

PROJECT OVERVIEW

UK Gunite LTD
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Sydenham
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17 July 2024
Reference: IB-00009890

Dear Damien Wiffin

Thank you for giving us the opportunity to provide you with a Sika product specification for the remedial works detailed herein.

Further to our discussions regarding the above structure on Tuesday, 26 September 2023, this document has been compiled for your attention by Ibrahim Bekri of Sika Limited and provides a product specification for the required works.

Our product specification is based upon our discussions, an understanding of your requirements and any site survey and testing data that has been made available. This specification is valid for a period of 12 months, after which a further product specification should be requested to ensure the suggested solutions are still fit for purpose.

Any variations to this specification and its related clauses must be authorised by Sika Limited to ensure the suitability of the proposed changes and assess any impact this may have on performance. Any guarantee may be invalidated if this is not adhered to.

As part of Sika Limited's continuous product development, we retain the right to alter our product specifications in accordance with relevant national and international standards without notice.

As per Section 1.1 within the proposal document, in order to initiate the guarantee process the contractor must inform Sika Limited at scs.technical@uk.sika.com before commencement of the work, providing the information detailed.

We trust this is of assistance to you. If we can be of further help on this, or any other project, please do not hesitate to contact me on +44 7970122264.

Yours sincerely





Ibrahim Bekri
Area Specification Manager

Jamie Squires
Commercial sales - SCS - London

PROJECT PROPOSAL



UK Guniting LTD - Sydenham

PROJECT: SOHO- Isokon
PROJECT REF: IB-00009890
DATE: 17 July 2024

CONTACT SHEET

Prepared for: UK Gunitite LTD
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Date: 17 July 2024

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1 SOHO- ISOKON

1.1 GENERAL INFORMATION

Guarantee Process

Our product specification is based on a remedial solution that will provide a guarantee in accordance with the system schedule(s). For the guarantee process to be triggered the contractor must e-mail the following to scs.technical@uk.sika.com before work commences:

1. Sika Specification Reference
2. Expected start date
3. Expected completion date
4. A contact name, email address and phone number

To attain the guarantee, the contractor must complete the Daily Materials Site Record and Specification Guarantee documents, which will be sent on receipt of the above email. Sika Limited retain the right to amend or remove any guarantee offering if the correct information is not provided.

Repair and Protective Material Selection & Compliance

In all cases the Contractor shall provide manufacturers' evidence to verify that they meet the requirements set out in BS EN 1504 and as such all materials where relevant should be CE or UKCA marked.

The materials must be supplied from a ISO 9001:2015 approved manufacturing plant and supplied from a single manufacturer to ensure compatibility and ensure long term durability.

For individual product application requirements please refer to current Product Data Sheets and Method Statements, which can be obtained via e-mailing scs.technical@uk.sika.com.

Concrete Substrate Quality and Preparation

Concrete Removal

After removal of defective concrete, the prepared repair area shall be free from dust, loose material, surface contamination and materials which reduce bond or prevent suction or wetting by repair materials.

Delaminated, weak, damaged, and deteriorated concrete; and where necessary sound concrete shall be removed along with tying wire fragments, nails and other metal debris embedded in the concrete where possible.

Uncoated Concrete Surfaces and Removal of Existing Coatings

The concrete shall be cleaned, and all blowholes and honeycombed areas exposed. Where applicable all existing coatings should be removed.

The surface shall be free from dust, loose material, surface contamination, existing renders, laitance, coatings, oil, and any other materials which could reduce surface adhesion.

Surfaces shall be prepared to an open texture, suitable for the coating system specified.

Coated Concrete Surfaces with Coatings Remaining

If it is deemed that existing coatings are to be overcoated rather than removed, then compatibility testing between the existing coating and the new Sika® specified Sika coating system together with a dry cross-cut test and adhesion test should be undertaken prior to proceeding with the works.

However, it should be borne in mind that failure to remove existing coatings may lead to an increased risk of technical compromise. Sika Limited is not responsible for failures related to the underlying coating or its bond to either the substrate or newly applied Sika coating.

Preparation of Steel Reinforcement

Using media blasting techniques, rust, scale, mortar, concrete, dust, and other loose and deleterious material which reduces bond or contributes to corrosion shall be removed to a minimum standard of SA2 or SA2.5 (see the relevant Product Data Sheet and/or Method Statement for details).

The whole circumference of the exposed reinforcement shall be uniformly cleaned, except where structural considerations prevent it.

If environmental constraints preclude the use of abrasive or water blasting preparation techniques, where corrosion has been induced by carbonation and where ingressed chlorides are not present, mechanical preparation techniques may be used in combination with Sika® Galvashield XP galvanic anodes. Please consult the Sika technical team for further details.

Curing Treatment

It is essential to cure repair mortars immediately after application for a minimum of 3-7 days depending on site exposure and weather conditions, to ensure full cement hydration and to minimise cracking. Curing compounds shall not be used if subsequent smoothing coats/pore filling or protective coatings are to be used.

For rapid setting products No special curing is required at temperatures between 5°C and 35°C. For placing at temperatures outside this range contact the Technical Service Department. At early ages do not allow placed concrete to rapidly dry and protect from rain and frost.

For more information, please refer to the relevant Product Data Sheet and/or Method Statement

Throughout the exterior of the block there are signs of carbonation & weathering.

There are localised areas of spalling concrete due chemical attack (Freeze Thaw) The makeup of the concrete is a ready mix made of concrete and stones and loose materials. The reinforcement for the balconies appears to be a cantilevered I Beam with possible rebar running through the linear.

Stair treads

If stair treads & landing repairs need treatment a combination of Sika Monotop 630 Rapid & Sikadur 41 for nose cones can be used. This is structural two part adhesive and repair mortar, based on a

combination of epoxy resins and special fillers.

Walkways

The external decks require refreshing to encapsulate preserve the repairs to the soffits and further enhance the Sika guarantee.

Sika flooring have an external decking system which would work in unison with the concrete repairs preserving the restoration, Sikafloor Pronto RB-58 a acrylic resin based, crack-bridging, fast curing decking membrane system. is a durable, flexible, slip resistant floor coating for balconies, terraces, stairs.

Construction joints/ Movement joints

Mastics which have unbonded, would need to be raked out and reapplied as this also plays a part in channelling water into the parent slab causing the coatings to debond and accelerate the degradation of the steels.

Sika sealing and bonding can offer a specification for mastics for movement joints.

Sika sealing and bonding can offer mastics for movement joints Sikaflex PRO-3 Purform - Mastic for movement and construction joints, trafficable by foot or by vehicle. Sika sealing and bonding will supply a specification for these areas.

or

Sika Hylfex 250 Façade is a 1-part polyurethane joint sealant. It is used for durably sealing movement and connection joints in concrete, masonry and EIFS facades. This will stop the channelling of water and containments into the parent slab. Preserving the restoration and repairs.

Flat Roof

Sika would recommend a investigation into the flat roof , a free assessment and specification can be obtained.

Summary

Sika would recommend the concrete be percussion tested and delaminated concrete recorded, identified, and marked out. Any loose concrete be removed to stop harm of person or property.

The contractor or a test house is recommended to investigate the condition of the concrete and submit a copy to both Sika and the client for filing purposes.

Sika will also require measures before the project is started. This is Sq meterage & Lm Linear meterage so a accurate forecast of materials can be made and to stop any hampering of works due to lack of material/ product supply.

Conclusion

Any loose concrete be removed to stop harm of person or property, this is a priority as a make safe.

Sika would advise the downpipes and outlets are given a CCTV drainage survey.

Testing under BSEN 1504 is split between required and recommended, please see your tests below.

Test awaiting are:

Percussion - Required (Hammer test to mark out delaminated areas for repair)

Carbonation - Required Carbonation (Measure depth levels of carbonation ingress)

Cover - Required - (Cover over rebar, this works with carbonation to see how close carbonation is to steels)

Chloride - Recommended – (This is to check the contamination levels in the concrete via dust particle analysis)

This specification has been written in mind of full coatings remaining; as per Fire safety Act 2022 Buildings = /<11m with 1000mm boundary. Sika always recommends seeking clarification and direction from a suitably qualified Fire Engineer / Consultant as to the appropriate system, or systems, to be applied to the building / structure in question.

If it is the expert's conclusion that removal of existing coatings is necessary for a given project and that safety cannot be assured by overcoating with a protective coating with a sufficiently low spread of flame rating, Sika can rewrite the specification to that effect.

Testing

1. Chloride testing to BS 1881:Part 124:2015
2. Carbonation testing to BRE I/P 6/81
3. Cover meter survey to BS 1881:Part 204:1988

Chloride testing to BS 1881:Part 124:2015

Dust samples of concrete for testing are taken by rotary percussion drilling a hole (min dia. 10mm Max dia. 15mm) and placing the removed dust into sealable plastic sample bags with identification labels giving details of date, location, depth, technician, site etc. Depths can vary in range typical depth is to steel and behind 5 to 25 mm, 25 to 50 mm, 50 to 75 mm.

This specification will ask for the first 5mm to be discarded. The dust samples are entered onto a schedule before being sent to a UKAS accredited laboratory.

The results are shown on analysis results, EG a result showing a chloride concentration greater than 0.4% with respect to cement content suggests reinforcement corrosion will be a problem. Testing of dust samples is to be in accordance with BS 1881. a result yielding >0.7% will require a sacrificial anode as chemical treatment will not be possible.

Carbonation testing to BRE I/P 6/81

Carbonation testing is carried out to determine the depth of carbonated concrete. There are several methods of carrying out carbonation tests, the most commonly used are:-

A. A small piece of concrete is broken away and a solution of phenolphthalein sprayed onto the freshly exposed substrate.

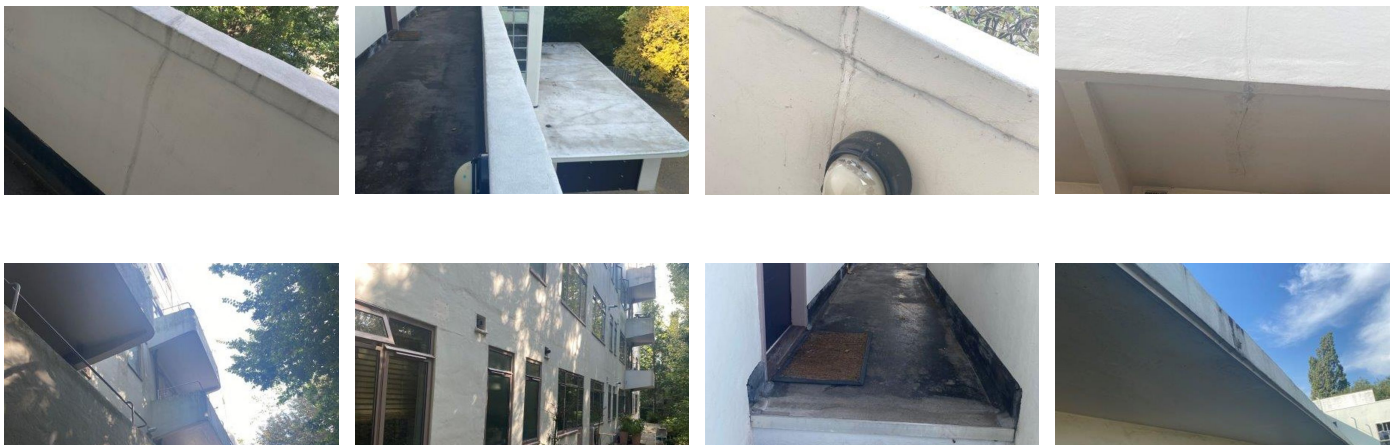
B. A hole is drilled (approx. 20- 25mm dia. depth 30-50mm) and the dust removed from the hole, a solution of phenolphthalein is then sprayed into the wall of the hole.

In both methods the good quality highly alkaline concrete will turn pink in colour so that the depth of carbonation from the surface can be measured in mm. Phenolphthalein solution is prepared by dissolving 1 gm of phenolphthalein powder in 50ml of ethyl alcohol and making up to 100ml with water. Ready made solutions available are also acceptable..

Cover meter survey to BS 1881:Part 204:1988

A cover meter survey is carried out using methods and equipment as described in BS 1881 part 204. The direction of the reinforcement with least cover is determined and the range of cover recorded.

All cover meters work on the principle that ferromagnetic cores measure the induced current produced when another ferromagnetic object –usually the reinforcement completes the circuit. It is important for the operator to be experienced or competent in reading results. Many factors can influence the readings; reinforcement depth and bar size. If possible, Sika will ask for exposure of section of reinforcement for inspection and check for any circumference loss.



2 CONCRETE COATED AREAS

2.1 SYSTEM SCHEDULE

AREA	MATERIAL
Classification	Concrete Repair & Protection
Main Degradation Cause Carbonation	Carbonation
Guarantee required	10 years
Placement Method Options	Hand Placed
Reinforcement Corrosion Protection Coating	Sika MonoTop®-1010
Repair Mortars	Sika MonoTop®-615
Corrosion Management Systems	Sika® Margel VPI-580
Protective Coating Primer System	Sikagard®-552 W Aquaprimer @ 0.12 L/m ²
Protective Coating System	Sikagard®-675 W GB ElastoColor @ 170 microns dft

2.2 REINFORCEMENT CORROSION PROTECTION COATING

Sika® MonoTop-1010

Immediately after preparation to SA2, apply two coats of Sika® MonoTop-1010 to the whole exposed circumference of the reinforcement. Wait until the first layer has dried before applying second layer. Allow to harden before applying repair mortars.

Sika MonoTop®-1010 is a 1-part, cementitious, polymer modified coating material used as bonding primer and reinforcement corrosion protection. It contains recycled waste materials which leads to a reduced carbon footprint compared to an equivalent performing mortar. For more information, please refer to the relevant Product Data Sheet and/or Method Statement.

2.3 REPAIR MORTAR APPLICATION

Sika® MonoTop-615

Sika® MonoTop-615 can be applied either by hand or by the wet spray method.

Apply the pre-mixed Sika® MonoTop-615 repair mortar “wet on wet” onto the bonding primer between the minimum and maximum layer thicknesses as stated on the Product Data Sheet.

Sika MonoTop®-615 is a one component cement-based polymer modified high build repair and reprofiling mortar, meeting the requirements of Class R3 of BS EN1504-3.

For more information, please refer to the relevant Product Data Sheet and/or Method Statement.

2.4 TOTAL CORROSION MANAGEMENT

Sika Margel VPI 580s (Uncoated & Coated)

Sika® Margel VPI 580 shall be installed in all unrepaired concrete areas. They are typically installed by drilling 20 mm diameter holes, 55 mm deep.

Sika® Margel VPI 580 is a patented vapour phase corrosion inhibitor which is inserted inside concrete structural elements close to the reinforcing steel.

For spacing and installation guidance please refer to the relevant Product Data Sheet and/or Method Statement.

2.5 PROTECTIVE COATINGS AND PRIMERS

Sikagard®-552 W Aquaprimer

Following application of either the specified pore filler OR smoothing coat apply one coat of Sikagard®-552 W Aquaprimer. For specific consumption rates please refer to the system schedule(s) within this documentation.

If neither pore filler or smoothing coat are required sufficient surface preparation must be achieved prior to application.

Sikagard®-552 W Aquaprimer is a one-component water dispersed adhesion promoting primer for water dispersed polymer paint coatings. Sikagard®-552 W Aquaprimer is part of a system that complies with the requirements of EN 1504-2 as a protective coating.

For more information, please refer to the relevant Product Data Sheet and/or Method Statement.

Sikagard®-675 W GB ElastoColor

Following application of the specified primer, apply 2 coats of Sikagard®-675 W GB ElastoColor. For specific consumption rates please refer to the system schedule(s) within this documentation.

Sikagard®-675 W GB ElastoColor is a one-part, plastoelastic water dispersed coating based on styrene acrylate dispersion for the protection and enhancement of fair-faced concrete. Sikagard®-675 W GB ElastoColor complies with the requirements of EN 1504-2 as a protective coating.

For more information, please refer to the relevant Product Data Sheet and/or Method Statement.

Sikagard®-675 W GB ElastoColor is supplied pigmented using RAL classic shades. RAL 9016 (traffic White) is the standard shade, along with the group 1 colours listed below. Other RAL classic shades are available on request.

Group 1 Colours



RAL 1014



RAL 1015



RAL 7030



RAL 7032



RAL 7035



RAL 7037



RAL 9001



RAL 9003

3 SOHO- ISOKON

3.1 DISCLAIMER

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.

Sika Limited does not fulfil the role of the Principal Designer and therefore preparation for the proposed specification and subsequent works should only commence when all parties involved with the design and execution of the works are satisfied the appropriate CDM regulations have been fulfilled.

3.2 PRODUCT DATA SHEETS

Concrete coated areas

Sika MonoTop®-1010	VIEW
Sika MonoTop®-615	VIEW
Sika® Margel VPI-580	VIEW
Sikagard®-552 W Aquaprimer	VIEW
Sikagard®-675 W GB ElastoColor	VIEW

SIKA CONCRETE REPAIR & PROTECTION

(CLIENT / APPLICATOR XX YEAR
GUARANTEE)

Guarantee No: Click or tap here to enter text.

Client/Owner: Click or tap here to enter text.

Applicator: Click or tap here to enter text.

Sika Project Reference: Click or tap here to enter text.

Site Address: Click or tap here to enter text.

Sika Products used: Click or tap here to enter text.

Total Project area (m2): Click or tap here to enter text.

Guarantee period: Click or tap here to enter text.

Works Start Date: Click or tap here to enter text.

Works Completion Date: Click or tap here to enter text.

Guarantee clauses

1. Sika Limited ("Sika") guarantees that the Sika-Products listed above and supplied by it meet at the time of delivery, the technical properties according to the relevant Product Data Sheets and System Data Sheets.
2. It is the responsibility of the Applicator to ensure Sika products are installed correctly according to the Product Data Sheet and/or Method Statement.
3. Should the Owner/Client or Applicator during the Guarantee Period as defined above give written notice of any defect for which Sika is responsible pursuant to this Guarantee, Sika shall:
 - Deliver free of charge defect-free suitable replacement Sika-Products
 - Reimburse the Applicator for the Labour cost necessary for the repair or replacement of the defective Sika-Products. "Labour" shall mean the personnel directly involved in the repair or replacement with the exclusion of any administrative or executive/management personnel; and such replacement and reimbursement is the sole remedy of the Applicator in this Guarantee.
4. This Guarantee is conditional upon the following:
 - Sika has been paid in full for the Sika-Products delivered for the Project;
 - The defective Sika-Products have been used for the Application as defined above;

The defects or damages are not the result of any of the following:

- Non-compliance with guidelines regarding storage and application of the Sika-Products, including but not limited to usage within the shelf life; and non-compliance with the Product Data Sheet and/or Method Statement; or
- any alterations or additions or repairs to the Sika-Products by others; or
- quality of substrate to which Sika-Products is applied not meeting the requirements as set forth by Sika, including but not limited to disintegration of the substrate; or
- faulty design or quality of the construction in which Sika-Products are used; or external effects, such as acts by third parties (including but not limited to damage and/or destruction) or acts of nature such as earthquakes, lightning, hurricanes, floods, fire etc. or any uncontrollable and/or unforeseen settlement or movement of material or constant contact of the Sika-Products with incompatible substances or mechanical damages; or
- ageing including any purely aesthetical changes

Sika has been informed immediately in writing about imminent damages or defects which may have been caused by defective Sika-Products and has had the opportunity to inspect them. The report to Sika to include:

- type of failure of the Sika-Products
- batch number or numbers of the Sika-Products
- specific location(s) of defective Sika-Products
- no repair measures covered by the guarantee have been taken without Sika's prior approval
- all reasonable measures to limit existing damage or prevent imminent damage have been taken
- the Applicator has fulfilled its duties pursuant to Clause 4.

5. To ensure the quality of the Application, the Parties agree on the following:
- the Applicator must maintain accurate records through a Quality System according to ISO 9000 ff. to assure constant observance of,
 - Including but not limited to, the Sika Application Guidelines/Sika Method Statement, to ensure a consistent installation process.
 - identical quality of the substrates to which the Sika-Products are applied. In case of change to, or different quality of the substrate,
 - the suitability of the Sika-Product must again be examined
 - use of adequate installation equipment
 - personnel of the Applicator will be regularly instructed on how to apply the Sika Products at the Sika Training Academy
 - the Applicator assures that only properly Sika trained and certificated persons for each appropriate Flooring system are allowed to apply the appropriate Sika-Products
6. This Guarantee shall exclusively apply to the Sika Products applied for the Project. This Guarantee contains all the provisions between Sika and the Applicator relating to liability for the Sika Products in connection with the Application and Project and such provisions shall apply instead of any liability provisions in any contract between Sika and the Applicator (whether oral or written), any terms of purchase or any other terms and conditions. In particular, Sika shall not be liable:
- for the correct application of the Sika Products by the Applicator or any third party. The presence of any Sika personnel on the job site shall not imply any responsibility of Sika whatsoever
 - for the quality of any Sika-Products which are declared as still in the trial or development phase
7. Sika's maximum aggregate liability to the Applicator in connection with the Sika-Products for the Project, whether arising in or caused by breach of this Guarantee, or breach of contract, tort (including negligence), breach of statutory duty or otherwise, shall in no circumstances exceed 100% of the total net invoiced amount (excl. VAT) of the Sika-Products delivered for the Project, or 100% of the net invoiced amount (excl. VAT) of the Sika-Products delivered for the Project in the 12 months before the defective Products were delivered, whichever amount is smaller. Sika's maximum aggregate liability shall be subject to a diminution of 10% for every 12 month period that is completed of the Guarantee Period
8. Except as expressly provided herein, Sika shall not be liable to the Applicator in connection with the Sika-Products for the Project, for any loss of income, loss of actual or anticipated profits, loss of business, loss of contracts, loss of goodwill or reputation, loss of business, loss of anticipated savings or indirect or consequential loss or damage of any kind, in each case howsoever arising, whether such loss or damage was foreseeable or in the contemplation of the parties and whether arising in or caused by breach of contract, tort (including negligence), breach of statutory duty or otherwise.
9. There are no conditions, warranties, representations or terms, express or implied as to the Sika-Products, that are binding on the parties except as specifically stated in this Guarantee; any condition, warranty, representation or other term which might otherwise be implied into or incorporated in this Guarantee or any contract, whether by statute, common law or otherwise, is hereby expressly excluded.
10. This Guarantee is governed by the material laws of England and the parties submit to the exclusive jurisdiction of the English courts to resolve any disputes arising out of or in connection with this Guarantee.

11. The parties do not intend that any term of this Guarantee may be relied upon or shall be enforceable by virtue of the Contracts (Rights of Third Parties) Act 1999 or otherwise by any person who is not a party to this Guarantee.

Signatories

Date: Click or tap here to enter text.

Signed Sika Limited

Date: Click or tap here to enter text.

Signed Sika Limited

Craig Summers

Head of Sales

Specialist Construction Solutions

Jamie Squires

Product Engineer

Specialist Construction Solutions