

## GENERAL DESCRIPTION

Hot Rolled 250 steel is a structural steel with a nominal minimum yield strength as specified in the table below, with good ductility.

## APPLICATIONS

- Structural applications

## STANDARDS

- AS/NZS 3678:2016
- AS/NZS 1365:1996

	≤20.0mm	>20	≤20.0mm	>20
<b>CHEMICAL COMPOSITION</b>	<b>TYPICAL (wt %)</b>		<b>EXPECTED MAXIMUM (wt %)<sup>[1]</sup></b>	
Carbon (C)	0.173	0.173	0.22	0.22
Silicon (Si)	0.013	0.013	0.03	0.35
Manganese (Mn)	1.066	1.066	1.70	1.70
Sulphur (S)	0.018	0.018	0.03	0.03
Phosphorus (P)	0.014	0.014	0.04	0.04

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

	10 – 12mm	12 – 32mm	40 – 50mm	10 – 12mm	12 – 20mm	20 – 25mm	25 – 50mm
<b>MECHANICAL PROPERTIES</b>	<b>TYPICAL</b>			<b>EXPECTED MINIMUM</b>			
Yield strength, MPa	310	300	300	260	250	250	250
Tensile strength, MPa	470	465	465	410	410	410	410
Elongation, % on L <sub>0</sub> =5.65mm√So	32	31	31	22	22	22	20*

\*For test piece cross-sectional area >1000mm<sup>2</sup>, 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.

<b>FABRICATING PERFORMANCE</b> 1 = Limited 5 = Excellent	
METHOD	RATING
Bending	3
Welding	5

<b>STANDARD PLATE SIZE*</b>	
WIDTH (mm)	LENGTH (mm)
1220 – 1250	2400
	3600
1510 - 1550	6000
	12000

\*There is minimum order quantity for any dimension outside of standard plate size.

<b>DIMENSION CAPABILITIES</b>	
<b>AS/NZS 3678 - 250</b>	
THICKNESS (mm)	WIDTH (mm)
10.00 – 60.00	730 – 1540

<b>AS/NZS 3678 – 250L0 250L15</b>	
THICKNESS (mm)	WIDTH (mm)
20.00 – 32.00	730 - 1540

Other dimensional combinations may be available by enquiry.

<b>IMPACT PROPERTIES (AS/NZS 3678 L0 and L15)</b>	
GUARANTEED MINIMUM (average 3 tests)	AT TEMPERATURE
27 Joules	0°C
27 Joules	-15°C

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