

# Method Statement for the application of Sikalastic® 618

**Storage Place:** Origin Sika Liquid Plastics Preston UK

**Key Words:** Sikalastic®, LAM, MTC, Sikarook®, 618, refurbishment, waterproofing, Reemat, detailing.

**Scope:** Method Statement for treatment of typical roof surfaces with Sikalastic® 618.



The information contained herein and any other advice are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. The information only applies to the application(s) and product(s) expressly referred to herein. In case of changes in the parameters of the application, such as changes in substrates etc., or in case of a different application, consult Sika's Technical Service prior to using Sika products. The information contained herein does not relieve the user of the products from testing them for the intended application and purpose. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

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# 1. System Description

Sikalastic®-618 is a single component, cold-applied, moisture-triggered polyurethane membrane. It cures to form a seamless and durable waterproofing solution for exposed roof areas.

Sikalastic® 618 is an MTC (Moisture Triggered Chemistry) System incorporating a unique technology that allows the material to use atmospheric moisture to trigger the curing process. This means the waterproof membranes are capable of curing in a wide range of conditions including extreme temperature ranges and humidity variations. Unlike traditional polyurethane systems they do not release CO<sup>2</sup> - which often causes aeration - and therefore the application need not be delayed by adverse weather conditions.

It is not recommended to install the Sikalastic® MTC systems when rain is imminent, as rainfall could affect the appearance of the product. However, once applied the membranes are water-resistant and will not show any adverse reaction to water other than physical impact.

The MTC System is a membrane from the Sikalastic® range that cures to provide completely seamless waterproof protection. Its liquid application means it can be easily applied to all complex detail areas, and because it is completely cold applied there is no requirement for any heat or naked flame on the roof.

## 1.1. Limitations

Do not apply Sikalastic®-618 on substrates with rising moisture.

Sikalastic®-618 is not suitable for permanent water immersion.

On substrates likely to exhibit outgassing, ensure substrate is thoroughly dry and apply during falling ambient and substrate temperatures. If applied during rising temperatures “pin holing” may occur from rising vapour. In very severe case Sikalastic® Concrete Primer may assist.

Product should be used in conjunction with a safe system of work. Ensure an adequate assessment of all site risks has been conducted prior to work commencing. Refer to the product safety datasheet for further guidance.

Do not use Sikalastic®-618 for indoor applications.

Do not apply close to the air intake vent of running air conditioning unit. Turn off or isolate if necessary.

The product can be applied by brush, roller or airless spray. Work well with a brush in difficult areas. Apply subsequent layers after the first layer has cured tack free.

The product can be overcoated with itself – refer to the ‘overcoating’ priming section of this Method Statement.

Bitumen sheets should be fully reinforced for any significant longevity, however if not using full reinforced system use strips of e.g. Sikalastic® Reemat Premium in order to cover joints, connections or overlaps of bituminous sheets. Please ask our technical service department for detailed recommendations.

Volatile bituminous materials may stain and or soften below the coating.

The suitability of each system to receive foot traffic varies. For specific recommendations, please contact our technical service department.

Do not apply adhesives or cementitious products (e.g. tile mortar) directly onto Sikalastic®-618.

In icy conditions do not use grit salt and/or other de-icing agents between coats of Sikalastic®-618 as this may affect the cure and inter-coat adhesion of the product.

Whilst Sikalastic®-618 is resistant to most commonly encountered atmospheric pollutants, proprietary cleaning solutions and environmental spoilage, the suitability of the product for use in applications with increased chemical resistance requirements should first be established.

## 1.2. References




To ensure the correct application of Sikalastic® 618 systems, please refer to the most recent issue of the following documents:

- PDS (Product Data Sheet)
- MSDS (Material and Safety Data Sheet)

If the fulfilment of the ETAG is an issue, the build-up as defined in the ETA is obligatory.

If local regulations regarding external fire performance are existing, the valid performance of Sikalastic® MTC systems may be checked.

## 2. Main Products

Product	Article code	Description	Packaging	Shelf life
Sikalastic®-618	Various	1C moisture triggered polyurethane 	5L and 15L	12 months
Sika® Reemat Sika® Reemat 300	174026 178110		1.3m*150m 0.3m*150m	N/A
Sika® Flexitape Heavy 15cm	174148	 Article Number - 174148	15cm x 50m	N/A

## 2.1. Systems Build - Up

### System 1 - Roof Coating

Sikalastic®618 2<sup>nd</sup> coat

Sikalastic®618 1<sup>st</sup> coat

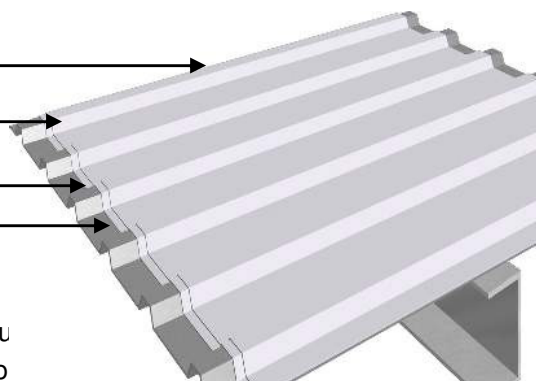
Primer if needed

Substrate - typically  
metal or cement sheet

For UV-stable coating, to extend life of existing stru

**Build up:** Sikalastic®-618 applied in o  
**Substrates:** Concrete, metals, asbestos cement, screeds, tiles.  
**Primer:** Please refer to Sikalastic® Primer-Cleaner chart below  
**Total thickness:** ~ 0.7 mm  
**Total consumption:** ~ 1L/ m<sup>2</sup> (1.4kg/m<sup>2</sup>)

For partial reinforcement Sikalastic® Reemat Premium or Sika® Flexitape Heavy is applied at areas with high movement, irregular substrate or to bridge cracks, joints and seams on the substrate as well as for details.



### System 2 - Reinforced Roof Waterproofing

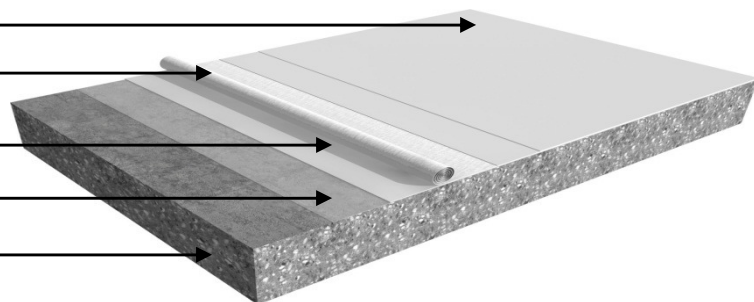
Sikalastic®618 2<sup>nd</sup> coat

Sikalastic® Reemat g

Sikalastic®618 1<sup>st</sup> coat

Primer if needed

Substrate



For cost efficient waterproofing solutions in new construction and refurbishment projects. For projects with surfaces subject to probable movement and light/maintenance foot traffic.

**Build up:** Sikalastic®-618 applied in one and reinforced with Sikalastic® Reemat Premium and sealed with a further coat of Sikalastic®-618  
**Substrates:** Concrete, metals, wood, tiles, asphalt\*, felt\*, etc.  
**Primer:** Please refer to Sikalastic® Primer-Cleaner chart below  
**Total thickness:** ~1.3mm  
**Total consumption:** ~1.75L/m<sup>2</sup> (2.45 kg/m<sup>2</sup>)

\* Test compatibility before use - soft or volatile bituminous felts would normally need full reinforcement. Bituminous materials may also soften temporarily and could produce a slight stain.

## 2.2. Pre-Project Preparation

### Project check

It is invaluable to check the project in advance. The following checklist, although not exhaustive, is a guide the most important points to take in consideration.

Check that the construction and substrate are in good condition.

Check that new concrete has cured for at least 28 days and has a pull off strength  $\geq 1.5 \text{ N/mm}^2$ .

Check that the surface is dry and substrate humidity is maximum 4% without emitting dampness.

Check the ventilation and ensure that during application it is sufficient.

During phase of refurbishment, check that the application on the roof is not disturbing the internal environment.

Check that the necessary health and safety equipment e.g. scaffolding, ladder etc is available on site.

Check the measurement of the project.

Make a programme for the whole project. Check staff (where necessary) are available when required, all Sikalastic®-618 products including tools/equipment as well as the protective health and safety equipment are available at and for the required period of time.

**Check weather conditions** system requires conditions as below.

**Substrate Temperature** + 5 °C min. / + 60 °C max.

**Ambient Temperature** + 5 °C min. / +40 °C max.

**Relative Humidity** - <85%

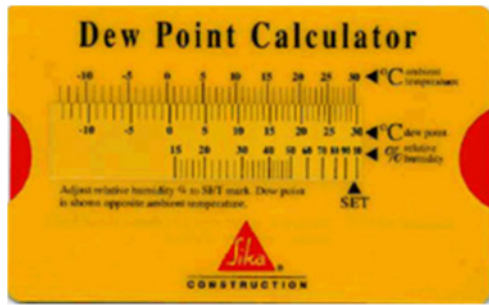
**Dew Point** - Beware of condensation! The substrate and uncured membrane must be at least 3 °C above the dew point to reduce the risk of condensation. Condensation may affect adhesion and could affect appearance – see below.

### Determination of dew point

It is important to pay close attention to avoiding dew point conditions. The application temperature must exceed the dew point by at least 3 °C. The dew point can be defined with a point device or manually by the dew point chart as following explained.



1. Measure air temperature in °C
2. Measure atmospheric humidity in %
3. Measure substrate temperature in °C



4. Determine dew point temperature using dew point chart or Sika slide rule guide
5. Add 3 °C to dew point temperature
6. Verify that substrate temperature is at least 3 °C higher than dew point

Example: Air temperature: 20 °C Atmospheric humidity: 60% Substrate temperature: 16 °C  
 Determined dew point temperature with dew point chart: 12.0 add 3 °C: 15.0 °C.  
 Verify: Is 16 °C greater than 15.0 °C? Decision: Installation is not permissible.

Dew Point Chart

Dew point temperature in °C															
Room air temperature	Relative humidity in %														
	30%	35%	40%	45%	50%	55%	60%	65%	70%	75%	80%	85%	90%	95%	
30	10,5	12,9	14,9	16,8	18,4	20,0	21,4	22,7	23,9	25,1	26,2	27,2	28,2	29,1	
29	9,7	12,0	14,0	15,9	17,5	19,0	20,4	21,7	23,0	24,1	25,2	26,2	27,2	28,1	
28	8,8	11,1	13,1	15,0	16,6	18,1	19,5	20,8	22,0	23,2	24,2	25,2	26,2	27,1	
27	8,0	10,2	12,2	14,1	15,7	17,2	18,6	19,9	21,1	22,2	23,3	24,3	25,2	26,1	
26	7,1	9,4	11,4	13,2	14,8	16,3	17,6	18,9	20,1	21,2	22,3	23,3	24,2	25,1	
25	6,2	8,5	10,5	12,2	13,9	15,3	16,7	18,0	19,1	20,3	21,3	22,3	23,2	24,1	
24	5,4	7,6	9,6	11,3	12,9	14,4	15,8	17,0	18,2	19,3	20,3	21,3	22,3	23,1	
23	4,5	6,7	8,7	10,4	12,0	13,5	14,8	16,1	17,2	18,3	19,4	20,3	21,3	22,2	
22	3,6	5,9	7,8	9,5	11,1	12,5	13,9	15,1	16,3	17,4	18,4	19,4	20,3	21,2	
21	2,8	5,0	6,9	8,6	10,2	11,6	12,9	14,2	15,3	16,4	17,4	18,4	19,3	20,2	
20	1,9	4,1	6,0	7,7	9,3	10,7	12,0	13,2	14,4	15,4	16,4	17,4	18,3	19,2	
19	1,0	3,2	5,1	6,8	8,3	9,8	11,1	12,3	13,4	14,5	15,5	16,4	17,3	18,2	
18	0,2	2,3	4,2	5,9	7,4	8,8	10,1	11,3	12,5	13,5	14,5	16,4	16,3	17,2	
17	-0,6	1,4	3,3	5,0	6,5	7,9	9,2	10,4	11,5	12,5	13,5	15,5	15,3	16,2	
16	-1,4	-0,5	2,4	4,1	5,6	7,0	8,2	9,4	10,5	11,6	12,6	14,5	14,4	15,2	
15	-2,2	-0,3	1,5	3,2	4,7	6,1	7,3	8,5	9,6	10,6	11,6	13,5	13,4	14,2	
14	-2,9	-1,0	0,6	2,3	3,7	5,1	6,4	7,5	8,6	9,6	10,6	12,5	12,4	13,2	
13	-3,7	-1,9	0,1	1,3	2,8	4,2	5,5	6,6	7,7	8,7	9,6	10,5	11,4	12,2	
12	-4,5	-2,6	1,0	0,4	1,9	3,2	4,5	5,7	6,7	7,7	8,7	9,6	10,4	11,2	
11	-5,2	-3,4	1,8	-0,4	1,0	2,3	3,5	4,7	5,8	6,7	7,7	8,6	9,4	10,2	
10	-6,0	-4,2	2,6	-1,2	0,1	1,4	2,6	3,7	4,8	5,8	6,7	7,6	8,4		

### 3. Safety Measures on Site

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.

#### Personal Protection:

The following protective equipment is essential for anyone working with SikaRoof® MTC products.



In addition to protective clothing it is also recommended to use a barrier cream on the skin. The use of a barrier cream is more useful and effective than often reputed, they are inexpensive, convenient, and protect well if they are not frequently flushed with solvents. However, barrier creams are only a supplement to and not a replacement for protective gloves, so always wear gloves. Always ensure there is no contamination inside gloves before reusing them.

If any Sikalastic® MTC products gets on clothing, remove the garment at once. The friction of resin-saturated fabric on the skin can cause serious chemical burns. Wash your exposed skin occasionally during the workday and immediately if any Liquid Applied Membrane product gets on it. Avoid using solvents since they can help Liquid Applied Membrane material penetrate in to the skin and solvents themselves are aggressive and harmful to the skin. If water is no more available at any time or shorten, then clean the contamination with sand instead. Certain hand cleaners also work without harmful effects. Citrus skin cleaners, for example, are effective and mild. Soap and water takes time, but also eventually works for small areas.

Avoiding skin contact by keeping tools and equipment clean is one of the best ways to protect oneself.



Precautions, with any instances of skin contact rinse with clean water and use warm water and soap to clean the skin. A good skin cleaner is Sika® Topclean T.

No Sikalastic® MTC applications should ever proceed without sufficient water being adjacent and available for eye washing.

If adequate clean water is not provided then the project should not commence, no matter what the urgency. If a professional eyewash kit is not available, then at the very minimum one quart of clean water must be present. The water can be in a pail, plastic jug or via a hosepipe.



Safety glasses or other eye protection obviously help those doing the work but they can also create a false sense of security. Do not take risks with health!



In the event of any spillage or contact into the eyes, always seek medical advice immediately after rinsing and cleaning the eyes with the clean water.

Ensure sufficient ventilation during application in closed or confined spaces. Dependent on local regulations respiratory masks may be required. Please observe all relevant local regulations.



Hard hats, safety shoes and ear protection is also generally recommended on construction sites.



## 3.1. Surface Preparation

Generally speaking all surfaces must be clean dry and sound the following section suggests methods of dealing with most common substrates.

### **Cementitious substrates**

New concrete should be cured for at least 28 days and should have a pull off strength  $\geq 1.5$  N/mm<sup>2</sup>. Inspect the concrete, including upstands, all areas should be hammer tested. Concrete must be suitably finished, preferably by wood float or steel pan. A power float finish is acceptable where the surface is prepared to avoid laitance (a tamped finish is not acceptable). The surface finish must be uniform and free from defects such as laitance, voids or honeycombing.

Loose friable material and weak concrete must be completely removed and surface defects such as blowholes and voids must be fully exposed.

Repairs to the substrate, filling of joints, blowholes/voids and surface levelling must be carried out using appropriate products from the Sikafloor®, SikaDur® and SikaGard® range of materials. High spots must be removed by e.g. grinding.

Outgassing is a naturally occurring phenomenon of concrete that can produce pinholes in subsequently applied coatings. The concrete must be carefully assessed for moisture content, air entrapment, and surface finish prior to any coating work. Any requirement for priming must also be considered. Installing the coating either when the concrete temperature is falling or stable can reduce outgassing. It is generally beneficial, therefore, to apply the embedment coat in the late afternoon or evening.

### **Brick and stone**

Mortar joints must be sound and preferably flush pointed. Make good any missing mortar and power wash – allow to dry.

### **Ceramic tiles**

Ensure all tiles are sound and securely fastened, replacing obviously broken or missing sections. Tiles need a good adhesion to the substrate otherwise they need to be removed. Test adhesion to surface some tiles may need to be abraded to produce a good bond. Degrease with detergent or proprietary degreasing agent. Power wash clean thoroughly and allow to dry. Ensure tiles are not situated above high levels of moisture.

### **Asphalt**

Asphalt contains volatiles which can cause bleeding and slight non-detrimental staining. The asphalt must be carefully assessed for moisture and/or air entrapment, grade and surface finish prior to any coating works being carried out. Power wash. All major cracks should be sealed. Asphalt must be carefully assessed for moisture and/ or air entrapment, grade and surface finish prior to any coating works being carried out. Coatings on asphalt must be fully reinforced.

### **Bituminous felt**

Ensure that bituminous felt is firmly adhered or mechanically fixed to the substrate. Bituminous felt should not contain any badly degraded areas. Power wash. Treat blisters by removal or star cutting and remove any underlying water and allow to dry. There are many types of bitumen felt with variable softening points and additives – Test compatibility before use - soft or volatile bituminous felts can stain and soften particularly on application. Darker colours will mask staining to some degree. Bituminous felt should be treated with a fully reinforced system however if not using fully reinforced system to treat adjacent areas use strips of Sikalastic® Reemat Premium or Sika® Flexitape Heavy in order to cover joints, connections or overlaps onto the felt.

### **Bituminous coatings**

Bituminous coatings should not have sticky or mobile surfaces, volatile mastic coatings, or old coal tar coatings. Remove loose or degraded coatings. Test compatibility before use – may need full reinforcement.

### **Metals**

Metals must be in sound condition.

Steelwork is ideally prepared to Sa2½ (Swedish Standard SIS 05 : 5900 = 2nd quality BS4232 = S.S.P.C. grade SP10) or as indicated by the blasting specification which may be of a higher standard.

Non-ferrous metals are prepared as follows. Remove any deposits of dust and oxidation and abrade to bright metal. Wire brushing can be used for soft metal such as lead. The surface must be clean and free from grease which, if present, must be removed with a proprietary solution. Wash with detergent, rinse and dry.

Use a suitable metal primer e.g. Sikalastic® Metal Primer and observe relevant application and overcoating instructions. Adhesion test before full application.

	Sikalastic® Metal Primer	Sikalastic® Concrete Primer	Sika® Reactivation Primer	Apply Direct	Sikalastic® Primer - FPO	EPDM Primer	Adhesion Test Required	Abrade/ Remove
Exposed Asphalt				X				
Coated Asphalt							X	
Felt				X				
Felt – Solar Reflective							X	
Mineral Felt		X*1		X*7				
Stable Bitumen				X				
Brittle Bitumen*2								X
Concrete		X*1		X				
Damp Concrete		X*3						
Brickwork				X				
Aerated Open Faced Brickwork*4		X						
Metal	X							X
Lead	X							X
Aluminium	X							X
Stainless Steel							X	
Galvanised*5	X							
Timber Upstands*6		X						
FPO Membranes					X		X	
Plastic GRP				X				X
AsbestosCement		X						
Existing MTC Coatings			X					
EPDM Membranes						X		

- \*1 Concrete Primer is not necessary for adhesion but can be used to improve material consumption and prevent outgassing
- \*2 Remove from substrate
- \*3 Damp Concrete must be allowed to dry
- \*4 Apply to suitable mortar screed using a bag and rubbing technique
- \*5 Apply mordant solution prior to metal primer application
- \*6 Sika® Flexitape Heavy required on the joints
- \*7 Only fully reinforced systems

Other compatible primers from the Sika range are Sika® Bonding Primer, Sikafloor® 155W, Sika® Primer 3N Sikafloor® 156, Sikafloor® 161 – subject to satisfactory adhesion test and application requirements and limitations given on individual data sheets.

### 3.2. Mixing

Sikalastic®618 is a single component material – no mixing is required. If on opening any separation of pigment is observed simply stir gently until uniform.

## 4. Application

Prior the application of Sikalastic®-618 the priming coat if used must have cured tack-free. For the waiting time / overcoating please refer to the PDS of the appropriate primer. Damageable areas (handrails etc) should be protected with tape or plastic wrapping.

### System 1

**Roof Coatings:** Sikalastic®-618 is applied in two coats. Prior to the application of a 2<sup>nd</sup> coat the indicated waiting time in the table below waiting time / over coating shall be allowed.

Apply localised crack or joint reinforcement

Apply 1<sup>st</sup> coat at 0.5L per m<sup>2</sup> allow to dry and check for any misses or pinholes – spot treat to rectify before continuing.

Once dry apply 2<sup>nd</sup> coat. On larger areas try to use a different colour for the first and second coats – this makes it easier to ensure a good coverage.

### System 2

**Reinforced Roof Waterproofing:** Sikalastic®-618 is applied in combination with Sikalastic® Reemat Premium.

Apply first coat of approximately 1.0 L/m<sup>2</sup> of Sikalastic®-618. Work only so far in advance that the material stays liquid.

Roll in the Sikalastic® Reemat Premium and push into the wet liquid and ensure full saturation. overlapping of the Reemat Premium a minimum 5 cm and ensure overlaps are sufficiently wet to bond.

The roller may require only a little extra material to keep wetted but no further significant material needs to be added at this stage.

The surface of the reinforcement should look wet and fully sealed.

After the coat is dry enough to walk on, apply a second coat of Sikalastic®-618 at a minimum 0.75 L/m<sup>2</sup> per coat.

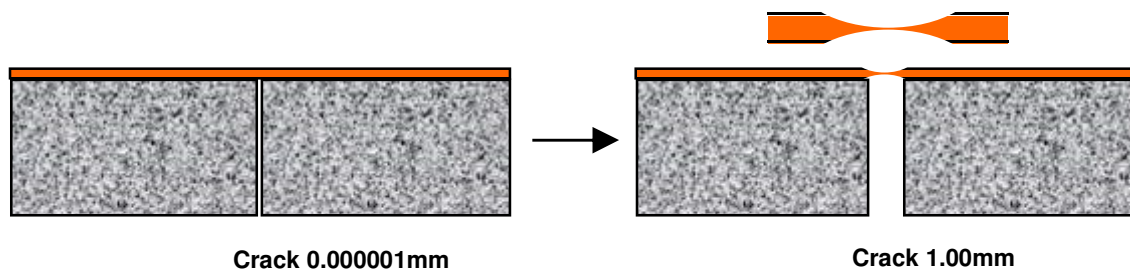
Always begin with details prior starting with waterproofing the horizontal surface. For details follow step 1-4.

System	Product	Consumption
Coating system	1 x Sikalastic®-618	0.5 L/m <sup>2</sup> (≥0.7kg/m <sup>2</sup> )
	1 x Sikalastic®618	0.5 L/m <sup>2</sup> (≥0.7kg/m <sup>2</sup> )
Reinforced roof waterproofing system	1 x Sikalastic®-618 embedded with Sikalastic® Reemat Premium	1.0 L/m <sup>2</sup> (≥1.8kg/m <sup>2</sup> )
	1 x Sikalastic®-618	0.75 L/m <sup>2</sup> (≥1.0kg/m <sup>2</sup> )

\* For severe UV Climates (e.g. Middle East) add 0.25L to the top coat.

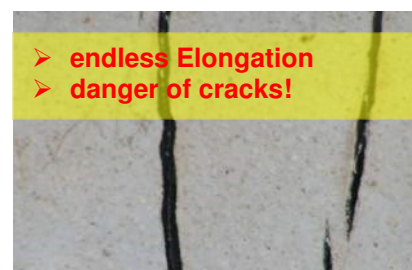
## Which system is best for any particular surface?

Surfaces susceptible to multiple or unpredictable splitting, crazing or softening under heat etc., e.g. bitumen felt, etc should be fully reinforced.

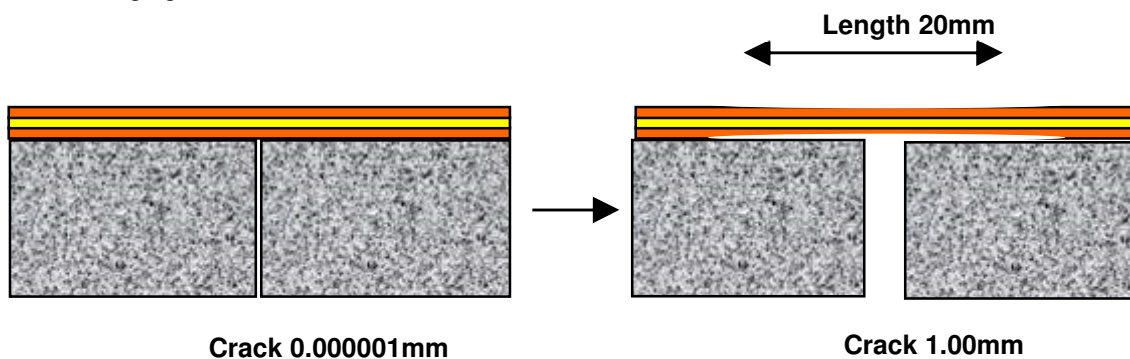


The resulting force out of the crack building is absorbed in the Sikalastic®-618. Because of the lower tensile strength of the Sikalastic®-618 in comparison to the adhesion and substrate strength the whole force will be carried in the coat and pure elongation. Because of the short distance (0.001mm) to cover the alternation of the length (1.0mm) the elongation is infinite and may therefore result in the crack projecting through from the substrate.

$$\text{Elongation} = \frac{1.0\text{mm}}{0.001\text{mm}} \cdot 100\% = 100'000\%$$



Crack bridging with Sikalastic® Reemat Premium



In comparison to the non Reemat Premium application the tensile strength is much higher encouraging the system to detach from the surface at the crack – essentially starting with a greater width the elongation required is much lower and the system far more likely to be able to resist cracking with the substrate.

$$\text{Elongation} = \frac{1.0\text{mm}}{20.0\text{mm}} \cdot 100\% = 5\%$$

- Elongation ok
- Low danger of cracks

**Before Sikalastic®-618 is applied on horizontal surface, always execute details before starting with the general surface application.**

Detailing with *Sikalastic®-Reemat Premium* requires no cutting or folding – the following pages show the best practice for typical standard situations.

### Detailing in various situations



The system may be used to repair damaged details or create details to existing protrusions for coating onto other materials - difficult shapes impossible for other systems are easily mastered with care.



Details terminating in an upward direction should ideally be finished by termination bar.



Terminating into Brickwork or stone is often finished with mortar.











Alternatively the chase may be filled with sealant e.g. Sikaflex® 11FC+



Projections can also be terminated by ties or clips suitable for the shape of the penetration.

# Construction

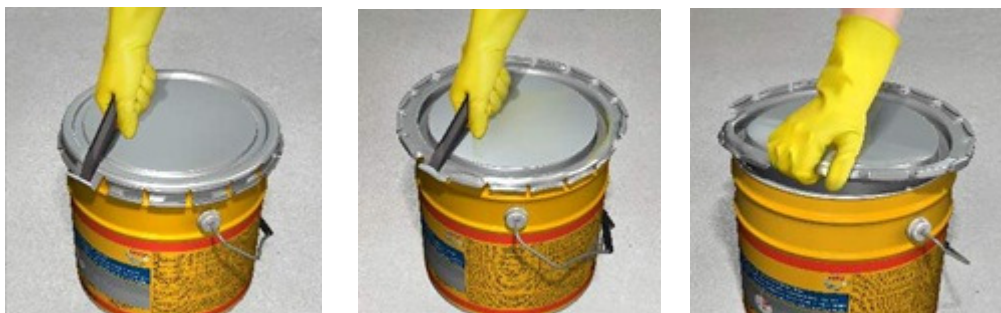
	
<p>Clean the area to be repaired and mask for a neat edge to exposed edges.        Tools you will need are a small brush and a small roller.</p>	<p>Apply all the first coat of Sikalastic®-618 – normally starting with the vertical face.</p>
	
<p>Whilst wet embed the Reemat with a small roller or brush – make sure all the mat is saturated out and that there are no dry patches.</p>	<p>Install the matting. Pay attention to corners to ensure there are no holes.</p>
	
<p>Tear the fabric to overlap it rather than cutting it and ensure a good overlap of at least 5 cm.</p>	<p>Pull edges at overlap to soften appearance of detail.</p>
	
<p>The matting is very adaptable – there is no need to cut and trim. Simply allow the matting to become saturated and allow a few minutes before pressing into shape.</p>	<p>Before finishing check the surface is a complete film – touch in any defects.</p>



## 4.1. Application Meth – roller

Prime the surface as appropriate – as described in the primer chart above.



### Containers



Using strong lever open each lug fully then lift off the lid. The material is reactive with moisture in the air and is not re-useable after 2-3 days of the tin being opened.

<p>After cleaning and preparing the substrate apply primer or sealer coat if necessary.</p>	<p>Allow primer surface to dry.</p>
<p>Apply 1<sup>st</sup> coat by brush or roller. Measure the correct area for the volume of material. For example if using 1 L/m<sup>2</sup> per coat each 15L tin will cover 15 m<sup>2</sup>. Mark that out on the roof and ensure all the material from each tin is used inside the defined area.</p>	<p>Overlap adjacent pieces of Reemat Premium by at least 5cm and ensure the joint is thoroughly wetted out between the Reemat Premium layers.</p>

# Construction

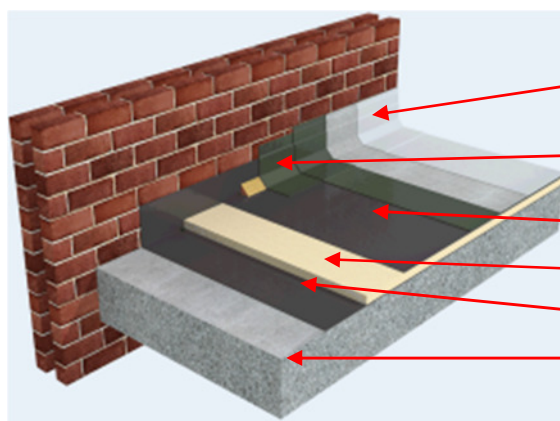
	
<p>Push the matting into the wet liquid until all fibres are thoroughly saturated – the surface should look smooth and completely pinhole free.</p>	<p>When dry check the first coat for simple errors e.g. missing patches etc. and spot treat to rectify – then apply second coat.</p>

Before applying the second coat, check for upstanding Reemat fibres. These fibres have to be eliminated by using sandpaper. Make sure that all upstanding fibres are abraded. Upstanding fibres can affect water tightness – risk of capillarity!

Before applying Sikalastic®-618 on Sikalastic®-618 allow:		
Ambient Conditions	Minimum	
+5°C/50% r.h.	Allow overnight curing	After seven days the surface has to be cleaned and primed with Sika® Reactivation Primer
+10°C/50% r.h.	12 hours	
+20°C/50% r.h.	6 hours	
+30°C/50% r.h.	4 hours	

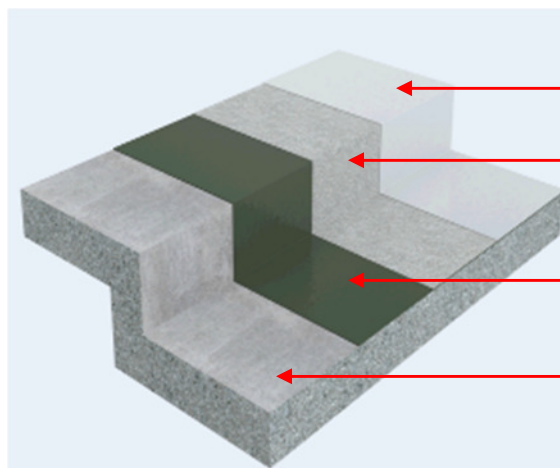
## Typical Application Technique

Application over existing concrete insulated roof with bitumen membrane



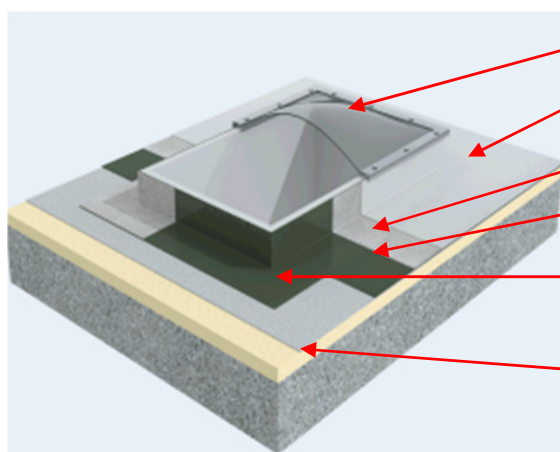
- 2 coats of Sikalastic®-618 with Reemat Premium embedded in the first coat
- 1 coat of Sikalastic®-618 with Reemat Premium
- Existing Bitumen membrane
- Existing Insulation
- Existing vapour layer
- Concrete substrate

Install fillet and embed Reemat Premium onto detail before general deck area, when dry install general deck area. Use detail trim or chase out bedding line and turn system into chase and seal with Sikaflex® 11FC + or similar.



- 2<sup>nd</sup> coat of Sikalastic®-618
- Reemat Premium fully embedded in 1<sup>st</sup> coat
- 1<sup>st</sup> coat of Sikalastic®-618
- Concrete substrate

Basic detail shapes like a change in level may be treated before the general surface or simply included in the general application as work proceeds.



- Roof light unit
- 2<sup>nd</sup> coat Sikalastic®-618
- Reemat Premium fully embedded in 1<sup>st</sup> coat
- 1<sup>st</sup> coat of Sikalastic®-618
- Detail coat of Sikalastic®-618 with Reemat Premium embedded

More complex detailing always apply detailing first – then apply general deck area up to or over detail section – always allow a minimum of 5 cm overlap for Reemat Premium. It is very important that there are no unreinforced sections of the surface – however small.

## Very important note

**This document alone is not intended to be, nor is it sufficient, to make you a competent spray technician.**

Training courses are available from suppliers and manufacturers of machinery if required.

This information is intended as a guide to typical requirements in respect of Sika materials only. The capability and efficiency of machines can vary with age, air or electricity supply, etc. Above all parameters for the safe operation of the equipment should be checked with the equipment provider or manufacturer. Airless spray pumps operate under high pressure and can cause injection wounds which, in the worst case, could be fatal.

**Only personnel appropriately trained/certified and competent in the use of high pressure spray units should operate such equipment.**

## 5. Inspection – all systems

Always inspect coatings at each stage to ensure a complete coat – free from any misses or pinholes – Spot treat to rectify before continuing with application.

During application measure material to area consumption regularly to ensure correct application thickness. It is also possible to remove dry samples of the completed coating to be measured for film thickness against the chart below.

Coating System	Product	Dry Film Thickness
Standard coating system	1 x Sikalastic®-618 1 x Sikalastic® 618	<b>700 microns (0.7mm)</b>
Reinforced roof waterproofing system	1 x Sikalastic®-618 embedded with Sikalastic® Reemat Premium 1 x Sikalastic®-618	<b>1300 microns (1.3mm)</b>

## 6. Equipment

Preparation equipment appropriate to the surface.

### Light blasting equipment – professional use only.

#### Grinders – do not use on bitumen



Use appropriate equipment for the project – pneumatic grinders may be required in some locations.

#### Wire brushes – hand or mechanical



#### High pressure water jet



Very common method of preparation – works very well – **caution** – adding water to surface may enter building so sealing may be necessary and surface will also need to be allowed to dry out before coating commences.

#### Pressure feed roller



Can be used in combination with spray pump for rapid roller installations.

## Hand tools

### Rollers



Small rollers ideal for detailing work.



Medium pile solvent resistant rollers are ideal for most surfaces – use double arm rollers to get even application of coating and even pressure if embedding fleece.



Larger deck roller extension pole – enables a longer reach.

### Brushes



Various sizes of brush are useful for detail work

**Use any equipment only as instructed by supplier or manufacturer.**

## 7. Disposal

The disposal of emptied tins of Sika® products.

Sikalastic®-618

Where residual material has fully cured the material poses no threat to health, safety or the environment. Therefore containers coated with fully cured residues do not need special disposal considerations. However, where the tins carry hazard warnings such as transport diamonds or orange squares denoting chemical hazards, these markings should be covered, removed or otherwise obliterated. If these are not removed there may be difficulties at the disposal site as the markings indicate that the contents are hazardous.

However, where residual material has not cured or a skin has formed on the surface this must be disposed as hazardous waste and any markings denoting hazards must remain.

Twin pack / two part materials:

When both parts are added and mixed, any subsequent residues will cure and the statement above applies. Residues from unmixed tins of part A and part B will not cure. This means that contaminated containers will need to be disposed of under local Hazardous Waste Regulations. However, it is suggested that when adding part B to part A mixed material should be added to the now empty part B tin and then used, the residues remaining in this tin will now cure and the tin will be suitable for normal disposal on curing.

## 8. Disclaimer

**Editorial note for National Method Statement:  
(This note must be deleted during preparation of National method Statement)  
It may be necessary to adapt this disclaimer below to specific local laws and regulations. Any changes to this disclaimer may only be implemented with permission of Sika Corporate Legal in Baar.**

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