CASE STUDY

BUILDING SURVEYING

GRAHAM SIBBALD

ROOF REFURBSIHMENT WORKS TO CORRIE PRIMARY SCHOOL

PROJECT SUMMARY

The Design, Specification, and Quality Management of a roof refurbishment project, following prolonged issues of water-ingress to the internal areas of the property.

TEAM
Manchester Building Surveying Department

LOCATION
Manchester, Tameside

CLIENT
Roberston FM

DATES
January – April 2024

SUBHEADER

Further to reports of longstanding and undiagnosed issues of water-ingress, Graham + Sibbald were appointed by Robertson FM (on behalf of Tameside Borough Council) to identify the source of the defects and provide an appropriate remedial specification to address the issues at Corrie Primary & Nursery School.

The roofs had suffered from ingress for a number of years with speculative liquid applied treatments being used to remedy the issues without any long-term success. Furthermore, excessive ponding and heavily blistered membranes were also contributing to the increased risk of ingress, with a legacy of issues collectively affecting the existing systems waterproofing integrity.

WHY G+S

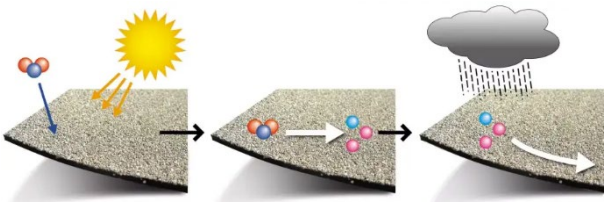
Graham + Sibbald were instructed due to our wealth of experience in the flat roofing industry and in particular, the discipline of defect analysis, which will ensure the source is correctly identified and the measures recommended for repair are appropriate and fully justified, both in reason and in cost.

As a result of our dedication to provide a very high service at a very good cost, we work with a broad spectrum of clients, including a number of leading names in the public and private sectors, representing a wide range of retained clients including Local Authorities, Inward Investors, Government Departments, Major Retailers and Industrialists, Licensed Trade Operators and Insurance Brokers via their Loss Adjusters, amongst many others.

APPROACH

A full condition survey was undertaken to multiple roofs of the property, identifying previous speculative repairs, blistered membranes and areas at high risk of ingress. Shrinkage, mineral loss and surface erosion were all contributing to the accelerated degradation of the existing system, leaving little choice but to fully replace the roof with a new high-performance specification.

We specified BMI Icopal's Noxite as an environmentally friendly roofing system, which uses the sun, wind and rain to transform harmful nitrogen oxides (NOx) into harmless nitrates. The product features a granular titanium oxide finish which, when activated by UV radiation from the sun, converts nitrogen oxide particles (carried by polluted air) into nitrates, which are then washed away by rainfall.



The result is a highly effective means of reducing a building's environmental impact, with Noxite continuing to work for the entire life of the roofing membrane. BMI Icopal confirm *'independent testing has proven that Noxite membranes can break down up to 90% of the NOx absorbed from the surrounding air within two months of installation and that these effects last the lifetime of the roof - which, over a 20-year period, the membranes may absorb and break down over 4 kilograms of NOx per square metre of roof.'*

ADDED VALUE

Specifying such a system not only provides the school with a robust roofing system for over 20 years, it is also helping to clean the local air for the children and the building users.

SERVICES PROVIDED

Throughout the project Graham + Sibbald were able to provide a number of services to the client;-

- Defect Analysis and Building Pathology
- Design and Specification

KEY CHALLENGES

The project was undertaken during the winter months with the school remaining in occupation throughout the project, which was subjected to a number of storms, with inclement weather from heavy rain, snow and frost complicating the construction phase of the project.

Furthermore, the Noxite membrane's white mineral finish, presented further challenges in keeping the primary covering clean and free from dust, dirt and grease throughout the project, to leave an aesthetically pleasing finish.

KEY MESSAGE

It is our responsibility as surveyors, specifiers and designers to ensure buildings are always protected with the appropriate materials, however it is not always possible (due to budgets and time constraints) to always specify the most sustainable solution. This roofing membrane provides an ideal opportunity to break that ideology and is a perfect product for clients and buildings to take advantage of a sustainable solution that can reduce a properties environmental impact at an affordable price.

TAMESIDE COUNCILS ENVIRONMENTAL STRATEGY 2021-26 STATES:

"OUR CARBON AND ENVIRONMENT STRATEGY 2021-26 AIMS TO CREATE A COLLECTIVE RESPONSIBILITY FOR OUR BOROUGH'S ENVIRONMENT. IT IS IMPORTANT WE PROVIDE OUR RESIDENTS AND LOCAL BUSINESSES WITH THE SUPPORT AND GUIDANCE THEY NEED TO CUT THEIR CARBON AND INFORM AND INFLUENCE THEIR COMMUNITIES."

A Noxite mineral insulated overlay specification was therefore produced, aligning us with our client's ethos by reducing air pollution, cutting CO2 emissions and improving energy efficiency. It also had the benefit of reducing waste going to landfill, further highlighting our commitment to and shared values with Tameside MBC's environmental strategy.

OUTCOME + RESULTS

The project was awarded 'Runner-up' at the Intelligent Membrane Associations (IMA) 2025 Awards in their Eco-Activ Category, which recognises a projects commitment to carbon and sustainability reduction principles.

noxite an eco-activ solution

IMA AGM 2025

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