



WALLTITE[®]

The airtight insulation solution

Remote Yorkshire Barn

Best Practice Case Study

Advantages at a glance

- Approximately 100m² of WALLTITE was applied in just two and a half days
- A minimal insulation thickness of 85mm was achieved in most areas with little reduction in room size, enabling the owner to retain the character of the original building elements
- The finished walls achieve their target U value of 0.26W/m²K, well within current and indeed new Part L Building Regulations
- WALLTITE is sustainable over the life span of the building and prolongs the buildings life as it protects against premature deterioration of building materials
- WALLTITE provided a built-in airtightness to an existing leaky building and provided resistance and durability in an exposed location

 **BASF**

We create chemistry

Remote Yorkshire Barn Best Practice Case Study



Project data

Project: Rigg End Farm, Rosedale, Yorkshire

Client: Mr McCann

Scope of Project: 100m²

Spray foam Contractor: UCS Insulation

Year Completed: 2010

Products Used: WALLTITE spray foam insulation

Project description

Rigg End Farm near the village of Rosedale is situated in the heart of the North Yorkshire Moors, a rural area exposed to the elements, and very cold in the winter months. Owner, Mr McCann, decided to convert the 18th Century barn into a modern four bedroomed family dwelling but needed to ensure that the insulation against the weather was second to none.

For Mr McCann, the insulation aspect of the build process was very important, "It gets very cold here in the winter with prolonged frost and substantial snowfall, we needed a tried and tested insulation solution that would not only provide exceptional insulation values, but complete airtightness too," he said.

Challenges

The barn, being a few hundred years old, leaked and was unstable. In addition, the site is remote and needed a system that was quick and easy to install. As the building was to retain its original character, the solution had to be suitable for application to the stone work in the building.

Solution

Mr McCann's builder suggested that the best way to stabilise the stone work and get the maximum insulation value was to use a spray foam system. He contacted BASF plc approved foam contractor, UCS Insulation who he had worked with on another project and asked them back to complete this one.

Mr McCann adds "I had implemented spray foam insulation many years ago and it has performed remarkably well over the decades in a fairly harsh environment, so it was an easy decision to use the same material to insulate my own house."

WALLTITE spray foam insulation from BASF plc was selected to provide a high standard of insulation at minimal thickness and maximum thermal efficiency in the converted property.

One of the advantages of applying WALLTITE is that the substrate does not require any preparation and no primer is necessary. On this project the stonework was simply dusted off prior to application. WALLTITE was then spray applied to the internal walls between the timber studwork and fixed slightly off the wall in order to eliminate the potential for cold bridging. Any high spots were then trimmed back with a wood saw before attaching plasterboard to the studwork.

Customer Satisfaction

Mr McCann was pleased with the results, "This is a fast applied, efficient insulation system. I really like the fact that airtightness is built in and that the framework is now completely rigid. As there are times we are cut off due to the snow and ice, we are pleased that we now have reliable insulation to keep us warm throughout the winter."

