

One of the biggest challenges to raising standards is our lack of ability to measure and demonstrate a building's performance



# Bringing warmth to the nation

The Insulation Manufacturers Association (IMA) examines the importance of the effects of greater thermal performance on fuel poverty across the UK...

For a country that is one of the wealthiest in the world, it remains a shocking and unacceptable statistic in the 21st Century that there are four million UK households living in fuel poverty<sup>1</sup>. The summer warmth may well be with us for a few months but for many caught in the fuel poverty trap and a cycle of soaring energy prices, low incomes and leaky, inefficient homes, the problem is not going away and has been an issue for far too long. With the UK's housing stock among the least energy efficient in Europe, one of the most effective ways to tackle the root causes of fuel poverty is by reducing energy demand through energy efficiency measures. The first step in tackling the issue is ensuring that the building fabric is upgraded to optimum levels.

A household is said to be in fuel poverty when it is on a lower income in a home which cannot be

kept warm at a reasonable cost. It is essentially determined by three factors: household income, cost of fuel and the energy efficiency of the home. But who are the fuel poor? According to Government statistics on fuel poverty, 20% of households renting from a private landlord are classified as fuel poor. Single parents with dependent children are at the highest risk, with almost 25% of this group in fuel poverty.

The consequences of fuel poverty are well-documented and include discomfort, ill health, mental illness and debt. Fuel poverty is also linked to increased winter mortality with a rise in winter deaths associated with cold homes. Such is the problem that, according to a study by the Association for the Conservation of Energy (ACE), living in a cold home kills more people than road accidents, alcohol or drug abuse.

However, it is not just the

vulnerable, frail, and elderly who become statistics. A cold home can mean lower educational attainment and social exclusion for young children. There are also links to rising costs within the NHS having to treat the conditions worsened by insufficiently heated homes, particularly heart and respiratory diseases.

Energy efficiency improvements should play their part in helping to keep up with rising energy costs, but, sadly, Government-backed delivery of home energy efficiency improvements has stalled. While the Government recognises the situation is unacceptable, it inevitably ends up playing political football with the issue and, sadly, the raft of underfunded policies and initiatives to improve these inefficient homes over the years have failed to make a significant difference, often leaving poor and vulnerable households behind.

### Minimum energy efficiency rating

One such measure is the Government's 2015 Fuel Poverty Strategy, which introduced a statutory target to ensure that as many fuel-poor homes as practically possible achieve a minimum energy efficiency rating of Band C by 2030. However, this can only be attained by investing in the highest performing insulants, such as PIR insulation, to achieve the maximum performance for the building fabric. Home insulation is proven to improve our housing stock and has a significant impact on the expense of keeping us warm, increasing comfort and improving our health and wellbeing.

One of the biggest challenges to raising standards is our lack of ability to measure and demonstrate a building's performance. We have the materials and the knowledge to improve the housing stock, but agreeing what needs to be done and then confirming that work has been carried out to a decent standard and is value for money, is the real challenge.

In the UK we have three categories of housing: owner-occupied, privately-rented and local authority/housing association owned housing. Each category has its own challenge. For the private rented sector – which includes some of the worst performing housing in the country – there are now suggestions of introducing a minimum EPC rating that must be achieved before a property can be let. However, as landlords do not live in their properties, there is little incentive for them to invest in improvements. Tenants pay the bills, but are unlikely to make a long-term investment in a property they don't own. To counter this, the Government is proposing a spending cap for landlords of £2,500 which may mean that money is spent on a more efficient boiler, for example, rather than ensuring that the fabric of the building is addressed. This could leave some householders without any insulation at all or having to

settle for a lower thermal performance from a cheaper option.

Local authorities are perhaps in the best position, as there is an incentive for them to significantly improve their housing stock and provide better-performing properties. However, for private owners nobody has yet found any suitable incentives for the majority to invest in energy saving initiatives in their own homes.

### Good practice

The first challenge for existing buildings is the need to provide an accurate upfront assessment of a building by a competent assessor, who can then interpret the findings and provide appropriate energy improvement measures.

There will be various measures required to refurbish a building, but to ensure the right result is achieved there must be co-ordination between all retrofit activities. For example, if the joints between a floor are not installed correctly, then the property will lose heat and condensation may occur, resulting in mould growth. With examples of poor practice in retrofit on the increase, it is important that a comprehensive set of standards, assessment, installation and commissioning, are all carried out correctly and that the consumer has a retrofit that works. Professional co-ordination, coupled with consumer motivation, will deliver a successful retrofit. This is one of the key objectives of the *Each Home Counts*<sup>2</sup> review, which recommends that there be a quality mark for all energy efficiency and renewable energy measures to ensure that the consumer receives excellent levels of consumer protection. This also ensures that companies adhere to a strict code of conduct when operating in the energy efficiency arena and that products are installed to approved codes of practice.

Retrofitting insulation works for a whole host of reasons, from saving money to reducing carbon and being good for our health.

Whether it is an internal or external insulation application, it is vitally important we bring the nation's homes up to, or beyond, an acceptable standard by getting the fabric of the building as energy efficient as possible...

### Insulation Manufacturers Association

#### New build

It is also important not to forget new build homes. We must build homes that solve today's challenges, while leaving a legacy that we would be proud of. It would be scandalous if homes being built today become the homes of the fuel poor in need of retrofitting in the future.

Whether it is an internal or external insulation application, it is vitally important we bring the nation's homes up to, or beyond, an acceptable standard by getting the fabric of the building as energy efficient as possible. Using the highest performing products, including PIR insulation, will go a long way to achieve this. Only then will we be able to provide a long-term asset that can be passed onto future generations.

<sup>1</sup>Annual Fuel Poverty Statistics Report (2015 data), The Department of Business, Energy and Industrial Strategy (BEIS) published June 2017

<sup>2</sup>Each Home Counts, The Department of Business, Energy and Industrial Strategy (BEIS) and Department for Communities and Local Government published December 2016

 Enquire about the Insulation Manufacturers Association QX225