

#### Case Study

### Stylite Profiled & Cut-To-Fall Roof Insulation School Roof Upgrade

**Project:** School Roof Upgrade

**Location:** Menstrie, Clackmannanshire, Scotland

**Sector:** Roofing

**System:** Stylite Profiled & Cut-To-Fall Roof Insulation

**Size:** 400m<sup>2</sup>

**Client:** Clackmannanshire Council

The Stylite Roofing boards offered the following key benefits to our client:

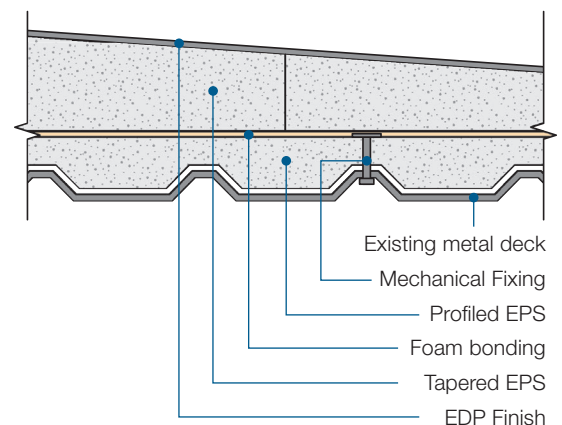
- ✓ Cost effective retrofit solution
- ✓ Cut-to-fall design solved drainage problems
- ✓ Lightweight - no added loading
- ✓ Excellent thermal performance
- ✓ Quick and easy to install

#### Problems

Menstrie Primary School Nursery building had an old metal deck roof which was coming to the end of its serviceable life and beginning to fail. Installed over 30 years ago the flat roof had been designed with minimal fall leading to poor drainage. Standing rainwater was increasing the loading on the roof and causing deflection of the deck, adding to the drainage problems.

#### Client Requirement

Clackmannanshire Council wanted a cost effective upgrade solution to provide an adequate fall without having to replace the whole roof. To meet current Building Standards they also wanted to significantly improve the thermal performance of the roof.





Before



After

## Design Solution

The roofing contractor, working on behalf of the council, specified two layers of Stylite Expanded Polystyrene (EPS) insulation. The first layer consisted of a flat sheet contour cut on the underside to match the profile of the existing metal roof and mechanically fixed into position.

The second layer consisted of tapered pieces of insulation which were adhesively bonded to the underlying boards to provide sufficient fall to improve the drainage of water from the roof. To complete the system a single ply membrane was applied to the insulation boards to provide the necessary waterproofing protection.

## Result

The upgraded roof solution was more cost effective than a full replacement and the cut-to-fall design has provided the required slope to allow excellent drainage. The lightweight properties of EPS has meant very little extra load has been added to the existing roof whilst its thermal properties have allowed the roof to achieve the specified U-value and meet Building Standards.

**“We were very happy with how this project progressed, the Stylite profiled boards fit perfectly over the existing roof giving us a flat and even surface to work off. All the tapered pieces of EPS were labelled clearly so we could install the whole roof within a few days.”** Roofing Contractor

Visit our Profiled Roofing webpage ➔

