

## UNDERSTANDING COMPLIANCE

The NCC outlines deem-to-satisfy requirements for metal products 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 product'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® metallic steel and are supplied to Lysaght in large coils. Lysaght then shapes and forms these materials (through the process known as rollforming) into their 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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## BONDEK®



## 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 BUILDING PRODUCTS.

- BONDEK®
- BONDEK PLUS®

## 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 Composite Formwork 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 COMPOSITE FORMWORK PRODUCT RANGE

<b>Issuing entity:</b>		<b>BlueScope Steel Limited</b>		<b>Ref #: LYS-NCC-FORM</b>		<b>Version: V1.0</b>		<b>Issue date: 05/06/2019</b>	
<b>Application</b>		Composite Structural Decking Formwork 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 composite structural decking formwork 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>APPLICABLE PRODUCTS</b>		LYSAGHT BONDEK® LYSAGHT BONDEK PLUS®							
<b>Product Attributes</b>	<b>Base Metal Thickness Range (BMT)</b>	0.60mm - 1.2mm							
	<b>Min Yield Strength</b>	550 MPa (500 MPa for 1.2mm BMT material)							
<b>Base Material Brand Name</b>		<b>Deckform®</b> DECKFORM® steel	<b>Deckform®</b> Low Glare Coated DECKFORM® steel	<b>Deckform®</b> DECKFORM® steel	<b>Deckform®</b> Low Glare Coated DECKFORM® steel	<b>Deckform®</b> DECKFORM® steel	<b>Deckform®</b> Low Glare Coated DECKFORM® steel	<b>Deckform®</b> DECKFORM® steel	<b>Deckform®</b> DECKFORM® steel
<b>Typical Environments</b>		For Low to High corrosive environments; >1000m from breaking surf > 600m from calm marine"	For Low to High corrosive environments; >1000m from breaking surf > 600m from calm marine	For Low to High corrosive environments; >1000m from breaking surf > 600m from calm marine	For Low to High corrosive environments; >1000m from breaking surf > 600m from calm marine	For Low to High corrosive environments; >1000m from breaking surf > 600m from calm marine	For Low to High corrosive environments; >1000m from breaking surf > 600m from calm marine	For Low to High corrosive environments; >1000m from breaking surf > 600m from calm marine	For Low to High corrosive environments; >1000m from breaking surf > 600m from calm marine
<b>Material Specification</b>	<b>Coating</b>	Z350 350 g/m <sup>2</sup> minimum metallic coating mass, (Type Z) to AS 1397:2011	Z350 350 g/m <sup>2</sup> minimum metallic coating mass, (Type Z) to AS 1397:2011	Z450 450 g/m <sup>2</sup> minimum metallic coating mass, (Type Z) to AS 1397:2011	Z450 450 g/m <sup>2</sup> minimum metallic coating mass, (Type Z) to AS 1397:2011	Z450 450 g/m <sup>2</sup> minimum metallic coating mass, (Type Z) to AS 1397:2011	Z450 450 g/m <sup>2</sup> minimum metallic coating mass, (Type Z) to AS 1397:2011	Z600 600 g/m <sup>2</sup> minimum metallic coating mass, (Type Z) to AS 1397:2011	Z600 600 g/m <sup>2</sup> minimum metallic coating mass, (Type Z) to AS 1397:2011
	<b>Paint</b>	N/A	Passivated and Resin coated to 1-2µm	N/A	N/A	Passivated and Resin coated to 1-2µm	Passivated and Resin coated to 1-2µm	N/A	N/A
<b>Warranty<sup>2</sup></b>		Up to 10 Years*	Up to 10 Years*	Up to 15 Years*	Up to 15 Years*	Up to 15 Years*	Up to 15 Years*	Up to 15 Years*	Up to 15 Years*
<b>Combustibility</b>		LYSAGHT® products manufactured from DECKFORM®, 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 in accordance with National Construction Code.							
<b>Compliance with the deemed- to - satisfy provision of the NCC</b>		<p>NCC 2019 Volume 1 - For class 2 to 9 Buildings (Non-Residential)</p> <p>Section B - Structure, Part B1 - Structural Provisions B1.2 -Structural Resistance - B1.2 - Determination of individual actions (Deemed-to-Satisfy Provisions) - B1.4 - Structural provisions (Deemed-to-Satisfy Provisions), - B1.4 - Determination of structural resistance of materials and forms of construction (Deemed-to-Satisfy Provisions), (b) (i) Concrete construction : AS3600 (d) Composite steel and concrete : AS/NZS 2327</p> <p>Section C 1.0 Deemed - to - Satisfy Provisions - C1.1 Type of construction required - C1.9 Non-combustible building elements</p> <p>Section F - Health and amenity F5 Sound Transmission and insulation - FP5.1 Sound transmission through floors</p> <p>Section J Energy efficiency - J1.2 Thermal construction - General - J1.6 Floors</p>							
<b>Acceptable Construction and Design manuals</b>		<p>AS/NZS 2327 : 2017 Composite Structures - Composite steel-concrete construction in buildings AS/NZS 1554.2 : 2003 Structural steel welding - Part 2 : Stud welding (steel studs to steel) AS/NZS 2312.1 : 2014 Guide to the protection of structural steel against atmospheric corrosion by the use of protective coatings</p> <p>LYSAGHT BONDEK® Design and Construction Guide LYSAGHT BONDEK® User Guide LYSAGHT BONDEK PLUS® User Guide LYSAGHT BONDEK PLUS® 2P User and Installation Guide LYSAGHT® Product Advisory Bulletins Guides and Technical materials available at <a href="http://www.lysaght.com">www.lysaght.com</a> BlueScope Technical Bulletin - TB-29 - DECKFORM® zinc-coated structural steel TB-4 - Maintenance of COLORBOND® steel and ZINCALUME® steel</p>							
<b>Australian Standards Compliance</b>		<p>Lysaght published Limit State Capacities for Strength and Serviceability have been determined from testing at NATA accredited facilities in compliance with the following standards. Additionally, full scale testing for Formwork, Composite and Fire have been completed in accordance with:</p> <p>AS/NZS 2327 : 2017 Composite Structures - Composite steel-concrete construction in buildings AS 3600 : 2018 Concrete structures AS 4100 : 1998 (R2016) Steel structures AS1530.3 : 1999 (R2016) Methods for fire tests on Building materials, components and Structures; Simultaneous determination of ignitability, flame propagation, heat release and smoke release AS 1530.4 : 2014 Methods for fire tests on Building materials, components and Structures; Fire - resistance tests for elements of construction</p> <p>Limit state capacities contained within the Acceptable Construction &amp; Design Manuals are suitable to determine structural adequacy and serviceability in accordance with:</p> <p>AS/NZS 1170.0 : 2002 Structural design actions, Part 0: General principles AS/NZS 1170.1 : 2002 (Reconfirmed 2016) Structural design actions, Part 1: Permanent, imposed and other actions AS/NZS 1170.2 : 2011 (Reconfirmed 2016) Structural design actions, Part 2: Wind actions AS/NZS 1170.3 : 2011 (Reconfirmed 2016) Structural design actions, Part 3: Snow and ice actions AS/NZS 2327 : 2017 Composite Structures - Composite steel-concrete construction in buildings AS 3600 : 2018 Concrete structures AS 4100 : 1998 (R2016) Steel structures</p> <p>- AS 1397 - 2011 Continuous hot dip metallic coated steel sheet and strip - Coatings of zinc and zinc alloyed aluminium and magnesium and Pre-painted products to comply with ; - AS 1397 - 2011 Pre-finished /pre-painted sheet metal products for interior/ exterior applications - AS 1397 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 requirement 1.3.1 Metal products Hot dipped metallic coated steel (types Z, ZM, AZ, AM) AS 4586 : 2013 Slip resistance classification of new pedestrian surface materials - Class X</p>							

1. National Association of Testing Authorities

2. Warranties apply against corrosion to perforation due to weathering in the natural environment only

\* visit [bluescope.com.au/warranties](http://bluescope.com.au/warranties) to obtain a pre-approved warranty for your project