### Case study

# ROCKWOOL® help school make much needed roof improvements

Llanfair Primary School









#### The project

Llanfair Primary School is a well-established learning environment, having first opened its doors over 100 years ago.

Based in Cowbridge in Wales, the school received investment from the Vale of Glamorgan Council to improve and update facilities, with some buildings being demolished and rebuilt, while others received upgrades. One particular roof at the school was experiencing occasional roof leaks and required a cost effective solution.

Roofing Technologies was the main contractor on this project, and worked directly with the council to complete the refurbishment works. "The product which was originally recommended would not have been compatible with the current roof surface. It was our aim to find a cost effective alternative. After hearing about the new ROCKWOOL® flat roofing product, we specified its HardRock® Multi-Fix Recovery Board."

Ben Murphy Director Roofing Technologies

## The challenge

It was recognised that the leaks were coming through the existing PVC single-ply membrane, the council recommended that the roof should be overlaid with a more robust bitumen membrane system.

This would avoid leaks in the future, and also provide much needed acoustic insulation. However, this presented the contractor with a challenge, as PVC must be isolated from any form of bituminous product and would therefore require a separating layer to create an appropriate surface on which the bitumen could be applied to.

Having been on site to maintain the roof numerous times in the past, it was important for Roofing Technologies to find a long lasting solution.



#### The solution

The Llanfair Primary School project required a quick to install and affordable solution which would prevent the roof from leaking and provide acoustic insulation.

The benefits that ROCKWOOL could provide with its Recovery Board solution, matched the main requirements for this job, including ease of installation, affordability, acoustic features and visually pleasing.

Approximately 450m² of HardRock Multi-Fix Recovery Board was supplied by Minster Insulation and Dry Lining. Roofing Technologies agreed the delivery time and method before getting on site, which resulted in the project being completed within five weeks.

The HardRock Multi-Fix Recovery Board was specified to act as the separating layer between the new and existing membrane systems. As the bitumen would be applied using a roofing torch, the separating layer had to be compatible with this form of application, and provide a safe, non-combustible roof surface to bond too.

Specially developed for use on flat roof refurbishment projects, the Recovery Board was extremely quick and easy to install. It was fitted directly over the in-situ roof membrane and evened out imperfections on the existing external finish. While there is an option to install the board using either adhesive or mechanical fixings, Roofing Technologies opted to fit it with the latter.

This product has provided the building with improved acoustic properties, upgrading the sound insulation performance of the existing flat roof system by 47%. At the same time, the overlay board has evened out the surface, improving the aesthetics of the roof insulation. The company's high tech production process enhances these properties and ensures an environmentally responsible approach.

The ROCKWOOL product has helped to achieve this, and will avoid extensive maintenance in the future. Not only has the solution met all the key requirements, but its non-combustible properties meet the highest European fire classification performance, achieving an A1 rating.

"We were impressed that a ROCKWOOL technical representative visited us on site to provide the required support with data sheets and in-depth knowledge. This technical support was a huge benefit to us, and sped up the installation process in the end."

Ben Murphy Director Roofing Technologies