

## UNDERSTANDING COMPLIANCE

The NCC outlines deem-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 claddings must be able to meet expected Structural, Wind and Installation loads as per the Australian Standards,
- b) that installed metal claddings 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.

## 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.

## INSIDE OUR BRANDS

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

COLORBOND® prepainted steel and ZINCALUME® aluminium/zinc/magnesium alloy 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, fascias and downpipes, plus products for fencing systems and home additions such as verandahs, patios and carports.

Similarly, PERMALITE® prepainted aluminium is used to manufacture a range of roofing, walling and structural products ideally suited to the most aggressive of environments.

FOR YOUR NEAREST SUPPLIER VISIT:

**WWW.LYSAGHT.COM**

FOR SALES ENQUIRIES CALL 13 30 38

FOR TECHNICAL ENQUIRIES CALL 1800 641 417

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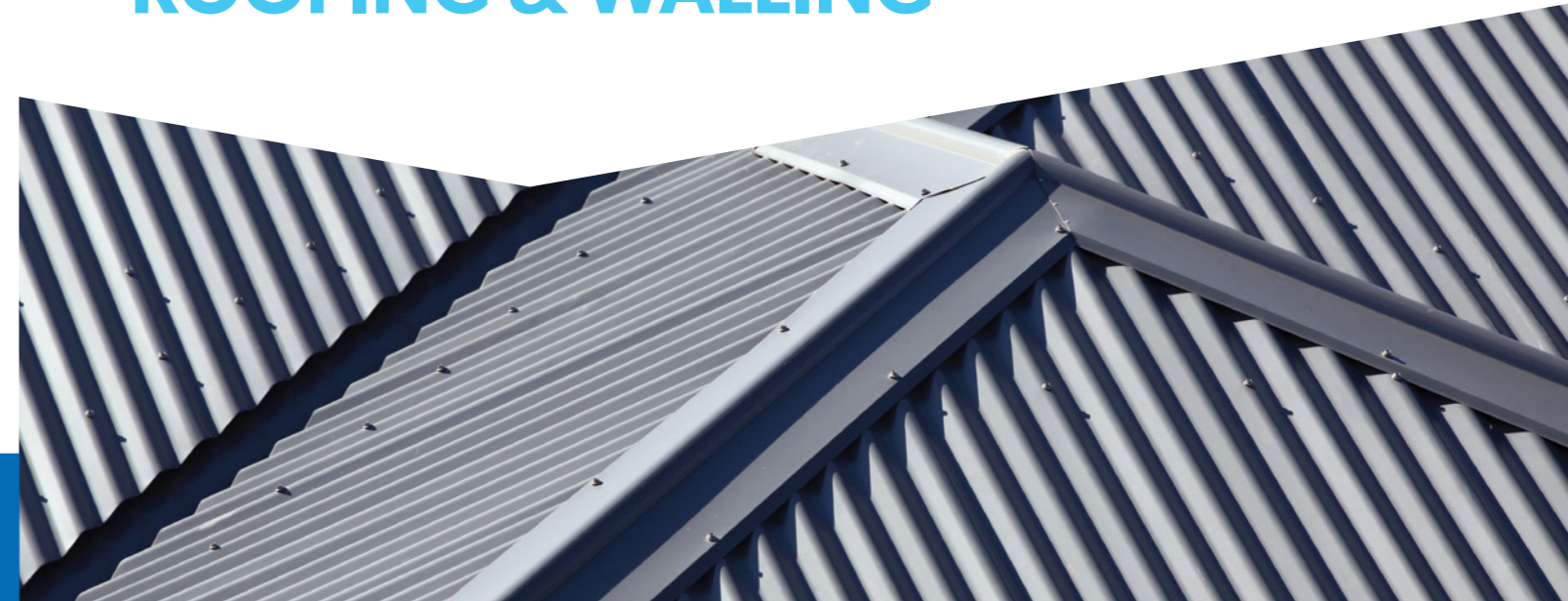
® product and colour names are registered trade marks of BlueScope Steel Limited. ™ product and colour names are trade marks of BlueScope Steel Limited ABN 16 000 011 058. The LYSAGHT® range of products is exclusively made by BlueScope Steel Limited trading as Lysaght.



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# ROOFING & WALLING



## 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

### THIS BULLETIN DETAILS RELEVANT NCC OF AUSTRALIA COMPLIANCE INFORMATION RELEVANT TO THE FOLLOWING LYSAGHT® STEEL AND PERMALITE® ALUMINIUM CLADDING PRODUCTS.

- LYSAGHT CUSTOM ORB®
- LYSAGHT CUSTOM ORB ACCENT® 21
- LYSAGHT CUSTOM ORB ACCENT® 35
- LYSAGHT TRIMDEK®
- LYSAGHT SPANDEK®
- LYSAGHT KLIP-LOK 700 HI-STRENGTH®
- LYSAGHT KLIP-LOK CLASSIC® 700
- LYSAGHT KLIP-LOK® 406
- LYSAGHT FLATDEK®
- LYSAGHT FLATDEK® II
- LYSAGHT FLATDEK® 310
- LYSAGHT PANELRIB®
- LYSAGHT MINI ORB®
- LYSAGHT MULTICLAD®
- LYSAGHT TRIMWALL®
- LYSAGHT WALLCLAD®
- LYSAGHT WEATHERLINE®
- LYSAGHT EASYCLAD® 2P300
- PERMALITE LT7®
- PERMALITE V-Rib®
- PERMALITE ALSPAN®
- PERMALITE WAVELINE®

## 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 and aluminium 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) COMPLIANCE STATEMENT

## LYSAGHT ROOFING AND WALLING PRODUCT RANGE

Issuing entity:		BlueScope Steel Limited				Ref #: LYS-NCC- R&W		Version: V2.0		Issue date: 26/11/2019		
<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 and/or walling when designed using the individual technical data available for each product at <a href="http://www.lysaght.com">www.lysaght.com</a> for LYSAGHT products or <a href="http://www.permalite.com.au">www.permalite.com.au</a> for PERMALITE® products										
		<b>ROOFING - WALLING</b>			<b>ROOFING</b>			<b>WALLING - CEILING - SOFFIT</b>			<b>ROOFING - WALLING</b>	
		LYSAGHT CUSTOM ORB® LYSAGHT CUSTOM ORB ACCENT® 21 LYSAGHT CUSTOM ORB ACCENT® 35		LYSAGHT TRIMDEK® LYSAGHT SPANDEK® LYSAGHT KLIP-LOK 700 HI-STRENGTH® LYSAGHT KLIP-LOK CLASSIC® 700 LYSAGHT KLIP-LOK® 406		LYSAGHT FLATDEK® LYSAGHT FLATDEK® II LYSAGHT FLATDEK® 310		LYSAGHT PANELRIB® LYSAGHT MINI ORB® LYSAGHT MULTICLAD® LYSAGHT TRIMWALL®		LYSAGHT WALLCLAD® LYSAGHT WEATHERLINE® LYSAGHT EASYCLAD® 2P300		PERMALITE LT7® PERMALITE V-Rib® PERMALITE ALSPAN® PERMALITE WAVELINE®
<b>Product Attributes</b>		<b>Base Metal Thickness Range</b>		Roofing: 0.42mm - 0.48mm				Walling: 0.35mm - 0.42mm				
		<b>Min Yield Strength</b>		550 MPa				550 MPa				
<b>Base Material Brand Name</b>		<b>Zincalume®</b>	<b>Colorbond®</b>	<b>Colorbond® MATT</b>	<b>Colorbond®</b>	<b>Colorbond®</b>	<b>Colorbond®</b>	<b>Colorbond®</b>	<b>Colorbond®</b>	<b>permalite</b>		
		ZINCALUME® steel	COLORBOND® steel	COLORBOND® steel Matt	COLORBOND® Metallic steel	COLORBOND® Ultra steel	COLORBOND® Stainless steel	PERMALITE® pre-painted aluminium				
<b>Typical Environments</b>		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 Low to High corrosive environments; >200m from breaking surf > 100m from calm marine	For Very High to High corrosive environments; >100m from breaking surf > 0m from calm marine	For Very High corrosive environments; > 0m from breaking surf		For Very High corrosive environments; < 0m from breaking surf		
<b>Material Specification</b>		<b>Coating</b>	AM125	AM100	AM100	AM100	AM150	Grade 430 SS	5251 / 5052 marine grade aluminium alloy			
		125 g/m <sup>2</sup> minimum metallic coating mass, (aluminium/zinc/magnesium alloy) with Activate® technology to AS 1397-2011	100 g/m <sup>2</sup> minimum metallic coating mass, (aluminium/zinc/magnesium alloy) with Activate® technology to AS 1397-2011	100 g/m <sup>2</sup> minimum metallic coating mass, (aluminium/zinc/magnesium alloy) with Activate® technology to AS 1397-2011	100 g/m <sup>2</sup> minimum metallic coating mass, (aluminium/zinc/magnesium alloy) with Activate® technology to AS 1397-2011	150 g/m <sup>2</sup> minimum metallic coating mass, (aluminium/zinc/magnesium alloy) with Activate® technology to AS 1397-2011	N/A					
		<b>Paint</b>	N/A	Paint Coating to AS 2728-2013 includes Thermatech® solar reflectance technology*	Paint Coating to AS 2728-2013 includes Thermatech® solar reflectance technology*	Paint Coating to AS 2728-2013 Type 3	Paint Coating to AS 2728-2013 Type 4 includes Thermatech® solar reflectance technology*	Paint Coating to AS 2728-2013 Type 6	Paint Coating to AS 2728-2013			
		<b>Solar Absorbance Value</b>	Range from 0.32 to 0.96	Range from 0.35 to 0.79	Range from 0.34 to 0.93	Range from 0.32 to 0.73	Range from 0.32 to 0.73	0.26 for unpainted weathered aluminium				
<b>Warranty**</b>		<b>Roofing</b>	Up to 36 years**	Up to 36 years**	Up to 36 years**	Up to 30 years**	Up to 36 years**	Up to 36 years**	up to 40 years***			
		<b>Walling</b>	Up to 18 years** (Non - residential)	Up to 20 years** (Non - residential) Up to 15 years** (Residential)	Up to 20 years** (Non - residential) Up to 15 years** (Residential)	Up to 20 years** (Non - residential) Up to 10 years** (Residential)	Up to 20 years** (Non - residential) Up to 15 years** (Residential)	Up to 20 years** (Non - residential) Up to 15 years** (Residential)	Up to 30 years***			
<b>Combustibility</b>		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 clauses C1.9.(e).(v) and 3.7.1.1.(e). PERMALITE® products manufactured from pre-painted aluminium materials have a Spread-of-Flame index of 0 (zero) and as such are considered non-combustible materials in accordance with the National Construction Code clauses C1.9.(e).(v) and 3.7.1.1.(e).										
<b>Compliance with the deemed-to-satisfy provision of the NCC</b>		<p>NCC Volume 1 - For class 2 to 9 Buildings (Non-Residential)</p> <ul style="list-style-type: none"> <li>- Section B1.4 Structural Resistance</li> <li>(j) (iv) Metal roofing: AS 1562.1-2018 (except in cyclonic areas)</li> </ul> <p>Section F1.0 Deemed-to-Satisfy Provisions</p> <ul style="list-style-type: none"> <li>- F1.5 Roof coverings</li> <li>Metal Sheet roofing complying with AS 1562.1-2018</li> </ul> <p>NCC Volume 2 - For class 1 and 10 Buildings (Housing Provisions)</p> <ul style="list-style-type: none"> <li>- 3.5.1 Roof cladding</li> </ul> <p>Published Capacity tables in reference manuals noted below 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"> <li>NCC, Volume One, Section B - Structure, Part B1 -Structural provisions (Deemed-to-Satisfy Provisions), Clause B1.1 Resistance to actions, and Clause B1.2 Determination of individual actions</li> <li>NCC, Volume One, Section B - Structure, Specification B1.2 - Design of Buildings in Cyclonic Areas</li> </ul>										
<b>Acceptable Construction Manuals</b>		AS 1562.1-2018 Design and Installation of sheet and wall cladding - Metal	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 TOPSPAN® Design & Installation Guide LYSAGHT TOPSPAN® Quick Selection Guide and Quick Selection Guide Addendums 1, 2, 3 LYSAGHT® Maintenance Manual for Roofing Walling and Rainwater Goods LYSAGHT CUSTOM ORB® Design & Installation Guide LYSAGHT TRIMDEK® Design & Installation Guide LYSAGHT CUSTOM ORB ACCENT® 21 Design & Installation Guide LYSAGHT CUSTOM ORB ACCENT® 35 Design & Installation Guide LYSAGHT SPANDEK® Design & Installation Guide LYSAGHT KLIP-LOK 700 HI-STRENGTH® Design & Installation Guide			LYSAGHT KLIP-LOK CLASSIC® 700 Design & Installation Guide LYSAGHT KLIP-LOK® 406 Design & Installation Guide LYSAGHT FLATDEK® Design & Installation Guide LYSAGHT FLATDEK® 310 Design & Installation Guide LYSAGHT FLATDEK® II Design & Installation Guide LYSAGHT® Product Advisory Bulletins			BlueScope Technical Bulletin 1A Steel roofing products - selection guide available at <a href="http://steelproducts.bluescopesteel.com.au">http://steelproducts.bluescopesteel.com.au</a>			PERMALITE® Aluminium Roofing Solutions PERMALITE® Aluminium Residential Solutions available at <a href="http://www.permalite.com.au">www.permalite.com.au</a>
<b>Australian Standards Compliance</b>		<p>lysaght published Limit State Capacities for Strength and Serviceability have been determined from testing at NATA<sup>(1)</sup> accredited facilities in compliance with the following standards;</p> <ul style="list-style-type: none"> <li>AS 1562.1-2018 Design and installation of sheet roof and wall cladding. Part 1: Metal</li> <li>AS 4040.0-1992 (Reconfirmed 2016) Methods of testing sheet roof and wall cladding. Method 0: Introduction, list of methods and general requirements</li> <li>AS 4040.1-1992 (Reconfirmed 2016) Methods of testing sheet roof and wall cladding. Method 1: Resistance to concentrated loads</li> <li>AS 4040.2-1992 (Reconfirmed 2016) Methods of testing sheet roof and wall cladding. Method 2: Resistance to wind pressures for non-cyclonic regions</li> <li>AS 4040.3-2018 Methods of testing sheet roof and wall cladding. Method 3: Resistance to wind pressures for cyclonic regions</li> </ul> <p>Limit state capacities contained within the Acceptable Construction &amp; Design Manuals are suitable to determine structural and serviceability in accordance with;</p> <ul style="list-style-type: none"> <li>AS/NZS 1170.0:2002 Structural design actions, Part 0: General principles</li> <li>AS/NZS 1170.1:2002 (Reconfirmed 2016) Structural design actions, Part 1: Permanent, imposed and other actions</li> <li>AS/NZS 2728:2013 (Reconfirmed 2016) Structural design actions, Part 2: Wind actions</li> <li>AS/NZS 1170.3:2011 (Reconfirmed 2016) Structural design actions, Part 3: Snow and ice actions</li> </ul> <p>AS 1562.1-2018 Design and Installation of sheet and wall cladding Part 1: Metal Section 2.1.3 Steel: Requires metallic coated products to comply with; AS 1397-2011 Continuous hot-dip metallic coated steel sheet and strip - Coatings of zinc and zinc alloyed with aluminium and magnesium and Pre-painted products to comply with; AS/NZS 2728:2013 Prefinished/prepainted sheet metal products for interior/exterior building applications - Performance requirements AS 1397-2011 Defines the coating types and classes and steel grades for hot-dip metallic coated steel. 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.</p> <p>LYSAGHT® product coating compliance is nominated at "Coating" above. 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.</p> <p>PERMALITE® aluminium feed coil complies to AS/NZS 1734:1997 Aluminium and Aluminium alloys - Flat sheet, coil sheet and plate. PERMALITE® pre-painted aluminium complies with AS/NZS 2728 Pre-finished /pre-painted sheet metal products for interior/ exterior applications</p>										

Please note that not all products are available in all finishes or in each state. Please refer to your local Lysaght service centre for product availability for your region.

\*Thermatech® solar reflectance technology is incorporated in the standard COLORBOND® steel colour range, however excludes Night Sky®.

\*\* Warranties subject to application and eligibility criteria. For full terms and conditions and to determine the eligibility of your product for a warranty visit [www.bluescopesteel.com.au/warranties](http://www.bluescopesteel.com.au/warranties) and [www.lysaght.com/warranties](http://www.lysaght.com/warranties).

\*\*\* visit [Permalite.com.au/warranties](http://Permalite.com.au/warranties) to obtain an indicative warranty period for your project.

1. National Association of Testing Authorities.