**Expanded polystyrene** is a type of cladding that is combustible and increases the likelihood of fire spreading more quickly.

It may shrink, melt or ignite when exposed to elevated temperatures.

Expanded polystyrene has been used widely in the building industry in Victoria over the past 20 years because of its low cost, light weight and insulating properties.

When used on a building, it is typically covered with render and looks like rendered concrete.

If you tap a rendered surface on a building and hear a hollow sound, it may indicate a lightweight building material is covered by the render.

This may be **expanded polystyrene**; however, it may also be a suitable product, such as fibre cement sheets.
Key characteristics of expanded polystyrene include its ease of installation and thermal-insulating properties.

Polystyrene is also a thermoplastic and has a very poor reaction to fire.

When it burns, a kilogram of polystyrene will release more energy than a litre of petrol.

Chemical fire retardants may be added to expanded polystyrene, but these do not prevent combustion from large fire sources.

Furthermore, these retardants may leach over time.

Generally, expanded polystyrene cannot be used as external wall cladding on apartment buildings without independent approval from the Building Appeals Board.

The non-compliant use of expanded polystyrene as external wall cladding presents an increased risk of fire spread, particularly in multi-storey buildings.

The National Construction Code allows the use of expanded polystyrene on townhouses and houses (class 1 buildings).

**Expanded polystyrene**

- High risk of rapid fire spread.
- Typically, not considered safe for use on multi-storey buildings.
- Increased usage over the past 20 years.
- Covered in render, and looks like rendered concrete.
- Usually white, but could be available in a variety of colours.