

## ALSAN RS System Selection Guidelines

### Time Tested Dependability

For over 100 years, the SOPREMA GROUP has developed and manufactured cutting edge waterproofing systems for all aspects of the building envelope. Today, advanced PMMA (polymethyl methacrylate) technology found in the ALSAN RS system is revolutionizing the industry by combining liquid plastics with time proven products to deliver unbeatable waterproofing protection. The ALSAN RS system is the ideal solution for waterproofing almost any surface including balconies, terraces, parking structures, water features, flat roof areas, plazas and many more.

### PMMA Resin Technology

The first methyl-methacrylate (MMA) resins were developed and produced in the early 1930's. These technologies were later developed into cross-linked polymers combined with non-woven polyester reinforcement resulting in the high performance liquid applied roofing, waterproofing and surfacing systems available today.

### ALSAN RS Product Range

SOPREMA offers a complete range of high quality, flexible, fully and partially reinforced cold liquid applied roofing, waterproofing and surfacing solutions. All ALSAN RS systems are cold applied for maximum safety and efficiency. ALSAN RS products represent the next generation in liquid applied technology, providing long-term solutions for most roofing, waterproofing and surfacing needs. They are proven cost-effective and highly durable alternatives to conventional roofing and waterproofing materials.

ALSAN RS products are manufactured to meet strict internationally recognized assurance standards for consistency, quality and performance. As a result of this commitment to quality and service, ALSAN RS products are the finest roofing, waterproofing and surfacing products available. Some common ALSAN RS system applications include:

- Conventional Roofing & Waterproofing
- Inverted, Protected & Green Roof Applications
- Plaza, Balconies, Terrace & Walkways
- Vehicular & Pedestrian Traffic Bearing Waterproofing & Surfacing

ALSAN RS systems may be applied with a variety of smooth, textured and anti-skid finishes available in a wide range of colors. Finishes may be applied to an entire system, or in isolation for walkways, signage, logos, etc.

### Solutions for All Waterproofing Challenges

ALSAN RS systems are flexible, self-adhering, self-terminating, monolithic waterproofing solutions to traditional roofing and waterproofing materials. ALSAN RS membranes conform and bond directly to the substrate, eliminating the need for caulked terminations, pitch boxes, and fasteners thereby providing low maintenance systems with additional benefits as follows:

- Fully or partially reinforced
- Quick easy application
- Cold liquid applied
- Minimal disruption
- Rapid curing
- Seamless
- Flexible
- Durable
- UV resistant
- Root resistant
- Chemical Resistant

ALSAN RS systems may be installed with minimal disruption and less risk than many conventional products, offering a diverse range of options suitable for most roofing, waterproofing and surfacing needs. Proven to be reliable in the some of the most technically challenging environments, ALSAN RS systems will offer continued compatibility and adaptability where long-term protective solutions are needed, even as building and construction techniques continue to change.

The following guides are provided to assist in selecting an appropriate SOPREMA ALSAN RS system for specific applications. Refer to the relevant sections of ALSAN RS brochures, literature or specifications regarding detailed qualifications or restrictions of individual ALSAN RS products or systems.

**ALSAN RS Substrate Compatibility**

ALSAN RS systems may be applied over a variety of substrates including but not limited to concrete, wood, metals, plastics, insulations, specialty roof board underlay, existing single-ply membranes, built-up roofing and coatings as follows:

Substrate / Compatibility:	See Note
<b>Asphalt Based Substrates</b>	
Asphalt or exposed asphalt at laps/seams	✓
Roofing Felt (all)	✓
SBS Modified Bitumen (sanded or granulated)	✓
APP Modified Bitumen (granulated)	✓
APP Modified Bitumen (smooth)	x 2 or 3
APP/SBS Applied With Solvent Adhesive	x 6
Uncured Roof Cement or Coatings	x 6
Coal Tar Pitch	x 5
<b>Cementitious Based Substrates</b>	
Standard Weight Concrete, Masonry, Brick	✓
Structural Lightweight & Aerated Concrete	✓ 1
LWIC, Gypsum, Tectum	x 2
Cement Based Roof Board	✓
Glass Faced Gypsum Based Roof Board	✓ 7,8
<b>Metals</b>	
Steel, Aluminum, Copper, Lead	✓
Zinc, Galvanized Steel, Stainless Steel	✓ 3
<b>Plastics, Single Ply Membranes &amp; Coatings</b>	
Acrylics	✓ 4
PVC	✓ 4
CPE, CSPE	✓ 4
EPDM, TPO	x
EVA	✓ 4
PIB	✓ 4
Rigid PVC & ABS	✓
PU (polyurethane)	✓ 4
UP (polyester)	✓ 4
Rigid Fiberglass & GRP	✓
<b>Wood Plank, Timber &amp; Sheathing</b>	
Wood, Plywood, Dimensional Lumber	✓
Waterborne Treated Lumber	✓
Penta Treated Lumber	x
Oriented Strand Board (OSB)	x
<b>Insulation &amp; Sheathing (Walls Only)</b>	
Polyiso Insulation (black organic facer)	✓ 2,8
Polyiso Insulation (coated glass facer)	x 2
Perlite, Wood Fiber, Rock Wool, Fiberglass, XPS, EPS Insulation	x 2
Cement Wall Board	✓
Fiberglass Faced Wall Board	✓ 7,8
Paper Faced Gypsum Wall Board	x
<b>Other</b>	
Glass, Glass Block	x 7

**ALSAN RS System Selection**

ALSAN RS systems are available as fully or partially reinforced systems based on the following guidelines:

ALSAN RS System Selection	
Over occupied and/or conditioned space	ALSAN RS fully reinforced assemblies
Over cantilever, open deck and slabs on grade	ALSAN RS fully or partially reinforced assemblies

**ALSAN RS Component Selection**

ALSAN RS system components are available as standard or low odor formulations as follows:

ALSAN RS Component	Standard Applications	Low Odor Applications
<b>Primers</b>		
ALSAN RS 222 Primer	✓	x
ALSAN RS 276 Primer	✓	x
ALSAN RS LO Primer	✓	✓
Acceptable Moisture Mitigation Epoxy Primer	✓	✓
<b>Waterproofing Resins</b>		
ALSAN RS 230 Field	✓	x
ALSAN RS 230 Flash	✓	x
ALSAN RS 260 LO Field	✓	✓
ALSAN RS 260 LO Flash	✓	✓
<b>Waterproof Mortars</b>		
ALSAN RS 233 Self-Leveling Mortar	✓	x
ALSAN RS 263 LO Self-Leveling Mortar	✓	✓

**Substrate Compatibility Notes**

- x NOT acceptable.
- ✓ Acceptable
- 1 Typically requires moisture mitigation primer
- 2 No direct application - requires approved overlay
- 3 Requires special preparation
- 4 Field adhesion test recommended
- 5 Typically not applied over full membrane, but compatible with residue
- 6 Typically ALSAN RS components may be applied once all solvent has evaporated and the material has cured.
- 7 Generally not recommended.
- 8 Multiple coats of primer may be required. SBS base ply preferred.

**Refer ALSAN RS Substrate Preparation & Primer Guidelines for additional information and requirements.**

SEE TABLE RS 101-A at the end of this document for a complete guide listing ALSAN RS roofing, waterproofing and traffic surfacing system selections.

**SOPREMA Product Cross Compatibility**

ALSAN RS components, flashing and waterproofing may be applied in conjunction with a variety of SOPREMA building envelope products and systems. The following table applies to the general compatibility and use of these products in mixed assemblies:

<b>SOPREMA Product Cross Compatibility</b>		
SOPREMA Product	Product Applied to ALSAN RS	ALSAN RS Applied to Product
<b>Roofing &amp; Waterproofing</b>		
All SBS products	✓,4,5	✓
COLPHENE BSW-H,V	✓,4,5	✓
COLPHENE 3000	✓,4,5	✓,5,8
COLPHENE H/HEV	✓,4,5	✓
SENTINEL	x	✓
RNOVA Plus	✓,4	✓
ALSAN SIL402	✓,4	x
SOPRALAST TV ALU	✓,4,5	✓,3,5
<b>Wall &amp; Air Barrier</b>		
COLPHENE LM BARR	✓,4	x
SOPRASEAL LM 202/203	✓,4,5	✓,5,8
SOPRASEAL LM 204	✓,4	x
SOPRASEAL Stick 100T	✓,4,5	✓,5,8
SOPRASEAL Stick VP	✓,4,5	x,5,8
SOPRASOLIN HD	✓,4,5	x
SOPRASEAL Liquid Flashing	✓,4,5	x
<b>Accessories</b>		
ALSAN Flashing	✓,4	✓, 6
COLPLY Adhesive & Cement	✓,4	1,2,6
COLPLY EF	✓,4	✓, 6,7
DUOTACK 365	✓,4	x,2
ELASTOCOL Stick, Zero, H2O	✓,4	2,6
SOPRAMASTIC SBS Cement	✓,4	1,2,6
SOPRAMASTIC SP1 Sealant	✓,4	6,7
SOPRABOARD	x	✓,5
SOPRAFLASH UN	x	x
SOPRAVAP'R	✓,4,5	✓,5,8

**Product Cross Compatibility Notes**

- x NOT acceptable.
- ✓ Acceptable
- 1 Not recommended
- 2 No direct application - requires approved overlay
- 3 Requires special preparation
- 4 ALSAN RS membrane must be wiped with ALSAN RS Cleaner prior to application
- 5 Acceptable SOPREMA primer recommended
- 6 Typically ALSAN RS components may be applied once all solvent has evaporated and the material has cured.
- 7 Substrate must be wiped with Acetone or ALSAN RS Cleaner immediately prior to application
- 8 Applied in vertical counter flashing applications only

**Refer to individual SOPREMA product and safety data sheets for additional information and requirements.**

## ALSAN RS System Assembly & Component Guides

### ALSAN RS Substrate Primers (all systems)

ALSAN RS Component	Unit Size	substrate profile	application rate Kg/ft <sup>2</sup> (kg/m <sup>2</sup> ) u.o.n.	approx. gross ft <sup>2</sup> (m <sup>2</sup> ) / unit	approximate dry times Rainproof	Next Coat
Primer Options: ALSAN RS 222/276	10 kg	CSP3/smooth CSP4/sanded granulated CSP5/rough	0.037(0.4) 0.046 (0.5) 0.055 (0.6) 0.075 (0.8)	269 (25.0) 215 (20.0) 179 (16.7) 135 (12.5)	30 minutes	45 minutes
ALSAN RS LO	2 gal 5 gal	CSP3/smooth	200 (18.6)/gal	400 (37.2) 1000 (92.9)	2 hours	3 hours
AQUAFIN SG3	2.4gal	CSP3/smooth	100 (9.3)/gal	240 (22.3)	6 hours	12 hours
ALSAN RS Metal	1 gal	SSPC SP3	250 (23.2)/gal	250 (23.2)	4 hours	6 hours

### ALSAN RS Flashing (fully reinforced flashings – all systems)

ALSAN RS Component	Unit Size	substrate profile	application rate Kg/ft <sup>2</sup> (kg/m <sup>2</sup> ) u.o.n.	approx. gross ft <sup>2</sup> (m <sup>2</sup> ) / unit	approximate dry times Rainproof	Next Coat
ALSAN RS 230/260 LO Flash resin Base coat	12 kg	-	-	-	-	-
		smooth typical granulated rough	0.19 (2.0) 0.21 (2.3) 0.26 (2.8) 0.30 (3.3)	43 (4.0) 39 (3.6) 34 (3.2) 30 (2.8)	30 – 45 minutes	1 – 1.5 hours
Top coat	-	-	0.09 (1.0)	included above	-	-
ALSAN RS Fleece	164 lf	-	-	varies by width	-	-

### ALSAN RS Roofing & Waterproofing (fully reinforced – all systems)

ALSAN RS Component	Unit Size	substrate profile	application rate Kg/ft <sup>2</sup> (kg/m <sup>2</sup> ) u.o.n.	approx. gross ft <sup>2</sup> (m <sup>2</sup> ) / unit	approximate dry times Rainproof	Next Coat
ALSAN RS 230/260 LO Field Resin Base coat	25 kg	smooth typical granulated rough	0.19 (2.0) 0.21 (2.3) 0.26 (2.8) 0.30 (3.3)	90 (8.3) 81 (7.6) 71 (6.6) 62 (5.8)	30 – 45 minutes	1 – 1.5 hours
Top coat	-	-	0.09 (1.0)	included above	-	-
ALSAN RS Fleece (41")	164 lf	-	-	535 (49.7)	-	-

### ALSAN RS Roofing & Waterproofing Surfacing & Finish Options

ALSAN RS Component	Unit Size	substrate profile	application rate Kg/ft <sup>2</sup> (kg/m <sup>2</sup> ) u.o.n.	approx. gross ft <sup>2</sup> (m <sup>2</sup> ) / unit	approximate dry times Rainproof	trafficable
Finish Options: ALSAN RS 287 color	10 kg	smooth	0.05 (0.6)	179 (16.7)	30 - 45 minutes	3 hours
ALSAN RS 289 Textured Finish	15 kg	smooth	0.07 (0.8)	201 (18.7)	45 minutes	3 hours
ALSAN RS Textured Coating	15 kg	smooth	0.33 (3.5)	46 (4.3)	30 minutes	2 hours
Bonding/Protection Layer: ALSAN RS 230/260 LO Resin coat	25 kg	smooth	0.14 (1.5)	179 (16.7)	30 – 45 minutes	1 – 1.5 hours
#1 (0.7-1.2mm) quartz	22.7 kg	-	0.65 (7.0)	35 (3.3)	-	-

ALSAN RS Fully Reinforced Traffic Bearing Waterproofing & Surfacing System						
ALSAN RS Component	Unit Size	substrate profile	application rate Kg/ft <sup>2</sup> (kg/m <sup>2</sup> ) u.o.n.	approx. gross ft <sup>2</sup> (m <sup>2</sup> ) / unit	approximate dry times Rainproof	Next Coat
ALSAN RS 230/260 LO Field Resin Base coat	25 kg	smooth typical granulated rough	0.19 (2.0) 0.21 (2.3) 0.26 (2.8) 0.30 (3.3)	90 (8.3) 81 (7.6) 71 (6.6) 62 (5.8)	30 – 45 minutes	1 – 1.5 hours
Top coat		-	0.09 (1.0)	included above		
ALSAN RS Fleece (41")	164 lf	-	-	535 (49.7)		
ALSAN RS 233/263 LO Self-Leveling Mortar coat	33 kg	CSP3/smooth	0.42 (4.5)	80 (7.4)	30 – 45 minutes	1 – 1.5 hours

ALSAN RS Partially Reinforced Traffic Bearing Waterproofing & Surfacing System						
ALSAN RS Component	Unit Size	substrate profile	application rate Kg/ft <sup>2</sup> (kg/m <sup>2</sup> ) u.o.n.	approx. gross ft <sup>2</sup> (m <sup>2</sup> ) / unit	approximate dry times Rainproof	Next Coat
ALSAN RS233/263 LO Self-Leveling Mortar coat	33 kg	CSP3/smooth CSP4 CSP5/rough	0.42 (4.5) 0.43 (4.6) 0.44 (4.8)	80 (7.4) 77 (7.2) 74 (6.9)	30 – 45 minutes	1 – 1.5 hours

ALSAN RS Pedestrian Traffic Surfacing & Finish Options						
ALSAN RS Component	Unit Size	substrate profile	application rate Kg/ft <sup>2</sup> (kg/m <sup>2</sup> ) u.o.n.	approx. gross ft <sup>2</sup> (m <sup>2</sup> ) / unit	approximate dry times Rainproof	trafficable
#1 (0.7-1.2mm) quartz cast into RS Mortar	22.7 kg	-	0.65 (7.0)	35 (3.3)	30 minutes	60 minutes
ALSAN RS 287 Finish	10 kg	#1 quartz	0.07 (0.8)	134 (12.5)	30 – 45 minutes	3 hours
ALSAN RS 287/281 bedding coat	10 kg	smooth	0.05 (0.6)	179 (16.7)	30 – 45 minutes	45 - 60 minutes
#0 (0.4-0.8mm) quartz cast into ALSAN RS 287	22.7 kg	medium duty	0.46 (5.0)	49 (4.5)	30 – 45 minutes	45 - 60 minutes
ALSAN RS 287/281 topcoat	10 kg	#0 quartz	0.06 (0.7)	154 (14.3)	30 – 45 minutes	3 hours
ALSAN RS 289 Textured Finish	15 kg	light duty medium duty	0.07 (0.8) 0.12 (1.3)	201 (18.7) 124 (11.5)	45 minutes	3 hours
ALSAN RS Textured Coating	15 kg	heavy duty	0.33 (3.5)	46 (4.3)	30 minutes	2 hours
ALSAN RS Chips	1 kg	very light duty	0.001 (0.01)	1076 (100)	30 – 45 minutes	3 hours
ALSAN RS 287 Finish	10 kg	smooth	0.05 (0.6)	179 (16.7)	30 – 45 minutes	3 hours

ALSAN RS Vehicular Traffic Surfacing & Finish Options						
ALSAN RS Component	Unit Size	substrate profile	application rate Kg/ft <sup>2</sup> (kg/m <sup>2</sup> ) u.o.n.	approx. gross ft <sup>2</sup> (m <sup>2</sup> ) / unit	approximate dry times Rainproof	trafficable
#1 (0.7-1.2mm) quartz cast into RS Mortar	22.7 kg	general duty	0.65 (7.0)	35 (3.2)	30 – 45 minutes	3 hours
ALSAN RS 287 Finish	10 kg	#1 quartz	0.07 (0.8)	134 (12.5)	30 – 45 minutes	3 hours
ALSAN RS 289 Textured Finish	15 kg	light traffic only	0.07 (0.8)	89 (8.3)	45 minutes	3 hours
ALSAN RS Textured Coating	15 kg	heavy duty	0.33 (3.5)	46 (4.3)	30 minutes	2 hours