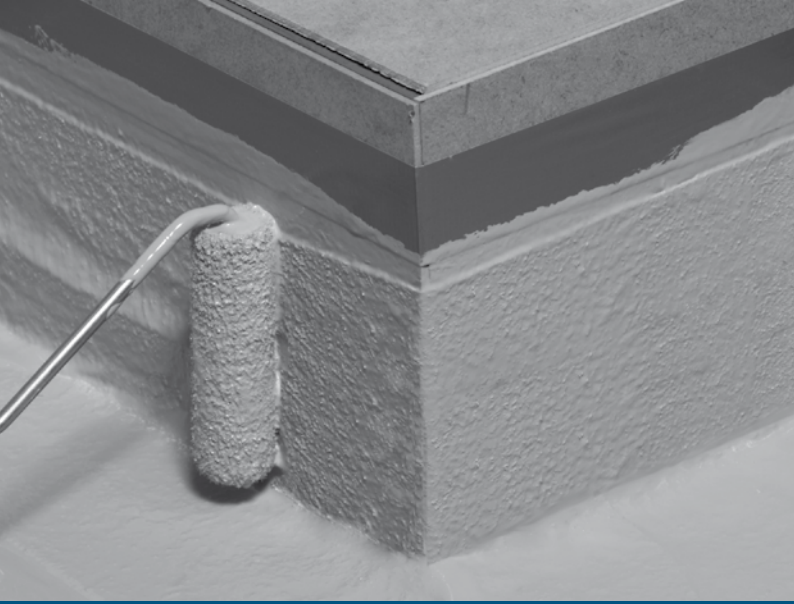


tie-ins
waterproofing
details **upstands**

alsan® pocket

user's guidebook for details,
tie-ins and waterproofing upstands.

alsan by SOPREMA

SOPREMA has been an independent family group since it was founded in 1908. Today, we install millions of square metres of waterproofing, roofing and insulation systems across the world.

100 years of know how

Innovation

Innovation as our driving force

We owe our worldwide success to our daring spirit and commitment to inventiveness – our company has a century-old tradition of promoting new and bold ideas that allow us to move forward. This has been **SOPREMA**'s watchword from the very start. The ability to innovate has been elevated to the status of corporate culture and applies to all aspects of our work, including people, operations, sales, R&D and sustainable development.

All throughout its history, **SOPREMA** has thus been weaving the fabric of a success story driven by innovation, all the while retaining its human dimension: a must for flexibility, creativity and service quality

Systems

Alsan® and Alsan® Flashing®: A state-of-the-art choice

Both liquid waterproofing systems are increasingly used by architects into their constructions (balconies, terraces, passage ways, etc.). It must be said that they work exceptionally well – flame-free installation, easy handling thanks to packaging in tins, material saving, four times more adherent than required by conventional standards, aesthetic appearance and seamless technology. These products are recognised and appreciated by professionals.

Alsan® Pocket

With **Alsan® Pocket**, our step-by-step guidebook for tie-ins and upstands, product users will possess a practical tool bringing answers to any questions that may be raised on worksites. Even so, this document is but a fraction of all the advice and assistance that our technical team can provide specifically for you (training sessions, technical support). Indeed, at **SOPREMA** we believe in assisting our clients right up to their construction sites or alternatively offering them regular and practical training sessions.

SUMMARY

1 General information about liquid waterproofing systems Substrate inspection Substrate preparation Substrate chart Dew point calculation Preliminary measures	**5** 6 8 12 18
2 Information about **Alsan® systems**	**23**
3 **Alsan® Flashing®** installation step	**29**
4 **Alsan® Flashing® Color** installation steps	**39**
5 **Alsan® RS 230 thix** installation steps	**45**
6 Cross sections of typical cases	**61**
7 Additional information	**69**

General information about liquid waterproofing systems 1

Information about Alsan® systems 2

Alsan® Flashing® installation steps 3

Alsan® Flashing® Color installation steps 4

Alsan® RS 230 thix installation steps 5

Cross sections of typical cases 6

Additional information 7

1 Substrate inspection

Inspect the substrate using a hammer. This will allow you to detect any eventual structural weaknesses. Mark those areas if need be.

2 Measuring humidity levels through non-destructive methods.

Humidity levels must not be higher than 5% (measured according to density of substrate) or 16% (measured according to volume), which can be determined in a non-destructive way using electronic measurements.

3 Measuring humidity levels through the CCM method.

Measuring humidity levels using a CCM device may be performed after creating a calcium carbide chemical reaction. This very precise form of measurement must however be performed only on a sample of the substrate.

4 Testing pressure resistance

The support's resistance to pressure must be tested using a Schmidt hammer.

5 Testing adherence strength

The adhesive strength of the waterproofing coat onto the support may be verified using a measuring device.

Concrete surfaces:
> 1,5 N/mm²
Asphalt surfaces:
> 0,8 N/mm²

6 Inspecting construction coats

Taking core samples is an efficient way to analyse the substrate's exact composition.

1 Abrasive blasting

Abrasive blasting is the most efficient technique, especially when dealing with an extensive surface. It allows you to eliminate the old outer coats all the while sucking up residual dust.
This particular procedure is very important given that a clean surface will guarantee an optimal adherence of the products you wish to apply onto it.

2 Sanding with a diamond polishing pad

It is the best-suited technique for sanding joint areas and upstands.

3 Manual sanding/ZEC abrasive disc

Polishing window frames, wooden surfaces, etc., may be performed using a ZEC abrasive disc which guarantees stronger adhesion strength of the waterproofing coat to the substrate.

4 Manual sanding/sand paper

Mechanical sanding (manually or with a sander). The rougher the surface, the better the waterproofing system will adhere.

5 Milling

Milling must be performed after the abrasive blasting and is particularly recommended when the surface you are working on is uneven. This technique prepares the surface for a high-quality adherence of the waterproofing coat.

6 Sand blasting

Sand blasting is both efficient and time-saving. It is an excellent technique when working on walls but nonetheless requires that significant safety measures be taken.

7 Cleaning the surface

Clean the surface with a suitable cleaning product.

8 Vacuuming

Clean and vacuum the substrate one last time.

9 Tool cleaning

Remember to clean the tools immediately after they have been used.

FIRST QUALITY

Type of substrate		Surface preparation	Products to install RS 230/230 thix/233 and 288 Tie-ins, upstands and surfaces. Suitable primer
GLASS	Acrylic glass	Remove grease using the **Alsan®**. cleaning product. Sand the surface with a belt sander or by hand.	No primer needed
	Mineral glass/glass mosaic/ glass bricks	Remove grease using an **Alsan®**. solvent.	Special glass primer **Alsan® RS 275**
UNDERLAYS	Concrete-type surfaces	Sand with a diamond polishing pad or by abrasive blasting.	**Alsan® RS 276/276K** or **EP 101/106/170**(2)
	Containing calcium sulphate (e.g. anhydrite).)	Sand using a 24 grit carbide disc.	Available on request.
	Containing magnesite (e.g. cement, wood)	Sand with a diamond polishing pad or by abrasive blasting..	Available on request.
	Synthetic resin-type surfaces (e.g. EP, PMMA, PUR).	Sanding.	Compatible with PMMA on PMMA. Contact us if different resin is used.
	Bitumen-based (e.g. mastic or hot-rolled asphalt,)	Sanding or milling	**Alsan® RS 222**
	Drywalls .	Clean well.	Available on request.
BITUMINOUS MEMBRANES	SBS bitumen polymer membranes	Clean with a metal brush or a high-pressure cleaner.	No primer needed
	APP bitumen polymer membranes.	Clean with a metal brush or a high-pressure cleaner.	**Alsan® RS 222**
SYNTHETIC MATERIAL	Polyurethane mastic joint.	Clean to remove dust without using any solvent.	No primer needed
	MS-polymer joint mastic.	Clean to remove dust without using any solvent..	No primer needed
	Synthetic PVC membranes.	Remove grease with an **Alsan®** solvent. Sand well to obtain a rough surface..	No primer needed
	Synthetic TPO membranes.	Remove grease with an **Alsan®** solvent. Sand well to obtain a rough surface..	**Alsan® RS 273 TPO**
	Grinded PVC materials	Remove grease with an **Alsan®** solvent. Sand with a ZEC disc.	No primer needed

(1) **Primaire EPR (primer)** only in case of capillary action.
(2) Cover surface with generous coats of grit.
(3) When working on narrow substrate or if water is in permanent contact with surface, use **Alsan® RS 274** : a specially conceived primer for metal (for **RS®** systems only.)

.

Produtcs to install		
Alsan® Flashing® Only for tie-ins & upstands	**Alsan® Flashing® Color Only for tie-ins & upstands**	
Suitable primer		**Additional : RS = PMMA // PUR = polyurethane // EP = epoxy**
No primer needed.	**Primaire P100**	Do not sand with a ZEC disc or any other large discs due to a risk of the glass cracking.
No primer needed.	Non suitable.	Do not sand with a ZEC disc or any other large discs due to a risk of the glass cracking.
No primer needed.	**Primaire P100**	Laitance on the concrete must be removed. Adhesion level > 1, 5 N/mm².
Available on request.	Available on request.	Do not sand the surface due to the risk of cracks appearing near the overlaps area.
Available on request.	Available on request.	Bear in mind the risk of humidity seeping through floors, especially those over cellars/basements.
Available on request.	Available on request.	Use a sander that is adapted to each situation. In most cases hard substrate should be sanded with a ZEC or diamond disc and softer substrate with a PKD diamond disc.
No primer needed.	Available on request.	The way you prepare the substrate depends on the state of the substrate itself. If in doubt, do no hesitate to contact us.
Available on request.	Available on request.	
No primer needed.	**Primaire P100**	Traces of slate chippings must be removed as much as possible. Ensure that the substrate is free of talc which has anti-adhesive properties.
Non suitable.	Non suitable.	Traces of slate chippings must be removed as much as possible. Ensure that the substrate is free of talc which has anti-adhesive properties. Adhesion tests are recommended on worksites.
No primer needed.	No primer needed.	Moderate adhesive strength.
No primer needed.	No primer needed.	Moderate adhesive strength.
No primer needed.	**Primaire P100**	If **Alsan® Flashing®** is used, ensure that PVC membranes are compatible with bitumen.
Non suitable.	Non suitable.	Adhesion verification recommended on site.
No primer needed.	**Primaire P100**	Sand the surface well until it is rough. Sanding by hand is not recommended.

If in doubt contact our **Alsan®** technical experts

	Type of substrate	Surface preparation	Product installed RS 230/230 thix/233 and 288 Tie-ins, upstands and surfaces.
SYNTHETIC MATERIALS	EPDM	Remove grease using an **Alsan®** cleaning product. Sand the surface with a belt sander..	**Alsan® RS 273 TPO**
	Polyester	Sand well until surface is rough..	No primer needed.
	Polyethylene (PE)	Sand well until surface is rough.	Available on request.
	Polypropylene (PP)	Sand well until surface is rough.	Available on request.
METALS	Copper/aluminium	Remove grease using **Alsan®** cleaning product. Sand the surface with a ZEC disc or belt sander.	No primer needed. (3)
	Galvanised steel	Remove grease using **Alsan®** cleaning product.	No primer needed. (3)
	Stainless steel (v2a,V4a, etc.)	Remove grease using **Alsan®** cleaning product. Sand the surface with a ZEC disc.	No primer needed. (3)
	Anodised metal	Remove grease using **Alsan®** cleaning product. Sand the surface with a ZEC disc	No primer needed. (3)
WOOD	Treated/untreated wood	Sand the surface with a ZEC disc.	**Alsan® RS 276**
	Engineered wood	Remove impurities and dust.	**Alsan® RS 222** or **RS 276**
OTHERS	Concrete	Sand with a diamond polishing pad or by abrasive blasting.	**Alsan® RS 276/276K** or **EP 101/106/170**(2)
	Synthetic modified mortar	Sand with a diamond polishing pad or by abrasive blasting.	**Alsan® RS 276**
	Fibreglass-reinforced plastic skylight	Remove grease using **Alsan®** cleaning product. Sand the surface with a ZEC disc.	No primer needed.
	Cement mortar	Sand with a diamond polishing pad or by abrasive blasting.	**Alsan® RS 276** or **EP 101/106/170**
	Ceramic/stone plaques (non polygonal)	Sand with a diamond polishing pad or by abrasive blasting.	**Alsan® RS 276**
CRITICAL SUBSTRATES	Oily and greasy	Sand with a diamond polishing pad or by abrasive blasting.	**EP 101**(2)
	Critical residual humidity and permanent seeping of humidity through floor.	Sand with a diamond polishing pad or by abrasive blasting.	**EP 106 (101)**(2)

(1) **Primaire EPR** (primer) only in case of capillary action.
(2) Sand sprinkling in excess.
(3) When working on narrow substrate or if water is in permanent contact with surface, use **Alsan® RS 274**, specially conceived for metal (for **RS®** systems only).

Product installed		
Alsan® Flashing® Only for tie-ins and upstands.	**Alsan® Flashing® Color Only for tie-ins and upstands.**	
Suitable primer		**Additional : RS = PMMA // PUR = polyuréthane et bitume-polyuréthane // EP = époxy**
Non suitable.	Non suitable.	Experimental tests recommended on worksite.
No primer needed.	**Primaire P100**	
Non suitable.	Non suitable.	Experimental tests recommended on worksite.
Non suitable.	Non suitable.	Experimental tests recommended on worksite.
No primer needed.	**Primaire P100**	
No primer needed.	Available on request.	Zinc has anti-corrosive properties. Do not sand.
No primer needed.	**Primaire P100**	
No primer needed.	Available on request.	Substrate must only be sanded. Experimental tests recommended on worksite.
No primer needed. EPR[1]	**P100 EPR**[1]	All former colour and paint coatings must be scraped off. Apply 2 coats of primer if necessary. Ensure that pores are filled.
No primer needed.	**P 100 Primaire EPR**[1]	Apply 2 coats of primer if necessary.
No primer needed.	**P 100 ou EP 101/106/170**[2]	Laitance on the concrete must be removed. Adhesive strength > 1,5 N/mm².
No primer needed.	**Primaire P100**	Laitance on the concrete must be removed. Adhesive strength > 1,5 N/mm².
No primer needed.	**Primaire P100**	On old coats, apply **Alsan® RS 222**.
No primer needed.	**Primaire P100**	Laitance on the concrete must be removed. Adhesive strength > 1,5 N/mm².
Non suitable.	Non suitable.	Remove tiles that are loose or produce a hollow sound and even out t with a coat of mortar. Waterproofing protection must be added to the substrate: use **Alsan® RS 230** and **Renfort RS®** fleece.
EP 101[2]	**EP 101**[2]	Apply 2 coats, the first one with a brush.
EP 106 (101)[2]	**EP 106 (101)**[2]	Apply 2 coats, the first one with a brush.

SAFETY MEASURES

Only use degreasing products to clean the substrate.
For simplicity's sake we recommend that you only use our dissolver: **Alsan®** Diluant.
CAUTION: The time needed for the solvents to evaporate (30 minutes) must be strictly observed, regardless of the type of substrate.

Alsan® EP products (epoxy) being used as primer must always be sanded. Granulometry depends on the substrate it will be applied on. When **Alsan® EP** products are used as primer under **Alsan® RS®** systems, the epoxy surface must be sanded in excess before the **Alsan® RS®** system is applied.

On "soft" types of support (e.g. bitumen-based), a **Renfort RS®** fleece must be added to the liquid waterproofing coat.

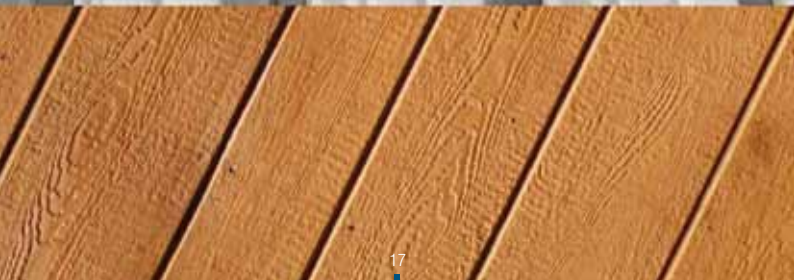
The residual humidity level in mineral substrate must not exceed 5%. Moreover the time needed for freshly-applied, cement-based substrate (at least 28 days) must be observed. Laitance from the concrete and other non-adhesive elements must be removed mechanically.

All traces of paint must be removed as well.

The information concerning the substrate preparation is given for purely informative purposes. Indeed, each type of material requires special treatment due to the wide variety that exists and thus we cannot guarantee any defined results. For this reason we recommend that you always perform sample tests to check adhesive performances before using our products.

You may also have a sample delivered to us if necessary (minimum 30 x 50 cm) which we will test in our laboratory so as to find the best-suited preparation procedure.

All the information and indications given in the charts correspond to our current technology.

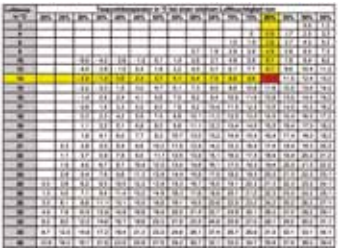


Calculating the dew point

DEW POINT CALCULATOR

The dew point must ideally be calculated with the proper devices. **DEW CHECK** is a dew point calculator for precise results completed by a user's guidebook that you may order from us. This device allows you to automatically calculate the dew point and the adequate temperature at which work may be carried out (3°C above that of the dew point).
It also indicates the superficial (outer) temperature of the substrate, of the air as well as the levels of humidity in the air.

CALCULATING THE DEW POINT



This chart, which allows you to calculate the dew point, is an alternative solution allowing you to calculate the dew point were a calculator not available on your worksite. Like the calculator, this chart may also be ordered from **SOPREMA**. It is however important to remember that the temperature of the substrate must always be lower than that of the air. Note as well that the information given in this chart is theoretical and is not as reliable as a calculator. We thus recommend that you always compare the measurements with a calculator.

Both a hygrometer and a thermometer are necessary in order to determine the temperature of the dew point. You may then use the measurements to find the dew point in the chart.

MIXTURE

Alsan® RS® products are highly-reactive 2-component resins made with Polymethyl Methacrylate (PMMA). The second component is a chemical reactive catalyst which, depending on the dose used and the ambient temperature, accelerates the drying process.

Ensure that both the powder and the resin are mixed homogenously. Depending on the dose used, this type of mixture can be obtained mechanically or by hand. The substances must always be mixed in a clean bucket.

Continue mixing until the chemical reaction begins.
Keep the surrounding area and the tools clean.
Wear a complete protective suit (goggles, gloves…) and ensure that the area is properly ventilated.

CATALYST MEASUREMENTS

Measurements given in grams

Resin quantity		500	1000	1500	2000	2500	3000	3500	4000	4500	5000
Catalyst measurements	1%	5	10	15	20	25	30	35	40	45	50
	2%	10	20	30	40	50	60	70	80	90	100
	3%	15	30	45	60	75	90	105	120	135	150
	4%	20	40	60	80	100	120	140	160	180	200
	5%	25	50	75	100	125	150	175	200	225	250
	6%	30	60	90	120	150	180	210	240	270	300

Resin quantity		5500	6000	6500	7000	7500	8000	8500	9000	9500	10000
Catalyst measurements	1%	55	60	65	70	75	80	85	90	95	100
	2%	110	120	130	140	150	160	170	180	190	200
	3%	165	180	195	210	225	240	255	270	285	300
	4%	220	240	260	280	300	320	340	360	380	400
	5%	275	300	325	350	375	400	425	450	475	500
	6%	330	360	390	420	450	480	510	540	570	600

Material needed for installation.

Material: liquid components,
catalyst (white powder) and a mixer.

Mix the liquid thoroughly in
its bucket before beginning.

Fill up the empty, clean bucket,
with the appropriate quantity of resin.

Add in the catalyst (refer to chart for
temperature and preparation time)
while using the mixer at low speed for 2 minutes

General information about liquid waterproofing systems 1

Information about Alsan® systems 2

Alsan® Flashing® installation steps 3

Alsan® Flashing® Color installation steps 4

Alsan® RS 230 thix installation steps 5

Cross sections of typical cases 6

Additional information 7

COMPOSITION OF EACH SOPREMA Alsan® SYSTEM

①

②

③

Slate

Quartz

Finish coulour

① Alsan® Flashing®

1. Substrate
2.First waterproofing coat **Alsan® Flashing®**
3. **Renfort RS®** fleece
4. **Alsan® Flashing®**
5.Second waterproofing coat **Alsan® Flashing®**

② Alsan® Flashing® Color

1. Substrate
2. **Primaire EPR/P100** primer (see substrate chart)
2. First waterproofing coat **Alsan® Flashing® Color**
3. **Renfort RS®** fleece
4. **Alsan® Flashing® Color**
5. Second waterproofing coat **Alsan® Flashing® Color**

③ Alsan® RS 230 thix

1. Substrate
2. Primer (if necessary) **Alsan® RS 276/222** (see substrate chart)
2. First waterproofing coat **Alsan® RS 230**
3. **Renfort RS®** fleece
4. **Alsan® RS 230**
5. Second waterproofing coat **Alsan® RS 230**
6. Optional finish coat

Available finish coats

Slate
The goal is to preserve a certain visual unity between the **Alsan®** system and the existing waterproofing coat (e.g. waterproofing systems).

Quartz
Improves mechanical properties or can be used as an adhesive surface for the following coat (e.g. pebbledash, ceramic).

Finish Colour
Ideal if joints are visible, improves the aesthetics.

Product information	
Product	**Description**
Alsan® RS® systems (PMMA)	**Polymethyl Methacrylate**
Alsan® RS 222	Primer for bituminous and asphalt substrate.
Alsan® RS 276	Primer for absorbent substrate / concrete.
Alsan® RS 276K	Resurfacing and primer.
Alsan® RS 274 primer special for metal	Primer for metal
Alsan® RS – FPO primaire	Special primer for FPO membranes
Alsan® RS 230	Waterproofing resin for upstands and tie-ins.
Alsan® RS 230 thix	Résine d'étanchéité pour la réalisation de relevés et de raccords
Alsan® RS 288 Finish	Finishing resin (tinted)
Alsan® RS 234	Flexible substance spread with a spatula.
Alsan® RS 235	Thick substance reinforced with fibers.
Alsan® systems	**Polyurethane**
Alsan® EPR	2-component solvent-based epoxy primer
Alsan® P100	Single-component solvent-based polyurethane primer
Alsan® Flashing®	Single-component bitumen polyurethane resin for upstands and tie-ins to embellish visible areas on buildings.
Alsan® Flashing® fleece	
With **Renfort RS®** fleece	
Alsan® Flashing® Color	Single-component polyurethane resin for upstands and tie-ins to embellish visible areas on buildings.

(1) 2nd coat if the **RS 230 thix** option is chosen. Also applies if slate or quartz coats are used.
(2) Several coats may be applied (use a spatula): max. 5 mm per coat.

Coats	Product consumption per m² (varies depending on the support)				Time lapse between two coats			
	Min. (per coat)	Max. (per coat)	Pot life	Watertight after (evaporation)	Min.	Max.	Trafficable after:	Workable deadline:
1	0,4 kg	0,6 kg	15 mn	15 mn	15 mn	-	1 hr	1 day
1	0,4 kg	0,6 kg	15 mn	15 mn	15 mn	-	1 hr	1 day
1	0,8 kg	1,5 kg	15 mn	15 mn	15 mn	-	1 hr	1 day
1	0,2 kg	0,3 kg	-	1 hr	1 hr	3 days	1 hr	1 day
1	0,1 kg	0,15 kg	-	1 hr	1 hr	3 days	1 hr	1 day
1	2,5 kg	2,8 kg	15 mn	15 mn	30 mn	-	1 hr	1 day
2	1,0 kg	1,5 kg	15 mn	15 mn	30 mn	-	1 hr	1 day
1	2,5 kg	2,8 kg	15 mn	15 mn	15 mn	-	1 hr	1 day
2(1)	1,0 kg	1,5 kg	15 mn	15 mn	15 mn	-	1 hr	1 day
1	0,4 kg	0,6 kg	15 mn	15 mn	15 mn	-	1 hr	1 day
1(2)	1,0 kg	3,0 kg	15 mn	15 mn	15 mn	-	1 hr	1 day
1	2,5 kg	2,8 kg	15 mn	15 mn	15 mn	-	1 hr	1 day
2(1)	1,0 kg	1,5 kg	15 mn	15 mn	15 mn	-	1 hr	1 day
1	0,3 kg	0,5 kg	20 mn	1 hr	2 hr	3 days	2 h	1 day
1	0,1 kg	0,15 kg	-	1 hr	1 hr	3 days	2 h	1 day
1	1,5 kg	1,8 kg	-	2 hr	1 hr	3 days	2 days	10 days
1	0,5 kg before reinforcement is installed then 0,9 kg to embed the fleece.		-	As soon as screed is installed	From 1 hr to 3 days, depending on atmospheric conditions		2 days	10 days
2	0,7 kg		-	-	-	-	2 days	10 days
1	1,5 kg	1,8 kg	-	2 hr	1 hr	3 days	2 days	10 days
2	1,0 kg	1,0 kg	-	2 hr	1 hr	3 days	2 days	10 days

1, 2 and 3 apply to **Flashing®** with the **Renfort RS®** fleece and **Flashing® Color**.

Note: Consumption indications apply to flat and sanded surfaces.

General information about liquid waterproofing systems 1

Information about Alsan® systems 2

Alsan® Flashing® installation steps 3

Alsan® Flashing® Color installation steps 4

Alsan® RS 230 thix installation steps 5

Cross sections of typical cases 6

Additional information 7

1 Preparing the substrate

Clean the area around the tie-ins before beginning to install the waterproofing coat. Remove any slate residue with a metal brush and delineate the area needing waterproofing protection with adhesive tape. The tape may also be used to cover the joints as well as other “transition” areas between two different materials needing to be dealt with differently.

2 Applying the first coat

Mix the resin thoroughly in the container, add **Alsan® Flashing®** followed by **Renfort RS®** fleece.
Consumption : approx. 1,5 kg/m²

3 Applying the fleece

The fleece must be laid against the upstand in such a way that the side reaches up to the adhesive tape. Place the **Renfort RS®** fleece in the **Alsan® Flashing®** coat and press them onto the substrate using a roller or a paintbrush. Ensure that the fleece adheres properly to the substrate, especially to the overlaps.

4 Impregnation of the fleece

Allow the **Renfort RS®** fleece to adhere properly to the substrate by covering it with a thin coat of **Alsan® Flashing®** resin. Remove any air entrapments that may appear on the surface.

5 Applying the second coat

After letting the first coat dry (and ensuring that it is), apply the second coat of resin (*1 kg/m²*) using a paintbrush or a roller.

6 Final step

Remove the adhesive tape immediately after the product is applied.

NOTE : Mechanical forms of protection (solin strips, saw-cuts, etc.) are unnecessary when working with **Alsan® Flashing®**. The width of the fleece may vary depending on the type of operation. Apply a 20 cm-large **Renfort RS®**. fleece for classical upstands (10 cm for the upstand and 10 cm for the heel). When working on specific types of upstands (window ledges or doors,…), 10 cm is enough (5 cm for the upstand, 5 for the heel).

Alsan® Flashing® fleece installation

1 Preparing the substrate

Clean the area around the tie-ins before beginning to install the waterproofing coat. Remove any slate residue with a metal brush and delineate the area needing waterproofing protection with adhesive tape.

2 Application

Apply a coat of **Alsan® Flashing®** using a paintbrush, roller or spatula, on the upstand onto which an **Alsan® Voile Flashing®** reinforcement coat will be placed.

N. B. : **Alsan® Voile de Renfort** fleece can also be used for special features as a deformable fleece. It benefits from European Technical Approval (ETA) and technical guidelines.

3 Reinforcement

Place **Alsan® Voile Flashing®** onto the fresh resin with the help of a spatula or brush. The operation consists in reinforcing all surfaces liable to crack (internal angles, wall joints, joints between materials, etc.).
***Consumption** : approximately 0.5 kg/m² to embed the fleece.*

4 Applying the first coat

Allow the product to dry for about one hour before applying a first coat of **Alsan® Flashing®**.
Consumption: 0.9 kg/m² for the first coat.

5 Applying the second coat

Ensure that the first coat is dry before applying the second one.
Consumption : 0.7 kg/m².

Unlike the installation procedure for **Alsan® Voile Flashing®**, for **Renfort RS®** fleece you will need to:

1. Pay close attention to the amount of product that is needed.
2. Bear in mind that **Alsan® Voile Flashing®**, is installed in three steps as opposed to two for **Renfort RS®**.
3. Height of the upstand = that of the **Alsan® Voile Flashing®** + 5 cm of pure product.
   Height of the upstand = that of the fleece with **Renfort RS®** fleece

1 Preparing the substrate

Place adhesive tape to define the area to work on. Apply the first coat. Apply the **Renfort RS®** fleece and ensure that it adheres properly onto the whole of the substrate, and most importantly onto the overlaps.

2 Reinforcement + applying the fleece and the first coat

Place the fleece so as to line it against the entire part of the wall delineated by the adhesive tape. Apply a coat onto the **Renfort RS®** fleece until it adheres completely.

3 Applying the second coat

Ensure that the first coat is dry before applying the second coat.
Consumption : 1 kg/m².

4 Finish coat

If a finish coat is necessary (gravel bits, slate chippings, etc.), an extra coat (approx. *0,3 kg/m²*) must be applied.

5 Final step

Remove the adhesive tape immediately after the last coat

NOTE : Mechanical forms of protection (solin strips, saw-cuts, etc.) are unnecessary when working with **Alsan® Flashing®**.

1 Preparing the substrate

Clean the area around the tie-ins. Remove any slate residue with a metal brush. Place the adhesive tape to delineate the area to work on. Prepare the **Renfort RS®** fleece by cutting it every 2-4 cm, depending on the diameter of the edge and 5 cm width (half the size of the **Renfort RS®** fleece.) The area of the tie-ins must be respected.

2 Applying the first coat

We recommend that you reduce the length of the paintbrush's hairs for a faster and more efficient operation.

3 Applying the fleece

Apply the first coat.
Consumption : approx. 1,5 kg/m².
Place the **Renfort RS®** fleece from top to bottom onto the coat of fresh resin. Ensure that it adheres properly onto the whole of the substrate.
After letting the first coat dry apply the second coat using a paintbrush or roller.
Consumption : 1 kg/m².

4 Finish coat

If a finish coat is necessary (gravel bits, slate chippings, etc.), an extra coat (approx. *0,3 kg/m²*) must be applied. Cover the fresh coat with the finishing coat.

5 Final step

Remove the adhesive tape immediately after the last operation.

General information about liquid waterproofing systems 1

Information about Alsan® systems 2

Alsan® Flashing® installation steps 3

Alsan® Flashing® Color installation steps 4

Alsan® RS 230 thix installation steps 5

Cross sections of typical cases 6

Additional information 7

1 Preparing the substrate

Clean the area around the tie-ins before beginning. Remove any slate residue with a metal brush and place the adhesive tape to delineate the area to work on. You may also use the tape to cover the joints as well as other "transition" areas between two different materials needing to be dealt with differently.

2 Applying the primer

Apply a coat of suitable primer onto the substrate (cf p.12-15).
Consumption : 0,1 - 0,3 kg.

3 Applying the first coat

Mix the resin thoroughly in the container and apply a first coat of **Alsan® Flashing® Color** with the help of a paintbrush or roller.
Consumption : approx. 1,5 kg.

4 Impregnation of the fleece

Place the **Renfort RS®** fleece into the coat of fresh resin and adjust it to the shape of the substrate with the help of a paintbrush of roller. Add another coat of **Alsan® Flashing® Color**.

5 Applying the second coat

Apply the second coat with the help of a paintbrush or a roller.
Consumption: *1 kg/m²*

6 Final step

Remove the adhesive tape immediately after the product is applied.

Tie-ins on skylights with Alsan® Flashing® Color

1 Preparing the substrate

Clean the area around the tie-ins before beginning. Remove any slate residue with a metal brush and place the adhesive tape to delineate the area to work on. You may also use the tape to cover the joints as well as other “transition” areas between two different materials needing to be dealt with differently.

2 Applying the primer

Apply a coat of suitable primer onto the substrate (cf. p.12-15).
Consumption : 0,1 - 0,3 kg.

3 Applying the first coat

Mix the resin thoroughly in the container and apply a first coat of **Alsan® Flashing® Color** with the help of a paintbrush or roller.
Consumption : approx. 1,5 kg.

4 Impregnation of the fleece

Place the **Renfort RS®** fleece into the coat of fresh resin and adjust it to the shape of the substrate with the help of a paintbrush of roller. Add another coat of **Alsan® Flashing® Color** resin onto the fleece until it is completely covered. Remove any air entrapments that may appear on the surface

5 Applying the second coat

Apply the second coat with the help of a paint-brush or a roller.
Consumption: *1 kg/m²*.

6 Final step

Remove the adhesive tape immediately after the product is applied.

General information about liquid waterproofing systems 1

Information about Alsan® systems 2

Alsan® Flashing® installation steps 3

Alsan® Flashing® Color installation steps 4

Alsan® RS 230 thix installation steps 5

Cross sections of typical cases 6

Additional information 7

Upstands with Alsan® RS 230 thix

1 Preparing the substrate and applying the primer

Clean the area around the tie-ins before beginning. Remove any slate residue with a metal brush and place the adhesive tape to delineate the area to work on. You may also use the tape to cover the joints as well as other “transition” areas between two different materials needing to be dealt with differently. If needed, cover the substrate with a coat of primer as well (as per the substrate guide), except on slate-based edges.The primer must be applied with the help of a paintbrush or roller. *Consumption depending on the substrate’s texture: approx.0,5 kg/m².*

2 Applying the first coat

After letting the product dry for approximately 20 minutes, apply a coat of **Alsan® RS 230 thix**. Use the necessary amount of resin for corners and vertical supports, especially if different types of materials are involved (approx. *1,5 kg/m²*). Any excess of resin will be spread out evenly onto the **Renfort RS®** fleece which will be applied later on.

3 Impregnation of the fleece

Once adjusted to the needed size, place the **Renfort RS®** fleece onto the fresh coat of **Alsan® RS 230 thix** fresin and proceed to remove any air entrapments on the surface. If some areas remain dry after the fleece has been placed then the amount of resin used was insufficient. When the **Renfort RS®** fleece is covered by another, ensure that there is enough resin between the two fleeces.

4 Preformed corners

A sufficient amount of additional **Renfort RS®** fleeces and resin must be applied onto preformed inside and outside corners. This procedure also works for fresh coats that have not yet dried. Ensure that the fleece adheres properly and remove any air entrapments that may appear on the surface.

5 Applying the last coat

Another coat can then be added onto the **Renfort RS®** fleece straightaway.
Consumption : approx. 1 to 1,3 kg/m².
A sufficient amount of resin must also be used for the border-lining areas alongside the adhesive tape.

6 Final step

Remove the adhesive tape immediately after the product is applied.

1 Preparing the substrate and applying the primer

Clean the area around the tie-ins and delineate the area to work on with adhesive tape. The tape may also be used to cover the joints as well as other “transition” areas between two different materials needing to be dealt with differently. Apply a coat of primer onto the substrate if necessary as per the substrate chart (required for wooden and concrete substrate). Use a paintbrush or roller to apply the primer. *Consumption depending on the substrate's texture : approx. 0,5 kg/m².*

2 Applying the first coat

After letting the product dry for approximately 20 minutes, apply a coat of **Alsan® RS 230 thix**. Use the necessary amount of resin for corners and vertical supports, especially if different types of materials are involved (approx. *1,5 kg/m²*). Any excess of resin will be spread out evenly onto the **Renfort RS®** fleece which will be needed later on.

3 Impregnation of the fleece

Once adjusted to the needed size, place the **Renfort RS®**, fleece onto the fresh coat of **Alsan® RS 230 thix** resin and proceed to remove any air entrapments on the surface. If some areas remain dry after the fleece has been placed then the amount of resin used was insufficient. When the **Renfort RS®** fleece is covered by another, ensure that there is enough resin between the two fleeces.

4 Preformed corners

A sufficient amount of additional **Renfort RS®** fleeces and resin must be applied onto preformed inside and outside corners. This procedure also works for fresh coats that have not yet dried. Ensure that the fleece adheres properly and remove any air entrapments that may appear on the surface.

5 Applying the last coat

Another coat can then be added onto the **Renfort RS®** fleece straightaway.
Consumption : approx. 1,3 kg/m².
A sufficient amount of resin must also be used for the border-lining areas alongside the adhesive tape.

6 Final step

Remove the adhesive tape immediately after the product is applied.

1 Preparing the substrate and applying the primer

Clean the area around the tie-ins and delineate the area to work on with adhesive tape. The tape may also be used to cover the joints as well as other "transition" areas between two different materials needing to be dealt with differently. Apply a coat of primer onto the substrate if necessary as per the substrate chart (required for wooden and concrete substrate). Use a paintbrush or roller to apply the primer.
Consumption depending on the substrate's texture : approx.0,5 kg/m².
Adjust the **Renfort RS®** fleece to the needed size beforehand.

2 Applying the first coat

After letting the product dry for approximately 20 minutes, apply a coat of approx.*1,5 kg/m²*.

3 Impregnation of the fleece

Once adjusted to the needed size, place the **Renfort RS®**fleece onto the fresh coat of **Alsan® RS 230 thix** fresin and proceed to remove any air entrapments on the surface.
If some areas remain dry after the fleece has been placed then the amount of resin used was insufficient. When the **Renfort RS®** fleece is covered by another, ensure that there is enough resin between the two fleeces.

4 Applying the second fleece

Apply the second **Renfort RS®** fleece and proceed to immediately remove any air entrapments on the surface. This procedure also works for fresh coats that have not yet dried.

5 Applying the last coat

Another coat can then be added onto the **Renfort RS®** fleece straightaway.
Consumption : approx.1 to 1,3 kg/m².
A sufficient amount of resin must also be used for the border-lining areas alongside the adhesive tape.

6 Final step

Remove the adhesive tape immediately after the product is applied.

1 Preparing the substrate and applying the primer

Primer for metal substrates.

Clean the area around the tie-ins and delineate the area to work on with adhesive tape. Apply a coat of primer onto the substrate if necessary as per the substrate chart. Use a paintbrush or roller to apply the primer.
Consumption : approx. 0,2 – 0,3 kg/m².
The product will need between 30 – 90 minutes to dry depending on the temperature.

2 Applying the first coat

After letting the product dry, apply a coat of **Alsan® RS 230 thix** Use the necessary amount of resin for corners and vertical supports, especially if different types of materials are involved (approx. *1,5 kg/m²*). Any excess of resin will be spread out evenly onto the **Renfort RS®** fleece which will be needed later on.

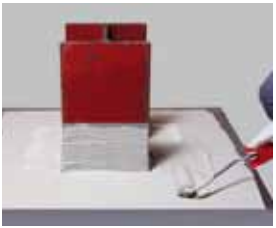
3 Impregnation of the fleece

Once adjusted to the needed size, place the **Renfort RS®**fleece onto the fresh coat of **Alsan® RS 230 thix** resin.

4 Removing air entrapments

Remove any air entrapments on the surface immediately after the product is applied. If some areas remain dry after the fleece has been placed then the amount of resin used was insufficient. When the **Renfort RS®** fleece is covered by another, ensure that there is enough resin between the two fleeces.

5 Applying the last coat



Another coat can then be added onto the **Renfort RS®** fleece straightaway.
Consumption : approx. 1 to 1,3 kg/m².
A sufficient amount of resin must also be used for the border-lining areas alongside the adhesive tape.

6 Final step

Remove the adhesive tape immediately after the product is applied.

Waterproofing procedure for tie-ins on rooftop air vents using Alsan® RS 230 thix

1 Preparing the substrate and applying the primer

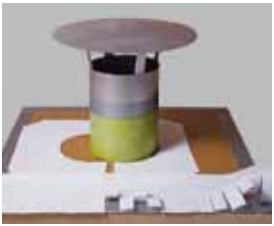
Primer for metal substrates.

Clean the area around the tie-ins and delineate the area to work on with adhesive tape. Apply a coat of primer onto the substrate if necessary as per the substrate chart. Use a paintbrush or roller to apply the primer.

Consumption : approx. 0,2 – 0,3 kg/m².

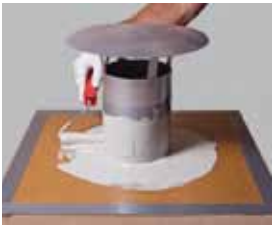
The product will need between 30 – 90 minutes to dry depending on the temperature.

2 Applying the first coat



After letting the product dry, use the necessary amount of resin for intricate zones and vertical supports, especially if different types of materials are involved (approx. *1,5 kg/m²*). Any excess of resin will be spread out evenly onto the **Renfort RS®** fleece which will be needed later on.

3 Impregnation of the fleece



Once adjusted to the needed size, place the **Renfort RS®** fleece onto the fresh coat of **Alsan® RS 230 thix** resin.

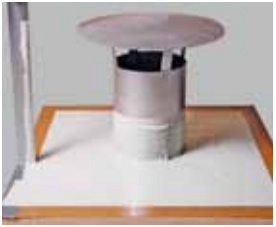
4 Removing air entrapments

Remove any air entrapments on the surface straightaway after the product is applied. If some areas remain dry after the fleece has been placed then the amount of resin used was insufficient. When the **Renfort RS®** fleece is covered by another, ensure that there is enough resin between the two fleeces.

5 Applying the last coat

Another coat can then be added onto the **Renfort RS®** fleece straightaway.
Consumption : approx. 1 to 1,3 kg/m².
A sufficient amount of resin must also be used for the border-lining areas alongside the adhesive tape.

6 Final step



Remove the adhesive tape immediately after the product is applied.

Waterproofing procedure for expansion joint tie-ins using Alsan® RS 230 thix

1 Preparing the substrate and applying the primer

Clean the area around the tie-ins and delineate the area to work on with adhesive tape. Apply a coat of primer onto the substrate if necessary as per the substrate chart. Use a paintbrush or roller to apply the primer.

2 Applying the first coat

After letting the product dry, apply a coat of **Alsan® RS 230 thix** Use the necessary amount of resin, especially if different types of materials are involved (approx. *1,5 kg/m²*). Any excess of resin will be spread out evenly onto the **Renfort RS®** fleece which will be needed later on.

3 Impregnation of the fleece

Once adjusted to the needed size, place the **Renfort RS®** fleece onto the fresh coat of **Alsan® RS 230 thix resin.** Remove any air entrapments on the surface immediately after the product is applied. If some areas remain dry after the fleece has been placed then the amount of resin used was insufficient. When the **Renfort RS®** fleece is covered by another, ensure that there is enough resin between the two fleeces.

4 Applying the last coat

Another coat can then be added onto the **Renfort RS®** fleece straightaway.
Consumption : approx. 1,0 to 1,3 kg/m².
A sufficient amount of resin must also be used for the border-lining areas alongside the adhesive tape.

5 Final step

Remove the adhesive tape immediately after the product is applied.

Finishing options

PLEASE PAY CLOSE ATTENTION TO THE FOLLOWING STEPS:

This procedure applies to small or medium expansion / construction joints.
For higher requirements, choose another installation procedure. Do not hesitate to contact our technical advisor if need be.

Waterproofing procedure for upstand tie-ins on steel decks using Alsan® RS 230 thix

1 Preparing the substrate and applying the primer

Primer for metal substrates.

Clean the area around the tie-ins and delineate the area to work on with adhesive tape. Apply a coat of primer onto the substrate if necessary as per the substrate chart. Use a paintbrush or roller to apply the special primer for metal substrates.
Consumption : approx. 0,2 – 0,3 kg/m².
The product will need between 30 – 90 minutes to dry depending on the temperature.

2 Applying the first coat

After letting the product dry, apply a coat of **Alsan® RS 230 thix** Use the necessary amount of resin for corners and vertical supports, especially if different types of materials are involved (approx. *1,5 kg/m²*). Any excess of resin will be spread out evenly onto the **Renfort RS®** fleece which will be needed later on.

3 Impregnation of the fleece

Once adjusted to the needed size, place the **Renfort RS®**fleece onto the fresh coat of **Alsan® RS 230 thix** resin.

4 Removing air entrapments

Remove any air entrapments on the surface immediately after the product is applied. If some areas remain dry after the fleece has been placed then the amount of resin used was insufficient. When the **Renfort RS®** fleece is covered by another, ensure that there is enough resin between the two fleeces.

5 Applying the last coat

Another coat can then be added onto the **Renfort RS®** fleece straightaway.
Consumption : approx. 1,0 to 1,3 kg/m².
A sufficient amount of resin must also be used for the border-lining areas alongside the adhesive tape.

Finishing options

PLEASE PAY ATTENTION TO THE FOLLOWING STEPS:

The metal deck must be well fastened, clean and free of greasy substances.
Make sure to take the materials expansions characteristics into account.

General information about liquid waterproofing systems 1

Information about Alsan® systems 2

Alsan® Flashing® installation steps 3

Alsan® Flashing® Color installation steps 4

Alsan® RS 230 thix installation steps 5

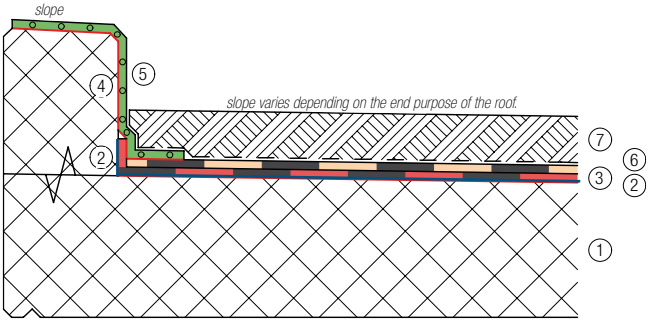
Cross sections of typical cases 6

Additional information 7

Tie-in on parapet with Alsan®

Description

① Concrete sloped substrate depending on end purpose of the roof (trafficable or not)
② Cold-applied bituminous primer
③ Double-layer bituminous waterproofing membrane
④ Impregnation primer
⑤ Liquid waterproofing system + **Renfort RS®** fleece
⑥ Non-woven synthetic film
⑦ Fastened or loose protection



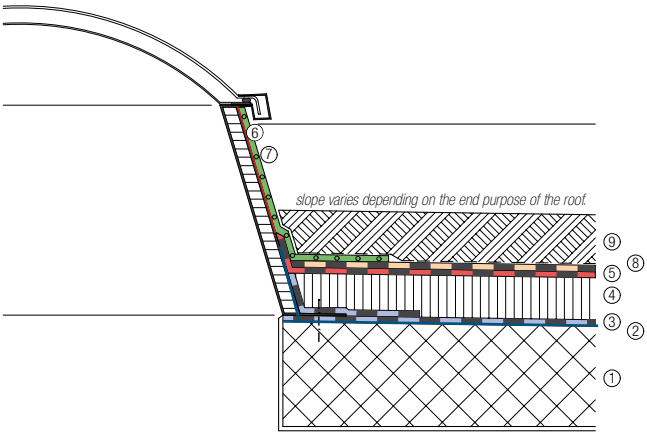
Legend applies to pages 60, to 66.

- Fastened or loose protection
- Thermal insulation
- Concrete
- Waterproofing layer
- Double-layer bituminous waterproofing membrane
- Bituminous vapour barrier
- Liquid waterproofing system
- Non-woven synthetic film
- Alsan® Primer
- Steel deck
- Cold applied bituminous primer

Tie-in on skylight with Alsan®

Description

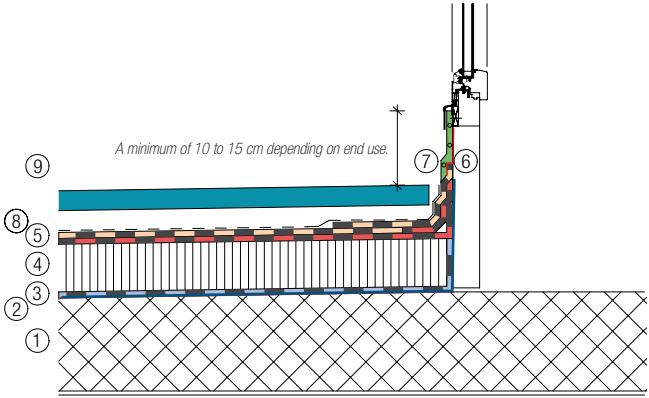
① Concrete sloped substrate depending on end purpose of the roof (trafficable or not)
② Cold-applied bituminous primer
③ Bituminous vapour barrier
④ Thermal insulation
⑤ Double-layer bituminous waterproofing membrane
⑥ Impregnation primer
⑦ Liquid waterproofing system (with an optional thin layer of slate chippings), e.g. **Alsan® Flashing® Color**, **Alsan® RS®**
⑧ Non-woven synthetic film
⑨ Fastened or loose protection



Doorframe tie-in with a ledge using Alsan®

Description

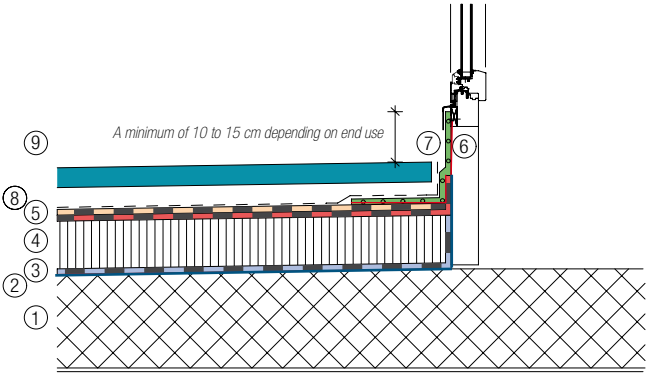
① Concrete sloped substrate depending on end purpose of the roof (trafficable or not)
② Cold-applied bituminous primer
③ Bituminous vapour barrier
④ Thermal insulation
⑤ Double-layer bituminous waterproofing membrane
⑥ Impregnation primer
⑦ Liquid waterproofing system (with an optional thin layer of slate chippings)
⑧ Non-woven synthetic film
⑨ Fastened or loose protection



Doorframe tie-in with Alsan®

Description

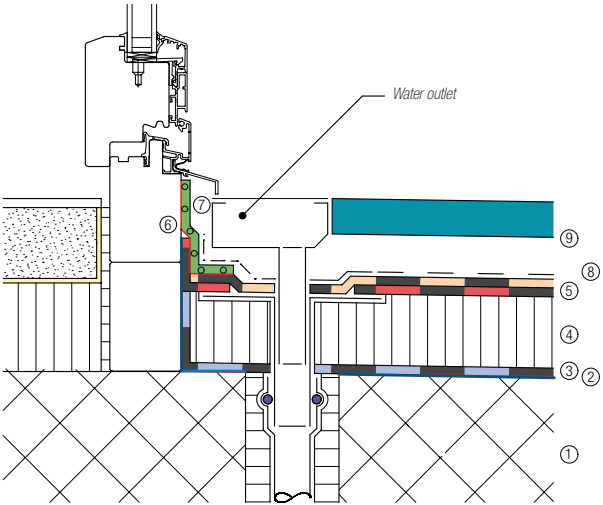
① Concrete sloped substrate depending on end purpose of the roof (trafficable or not)
② Cold-applied bituminous primer
③ Bituminous vapour barrier
④ Thermal insulation
⑤ Double-layer bituminous waterproofing membrane
⑥ Impregnation primer
⑦ Liquid waterproofing system (with an optional thin layer of slate chippings)
⑧ Non-woven synthetic film
⑨ Fastened or loose protection



Doorframe tie-in and rainwater outlet system with Alsan®

Description

1. Concrete sloped substrate depending on end purpose of the roof (trafficable or not)
2. Cold-applied bituminous primer
3. Vapour barrier
4. Thermal insulation
5. Double-layer bituminous waterproofing layer
6. Impregnation primer
7. Liquid waterproofing system (with an optional thin layer of slate chippings)
8. Non-woven synthetic film
9. Fastened or loose protection



General information about liquid waterproofing systems 1

Information about Alsan® systems 2

Alsan® Flashing® installation steps 3

Alsan® Flashing® Color installation steps 4

Alsan® RS 230 thix installation steps 5

Cross sections of typical cases 6

Additional information 7

We hope that this guidebook was a useful tool for your project. We shall continue to remain at your service for any further information you may need regarding our **Alsan®** liquid waterproofing systems :

- Practical Liquid Waterproofing Guide
- Technical documentation
- Detailed technical sectional view
- Technical Data Sheet
- Safety Data Sheet
- Technical Guidelines
- European Technical Agreement

SAFETY DATA SHEET
ALSAN FLASHING

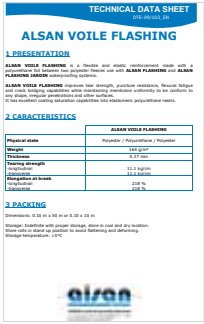
1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

2. HAZARDS IDENTIFICATION

3. COMPOSITION - INFORMATION ON INGREDIENTS

4. FIRST AID MEASURES

5. FIRE-FIGHTING MEASURES


TECHNICAL DATA SHEET

ALSAN VOILE FLASHING

1 PRESENTATION

ALSAN VOILE FLASHING is a flexible and elastic reinforcement made with a polyester fabric, coated on both sides with polyether flexible use with ALSAN FLASHING and ALSAN FLASHING 2K/ECO waterproofing systems.

ALSAN VOILE FLASHING improves tear strength, puncture resistance, flexural fatigue and crack bridging capabilities while maintaining membrane uniformity to be conform to any shape, irregular penetrations and other surfaces.
It has excellent coating saturation capabilities into elastomeric polyurethane resins.

2 CARACTERISTICS

	ALSAN VOILE FLASHING
Physical state	Polyester / Polyurethane / Polyester
Weight	194 g/m²
Thickness	0.17 mm
Tearing strength Longitudinal Transverse	11.1 kg/cm 11.3 kg/cm
Elongation at break Longitudinal Transverse	218 % 218 %

3 PACKING

Dimensions: 0.32 m x 50 m or 0.32 x 10 m

Storage: Indefinite with proper storage, store in cool and dry location.
Store rolls in stand-up position to avoid flattening and deforming.
Storage temperature : >5°C

These documents are available for you on request in both paper and electronic versions.

Contact us !

Your **SOPREMA Alsan®** team
Phone. : +33 (0)3 88 79 84 84
www.soprema.com

SOPREMA at your service

Looking for a commercial contact to discuss a current or upcoming project?
Have any questions concerning the use of our products?

SOPREMA Export Department.
Phone. : +33 (0)3 88 79 84 84

thermal insulation
waterproofing
Alsan systems
liquid waterproofing

SOPREMA

14 rue de Saint-Nazaire - BP 60121
67025 STRASBOURG CEDEX 1 - FRANCE
Phone. : +33 (0)3 88 79 84 00 - Fax : +33 (0)3 88 79 84 85
export@soprema.com - www.soprema.com

SOPREMA reserves the right to modify the composition and conditions of use of its materials and their price without prior notice. Always ensure that the product is used for no other purpose than that for which it was designed. Refer to technical specifications at each step.

SOPREMA S.A.S. with capital of 51 550 000 €. HQ : 14 rue de Saint-Nazaire - BP 60121 - 67025 STRASBOURG CEDEX 1. RCS : 485 196 877.