

Product Name	Customwood ECNZ certified MDF panels
Document Type	Green Building Rating Compatibility Analysis
Document Code	ES-GSNZ-11-47a
Client	Daiken New Zealand Ltd

Customwood® is a dry-process fibreboard, usually referred as MDF. The product is made with softwood (pine species) fibres from NZ South Island plantations. A low formaldehyde emitting resin (UF or MUF) is used. The product and supplier have FSC chain of custody, Environmental Choice NZ certification, and can be supplied in E0 or SEO formaldehyde performance levels.



Green Star Design & As Built NZ (V1)	Credit 13	1 point
	Credit 20	1 point
	Credit 21	Sustainability Factor (SF) = 1
Green Star Interiors NZ (V1)	Credit 12	2 points
	Credit 20	1 point
	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	MAT 4	1 point
	MAT 6	Pre-requisite – <i>Excluded (NA)</i> Criteria A – 2 points Criteria B – <i>Excluded (NA)</i>



Homestar V4	MAT-1	2 points
	MAT-2	1 point
Homestar (V2 and V3)	MAT-1	1 merit
	MAT-2	0.75 point

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)	○
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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 13	2	<p>This credit rewards the use of low VOC and low formaldehyde interior products and finishes that safeguard occupant health through the reduction in internal air pollutant levels.</p> <p>- 1 point is available where at least 95% of all internally applied paints, adhesives, sealants and carpets meet stipulated 'Total VOC Limits', or, where no paints, adhesives, sealants or carpets are used in the building.</p> <p>- 1 point is available where at least 95% of all engineered wood products meet stipulated formaldehyde limits or no new engineered wood products are used in the building.</p>	✓	1 point	<p>The nominated product has E0 or lower formaldehyde emissions, as well as ECNZ certification, satisfying the requirements for engineered wood products.</p> <p><i>Note: achieving 1 point here is dependent on the remaining products in the category also being compliant.</i></p>
	Credit 20	3	<p>This credit rewards projects that achieve a reduced environmental impact in the sourcing of steel, timber and PVC.</p> <p>Steel - 1 point is available where 95% of the building's steel (by mass) is sourced from a Responsible Steel Maker (manufacturer) ; and</p> <p>For steel framed buildings - at least 60% of the fabricated structural steelwork is supplied by a responsible steel fabricator/steel contractor.</p> <p>For concrete framed buildings - at least 60% (by mass) of all reinforcing bar and mesh is produced using energy-reducing processed in its manufacture holds Environmental Choice EC-41-15 certification.</p> <p>Timber - 1 point is available where at least 95% (by cost) of all timber used in the building and construction works is either certified by a recognised forest certification scheme, or is from a reused source.</p> <p>PVC - 1 point is available where 90% (by cost) of all permanent formwork, pipes, flooring, blinds and cables in a project are either PVC free, or meet the GBCA's Best Practice Guidelines for PVC.</p>	✓	1 point	<p>This product holds an FSC Certification and Level A approved eco-label and satisfies the requirements.</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>This 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
Green Star Interiors NZ (V1)	Credit 12	6	<p>This credit rewards the use of plants, as well as low VOC and low formaldehyde interior products and finishes that safeguard occupant health through the reduction in internal air pollutant levels.</p> <ul style="list-style-type: none"> - 2 points are available where at least 95% of all internally applied paints, adhesives, sealants and carpets meet stipulated 'Total VOC Limits', or, where no paints, adhesives, sealants or carpets are used in the building. - 2 points are available where at least 95% of all engineered wood products meet stipulated formaldehyde limits or no new engineered wood products are used in the building. - 2 points are available where indoor plants are distributed across the nominated area and are regularly maintained. 	✓	2 points	<p>The nominated product has E0 or lower formaldehyde emissions, as well as ECNZ certification, satisfying the requirements for engineered wood products.</p> <p><i>Note: achieving 2 points here is dependent on the remaining products in the category also being compliant.</i></p>
	Credit 20	2	<p>This credit rewards projects that achieve a reduced environmental impact in the sourcing of timber and PVC.</p> <p>Timber - 1 point is available where at least 95% (by cost) of all timber used in the building and construction works is either certified by a recognised forest certification scheme, or is from a reused source.</p> <p>PVC - 1 point is available where 90% (by cost) of all permanent formwork, pipes, flooring, blinds and cables in a project are either PVC free, or meet the GBCA's Best Practice Guidelines for PVC.</p>	✓	1 point	<p>This product holds an FSC Certification and Level A approved eco-label and satisfies the requirements.</p>
	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 Timber 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 > 75% by cost of refurbishment and maintenance materials are purchased in accordance with the procurement framework, or 0.5 points if > 50% by cost comply. <p><u>Refurbishment materials</u> - This includes at a minimum :</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><i>If Engineered Wood Products are part of the refurbishment materials purchased by the Building Owner / Landlord (as part of the base building), then they are to be included in the calculation.</i></p> <p><i>The nominated product has E0 or lower formaldehyde emissions and therefore satisfies the credit criteria for low product emissions. It also carries a level A approved ecolabel.</i></p> <p><i>Note: achieving 0.5 or 1 point here is dependent on total % achieved when including the other refurbishment products purchased.</i></p>

Rating Tool	Credit / category	Points available	Requirements	Contribution symbol	Contribution Potential	Details of compliance
Homestar (V2 and V3)	MAT-1	9 (all products combined)	This credit rewards the selection of eco-preferred and responsibly sourced materials. Floor coverings are one of thirteen possible construction types eligible for up to 1 merit each.	✓	1 merit (out of 1 available for this construction system)	The nominated product is Environmental Choice NZ certified, satisfying the requirements for this credit.
	MAT-2	3 (all products combined)	This credit rewards the use of low VOC and low formaldehyde interior products and finishes. This product is eligible for 0.75 points out of 3.	✓	0.75 points (out of 0.75 available for engineered wood)	This product satisfies the low Formaldehyde requirements of this credit.
Homestar V4	MAT-1	10	This credit rewards the use of eco-preferred and responsibly sourced materials. Flooring products are one of thirteen possible material categories eligible for 2 points each.	✓	2 points (out of 2 points available for this material category)	The nominated product is Environmental Choice NZ certified, satisfying the requirements for this credit.
	MAT-2	4	This credit rewards the use of low VOC and low formaldehyde interior products and finishes. Floor coverings are one of four material categories eligible for 1 point each.	✓	1 point (out of 1 available for engineered wood)	This product satisfies the low Formaldehyde requirements of this credit.

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 V3.2 + Industrial V3.0	MAT-4	5	This credit rewards up to 5 points in total. CRITERIA A • 4 points are allocated for the use of low VOC and low formaldehyde emitting products (including Applied coatings, Adhesives & Sealants, Flooring, Ceilings, Internal walls & partitions) – Each product type is worth up to 1 point. <u>Benchmarks are:</u> - 0.5 points are awarded if > 50% of a selected product type complies - 1 point is awarded if > 90% of a selected product type complies. CRITERIA B • 1 point is allocated for the use of low formaldehyde emitting engineered wood products (exposed or concealed applications). <u>Benchmarks are:</u> - 0.5 points are awarded if > 50% of engineered wood products complies. - 1 point is awarded if > 90% of engineered wood products comply.	✓	1 point	This product satisfies the low Formaldehyde requirements of this credit.
Green Star NZ Interiors V3.0	MAT-4	6	This credit rewards up to 6 points in total. CRITERIA A • 5 points are allocated for the use of low VOC and low formaldehyde emitting products (including Applied coatings, Adhesives & Sealants, Flooring, Ceilings, Internal walls & partitions and fit out items) – Each product type is worth up to 1 point. <u>Benchmarks are:</u> - 0.5 points are awarded if > 50% of a selected product type complies - 1 point is awarded if > 90% of a selected product type complies. CRITERIA B • 1 point is allocated for the use of low formaldehyde emitting engineered wood products (exposed or concealed applications). <u>Benchmarks are:</u> - 0.5 points are awarded if > 50% of engineered wood products complies. - 1 point is awarded if > 90% of engineered wood products comply.	✓	1 point	This product satisfies the low Formaldehyde requirements of this credit.

<p>Green Star NZ</p> <p>Office</p> <p>V3.0</p> <p>+</p> <p>Education</p> <p>V3.2</p> <p>+</p> <p>Industrial</p> <p>V3.0</p> <p>+</p> <p>Interiors</p> <p>V3.0</p>	<p>MAT-6</p>	<p>3</p>	<p>This credit rewards up to 3 points in total.</p> <p>PRE-REQUISIT CRITERIA</p> <ul style="list-style-type: none"> • 1 point is awarded where 90% (by volume) of all new timber products used in the project and construction works are from certified sustainably managed forests (FSC) OR are re-used or recycled. <p>Where the pre-requisite point is achieved up to a maximum of 2 additional points can be achieved through a combination of criteria A and B:</p> <p>CRITERIA A</p> <ul style="list-style-type: none"> • Up to 2 points are allocated for the use of Environmentally preferable wood products (for applications including structural and non-structural timber including wall, floor and roof structures / External and internal cladding / Structural formwork / Flooring, wall and ceiling finishes / Internal and external joinery including windows, doors and other specialist uses of timber such as installed furnishings, joinery fixtures or balustrades). <p>Benchmarks are:</p> <ul style="list-style-type: none"> - 1 point is awarded if > 30% of selected products comply. - 2 points are awarded if > 60% of selected products comply. <p>CRITERIA B</p> <ul style="list-style-type: none"> • Up to 1 point is allocated for timber used (excluding interior finishing timber products) that has reduced toxicity through either minimum treatment levels / Arsenic , Chrome , LOSP free treatments / non chemical treatments or use of untreated timber. <p>Benchmarks are:</p> <ul style="list-style-type: none"> - 0.5 points are awarded if > 30% of selected products comply. - 1 point is awarded if > 60% of selected products comply. 		<p>Up to 3 points</p>	<p>PRE-REQUISITE CRITERIA. This product falls under a product application area that excludes it from the FSC pre-requisite criteria.</p> <p>CRITERIA A. The nominated product has ECNZ certification, contributing up to 2 points in the calculator (if the other products also comply. And the project team achieves the 60% benchmark)</p> <p>CRITERIA B. The nominated product is typically used for interior finishing applications and therefore does not qualify for inclusion under Criteria B.</p>
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