



## CASE STUDY – INSULATION OF GRAIN STORAGE BUILDING

**BUFCA SUPPLIER:** Edu-Chem Ltd  
**BUFCA INSTALLER:** Roofing Insulation Services Ltd

### THE SITUATION

This farm building was one of three, side by side, which were all constructed at the same time using the same materials. The problem was that they were all constructed many years ago and incorporated no insulation or condensation-proofing. The roofs and walls were clad using fibre cement sheets, with a concrete lining constructed internally to enable storage of grain. However, when the grain was stored within the buildings, condensation was formed on the roof and dripped onto the grain.

### SOLUTION

The solution to insulate old fibre cement sheets was to use EduFoam: this not only provides excellent thermal insulation properties but also eliminates and prevents the future build-up of condensation on the internal surface of the cladding. Using this system also saves the building owner valuable time and money when it comes to insulating these older buildings.

The insulant was spray applied as a liquid to the internal surfaces of the roofs and walls of the building. This allows the foam to adhere to all the contours of the roof before curing to form a rigid layer of thermal insulation. In this case the foam insulation was applied to a depth of 50mm throughout the buildings: this depth eliminates all condensation – even in harsh winters – as well as providing dramatic improvements in overall insulation levels and energy efficiency. Another benefit of using polyurethane foam insulation on this project was the improvement in structural strength of the roof. Shortly after the installation of foam, the area was hit by strong winds and neighbouring farms lost some of their cladding sheets, however these buildings remained fully intact.

