

# Monolastex Smooth

## Water based weatherproof coating

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### Product Description

Monolastex Smooth is a water based, acrylic coating that is used to weatherproof parapet walls and plant room walls

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### Uses

- Coloured coating for both internal and external walls
  - For use over many common substrates
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### Characteristics / Advantages

- Water based coating for concrete protection
  - Affords concrete protection in accordance with the requirements of EN 1504-2
  - BBA certified manufacturing systems and performance accreditation
  - Very good resistance against ageing and weathering
  - Resists diffusion of carbon dioxide
  - Fast drying\*, often enabling two coats in one working day
  - Water based, low odour and VOC content (complies with the requirements of directive 2004/42/CE)
  - High opacity, obliterating even strong underlying colours
  - Easy application
  - Available in a wide range of colours
  - Matt finish
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\*under normal conditions

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### Approvals / Standards

British Board of Agrément (BBA) certified No. 87/1930

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### Product Data

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#### Form

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#### Appearance

Medium viscosity liquid available in an extensive colour palette  
Matt finish when dry

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#### Packaging

15 litres

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### Storage

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#### Storage Conditions / Shelf Life

18 months from date of production if stored properly in original, unopened and undamaged sealed packaging, in dry conditions at temperatures between +5°C and +25°C. Avoid exposure to frost and sources of heat.

**Product Data Sheet**Edition 11.2011  
Identification no.  
Version no. 01**Technical Data****Chemical Base** Waterbased**Density** ~ 1.42 EN ISO 2811-1**Solid Content** Weight: ~64%  
Volume: ~48%**Service Temperature** -50 °C to +80 °C**Resistance****Chemical Resistance** Resists splash contact and cleaning with a range of cleaners, detergents and sanitizers. For specific requirements, please consult Sika Liquid Plastics**Mechanical / Physical Properties****Elongation:** Approx.50% BS EN ISO 527-3  
TB378/MXS**Impact Resistance:** Withstands 5 mm indentation without damage to film. BS.3900: Part E3**Bond Strength (Adhesion) Over Concrete:** 2.79 MPa BS EN 1542:1999**Water Vapour Permeability:** Mean water vapour permeability = 35.6 g/m<sup>2</sup>/day  
Mean diffusion equivalent air layer thickness = 0.59m. BS EN ISO 7781-1:2000 and BS EN ISO 7783-2:1999**Accelerated Weathering:** 5000 hours UVB 313 - No chalking, flaking or blistering.**Liquid Water Transmission Rate:** 0.07 kg/(m<sup>2</sup>.h0.5) BS EN 1062-3:1999**Carbon Dioxide Permeability (Anti Carbonation):** Mean Diffusion equivalent air layer thickness (SD) = 235m BS EN 1062-6:2002**Resistance to Fire Propagation:** Rated class 1 on concrete BS 476 Part 6**Surface Spread of Flame:** Rated class 1 on concrete BS 476 Part 7

Roofing



**Resistance to Fire Propagation:**

Rated class 1 on concrete

BS 476 Part 6

**Surface Spread of Flame:**

Rated class 1 on concrete

BS 476 Part 7

Classified a 'Class 0' to Building Regulations, Approved Document B (Fire safety) – Volume 2 - Buildings other than dwellinghouses (2006 Edition, Amended 2007) Appendix A paragraph 13(b).

## System Information

### Minimum Coverage Rates

#### Coating Only - 15 Year Expected Durability

<b>Substrate</b>	Substrate must be prepared according to Preparation Section – for further information please contact Technical Services	
<b>First Coat</b>	Monolastex Smooth	0.2 l/m <sup>2</sup>
<b>Second Coat</b>	Monolastex Smooth	0.2 l/m <sup>2</sup>

\*Application by roller may result in a slight surface texture when using standard coverage rates. If a smoother surface is required apply 3 thinner coats to produce the same overall DFT.

For relevant primer coverage rates please refer to the appropriate technical datasheet.

**Note:**

· These figures are theoretical and do not allow for any material required due to surface porosity, surface profile, variations in level and wastage etc

### Typical Test Data - System

**Dry Film Thickness** 200 microns

### Application Details

**Substrate Quality**

The substrate must be sound, clean, dry and free from all contaminants such as dirt, oil, laitance, mould, grease, coatings and surface treatments, etc.

Brick work, block work, stone work:

Inspect substrate. Spalling, flaking or damaged areas should be repaired using compatible materials to match surroundings or replace as necessary.

Stable cracks should be filled with an external quality flexible filler

If in doubt apply a test area first.

### Substrate Preparation

Roofing



Brick blocks and stone

Aerated/foamed or open faced blocks should first be bag-rubbed, filled or rendered using a mortar or screed to create a smooth even surface. Pointing of brickwork and blockwork should be repaired and all unsound joints should be repointed. Apply direct to sound, dry surfaces. Brickwork with a relatively high moisture content requires Sika Bonding Primer. Glazed bricks should be mechanically abraded or blasted to aid adhesion; if this is not possible, clean and use Sika Bonding Primer.

Asbestos Cement And Asbestos-Free Equivalents

Always ensure strict compliance with health and safety executive requirements when working with asbestos - containing materials. Surfaces should be wetted before cleaning or abrading. Local reinforcement should always be used over joints, cracks, fixings, laps and degraded surfaces. Bolt heads should be abraded to reveal bright metal, tightened and cropped where necessary.

Cementitious Materials

(Renders, screeds, repair mortars, cement-bound boards, GRC, aggregate faced panels and concrete)

Areas of missing or spalled concrete should be repaired and residual cavities and non-structural cracks should be filled. Always use total or partial reinforcement over degraded or multi-cracked substrates which cannot be reinstated to a sound base, on surfaces which contain multiple joints, or on substrates which are liable to develop cracks. Concrete and screeds etc must be a minimum of 10 days old and preferably 28 days old before treatment. Sika Bonding Primer is required if the surface is very friable, dusty or absorbent, or prior to the application of a 2 coat anti-carbonation system. Sika Bonding Primer is likewise needed if the substrate incorporates unwashed sand containing sea salt, or when treating repair mortars.

Lining Boards

General: Seek Sika Liquid Plastics advice before treating surface coated boards. However, direct application is normally possible.

Mastics

Mastics must be fully cured before coating. Monolastex Smooth will not adhere to silicone based mastics. Apply direct over polysulphide or polyurethane mastics.

Metals

General: Monolastex Smooth is not specifically designed as an anti-corrosion coating but may be lapped onto metal surfaces subject to it being correctly prepared and primed with Metal Primer.

Painted Surfaces (including existing Liquid Plastics membrane)

Porous surfaces should be primed with Sika Bonding primer or diluted Monolastex Smooth. Gloss painted surfaces should be flattened and/or degreased with sugar soap or similar. Existing Monolastex Smooth, once cleaned, may be coated direct.

**Application Conditions / Limitations**

**Air Temperature:** +3°C (min) / +35oC (max)

**Substrate Temperature:** +3°C (min) / +35oC (max)

**Relative Air Humidity:** Do not apply when rain is imminent, humidity exceeds 90%, or in ongoing conditions of no sunlight.



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**Substrate Moisture Content:** 20% (wood moisture equivalent)

**Dew Point:** Beware of condensation!  
The substrate and uncured coating must be at least 2°C above dew point to reduce the risk of condensation or blooming on the wall finish.

**Application Instructions**

**Application Method** Prior to application, confirm substrate moisture content, relative humidity and dew point.

**Tools** Rollers  
Use a heavy nap 2 to 2.5 cm. (3/4 "or 1") synthetic cover.

Airless Spray  
Airless spray can be used, with care, on smooth substrates only; always finish off in one direction. Most types are suitable. Tip size 0.43 to 0.58 mm. (17 to 23 thou.).

**Cleaning of Tools:** Brushes  
Always use a soft, wide nylon or bristle brush. Do not use sweeping brushes.  
Clean equipment in water immediately after use. Dried Monolastex Smooth may be removed with cellulose thinners, xylene or toluene

**Curing Details**

**Waiting time/Overcoating** Approximately ½ hour in warm, sunny conditions with a breeze. At lower temperatures or conditions of high relative humidity, drying will be retarded.

Temperature	Relative humidity	Touch dry	Full cure
+10°C	50%	1 hours	2 hours
+20°C	50%	1 hours	2 hours
+30°C	50%	0.5 hours	2 hours
Before applying Monolastex Smooth to Monolastex Smooth allow			
Temperature	Minimum	Maximum	
+10°C	2 hours	7 days	
+20°C	2 hours	7 days	
+30°C	1 hour	7 days	

Times are approximate and will be affected by changing ambient conditions particularly temperature and relative humidity. For curing times of any primers please see the relevant primer technical datasheet.

If in doubt, allow 24 hours between coats

Roofing



**Notes on Application / Limitations:**

Each method of application will leave slightly a different surface finish – if this is important do not mix methods within single areas other than for cutting in etc.

Ensure entire surface is fully dried before proceeding. Crazeing may occur overcoating semi-cured surfaces or when applying excessively thick material.

Always ensure good ventilation when using Monolastex Smooth in a confined space, to ensure drying and full curing.

The gloss of the applied material is influenced by humidity, temperature and absorbency of the substrate.

The incorrect assessment and treatment of cracks may lead to a reduced service life and reflective cracking (for further information please contact Technical Customer Services).

For spray application the use of protective health & safety equipment is mandatory!

If heating is required do not use gas, oil, paraffin or other fossil fuel heaters, these produce large quantities of both carbon dioxide and water vapour, which may adversely affect the finish. For heating use only electric powered warm air blower systems.

New concrete should be allowed to cure/hydrate for a minimum of 10 days and preferably 28 days.

Do not apply near foodstuffs in unventilated conditions, always ensure adequate ventilation.


Do not thin or brush out like conventional paints (thinning for primer use is permissible).

When using this product with Liquid Plastics Bonding Primer, please refer to the overcoating instructions on the Primer's Product Data Sheet.

Acoustic insulation boards may lose some acoustic absorption after coating

Monolastex Smooth is approved for use by the European Organisation for Technical Approvals (EOTA). The following levels of performance were established:

**CE Labelling**

 0836
Monolastex Smooth
Sika Liquid Plastics, Sika House, Miller Street, Preston, UK, PR1 1EA
09
09/F015
EN 1504-2



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# Roofing

	Surface protection products
	Coating
	Permeability to CO <sub>2</sub> : Pass
	Permeability to water vapour: Class I
	Capillary absorption & permeability to water: Pass
	Adhesion strength by pull-off for a crack-bridging or flexible system without trafficking: Pass
	Dangerous substances comply with 5.4

**Value Base** All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

**Health and Safety Information** For information and advice on the safe handling, storage and disposal of chemical products, please refer to the most recent Material Safety Data Sheet.

**Disclaimer** The information, and, in particular, the recommendations relating to the application and end- use of Sika products, 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. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. 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.

**Specification assistance** NBS is the industry standard specification system, which allows architects, specifiers and engineers to insert clauses into specifications by manufacturer and product, making the process quicker and more efficient. We are members of NBS Plus and therefore detailed up-to-date product information is readily available to create accurate specifications.

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