


Customer: <b>NEW ZEALAND STEEL LTD</b> <b>ATTN: MARKETING (MA05)</b> <b>PRIVATE BAG 92121</b> <b>AUCKLAND</b> <b>New Zealand</b>	Supplier: <b>BLUESCOPE STEEL (AIS) PTY LTD</b> <b>PORT KEMBLA, N.S.W., AUSTRALIA.</b> <b>A.B.N. 19 000 019 625</b>
Cust Order No: 116176	Sales Order No: Z9020 Printed At: Supplier MWS on: 03/09/2019

 Accredited for compliance with ISO/IEC 17025 - Testing.	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.  <b>R.MATHIESSEN - BLUESCOPE STEEL APPROVED SIGNATORY</b> Mechanical LAB 0631 <b>M.GATRICK - BLUESCOPE STEEL APPROVED SIGNATORY</b> Chemical LAB 0632
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STEELMAKING: Basic Oxygen - Slab Cast  
SPECIFICATION: **AS/NZS 3678-350L15**  
PRODUCT: **XLERPLATE**

INSPECTION: Supplier  
CERTIFICATION: EN10204 3.1

### 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
0097	6666809	0632	L	.152	.023	1.21	.30	.011	.016	.036	.006	.038	.027
0098	6668837	0632	L	.160	.021	1.22	.30	.015	.017	.045	.004	.044	.027

Item No	Heat / Unit No	NATA Lab	L/P	Ti	B-T	Nb	V	CF1	CF2	CF3
0097	6666809	0632	L	.015	.0004	.001	.003	.37	.10	.02
0098	6668837	0632	L	.017	.0004	.001	<.003	.38	.11	.02

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

### MECHANICAL TESTING

#### Tensile AS 1391

Item No	Heat No	Tested Unit	NATA Lab	Cat	Loc	THICK mm	ReH MPa	Rm MPa	Lo	ELONGN %
0097	6666809	KR003	0631	B	TQF	16.00	395	510	A	33
0098	6668837	KT471	0631	B	TQF	25.00	405	520	A	29

#### Charpy V-Notch AS 1544.2

Item No	Heat No	Tested Unit	NATA Lab	Cat	Loc	Wo mm	THICK mm	TEMP DEG C	ENERGY JOULES	ENERGY JOULES	ENERGY JOULES	AVG ENERGY JOULES
0097	6666809	KR003	0631	B	LQF	10	10	-15	150	140	152	147
0098	6668837	KT471	0631	B	LQF	10	10	-15	95	92	96	94

### ITEMS COVERED BY THIS CERTIFICATE

Item No	Heat No	Ordered Dimensions (mm)	No of Units	Mass (Tonnes)	Unit Identities
0097	6666809	2400.0X20.00X9000	2	6.782	<b>KT463A1 KT463A2</b>
0098	6668837	2400.0X25.00X9000	2	8.478	<b>KT470A1 KT471A1</b>

### COMMENTS

This test certificate is issued subject to the Uncertainty of Results statement set out on BlueScope Steel's Website

[www.bluescopesteelconnect.com](http://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 3678:2016. 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. Quality management system conforms to AS/NZS ISO 9001 as assessed by BSI (Certificate Number FS 594448).



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**MECHANICAL COMMENTS**

TEST PIECE LOCATION (LOC) LQF=Longitudinal Quarter Front End 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.

MEASUREMENT ABBR AVG=AVERAGE

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