ARAMAX®

NATIONAL CONSTRUCTION CODE (NCC) COMPLIANCE BULLETIN

DECEMBER 2023 | This version supersedes all previous issues.

THIS BULLETIN DETAILS RELEVANT NCC OF AUSTRALIA COMPLIANCE INFORMATION RELEVANT TO THE FOLLOWING FIELDERS PRODUCT.

- ARAMAX®

FIELDERS® - 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.

Fielders' 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 Fielders ARAMAX® with both the National Construction Code of Australia and the relevant Australian Standards for both Residential and Non-residential buildings.

FIELDERS

NATIONAL CONSTRUCTION CODE OF AUSTRALIA (NCC) COMPLIANCE STATEMENT
FOR FIELDERS ARAMAX®

Issuing entity		BlueScope Steel Limited trading as Fielders				
Issue Date		December, 2023				
Application		Roofing and Walling for class 2 to 9 Buildings (Non-Residential) and For class 1 and 10 Buildings (Residential)				
Scope of Use		The product noted below may be used as roof and or wall cladding when designed using the individual technical data available for each product at https.specifying.fielders.com.au				
Product Brand		**Fielders®**				
PRODUCTS[1]		ARAMAX®				
Base Metal Brand		**ZINCALUME® steel**	**COLORBOND® steel**	**COLORBOND® Ultra steel**	**COLORBOND® Metallic steel**	**Pre-painted aluminium**
Typical Environments		For Benign environments >200m from breaking surf > 100m from calm marine	For Benign environments >200m from breaking surf > 100m from calm marine	For coastal & industrial environments >100m from breaking surf > 0m from calm marine	For Benign environments >400m from breaking surf > 200m from calm marine	For severe coastal & industrial environments < 0m from breaking surf
Base Metal Thickness Range		0.55mm – 0.75mm	0.55mm – 0.75mm	0.55mm – 0.75mm	0.55mm – 0.75mm	0.55mm – 0.75mm
Minimum Yield Strength		500 - 550 MPa	500 - 550 MPa	500 - 550 MPa	500 - 550 MPa	220-225 MPa
Coating		AM125	AM100	AM150	AM100	N/A
		125 g/m² minimum metallic coating mass, (aluminium/zinc/ 5251 / 5052 marine grade Aluminium alloy magnesium alloy) with Activate™ technology to AS 1397	Paint Coating to AS/NZS 2728 includes Thematech®	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
Paint[2]		N/A	Paint coating to AS/NZS 2728 with Thermatech® solar reflectance technology	Paint Coating to AS/NZS 2728 Type 4 includes Thematech® solar reflectance technology	Paint Coating to AS/NZS 2728 Type 3 includes Thermatech® solar reflectance technology^	Paint Coating to AS/NZS 2728 includes Thermatech® solar reflectance technology^
Solar Absorbance Value Range		N/A	Range from 0.32 to 0.96	N/A	range from 0.32 to 0.96	N/A
Warranty[3]	**Roofing**	Up to 36 Years*	Up to 36 Years*	Up to 36 Years*	Up to 30 Years*	Up to 40 years*
	Walling	Up to 18 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 15 Years* (Residential)	Up to 20 Years* (Non - residential) Up to 10 Years* (Residential)	Up to 30 years*
Combustibility		Fielders 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 are considered non-combustible materials in accordance with the National Construction Code clauses C1.9.(e).(v) and 3.7.1.1.(e). Aluminium 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		AS 1562.1:2018 - Design and installation of sheet roof and wall cladding - Part 1: Metal Fielders ARAMAX® Profile data at https://specifying.Fielders.com.au/aramax/aramax-freespan/ Fielders project specific Custom design assessment to AS/NZS 4600:2018 Cold-Formed Steel Structures Code and AS/NZS 1664.1:1999 - Aluminium structures Part 1: Limit state design (Reconfirmed 2020)				
Australian Standards Compliance	Fielders published Limit State Capacities for Strength and Serviceability have been determined from testing 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 4600:2018 - Cold Formed Steel Structures • 8.1 Testing for determining material properties • 8.2 Testing for assessment or verification • 8.3 Coefficient of variation of structural characteristics • 8.4 Design Values AS 4100:2020 - Steel Structures : Section 17 Testing of Structures or Elements				
	Limit state capacities provided within the Fielders project specific design assessment are suitable to determine structural adequacy and serviceability in accordance with	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 AS/NZS 4600:2018 - Cold Formed Steel Structures Code when used in accordance with Fielders project specific Custom design assessment				
	BlueScope coated steel products have been determined to be compliant with the following standards:	AS 1562.1:2018 - Design and installation of sheet roof and wall cladding - Part 1: Metal Section 2.1.3 Steel: Requires metallic coated products to comply with; • 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. 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. Fielders product coating compliance is nominated at "Coating" above. AS/NZS 2728:2013 specifies requirements for the physical properties and long-term durability of pre-finished/pre-painted sheet metal products. Fielders 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 ally in the form of sheet, coil or strip.				
Compliance with the deemed-to-satisfy provision of the NCC		NCC Volume 1 - For class 2 to 9 Buildings (Non-Residential) • B1.0 Deem-to-Satisfy provisions • B1.4 Determination of structural resistance of materials and form of construction • (j) (iv) Metal roofing: AS 1562.1:2018 (except in cyclone areas) • (c) (i) Steel Structures: AS/NZS 4600:2018 (ii) Cold Formed steel structures AS 4100:2020 Section F1.0 Deemed - to - Satisfy Provisions • F1.5 Roof coverings Metal Sheet roofing complying with AS 1562.1:2018 NCC Volume 2 - For class 1 and 10 Buildings (Housing Provisions) • 3.5.1 Roof cladding 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: • NCC 2016, 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 • NCC 2016, Volume One, Section B - Structure, Specification B1.2 - Design of Buildings in Cyclonic Areas				

Notes:
1. Not all products are available in all materials and finishes. Not all products are available in all regions. Visit fielders.com.au 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. com.au.

* Warranties subject to application and eligibility criteria. For full terms and conditions and to determine the eligibility of your product for a warranty visit bluescopesteel.com.au/warranties or call BlueScope on 1800 800 789.

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.

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

Fielders® 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 Fielders in large coils. Fielders then rollforms 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.

YOUR COMPLIANCE CHECKLIST

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

DISCLAIMER, WARRANTIES AND LIMITATION OF LIABILITY

- This publication is intended to be an aid for all trades and professionals involved with specifying and installing Fielders® products and not be a substitute for professional judgement.
- Terms and conditions of sale available at http://fielders.com.au/legals/
- 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.

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

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.

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

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