



## CASE STUDY – Timber Frame Solution

**BUFCA SUPPLIER:** BASF Polyurethanes U.K. Ltd  
**BUFCA INSTALLER:** Total Insulation Ltd

### THE SITUATION

Kent-based property development company Premier Penthouses originally specialised in building penthouses onto existing buildings. However, the company now finds itself working more on the development of residential houses and low to medium rise flats. The preferred method of construction is to use an insulated timber frame structure.

### SOLUTION

Premier Penthouses has used Walltite spray foam insulation as both a primary insulation source and airtightness barrier for all its recent residential developments. The insulant is now used as standard on all new projects because of its consistent and reliable thermal insulation combined with airtightness.

Walltite is typically sprayed directly onto the interior face of the infill panels in between the timber studs. The interior surface is then finished with plasterboard prior to decoration.



For Richard McAllister, Project Manager for Premier Penthouses, it is a simple specification decision. "We find that using spray foam is an extremely quick solution to use on site. Just as importantly it is also reliably airtight. The spray foam seals the surface completely and there is no risk of gaps occurring that would lead to heat loss."

Walltite is a very adaptable insulator: the U-value delivered can be varied by changing the depth of insulation applied. In the case of Premier Penthouses, the specification is always more onerous than current building regulations (0.3W/m<sup>2</sup>K). The technical team at Walltite have provided specification advice for U-values as low as 0.2W/m<sup>2</sup>K.

The most recently completed project uses Walltite on a development in Shortlands, Kent. A three-storey development of six flats: this development asked for a U-value of 0.22W/m<sup>2</sup>K, requiring 110mm of Walltite to be used in the wall construction.