

Product Name	MagnaFlow longrun steel roofing / cladding (supplied to market by either Roofing Industries New Zealand, or Dimond Roofing)
Document Type	Green Building Rating Compatibility Analysis
Document Code	ES-GSNZ-21-97b
Client	ColorCote

MagnaFlow is ColorCote's most innovative corrosion resistant pre-painted metal roofing product, with magnesium added technology. Magnesium allows the zinc/aluminum alloy-coated steel substrate to 'heal itself' along any cut or exposed edges of the material, which prevents premature corrosion. The product carries an EPD and when supplied to market by either Roofing Industries New Zealand, or Dimond Roofing then the product also carries GreenTag GreenRate Level A certification .



Green Star Design & As Built NZ (V1)	Credit 19B.2A	Up to 1 point
	Credit 21	Sustainability Factor (SF) = 1
Green Star Interiors (V1)	Credit 21	Sustainability Factor (SF) = 1



Homestar V5	EN3	1.5 points
Homestar V4	MAT-1	Up to 4 points



WELL Building Standard® V1	Feature 11	Complies
	Feature 26	Complies
	Feature 97	Complies
WELL Building Standard® V2	Feature X8	1 point
	Feature X13	Up to 2 points
	Feature X14	Up to 2 points




Living Building Challenge V3	Imperative 10	Pass
	Imperative 12	Pass
	Imperative 13	Pass
Living Building Challenge V4	Imperative 13	Pass
	Imperative 14	Pass
	Imperative 15	Pass

n which the product may contribute towards points	Legend of Symbols in EnviroSpec
Products must meet specific criteria (e.g. Paint VOC emissions, carpets, etc)	✔
Products may help achieve points by their very nature, if they are specified and installed (e.g. bicycle racks)	●
Products may help achieve an outcome but they must be used in a specific manner (e.g. lighting control and zoning systems) OR The nominated product(s) can contribute towards the outcome but many other products or factor influence that same outcome (E.g. Potable Water Calculator)	○
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Rating Tool	Credit / category	Points available	Requirements	Contribution symbol	Contribution Potential	Details of compliance
Green Star Design & As Built NZ (V1)	Credit 19	7	<p>This is a sub-section of Credit 19 (Life Cycle Impacts). This credit section rewards a reduction in the mass of steel framing used when compared to standard practice. The reduced mass of steel framing can be demonstrated by one of the following design initiatives:</p> <ul style="list-style-type: none"> • High strength steel; or • Reduction in mass of steel framing by 5% when compared to a suitable reference building. <p>High Strength Steel - For this option, project teams must demonstrate that 95% of Category A products and 25% of Category B products meet the strength grades specified in Table 19B.2A.1 and Table 19B.2A.2, as applicable.</p> <p>Reduction in Mass - For this option, project teams must demonstrate that the project results in a 5% or more reduction in mass of steel framing, when compared to a suitable reference case building. To demonstrate compliance the Submission Template must be completed by a qualified Structural Engineer and require a number of justifications as prescribed by the Green Star Submission Guidelines.</p>	✓	Up to 1 point (out of 1 point available for this credit category)	<p>Table 19B.2A.1 identifies (amongst others) that roof sheeting and wall sheeting that has a minimum strength grade of 550MPa can be used to contribute towards the compliant products.</p> <p>ColorCote is able to provide CoC certificates that identify the strength grade (e.g. G550, G300, etc). These are available on request and the strength grade to be sourced should be clearly specified by the Design Team.</p>
	Credit 21	3	<p>This credit rewards the selection of products that meet transparency and sustainability requirements. Points are awarded based on the Project Sustainability Value (PSV*) and comparing it with the Project Contract Value (PCV).</p> <p><u>Benchmarks are:</u></p> <ul style="list-style-type: none"> - 1 point is awarded if PSV > 3% of PCV - 1 point is awarded if PSV > 6% of PCV - 1 point is awarded if PSV > 9% of PCV <p><i>The Project Sustainability Value is the sum of all the compliant product's "Product Sustainability Value" (PSV).</i></p> <p><i>The PSV = Sustainability Factor x cost of product</i></p>	✓	Sustainability Factor (SF) = 1	<p>The nominated product holds a level A approved eco-label, therefore the Product Sustainability Value (PSV) can be calculated as :</p> <p>"Product Cost x 1".</p>
Green Star Interiors NZ (V1)	Credit 21	19	<p>This credit rewards the selection of products that meet transparency and sustainability requirements. Points are awarded based on the Project Sustainability Value (PSV*) and comparing it with the Total Materials Cost (TMC).</p> <p><u>Benchmarks are:</u></p> <ul style="list-style-type: none"> - 3.8 points are awarded if PSV > 20% of TMC - 7.2 points are awarded if PSV > 40% of TMC - 11.4 points are awarded if PSV > 60% of TMC - 15.2 points are awarded if PSV > 80% of TMC - 19 points are awarded if PSV = 100% of TMC <p><i>The Project Sustainability Value is the sum of all the compliant product's "Product Sustainability Value" (PSV).</i></p> <p><i>The PSV = Sustainability Factor x cost of product</i></p>	✓	Sustainability Factor (SF) = 1	<p>The nominated product holds a level A approved eco-label, therefore the Product Sustainability Value (PSV) can be calculated as :</p> <p>"Product Cost x 1".</p>

Rating Tool	Credit / category	Points available	Requirements	Contribution symbol	Contribution Potential	Details of compliance
Homestar V5	EN3	10	This credit rewards the selection of eco-preferred and responsibly sourced materials, with twelve possible material categories eligible for up to 1.5 points each (up to a maximum of 10 points combined), provided > 50% of product compliance is achieved based on the relative weighting of individual product ecolabel certifications.	✓	Up to 3 points	The nominated product has a level A approved ecolabel, satisfying the requirements for this credit. If used for roofing and cladding then up to 3 points can be claimed (i.e. 1.5 points for each application).
Homestar V4	MAT-1	10	This credit rewards the selection of eco-preferred and responsibly sourced materials, with thirteen possible material categories eligible for up to 2 points each (up to a maximum of 10 points combined), provided > 50% of product compliance is achieved based on the relative weighting of individual product ecolabel certifications.	✓	Up to 4 points	The nominated product has a level A approved ecolabel, satisfying the requirements for this credit. If used for roofing and cladding then up to 4 points can be claimed (i.e. 1.5 points for each application).

Rating Tool	Credit / category	Points available	Requirements	Contribution symbol	Contribution Potential	Details of compliance
WELL Building Standard® V1	Feature 11	Pass/Fail	<p>This feature aims to reduce or eliminate occupant exposure to known harmful substances, as follows:</p> <p>PART 1 Asbestos and Lead Restriction PART 2 Lead Abatement PART 3 Asbestos Abatement PART 4 Polychlorinated Biphenyl Abatement PART 5 Mercury Limitation PART 6 Playground Equipment Safety</p>		Pass	This product holds holds GreenTag GreenRate level A certification and a GreenTag PHD, which has been approved by IWBI as an acceptable equivalency to demonstrate compliance with this feature under Part 1 -C, confirming that no more than 100 ppm (by weight) is added lead to this roofing/flushing product.
	Feature 26	Pass/Fail	<p>This features aims to minimize the impact of hazardous building material ingredients on indoor air quality and protect the health of manufacturing and maintenance workers.</p> <p>Part 1: Precautionary Material Selection</p> <p>At least one of the following requirements is met:</p> <p>a. The project completes all Imperatives in the Materials Petal under the Living Building Challenge 3.0.</p> <p>b. At least 25% of products by cost (including furnishings, built-in furniture, all interior finishes and finish materials) are Cradle to Cradle^a Material Health Certified with a V2 Gold or Platinum or V3 Bronze, Silver, Gold or Platinum Material Health Score.</p> <p>c. At least 25% of products by cost (including furnishings, built-in furniture, all interior finishes and finish materials) have no GreenScreen[™] Benchmark 1, List Translator 1 or List Translator Possible 1 substances over 1,000 ppm, as verified by a qualified Ph.D. toxicologist or Certified Industrial Hygienist.</p> <p>d. At least 25% of products by cost (including furnishings, built-in furniture, all interior finishes and finish materials) meet some combination of the certifications described in Requirements b and c.</p>		Pass	If the product is used for an interior application such as a wall finish material, then complies with part 1, section c
	Feature 97	Pass/Fail	<p>This features aims to reward materials transparency and the selection of products that display a declaration of content and ingredients.</p> <p>PART 1 - Material Information</p> <p>At least 50% (as measured by cost) of interior finishes and finish materials, furnishings (including workstations) and built-in furniture must have some combination of the following material descriptions (in order to contribute, the product must indicate that all ingredients have been evaluated and disclosed down to 1,000 ppm):</p> <p>a. Declare Label. b. Health Product Declaration. c. Any method accepted in USGBC's LEED v4 MR credit: Building Product Disclosure and Optimization - Material Ingredients, Option 1: material ingredient reporting.</p> <p>PART 2 - Accessible Information</p> <p>All declaration information must be compiled and made readily available to occupants either digitally or as part of a printed manual.</p>		Pass	If used for an interior finish application, then the GreenTag PHD document for this product complies with part 1 of this feature.

Rating Tool	Credit / category	Points available	Requirements	Contribution symbol	Contribution Potential	Details of compliance
WELL Building Standard® V2	Feature X8	1	<p>This WELL feature requires the restriction of heavy metals in various building materials and products, including furniture and furnishings and electrical components.</p> <p>a) At minimum 20% by cost of the following newly installed building products and material types must contain less than 100 ppm added lead:</p> <p>Doors and door hardware, Ductwork, Conduits, Metal studs, Mirrors/glass, Roofing or flashing, Brass cooler drains, pumps, motors and valves, Vinyl blinds or wallcovering.</p> <p>b) For all newly installed furnishings and furniture (including textiles, finishes and dyes), all components that constitute at least 5%, by weight, furniture or furnishing assembly meet the following thresholds for material content:</p> <p>< 100ppm for Mercury, Cadmium, Antimony. < 1000ppm for Hexavalent chromium in plated finishes.</p> <p>c) All newly installed electrical components: fire alarms, meters, sensors, thermostats and load break switches, meet the following maximum concentration value per listed substance:</p> <p>< 1000ppm for Lead, Mercury, Hexavalent Chromium , < 100ppm for Cadmium.</p>		1 point	This product holds a GreenTag PHD document, with ingredients inventory threshold of 100ppm, indicating no added lead, and complies with part a) of this feature.
	Feature X13	2	<p>This WELL feature requires screening and labeling of products in accordance with programs that restrict the use of hazardous ingredient contents in materials and products..</p> <p>Part 1: Select Optimized Materials</p> <p>1 point is awarded if > 15% by cost, and 2 points if > 25% by cost of newly installed furnishings, built-in furniture, interior finishes and finish materials comply with some combination of the following programs:</p> <p>a. Declare: Living Building Challenge Red List Free, Declare: Living Building Challenge Compliant or Living Product Challenge label.</p> <p>b.No GreenScreen™ Benchmark 1, List Translator 1 or List Translator Possible 1 substances over 1,000 ppm, as verified by a qualified Ph.D. toxicologist or Certified Industrial Hygienist.</p> <p>c. Cradle to Cradle Certified™ products with a Bronze, Silver, Gold or Platinum level in the Material Health category or products with a Bronze, Silver, Gold or Platinum level Material Health Certificate from the Cradle to Cradle Products Innovation Institute.</p>		Up to 2 points	If the product is used for an interior application such as a wall finish material, then the product complies as it has been certified under GreenTag V4 which is a recognized strategy/equivalency for this feature.
	Feature X14	2	<p>This WELL feature requires the compilation and availability of product descriptions, with ingredients evaluated and disclosed through transparency labels.</p> <p>Part 1 - Promote Ingredient Disclosure (Max: 2 points).</p> <p>1 point if > 25% compliance (by cost) and 2 points if > 50% (by cost) of all newly installed interior finishes & finish materials, furnishings (including workstations) & built-in furniture have any of the following material descriptions, with ingredients identified & disclosed to 1,000 ppm:</p> <ul style="list-style-type: none"> • Declare Label. • Health Product Declaration. • Any screening and hazard disclosure method accepted in USGBC's LEED v4 MR credit: Building Product Disclosure and Optimization - Material Ingredients, Option 1: material ingredient reporting. <p>Material library – In addition to the above, a digital or physical library is provided to occupants on compliant products as part of the resource library required through Feature C01: Health and Wellness Awareness.</p>		Up to 2 points	If the product is used for an interior application such as a wall finish material, then the product complies as it has been certified under GreenTag V4 and has a GreenTag PHD, which have been recognized as a strategy/equivalency for this feature, complying with Part 1.

Living Building Challenge V3	Imperative 10	Pass/Fail	This imperative restricts the use of products that contain Red List chemicals as nominated by the Living Building Challenge.	✓	Pass	The nominated product(s) meet the requirements.
	Imperative 12	Pass/Fail	This imperative encourages responsible industry when sourcing product and materials by rewarding the use of FSC certified timber and/or products that have Declare ingredients label.	✓	Pass	The nominated product(s) holds a valid Declare label.
	Imperative 13	Pass/Fail	This imperative encourages local sourcing of materials to help sustain the local economy and reduce transportation cost. Only 25% of all materials by cost (materials construction budget) can come from any location, with the remaining having to adhere to distance sourcing restrictions.	✓	Pass	The nominated product(s) manufacturing plant is located in Auckland, New Zealand.

Living Building Challenge V4	Imperative 13	Pass/Fail	This imperative restricts the use of products that contain Red List chemicals as nominated by the Living Building Challenge.	✓	Pass	The nominated product(s) meet the requirements.
	Imperative 14	Pass/Fail	This imperative encourages responsible industry when sourcing product and materials by rewarding the use of FSC certified timber and/or products that have Declare ingredients label.	✓	Pass	The nominated product(s) hold a valid Declare label.
	Imperative 15	Pass/Fail	This imperative encourages local sourcing of materials to help sustain the local economy and reduce transportation cost. Only 25% of all materials by cost (materials construction budget) can come from any location, with the remaining having to adhere to distance sourcing restrictions.	✓	Pass	The nominated product(s) manufacturing plant is located in Auckland, New Zealand.