

# HERITAGE RANGE



## NATIONAL CONSTRUCTION CODE (NCC) COMPLIANCE BULLETIN

**JANUARY 2024** | This version supersedes all previous issues.



### **THIS BULLETIN DETAILS RELEVANT NCC OF AUSTRALIA COMPLIANCE INFORMATION RELEVANT TO THE FOLLOWING LYSAGHT ZENITH® STEEL CLADDING PRODUCTS.**

- CUSTOM ORB®
- CUSTOM ORB ACCENT® 21
- CUSTOM BLUE ORB®

### **LYSAGHT® – YOUR GUARANTEE OF COMPLIANCE**

The National Construction Code of Australia (NCC) details the minimum necessary requirements for safety, health, amenity and sustainability that need to be met in the design and construction of new buildings (and new building work in existing buildings) throughout Australia.

Using products that do not conform to the NCC requirements can leave installers, builders and suppliers liable for cost of replacement, rectification and consequential damages.

Lysaght's range of Australian-made steel building products has been developed, tested and manufactured to not only meet our country's demanding climatic and geographic requirements but also to provide building

designers, builders and owners with the confidence that comes from using guaranteed compliant products.

The compliance statements overleaf outline compliance of Lysaght's Heritage range of roofing and walling products with both the National Construction Code of Australia and the relevant Australian Standards for both Residential and Non-residential buildings.

# NATIONAL CONSTRUCTION CODE OF AUSTRALIA (NCC 2022) COMPLIANCE STATEMENT

## LYSAGHT® HERITAGE ROOFING AND WALLING PRODUCT RANGE



<b>Issuing entity:</b>		BlueScope Steel Limited trading as Lysaght			
<b>Issue Date</b>		January 2024			
<b>Application</b>		Roofing for Class 2 to 9 Buildings (Non-Residential) and for Class 1 and 10 Buildings (Residential)			
<b>Scope of Use</b>		All products noted below may be used as roof cladding when designed using the individual construction manuals available for each product, accessible at lysaght.com			
<b>Product Brand</b>		LYSAGHT®			
<b>PRODUCTS<sup>1</sup></b>	<b>Roofing or Walling</b>	<ul style="list-style-type: none"> <li>CUSTOM ORB®</li> <li>CUSTOM BLUE ORB®</li> <li>CUSTOM ORB ACCENT® 21</li> </ul>			
<b>Base Metal Brand</b>		<b>ZINCFORM® steel</b>		<b>ZINC HI-TEN® steel</b>	
<b>Typical Environments</b>		For low to high corrosive environments >1000m from breaking surf >1000m from calm marine	For low to high corrosive environments >1000m from breaking surf >1000m from calm marine	For low to high corrosive environments >1000m from breaking surf >1000m from calm marine	For low to high corrosive environments >1000m from breaking surf >1000m from calm marine
<b>Base Metal Thickness Range</b>	<b>Roofing</b>	0.42mm – 0.48mm	0.42mm – 0.48mm	0.6mm	0.6mm
	<b>Walling</b>	0.42mm – 0.48mm	0.42mm – 0.48mm	0.6mm	0.6mm
<b>Minimum Yield Strength</b>		550 MPa	550 MPa	300 MPa	300 MPa
<b>Coating</b>		Z450 450 g/m <sup>2</sup> minimum metallic coating mass, (zinc) to AS 1397	Z600 600 g/m <sup>2</sup> minimum metallic coating mass, (zinc) to AS 1397	Z450 450 g/m <sup>2</sup> minimum metallic coating mass, (zinc) to AS 1397	Z600 600 g/m <sup>2</sup> minimum metallic coating mass, (zinc) to AS 1397
<b>Paint</b>		N/A	N/A	N/A	N/A
<b>Solar Absorptance Value Range</b>		0.66 – 0.89	0.66 – 0.89	0.66 – 0.89	0.66 – 0.89
<b>Warranty<sup>2</sup></b>	<b>Roofing</b>	Up to 15 years	Up to 15 years	Up to 15 years	Up to 15 years
	<b>Walling</b>	Nil	Nil	Nil	Nil
<b>Combustibility</b>		LYSAGHT® products manufactured from ZINC HI-TEN® and ZINCFORM® steel all have an ignitability index, Spread of Flame index and Heat Evolved Index of 0 (zero) and as such may be used wherever a non-combustible material is required as per the National Construction Code Volume 1 clauses C2D10 (5)(b) & (6)(e) and in Volume 2 clause H3D2 (1) (e).			
<b>Acceptable Construction Manuals</b>		LYSAGHT® Roofing & Walling Installation Manual for Design and Installation Professionals LYSAGHT® Cyclonic Area Design Manual for Design and Installation Professionals LYSAGHT® Architectural Detailing and Flashing Manual for Architects and Detailing Professionals LYSAGHT® Product Advisory Bulletins BlueScope Technical Bulletin 1A Steel Roofing Products - Selection Guide			
<b>Australian Standards Compliance</b>	Limit State Capacities for Strength and Serviceability have been determined from testing at NATA <sup>3</sup> accredited facilities in compliance with the following standards:	AS 1562.1:2018 - Design and installation of sheet roof and wall cladding - Part 1: Metal AS 4040.0:1992 - Methods of testing sheet roof and wall cladding AS 4040.1:1992 (Rec: 2016) - Methods of testing sheet roof and wall cladding - Method 1: Resistance to concentrated loads AS 4040.2:1992 (Rec: 2016, Amd 1: 2018) - Methods of testing sheet roof and wall cladding, Part 2: Resistance to wind pressures for non-cyclone regions AS 4040.3:2018 - Methods of testing sheet roof and wall cladding, Method 3: Resistance to wind pressures for cyclone regions AS/NZS 1170.0:2002 - Structural design actions - Part 0: General principles AS/NZS 1170.1:2002 - Structural design actions Part 1: Permanent, Imposed and other actions AS/NZS 2728:2013 - Prefinished/prepainted sheet metal products for interior/ exterior building applications - Performance requirements AS/NZS 1170.3:2011 - Structural design actions Part 3: Snow and ice actions			
	BlueScope coated steel products have been determined to be compliant with the following standards:	AS 1397:2021 - Continuous hot-dip metallic coated steel sheet and strip - Coatings of zinc and zinc alloyed with aluminium and magnesium AS/NZS 2728:2013 - Prefinished/prepainted sheet metal products for interior/ exterior building applications - Performance requirements AS 1397:2021 - Defines the coating types and classes and steel grades for hot-dip metallic coated steel. LYSAGHT® product coating compliance is nominated at "Coating" above. Product made to other standards may not meet the ductility or strength requirements assumed by design standards or the minimum coating class requirements critical to building durability. AS/NZS 2728 - Specifies requirements for the physical properties and long-term durability of pre-finished/pre-painted sheet metal products. LYSAGHT® pre-painted compliance is nominated at "Paint" above for Performance requirement 1.3.1 Metal products Hot dipped metallic coated steel (types Z, ZM, AZ, AM) complying with AS 1397, stainless steel, aluminium, or aluminium alloy in the form of sheet, coil, or strip.			
<b>Compliance with the deemed-to-satisfy provision of the NCC</b>		NCC Volume 1 - For class 2 to 9 Buildings (Non-Residential) <ul style="list-style-type: none"> <li>Section B1.4 Structural Resistance (j) (iv) Metal roofing: AS 1562.1</li> <li>Section F1.0 Deemed-to-Satisfy Provisions</li> <li>F1.5 Roof coverings Metal Sheet roofing complying with AS 1562.1</li> </ul> NCC Volume 2 - For class 1 and 10 Buildings (Housing Provisions) <ul style="list-style-type: none"> <li>H1D7 Roof cladding</li> </ul> Published Capacity tables in reference manuals above below are suitable to determine structural adequacy and serviceability of nominated products for individual projects referencing the following Australian Standards and NCC requirements: <ul style="list-style-type: none"> <li>NCC, Volume One, Section B - Structure, Part B1 -Structural provisions (Deemed-to-Satisfy Provisions), Clause B1D2 Resistance to actions, and Clause B1D3 Determination of individual actions</li> <li>NCC, Volume One, Section B - Structure, Specification B1D3 - Design of Buildings in Cyclonic Areas</li> </ul>			

**Notes:**

- Not all products are available in all materials and finishes. Not all products are available in all regions. Visit lysaght.com for more information.
- Warranties are subject to application and eligibility criteria. For full terms and conditions and warranty eligibility for BlueScope steel products visit warranties.bluescopesteel.com.au.
- NATA – National Association of Testing Authorities.

## UNDERSTANDING COMPLIANCE

The National Construction Code (NCC) outlines deemed-to-satisfy requirements for metal claddings based on compliance to Australian Standards. Whilst the applicable Australian Standards differ between Residential and Non-Residential buildings, the underlying common tenants are;

- a) That installed metal products must be able to meet expected Structural, Wind and Installation loads as per the Australian Standards,
- b) That installed metal products must be sufficiently durable to meet the amenity and sustainability requirements of the Australian Standards.

To determine a metal cladding's capacities and ability to comply with Australian design standards, metal cladding products must be tested in accordance with AS 4040.1. Metal cladding products that cannot demonstrate testing to AS 4040.1 and compliance with other relevant Australian Standards do not meet the deemed-to-comply provisions of the NCC.

LYSAGHT® steel building products have been tested in Lysaght's own NATA-accredited testing facility to meet all relevant Australian Standards as outlined in this document.

## STATEMENT OF PRODUCT CONFORMANCE

This document confirms that the structural design capacity tables for LYSAGHT® Roofing and Wall Cladding products included in the Acceptable Construction Manuals referenced in this bulletin have been prepared in accordance with the relevant Australian Standards & Deemed to satisfy provisions of NCC 2022 as referenced below.

Designs utilising data from these reference documents can form part of a structurally adequate assembly, subject to the following conditions:

- Installation and construction of roofing and walling products is in accordance with the Acceptable Construction Manuals referenced in this bulletin and accepted good construction practice.

## CHAIN OF RESPONSIBILITY

It is the primary responsibility of each person in the value chain, from designer to supplier to installer to builder to ensure that products used on a building are;

- a) Suitable for the intended use, and;
- b) Comply with relevant Australian Standards and NCC provisions. Increasingly regulatory authorities are requiring documentary evidence of a products compliance to the requirements of the NCC.

Recent Queensland legislation goes further placing an onus on all members in the chain of responsibility to report the use of any non-conforming product.

## DISCLAIMER, WARRANTIES AND LIMITATIONS OF LIABILITY

This publication is intended to be an aid for all trades and professionals involved with specifying and installing LYSAGHT® products and not be a substitute for professional judgement.

Terms and conditions of sale are available at [lysaght.com/terms](https://lysaght.com/terms)

Except to the extent to which liability may not lawfully be excluded or limited, BlueScope Steel Limited will not be under or incur any liability to you for any direct or indirect loss or damage (including, without limitation, consequential loss or damage such as loss of profit or anticipated profit, loss of use, damage to goodwill and loss due to delay) however caused (including, without limitation, breach of contract, negligence and/or breach of statute), which you may suffer or incur in connection with this publication.

## INSIDE OUR BRANDS

Lysaght's range of steel building products are manufactured using Australia's leading coated steel materials.

ZINC HI-TEN® metallic coated steel and ZINCFORM® metallic coated steel are supplied to Lysaght in large coils. Lysaght then shapes and forms these materials (through the process known as rollforming) into our range of Heritage roofing and walling products.

## YOUR COMPLIANCE CHECKLIST

- Fully specify LYSAGHT® Profile, Finish & Coating class
- Check all details when you receive order confirmation
- On-Site - check delivery docket and product branding

FOR DETAILED PRODUCT INFORMATION,  
MANUALS AND PROJECT CASE STUDIES VISIT:

[WWW.LYSAGHT.COM](https://www.lysaght.com)

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