Uncoated Steel
Data Sheet

September 2026 - This literature supersedes all previous issues

Welded Beams and Columns AS/NZS 3679.2 – 400 (L15)

General description

Welded Beams and Columns are manufactured in accordance with AS/NZS 3679.2:2016, from plate manufactured to AS/NZS 3678:2016 with a nominal yield strength of 400MPa. 400L15 has a guaranteed impact performance at -15°C.



Typical uses

Heavier end of the engineering construction, buildings, mining infrastructure and transport market in applications such as office buildings, shopping centres, stadiums, car parks and bridges.

Features & benefits

Consistent, uniform deep penetration fillet weld profile

Guaranteed minimum strength levels

Low temperature properties (if specified)

ACRS accreditation (ACRS Certificate No. 120802)

Warnings

This material should be used in conjunction with the appropriate structural design and welding standards.

Maximum recommended temperature for hot forming is 620°C. If heated above 620°C, mechanical properties may deteriorate.

Untrimmed Ends: Untrimmed welded sections may have one or both ends that are not ‘flush-cut’ by the mill. The total additional length of the beam may be up to 200mm greater than the standard length. It is recommended that a minimum of 75mm be removed from the untrimmed end(s) to ensure that the weld in the remaining section meets the requirements of AS/NZS 3679.2:2016.

Australian and International Standards

AS/NZS 3678:2016

AS/NZS 1365:1996 (R2016)

AS/NZS 3679.2:2016

ISO 9001:2015 Quality System Certified

Supply conditions

	Normal	Optional
Plate Thickness Range	10 – 40 mm	-
Plate Tolerances	AS/NZS 1365:1996 (R2016)	-
Beam Tolerances	AS/NZS 3679.2:2016	-
Ultrasonic Inspection	-	AS 1710-2007 (R2017)
Surface Inspection	BlueScope	-
Certification	BlueScope	-

Tensile test requirements for welded web-to-flange test

Grade to AS/NZS 3678:2016	Specified Minimum Tensile Strength (MPa)	Nominal Thickness of Web (mm)	Minimum test load per unit flange/web length (kN/mm)
400L15	**480**	10	4.80
		12	5.76
		≥ 16	7.68

Charpy impact properties

Charpy Impact Properties	Longitudinal on 10 X 10 mm test piece	Test Temperature (ºC)	Absorbed Energy (joules)	
			Avg. of 3	Individual
Guaranteed Min	400L15	-15	27	20

Fire hazard properties

Test & Evaluation Method	Result
Combustibility test for materials (AS 1530.1-1994 (R2016))	Not deemed combustible (steel substrate) #

These test results relate only to the behaviour of the test specimens of the material under the particular conditions of the test and they are not intended to be the sole criterion for assessing the potential fire hazard of the material in use.

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