SIKA ROOFING
SITE SURVEY REPORT




WE ANSWER

O'Connor Roofing Services Ltd - Hartlepool

PROJECT: Cleveland Health Centre
PROJECT REF: DH-0279571
DATE: 4 August 2021

BUILDING TRUST

Sika Limited · Watchmead · Welwyn Garden City · AL7 1BQ · United Kingdom

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4 August 2021
Reference: DH-0279571

Dear Roy O Conner

Further to the site visit on the 2021-07-29, this document has been compiled for your attention by Darren Holden of Sika Limited, it is based on the information gathered during recent discussions and is intended to provide details relating to the treatment of the roof area(s) in question.

This specification should be read in conjunction with the relevant product data sheets and all named appendices.

This specification is valid for a period of 12 months, after which a further site survey should be carried out to ensure that the suggested solutions are still fit for purpose.

Any variations to this specification must be confirmed by Sika Liquid Plastics to ensure the suitability of the proposed change and any impact this may have on any guarantees offered or implied. As part of Sika Liquid Plastics' continuous product development, we retain the right to alter our product specifications in accordance with relevant national and international standards without notice.

The specified system is designed utilising cold applied Sika Liquid Plastics products and intended to avoid the use of hot works.

However, should the installing contractor require use of any heat or hot works during installation for preparation or drying, care should be taken and all hot works must be carried out with the clients permission and in strict accordance with Health & Safety Guidelines with particular reference to Safe2Torch. A comprehensive guidance document can be found on the NFRC website: https://www.nfrc.co.uk/safe2torch.

We trust this is of assistance to you. If we can be of further help on this, or any other project, please contact me on null.

Kind regards

Darren Holden
Area Technical Manager

Simon Robertson
Technical Team Manager (LAM)

CONTACT SHEET

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Date: 4 August 2021

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CONTENTS

1 SITE SURVEY CLEVELAND HEALTH CENTRE - FLAT ROOFS

1.1 CDM REGULATIONS

The Construction (Design and Management) Regulations (CDM) are about the management of health and safety and apply to everyone associated with construction projects including the client. Regulations 4 and 5 state that it is the client's duty to make suitable arrangements for managing a project and maintaining and reviewing them for its duration so that it is carried out in a way that manages the health and safety risks involved. For projects involving more than one contractor, these regulations require the client to appoint a Principal Designer and Principal Contractor and to make sure that they carry out their duties. It is also the client's responsibility to engage a competent team that can include Contractors, Designers and Sub-Contractors and to provide all duty holders the appropriate information at the appropriate time.

For further information on the requirements of the CDM Regulations visit

http://www.hse.gov.uk/pubns/books/l153.htm for free guidance.

All construction projects will have to comply with the CDM Regulations, however Regulation 6 states that the HSE or other relevant enforcing authority, do not need to be notified about all of them. Notifiable projects are projects that:

- last longer than 30 working days and have more than 20 workers working simultaneously at any point in the project; or
- exceed 500 person days

The easiest way to notify any project to the HSE or other relevant enforcing authority is to use the online notification form F10 on the HSE's website. Further information on how to notify construction work can be found at:

www.hse.gov.uk/construction/cdm/faq/notification.htm.

Clients, Designers and Contractors still have responsibilities for those projects that the HSE does not require notification on.

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.

1.2 ROOF PLAN

The images shown below have been illustrated to show the areas surveyed and their priority for treatment.

- **Red;** Main Roof Area
- **Blue;** Walkway Area

1.3 CONDITION REPORT

1.3.1 PROJECT OVERVIEW

Roof Surfaces & Internal Gutter Runs: The proposed **Sika Liquid Plastics** system is to be installed utillizing the existing falls.

Note: Should the existing falls not be corrected, standing water will remain following installation of the proposed system.

1.3.2 CORE SAMPLING & INTERNAL INSPECTION

Core Sample: A core sample was taken to assess the build-up and condition of the roof, this was found to be as follows...

[MULTILINE:Items|value=Sarnafil PVC Membrane.50mm PIR Insulation,ChippingsBituminous Layers12mm fibreboardMetal Deck,]

Core samples which are taken as a method of confirming the existing deck and waterproofing system construction. These samples give a clear indication of the general condition of the roof build-up in that specific location.

Please note: Findings are representative only of the particular location sampled and this is used to give general guidance as to the likely overall condition and deck and construction. Due to the limited number of core samples that can be practically taken on a roof, Sika Liquid Plastics cannot be held responsible for any changes in roof build-up in areas where core samples have not been taken.

Core Sample Moisture Result: Moisture was found in the roof build up above the structural deck. Good roofing practice dictates that the existing roof build up should be stripped.

The roof areas were scanned with an electrical impedance device. Localised areas of wet insulation were identified and confirmed with core sampling. These areas will need to be stripped out nd the insulation replaced.

1.3.3 STANDING/PONDING WATER

Standing Water: At the time of inspection this roof area was showing no visible signs of standing water, however, areas of dipping or sagging which affects the overall roof plane may encourage ponding water.

Note: Areas of ponding water can cause damage to the existing waterproofing due to the constant cycle of freeze thaw.

This specification is for the over coating of the existing substrate and this treatment is designed to extend the life of the existing roof substrate. This treatment will not remove areas of ponding from this roof.

Small areas of ponding water have no detrimental effect to the proposed waterproofing system as we anticipate these areas will dry out through climatic changes. Larger areas which will stand for a significant amount of time may accelerate degradation of the system by UV exposure through standing water.

Note: Any areas which are identified as dipping or sagging preventing natural drainage to the outlets should be corrected prior to installation of the proposed Sika Liquid Plastics system.

Ponding: Standing water is an issue in places, increasing the likelihood of water ingress via defects in the existing waterproofing.

The cause of the ponding should be investigated further and all necessary action taken to eliminate recurrence.

There are significant areas of pond in water. Sumps will need to be formed to aid the drainage

1.3.4 HISTORICAL REPAIRS

Short Term Repairs: Repairs have been carried out to the existing waterproofing. Individual repairs should be assessed for integrity and removed where necessary.

Non compatible repairs will need to be removed

1.3.5 UPSTANDS

Upstand Heights:- Upstands should conform to the recommendations of BS 6229:2018: Flat roofs with continuously supported coverings – Code of practice: Section 7.1 concerning the minimum height of upstands.

"The design of drainage falls should ensure that the continuity of the waterproof covering is maintained for a vertical height of 150mm above the finished roof level at all abutments, door openings and parapets. For inverted roofs, those overlaid with paving, or garden roofs, the finished roof surface is the upper surface of the ballast, paving slabs or growing medium."

Note: Where any upstand detail does not satisfy the above recommendations, Sika Liquid Plastics must be informed, advice/recommendations may then be provided by Sika Liquid Plastics. If this advice is not followed, the identified detail may be excluded from the guarantee.

1.3.6 PERIMETERS

Existing Watercheck: The existing waterchecks are in a good condition and are suitable for overcoating.

1.3.7 PENETRATIONS

Penetration Details: The existing penetrations must be inspected to determine their suitability to receive the new system.

Prepare/repair/replace as necessary prior to installation of the specified system. The penetration must offer a minimum termination clearance of 150mm above the newly installed waterproofing finish and therefore may need to be adjusted to accommodate.

1.3.8 ROOFLIGHTS/ACCESS HATCHES/GLAZING

Rooflights: The rooflights are in a good condition and are to remain in situ.

1.3.9 DRAINAGE

The design of roof drainage should be carried out in accordance with BS EN 12056-3:2000 which specifically states the following:

General: Design of roof drainage systems shall take account of construction tolerances and settlement so as to avoid backfalls and ponding, which may adversely affect durability.

"All flat roofs should be laid to a minimum finished fall of 1:80, and to achieve this a design fall of 1:40 should be used to ensure proper drainage as recommended in BS 6229:2018."

Outlets: Remedial work required prior to the application of the waterproofing system involving cutting back, levelling and removing obstructions to allow efficient drainage.

1.3.10 MISCELLANEOUS/PLANT/EQUIPMENT/SERVICES

Roof Furniture: Areas of roof furniture that are to be encapsulated to a termination point should be inspected and repaired or replaced as necessary.

Safety Rail System: A safety rail system is present on this roof area. If ballasted, this should be raised in order to allow the waterproofing to be completed and once installed, can be reinstated on suitable pads to protect the new membrane.

If mechanically fixed, the penetrations should be suitably prepared to receive the waterproofing membrane and detailed in adherence to the specification guidelines.

Lightning Conductors:-

- Lightning conductor cables should not be coated. They must either be removed or suspended to allow for coating.

Note: The Contractor will be responsible for either removing or raising the conductor cables but only once proper authority has been granted. Coatings should be allowed to fully cure before replacement using suitable approved non-mechanical fixtures. Once in place, the system should be inspected and tested by a qualified engineer.

1.4 DISCLAIMER

The information, and, in particular, the recommendations relating to the application and end-use of Sika Liquid Plastics products, are given in good faith based on Sika Limited's current knowledge and experience of the products when properly stored, handled and applied under normal conditions. 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, unless from any written recommendations, or from any other advice offered by Sika Limited. 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 Product Data Sheet for the product concerned, copies of which will be supplied on request.