

CLADDING TYPES IN NEW BUILDINGS

The building materials used in roof and wall claddings continue to change over time. What are the current trends?

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Each quarter since March 1998, the BRANZ Materials Survey has collected information on building materials used in new buildings. This data is useful for showing trends in building material use.

Steel dominates roof claddings

The types of roof claddings can be divided into three broad groups:

- Steel – sheet steel with various profiles and coatings, and metal tiles.
- Concrete – concrete tiles and flat concrete slab roof, usually with a membrane skin.
- Other – a variety of claddings including aluminium and copper sheet, asphalt and fibreglass shingles, sheet membranes on plywood sheet, etc.

For roof claddings, the market shares are based on the floor area of the buildings in the BRANZ Materials Survey sample.

In new housing, steel roof cladding predominates with over 60% market share. Concrete tiles appear to have been on a slight downward trend for a number of years (see Figure 1).

In non-residential buildings, steel is again the main roof cladding type (see Figure 2). Steel has a near 100% share in industrial and farm type buildings, and as these buildings have large roof areas, they dominate the overall percentage for all non-residential buildings. There are some building types, such as education and social/cultural buildings, that have domestic type roofs, including concrete tiles and membrane on plywood, but they are small in area as a percentage of total non-residential.

Wall claddings

The types of wall cladding are much more varied than roof claddings. The following market shares are based on roof areas provided in the BRANZ Materials Survey. →

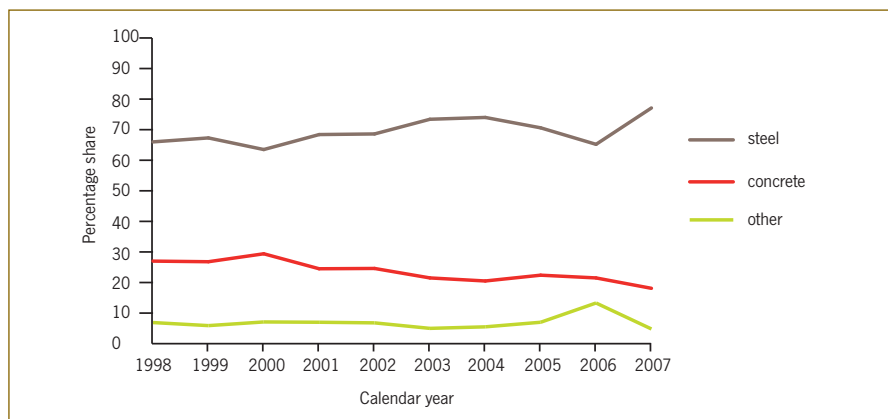


Figure 1: New dwelling roof claddings.

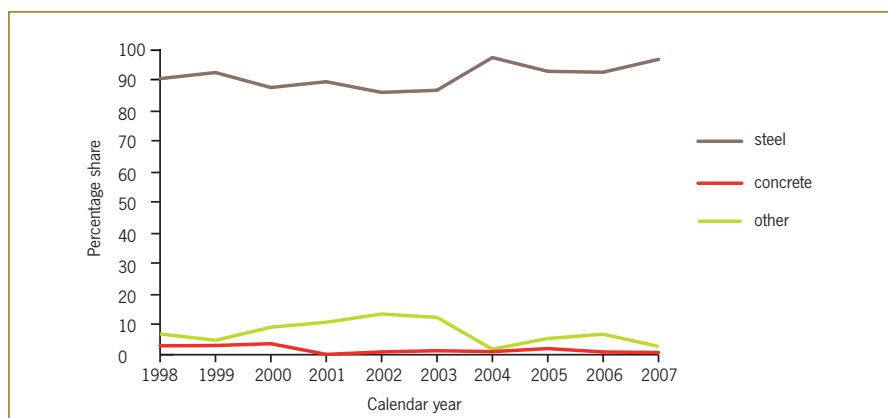


Figure 2: Non-residential buildings roof claddings.

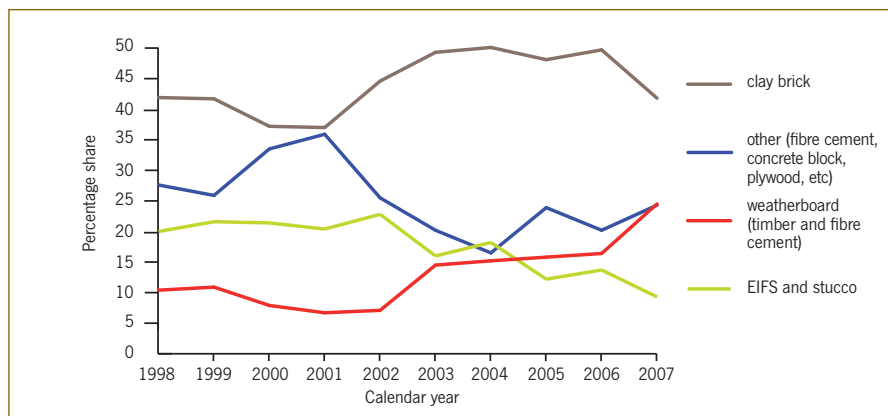


Figure 3: New dwelling wall cladding types.

Clay brick dominates in new housing (see Figure 3). The monolithic look of EIFS (external insulation and finish systems) and stucco claddings have been declining in market share since the early 2000s. Weatherboard, both timber and fibre cement, has recovered its market share in recent years.

In non-residential buildings, concrete is the main wall cladding (see Figure 4). This is mainly tilt slab in industrial buildings, masonry block

construction and precast panels installed on a variety of building types. The steel claddings include SIP, which is structural insulated panels (sandwich panels with polystyrene cores and steel skins), used in coolstores and other industrial applications. The overall market share depends on how much industrial work is underway, and when this drops off, the 'other' category gains a larger share of all building claddings. ■

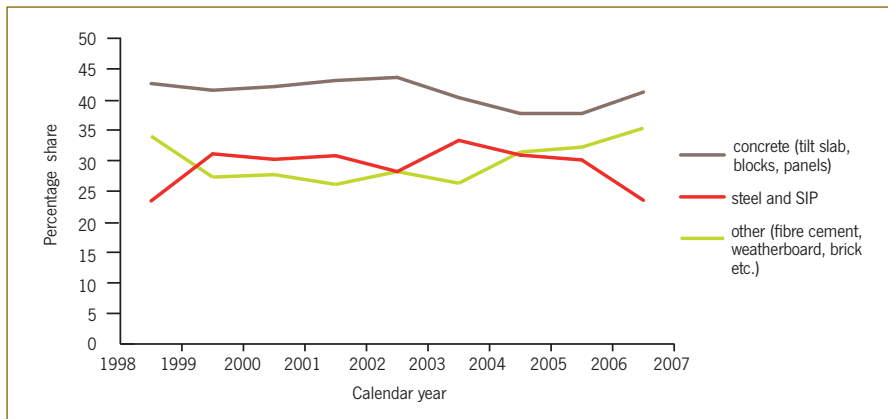


Figure 4: Non-residential buildings wall cladding types.