Solar panel blazes ignite safety fears

An investigation has been launched after fires at buildings, including flats and schools, fitted with the energy equipment

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Solar panels catch light at a new block of flats in Bow, east London, last week ANDREW BANNISTER

Fire risks posed by solar panels fitted to thousands of British homes, schools and businesses are being investigated after international warnings over the panels' flammability.

The Building Research Establishment (BRE), a government fire safety contractor that is conducting tests on cladding after the Grenfell Tower blaze, is examining instances of solar panels catching fire and is due to report initial findings at an industry meeting this week.

About 80 firefighters fought a blaze at a new block of flats in Bow, east London, last Sunday in which the solar panels appear to have caught fire. The cause of the fire is being investigated.

A blaze last month at a block of flats in Thornton Heath, south London, is also being investigated after solar panels and cladding caught fire. Orbit, the housing organisation that owns the block, said an initial investigation indicated the fire was caused by "an overheated solar panel".

Over the past five years solar panels have also caught fire on buildings such as Hove Town Hall in East Sussex in 2015, a Nottinghamshire primary school in 2014 and a Devon hotel in 2013.

There are about 920,000 solar panel installations in Britain, with no minimum fire safety standards for those placed on fire-resistant roofs. Systems with a low fire rating that are built into roofs must be at least 65ft from a boundary wall.

The Society of Fire Protection Engineers, an international body, has stated: "One of the many dangers to solar panels is how the panel and its mounting system impact the combustibility of the overall roof system. Some solar panels include a backing of highly combustible plastic."

Italian research published in 2015 found that in Italy and Germany over a two-year period there had been nearly 700 fires involving solar panels. Fire tests for the study found that ethylene vinyl acetate — a material commonly used in the panels — appeared to be "a rapidly combustible material releasing gaseous fuels . . . once degraded thermally".

Paul Barwell, chief executive of the Solar Trade Association, said the BRE study would help government and industry understand whether changes to regulations and guidance were required. Barwell said: "It is one of the safest technologies but we do need to ensure we have the highest safety standards."

Few fires in Britain have involved solar panels and the BRE said there is no evidence to suggest the risks are greater than with other electrical equipment. It adds, however, that evidence is emerging of potential fire hazards and its website asks for UK cases to be reported.

Jonathan Bates, managing director of Photon Energy, a solar energy firm in Reading, Berkshire, said the most likely causes of fires were electrical faults as a result of incorrect installation. He said a properly installed solar panel system should pose no significant risk but some providers "cut corners". He added: "We have seen some fairly shocking installations. Like any industry that grows very quickly, you will inevitably get cowboys."

Chris Roberts, who chairs a working group of the Microgeneration Certification Scheme, which provides quality assurance for renewable technologies, said he considered the regulations robust but that they would be reviewed in light of the BRE research.

The Department for Business, Energy and Industrial Strategy, which supports the solar panel certification scheme, said: "The government's top priority is public safety and, while the risk of solar panel fires is extremely low, it's only right that we work with the industry to improve safety further. That's why we continually review our guidelines to ensure exemplary safety standards are in place."

@JonUngoedThomas

comments

hfk123 Jul 9, 2017 public inquiry please. Must be due to austerity.

John Adsett Jul 9, 2017 I blame that Mrs May...

Johnny Norfolk Jul 9, 2017

A bungalow in the next village was destroyed by fire about 2 years ago caused by the solar panels. To me it was hushed up as hardly any news was printed about it. It has now been rebuilt without solar panels. Soon it will be far too expensive to have insurance on them. Pity the media cannot fully investigate this rather than all the fake news they give us.

MR A Graham Jul 9, 2017

I could never understand why solar panels were pushed with our weather. I would have thought a windmill about the size of a satellite dish would have been far more useful and much less intrusive than the huge monstrosities we have had foisted on beauty spots around the country.

JB Jul 9, 2017

Is it true that due to the electrical connections, firefighters aim to evacuate properties with solar panels then simply ensure the fire does not spread elsewhere; rather than try to put it out?

anyfool Jul 9, 2017

OMG, not another reason for the BBC to have an hourly Grenfell anti-government hatefest.

They are still blowing on the embers.

John Adsett Jul 9, 2017 @anyfool They'll huff and they'll puff...

Cornish Cynic Jul 9, 2017

"Fire tests for the study found that ethylene vinyl acetate — a material commonly used in the panels — appeared to be "a rapidly combustible material releasing gaseous fuels . . . once

Robert Hardcastle Jul 9, 2017

Solar panels that catch fire. Wind turbines that the turbines fall off. Where is all this stuff made.

Answers on a postcard.

Mr Kipling Jul 9, 2017

So let's see if I've got this right. The inflammable insulation panels that fed the flames at Grenfell Tower were fitted to meet eco targets. And these fire hazard solar panels have been fitted to meet eco targets. Still, I guess at least the polar bears can breath more easily.

Mr Laon Hulme Jul 9, 2017 Another example requiring investigation of fire safety regulations and their application - perhaps?