

## GENERAL INFORMATION

Revision 6, November 2003

This literature supersedes all previous issues

### GENERAL DESCRIPTION

Cold Rolled products are available in four product groups; Formable, Structural, Carbon and Hardness. The product designations are based on those of AS/NZS 1595 as shown on page 2.

### SURFACE CHARACTERISTICS - Surface Quality

Surface quality refers to the standard of inspection used to identify and remove defects. Only one surface may be guaranteed but defects on the other surface should not intrude on the inspected surface.

There are three grades of surface quality. These are;

- G - general purpose - a surface not intended for exposed application
- E - exposed - a surface free from discontinuities and suitable for surface finishing
- D - drums - a surface specially designed for the drum industry.

### SURFACE FINISH

BlueScope Steel Cold Rolled products are available with either matt or lustre finish. The matt finish is produced by rolling with mechanically roughened rolls. This finish is preferred for lacquer or paint finishes and is beneficial during drawing operations when used with a lubricant. This finish can be assumed when no surface is specified.

Lustre finish is a smooth finish for electroplating achieved by using specially prepared rolls. Some surface preparation by the plater may be necessary.

### EDGE CONDITION

BlueScope Steel Cold Rolled products are generally trimmed to customer width. However, when coils are being slit to narrower widths, untrimmed (or mill edge) processing and tolerances may be suitable.

### AGEING

Non-ageing, or stabilized steels do not experience a yield point reappearance during storage. Stretcher strain markings do not develop in these steels during pressing or forming.

### STORAGE

Cold rolled products are supplied with the surface either 'oiled' or 'not oiled'. Where possible 'oiled' product should be ordered to improve the resistance to atmospheric corrosion during storage.

The surface of 'not oiled' or 'dry' product carries corrosion inhibiting compounds which, combined with the protective packaging, affects a degree of protection against atmospheric corrosion.

It is recommended that the following guidelines for the storage and use of 'Cold Rolled' products be adhered to;

- Packs must be kept dry;
- Packs must be stored under cover;
- The material should be used promptly after receipt;
- The material should not be stored as part coils after unpacking;
- If storage of part coils is unavoidable, the coils should be tightly re-strapped, preferably wrapped in rust inhibiting plastic or paper, and stored in a dry area. The storage time before surface rusting occurs will vary with storage conditions, particularly relative humidity, but storage for longer than a few days could result in rusting.
- Oiling improves corrosion resistance but oiled product should be used within 3 months.

### TOLERANCES

Width, length, thickness and flatness tolerances are designated as Class A or Class B. These are abbreviated as AW, AL, AT and AF or BW, BL, BT and BF indicating compliance with the relevant class set out in AS/NZS 1365. Class A tolerances are commercial tolerances and Class B are more stringent.

### DATA SHEETS

These data sheets are a guide to the availability, performance and properties of the BlueScope Steel range of Cold Rolled products at the time of printing. However, product variables can change from time to time and doubts should be referred to the nearest BlueScope Steel Limited Sales Office.

BlueScope is a trade mark of BlueScope Steel Limited.

Please ensure you have the current data sheet for this product as displayed at [www.bluescopesteel.com.au](http://www.bluescopesteel.com.au)

## BlueScope Steel Limited

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BlueScope Steel (AIS) Pty Ltd ABN 19 000 019 625

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## GENERAL INFORMATION **Cont.**

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**This table is an EXPLANATION of the DESIGNATION SYSTEM ONLY**  
**It does not imply that all combinations are available**  
 Regularly available products are listed in the Data Sheets

GROUP	CHARACTER POSITION						
<b>Formable (Ductile)</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
	<b>Product type</b>	<b>Steel type</b>	<b>Degree of Formability</b>	<b>Condition</b>		<b>Surface quality</b>	<b>Surface finish*</b>
	C - Cold Rolled	A - Aluminium killed V - Vitreous enamelling	1 - Commercial forming 2 - Commercial drawing 3 - Deep drawing 4 - Extra deep drawing 5 - Critical drawing	S - Skin-passed A - Annealed last (not skin passed)	N - Non-ageing (Stabilized)	G - General purpose E - Exposed F - Fully inspected	M - Matt L - Lustre
<b>Example</b>	<b>C</b>	<b>A</b>	<b>3</b>	<b>S</b>	<b>N</b>	<b>E</b>	
<b>Strength</b>	<b>Product type</b>	<b>Steel type</b>	<b>Strength Minimum yield strength (MPa)</b>			<b>Condition</b>	<b>Surface Quantity</b>
	C - Cold Rolled	A - Aluminium killed M - Sulphide modified U - Unspecified	Numeral	Numeral	Numeral	S - Skin passed	G - General Purpose E - Exposed
	<b>Example</b>	<b>C</b>	<b>A</b>	<b>2</b>	<b>5</b>	<b>0</b>	
<b>Hardness</b>	<b>Product type</b>	<b>Steel type</b>	<b>Hardness Minimum Rockwell B</b>			<b>Surface quality</b>	<b>Surface finish*</b>
	C - Cold Rolled killed	A - Aluminium	Numeral	Numeral	T - Hardness achieved by temper rolling S - Skin Passed	G - General purpose E - Exposed F - Fully inspected	M - Matt L - Lustre
	<b>Example</b>	<b>C</b>	<b>A</b>	<b>4</b>	<b>5</b>	<b>S</b>	<b>E</b>

Note: \* Unless otherwise specified the surface finish supplied is Matt.

\*\* The numeral 1 or 2 indicates the grade of Vitreous Enamelling Steel 1-General purpose; 2- Ultra Low Carbon Steel suitable for high quality enamel finishes.

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