

**Sika at Work**



## **Roofing**

**The Principal's Lodge, Newnham College,  
Cambridge**

**Roofing: G410-18ELF with Décor Profile**

**Size: 500m<sup>2</sup>**



**Sarnafil®**



## Project Requirement

Newnham is one of the 31 colleges of the University of Cambridge and has 400 undergraduates, 150 postgraduates, and approximately 70 staff. The college was established in 1871 as a house in which young women could reside while attending lectures in Cambridge. It is still a women's college, and the only undergraduate college with an all-women fellowship.

The Principal's Lodge was built in 1956 and is home to the Principal of the college. Unfortunately it is renowned for not being the most attractive of buildings, as would befit the head of the college.

The roof of the building is not the sort of flat roof typically encountered by Sika Sarnafil. It's a duopitched ridge with hips and the existing construction was an aluminium profiled metal deck supported on a timber truss system.

The proposal was to leave the profiled metal deck system in place to ensure the roof remained watertight and encapsulate the whole thing with new SarnaTherm insulation and a Sika Sarnafil waterproofing membrane. This would upgrade the thermal performance of the roof and provide guaranteed waterproof protection.

## Sika Sarnafil Solution

Cambridge Polymer Roofing, one of Sika Sarnafil's Registered Contractors, had encountered a similar project and suggested a G410-18ELF single ply membrane in light grey. This is an adhered system, which also incorporated Décor Profiles to imitate a standing seam roof.

The specification required attachment of the new roofing system to the existing metal deck, which meant additional fixings were installed to ensure the deck was secure prior to the SarnaTherm insulation being mechanically fastened on top. As the profiled deck was aluminium – a soft metal – normal fasteners could not be used and special fixings, called peel rivets which are normally used with problem decks, were utilised instead.

Once the insulation was attached the Sika Sarnafil membrane was then installed to give a waterproof finish and completely encapsulate the existing roof.

## Project Participants

Contractor: Cambridge Polymer Roofing

Client: Clerk of Works, Newnham College



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