



Case Study: Grove Park School, Chiswick

Project

Grove Park Primary School,
Chiswick, London W4

Building owner

Grove Park Primary School

Architect

Redmond Ivie Architects,
Chiswick, London W4

Roofing Contractor

Delomac Roofing, Bedford

Roofing System

Sarnafil G410-18ELF membrane
bonded using sarnacol 2170
adhesive.
Sarnatherm G insulation
mechanically fixed to underlying
aluminium deck using peel rivets.

Project Size

3,500m²

Completion Date

August 2004

Grove Park Primary School in Chiswick sought the help of Sarnafil's Roof Management Department when the existing waterproofing on its unusual wave-form roof became brittle and ongoing stress on the bituminous felt had led to water ingress.

As with many schools across the country, the roof had been patch repaired on numerous occasions to try and extend the life of the existing waterproofing, but even these were starting to fail. As the patching had only provided a temporary solution, Redmond Ivie Architects, contacted Sarnafil to find out how the roof could be successfully refurbished with the challenges posed.

The main objective was to make waterproof the curved roof of the primary school, upgrade the insulation to meet the latest Building Regulations requirements and provide a 20 year comprehensive guarantee within the budget.

On the face of it, a fairly standard re-roofing project, the type of which would be generally completed during

the annual summer holidays. However the poor condition of the existing waterproofing meant that the work had to be carried out in term time, a difficult task with almost 500 primary school children in-situ. As the school would be occupied whilst the works were to be undertaken the use of naked flames and bitumen boilers were prohibited.

Sarnafil Roof Management provided a detailed survey report stating the existing condition of the roof. Pull out tests, core samples, wind uplift and thermal calculations, were all undertaken. Photographs of problematic areas and detail drawings were included. Finally, the report provided a recommended specification which dealt with issues and challenges that the project raised.

To overcome the Health and Safety issues whilst maintaining the waterproof environment of the school, Sarnafil proposed a mechanically fastened insulation board to the underlying structural deck with Sarnafil membrane bonded to the insulation using a cold applied adhesive.

Case Study: Grove Park School, Chiswick

This ensured that the new water-proofing system was not reliant on any existing component within the bituminous covering that was left in place. This solution ensured that disturbance from the works was kept to a minimum and there would then be less chance of water ingress during the refurbishment.

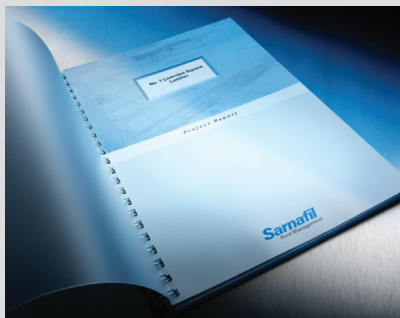
Whilst the complexity of the original roof shape was maintained, numerous details were redesigned in consultation with the architect, to avoid future water ingress and provide a maintenance free solution. This advice, covered by Sarnafil's design insurance, ensured that the client had total peace of mind on the completed project.

Brendan McNulty, Director of Delomac Roofing commented, "Specification and interface detailing were addressed by rigorous pre-planning from the Sarnafil Roof Management Team - this allowed Delomac to hit the ground running with this project. We were consequently able to deliver a technically demanding project in wet spring weather to time and budget requirements, and with minimal disruption to the School. Client satisfaction has been evidenced in subsequent negotiated projects."

For further information on Sarnafil Roof Refurbishment, please contact Sarnafil on 01603 748 985, email roofing@sarnafil.co.uk or visit our website: www.sarnafil.co.uk/refurbishment



Before refurbishment: The roof had been patch repaired on numerous occasions to try and extend the life of the existing waterproofing, but even these were starting to fail (See front for 'after' photograph).



As with all Sarnafil Roof Management projects, comprehensive documentation was provided, outlining or recommendations. Sarnafil Roof Management survey reports include re-roofing specification, project specific CAD drawings and wind load calculations.



Sarnafil Ltd.
Robberds Way, Bowthorpe, Norwich NR5 9JF
Tel: 01603 748985, Fax: 01603 743054, www.sarnafil.co.uk

Sarnafil®
Roofing. Systems. Solutions.