



**HOT DIP GALVANISED STEEL SHEET & COIL**



durability

**GalMaxx<sup>®</sup>**

**MAXIMUM PROTECTION**  
 AGAINST CORROSION



CERTIFIED TO ISO 9001 : 2008  
 CERT. NO. : AR 2495



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## **HOT DIP GALVANISED STEEL SHEET & COIL**

The most economical and effective way of protecting steel against corrosion is by way of zinc coating through hot dip continuous galvanising process.

Zinc coating provide protection in two ways:  
**Barrier Effect** and **Galvanic Protection Effect**.

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## Barrier Effect

The zinc coating layer prevents corrosion by sealing off the steel surface from oxygen and corrosive environment.

The protection will last for as long as there is still a layer of zinc coating until it is naturally depleted.



## Galvanic Effect

If the coating is accidentally scratched or breached so as to expose the steel, the surrounding zinc then acts as a sacrificial anode and 'heals the wound' by corroding instead of the steel, thus delaying the rusting of the steel sheet. This is called "sacrificial protection," a type of protection not provided by organic films or other common metallic coatings such as tin or chromium-plating. This is what accounts for the excellent edge protection on sheared hot dip galvanised steel sheet.



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## **ADVANTAGES OF GALMAXX® HOT DIP GALVANISED STEEL SHEET**

- Economical
- Variable Length to suit specific needs
- Durable
- Easy/ fast installation
- Termite proof
- Quality consistency/ uniformity

## **PRODUCT USAGE**

- Residential & Industrial Roofing
- Wall Cladding
- Rain Gutter
- Down Pipe
- Water Tank
- Steel Truss
- Floor Decking
- Light Gauge Sections
- Scaffolding Pipe
- Air-Con Ducting
- Window & Door Frame



## PRODUCT SPECIFICATION

### GRADE AND SYMBOL

Unit: mm

Classified Symbol	Nominal Thickness	Application
SGCC (Soft)	0.19 ≥ 1.55	Commercial quality
SGC440 (Semi Hard)	0.23 ≥ 1.55	Structural quality
SGCH (Full Hard)	0.156 ≥ 1.55	Commercial quality, hard class

### STANDARD COATING MASS

Unit: mm

Nominal Thickness	Symbol Indicating Weight of Zinc Coating	Equivalent Coating Thickness
0.156 to 0.176	Z08	0.017
0.19 to 0.45	Z12	0.026
0.48 to 0.60	Z18	0.034
0.70 to 1.55	Z22	0.043

\* Other coating masses are available upon request.

### MINIMUM COATING MASS

Coating Classification	Symbol for coating mass on both surfaces	Average coating mass in triple-spot test on both surfaces	Minimum coating mass at a single spot on both surfaces
Non Alloyed (GI)	Z08	80	68
	Z10	100	85
	Z12	120	102
	Z15	150	124
	Z18	180	153
	Z20	200	170
	Z22	220	187
	Z25	250	213
	Z27	275	234

#### Remarks:

1. The average coating mass in the triple-spot test on both surfaces shall be the average of measured coating masses of three test pieces cut from the test specimen.
2. The minimum coating mass at a single spot on both surfaces shall be the smallest of the measured coating masses of three test pieces cut from the test specimen.



## PRODUCT SPECIFICATION

### STANDARD NOMINAL THICKNESS & WIDTH

Width (mm)	Thickness (mm)
1219	(BMT) 0.30, 0.35, 0.40, 0.45, 0.50, 0.60, 0.70, 0.80, 0.90, 1.00, 1.20, 1.55 (TCT) 0.50, 0.70, 0.80, 1.00, 1.20, 1.50
914	(BMT) 0.156, 0.176, 0.19, 0.22, 0.25, 0.28, 0.30, 0.34, 0.40, 0.42, 0.48, 0.50
762 (for Corrugated Sheet)	(TCT) 0.18, 0.20, 0.23, 0.33

**Remarks :** Other thicknesses and widths are available upon request.

### STANDARD WIDTH & LENGTH FOR CUT SHEETS

Standard Width (mm)	Standard Length (mm)
1219 (Plain Sheet)	2438
914 (Plain Sheet)	2438
762 (for Corrugated Sheet)	1829, 2134, 2438, 2743, 3048, 3353, 3658

**Remarks :** Other lengths are available upon request.

### THICKNESS TOLERANCE UNIT (MM)

Nominal Thickness (mm)	Width (mm)	
	630 and above up to 1000	1000 and above up to 1250
Up to 0.25	± 0.04	± 0.04
0.25 and above up to 0.40	± 0.05	± 0.05
0.40 and above up to 0.60	± 0.06	± 0.06
0.60 and above up to 0.80	± 0.07	± 0.07
0.80 and above up to 1.00	± 0.07	± 0.08
1.00 and above up to 1.25	± 0.08	± 0.09
1.25 and above up to 1.55	± 0.10	± 0.11



## PRODUCT SPECIFICATION

### COIL SIZE & WEIGHT

<b>Inner Diameter</b>	508 mm (20")
<b>Outer Diameter</b>	1300mm Max for 1219 mm width 1450mm Max for 914 mm width 1600mm Max for 762 mm width
<b>Minimum Coil Weight</b>	2,000 kgs~ for 0.30 mm and below 2,500 kgs~ for 0.34 mm to 1.00 mm 3,500 kgs~ for 1.20 mm and above
<b>Maximum Coil Weight</b>	10,000 kgs

### MECHANICAL PROPERTIES

Mechanical Properties Steel Base	SGCH		SGC440		SGCC	
	Guaranteed	Typical	Guaranteed	Typical	Guaranteed	Typical
<b>Longitudinal Tensile Yield Strength, MPa</b>	550 min	600 - 750	440 min	440 - 550	270 min	340 - 400
<b>Tensile Strength, MPa</b>	550 min	600 - 750	335 min	380 - 550	205 min	320 - 400
<b>Elongation %</b>	-	2 - 7	-	11 - 20	-	24 - 29

Above are the typical mechanical properties. They are intended solely to provide purchaser with as much information as possible to make an informed decision on the steel grade to be specified.

### TYPES OF SURFACE FINISHES AVAILABLE

<b>Type of Spangle</b>	Minimised Spangle, Skin-Passed (Extra Smooth)
<b>Coating Mass (Standard)</b>	Z08, Z12, Z18, Z22
<b>Type of Surface Treatment</b>	<b>Cr<sup>6+</sup> Passivated</b> (GalMaxx®) - Suitable for general application
	<b>Chrome Free</b> (GalMaxx® Eco) - Suitable for Electrical Appliances & Automotive Accessories
	<b>Resin Coating</b> (GalMaxx® Premium) - Suitable for Steel Roof Truss, Batten & Purlin

\* Other coating masses are available upon request.

### CHEMICAL COMPOSITION

ELEMENT	SGCC & SGCH		SGC440	
	Guaranteed	Typical	Guaranteed	Typical
<b>Carbon (c)</b>	0.15 Max	0.03-0.06	0.15 Max	0.11-0.13
<b>Manganese (M)</b>	0.60 Max	0.12-0.34	0.60 Max	0.45-0.51
<b>Phosphorus (P)</b>	0.10 Max	0.009-0.019	0.10 Max	0.012-0.025
<b>Sulphur (S)</b>	0.05 Max	0.003-0.014	0.05 Max	0.003-0.006

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