

LEED® Rating Systems V4 & V4.1

How Armstrong Ceilings and Walls Can Contribute to LEED



Theme	Credit	LEED Credit	Points Available	Armstrong® Ceilings and Walls Contribution
Recycling Program	Material and Resources	Construction Waste Management Now a Prerequisite – ID at least 5 materials	MRp Required MRc 1-2	<p>ARMSTRONG® CEILING RECYCLING PROGRAM</p> <p>MR Prerequisite: Add the Armstrong Ceiling Recycling Program to the Waste Management Plan to provide a solution to divert materials from the waste stream, increasing diversion percentage. Ceilings qualify as one (1) nonstructural material. Available throughout the U.S. and Canada.</p> <p>Option1:</p> <ul style="list-style-type: none"> • Path 1: Divert 50% and 2 material streams. Ceilings qualify as a material stream to meet 50% diversion. (1 pt) • Path 3: Divert 75% and 3 material streams. Ceilings qualify as a material stream to meet 75% diversion. (2 pts) <p>Option 2: Reduction in Total Waste: Specify products with minimal waste; Armstrong acoustical ceiling systems and Armstrong AcoustiBuilt® contribute to greater waste reduction over standard drywall installations.</p>
Regional Materials	Material and Resources	Regional Materials (Extracted, manufactured and purchased within 100 miles)	200% base contributing cost	<p>ARMSTRONG CEILING MANUFACTURING LOCATIONS</p> <p>Armstrong has the largest number of ceiling and suspension plant locations in North America. Use the Armstrong Ceilings Sustainable Product Search Tool to calculate mileage for manufacture and extraction locations; Product meeting 100 mile criteria is valued at 200% of base cost.</p>
Life Cycle Impacts & Environmental Product Declarations	Material and Resources	Building Life Cycle Reduction Interiors Life Cycle Impact Reduction	BD&C – 3 ID&C – 1-3	<p>ARMSTRONG® PRODUCT EPDs</p> <p>BD&C, Option 4: Whole Building Life Cycle Assessment: (1-4 pts) Use Armstrong third party-certified Product EPD or Embodied Energy (EE) for Whole Building LCA calculations.</p> <p>ARMSTRONG® CEILING-2-CEILING™ PRODUCTS</p> <p>ID&C, Option 1 – Reuse of nonstructural elements: Specify Armstrong® Ceiling-2-Ceiling™ products – new ceilings made of reclaimed ceilings that are returned to our recycling program with a high level of post-consumer recycled content.</p> <p>ARMSTRONG® ACCESSIBLE CEILING SYSTEMS</p> <p>ID&C, Option 3 – Design for Flexibility: Specify any of a wide range of both upward and downward accessible Armstrong® ceilings, in mineral fiber, fiberglass, metal and wood substrates.</p> <p>All Sustain® products contribute to this credit.</p>
Life Cycle Impacts & Environmental Product Declarations	Material and Resources	Building Disclosure and Optimization – Environmental Product Declaration	BD&C – 1 ID&C – 1-2	<p>ARMSTRONG® PRODUCT EPDs</p> <p>BD&C, Option 1: Use Armstrong type III Product EPDs.</p> <p>ID&C, Option 1: Use Armstrong publically available EPD's which show reduction in the total ceiling system and suspension system impact.</p> <p>Option 2: Use products that have a Life Cycle Impact Reduction Action Plan. Armstrong® products have demonstrated reductions in environmental impact as noted in the EC3 tool against the industry baseline.</p>
Responsible Sourcing of Raw Materials	Material and Resources	Building Disclosure and Optimization – Responsible Sourcing of Raw Materials	BD&C – 1-2 ID&C – 1-2	<p>Use products that meet responsible sourcing and extraction criteria:</p> <p>Extended Producer Responsibility: ARMSTRONG® RECYCLING PROGRAM – Armstrong is responsible for extended producer responsibility with our acoustical ceiling products. Armstrong mineral fiber and fiberglass ceiling products contribute to this credit.</p> <p>Bio-based Materials: ARMSTRONG® BIOBASED PRODUCTS</p> <p>Specify Armstrong® mineral fiber panels that contain plant-based binders, or biobased alternatives to petroleum-based binders.</p> <p>Armstrong products are tested using ASTM D6866 and are noted in the USDA BioPreferred Database.</p> <p>Wood Products: ARMSTRONG® WOOD CEILINGS & WALLS</p> <p>Specify Armstrong® FSC®-certified (92% mixed) composite wood ceilings and walls.</p> <p>Material Reuse: Armstrong products are designed for disassembly and are flexible and adaptable to your environment.</p> <p>Recycled Content: ARMSTRONG® HIGH RECYCLED CONTENT CEILINGS</p> <p>Recycled Content: Specify Armstrong® mineral fiber, fiberglass and wood ceilings which have a recycled content from 50%-95%. There are high recycled suspension systems, drywall grid and framing systems.</p>
Energy and Atmosphere		EA Prerequisite: Minimum Energy Performance	Prerequisite - Required	To reduce energy use, use Armstrong Ultima Templok Ceiling System. This system contributes to reduction and efficiency measures.
Energy and Atmosphere		EA Credit: Optimize Energy Performance	1-18 pts	To contribute to increasing the level of energy performance beyond the prerequisite, use Armstrong Ultima Templok ceiling system.
Energy and Atmosphere		EA Grid Harmonization	1-2 pts.	To increase participation in demand response technologies and programs, use Armstrong Ultima Templok ceiling system.
Recycling Program	Materials and Resources	Construction Waste Management	MRc 1-2	<p>Add the Armstrong Ceiling Recycling Program to the Waste Management Plan to provide a solution to divert materials from the waste stream, increasing diversion percentage. Ceilings qualify as one (1) nonstructural material. Available throughout the U.S. and Canada.</p> <p>Option1:</p> <ul style="list-style-type: none"> • Path 1: Divert 50% and 2 material streams. Ceilings qualify as a material stream to meet 50% diversion. (1 pt) • Path 3: Divert 75% and 3 material streams. Ceilings qualify as a material stream to meet 75% diversion. (2 pts) <p>Option 2: Reduction in Total Waste: Specify products with minimal waste; Armstrong acoustical ceiling systems and Armstrong AcoustiBuilt® contribute to greater waste reduction over standard drywall installations.</p>

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Responsible Sourcing of Raw Materials	Materials and Resources	Building Disclosure and Optimization – Responsible Sourcing of Raw Materials	BD&C – 1-2 ID&C – 1-2	<p>Use products that meet responsible sourcing and extraction criteria:</p> <p>Extended Producer Responsibility: ARMSTRONG® RECYCLING PROGRAM – Armstrong is responsible for extended producer responsibility with our acoustical ceiling products. Armstrong mineral fiber and fiberglass ceiling products contribute to this credit.</p> <p>Bio-based Materials: ARMSTRONG® BIOBASED PRODUCTS</p> <p>Specify Armstrong® mineral fiber panels that contain plant-based binders, or biobased alternatives to petroleum-based binders. Armstrong products are tested using ASTM D6866 and are noted in the USDA BioPreferred Database.</p> <p>Wood Products: ARMSTRONG® WOOD CEILINGS & WALLS</p> <p>Specify Armstrong® FSC®-certified (92% mixed) composite wood ceilings and walls.</p> <p>Material Reuse: Armstrong products are designed for disassembly and are flexible and adaptable to your environment.</p> <p>Recycled Content: ARMSTRONG® HIGH RECYCLED CONTENT CEILINGS</p> <p>Recycled Content: Specify Armstrong® mineral fiber, fiberglass and wood ceilings which have a recycled content from 50%-95%. There are high recycled suspension systems, drywall grid and framing systems.</p>
Material Ingredient Disclosure	Material and Resources	Building Disclosure and Optimization – Material Ingredients	BD&C – 1-2 ID&C – 1-2	<p>ARMSTRONG® LOW OR NO-ADDED FORMALDEHYDE CEILINGS</p> <p>All standard Armstrong® WoodWorks® ceilings meet the Composite Wood Formaldehyde Emissions requirements of California Air Resources Board (CARB) ATCM for formaldehyde requirements for ultra-low-emitting formaldehyde (ULEF) resins.</p> <p>WoodWorks® options that meet CARB ATCM formaldehyde requirements for no added formaldehyde resins (NAF) are available upon request.</p>
VOC Emissions	Indoor Environmental Quality	Low Emitting Materials	BD&C – 1-3 ID&C – 1-3	<p>ARMSTRONG® HIGH LIGHT-REFLECTANT CEILINGS AND WALLS</p> <p>Option 2: Choose Armstrong® Hi-LR ceilings (LR.85) or walls (.60) to aid in improving lighting quality in the space.</p> <p>Option 2: Specify Armstrong® TechZone® Ceiling Systems lighting partners and LED lighting as another option to satisfy LEED® criteria.</p>
Lighting	Indoor Environmental Quality	Lighting Quality	BD&C – 1 ID&C – 1	<p>ARMSTRONG® ACOUSTIC CEILINGS & WALLS</p> <p>Sound Transmission: Choose Armstrong® ceiling and wall panels to meet the composite sound transmission class (STC) ratings or noise isolation class (NIC) for adjacent spaces.</p> <p>Reverberation Time: Armstrong® acoustic ceilings absorb sound, contributing to the reduction of Reverberation Time and increased speech intelligibility for all room types and applications per Table 2.</p> <p>Look for Armstrong® Total Acoustics® products. Reduce noise and improve speech intelligibility & occupant comfort with a custom reverberation time report or meet your speech privacy needs with a custom speech privacy report. From offices to restaurants to schools our TechLine Experts can help you get the right sound control for any type of space. Contact them to receive a free acoustical analysis for your project.</p>
Acoustics	Indoor Environmental Quality	Acoustic Performance	BD&C – 2 ID&C – 2	<p>ARMSTRONG® ACOUSTIC CEILINGS & WALLS</p> <p>Sound Transmission: Choose Armstrong® ceiling and wall panels to meet the composite sound transmission class (STC) ratings or noise isolation class (NIC) for adjacent spaces.</p> <p>Reverberation Time: Armstrong® acoustic ceilings absorb sound, contributing to the reduction of Reverberation Time and increased speech intelligibility for all room types and applications per Table 2.</p> <p>Look for Armstrong® Total Acoustics® products. Reduce noise and improve speech intelligibility & occupant comfort with a custom reverberation time report or meet your speech privacy needs with a custom speech privacy report. From offices to restaurants to schools our TechLine Experts can help you get the right sound control for any type of space. Contact them to receive a free acoustical analysis for your project.</p>