# Cladding costs over a lifetime

There's more to selecting a wall or roof cladding than just the initial cost. BRANZ has been examining lifetime costs of claddings so designers can makes more informed choices.

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**A WIDE VARIETY** of roof and wall claddings are used in new housing. Builders and designers are often aware of the approximate initial cost of these, but comparing costs over the lifetime of the claddings can be much harder.

### Comparing different claddings

Figures 1 and 2 show the lifetime costs of the more common claddings spread over the estimated lifetime of each cladding to give an annual cost. This covers initial cost and maintenance expenditures.

The maintenance regime for each cladding and assumed durability in years is shown in Table 1. The analysis uses the mid-point of the average life range shown.

These costs do not allow for disruption caused by maintenance or replacement. For example, there may be temporary accommodation expenses when claddings are replaced. These costs will affect the

short-durability sheet steel options more than the long-life materials.

### Unpainted sheet metal cheapest

Unpainted sheet metal roof claddings are the cheapest. They have quite a short life span, but their initial cost is very low, so their annual cost is also low.

For wall claddings, sheet steel is again the cheapest, followed by sheet plywood. The most expensive wall claddings are PVC, fibrecement and timber weatherboards.

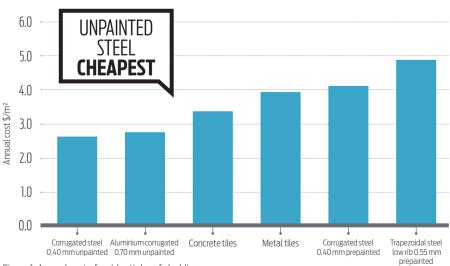


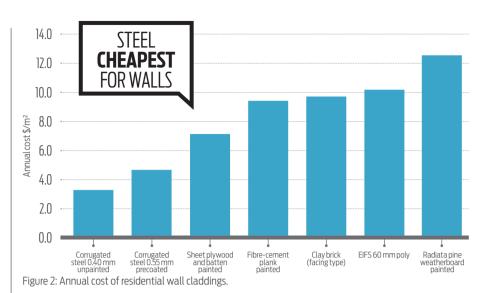
Figure 1: Annual cost of residential roof claddings



# Better-quality cladding lasts longer

Decisions are usually not made solely on cost. Appearance is also important to the owner. The more expensive, longer-lasting products usually maintain their appearance better than the cheaper materials.

While the first owners are very unlikely to still live in a house when the cladding needs replacing, owners will be concerned about resale value. This is why there is a predominance of more expensive materials, particularly for wall claddings.



# Table 1

# Lifetime costs of new house claddings

AVERAGE LIFE (YEARS)	INITIAL COST \$/M <sup>2</sup>	LIFETIME \$/M <sup>2</sup> /YEAR
20–30	30–40	\$2.5-\$3.5
30-40	30-40	\$2.5-\$3.5
60-80	40-50	\$2.5-\$3.5
80-100	50-60	\$2.5-\$3.5
40-60	60–70	\$3.6-\$4.5
40-60	40-50	\$3.6-\$4.5
40-60	50-60	\$3.6-\$4.5
40-60	60-70	\$4.6-\$6.0
40-60	70-80	\$4.6-\$6.0
20-25	50-60	\$3.0-\$7.9
40-50	70-80	\$3.0-\$7.9
40-60	90–100	\$3.0-\$7.9
40-60	80-90	\$3.0-\$7.9
30-40	110-120	\$8.0-\$10.9
30-40	130-140	\$8.0-\$10.9
60-80	140-150	\$8.0-\$10.9
60-80	140-150	\$8.0-\$10.9
25–35	150–160	\$11.0-\$15.0
30-40	150-160	\$11.0-\$15.0
40-60	170–180	\$11.0-\$15.0
25-35	200-210	\$11.0-\$15.0
	20–30 30–40 60–80 80–100 40–60 40–60 40–60 40–60 20–25 40–60 40–60 30–40 30–40 60–80 60–80 25–35 30–40 40–60	20-30 30-40   30-40 30-40   60-80 40-50   80-100 50-60   40-60 60-70   40-60 50-60   40-60 50-60   40-60 70-80   20-25 50-60   40-60 90-100   40-60 80-90   30-40 110-120   30-40 130-140   60-80 140-150   25-35 150-160   30-40 150-160   40-60 170-180