

# GREEN GUIDE FOR HEALTHCARE™ (GGHC)

## Credit Summary

### SECTION I. ARMSTRONG CEILING, SUSPENSION AND WALL SYSTEMS CREDIT SUMMARY

This credit summary details how Armstrong Ceilings, Suspension and Walls systems can help to achieve credits in the GGHC Rating Systems. The GGHC is the healthcare sector's first quantifiable sustainable design tool kit integrating enhanced environmental and health principles and practices into the planning, design, construction, operations and maintenance of their facilities. This Guide provides the healthcare sector with a voluntary, self-certifying metric tool kit of best practices

that designers, owners, and operators can use to guide and evaluate their progress towards high performance healing environments. [gghc.org](http://gghc.org)

### SECTION II. PRODUCT IDENTIFICATION

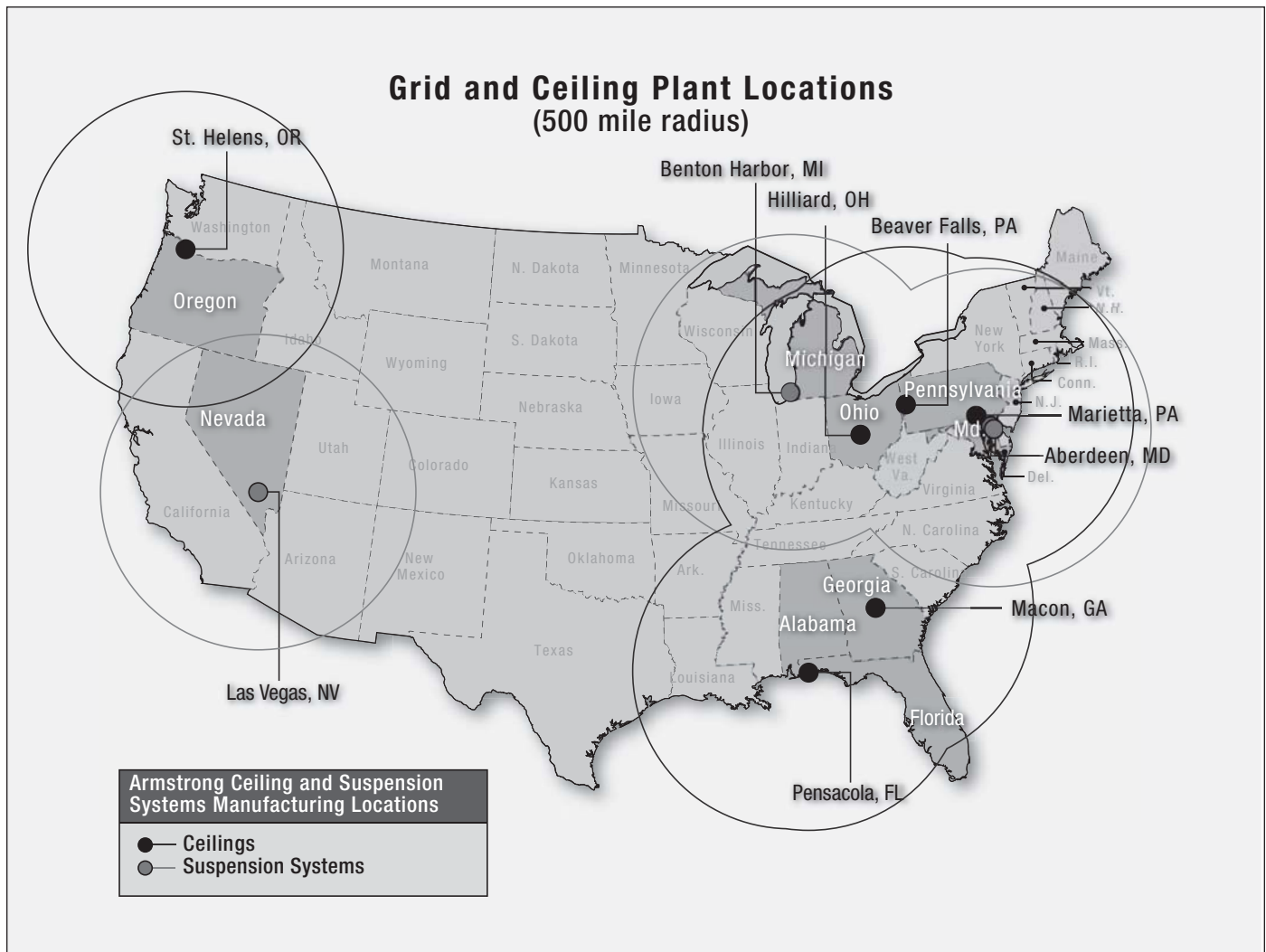
To learn more about Armstrong, visit [armstrong.com/ceilings/green](http://armstrong.com/ceilings/green). Contact Armstrong TechLine™ at 877 ARMSTRONG for further assistance or visit the Green Genie™, our online environmental tool, at [armstrongceilings.com/greengenie](http://armstrongceilings.com/greengenie).

ENERGY AND ATMOSPHERE/FACILITIES MANAGEMENT	INTENT	CREDIT GOALS
<div>.....</div> <div><b>EA 1: OPTIMIZE ENERGY PERFORMANCE</b></div> <div><b>Credit 1.1–1.10 - Reduce design energy consumption by 3.5% to 42%</b></div>	Achieve increasing levels of energy performance to reduce environmental impacts associated with excessive energy use.	<ul style="list-style-type: none"><li>• Model anticipated building energy performance using DOE2.1E or Energy Plus in accordance with the instructions provided in Prerequisite 2.</li><li>• For buildings that are not exempt from local energy codes, compare performance of the proposed building systems with the baseline systems in accordance with ASHRAE 9D.1-2004 Appendix G.</li><li>• For buildings that are exempt from all or portions of the local energy codes, compare performance of the proposed building systems with the baseline systems as described in Prerequisite 2.</li></ul> <p><b>Armstrong Contribution:</b> A suspended ceiling design with an optimized lighting layout delivers up to 11% energy savings over an open plenum/ducted air return design. The efficiencies in a suspended ceiling design is the use of a return air plenum with low static pressures and fan horsepower instead of a ducted air return with high static pressures and fan horsepower. A suspended ceiling with a return air plenum is also more effective in removing the heat generated by lighting, thereby reducing the air conditioning load on the space.</p> <p>To aid in reducing lighting power density which lowers energy and maintenance costs, Armstrong High Light Reflectance ceilings and systems provide the same level of illuminance with fewer luminaires. This will yield a 23% lower lighting power density in new or existing building structures. Also, steps to reduce the number of fixtures and reduce the wattage of lamps should be taken.</p>

ENERGY AND ATMOSPHERE/FACILITIES MANAGEMENT (...cont.)	INTENT	CREDIT GOALS
		<p>The TechZone™ Ceiling System combines High Light Reflectance ceilings with indirect lighting which contributes to EA Credit 1.</p> <p>Go to <a href="http://armstrong.com/ceilings/green">armstrong.com/ceilings/green</a> to the Sustainable Performance Section, Energy tab to learn about energy savings strategies. Or contact TechLine™ for our white paper, <i>Suspended ceiling or open plenum? Making the right choice</i>, CS-3959.</p>
MATERIAL AND RESOURCES/ ENVIRONMENTALLY PREFERABLE PURCHASING	INTENT	CREDIT GOALS
<p>.....</p> <p><b>MR 2.1, 2.2 – CONSTRUCTION WASTE MANAGEMENT</b></p> <p><b>Divert from Landfill &amp; Incineration WM 1.4, EPc1</b></p>	<p>Divert construction and demolition debris from disposal in landfills and incinerators.</p> <p>Redirect recyclable recovered resources back to manufacturing.</p>	<ul style="list-style-type: none"> <li>• Develop and implement a construction waste management plan that, at a minimum, identifies the materials to be diverted from disposal in landfill or incineration. Identify whether the materials will be sorted on-site or co-mingled.</li> <li>• Calculations can be done by weight or volume, but must be consistent throughout.</li> <li>• Credit 2.1 (1 credit) Recycle and/or salvage at least 50% of non-hazardous construction and demolition debris.</li> <li>• Credit 2.2 (1 credit) Recycle and/or salvage an additional 25% (75% total) of non-hazardous construction and demolition debris.</li> </ul> <p><b>Armstrong Contribution:</b> Armstrong is the first ceiling manufacturer with a closed-loop recycling program which redirects recovered ceilings back to the manufacturing process. Please contact your Armstrong representative or Tour Recycling Center at 1 877 276 7876 (Option 1, 8) for more details on how this program can help you meet this requirement. More details and a recycling specification to include in your waste management plan can be found at <a href="http://armstrong.com/ceilings/recycling">armstrong.com/ceilings/recycling</a>. Ceilings must be combined with other items to achieve this credit.</p> <p>Armstrong will provide verification of weight and plant return location for GGHC submittal.</p>
<p><b>MR 2.3 – CONSTRUCTION PRACTICES</b></p> <p><b>Site &amp; Materials Management</b></p>	<p>Implement site and materials management practices during construction to minimize adverse impacts on adjacent occupants.</p>	<ul style="list-style-type: none"> <li>• Develop and implement a Construction Practices Environmental Management System (EMS) for the construction and pre-occupancy phase of the building. The below-listed “best practices” are strategies the contractor could employ as part of the EMS depending on the size, scope and circumstances of the project.</li> </ul> <p><b>Armstrong Contribution:</b> Armstrong can aid in providing best practice training for installation of new products and for recycling of acoustical ceilings from renovation projects.</p>

<b>MATERIAL AND RESOURCES/ ENVIRONMENTALLY PREFERABLE PURCHASING (...cont.)</b>	<b>INTENT</b>	<b>CREDIT GOALS</b>
<p>.....</p> <p><b>MR CREDIT 3 – SUSTAINABLY SOURCED MATERIALS</b></p> <p><b>EPc 4.1-4.5</b></p>	<p>Reduce the environmental impacts of the materials acquired for use in the construction of buildings and in the upgrading of building services.</p>	<p>One point (up to a maximum of five) will be awarded for each 10% of the total value of all building materials used in the project (on a dollar basis) that achieve at least one of the following sustainability criteria:</p> <ul style="list-style-type: none"> <li>• Contains at least 70% salvaged material</li> <li>• Contains at least 50% rapidly renewable materials.</li> <li>• Contains 100% wood certified in accordance with the Forest Stewardship Council's (FSC) Principles and Criteria.</li> <li>• Contains at least 50% materials harvested and processed or extracted and processed within 500 miles of the project.</li> <li>• Contains recycled content. Materials with recycled content can be credited toward the sustainably sourced total at the sum of post-consumer recycled content plus one-half of the pre-consumer content. The recycled content value of a material assembly shall be determined by weight. The recycled fraction of the assembly is then multiplied by the cost of assembly to determine the recycled content value.</li> </ul>
		<p><b>Armstrong Contribution</b></p> <p><b>Rapidly Renewable Materials</b></p> <p>Mineral fiber panels contain cornstarch binders, biobased alternatives to petroleum based binders. Tierra™ ceiling panels have a natural BioAcoustic™ substrate made from plants that grow from seed to harvest in just 90 days, making Tierra 45% rapidly renewable. Tierra is also the only ceiling that's Cradle to Cradle™ - Silver certified which also can contribute to an Innovation in Design credit with other MBDC C2C certified products. Armstrong WoodWorks® Bamboo Ceilings can contribute to the rapidly renewable calculation. Since this product is an assembly, take the rapidly renewable value of only the bamboo veneer to combine with other interior furnishings and finishes to achieve credit.</p> <p><b>FSC Certification</b></p> <p>Armstrong WoodWorks® ceilings are available as an FSC-certified composite product. Be sure to specify when ordering. Contact TechLine™ for details or use the Green Genie™ for FSC documentation. Armstrong WoodWorks products must be aggregated with all other certified wood materials in order to achieve this credit. The Armstrong Chain of Custody number for FSC certification is SW-COC-003601.</p> <p><b>Regional Materials</b></p> <p>Refer to the listing of Ceiling and Suspension System plant locations and to our map showing a radius of 500 miles from all our plants. The Green Genie tool can provide a regional materials value for each product. This is dependent upon the plant location where the product is produced. Go to <a href="http://armstrongceilings.com/greengenie">armstrongceilings.com/greengenie</a>.</p> <p>Note: See map on page 4.</p>

# Armstrong Ceiling and Suspension Systems manufacturing locations



## Armstrong Ceiling Manufacturing Sites (U.S.)

- Beaver Falls, PA 15010  
Mineral Fiber Ceilings
- Hilliard, OH 43026  
Fiberglass Ceilings
- Macon, GA 31208  
Mineral Fiber Ceilings
- Marietta, PA 17547  
Mineral Fiber Ceilings
- Pensacola, FL 32505  
Mineral Fiber Ceilings
- St. Helens, OR 97051  
Mineral Fiber Ceilings

## Armstrong Suspension Systems Manufacturing Sites (U.S.)

- Aberdeen, MD 21002
- Benton Harbor, MI 49022
- Las Vegas, NV 89031

MATERIAL AND RESOURCES/ ENVIRONMENTALLY PREFERABLE PURCHASING (...cont.)	INTENT	CREDIT GOALS
<p>.....</p> <p><b>MR CREDIT 3 – SUSTAINABLY SOURCED MATERIALS</b></p> <p><b>EPc 4.1-4.5</b></p>		<p><b>Recycled content</b></p> <p><b>Armstrong Contribution:</b> Armstrong ceiling products contain 23% – 82% recycled content. Armstrong suspension systems contain 30% recycled content – 23% post-consumer, 7% pre-consumer.</p> <p>For specific post-consumer/pre-consumer breakdowns, visit our Green Genie™ tool at <a href="http://armstrong.com/greengenie">armstrong.com/greengenie</a> or contact TechLine™. The Green Genie can also supply the appropriate documentation needed for your submittal packet. Depending on manufacturing location, certain products are available with a higher recycled content option.</p>
<p><b>MR CREDIT 4.1 – PBT ELIMINATION: DIOXINS</b></p>	<p>Reduce the release of persistent bioaccumulative toxic chemicals (PBTs) associated with the life cycle of building materials.</p>	<ul style="list-style-type: none"> <li>Specify no use of materials containing virgin or recycled chlorinated compounds in interior finishes [flooring (minimum of 50% of total floor area), base, ceiling tiles, wall coverings and window treatments]. Due to the critical nature of indoor air emissions to healthcare, all interior materials must meet any applicable credit goals of GGHC EQ 4 to attain points under this credit.</li> </ul> <p><b>Armstrong Contribution:</b> Armstrong products (with the exception of vinyl-faced products) do not contain any of the chlorinated compounds covered in this credit, and also meet the GGHC EQ 4 emissions requirements.</p>
<p><b>MR CREDIT 7.1 – RESOURCE USE: DESIGN FOR FLEXIBILITY</b></p>	<p>Conserve resources associated with the construction and management of buildings by designing for durability, flexibility and ease of future adaptation and maximizing life of constituent components and assemblies.</p>	<ul style="list-style-type: none"> <li>Increase building flexibility and ease of adaptive reuse over the life of the structure by employing design and/or space planning strategies:</li> </ul> <p><b>Armstrong Contribution:</b> Armstrong Ceiling and Wall Systems are designed for disassembly and flexibility. Ease of adaptive reuse is achieved through no adhesives. New systems employ coordination and flexibility with other interior elements to provide a flexible interior environment. Refer to <a href="http://emergealliance.org">emergealliance.org</a> and to <a href="http://armstrong.com/ceilings">armstrong.com/ceilings</a> to explore design and space planning strategies.</p>

ENVIRONMENTAL QUALITY	INTENT	CREDIT GOALS
<p>.....</p> <p><b>EQ CREDIT 4.2 – LOW-EMITTING MATERIALS</b></p> <p><b>Wall &amp; Ceiling Finishes</b></p>	<p>Minimize indoor air contaminants that are odorous, potentially irritating and/or harmful to the comfort and well-being of installers and occupants.</p>	<ul style="list-style-type: none"> <li>Specify ceiling tiles (including suspended acoustical tiles) and wall coverings that meet or exceed the indoor air quality requirements of California's Special Environmental Requirements Specifications Section 01350, as specified in California Department of Health Services Standard Practice CA/DHS/EHLB/R-174. Testing should be conducted by an independent laboratory and modeling should use the standard office building protocol parameters.</li> </ul> <p>AND</p> <ul style="list-style-type: none"> <li>Do not contain either of the following ingredients: <ul style="list-style-type: none"> <li>Polybrominated diphenyl ethers (PBDE)</li> <li>Phthalates</li> </ul> </li> </ul>

ENVIRONMENTAL QUALITY (...cont.)	INTENT	CREDIT GOALS
<p>.....</p> <p><b>EQ CREDIT 4.2 – LOW-EMITTING MATERIALS</b></p> <p><b>Wall &amp; Ceiling Finishes (...cont.)</b></p>		<p><b>Armstrong Contribution:</b> Armstrong Ceilings offers the widest selection of acoustical ceilings and walls that satisfy stringent indoor environmental quality requirements for formaldehyde and VOC emissions. Many Armstrong acoustical mineral fiber ceilings are formulated with no-added formaldehyde and they outperform CHPS (the collaborative for high performance schools) Section 01350 requirements on emissions. Several products in this category meet the most stringent requirements set by California Office of Environmental Health Hazard Assessment (OEHHA), contributing less than 2.5 ppb of formaldehyde when used under typical conditions required by ASHRAE Standard 62.1-2004. "Ventilation for Acceptable Indoor Air Quality," California Code of Regulations, Title 245. Third party certified test reports from independent laboratories are available through TechLine<sup>SM</sup>. Contact TechLine at 877 276 7876.</p>
<p><b>EQ CREDIT 4.4 – LOW-EMITTING MATERIALS</b></p> <p><b>Composite Wood &amp; Insulation</b></p>	<p>Minimize indoor air contaminants that are odorous, potentially irritating and/or harmful to the comfort and well-being of installers and occupants.</p>	<ul style="list-style-type: none"> <li>Specify composite wood and agrifiber products and fiberglass materials (including acoustical and other suspended ceiling tiles) used on the interior of the building (defined as inside of the weatherproofing system) with no-added urea-formaldehyde resins.</li> </ul> <p><b>Armstrong Contribution:</b> Armstrong WoodWorks<sup>®</sup> ceiling products meet California Air Resources Board (CARB) phase 1 levels and are available as a no-added formaldehyde composite product to meet requirements for this credit (with the exception of Constants<sup>™</sup> veneers).</p>
<p><b>EQ 8.1 – DAYLIGHT &amp; VIEWS</b></p> <p><b>Daylight for Occupied Spaces</b></p>	<p>Provide building occupants with a connection between indoor spaces and the outdoors by introducing daylight and views.</p>	<ul style="list-style-type: none"> <li>Design the building to maximize interior daylighting. Ensure compliance with the goal early in the design process, acknowledging site constraints at the programming stage, when block planning is tested and initial design parameters are established.</li> </ul> <p><b>Inpatient Units:</b></p> <ul style="list-style-type: none"> <li>Provide daylight access for 90% of patient and public spaces. (1 point)</li> <li>Achieve 2% daylight factor for 75% of staff occupied areas. (1 point)</li> </ul> <p><b>Armstrong Contribution:</b> Armstrong Hi-LR ceilings can aid in extending daylighting into the space. A typical acoustical ceiling reflects just 75% of the light striking the surface, while a high light reflectance ceiling is engineered to reflect up to 90% of the light striking the surface. Recent independent studies have shown a 10-15% daylighting effectiveness increase.</p> <p>A separate study concluded that the Hi-LR ceiling could contribute to daylight effectiveness with 87% less glazing than a ceiling with a reflection of 75%. The Hi-LR ceiling helps to extend daylighting into the space.</p>

ENVIRONMENTAL QUALITY (...cont.)	INTENT	CREDIT GOALS
<p>.....</p> <p><b>EQ CREDIT 9.1 – ACOUSTIC ENVIRONMENT</b></p> <p><b>Exterior Noise, Acoustical Finishes &amp; Room Noise Levels</b></p>	<p>Provide building occupants with a healing environment, free of disruptive levels of sound.</p>	<p>Design the facility's acoustic environment in accordance with the following three sections of the 2006 AIA/AHA Draft Interim Sound and Vibration Design Guidelines for Hospital and Healthcare Facilities (refer to <a href="http://www.fgiguideelines.org">www.fgiguideelines.org</a> for the latest developments in updates of these guidelines).</p> <ul style="list-style-type: none"> <li>• Acoustical Finishes and Detail: Design the facility by selecting and specifying materials, products, mechanical systems and design features to attenuate sound and vibration and to meet or exceed room average sound absorption coefficients shown in Table 2.3-1. <ul style="list-style-type: none"> <li>- In the design process, select room finishes using room sound absorption coefficients as listed in Table 2-1 and Table 2-2 (or other similar laboratory data for the materials considered) as guidance towards meeting the requirements of Table 2.3-1.</li> </ul> </li> <li>• Specify and install ceiling tiles with Ceiling Attenuation Class (CAC) ratings of 35 or greater for spaces with noisy plenum equipment or walls that stop short of the deck.</li> <li>• Specify and install sound-absorptive wall treatment with an NRC of 0.7 or higher.</li> </ul> <p><b>Armstrong Contribution:</b> Armstrong mineral fiber ceilings carry UL Classification for acoustical compliance for three acoustical categories – NRC, CAC, AC. There are various choices of ceiling finishes and acoustical performance to fit your healthcare setting. You can predict a balanced acoustical design to achieve the privacy level that is needed per HIPAA by using our Speech Privacy Predictor tool. Visit <a href="http://armstrong.com/hipaa">armstrong.com/hipaa</a> for more information and to learn about the tool.</p>
<p><b>EQ CREDIT 9.2 – ACOUSTIC ENVIRONMENT</b></p> <p><b>Sound Isolation, Paging &amp; Call Systems &amp; Building Vibration</b></p>	<p>Provide building occupants with a healing environment free of disruptive levels of sound.</p>	<ul style="list-style-type: none"> <li>• Achieve GGHC Credit 9.1: Acoustic Environment Exterior Noise, Acoustical Finishes &amp; Room Noise Levels.</li> </ul> <p>AND</p> <ul style="list-style-type: none"> <li>• Design the facility's acoustic environment in accordance with Sound Isolation Performance of Construction - Speech Privacy Goal Section of the 2006 AIA/AHA Draft Interim Sound and Vibration Design Guidelines for Hospital and Healthcare Facilities: <ul style="list-style-type: none"> <li>- Adequate sound isolation will result in speech privacy, acoustic comfort and a reduction in noise-produced annoyance. Sound isolation between hospital occupants and noise sources is the sound level difference between source and receiver spaces and adjusted for the background sound at the receiver's location.</li> </ul> </li> <li>• Design the facility to meet the criteria of Table 4.3 Speech Privacy Goals for Enclosed Rooms and Table 4.4 Speech Privacy Goals for open Plan Spaces. Design sound isolation between spaces in accordance with Table 4.3-1, Recommended Sound Isolation Performance Between Enclosed Rooms.</li> <li>• Alternatively, Test 5% of the privacy adjacencies in a building.</li> </ul> <p><b>Armstrong Contribution:</b> Armstrong mineral fiber ceilings carry UL Classification for acoustical compliance for three acoustical categories – NRC, CAC, AC. There are various choices of ceiling finishes and acoustical performance to fit your healthcare setting. You can predict a balanced acoustical design to achieve the privacy level that is needed per HIPAA by using our Speech Privacy Predictor tool. Visit <a href="http://armstrong.com/hipaa">armstrong.com/hipaa</a> for more information and to learn about the tool.</p>



# GGHC Credit Summary

## Ceilings, Suspension and Wall Systems

	EAc Credit 1.1-1.10, EQ 8.1	Material and Resources Credit 2.1 – 2.2	Armstrong Recycling Program	Material and Resources Credit 3	Materials and Resources Credit 3	Environmental Quality Credits 4.2 – 4.4
Product Name	Light Reflectance (LR)	100% Recyclable**		Total Recycled content <sup>1</sup>	FSC Wood	Formaldehyde Emissions <sup>2</sup>
Mineral Fiber						
Cirrus	0.86	Yes	✓	68-82%	N/A	No Added
Cirrus High Recycled Content	0.86	Yes	✓	82%	N/A	No Added
Cirrus Profiles	0.86	Yes	✓	68-82%	N/A	No Added
Cirrus Second Look	0.85	Yes	✓	68%	N/A	No Added
Cortega	0.82	Yes	✓	23-46%	N/A	Low/No Added
Dune	0.83	Yes	✓	37-66%	N/A	Low/No Added
Dune Second Look	0.83	Yes	✓	45-49%	N/A	Low/No Added
Endura	0.84	Yes	✓	74%	N/A	Low
Fine Fissured	0.85	Yes	✓	40-55%	N/A	Low/No Added
Fine Fissured Second Look	0.84	Yes	✓	32-39%	N/A	Low/No Added
Fissured	0.81	Yes	✓	23-40%	N/A	Low/No Added
Georgian	0.86	Yes	✓	39-40%	N/A	Low
Georgian High Washability/High Acoustics	0.86-0.88	Yes	✓	51%	N/A	Low/No Added
Latitudes	N/A	Yes	✓	63%	N/A	No Added
Mesa, Mesa HRC	0.85	Yes	✓	51-73%	N/A	Low/No Added
Natural Fissured	0.83	Yes	✓	63%	N/A	No Added
Sanserra	N/A	Yes	✓	63%	N/A	No Added
School Zone Fine Fissured High NRC/CAC	0.85	Yes	✓	50-51%	N/A	No Added
School Zone Fine Fissured High Durability	0.85	Yes	✓	38%	N/A	No Added
Stratus	0.74	Yes	✓	74%	N/A	Low
Terrain	0.74	Yes	✓	63%	N/A	No Added
Tincraft	0.78	Yes	✓	51-52%	N/A	No Added
Traces	N/A	Yes	✓	63%	N/A	No Added
Tundra	0.87	Yes	✓	33-50%	N/A	Low
Ultima	0.90	Yes	✓	71-80%	N/A	No Added
Ultima HRC	0.90	Yes	✓	80%	N/A	No Added
Ultima Vector	0.90	Yes	✓	71%		Low
Fiberglass						
Optima all Categories	0.90	Yes	✓	82%	N/A	Low
Painted Nubby	0.84	Yes**		82%	N/A	Low
Pebble	0.89	Yes**		82%	N/A	Low
Random Fissured	0.72	Yes**		82%	N/A	Low
Shasta	0.72	Yes**		82%	N/A	Low
SoundScapes Shapes	0.90	Yes	✓	82%		Low
BioAcoustic						
Tiera	0.88	Yes	✓	23%	N/A	No Added
Special Performance						
Armatuff	0.87	Yes	✓	51%	N/A	Low
Ceramaguard (unperforated)	0.88	Yes	✓	38%	N/A	No Added
Cirrus Open Plan	0.85	Yes	✓	69-77%	N/A	No Added
Clean Room Mylar/VL and VL	0.78-0.80	No**		71%	N/A	Low
Fine Fissured Open Plan	0.86	Yes	✓	69%	N/A	No Added
Ultima Open Plan	0.89	Yes	✓	70-80%		No Added
Health Zone Ultima	0.86	Yes	✓	70-71%	N/A	No Added
Specialty Ceilings						
Filaments	N/A	No		31-54%	N/A	Low
Sticks and Stones	0.84	Yes	✓	74%	N/A	No Added
Ultima Themes	0.90	Yes	✓	70-71%	N/A	No Added
MetalWorks Concealed	0.61-0.77	Yes		25%	N/A	N/A
MetalWorks Linear	0.61-0.77	Yes		25%	N/A	N/A
MetalWorks Tegalur	0.61-0.77	Yes		25%	N/A	N/A
MetalWorks Vector	0.61-0.77	Yes		25%	N/A	N/A
SoundScapes (Canopies)	0.86	Yes		66%	N/A	N/A
WoodWorks Linear, Tegalur, Vector	N/A	No		92%	Options Available	No Added
WoodWorks Channelled	N/A	No		92%	Options Available	No Added
MetalWorks Wings	0.77	Yes	✓	50%	N/A	No Added
Suspension Systems						
Suspension Systems - Steel	N/A	Yes		30%	N/A	N/A
Suspension Systems - Aluminum	N/A	Yes		50%	N/A	N/A
Axiom Trim	N/A	Yes		50%	N/A	N/A
Suspension Systems - High RC	N/A	Yes		63%	N/A	N/A
Wall Systems						
Soundsoak Standard Vinyl with Mineral Fiber Substrate	N/A	Yes	✓	77%	N/A	No Added
Soundsoak Standard Fabric with Mineral Fiber Substrate	N/A	Yes	✓	67%	N/A	No Added
Soundsoak Standard Fabric with Fiberglass Substrate	N/A	Yes	✓	51-52%	N/A	Low
WoodWorks Ekos Walls (perforated)	N/A	Yes	✓	67%	N/A	No Added
WoodWorks Ekos Walls (unperforated)	N/A	Yes	✓	67%	N/A	No Added
Custom Soundsoak	N/A	Yes		82%	N/A	Low

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environmental  
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greengenie



CS-3764-809 green genie

- 1 Recycled content is based on board composition. Recycled content percentage is based on 2008 production. Ranges reflect variation by plant location. For specific post-consumer and pre-consumer recycled content % breakdown for a project, go to [armstrong.com/greengenie](http://armstrong.com/greengenie). Armstrong adheres to the FTC guidelines for recycled content. Higher levels of recycled content are available through our Specials Process for many of our ceiling products. Please contact your Armstrong representative for more details.
- 2 Formaldehyde Emissions/CHPS as tested per California Special Environmental Requirements, Specifications Section 01350. For further detail on emissions, please refer to our brochure "The Basics of Formaldehyde and Interior Spaces - What You Need to Know." Check for specific item numbers that qualify.
- \*\* Based on product meeting recycling requirements. Call your Armstrong representative.
- Refer to [armstrong.com/greengenie](http://armstrong.com/greengenie) for the most current environmental product detail.

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