

# 300, 300L0, 300L15

## Hot-Rolled – Plate

Revision: 31/1/2012

### 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.

### APPLICATIONS

- Structural applications

### STANDARDS

- AS/NZ 3678:2011
- AS/NZS 1365:1996

CHEMICAL COMPOSITION	10 – 32mm	32 – 50mm	10 – 32mm	32 – 50mm
	TYPICAL (wt %)		EXPECTED MAXIMUM (wt %) <sup>[1]</sup>	
Carbon (C)	0.16	0.15	0.22	0.22
Silicon (Si)	0.24	0.250	0.35	0.35
Manganese (Mn)	1.30	1.30	1.70	1.70
Sulphur (S)	0.017	0.016	0.030	0.030
Phosphorus (P)	0.020	0.012	0.040	0.040
Vanadium (V)	0.016	0.035	0.030	0.045

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

MECHANICAL PROPERTIES	10.0 – 12.0mm	12.0 – 20.0mm	20.0 – 32.0mm	10.0 – 12.0mm	12.0 – 20.0mm	20.0 – 50.0mm
	TYPICAL			EXPECTED MINIMUM		
Yield strength, MPa	350	340	320	310	300	280
Tensile strength, MPa	510	500	430	430	430	430
Elongation % on L <sub>0</sub> =5.65mm√So	32	28	27	21	21	21

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.

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

DIMENSION CAPABILITIES	
THICKNESS (mm)	WIDTH (mm)
10.00 – 50.00	730 – 1540

Other dimensional combinations may be available by enquiry.

STANDARD PLATE SIZE	
WIDTH (mm)	LENGTH (mm)
1220 – 1250	2400
	3600
	6000
1510 - 1550	12000

IMPACT PROPERTIES (AS/NZS 3678 L15)	
GUARANTEED MINIMUM (average 3 tests)	AT TEMPERATURE
27 Joules	- 15°C

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