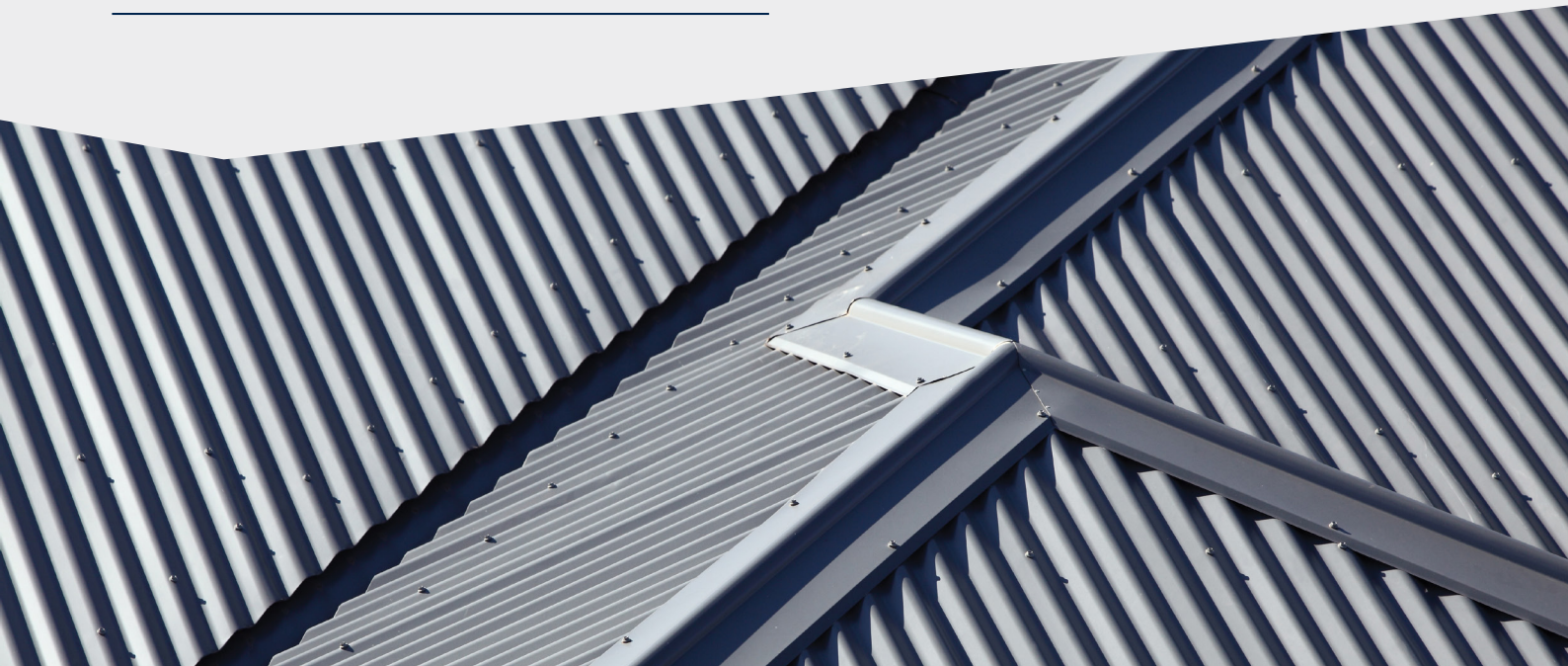


ROOFING AND WALLING



NATIONAL CONSTRUCTION CODE (NCC) COMPLIANCE BULLETIN

FEBRUARY 2024 | This version supersedes all previous issues.



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

- CUSTOM ORB®
- CUSTOM ORB ACCENT® 21
- CUSTOM ORB ACCENT® 35
- TRIMDEK®
- SPANDEK®
- KLIP-LOK 700 HI-STRENGTH®
- KLIP-LOK CLASSIC® 700
- KLIP-LOK® 406
- FLATDEK®
- FLATDEK® II
- FLATDEK® 310
- PANELRIB®
- MINI ORB®
- MULTICLAD®
- TRIMWALL®
- WALLCLAD™
- WEATHERLINE®
- EASYCLAD® 2P300

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 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® ROOFING AND WALLING PRODUCT RANGE



Issuing Entity		BlueScope Steel Limited trading as Lysaght					
Issue Date		January 2024					
Application		Roofing and walling for Class 2 to 9 Buildings (Non-Residential) and for Class 1 and 10 Buildings (Residential)					
Scope Of Use		All products noted below may be used as Roof cladding and/or Walling when designed using the individual construction manuals available for each product, accessible at lysaght.com for LYSAGHT® products					
Product Brand		LYSAGHT®					
Products¹	Roofing or Walling	<ul style="list-style-type: none"> CUSTOM ORB® CUSTOM ORB ACCENT® 21 TRIMDEK® SPANDEK® 	<ul style="list-style-type: none"> KLIP-LOK® 700 HI-STRENGTH KLIP-LOK 700 CLASSIC® KLIP-LOK® 406 				
	Roofing only	<ul style="list-style-type: none"> FLATDEK® FLATDEK® II FLATDEK® 310 					
	Walling only	<ul style="list-style-type: none"> PANELRIB® MINI ORB® MULTICLAD® 	<ul style="list-style-type: none"> TRIMWALL® WALLCLAD™ WEATHERLINE® 				
Base Metal Brand		ZINCALUME® steel	COLORBOND® steel	COLORBOND® steel Matt	COLORBOND® Metallic steel	COLORBOND® Ultra steel	SUPERDURA® Stainless steel
Typical Environments		For low to high corrosive environments >200m from breaking surf >100m from calm marine	For low to high corrosive environments >200m from breaking surf >100m from calm marine	For low to high corrosive environments >200m from breaking surf >100m from calm marine	For low to high corrosive environments >200m from breaking surf >100m from calm marine	For high to very high corrosive environments >100m from breaking surf >0m from calm marine	For very high corrosive environments >0m from breaking surf
Base Metal Thickness Range	Roofing	0.42mm – 0.48mm	0.42mm – 0.48mm	0.42mm – 0.48mm	0.42mm – 0.48mm	0.42mm – 0.48mm	0.42mm – 0.48mm
	Walling	0.35mm – 0.42mm	0.35mm – 0.42mm	0.42mm	0.42mm	0.42mm	0.42mm
Minimum Yield Strength		550 MPa	550 MPa	550 MPa	550 MPa	550 MPa	550 MPa
Coating		AM125	AM100	AM100	AM100	AM150	Grade 430 SS
		125 g/m² minimum metallic coating mass, (aluminium/zinc/magnesium alloy) with Activate® technology to AS 1397	100 g/m² minimum metallic coating mass, (aluminium/zinc/magnesium alloy) with Activate® technology to AS 1397	100 g/m² minimum metallic coating mass, (aluminium/zinc/magnesium alloy) with Activate® technology to AS 1397	100 g/m² minimum metallic coating mass, (aluminium/zinc/magnesium alloy) with Activate® technology to AS 1397	150 g/m² minimum metallic coating mass, (aluminium/zinc/magnesium alloy) with Activate® technology to AS 1397	N/A
Paint²		N/A	Paint coating to AS/NZS 2728 with Thermatech® solar reflectance technology	Paint coating to AS/NZS 2728 with Thermatech® solar reflectance technology	Paint coating to AS/NZS 2728 Type 3	Paint coating to AS/NZS 2728 Type 4 with Thermatech® solar reflectance technology	Paint coating to AS/NZS 2728 Type 6
Solar Absorbance Value Range		N/A	0.28 – 0.95	0.35 – 0.79	0.34 – 0.94	0.33 – 0.73	0.36 – 0.74
Warranty³	Roofing	Up to 36 years	Up to 45 years	Up to 45 years	Up to 30 years	Up to 45 years	Up to 45 years
	Walling	Up to 18 years (non-residential only)	Up to 30 years	Up to 30 years	Up to 20 years	Up to 30 years	Up to 30 years
Combustibility		LYSAGHT® products manufactured from COLORBOND® steel, ZINCALUME® steel or galvanised steel materials 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).					
Acceptable Construction Manuals		<p>LYSAGHT® Roofing & Walling Installation Manual for Design and Installation Professionals</p> <p>LYSAGHT® Cyclonic Area Design Manual for Design and Installation Professionals</p> <p>LYSAGHT® Architectural Detailing and Flashing Manual for Architects and Detailing Professionals</p> <p>TOPSPAN® Design & Installation Guide</p> <p>TOPSPAN® Quick Selection Guide and Quick Selection Guide Addendums 1, 2, 3</p> <p>LYSAGHT® Maintenance Manual for Roofing Walling and Rainwater Goods</p> <p>CUSTOM ORB® Design & Installation Guide</p> <p>TRIMDEK® Design & Installation Guide</p> <p>CUSTOM ORB ACCENT® 21 Design & Installation Guide</p> <p>CUSTOM ORB ACCENT® 35 Design & Installation Guide</p>				<p>SPANDEK® Design & Installation Guide</p> <p>KLIP-LOK 700 HI-STRENGTH® Design & Installation Guide</p> <p>KLIP-LOK CLASSIC® 700 Design & Installation Guide</p> <p>KLIP-LOK® 406 Design & Installation Guide</p> <p>FLATDEK® Design & Installation Guide</p> <p>FLATDEK® 310 Design & Installation Guide</p> <p>FLATDEK® II Design & Installation Guide</p> <p>LYSAGHT® Walling Solutions Design & Installation Guide</p> <p>LYSAGHT® Product Advisory Bulletins</p> <p>BlueScope Technical Bulletin 1A Steel Roofing Products - Selection Guide</p>	
Australian Standards Compliance	lysaght Published Limit State Capacities for Strength and Serviceability have been determined from testing at NATA⁴ accredited facilities in compliance with the following standards:	<p>AS 1562.1:2018 - Design and installation of sheet roof and wall cladding - Part 1: Metal</p> <p>AS 4040.0:1992 - Methods of testing sheet roof and wall cladding</p> <p>AS 4040.1:1992 - (Rec :2016) - Methods of testing sheet roof and wall cladding - Method 1: Resistance to concentrated loads</p> <p>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</p> <p>AS 4040.3:2018 - Methods of testing sheet roof and wall cladding, Method 3: Resistance to wind pressures for cyclone regions</p>				<p>AS/NZS 1170.0:2002 - Structural design actions, Part 0: General principles</p> <p>AS/NZS 1170.1:2002 - Structural design actions, Part 1: Permanent, imposed and other actions</p> <p>AS/NZS 1170.3:2011 - Structural design actions, Part 3: Snow and ice actions</p>	
	BlueScope coated steel products have been determined to be compliant with the following standards as required by AS 1562.1:2018 - Design and installation of sheet roof and wall cladding - Part 1: Metal - Section 2.1.3 Steel:	<p>AS 1397:2021 - Continuous hot-dip metallic coated steel sheet and strip - Coatings of zinc and zinc alloyed with aluminium and magnesium</p> <p>AS/NZS 2728:2013 - Prefinished/prepainted sheet metal products for interior/exterior building applications - Performance requirements</p>				<p>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 1397:2021, stainless steel, aluminium, or aluminium alloy in the form of sheet, coil, or strip.</p>	
Compliance with the deemed-to-satisfy provision of the NCC		<p>NCC Volume 1 - For class 2 to 9 Buildings (Non-Residential)</p> <ul style="list-style-type: none"> Section B1.4 Structural Resistance (j) (iv) Metal roofing: AS 1562.1 (except in cyclonic areas) Section F1.0 Deemed-to-Satisfy Provisions Section F1.5 Roof coverings Metal Sheet roofing complying with AS 1562.1 <p>NCC Volume 2 - For class 1 and 10 Buildings (Housing Provisions)</p> <ul style="list-style-type: none"> Section H1D7 Roof cladding <p>Published Capacity tables in reference manuals noted above are suitable to determine structural adequacy and serviceability of nominated products for individual projects referencing the following Australian Standards and NCC requirements:</p> <ul style="list-style-type: none"> NCC, Volume 1, Section B - Structure, Part B1 -Structural provisions (Deemed-to-Satisfy Provisions), Clause B1D2 Resistance to actions, and Clause B1D3 Determination of individual actions NCC, Volume 1, Section B - Structure, Specification B1D3 - Design of Buildings in Cyclonic Areas 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 1170.2:2021 - Structural design actions, Part 2: Wind actions AS/NZS 1170.3:2011 - Structural design actions, Part 3: Snow and ice actions 					

Notes:
1. Not all LYSAGHT® products are available in all materials and finishes. Not all products are available in all regions. Visit lysaght.com for more information.
2. Thermatech® solar reflectance technology is incorporated in the standard COLORBOND® steel colour range, excluding colour Night Sky®.
3. 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.

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

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

COLORBOND® prepainted steel and ZINCALUME® 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 roofing profiles, gutters, fascia and downpipes, plus products for fencing systems and home additions such as verandahs, patios and carport.

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)

Thermatech® solar reflectance technology is not available in Night Sky®, or non-standard colours, and is not available in COLORBOND® Stainless steel, COLORBOND® Metallic steel, or COLORBOND® Coolmax® steel.

Activate® technology is not available for COLORBOND® steel products with a galvanised steel substrate.

COLORBOND®, SUPERDURA®, ZINCALUME®, Thermatech®, Activate®, LYSAGHT® and ® product names are registered trademarks of BlueScope Steel Limited and ™ product names are trademarks of BlueScope Steel Limited.

© 2024 BlueScope Steel Limited. ABN 16 000 011 058. All rights reserved.

INSPIRATION TO BUILD BETTER

LYSAGHT