

**BUILDING TRUST** 

# PRODUCT DATA SHEET Sika<sup>®</sup> Raingard-Pro MY

# DECORATIVE AND ANTI-CARBONATION PROTECTIVE COATING FOR EXTERNAL WALLS AND FACADES

## DESCRIPTION

Sika<sup>®</sup> Raingard-Pro MY is a one part, plasto-elastic coating based on acrylic dispersion with excellent weather resistance and crack-bridging properties. Sika<sup>®</sup> Raingard-Pro MY is specially designed for exposed walls and facades, with an excellent resistance to dirty retention, fungi and algae growth. It forms a flexible protective coat, impermeable to aggressive agents in the atmosphere (CO<sub>2</sub>) while allowing substrate to breathe.

## USES

- Provides resistance to weathering, dirty picking and contamination (CO<sub>2</sub>)
- Preventative protection for new reinforced concrete structures exposed to aggressive environments
- Decorative and protective coating for concrete and screed on external walls, facades and repair works (Sika<sup>®</sup> MonoTop<sup>®</sup> or SikaTop<sup>®</sup>)
- Waterproof against wind driven rain (prevent moisture ingress)

# **CHARACTERISTICS / ADVANTAGES**

- Decorative protection of concrete facades
- Excellent carbonation barrier
- Long term UV resistance
- High diffusion resistance to CO2
- Water vapor permeable, allowing substrate to breathe
- Can be applied by brush, roller, or airless spray
- Low VOC, environment friendly

## **PRODUCT INFORMATION**

Composition	Acrylic based resin dispersion		
Packaging	18 L pail (~25kg)		
Colour	<ul> <li>Thixotropic liquid available in standard white, grey.</li> <li>A large range of colours are available on request.</li> </ul>		
Shelf Life	12 months from date of production		
Storage Conditions	Store properly in undamaged and unopened original sealed packaging in cool and dry conditions. Protect from direct sunlight.		
Density	~1.35 kg/l (at +23 °C)		
Solid content by weight	~62 %		
Solid content by volume	~52 %		

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## **TECHNICAL INFORMATION**

Elongation at Break	400 % at 23 °C		(ASTM D412)	
Adhesion in Peel	> 1.0 MPa		(EN ISO 1542	
Crack Bridging Ability	Class A3 (+29 °C	Class A3 (+29 °C for 2 coats of 0.3 kg/m <sup>2</sup> )		
SYSTEM INFORMATIO	N			
System Structure	2–3 coats at approximately 0.2kg/m <sup>2</sup> per coat. Intensive colours require 3–4 coats.			
	For new concrete and existing solvent-based well adhering coating			
	System	Product	No. of application	
	Priming	Dilution with water 10–15 % by weight of Sika® Raingard-Pro MY	1–2 coats	
	Top coat	Sika <sup>®</sup> Raingard-Pro MY	2–3 coats	
	For repairing and refurbishment work on SikaTop® or Sika® MonoTop® mortar and existing water-based well adhering coating			
	System	Product	No. of application	
	Priming	Dilution with water 10–15 % by weight of Sika® Raingard-Pro MY	1–2 coats	
	Top coat	Sika <sup>®</sup> Raingard-Pro MY	2–3 coats	
Dry film thickness	Minimum requin tion characterist Total minimum r primer 0.1 kg/m <sup>2</sup>	150 microns max. in minimum 2 coats. Minimum required dry film thickness to achieve the required anti-carbona- tion characteristics (CO <sub>2</sub> equivalent air thickness of 50 m) ~150 microns Total minimum recommended dry film build of 290 microns (including primer 0.1 kg/m <sup>2</sup> ) is required to achieve stated anti-carbonation perform- ance of ~450 m		

### **APPLICATION INFORMATION**

Ambient Air Temperature	+8 °C min. / +40 °C max.	
Relative Air Humidity	< 85 %	
Substrate Temperature	+8 °C min. / +35 °C max.	
Dew Point	Substrate temperature must be at least 3 °C above dew point	

## **APPLICATION INSTRUCTIONS**

#### SUBSTRATE PREPARATION

#### Exposed concrete without existing coating

The surface must be dry, sound and free from loose and friable particles. Suitable preparation methods are steam cleaning, high pressure water jetting or blast cleaning. New concrete must be at least 28 days old. Old concrete that are damp and wet will require at least 24 hours of thorough drying. Renders and screeds should be cured for at least 7 days. Old wet renders and screeds should be thoroughly dry for at least 24 hours. If required, a levelling pore sealer (e.g. Sika MonoTop®-620 MY, Sika Monotop®-711 MY.) should be applied. For cement based products, allow a curing time of at least 4 days before coating.

#### Exposed concrete with existing coating

Existing coatings must be tested to confirm their adhesion to the substrate - adhesion test average > 0.8 N/mm<sup>2</sup> with no single value falling below 0.5 N/mm<sup>2</sup>. Loose or flaking paint in all areas must be removed from the substrate. Inadequate adhesion: Existing coatings must be completely removed by suitable methods and the substrate must be sufficiently sound and suitable to be coated as above. Adequate adhesion: Thorough cleaning of all surfaces by steam cleaning or high pressure water jetting (~200 bar). For water based coating, dilute Sika® Raingard-Pro MY with 10–15 % water by weight and use as primer. If in doubt, carry out adhesion test to determine the suitability of the primer. Wait for at least 2 weeks before conducting the adhesion test. An average value of > 0.8 N/mm<sup>2</sup> is required with no single value falling below 0.5 N/mm<sup>2</sup>.

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#### MIXING

Sika® Raingard-Pro MY supplied ready for use. Stir thoroughly prior to application for color homogenization.

#### APPLICATION

Sika<sup>®</sup> Raingard-Pro MY can be applied by brush or roller or airless spray onto the substrate. However, the direction of application of the 2<sup>nd</sup> coat shall be transverse (at right angles) to the 1<sup>st</sup> coat in order to achieve optimum opacity.

## **BASIS OF PRODUCT DATA**

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.

## LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

## ECOLOGY, HEALTH AND SAFETY

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

# **LEGAL NOTES**

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.

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