



**WALLTITE®**

The airtight insulation solution

# Stoughton Infant and Primary School

## Best Practice Case Study

**HARD  
TO TREAT**

 **BASF**

We create chemistry

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### Project data

**Project:** School extension involving consequential improvements

**Client:** Stoughton Infant and Primary School, Guildford

**Specifier:** NPS

**Spray Foam Contractor:** Total Insulations

**Scope of Project:** Insulation retrofitted to hard-to-treat cavity walls

**Products Used:** WALLTITE CV100 foam insulation

### Project description

Leading national property consultant NPS offers a comprehensive range of property services to the public and private sectors. The Brighton based office of the public sector owned organisation was commissioned to act as architect and specifier on a scheme involving the creation of Nurture Rooms at four schools. At Stoughton Infant and Primary School in Guildford this involved building an extension on to the existing Victorian building.

### The Challenge

Part L of Building Regulations is concerned with the conservation of fuel and power and during an overhaul of the regulations in 2006 the concept of consequential improvements was introduced.

Prior to 2006, Part L only applied to elements of work actually being carried out, for example, minimum efficiency levels of replacement boilers and the thermal efficiency of replacement or new windows being installed.

However, in 2006 this changed and the minimum standards no longer only applied to the actual work being carried out but it also meant that improvements may need to be made to the energy efficiency levels of the existing building in order to bring it up to the minimum standards. These improvements became known as consequential improvements.

In 2010 the regulations were changed once more to say that this form of improvement only applies to buildings over 1,000m<sup>2</sup> thus eliminating most homes, however given the size of most public buildings it is rare that they are excluded.

When NPS and Stoughton Infant and Primary School decided to build a new extension on to the existing Victorian school Building Regulations stated that consequential improvements had to be carried out to the energy efficiency of the existing building.

The challenge came in the form of narrow-width and uneven cavities in the Victorian building making it difficult to improve the thermal insulation of the walls.

### The Solution

NPS decided to utilise WALLTITE CV100 spray foam insulation to improve the thermal insulation of the Victorian building.

The quick application of WALLTITE injection grade rigid closed cell polyurethane foam prevents air leakage and air infiltration. Post-installation, the foam will not shrink or settle over time, providing sustainable insulation for the building's life span.

Because of its spray foam injection application method, WALLTITE moulds itself to any shape and surface ensuring there is no possibility of gaps that would hinder the air tightness performance. This is particularly relevant to older buildings, such as Victorian constructions, given that the materials and methods used in the original construction often result in hard-to-treat cavities and are vastly different to what are used in present day projects of a similar nature.

### Client quote

Helen Bayliss of NPS who specified the use of WALLTITE explained: "I chose WALLTITE because of its thermal capabilities after reading about a similar project in which it was used. The installation went smoothly with no hic-cups. It was the perfect solution for this job as the cavity was very small and the skins were uneven due to the materials used in the Victorian era."

