

# VEHICULAR SYSTEMS

## ALSAN® Trafik PU 211/410/411

The ALSAN Trafik PU 211/410/411 polyurethane deck coating systems consist of a primer, a one-component polyurethane base coat, one-component aromatic intermediate coat and a two-component aliphatic top coats. These systems are used to protect concrete substrates designed for concrete parking decks with vehicular traffic.

For vehicular traffic deck coating systems that accommodate a shorter schedule with faster curing components please reference our application instructions for ALSAN Trafik PU 215/420/421 or for rapid set ALSAN Trafik RS 276/730/233/279.

### HEALTH & SAFETY

The contractor shall ensure compliance with OSHA, EPA and other local governing and disposal authorities for project-related safety and environmental requirements. Prior to application, persons handling or applying ALSAN Trafik PU coatings should familiarize themselves with the applicable Product Data Sheets (PDS), Safety Data Sheets (SDS), specifications, and application instructions. Refer to product SDS for health, safety, and environment related hazards, and take all necessary measures and precautions to comply with specified exposure limits where required. The applicator is responsible for ensuring conditions are appropriate to proceed and proper application methods are followed.

When applying ALSAN Trafik PU Coatings typical exposure levels will be below OSHA permissible limits for most outdoor applications. When required, air monitoring should be performed by a qualified person to identify any hazards. If respiratory protection is required, use a NIOSH approved air-purifying respirator.

# APPLICATION GUIDELINES

### STORAGE & HANDLING

Containers should be left unopened until ready for use. Store material above 60°F (16°C) but less than 95°F (35°C) for optimum shelf life. Storage outside of the recommended guidelines for extended time could affect the performance of the material. Store away from any sparks or open flames.

### ENVIRONMENTAL CONDITIONS

Environmental conditions such as temperature, dew point, humidity, precipitation, sun, cloud cover, wind, and shade will affect application and cure rate of ALSAN Trafik PU components. Monitor and confirm all environmental conditions are satisfactory to begin work and remain so during installation of the specified components and materials.

- Do not apply ALSAN Trafik PU components if precipitation is anticipated 24hrs before or after installation.
- Do not apply ALSAN Trafik PU components during fog, dew, frost, with 90% relative humidity (RH) or above, or with chance of condensation.
- Generally, application may proceed when ambient and surface temperature is minimum 40°F (10°C) and rising providing the substrate is a minimum of 5°F (3°C) above the dew point temperature, and the substrate is clean and dry.

### MOCKUP

Mockup should be installed as a guide for quality control and be approved by an authorized owner's representative for fit for use, such as slip resistance, aesthetics, and functionality.



## EQUIPMENT LIST

- 3/8" nap rollers of varying length - 4", 9" or 18"
- Properly sized notched squeegee
- Extension handles
- Gloves
- Safety glasses
- Jiffy mixer paddle
- Power drill capable low speed mixing (250 - 500rpm)
- Spiked shoes
- Blower and/or brooms

## MIXING

Use the jiffy mixer at low speed (250-500rpm) for 2-3 minutes making sure to stir from the bottom to the top of the pail for a homogeneous mixture prior to application.

## SUBSTRATE PREPARATION

All substrates must be clean, dry and 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 be detrimental to adhesion of primer or resin materials to the substrate. Most surfaces will require mechanical abrasion in the form of scarifying, shot blasting, or grinding to achieve a suitable substrate.

Inspect all substrates, and correct defects before application of waterproofing materials.

Concrete shall be fully cured and a minimum of 3500 psi prior to application with a moisture of 4.5% or less. Moisture can be measured with a non-destructive moisture meter. Shot blast, scarify, or grind to ICRI Concrete Surface Profile CSP 3 to CSP 5; CSP 3 being the preferred profile.

Metal substrates shall be prepared to near-white metal in accordance with SSPC – SP3 (power tool clean) to a maximum 1/8" (3mm) beyond the termination of the ALSAN Trafik membrane. Immediately prime cleaned surface with ALSAN Trafik EP 141

## AGGREGATES

Use clean and dry silica sand of 16-30 or 12-20 mesh, or 24 mesh silicon carbide or aluminum oxide depending on the system need.

## DETAILING

1. Cracks less than 1/16" wide shall be pretreated prior to placement of ALSAN Trafik PU coatings. Apply a coat of specified primer by roller at 5 mil, 4" beyond crack to each side and allow to dry to thumb print tacky. Proceed by applying detail coat of properly mixed base coat at 25 mils a minimum of 4" to each side of the crack. Allow detail coat to cure a minimum of 6 hours.
2. Cracks 1/16" or greater shall be routed to a min. 1/4" wide by 1/2" deep. Install backer rod to clean and dry routed crack to allow for 1/4" depth of sealant and seal with Soprema approved joint sealant. Allow sealant to cure overnight. Apply primer 4" beyond joint to each side and allow to dry to thumb print tacky. Proceed by applying detail coat of properly mixed base coat at 25 mils a minimum of 4" to each side of the crack. Allow detail coat to cure a minimum of 6 hours.
3. When terminating coatings up a vertical surface install a 45° cove bead of Soprema approved sealant a minimum of 1/2" onto both surfaces and allow the sealant to cure overnight.

## DETAILING

For a clean finish install tape 4" above the surface on the vertical prior to coating application and then remove immediately after coating is applied. Apply primer 4" onto the vertical and horizontal and allow to dry to thumb print tacky. Apply detail coating at 25 mils over the cove bead 4" onto the vertical and 4" onto the horizontal. Allow detail coat to cure a minimum of 6 hours.

4. Penetrations such as pipes through the deck shall be rigidly fastened on both sides of the deck whenever possible. Seal the penetration with a Soprema approved sealant creating a cove bead around the base of the pipe with a minimum of 1/2" onto the penetration and the deck. Allow sealant to cure overnight. For a clean finish install tape to the penetration 4" above the surface prior to coating application and then remove immediately after coating is applied. Apply primer 4" onto the penetration and horizontal, allow to dry to thumb print tacky. Apply detail coating at 25 mils over the cove bead 4" onto the vertical and 4" onto the horizontal. Allow detail coat to cure a minimum of 6 hours.

5. Drains shall be operational and recessed with the deck sloped to drain. Drains to be detailed with a Soprema approved sealant creating a seal between the deck and the drain. Block drain and turn deck coating system down into the drain.

## PARKING STALLS APPLICATION RATES- ALSAN TRAFIK PU 211/410

Primer ALSAN Trafik EP 140 or 141	5 mils (300 ft <sup>2</sup> /gal)
Base coat ALSAN Trafik PU 211	25 mils (64 ft <sup>2</sup> /gal)
Top coat ALSAN Trafik PU 411	15 mils (105ft <sup>2</sup> /gal)
Total system thickness (excluding primer)	40 mils

1. Apply 5 wet mils of specified primer using notched squeegee or roller. Follow mixing instructions accordingly. Allow to cure to thumb-print tacky.

2. Apply 25 wet mils of ALSAN Trafik PU 211 base coat using a properly sized notched squeegee. Immediately back roll base coat with pre-saturated 3/8" nap roller in the opposite direction of squeegee. Allow to cure approximately 16 hours prior to application of top coat, usually next day.

3. Apply 15 mils of ALSAN Trafik PU 411 top coat with notched squeegee.

4. Broadcast specified clean and dry 16-30 silica sand at 10-15 lbs./100sqft into the wet top coat and back roll to encapsulate the sand and create slip resistance.

5. Extend deck coating up vertical surfaces a minimum of 4".

6. Allow a minimum of 48 hours for the system to cure prior to opening to vehicular traffic.

## CURING

Product cure time will vary depending on temperature and relative humidity. Typical cure time is next day. Do not apply subsequent coats until previous coat has cured. Allow a minimum 48 hour cure time on the finished system prior to opening to vehicular traffic.

## CLEANUP

Before material cures, clean all tools and equipment with xylene or similar solvent. Cured material will need to be mechanically cut or abraded. Clean skin with warm soapy water and a medium bristled brush as needed.



### DRIVE LANES APPLICATION RATERS - ALSAN TRAFIK PU 211/410/411

Primer ALSAN Trafik EP 140 or 141	5 mils (300 ft <sup>2</sup> /gal)
Base coat ALSAN Trafik PU 211	25 mils (64 ft <sup>2</sup> /gal)
Intermediate coat ALSAN Trafik PU 410	15 mils (105 ft <sup>2</sup> /gal)
Top coat ALSAN Trafik PU 411	15 mils (105ft <sup>2</sup> /gal)
Total system thickness (excluding primer)	55 mils

1. Apply 5 wet mils of specified primer using notched squeegee or roller. Follow mixing instructions accordingly. Allow to cure to thumb-print tacky.
2. Apply 25 wet mils of ALSAN Trafik PU 211 base coat using a properly sized notched squeegee. Immediately back roll base coat with pre-saturated 3/8" nap roller in the opposite direction of squeegee. Allow to cure approximately 16 hours prior to application of intermediate coat, usually next day.
3. Apply 15 mils of ALSAN Trafik PU 410 intermediate coat using a properly sized notched squeegee and broadcast specified clean dry 16-30 silica sand to refusal, approximately 30-50 lbs./100SF. Once cured, usually next day, remove all loose aggregate prior to proceeding.
4. Apply 15 mils of ALSAN Trafik PU 411 top coat with notched squeegee and broadcast specified clean and dry 16-30 silica sand at 5-10 lbs./100sqft into the wet top coat and back roll to encapsulate the sand and create slip resistance.
5. Extend deck coating up vertical surfaces a minimum of 4".
6. Allow a minimum of 48 hours for the system to cure prior to opening to vehicular traffic.