AUSTRALIAN STANDARDS GUARANTEED

Assuring product compliance

BlueScope Steel is Australia's only manufacturer of flat steel and has a long history of supplying quality products that meet or exceed Australian Standards at its ISO:9001 accredited manufacturing facilities.

Compliance to the Standard is vital as it gives the specifier and purchaser confidence that the material obtained will perform as intended in the design and use phases of the project.

Unfortunately reinforcing, prestressing and structural steels have arrived on construction sites within Australia that fail to meet the minimum requirements of the applicable AS/NZ Standards.

The influx of these non-compliant materials have led to lengthy project delays and consequential rectification costs. In addition, companies and individuals may be liable under the Work Health & Safety Act 2011 in the event of structural failure causing injury or death, occurring as a result of using non-compliant materials.

Some of the key problems have been identified. Problems include inadequate product traceability; misleading and false supporting documentation; excessive variation in material properties and product markings that are simply inadequate.

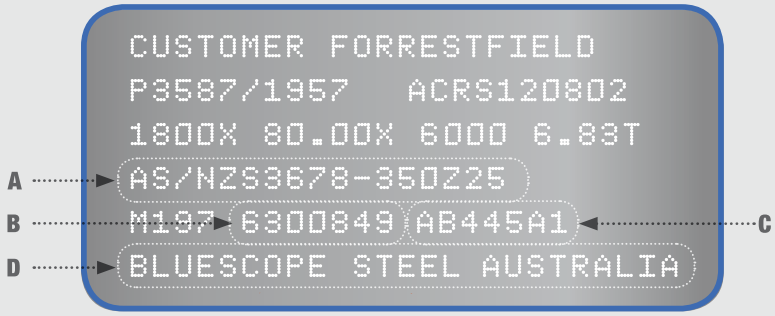
BlueScope Steel supports a safe construction and fabrication industry. Therefore we would like to provide information that will assist you to ensure that the material you specify is actually supplied; in this way we are assisting you to protect your reputation.

BlueScope Steel has identified a number of ways to check compliance to AS/NZS 3678: 2011. This includes correct compliance information being noted on both plate stencils and test certificates, and for further assurance, ACRS certification. ACRS has independently assessed BlueScope Steel to have the capability to manufacture to Australian Standard AS/NZS 3678 and verified that it consistently does so.

Image above: Clifton Hill Rail Bridge, Melbourne. Courtesy – Frank Rapattoni, Parsons Brinkerhoff. Fabrication – Keppel Prince.

3 ways to check compliance

1 Check the stencil on the plate has the following minimum information:



A Steel grade and the Standard applicable

B Heat number

C Traceable plate or identification number

D Name of manufacturer

BlueScope Steel stencils all of its AS/NZS 3678 structural steel plate with the necessary compliance information for identification, traceability and linkage to a specific test certificate. Although not mandatory, the stencil also states the ACRS certification number for even greater assurance.

Having the right information as required by the Standard provides the first step in the quest for product compliance assurance.

2 Check the test certificate has the following minimum information:

- ☑ Certificates to be written in English
- ☑ Reference to a third party accrediting body recognised by ILAC, such as NATA
- ☑ Steelmakers, manufacturers, suppliers and the testing authorities name
- ☑ Test certificate number and test number
- ☑ Date
- ☑ Product, testing specification and grade, e.g. AS/NZS 3678-350L15
- ☑ Product delivery condition, e.g. 'As rolled'
- ☑ Dimensions
- ☑ Product Steelmaking process, e.g. basic oxygen, slab cast
- ☑ Unique product identifiers for the tested units and other product covered by the test certificate
- ☑ Heat number
- ☑ Chemical Analysis type, e.g. either ladle or cast analysis ('L') or product ('P') analysis
- ☑ Chemical composition of all elements listed in Tables 2 or 3 of the Standard
- ☑ The relevant mechanical testing results (including test piece position and orientation, batch or item basis of testing and results)
- ☑ Additional tests agreed between the purchaser and the manufacturer
- ☑ Statement acknowledging the chemistry and tested mechanical properties comply with the Standard
- ☑ Signatory from the manufacturer, supplier and certification authority attesting to items above.

TEST CERTIFICATE — BLUESCOPE STEEL — Page 1 of 1 — Certificate No. : XXXXX — Transmission Date: XX/XX/XX

Customer: JOHN SAMPLE SAMPLE COMPANY SAMPLE STREET SAMPLEVILLE STATE PCODE Cust Order No: XXXXXXXXXX	Supplier: BLUESCOPE STEEL (AIS) PTY LTD PORT KEMBLA, N.S.W., AUSTRALIA. A.B.N. 19 000 019 625 Sales Order No: XXXXX Printed At: Supplier XXXX on: XX/XX/XXXX

NATA — Accredited for compliance with ISO/IEC 17025.

I certify that the original records of the company show that the item(s) referred to on this certificate conform to the specification as stated.
K.BAZLEY - APPROVED SIGNATORY Mechanical LAB 0631
K.ANNETT - APPROVED SIGNATORY Chemical LAB 0632

STEELMAKING: Basic Oxygen - Slab Cast — INSPECTION: Supplier
SPECIFICATION: AS/NZS 3678-250 AS/NZS 3678-350 — CERTIFICATION: Supplier
PRODUCT: XLERPLATE

CHEMICAL ANALYSIS
Percentage of element by mass (L=Cast, P=Product, -S=Soluble, -T=Total, CF=Chemical Formula, n=Min, x=Max)

Item No	Heat / Unit No	NATA Lab	L/P	C	P	Mn	Si	S	Ni	Cr	Mo	Cu	Al-T
2432	7306829	0632	L	.165	.012	.71	.16	.012	.009	.012	.003	.012	.042
2432	7308389	0632	L	.153	.022	.65	.15	.014	.007	.018	<.002	.008	.035

Item No	Heat / Unit No	NATA Lab	L/P	Ti	Nb	V	CF1	CF2	CF3	CF4
2432	7306829	0632	L	<.002	.001	<.003	.29	.04	.00	.00
2432	7308389	0632	L	<.002	.001	<.003	.27	.03	.00	.00

CF1=C+ (MN/6) + ((CR+MO+V)/5) + ((CU+NI)/15) CF2=NI + CR + CU + MO CF3=NB + TI + V CF4=NB + V

MECHANICAL TESTING
Tensile AS1391

Item No	Heat No	Tested Unit	NATA Lab	Cat	Loc	THICK mm	ReH MPa	Rm MPa	Lo	ELONGN %
2432	7306829	FD334	0631	B	TQF	5.00	480	530	A	26
2432	7308389	FD336	0631	B	TQF	5.00	420	480	A	27

ITEMS COVERED BY THIS CERTIFICATE

Item No	Heat No	Ordered Dimensions (mm)	No of Units	Mass (Tonnes)	Unit Identities
2432	7306829	2400.0X5.00X6000	4	2.260	FD347A1 FD347A2 FD347A3 FD349A1
2432	7308389	2400.0X5.00X6000	19	10.735	FD336A2 FD336A3 FD336B1 FD338A1 FD338A2 FD338A3 FD339A1 FD339A2 FD339A3 FD340A1 FD340A2 FD340A3 FD340B1 FD341A1 FD341A2 FD341A3 FD343A1 FD343A2 FD343A3

COMMENTS
This test certificate is issued subject to the Uncertainty of Results statement set out on BlueScope Steel's Website www.bluescopesteelconnect.com. In order to rely upon this certificate, you must read the Uncertainty of Results statement.
THIS PRODUCT IS SUPPLIED IN ACCORDANCE WITH THE REQUIREMENTS OF AS/NZS 3678:2011 SAMPLING AND CHEMICAL ANALYSIS ARE PERFORMED IN ACCORDANCE WITH BLUESCOPE STEEL PROCEDURE DH-LABS-QS-00 S05.07C. MECHANICAL TESTING HAS BEEN PERFORMED ON SAMPLES SUPPLIED BY THE RELEVANT PRODUCTION DEPARTMENTS. HEAT TREATMENT - PRODUCT AS ROLLED.

MECHANICAL COMMENTS
TEST PIECE LOCATION (LOC) TQF=Transverse Quarter Front End
TEST CATEGORY (CAT) B=Batch
GAUGE LENGTH (Lo) A=5.65 * square root of the original cross-sectional area of the test piece.

NATA accredited test certificates are provided with each BlueScope Steel order and are kept on file. Certificates dating back to 1993 are available online for uncoated steel, and provide a strong second step in the quest for product compliance assurance.

3 ACRS certification – BlueScope Steel is now ACRS certified

When you specify BlueScope steel you can be confident that you get the quality you have specified, and not potentially non-compliant materials that put you at risk.

To provide the third step in assuring specifiers and customers that our XLERPLATE® steel meets or exceeds AS/NZS 3678, ACRS has independently assessed BlueScope Steel to have the capability to manufacture to Australian Standard AS/NZS 3678 and verified that it consistently does so.

Valid to 31 DEC 2013

ACRS

Australian Certification Authority for Reinforcing Steels Ltd

Certificate of Product Compliance

Certificate Number: **120802**

BLUESCOPE STEEL

BLUESCOPE STEEL PORT KEMBLA PLATE MILL

PORT KEMBLA, NSW, AUSTRALIA

has satisfied the authority that it complies with the relevant ACRS Quality and Operations Assessment Procedures. Where appropriate, and as listed below, it has further satisfied the Authority that it manufactures and/or supplies products that conform with the stated product standards and is entitled to use the ACRS mark on its products.

Scope of Certification

Structural steel hot-rolled plates and slabs to AS/NZS 3678

Full details of the products for which certification has been achieved should be viewed at: www.steelcertification.com

By authority of ACRS Council:

Philip Sanders, Executive Director

Valid until: 31 December 2013

First certified: August 2012

ACRS Certified STRUCTURAL STEELS

What is ACRS?

The Australian Certification Authority for Reinforcing Steels ("ACRS") provides independent, expert, industry-based accreditation, certifying manufacturers and suppliers of reinforcing, prestressing and structural steels to Australian/New Zealand Standards.

ACRS was formed by industry in 2000, using an internationally recognised model for steel certification established in the UK almost 30 years ago. ACRS is structured around the requirements of the International Standard for bodies operating product certification systems, ISO/Guide 65, published as AS/NZS 3843, and its successor Standard, ISO/IEC 17065.

ACRS currently certifies over 150 manufacturing locations, in 15 countries around the world, and has undertaken more than 500 technical conformity assessments to AS/NZ steel Standards.

For more information: **steelcertification.com.au**

BlueScope Steel ACRS certification – The key benefits to you

- ACRS has independently assessed BlueScope Steel to have the capability to manufacture to Australian Standard AS/NZS 3678 and verified that it consistently does so
- Mitigates risk and protects your reputation. You can be confident that the material you specify will deliver the properties outlined under AS/NZS 3678 – properties you are assuming when designing for critical applications; a basic prerequisite to mitigate failure in service
- It enables your procurement choices to be made on a *compliance* basis and not simply on the cost of an "equivalent" product

For more information on product compliance:

BlueScope Steel XLERPLATE® website

xlerplate.com.au/AustralianStandards

or contact BlueScope Steel Direct on

1800 800 789

9 320075 072131