



Product Name	Armstrong RH99 Ultima Ceiling Tiles (GreenTag GreenRate Level A certified)
Document Type	Green Building Rating Compatibility Analysis
Document Code	ES-GSNZ-09-11h
Client	Forman Building Systems

Armstrong RH99 Ultima is a high absorption acoustic ceiling panel for suspended ceiling grid which combines a high level of acoustic absorption with exceptional impact and scratch resistant because of the factory applied paint finish over an acoustically transparent Durabrite tissue. The smooth non-directional visual and a wide variety of grid options enables a wide range of uses in private and public sector projects. Ultima combines HumiGuard Plus no sag performance with BioBlock paint to inhibit surface growth of mold and mildew. Armstrong RH99 Ultima is GreenTag Green Rated Level A certified as well as Low VOC and low formaldehyde as tested by CETEC laboratories based on Greenguard standards.



	Green Star Design & As Built NZ (V1)	Credit 21	Sustainability Factor (SF) = 1
	Green Star Interiors NZ (V1)	Credit 21	Sustainability Factor (SF) = 1
	Green Star Performance NZ (V1)	Credit 21	1 point
	Green Star NZ (V3) Office / Industrial / Interiors & Education V3.1	IEQ-8	Up to 3 points
		IEQ-11	Up to 3 points
IEQ-13		Up to 2 points	
ENE-4		Up to 3 points	
	MAT-4	Up to 2 points	
	Homestar V4	EHC 9	1 Point (detached homes) / 0.5 pts (terrace / apartments)
	Homestar V3	MAT 1	1 Merit
		EHC 9	Up to 2 points

Manner in 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)	○

Disclaimer - Please read this carefully

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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 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>This product falls under the "ceilings" category.</p> <p>This ceiling 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>This product falls under the "ceilings" category.</p> <p>This ceiling 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 Performance NZ (V1)	Credit 21	3	<p>This credit rewards the measurement and reduction of the environmental impacts of materials in building operations, maintenance and upgrades.</p> <p><u>Benchmarks are:</u></p> <ul style="list-style-type: none"> - 1 point is awarded for developing a sustainable procurement framework - 1 point is awarded where the top 3 consumable materials are purchased in accordance with the procurement framework - 1 point is awarded where refurbishment and maintenance materials are purchased in accordance with the procurement framework. <p><i>Refurbishment materials - This includes at a minimum:</i></p> <ul style="list-style-type: none"> - Paints adhesives, sealants and carpets (to comply with Green Star V3 "Low emitting materials"), - Concrete (to comply with Green Star V3 "Concrete and Aggregate"), - Steel (to comply with Green Star V3 "Steel"). <p><i>* Note: This credit can, if desired, be extended to include doors, wall finishes and paneling, wall and roof insulation, carpet, floor tiles, ceiling tiles, light fixtures and any other building component owned by the building owner (e.g. roof replacement, built in furniture and joinery, etc)</i></p> <p><i>This only applies if the refurbishment work is > \$5/m2, otherwise the credit is deemed N/A</i></p>	✓	1 point	<p>For materials credits in Green Star Performance, if the specific requirement is not covered in the submission guidelines, the project should refer to the GS Design & As Built for reference.</p> <p>This ceiling product holds a level A approved eco-label, therefore and can be included as a compliant refurbishment material.</p>

Rating Tool	Credit / category	Points available	Requirements	Contribution symbol	Contribution Potential	Details of compliance
Homestar V4	EHC-9	3	This credit rewards the provision of an improved sound environment in accordance with items listed in the sound insulation checklist.	●	0.5 Pts <i>(terrace / Apt)</i> 1 point <i>(detached homes)</i>	Acoustic ceiling tiles are referred to in the sound insulation checklist. If the nominated ceiling tiles are used in > 80% of a dwelling's livable rooms then 0.5 points can be claimed for terrace homes or apartments, and 1 point can be claimed for single detached houses.
	MAT-1	9	This credit rewards the use of eco-preferred and responsibly sourced materials. Ceiling products are one of thirteen possible material categories eligible for 2 points each.	✓	1 merit	The nominated product has Level A approved eco label certification, contributing to 2 points (unweighted in the calculator), thus satisfying the requirement of this credit. This product has low VOC emissions, contributing 1 point.
Homestar V3	EHC-9	2	This credit rewards the provision of an improved sound environment in accordance with items listed in the sound insulation checklist.	●	0.33	Acoustic ceiling tiles are referred to in the sound insulation checklist. If the nominated ceiling tiles are used in > 80% of a dwelling's livable rooms then 0.33 points can be claimed in Homestar V3.

LEGACY GREEN STAR NZ TOOLS

Tool	Credit category	Points available	Requirements	Contribution symbol	Contribution Potential	Details of compliance
Green Star NZ Office V3.0 + Education V3.1 + Industrial V3.0 + Interiors V3	IEQ-8	3	This credit rewards buildings that maximise daylight.	○	Contribution potential	Armstrong Ultima Ceiling tiles have a Light Reflectance Value of 90% (average) which may help improve the floor area with a daylight factor above 2.5%.
	IEQ-11	3	This credits rewards for good visual comfort and lighting design.	○	Contribution potential (2)	To achieve 2 points or more, the light reflectance of ceilings must be minimum 75%. Armstrong Ultima Ceiling tiles have a Light Reflectance Value of 90% (average), thus satisfying this requirement. The remaining items in this credit are based on lighting design and are not product dependent.
	IEQ-13	2	This credit rewards buildings that maintain adequate noise levels.	○	Contribution potential	Armstrong Ultima Ceiling tiles have a CAC of 35 and NRC of 0.70 which may assist in maintaining suitable noise levels.
	ENE-4	3	This credit rewards design options that lessen lighting energy consumption while maintaining adequate lighting levels	○	Contribution potential	Armstrong Ultima Ceiling tiles have a Light Reflectance Value of 90% (average) which may assist in reducing the lighting output required to obtain a given lighting level in a space.
	MAT-4	2	This credit rewards the use of eco-preferred and/or low VOC/formaldehyde emitting products for ceilings engineered wood products and gypsum plasterboard.	✓	2 Points	The nominated product is GreenTag Green Rate Level A certified, thus satisfying the full point requirements for ceilings.