BUILDING TRUST

PRODUCT DATA SHEET

Sikagard®-675 W GB ElastoColor

PROTECTIVE COATING FOR CONCRETE

PRODUCT DESCRIPTION

Sikagard®-675 W GB ElastoColor is a one-part, plasto-elastic water dispersed coating based on styrene acrylate dispersion for the protection and enhancement of fair-faced concrete. Sikagard®-675 W GB ElastoColor can be applied over existing coatings or directly onto the concrete surfaces. Sikagard®-675 W GB ElastoColor complies with the requirements of EN 1504-2 as a protective coating.

USES

- Protection and enhancement of concrete structures.
- Concrete repair works on Sika® levelling mortar, fibre cement and overcoating existing soundly adhering coatings.
- Suitable for protection against ingress (Principle 1, method 1.3 of EN 1504-9).
- Suitable for moisture control (Principle 2, method 2.3 of EN 1504-9).
- Suitable for increasing the resistivity (Principle 8, method 8.3 of EN 1504-9).

CHARACTERISTICS / ADVANTAGES

- Water vapour permeable.
- Resistant to weathering and ageing.
- Application by roller brush or spray.
- High covering power (good opacity).
- Prevents water ingress.
- High diffusion resistance to CO_2 (carbon dioxide).

APPROVALS / STANDARDS

Conforms to the requirements of EN 1504-2.
Reaction to fire classification B-s1, d0 in accordance with BS EN 13501-1:2018.
Complies with the requirements of A2-s1,d0 reaction to fire in accordance with BS EN 13501-1:2018 (please contact Sika Technical Services for more information on system build up requirements).

PRODUCT INFORMATION

Chemical Base	Styrene acrylate dispersion
Packaging	15 l pails
Shelf Life	12 months
Storage Conditions	Store in cool and dry conditions. Protect from direct sunlight and frost.
Appearance / Colour	Thixotropic liquid available in almost every colour shade.
Density	~1.42 kg/l (at +20 °C)
Solid content by mass	~64 %
Solid content by volume	~48 %

TECHNICAL INFORMATION

Tensile adhesion strength	~ 2.7 MPa		(EN 1542)
Capillary Absorption	w = 0.07 kg/(m²h$^{0.5}$)		(EN 1062-3)
Diffusion Resistance to Water Vapour	Dry film thickness	d = 270 µm	(EN ISO 7783-1 & -2)
	Equivalent air layer thickness	S_D, H2O = 0.59 m	
	Water Vapour Permeability	35.6 g/m²/day	
	Requirements for breathability	S_D, H_2O ≤ 5 m	
Permeability to CO2	Dry film thickness	d = 160 µm	(EN 1062-6)
	Equivalent air thickness	S_D, CO_2 = 235 m	
	Diffusion coefficient CO_2	µCO_2 = 1.47x 10^6	
	Requirements for protection	S_D, CO_2 ≥ 50 m	
Behaviour after Artificial Weathering	Pass after 2000 hours		
Reaction to Fire	B-s1,d0		(BS EN 13501-1:2018)
	As part of an A2-s1,d0 system is achieveable (please contact Sika Technical Services for system build-up information).		

SYSTEM INFORMATION

System Structure

Normal absorbent concrete and/or well cured thin layer Sika® renders (Sika® MonoTop®-3020, etc.):

System	Product	Number of coats
Priming	Sikagard®-675 W GB ElastoColor diluted with ~15% H_2O (water)	1

Smooth, non-absorbent concrete:

System	Product	Number of coats
Priming	Sikagard®-551 S Elastic Primer	1

Absorbent fair-faced concrete:

System	Product	Number of coats
Priming	Sikagard®-552 W AquaPrimer	1

Water splash zones, de-icing salt exposure:

System	Product	Number of coats
Priming	Sikagard®-705 L or other Sika® hydrophobic impregnation (Penetration depth class II - EN 1504-2)	1-2

Varied types of substrates, dense or weak, tensile strength < 1 MPa:

System	Product	Number of coats
Priming	Sikagard®-551 S Elastic Primer	1

All substrates:

System	Product	Number of coats
Top coat*	Sikagard®-675 W GB ElastoColor	2

* **Note:** With yellow or red colour shade variations and/or dark substrates, more than two coats may be required. Trials are advised. Refer to relevant Product Data Sheets within the system.

APPLICATION INFORMATION

Consumption

Product	Per coat
Sikagard®-551 S Elastic Primer	~ 0.10 - 0.15 kg/m²
Sikagard®-552 W Aquaprimer	~ 0.10 - 0.15 kg/m²
Sikagard®-705 L	~ 0.15 kg/m²
Sikagard®-675 W ElastoColor	~ 0.20 - 0.25 kg/m²

Layer Thickness

Minimum required dry film thickness (DFT) to achieve full durability characteristics (CO_2 diffusion, adhesion after thermal cycling, etc.) ≈ 160 microns.

Ambient Air Temperature

+8 °C minimum / +35 °C maximum

Relative Air Humidity

<80 %

Dew Point

Substrate and ambient temperature must be at least 3 °C above dew point.

Substrate Temperature

+8 °C minimum / +35 °C maximum

Waiting Time / Overcoating

Waiting time between coats at +20 °C substrate temperature:

Previous coating	Waiting time (Hours)	Next coating
Sikagard®-552 W Aquaprimer	≥12	Sikagard®-675 W GB ElastoColor
Sikagard®-551 S Elastic Primer	≥18	Sikagard®-675 W GB ElastoColor
Sikagard®-705 L	≥5	Sikagard®-675 W GB ElastoColor
Sikagard®-675 W GB ElastoColor	≥1	Sikagard®-675 W GB ElastoColor

Note: A refresher coat of Sikagard®-675 GB W ElastoColor can be applied without priming if the existing coat has been thoroughly cleaned.

Applied Product Ready for Use

Final drying: ~24 hours at +20 °C

VALUE BASE

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

LIMITATIONS

- Product must be not thinned unless the 1st coat is used as a primer (refer to coating system structure).
- Application during cold temperatures below recommended application temperatures may reduce adhesion values.
- Product is NOT a chemical resistant coating.
- Product is NOT suitable for constant immersion in water.
- Dark colour shades (especially black, dark red and blue, etc.) may fade more rapidly than other lighter colour shades. Fading will be dependant on UV (ultra violet) light exposure.
- A refresher coat to improve colour may be required at an earlier interval than usual.
- Where colour fade may occur, the protective properties of the coating will remain unaffected.

Do not apply when:

- Rain is expected.
- Relative humidity is > 80%.
- Temperature is below +8°C and/or below dew point.
- Concrete is younger than 28 days.

ECOLOGY, HEALTH AND SAFETY

Local safety regulations must be observed and it advisable to wear PPI when working with this product with particular attention paid to cutting and handling. Transportation Class: The product is not classified as hazardous good for transport. Disposal: The material is recyclable. Disposal must be according to local regulations. Please contact your local Sika sales organisation for more information.

REGULATION (EC) NO 1907/2006 - REACH

DIRECTIVE 2004/42/CE - LIMITATION OF EMISSIONS OF VOC

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY / PRE-TREATMENT

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.
- If required, a levelling render / pore sealer (e.g. Sika® MonoTop®-3020, Sikagard®-720 EpoCem®, Sikagard®-545 W Elastofill, etc.) shall be applied.
- For cement based products, allow a curing time of at least 4 days before coating (when Sikagard®-720 EpoCem® is used, coating can be applied within 24 hours).

Exposed concrete with existing coating:

- Existing coatings must be tested to confirm their adhesion to the substrate and their compatibility - adhesion test average > 0.8 N/mm² with no single value below 0.5 MPa.
- For water based coating, use Sikagard®-552 W Aquaprimer as the primer.
- For solvent based coating, use primer Sikagard®-551 S Elastic Primer.
- If coating type is unknown, carry out compatibility and adhesion testing to determine which primer is most suitable – wait at least two weeks prior to conducting the adhesion test - an average value of 0.8 MPa is required with no single value below 0.5 MPa.

APPLICATION

- Sikagard®-675 W GB ElastoColor is supplied ready for use.
- If required, apply appropriate primer to substrate (refer to coating system structure).
- Sikagard®-675 W GB ElastoColor can be applied by brush, roller or airless spray.
- For airless spray application: Pressure: ~150 bar. Nozzle bore: 0.38–0.53 mm. Spray angle: ~50–80°.

CLEANING OF TOOLS

Clean all tools and application equipment with water immediately after use. Hardened / cured material can only be removed mechanically. For Sikagard®-551 S Elastic Primer, use Sika® Thinner C.

LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for the exact product data and uses.

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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