

UK

## Second common cladding type raises Grenfell fire risk fears

Research shows HPL cladding failed safety tests 80% of the time



The scene of the blaze at a student accommodation block in Bolton last week © Joel Goodman/LNP

Donato Paolo Mancini and Judith Evans in London NOVEMBER 22 2019

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A widely used cladding, known as high-pressure laminate, is at least as flammable as the type targeted by a UK government safety programme after the Grenfell Tower disaster, a new independent study has found.

Researchers from Imperial College London and Warsaw's Building Research Institute found that HPL cladding failed fire safety tests 80 per cent of the time, while the category of cladding similar to that blamed for the rapid spread of the catastrophic fire at Grenfell failed 60 per cent of the time.

The two types of cladding were the most flammable categories assessed by researchers in the most [comprehensive study](#) to date.

The government-run [safety programme](#) was launched in the aftermath of the June 2017 Grenfell fire, which caused the deaths of 72 people. But it has only focused on removing aluminium composite material cladding, used on Grenfell, from other buildings.

The version used on Grenfell was a particularly flammable type of ACM with an untreated polyethylene core but the government has said that other variants of the same cladding, including those intended to be fire retardant, may also be dangerous.

Similar concerns about HPL cladding have been raised over the years, not least as panels made of the material played a role in a 2009 fire in another London housing block, called Lakanal House, which killed six people.

The safety of HPL panelling has come under renewed scrutiny since a fire tore through a [student housing block in Bolton](#) last week. Witnesses said the blaze spread rapidly across the cladding. Local politicians and planning documents identified the cladding on the building as HPL.

The evidence raises questions about the government's post-Grenfell programme of testing and remediation work, which has largely focused on ACM cladding. Ministers have pledged at least £600m of government funding to remove that type of cladding on 431 buildings.

It is not clear how many buildings have HPL cladding as the government is still conducting a broader survey of high-rise buildings across the country.

But research by insulation firm Rockwool, which was submitted to parliament after the Grenfell fire, found that sales of HPL cladding were on par with those of ACM before the disaster.

The Rockwool study estimated that more than 1,650 high-rise or high-risk buildings in the UK have cladding fitted that is not ACM in so-called rainscreen form, a common type of facade system used on the Grenfell Tower, which leaves a cavity that can help the spread of flames.

Guillermo Rein, professor of fire science at Imperial College London and one of the authors of the study, said the latest research underlined the risks for HPL-clad buildings. "This study shows that like in the case of Grenfell Tower, many modern facades are excessively flammable," he said.

The researchers studied a database of more than 250 fire tests of building facades conducted in Poland, which has similar fire testing standards to those in the UK but a more rigorous regime, according to Prof Rein. "We used test data from Poland because it is the only one available to scientific study. We asked all around the world and all other data sets were closed to scrutiny."

He said Polish fire standards were "unique and challenging" for building facades because they included the effect of wind and required the test to be repeated three times. "Most other standards neglect the fire enhancement of frontal wind and are done only once," he told the Financial Times.

Prof Rein said that until the Grenfell disaster there had been no rigorous fire assessment of HPL cladding and that it had been installed on buildings around the world "when the science was blind to its risks".

The authors of the paper said their findings on HPL were in line with another [study](#) last year that found HPL was unlikely to pass fire safety tests, even when fire retardant was added.

In the UK, the government has so far carried out one test on HPL cladding, which found that it met fire safety standards. But that test has been criticised by industry experts and campaign groups because it was conducted on a fire resistant version in combination with non-combustible insulation.

“We would like answers as to when [the government] will carry out and release the test results of more commonly used combinations of HPL cladding and insulation,” said Ritu Saha of campaign group UK Cladding Action.

The use of HPL is now banned on buildings more than 18 metres tall under tougher rules brought in after Grenfell, while the government advises that certain types of HPL cladding on existing buildings require “immediate” action to be made safe. But it has still prioritised the removal of ACM cladding.

A Ministry for Housing, Communities and Local Government statement said the government banned combustible materials on external walls of new high-rise homes last year. Building owners must check cladding types and ensure their residents are safe in their homes. The government had made funding available to councils to identify types of cladding on high-rise buildings and had tested “a number” of non-ACM materials, including HPLs, to assess whether action was necessary.

It declined to comment on the study.