

# Safer Buildings for Queensland

## Background information

### What's happened globally?

The Grenfell Tower fire in London in 2017 and subsequent safety concerns regarding the Aluminium Composite Panel (ACP) cladding products created a chain reaction around the world.

While not the first incident, the heightened international concern following the Grenfell Tower fire proved to be the catalyst for a world-wide focus on the use of combustible cladding.

### What's happened locally?

The Queensland Government became aware of the potential risks associated with suspected combustible cladding on a number of government and non-government owned buildings and, in June 2017, established the Non-Conforming Building Products Audit Taskforce (the Taskforce).

The Taskforce's work has focused on both government and privately-owned buildings constructed or renovated between 1994 and now.



### Material concerns

At the heart of the problem is a thin layer of combustible thermoplastic material called polyethylene (PE) sandwiched between two sheets of aluminium.

When this material is fitted externally to buildings, it can significantly contribute to developing flames and the subsequent rapid spread of fire to other areas of a building.

As the building deteriorates during a fire, combustible material can drip, pool or detach and potentially land on other areas of the building such as balconies, spreading the fire even further.

This fire spread impacts on the ability of firefighters to access the site.

Combustible cladding increases a risk to the building's integrity, and the possibility of the fire spreading to adjacent buildings. This can pose a risk to not only building occupants but also to fire fighters.

*"...the Grenfell Tower fire proved to be the catalyst for a world-wide focus on the use of combustible cladding."*

### The challenges

The extent of combustible cladding use in Queensland's built environment is increasingly becoming known but there is no single point of reference of building approvals since 1994 and existing records provide limited information about the type of building or the cladding materials used.

Queensland's building industry operates under a performance-based National Construction Code (NCC). The NCC allows building professionals to apply the code to a broad range of building designs.

This can result in different industry interpretation about the use and application of compliance pathways. These are key areas subject to changes driven by new technology which can outpace the process of updating the NCC.

### The way forward

The Taskforce Status Report was tabled in parliament and made public on 17 May 2018. The report includes six key recommendations now being carefully considered by the government.

In parallel with preparation of the report, two continuing professional development (CPD) training courses developed for fire engineers, in conjunction with The University of Queensland (UQ), have been successfully conducted. It will provide a better understanding of the performance of façades when subjected to fire.

Work is also underway with UQ to establish a materials library, the first of its kind in Australia, to assist industry professionals to quickly and cost effectively identify the fire behaviour of cladding products. It involves a thorough testing regime at UQ laboratories to analyse hundreds of samples.