

Decadex

Water based weatherproof coating

Product Description

Decadex is a single pack, water based, copolymer coating that can reinforced and used to waterproof parapet and plant room walls on a roof.

Uses

- Coloured coating for external walls
- For use over many common substrates

Characteristics / Advantages

- Coloured coating for external walls
- Water based, low odour and VOC content (complies with the requirements of 2004/42/CE)
- Single component
- Easy application by brush or spray
- Cost effective
- High build
- Good resistance against weathering and aging
- Easily reinforced, to provided increased tensile strength
- Anti-carbonation properties
- Light colours are solar reflective
- Resistant to chemicals/pollution
- 10 and 15 year systems are available
- Vapour permeable, whilst providing resistance to moisture ingress
- Affords concrete protection in accordance with the requirements of EN 1504-2

Product Data

Test

Approvals / Standards

- CE Marked - Tested in accordance with EN 1504-2

Form

Appearance

Liquid available in an extensive colour palette
Matt finish when dry

Packaging

15 litres

Storage

Storage Conditions / Shelf Life

24 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.



Technical Data

Chemical Base Waterbased

Density ~ 1.25 EN ISO 2811-1

Solid Content Weight: ~60.5%
Volume: ~49.5%

Service Temperature -50°C to +80°C

Resistance

Chemical Resistance Resistant to a range of chemicals including acids, and alkalis (10% solutions).
For specific requirements, please consult Sika Liquid Plastics

Mechanical / Physical Properties

Elongation: Approx.320% 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: 17.5g/m²/24 hours at 0.29mm nominal dry film thickness. BS EN ISO 7781-1:2000 and BS EN ISO 7783-2:1999

Accelerated Weathering: No surface defects, crazing or flaking. No delamination

Scratch Resistance: Withstands 1 kg without damage. BS:3900:Part E2

Sub Tropical Testing (Florida Weathering): No discolouration, defects, crazing, flaking or lichen growth

Anti-Carbonation: Equivalent carbonation barrier to 520 metres of air.
(Effective barrier = 50 meters).

Roofing



System Information

Minimum Coverage Rates

Coating Only (unreinforced) - 10 Year Expected Durability

Substrate	Substrate must be prepared according to Preparation Section – for further information please contact Technical Services	
	*Local Reinforcement (where required)	
First Coat	Decadex	0.25 l/m ²
Second Coat	Decadex	0.25 l/m ²

Coating Only (unreinforced) – 15 Year Expected Durability

Substrate	Substrate must be prepared according to Preparation Section – for further information please contact Technical Services	
	*Local Reinforcement (where required)	
First Coat	Decadex	0.33 l/m ²
Second Coat	Decadex	0.33 l/m ²

*Where local reinforcement is required embed Sika Flexitape Heavy in 0.6 l/m² (plus wastage) of Decadex.

Fully Reinforced System for Encapsulation

Substrate	Substrate must be prepared according to Preparation Section – for further information please contact Technical Services	
First Coat (Embedment)	Decadex	1.0 l/m ²
Reinforcement	Sika Reemat Premium	
Second Coat	Decadex	0.75 l/m ²

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

Note:

The rates quoted are for smooth, sealed surfaces. Rough porous, absorbent or undulating surfaces will inevitably increase the quantity of coating required, particularly at the embedment/first coat stage, to achieve the necessary film thickness and pin-hole free finish

Typical Test Data - System

	10 Year System	15 Year System	Fully Reinforced System
Dry Film Thickness	250 microns	465 microns	900 microns

Roofing



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

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. Decadex will not adhere to silicone based mastics. Apply direct over polysulphide or polyurethane mastics.

Metals

General: Decadex 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 Decadex. Gloss painted surfaces should be flattened and/or degreased with sugar soap or similar. Existing Decadex, once cleaned, may be coated direct.

Plaster

Usual preparation procedures should be observed. Always use reinforcement if the plaster is degraded or exhibits multiple cracking. In very hot, dry weather, external plaster should be wetted to prevent Decadex applications from drying out too quickly. Apply over Bonding Primer.

Roofing



Plastics

Usual preparation procedures should be observed. Most plastics may be treated but seek advice from our Technical Customer Services Department. Apply over Bonding Primer. When treating polyvinyl chloride (PVC) or plastisol coated metal, Decadex is applied after a pre-treatment of solvent wipe and Metal Primer

Tiles (e.g. mosaic walls tiles etc)

Usual preparation procedures should be observed. Any loose or missing grout should be replaced/filled and the tiles inspected to ensure that they are firmly adhered. Glazed tiles should be mechanically abraded in order to provide a key for subsequent applications. Apply over Bonding Primer.

Timber

Non-checking, exterior quality timber and boards may be treated over Bonding Primer. Damp, checking substrates or those subject to significant expansion and contraction should not be treated. If in doubt, please consult our Technical Customer Services Department.

Application Conditions / Limitations

Air Temperature: +8°C (min) / +35oC (max)

Substrate Temperature: +8°C (min) / +35oC (max)

Substrate Moisture Content: 20% (wood moisture equivalent)

Dew Point: Beware of condensation!
The substrate and uncured coating must be at least 3°C above dew point.

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.).

Brushes
Always use a soft, wide nylon or bristle brush. Do not use sweeping brushes.

Cleaning of Tools: Clean equipment in water immediately after use. Dried Decadex may be removed with cellulose thinners, xylene or toluene

WaitingTime/Overcoating If in doubt, allow 24 hours between coats

Curing Details

Waiting time/ Overcoating

Temperature	Relative humidity	Touch dry	Full cure
+5°C	50%	1 hour	2 hours
+20°C	50%	45 minutes	1 hour

Note 1: Times are approximate and will be affected by changing ambient conditions

Note 2: Typical drying times quoted are for a wet film thickness of 550 microns

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 Decadex 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 Sika 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

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CE Labelling

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

 0836-CPD
Decadex
Sika Liquid Plastics, Sika House, Miller Street, Preston, UK, PR1 1EA
09
09/F015
EN 1504-2
Surface protection systems for concrete
Coating
Permeability to CO ₂ : 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

Roofing



Product Data Sheet

Edition 11.2014

Identification no. 02 03 03 01 002 0 000038

Version no. 02

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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