

**COMPLIANCE SUMMARY REPORT / PRODUCT SPECIFICATIONS**

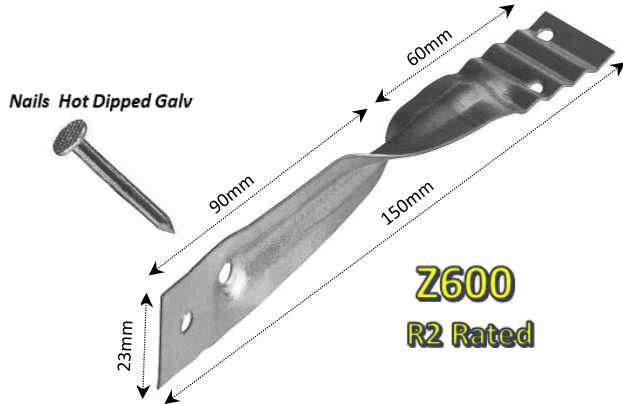
**CARLRAY VENEER TIES SIDE-FIXED LIGHT DUTY Z600 R2 RATED  
COMPLY TO AS 2699.1:2020 & AS 3700:2018**

**Manufactured By**

Carlray Pty Ltd  
448 The Boulevarde  
Kirrawee N.S.W. 2232

**Product: Code 83959**

Type: A  
Category of Tie: Veneer - Side Fixed  
Classification: Light Duty  
Rated Cavity Width: 50mm  
Durability Category: R0 R1 R2 Mild  
Fastening Requirements: 3.15 Galv Nail  
Product Dimensions: 150mm x 23mm x .75mm



**Test Results: Masonry Research Centre Deakin University - Specimens Tested 10**

Duty Classification	Mean Strength Kn	
	Tension	Compression
Light Duty	0.69	0.76

Durability Class	Colour Code	Material
R2	Yellow	Z600

300gms/m<sup>2</sup> on each surface

Water Transfer Test	Vertical Offset = 0	Vertical Offset = 20mm
Up Position	Pass	Pass

Note: Ties must be installed in the up position, as per image.

Corrosion Zones for Masonry Strip Steel Veneer Ties - Material Z600 Galv		
Durability Class	Surf Coast	Sheltered Coast
R2	>10km	>1km

Note: The closer the construction is located to the sea the higher corrosive environment.

Installation and Spacings Requirements For Masonry Veneer Ties		
450 Stud Walls	600 Stud Walls	Around Openings & Edges
600mm x 450mm	600mm x 600mm	300mm x 300mm

Note: Suitable for timber frames. The correct mortar mix is important to effectivity of strength in masonry construction.

**Assessment / Overview**

These ties comply, having been independently tested by Deakin University Masonry Research Centre. Test reports and Material Certificate of Analysis for determining the coating thickness of galvanised wall ties are available on request.

**TEST CERTIFICATE**



Customer:	STHNSCLLTB SOUTHERN SHEET & COIL P/L LLT 2 STEEL STREET BANKSTOWN NSW 2200	Supplier:	BlueScope Steel Limited PORT KEMBLA, NSW, AUSTRALIA A.B.N. 16 000 011 058 218840
Cust Order No:	22327	MOI No:	Supplier MWS
		Printed At:	26/11/2020
		on:	



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 and that the product test results on this certificate supercede product test results on any other certificate.

R. MATHIESSEN - BLUESCOPE STEEL APPROVED SIGNATORY  
 Mechanical LAB 0631  
 M. GATRICK - BLUESCOPE STEEL APPROVED SIGNATORY  
 Chemical LAB 0632

PRODUCT: GALVABOND(R) G2 Z600

SPECIFICATION: AS 1397

**CHEMICAL ANALYSIS** (Chemical Analysis supplied by the Steelmaker. Basic Oxygen Steelmaking process.)

Item No	Dimensions (mm)	PACK No	NATA Lab	CHEMICAL COMPOSITION PERCENT															
				HEAT No	C	P	Mn	Si	S	NI	Cr	Mo	Cu	Al-T	Ti	Nb	B-T	V	
05	0.65 x 1245	G70118	0632	7706839	.064	.013	.19	<.005	.011	.017	.032	.005	.049	.037	<.002	.001	<.0003	<.003	

Item No	Dimensions (mm)	PACK No	NATA Lab	CHEMICAL COMPOSITION PERCENT		
				HEAT No	Sn	N
05	0.65 x 1245	G70118	0632	7706839	.003	.0043

**TENSILE TESTING**

Item No	PACK No	Heat No	COIL/ TEST No	NATA Lab	Thick mm	Tensile AS1391			
						ReL MPa	Rm MPa	ELONGATION	
								Lo(mm)	%
05	G70118	7706839	0118	0631	.65	379	412	80	32

**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.

SAMPLING AND CHEMICAL ANALYSIS ARE PERFORMED IN ACCORDANCE WITH BLUESCOPE STEEL PROCEDURE DH-LABS-QS-00 \$05.07C  
 MECHANICAL TESTING HAS BEEN PERFORMED ON SAMPLES SUPPLIED BY THE RELEVANT PRODUCTION DEPARTMENTS