



Steel is an important part of economic activity, and is extensively used in many sectors such as Engineering, Construction, Infrastructure and Automotive manufacturing.

To extend the service life of steel, it is usually protected with a corrosion inhibiting coating. The two most widely used coatings used for this purpose are:

Aluminium Zinc coating:

Aluminium (55%), Zinc (43.5%) Lead (0.01%) and Silicon (1.5%) are combined in an alloy which, when used to coat steel, extends the life of the steel core by up to 4 times more than that of an equivalent galvanised coated steel used in similar conditions.

Galvanised coating:

Zinc (99.7%), with a little Aluminium and Lead, form a coating for steel. This coating is heavier than an Aluminium-Zinc coating of the same microns.



- Zincal has a small uniform spangle with a matte finish
- It has excellent heat reflectivity, creating a cooler internal building temperature in summer, and a warmer building interior in winter

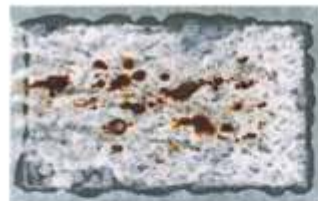


- Galvanised steel has medium spangle and a shiny finish
- It has moderate heat reflective properties, particularly when the sheet loses its surface sheen, reducing thermal comfort levels in the building interior



AZ150 after 240 hours of salt spray testing

- No signs of deterioration
- Aluminium offers barrier protection
- Zinc offers sacrificial protection



Z200 after 240 hours of salt spray testing

- Visible signs of red rust
- Zinc offers sacrificial protection

Coating comparison:

Because Zinc is heavier than aluminium, the relative weights of coating of the same thickness (microns) are different for Aluminium-Zinc-coated and Zinc-coated (Galvanised) steel.

COATING THICKNESS (in microns)	COATING WEIGHT (grams/m ²)	
	ALUMINIUM ZINC COATED STEEL	GALVANISED STEEL
18.9 microns	AZ 70	Z 140
27 microns	AZ 100	Z 193
40.5 microns	AZ 150	Z 289

* Coating thickness of less than AZ 100 or Z 200 is not recommended for roofing applications.

