



# **ZINCAL: Aluminium-Zinc Metal Coated Steel**

**Zincal**® is the brand for coils that are manufactured using a patented Aluminum Zinc coating alloy recognized as being the most technologically advanced metallic coating in use worldwide. When used in the correct application, you can be sure of the following attributes:

- Considerable increase in service life
- Superior thermal protection
- Distinctive aesthetic value

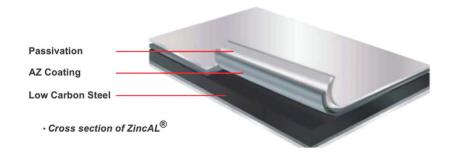


The coating alloy consists of 55% Aluminium, 43.5% Zinc & 1.5% Silicon. The aluminum component of the coating provides a tough physical barrier to protect the steel core against extreme atmospheric conditions and moisture. The zinc component has a galvanic action and builds up on cut edges to further increase corrosion protection.

Their combined action in a metallic alloy coating increases the service life of the steel core by up to 4 times that of traditional zinc galvanized steel with the same coating thickness in the same physical environment.

The extended serviceability of Zincal® makes it a cost effective and environmentally responsible choice of material.

#### **CROSS SECTION OF ZINCAL® MATERIAL**









# Technical **Specifications**

ALAF Limited® produces coils of AZ85 and AZ100 coating in Grade G550 or G330.

| Standards   | Grades |
|-------------|--------|
| A792M/192M  | G550   |
| EAS410:2008 | G330   |

| Mechanical Properties | Guaranteed Minimum |      |
|-----------------------|--------------------|------|
|                       | G550               | G330 |
| Yield strength, MPa   | 550                | 330  |
| Tensile strength, MPa | 570                | 400  |
| Elongation %          | 2                  | 15   |

#### **Dimensions**

| Base Metal Thickness (mm) |              |
|---------------------------|--------------|
| Range                     | Tolerance    |
|                           | Width ≤ 1200 |
| 0.2- 0.3                  | ±0.02        |
| 0.3- 0.4                  | ±0.03        |
| 0.4- 0.5                  | ±0.04        |
| 0.5- 0.6                  | ±0.05        |
| 0.6- 0.7                  | ±0.06        |
| 0.7- 0.8                  | ±0.07        |
| 0.8- 0.9                  | ±0.08        |
| 0.9- 1.0                  | ±0.10        |
| 1.0- 1.2                  | ±0.012       |

<sup>\*</sup>Restricted thickness tolerance is subject to negotiation

### **Coating Mass**

|               | MINIMUM AZ coating |                      |
|---------------|--------------------|----------------------|
| COATING CLASS | Mass<br>(g/m2)     | Thickness<br>microns |
| AZ85          | 71                 | 19                   |
| AZ100         | 85                 | 23                   |

| Reflective Index        |     |
|-------------------------|-----|
| Total Solar Reflectance | 50% |

<sup>\*</sup>Please note this may vary depending on coating weight

Coating Adhesion - 180° Bend Test

| COIL WIDTH (mm) |           |
|-----------------|-----------|
| Range           | Tolerance |
| 762- 1220       | +5/-0     |

#### Supply Conditions

| Surface Condition | Spangled   |
|-------------------|--|
| Surface Treatment | PASSIVATED with Thin<br>Organic Coating (TOC)        |
| Flatness          | EAS 410:2008   |
| Branding          | All coils are branded to allow for full traceability |

## **Superior Thermal Performance**

Less heat transmitted into building interior, giving cooler interiors in hot climates.

850

Watts/m²

ZincAL® Roof

Approx. 65 watts/m² heat transmitted

Approx. 120 watts/m² heat transmitted

Approx. 150 watts/m² heat transmitted

