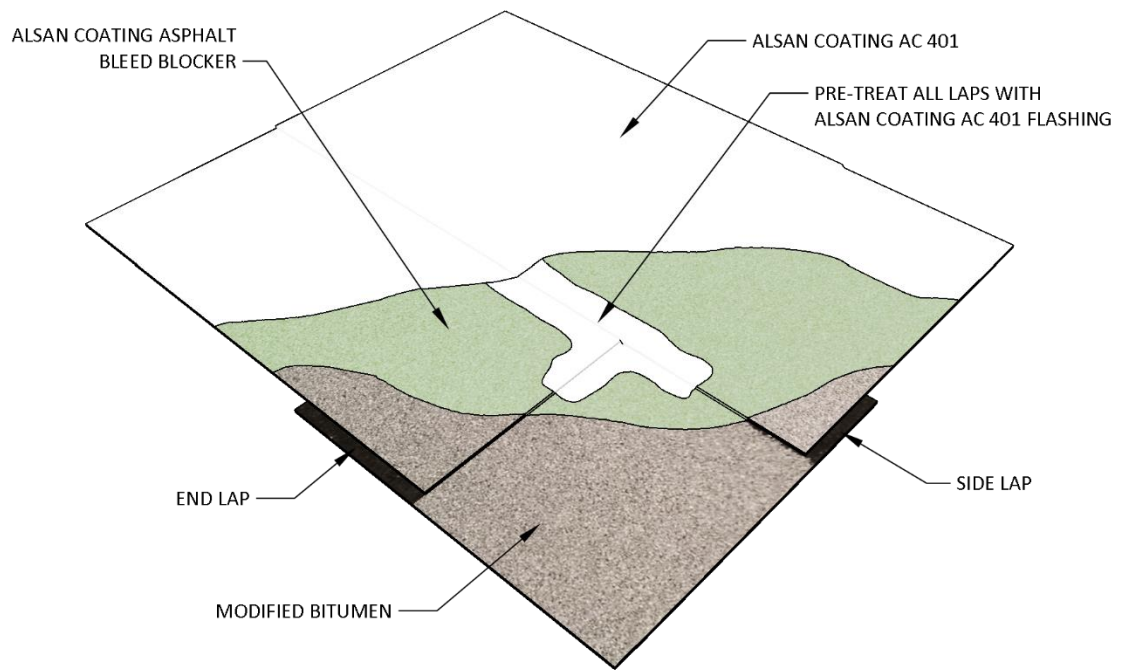


Figure 2.2a Acrylic Roof Coating Over Modified Bitumen, Side/End Laps

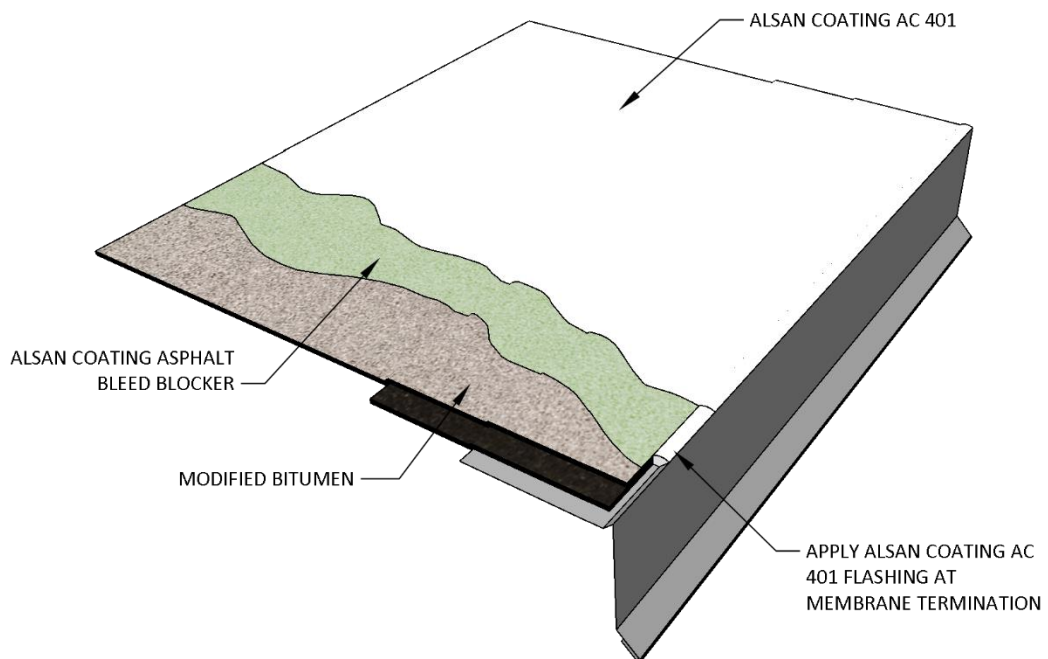


Figure 2.2b Acrylic Roof Coating Over Modified Bitumen, Edge

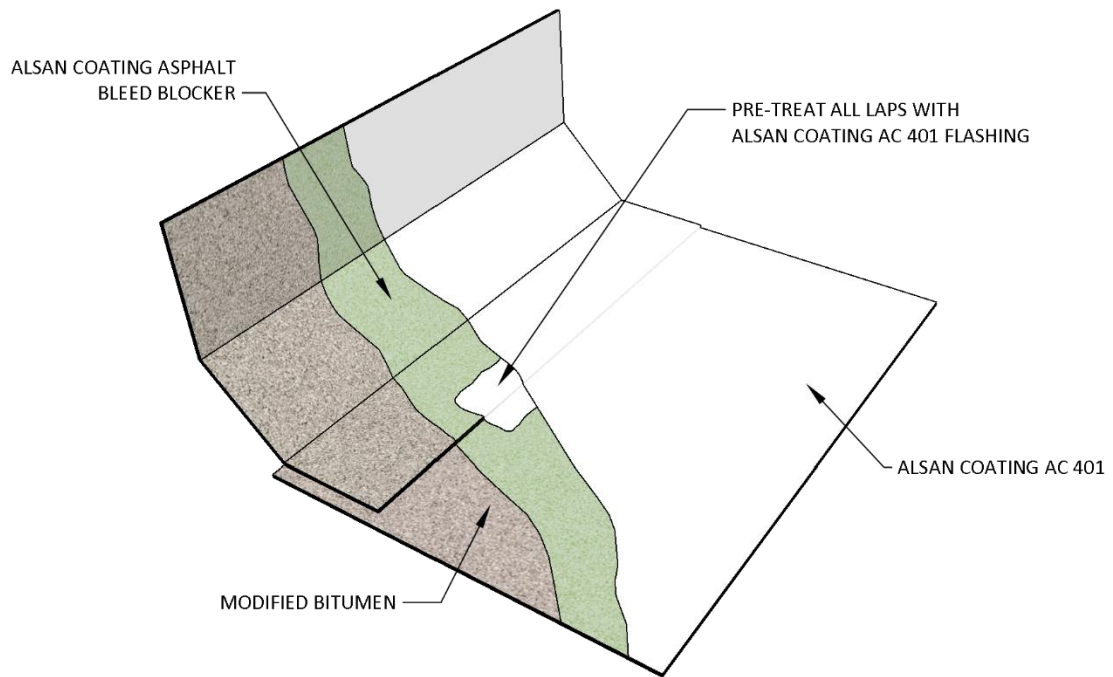


Figure 2.2c Acrylic Roof Coating Over Modified Bitumen, Wall/Curb

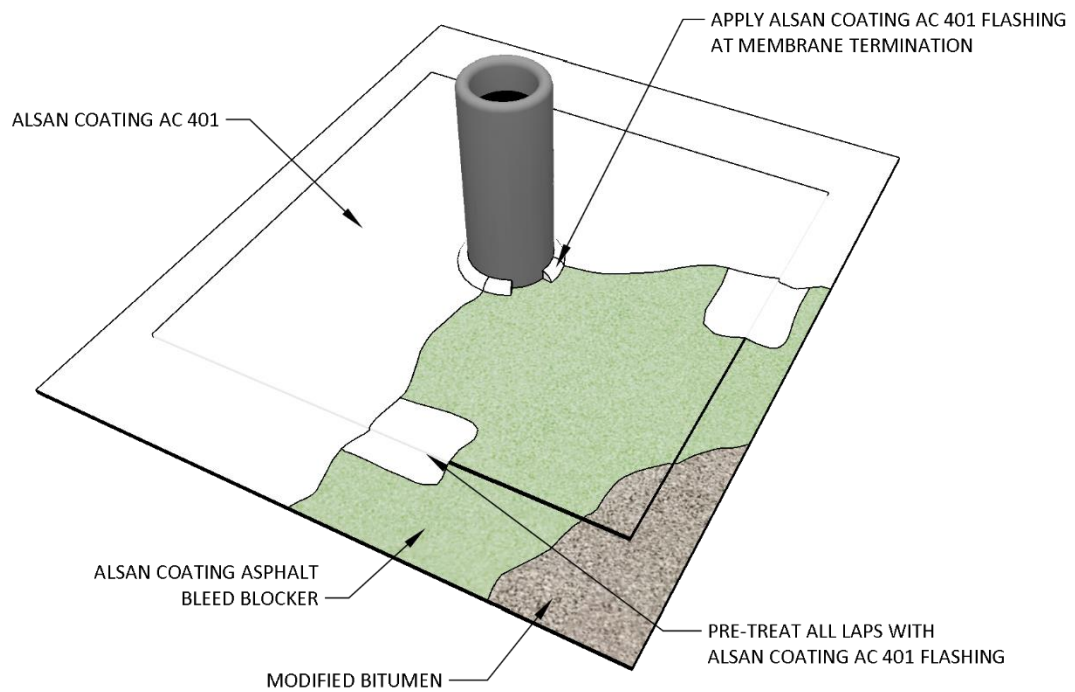


Figure 2.2d Acrylic Roof Coating Over Modified Bitumen, Penetration

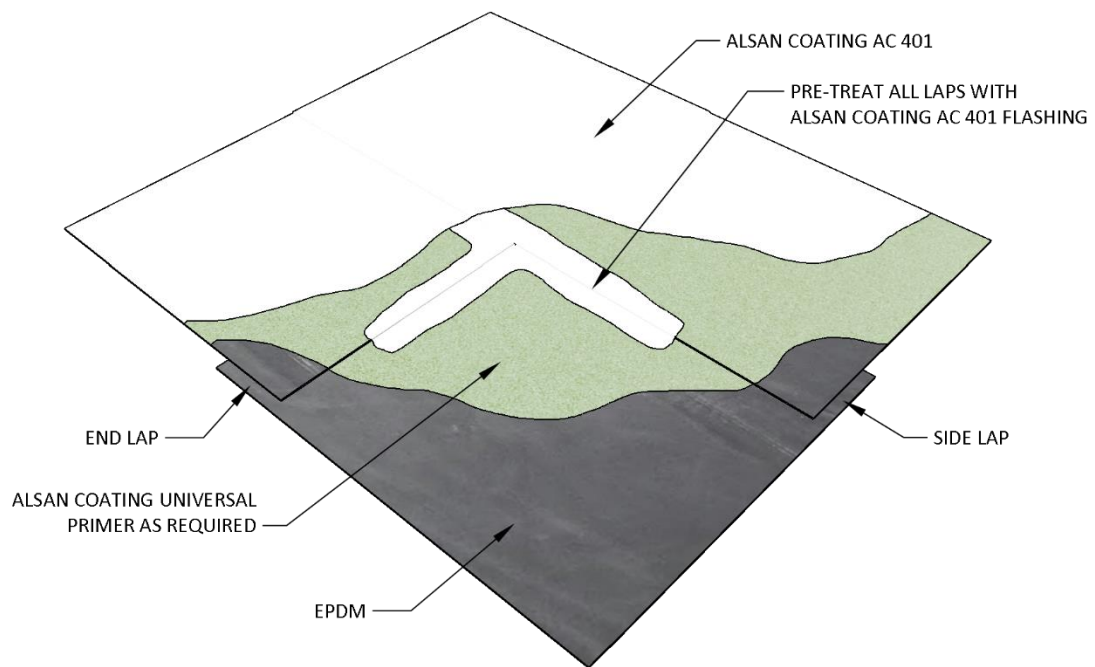


Figure 2.2e Acrylic Roof Coating Over EPDM, Side/End Laps

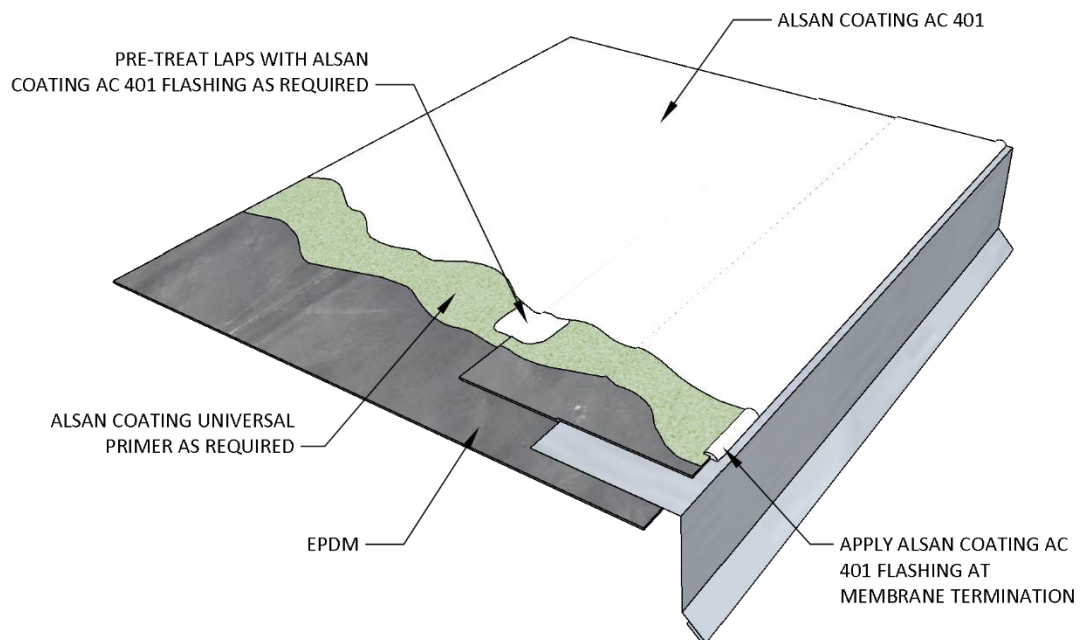


Figure 2.2f Acrylic Roof Coating Over EPDM, Edge

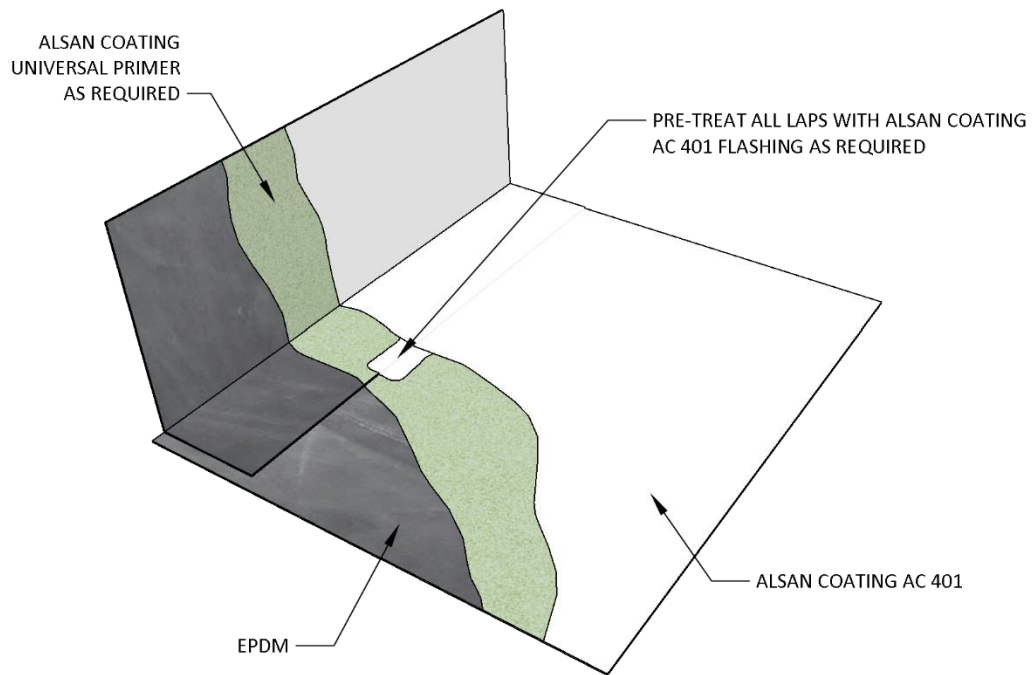


Figure 2.2g Acrylic Roof Coating Over EPDM, Wall/Curb

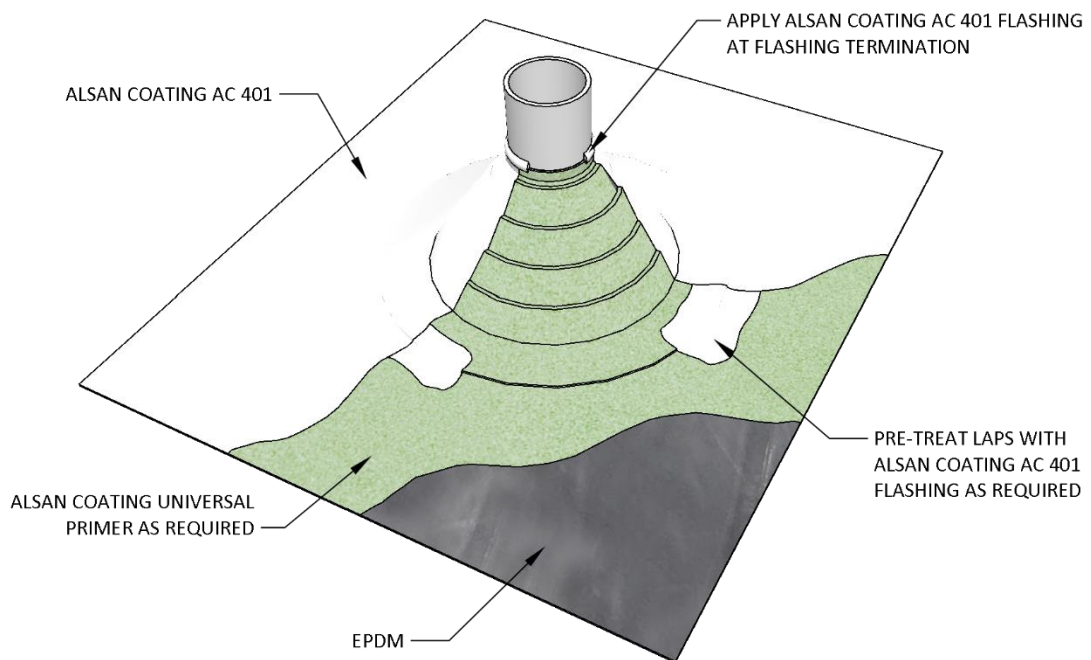


Figure 2.2h Acrylic Roof Coating Over EPDM, Penetration

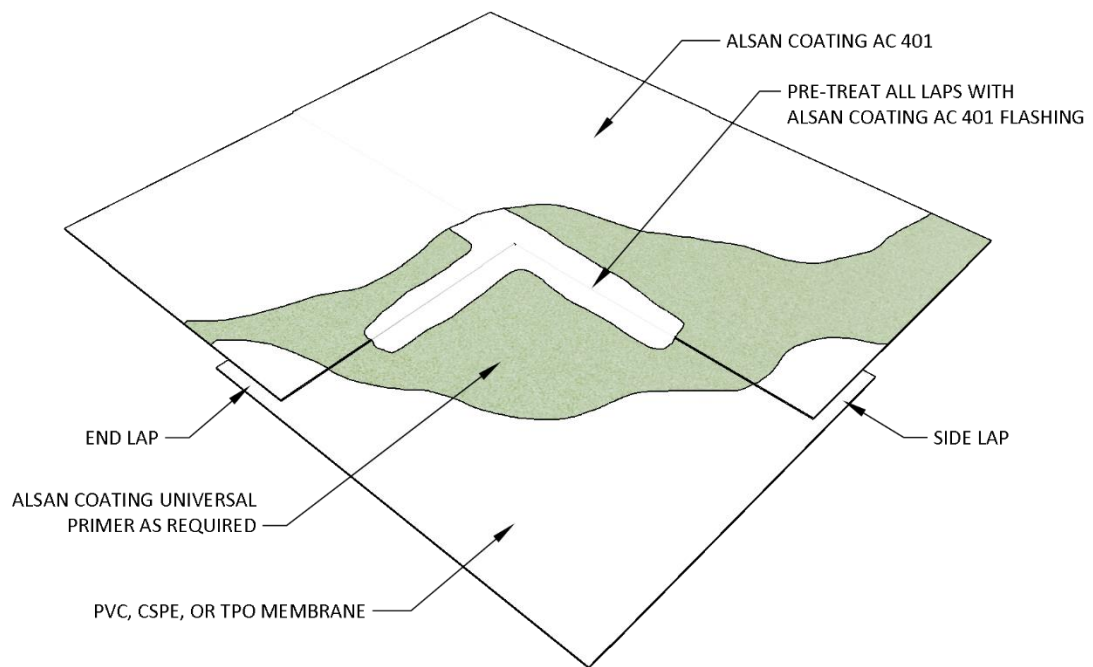


Figure 2.2i Acrylic Roof Coating Over TPO/CSPE/PVC, Side/End Laps

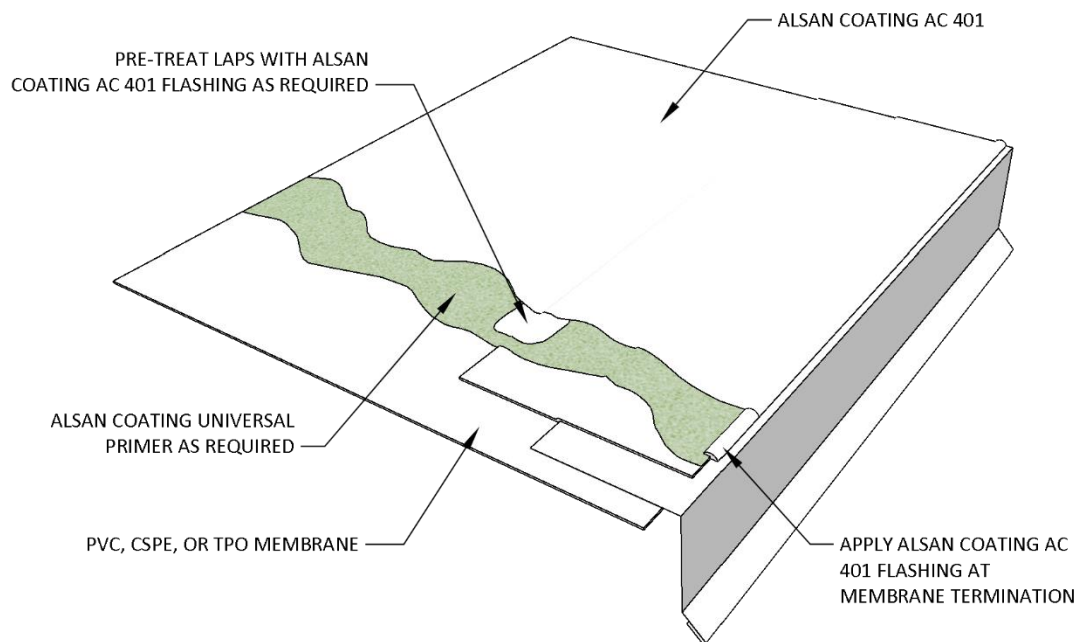


Figure 2.2j Acrylic Roof Coating Over TPO/CSPE/PVC, Edge

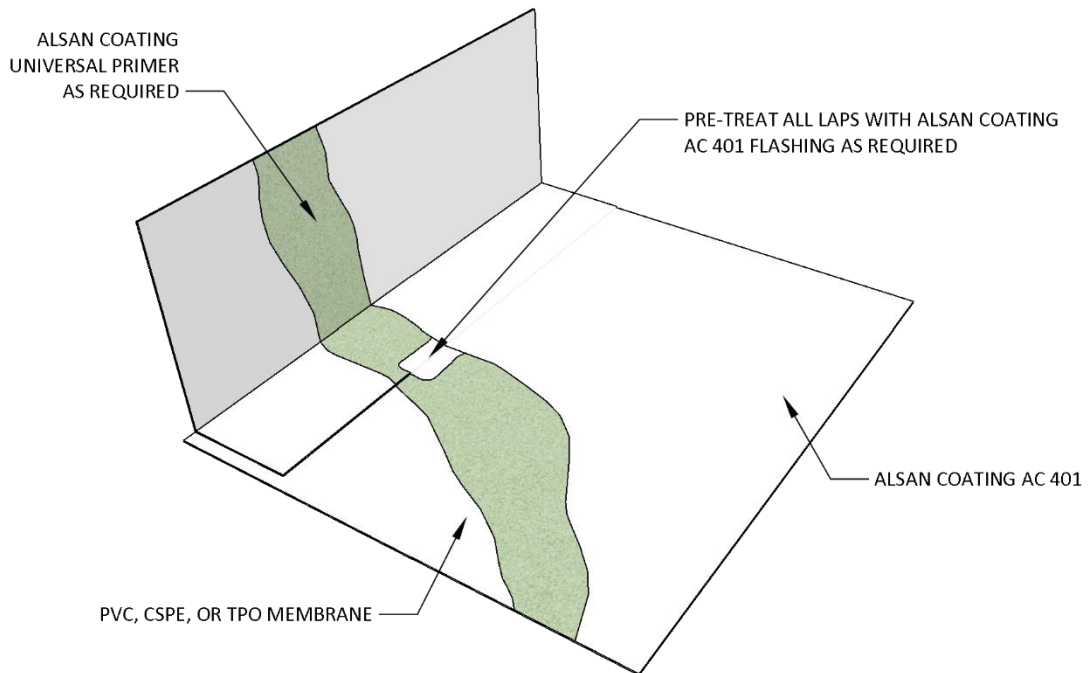


Figure 2.2k Acrylic Roof Coating Over TPO/CSPE/PVC, Wall/Curb

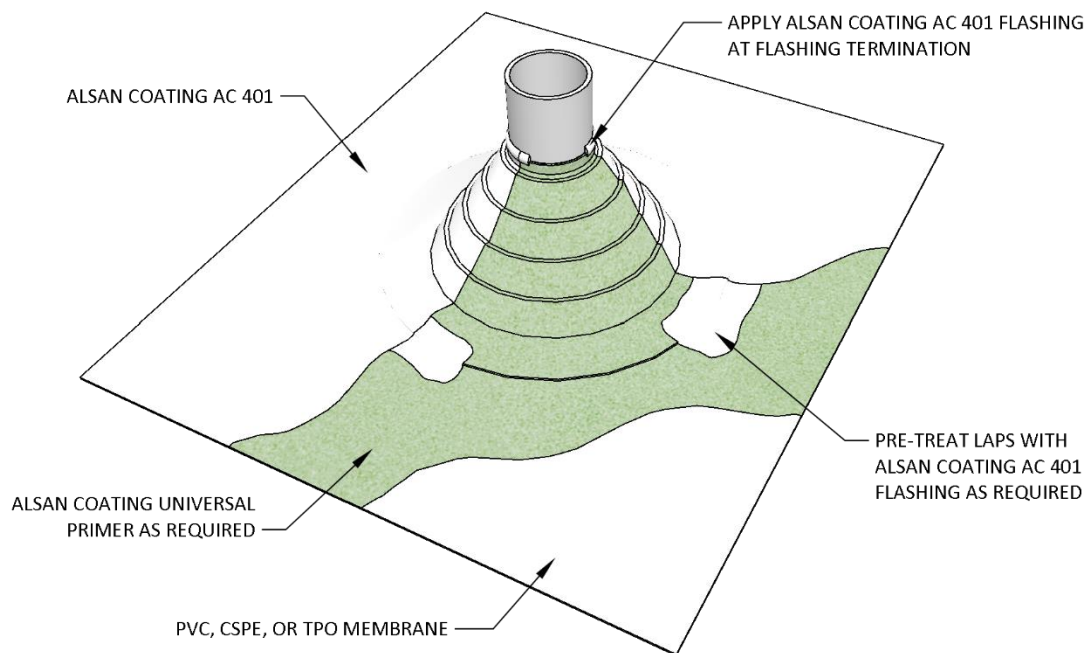


Figure 2.2l Acrylic Roof Coating Over TPO/CSPE/PVC, Penetration

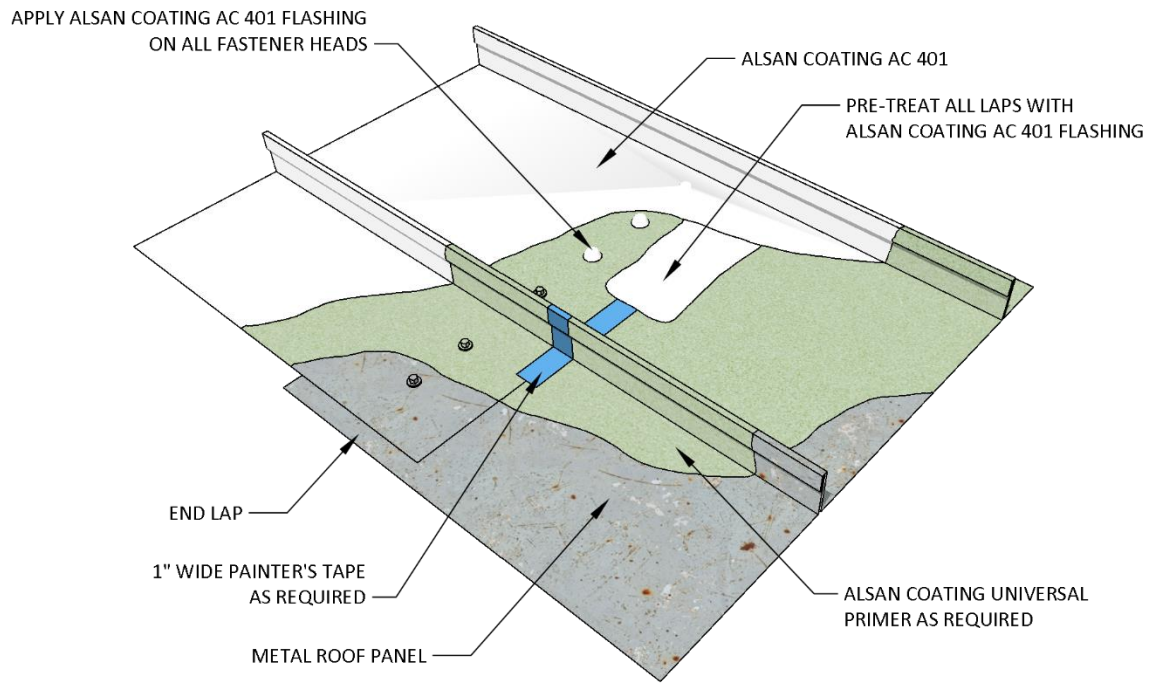


Figure 2.2m Acrylic Roof Coating Over Standing Seam Metal, Side/End Laps

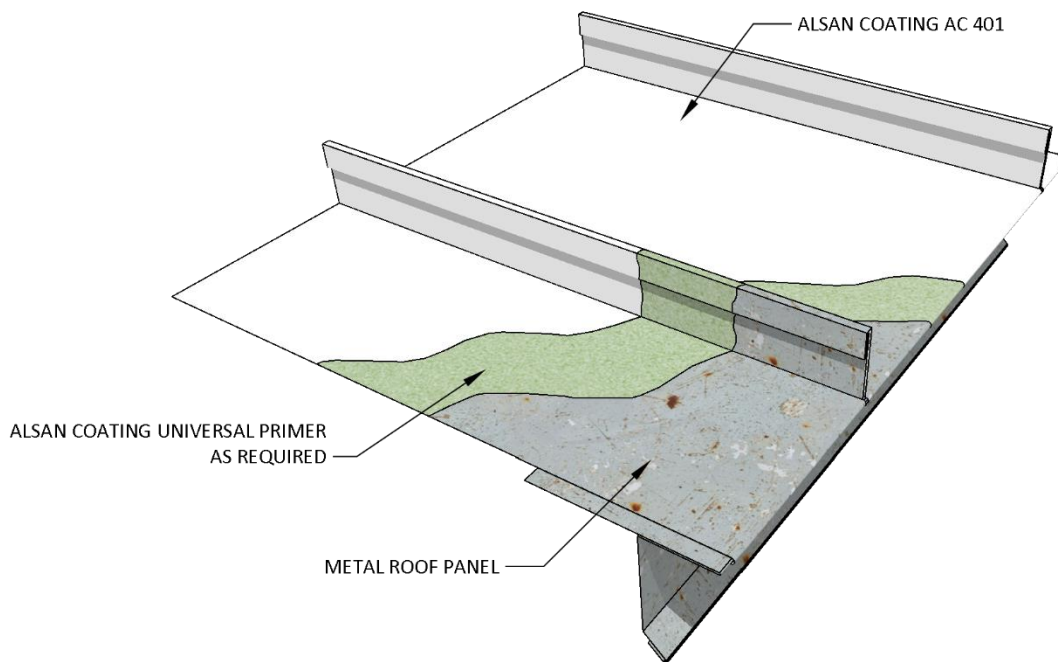


Figure 2.2n Acrylic Roof Coating Over Standing Seam Metal, Edge

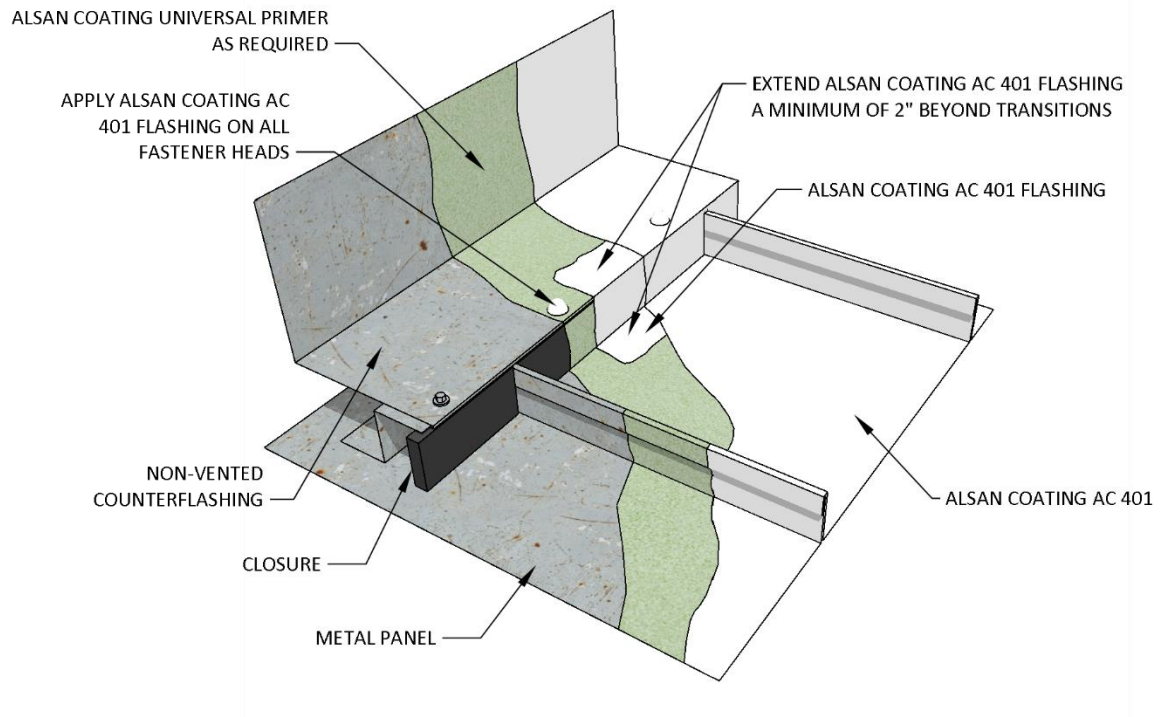


Figure 2.2o Acrylic Roof Coating Over Standing Seam Metal, Wall/Curb

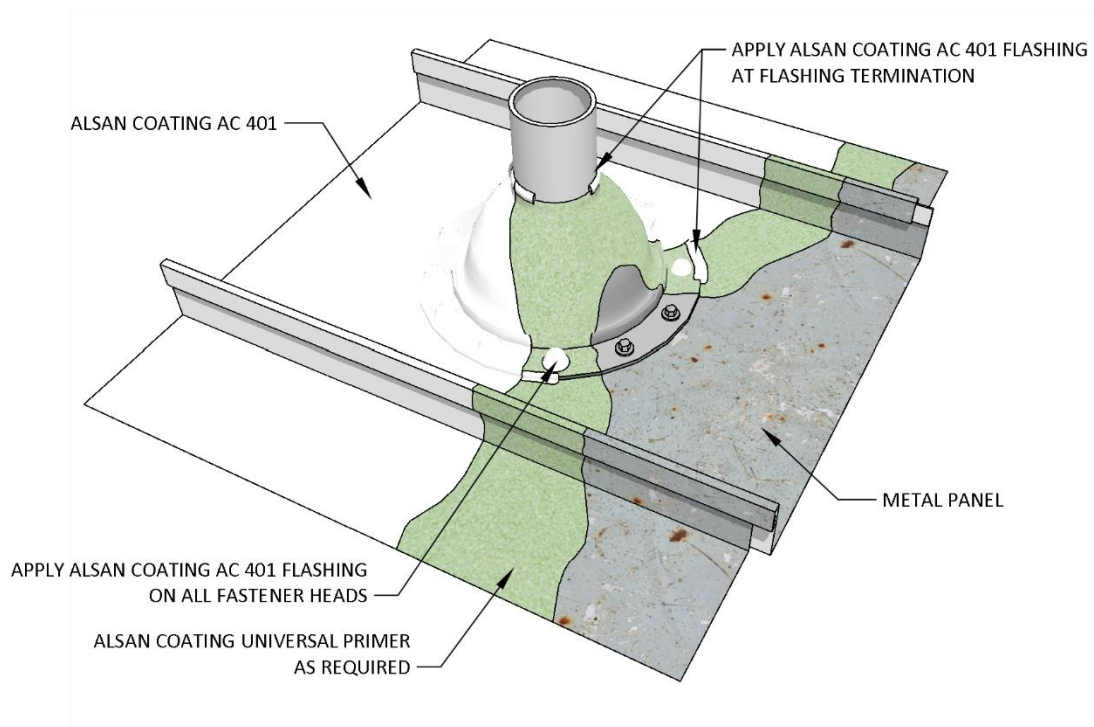


Figure 2.2p Acrylic Roof Coating Over Standing Seam Metal, Penetration

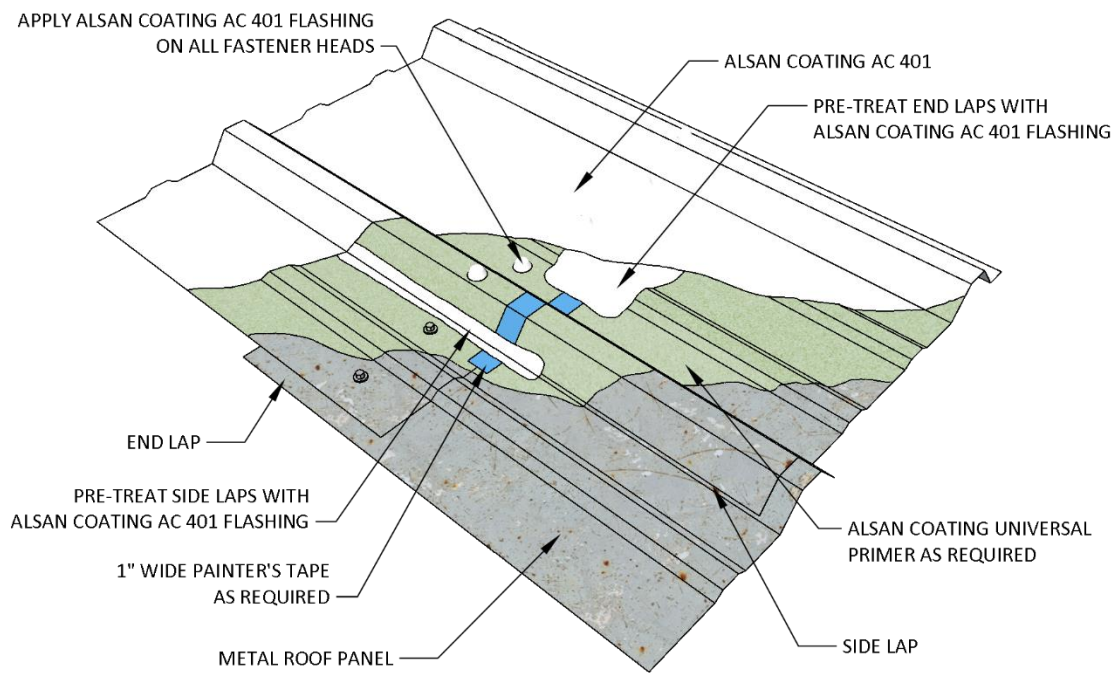


Figure 2.2q Acrylic Roof Coating Over Metal Lap Panels, Side/End Laps

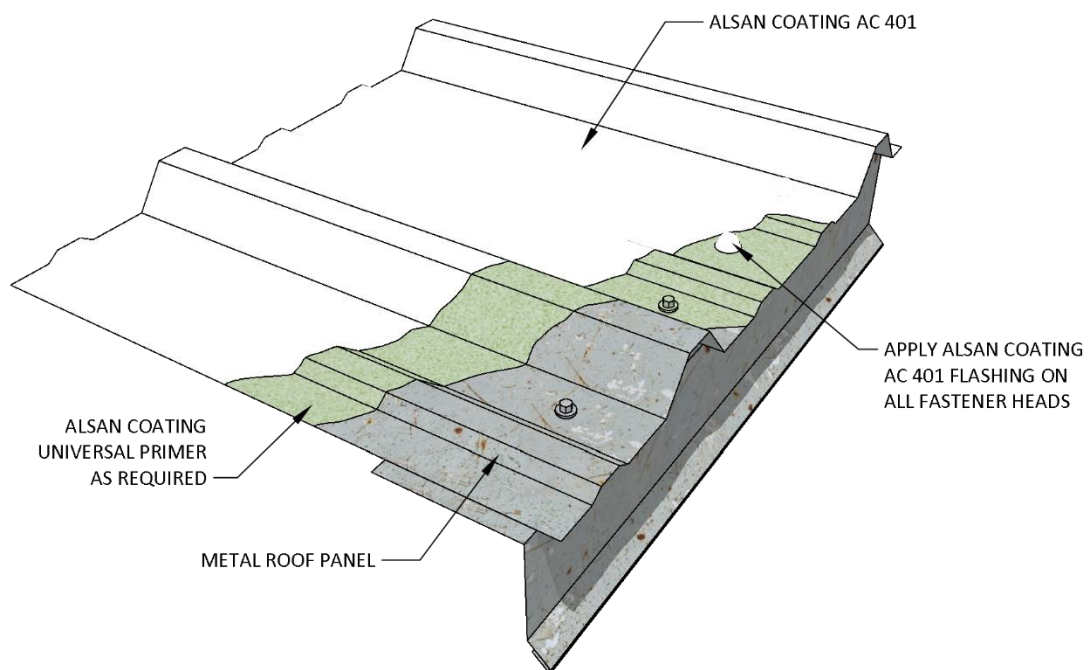


Figure 2.2r Acrylic Roof Coating Over Metal Lap Panels, Edge

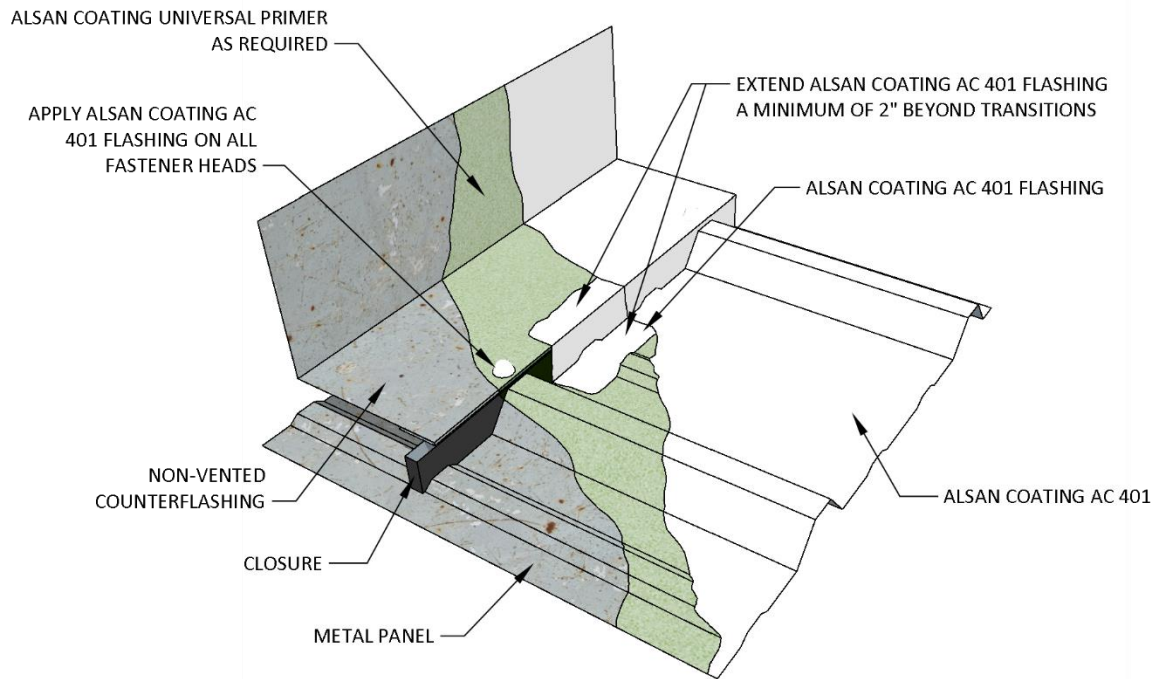


Figure 2.2s Acrylic Roof Coating Over Metal Lap Panels, Wall/Curb

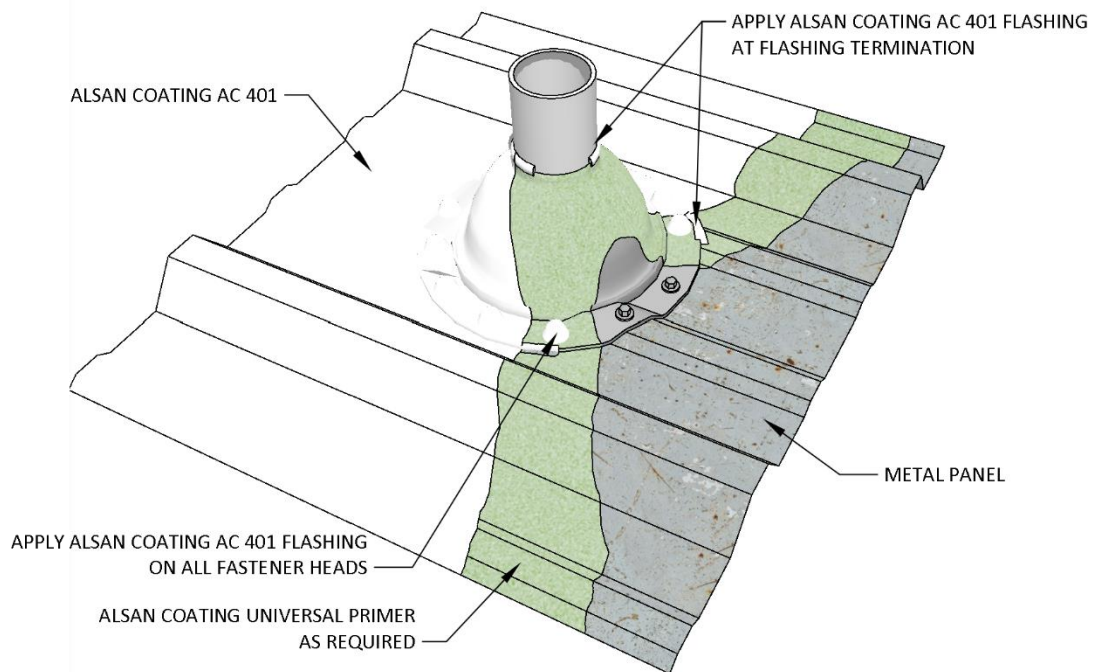


Figure 2.2t Acrylic Roof Coating Over Metal Lap Panels, Penetration

3 MISCELLANEOUS

3.1 WALKWAYS

General:

- Refer to [Table 3.2a](#) for an outline of coating materials and accessories.
- [ALSAN® COATING SIL WALKWAY GRADE](#) is yellow in color, used to create non-skid walkways on [SOPREMA®](#) acrylic and silicone roof coatings.
- [ALSAN® COATING SIL WALKWAY GRANULES](#) are yellow granules broadcasted into [ALSAN® COATING SIL WALKWAY GRADE](#) to create non-skid walkways.
- The contractor and/or applicator is responsible for managing and controlling all exposures related to chemical hazards, toxic substances and odors. This includes personal protective equipment (PPE), administrative and work practice controls, and engineering controls. The contractor is responsible for the elimination or substitution of products as necessary to manage and control exposures related to chemical hazards, toxic substances and odors.
- Refer to product Safety Data Sheets (SDS) for health, safety, and environment related hazards, and take all necessary measures and precautions to comply with exposure requirements.
- Refer to the PDS and SDS for additional information.

Preparation:

- Ensure the roof coating has cured sufficiently to apply [ALSAN® COATING SIL WALKWAY GRADE](#).
- Refer to [Section 1.1](#) for preparation guidelines.
- Mark areas to receive walkways.

Application:

- Light traffic areas:
 - Brush or roll [ALSAN® COATING SIL WALKWAY GRADE](#) at designated walkway area at a rate of 2.0 gals/100ft².
 - If a non-skid surfacing is desired, immediately broadcast [ALSAN® COATING SIL WALKWAY GRANULES](#) in the wet walkway coat until refusal and allow to cure.
 - Remove loose granules.
- Heavy traffic areas:
 - Brush or roll a base layer of [ALSAN® COATING SIL WALKWAY GRADE](#) at designated walkway area at a rate of 2.0 gals/100ft².
 - Install [POLYFLEECE](#) into wet base layer followed by a top layer of [ALSAN® COATING SIL WALKWAY GRADE](#) at a rate of 2.0 gals/100ft² and allow to cure.
 - Brush or roll an additional layer of [ALSAN® COATING SIL WALKWAY GRADE](#) at designated walkway area at a rate of 2.0 gals/100ft².
 - If a non-skid surfacing is desired, brush or roll an additional layer of [ALSAN® COATING SIL WALKWAY GRADE](#) at designated walkway area at a rate of 2.0 gals/100ft² and immediately broadcast [ALSAN® COATING SIL WALKWAY GRANULES](#) in the wet walkway coat until refusal and allow to cure.
 - Remove loose granules.






Inspection:


- After [ALSAN® COATING SIL WALKWAY GRADE](#) has cured sufficiently, walk the roof and examine conditions to ensure work has been completed as required. Repair all deficiencies.

3.2 ALSAN® COATING MATERIALS AND ACCESSORIES

General:

- Refer to [Table 3.2a](#) for a general description of ALSAN® roof coating materials and accessories. Refer to the Product Data Sheets and Safety Data Sheets for additional product information.

Table 3.2a ALSAN® Coating Materials and Accessories	
¹ Product	² Product Description
#652 ULTRAGREEN ROOF WASH ALL PURPOSE CLEANER	A water-soluble surface cleaner used to dissolve and remove dirt, oil and grease from roofing substrates.
ALSAN® COATING ASPHALT BLEED BLOCKING PRIMER 	A water-based acrylic primer applied to clean, dry modified bitumen and smooth built-up roofing surfaces. The primer improves adhesion and prevents discoloration of coatings.
ALSAN® COATING UNIVERSAL PRIMER 	A water-based acrylic primer used where needed to improve adhesion to approved substrates. The primer is required to pre-treat surface-rust on clean, dry un-painted steel, Galvanized or Galvalume® roofing. Remove loose rust before applying primer.
ALSAN® COATING AC 401 	A water-based acrylic elastomeric roof coating that provides a highly flexible surfacing for a variety of metal, single-ply, modified bitumen, smooth-surface asphalt built-up and other properly prepared roofing substrates.
ALSAN® COATING SIL 402 	A high solids silicone roof coating that provides a highly flexible surfacing resistant to ponding water, UV and natural weathering exposures suitable for a variety of metal, single-ply, modified bitumen, smooth-surface asphalt built-up and other properly prepared roofing substrates.
POLYFLEECE 	A non-woven polyester reinforcing fabric used to reinforce ALSAN® COATING AC 401 or ALSAN® COATING SIL 402 .

Product*	Product Description**
ALSAN® COATING AC 401 FLASHING 	A brush/trowel-grade mastic used to pre-treat and seal roofing fasteners, seams and flashings.
ALSAN® COATING SIL 402 FLASHING 	A silicone brush/trowel-grade mastic used to pre-treat and seal roofing fasteners, seams and flashings.
ALSAN® COATING SIL WALKWAY GRADE	A yellow silicone coating applied over existing ALSAN® COATING AC 401 acrylic or ALSAN® COATING SIL 402 silicone coating to delineate rooftop walkways and caution areas.
ALSAN® COATING SIL WALKWAY GRANULES	Yellow granules used with ALSAN® COATING SIL WALKWAY GRADE to provide a non-skid surface at rooftop walkways and caution areas.

¹ Refer to www.SOPREMA.us for product data sheets (PDS) or safety data sheets (SDS).

² Refer to additional preparation and application guidelines, and detail drawings included herein. Contact [SOPREMA®](#) at 800.356.3521 for more information.