



**WALLTITE®**

The airtight insulation solution

# University of Wolverhampton

## Best Practice Case Study

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# University of Wolverhampton

## Best Practice Case Study



### Project data

**Project:** University of Wolverhampton, West Midlands

**Client:** University of Wolverhampton

**Architect:** Tweedale

**Spray Foam Contractor:** Total Insulations

**Scope of Project:** Refurbishment of an academic tutor block at the university

**Year Completed:** 2011

**Products Used:** WALLTITE CL100 spray foam insulation

### Project description

WALLTITE® polyurethane spray foam insulation system was specified for a roof refurbishment of an academic tutor block at the University of Wolverhampton. The refurbishment was carried out to significantly improve the U-values of the existing pitched roof on the three story building. The academic rooms provide the staff and students at the University with essential staff offices, meeting rooms and research areas.

### Challenges

The aim of the project was to achieve a U-value result of 0.16W/m<sup>2</sup>K.

Various issues had to be considered to achieve this result, particularly with reference to minimising the levels of condensation within the roof space. Unwanted moisture would adversely affect the building's U-value performance and the overall quality of the insulation.

Access was also a major factor for this project as the refurbishment work had to be carried out on a three story building. Ideally, the renovation needed to be carried out internally rather than externally to provide the quickest and best results possible. A speedy and simple operation was a crucial factor for this project as the academic rooms needed to be completed in time for the return of staff and students following the summer break.

### Solution

Total Insulations carried out the work using 145mm of WALLTITE CL 100 spray applied polyurethane foam insulation to achieve the specified U-value requirement of 0.16W/m<sup>2</sup>K.

WALLTITE CL 100 spray applied polyurethane foam insulation was directly applied to the timber sarking boards within the roof space. This application met the architect's specification by exceeding the condensation risk requirements. The cold surface area was sufficiently insulated, resulting in a reliable insulation.

WALLTITE CL 100 spray applied polyurethane foam insulation's versatility enabled the work to be carried out internally within the roof space. The initial liquid state enables the foam to seal every joint and exposed area, resulting in highly air tight insulation.

By avoiding external work to the roof area, it was possible to complete the project within the confines of the tight schedule. The refurbishment was carried out with speed and simplicity which resulted in a successful process for Total Insulations.

### Client quote

*Andrew Hall*, the architect from Tweedale leading the project explains, "The WALLTITE polyurethane spray foam insulation system enabled us to save on the cost and time of the refurbishment process. The refurbishment has created a far more comfortable environment and greatly improved the energy efficiency of the space."



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