

ALSAN RS Priming Guidelines

Primer Application (General)

Primers are a pretreatment used to promote and improve adhesion of ALSAN RS components to certain substrates. All substrates must be prepared as necessary prior the application of primers. Surfaces must be free from gross irregularities, loose, unsound or foreign material such as dirt, ice, snow, water, grease, oil, release agents, lacquers, or any other condition that would compromise the primers adhesion to the substrate.

SOPREMA offers several primers used for a variety of applications. A list of these primers and associated uses are as follows:

Primer	General Description & Use
ALSAN RS 222	Asphalt blocking primer used on substrates requiring a semi-rigid primer
ALSAN RS 276	Used on traffic assemblies or substrates requiring a rigid primer
ALSAN RS LO	Low-odor applications
ALSAN RS Metal	Metal terminations & tie-ins
Moisture Mitigation	Approved moisture blocking primer used on concrete & masonry

See page two of this Technical Data Sheet for specific substrate and primer guidelines. Refer to SOPREMA ALSAN RS product data sheets and published general requirements for application rates and cure times.

ALSAN RS Primer Application

Apply masking tape at top edge termination and on substrate when ALSAN RS primer and flashing will be applied over an in place membrane. Thoroughly mix and apply an appropriate primer resin to clean and prepared substrate at the required consumption using ALSAN RS approved v-notched squeegee, rollers or brushes as recommended at the following rates:

ALSAN RS 222/276 Primer Recommended Coverage Rates	
Substrate	kg/ft ² (kg/m ²)
smooth (CSP3)	0.037 (0.4)
medium (CSP4)	0.046 (0.5)
rough (CSP5)	0.075 (0.8)

ALSAN RS LO Primer Recommended Coverage Rates	
Substrate	gal/ft ² (l/m ²)
smooth (CSP3)	0.005 (0.20)

ALSAN RS Metal Primer Recommended Coverage Rates	
Substrate	gal/ft ² (l/m ²)
SSPC-SP3	0.004 (0.16)

Moisture Mitigation Epoxy Primer Coverage rate as indicated below or recommended by primer manufacturer	
Substrate	gal/ft ² (l/m ²)
smooth (CSP3)	0.01 (0.41)

Allow primer to fully cure before applying the next ALSAN RS component. Changing project conditions should be monitored throughout the day to adjust catalyst ratios and cure time. At membrane tie-ins, clean cured ALSAN RS membrane with ALSAN RS Cleaner before application of adjacent membrane.

Typical Primer Installation



Step 1:
Apply masking tape at top edge termination and on substrate when ALSAN RS flashing will be applied over an in place membrane.



Step 2:
Apply ALSAN RS Primer starting on vertical substrates then horizontal.



Step 3:
Remove masking before primer resin cures.

Protection & Recoat Times

In some applications, applied primers may be left exposed to the elements and/or trafficked prior to application of subsequent ALSAN RS components due to weather, scheduling or other interruptions. In all cases, care should be taken by the applicator to protect and keep the primer layer clean. Any damage or contamination (dirt, dust, debris) must be corrected prior to applying subsequent ALSAN RS components.

Recommended minimum cure and maximum recoat times should be followed for all primers. Primers left exposed to the elements for more than 12 hours, or the surface becomes dirty or contaminated from exposure to the elements, should be thoroughly cleaned with ALSAN RS Cleaner and allowed 20 minutes evaporation time prior to application of the next ALSAN RS component. When primer is left exposed to the elements for longer than the recommended period or has been contaminated or damaged beyond cleaning or repair, the primer must be completely removed and re-applied.

ALSAN RS 222 & RS 276 Primer

Mixing & Application

Mix: Thoroughly mix the entire drum of resin for 2-3 minutes before each use and prior to pouring off resin into a second container if batch mixing, using a slow-speed (200 to 400 rpm) mechanical mixer with spiral agitator or stirring stick taking care not to aerate. Catalyze only the amount of material that can be used within 10-15 minutes. Add pre-measured ALSAN RS Catalyst to the resin component, stir for 2-4 minutes or until the catalyst has sufficiently dissolved before applying to substrate. ALSAN RS Catalyst addition is based on the weight of resin being used and temperature.

Apply: After mixing, apply resin to clean and prepared substrate at the required consumption using ALSAN RS approved rollers or brushes. The resin should be applied evenly onto the surface using care not to spread primer too thin or pool in low areas.

Cure & Recoat: Allow primer to fully cure before applying the next ALSAN RS component. Changing project conditions should be monitored throughout the day to adjust primer catalyst ratios and cure time. Primer should be covered with the next ALSAN RS component as soon as possible, up to a maximum of 6 months.

ALSAN RS LO Primer

Mix: Thoroughly mix the entire drum of component A for 2 to 3 minutes until a uniform consistency is achieved and then add component B and remix until both components are evenly mixed using a slow-speed mechanical mixer with spiral agitator taking care not to aerate.

Apply: After mixing, apply resin to clean and prepared substrate at the required consumption using ALSAN RS approved v-notch squeegees, rollers or when needed brushes to cut-in at corners and around penetrations. The resin should be applied evenly onto the surface using care not to spread primer too thin or pool in low areas. To reduce potential for pinholes and bubbles due to "off-gassing", apply ALSAN RS LO Primer preferably with falling temperature. If the primer will be left exposed for more than 24 hours, while wet, apply broadcast #1 (0.7 – 1.2mm) kiln-dried quartz into the applied ALSAN RS LO Primer at the rate of 30 lbs/100 ft² (1.5 kg/m²).

Cure & Recoat: Allow primer to fully cure and apply the next ALSAN RS component within 24 hours of primer application unless broadcast with quartz.

ALSAN RS Metal Primer

Mix: Thoroughly mix primer resin approximately 2 – 3 minutes using a slow-speed (200 to 400 rpm) mechanical mixer with spiral agitator or stirring stick taking care not to aerate.

Apply: After mixing, apply resin to clean and prepared substrate at the required consumption using ALSAN RS approved rollers or brushes. The resin should be applied evenly onto the surface using care not to spread primer too thin or pool in low areas.

Cure: Allow primer to fully cure before applying the next ALSAN RS component. Changing project conditions should be monitored throughout the day to primer cure time. Primer should be covered with the next ALSAN RS component as soon as possible, up to a maximum of 24 hours.

Moisture Mitigation Primer

Refer to approved moisture mitigation primer manufacturer's product data sheets and published general requirements for application rates and specific installation instructions. Moisture mitigation primer must be applied free of pinholes with all cracks and joints properly sealed to block moisture transmission.

Cure: Allow primer to fully cure before applying the next ALSAN RS component. Changing project conditions should be monitored throughout the day to primer cure time. Primer should be covered with the next ALSAN RS component as soon as possible, up to a maximum of 24 hours.

When the moisture mitigation primer will be left exposed for more than 24 hours, apply a second coat of moisture mitigation primer broadcast with #1 (0.7 – 1.2mm) kiln-dried quartz while wet at the rate of 30 lb/100 ft² (1.5 kg/m²).

Steep Slope Applications

ALSAN RS and other recommended primers are produced ready for application at all slopes. ALSAN RS Primers typically do not require mixing with ALSAN RS Liquid Thixo. However, for ramps, steep slope roofing or waterproofing and high vertical wall applications, ALSAN RS primers may be peppered while wet with broadcast #1 (0.7 – 1.2mm) kiln-dried quartz to provide limited slip resistance and "grab" for application of subsequent ALSAN RS components. NOTE: With moisture mitigation primer applications, aggregate must be applied in a subsequent sacrificial layer of moisture mitigating primer as previously discussed.

Galvanized & Zinc Rich Metals

Galvanized and zinc rich metals are typically passivated or coated with oil requiring special preparation. The passivator must be completely removed by mechanical abrasion for ALSAN RS Metal Primer to obtain sufficient long-term bond. This can be confirmed by applying a coat of copper sulfate solution to the prepared galvanized metal surface. A properly prepared surface will turn black indicating the passivator has been removed. If the surface does not turn black, additional abrasive cleaning will be required. In certain applications with zinc rich or stainless steel metals, an acceptable pre-primer may be required prior to application of ALSAN RS Metal Primer. Consult SOPREMA for recommendations regarding specific applications.

Primer/Substrate Guidelines

The following tables provide general guidelines regarding acceptable substrates, recommended primer, and basic surface preparation:

Asphalt Based Substrates					
Substrate	Prep	222	276	RS LO Odor	Metal
Asphalt or bleed out at laps/seams	1	✓**	✗	✓	✗
Roofing Felt (all)	1	✓**	✗	✓	✗
SBS Modified Bitumen (sanded or granulated)	1,3	✓**	✗	✓	✗
APP Modified Bitumen (granulated)	1,3	✓**	✗	✓	✗
APP Modified Bitumen (smooth)	1,4	✓**	✗	✓	✗
Coal Tar Pitch	1,9	✓	✗	✗	✗

Cementitious Based Substrates					
Substrate	Prep	222	276	RS LO Odor	Metal
Standard Weight Concrete, Masonry, Brick	1,2	✓	✓	✓	✗
Structural Lightweight & Aerated Concrete	1,2,9	✓	✓	✗	✗
LWIC	0	✗	✗	✗	✗
Cement Based Roof Board	1	✓	✓**	✓	✗
Glass Faced Gypsum Based Roof Board	0	✓**	✗	✓	✗

Metals					
Substrate	Prep	222	276	RS LO Odor	Metal
Steel	1,5	✗	✗	✓	✓
Galvanized Steel	1,5,8	✗	✗	✓	✓
Stainless Steel	1,5	✗	✗	✓	✓
Aluminum	1,5	✗	✗	✓	✓
Copper	1,5	✗	✗	✓	✓
Zinc	1,5,8	✗	✗	✓	✓
Lead	1,6	✗	✗	✓	✓

Wood Plank, Timber & Wood Sheathing					
Substrate	Prep	222	276	RS LO Odor	Metal
Wood, Plywood, Dimensional Lumber	1	✓**	✓	✓	✗
Treated Lumber with waterborne Preservatives	1	✓**	✓	✓	✗
Penta Treated Lumber	0	✗	✗	✗	✗

Note: Primer suitability and substrate preparation requirements should be confirmed by the applicator with field adhesion testing at the time of application.

Plastics, Single Ply Membranes & Coatings					
Substrate	Prep	222	276	RS LO Odor	Metal
PVC	1,6,9	✓	✗	✓	✗
CPE, CSPE	1,6,9	✗	✗	✓	✗
EPDM, TPO	0	✗	✗	✗	✗
EVA	1,6,9	✓	✗	✓	✗
PIB	1,6,9	✓	✗	✓	✗
Rigid PVC & ABS	1,6,9	✓	✗	✓	✗
PU (polyurethane)	1,6,9	✓	✗	✓	✗
Acrylics	1,7	✓	✗	✓	✗
UP (polyester)	1,6,9	✓	✗	✓	✗
Rigid Fiberglass & GRP	1,6,9	✓	✓	✓	✗

Substrate Preparation Notes

- ✗ Primer NOT acceptable.
- ✓ Acceptable primer.
- ** Preferred primer for this application.
- 0 Substrate NOT acceptable.
- 1 Surface should be clean, dry & dust-free.
- 2 Shot blast, scarify, cup grind.
- 3 Primer recommended but not required except for exposed asphalt and asphalt bleed out at laps & seams.
- 4 Aggregate surfacing required on smooth surface APP. Apply cover board, SBS base ply, granulated cap sheet or soften asphalt surface by application of heat and immediately blind with quartz aggregate
- 5 Heavily abrade metals and hard plastics, thoroughly wipe with ALSAN RS Cleaner
- 6 Lightly scratch and scour surface, thoroughly wipe with ALSAN RS Cleaner.
- 7 Thoroughly wipe with ALSAN RS Cleaner.
- 8 Passivator must be completely removed by mechanical abrasion. Apply coat of copper sulfate solution to the prepared galvanized metal surface to assure removal of passivator. Properly prepared surface will turn black indicating the passivator has been removed.
- 9 Contact SOPREMA to confirm primer requirements

Refer ALSAN RS "Substrate Preparation Guidelines" for additional information and requirements.