

Data Sheet

300, 300L0, 300L15

Hot-Rolled – Plate Revision: 2/12/2021

GENERAL DESCRIPTION

Hot rolled steel plate with a nominal minimum yield strength as specified in the table below, with good ductility. Impact grades are available if required.

8mm plate is produced on the light (coil) plate line.

10mm and 12mm x 12xx plate is produced on either the Heavy Plate Line or light (coil) plate line, a preference can be specified when ordering.

>12mm plate is produced on the Heavy Plate Line.

STANDARDS

APPLICATIONS

AS/NZS 3678:2016

Structural applications

AS/NZS 1365:1996

DIMENSION CAPABILITIES				
THICKNESS (mm)	WIDTH (mm)			
8.00 - 60.00	730 – 1540			

Other dimensional combinations may be available by enquiry.

STANDARD PLATE SIZE		
WIDTH (mm) LENGTH (mm)		
1220 – 1250	2400	
	3600	
1510 – 1550	6000	
	12000 – Off heavy plate line*	
*60mm plate maximum length of 11000mm for width 1510 - 155		

		eennin plate maxim
CHEMICAL COMPOSITION	TYPICAL (wt %)	STANDARD MAX (wt %) ^[1]
Carbon (C)	0.19	0.22
Silicon (Si)	0.14	0.50
Manganese (Mn)	1.03	1.70
Sulphur (S)	0.009	0.030
Phosphorus (P)	0.013	0.040
Vanadium (V)	0.040	0.050

^[1] Values shown refer to relevant Australian/ New Zealand standard unless stated otherwise

MECHANICAL PROPERTIES	TYPICAL		STANDARD MIN ^[1]					
MECHANICAL PROPERTIES	>8 ≤12	>12 ≤20	>20	8	>8 ≤12	>12 ≤20	>20 ≤50	>50
Yield strength, MPa	350	340	320	320	310	300	280	270
Tensile strength, MPa	510	500	480	430	430	430	430	430
Elongation% on L₀=5.65mm√So	32	28	27	21	21	21	19*	19*

^[1] Values shown refer to relevant Australian/ New Zealand standard unless stated otherwise

*For test piece cross-sectional area >1000mm², minimum elongation is reduced by 2% from AS/NZS3678 value.

Material should be used promptly (within 6 months) to avoid the possibility of storage related corrosion and degradation. Mechanical properties are guaranteed at ambient/room temperatures. Please consult technical representatives at New Zealand Steel for high/low temperature use.

IMPACT PROPERTIES			
Gauge GUARANTEED MINIMUM (average 3 tests)		AT TEMPERATURE	
≥10	27 Joules	0°C, -15°C	
8	22 Joules	0°C, -15°C	

FABRICATING PERFORMANCE 1 = Limited 5 = Excellent		
METHOD	RATING	
Bending	3	
Welding	4	

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