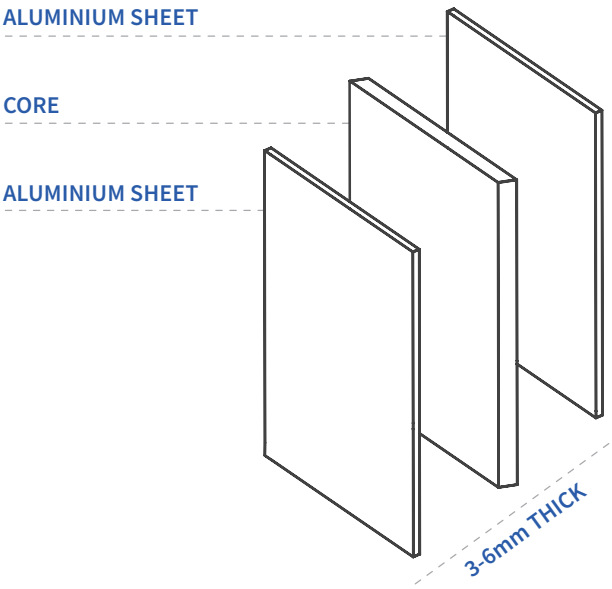
ALUMINIUM COMPOSITE PANELS

ACT Government

WHAT ARE ALUMINIUM COMPOSITE PANELS?

An aluminium composite panel (ACP) consists of two foil-coated aluminium sheets (typically around 0.5mm in thickness) bonded to a core (around 2 to 5mm thick). Depending on the panel, this core may be aluminium, mineral, or a thermoplastic polymer (usually polyethylene).



Due to their strength and light weight, ACPs are used frequently in construction for insulation, partitions, false ceilings and external cladding. When used externally, cladding may be found on walls, balconies, palings, decorative features and around walls. It may be matte or colourless.

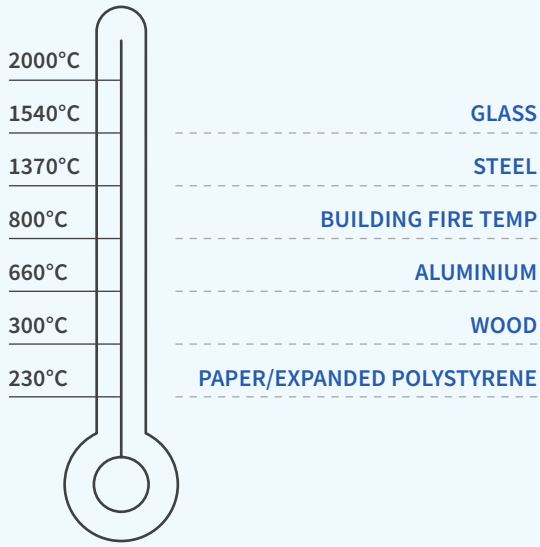
When installed in compliance with the National Construction Code, ACPs are not unsafe as building materials. However, the incorrect use or installation of ACPs may pose a risk in the event of a fire.

It is important to note that the presence of external combustible cladding on a building does not necessarily mean it is a fire hazard. It depends on where the cladding has been applied and the building's overall fire safety measures.

WHAT MAKES ACPs COMBUSTIBLE?

The combustibility of ACPs depends on the amount of polymer used in the core. Cores containing over 10% polymer have a high potential to spread fire, with the most dangerous cores being 100% polymer. Polymer is combustible, while the thin aluminium sheets conduct heat easily and melt under high temperatures. This means in a fire ACPs can ignite and spread the fire between interconnected sheets up and around the building. Polymer cores may also melt under high temperatures, causing the molten core to drip to the ground below and further spread the fire. ACPs can fall from the building, potentially spreading spot fires, blocking exits or causing injury to occupants.

MELTING AND IGNITION POINTS



WHERE CAN I GET MORE INFORMATION ON THE NATIONAL CONSTRUCTION CODE?

The National Construction Code was updated in 2019. You can read the current code as well as the 2016 code at ncc.abcb.gov.au.