

# Optima<sup>®</sup>



The next generation of Colour Coated Steel  
**from Mabati Rolling Mills Limited**





## Technical Specifications

Mabati Rolling Mills Limited, **OPTIMA**® AZ70 (refer to product selection guide overleaf) Grade, **G550** or **G330**. **OPTIMA**® is fit-for-purpose colour coated steel for use in **benign** corrosive environments. **OPTIMA**® is warranted for up to 5 years if used in the correct environment.

Standards	Grades
EAS468:2008	G550
EAS468:2008	G330

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

### Dimensions

Thickness range	Tolerance thickness	Width range (mm)	Width tolerance
0.25	± 0.025	925 - 1220	0, (+) 5
0.32	± 0.032	925 - 1220	0, (+) 5
0.4	± 0.040	925 - 1220	0, (+) 5
0.5	± 0.050	925 - 1220	0, (+) 5
0.6	± 0.060	925 - 1220	0, (+) 5

Coil width (mm)	
Range	Tolerance
925 - 1220	+5 / -0

### Branding

All coils are branded to allow for full traceability. Example of product identification (underside of sheet):

MABATI ROLLING MILLS RESINDOT OPTIMA 925 X 0.3 TCT AZ100 45107-1-1-1

### Colour Fading and Physical Parameters

Colour	Maximum Fading $\Delta E$ CIELab (Cleaned) EAS46:2008	Gloss % (Within 5 years)	Maximum Chalking/ Tape off test ISO 4628-6 (Within 5 years)
Light colours (L > 60)	≤5	>60	4 (5 years)
Dark Colours (L < 60)	≤8	>70	4 (5 years)

\*Result may change depending on climate conditions

\*Warranties available upon pre-application

### Coating Weight\*

Coating Class	Minimum (g/m <sup>2</sup> )	AZ coating Thickness/microns
AZ100	85	23

\*Triple spot testing

### Paint Line Tested Properties of Material

Property	Measured by	Result
Hardness	Pencil	2H min
	Reverse Impact	500g
	T-bend	Max 2T
Adhesion	Flexibility	Max 6mm dia
Specular Gloss	60 degree	40 ± 5 units
Paint Film	Top Coat	12 ± 2 µm
	Backing Coat	7 ± 1 µm - light grey
Solvent Resistance	MEK	100 double rubs



## Colour Options

### Colour that says who you are

**OPTIMA**® is a single coat painted steel product for residential, small commercial and industrial projects in benign corrosive environments. It has been designed to offer the benefits of Aluminium-Zinc coating with the added aesthetics and superior solar reflection of top quality colour coating technology. The paint system used on **OPTIMA**® provides superior performance and is excellent value for money.

### Lasting performance is at its heart

The **ZINCAL**® inner core of **OPTIMA**® is produced by a process whereby rolled steel is continuously hot dipped into a patented alloy of 55% Aluminium, 43.5% Zinc and 1.5% Silicon.

This patented coating protects the steel in two ways:

- The Aluminium component of the coating provides a tough physical barrier between the extreme atmospheric conditions and the inner core of steel
- The Zinc in the coating protects the steel at the cut edges

**OPTIMA**® is available in a variety of colours. Tests have proven that light colours offer a higher reflectance compared to darker colours and will therefore provide a cooler interior on hot days.

**OPTIMA**® is available in the following standard colours:



Non-standard colours are available at the discretion of the mill, with minimum order quantities and extended lead times.