



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

- LT7
- V-RIB®
- ALSPAN®
- WAVELINE®
- ALURE™
- PERCIPERE®
- PERPETUAL™

PERMALITE® – 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 PERMALITE® 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 PERMALITE® aluminium roofing, walling, structural and rainwater goods 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 PERMALITE® PRODUCT RANGE



Issuing Entity	BlueScope Steel Limited trading as Lysaght						
Issue Date	July 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 and/or individual data sheets available for each product, accessible at permalite.com.au						
Product Brand	PERMALITE®						
Base Metal Brand	PERMALITE® aluminium						
Base Metal	5251 / 5052 marine grade aluminium alloy						
Typical Environments	For very high corrosive environments <0m from breaking surf						
Products¹	LT7®	V-RIB®	ALSPAN®	WAVELINE®	ALURE™	PERCIPERE®	PERPETUAL™
Temper	H38	H38	H38	H38	H38	H38	H32
Base Metal Thickness (BMT)	0.7mm, 0.9mm, 1.2mm	0.7mm, 0.9mm, 1.2mm	0.7mm, 0.9mm, 1.2mm	0.7mm, 0.9mm, 1.2mm	0.9mm	0.9mm	0.9mm
Minimum Yield Strength (MPa)	220 – 225 MPa	220 – 225 MPa	220 – 225 MPa	220 – 225 MPa	220 – 225 MPa	220 – 225 MPa	130 – 160 MPa
Paint	Paint coating to AS 2728						
Solar Absorbance Value Range	0.26 (unpainted, weathered aluminium)						
Warranty²	Up to 40 years						
Combustibility	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).						
Acceptable Construction Manuals	PERMALITE® Aluminium Roofing Solutions Manual PERMALITE® Aluminium Residential Solutions Manual						
Australian Standards Compliance	Limit State Capacities for Strength and Serviceability for cladding products have been determined from testing at NATA ³ 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 1170.3:2011 - Structural design actions, Part 3: Snow and ice actions AS/NZS 2728:2013 - Prefinished/prepainted sheet metal products for interior/exterior building applications - Performance requirements					
	Aluminium feed products have been determined to be compliant with the following standards:	PERMALITE® aluminium feed coil complies with AS/NZS 1734:1997 Aluminium and aluminium alloys - Flat sheet, coiled sheet, and plate (Reconfirmed 2020) PERMALITE® pre-painted aluminium complies with AS/NZS 2728 Pre-finished /pre-painted sheet metal products for interior/ exterior applications					
Compliance with the deemed-to-satisfy provision of the NCC	<p>NCC Volume 1 - For class 2 to 9 Buildings</p> <ul style="list-style-type: none"> Section B1D4 Structural Resistance (j) (iv) Metal roofing: AS 1562.1 (except in cyclonic areas) Section F1D1 Deemed-to-Satisfy Provisions Section F3D2 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 and wall 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:

- Not all products are available in all materials and finishes. Not all products are available in all regions. Visit permalite.com.au for more information.
- Warranties are subject to application and eligibility criteria. For full terms and conditions and warranty eligibility for PERMALITE® aluminium products visit permalite.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 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.

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

PERMALITE® Cyclonic data has been prepared based on testing at James Cook University.

STATEMENT OF PRODUCT CONFORMANCE

This document confirms that the structural design capacity tables for PERMALITE® aluminium roofing, walling, structural and rainwater goods 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 PERMALITE® 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 PERMALITE® 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 PERMALITE® aluminium building products are manufactured using 5251 / 5052 marine grade aluminium alloy.

PERMALITE® pre-painted and unpainted marine grade aluminium is supplied to Lysaght in large coils. Lysaght then shapes and forms these materials (through the process known as rollforming) into our range of roofing, walling, gutters, fascia and downpipes and structural 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:

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

PERMALITE® and ® colour and product names are registered trademarks of BlueScope Steel Limited and ™ colour 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