

Air Vol Products Possible Point Contributions to LEED Version 3.0

Important Note: This document is intended to be used only as a general guideline of how various Air Vol manufactured products might help a project attain LEED credits. Because LEED Criteria is constantly evolving, and because this document omits those LEED credits not relevant to our products, please consult the most current documentation from the U.S. Green Building Council for a more complete discussion of all available LEED credits and to verify current LEED credit criteria.

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LEED Credit	Points Possible	Objectives and Solutions	Air Vol Block Manufactured Product Solutions:	
SS = SUSTAINABLE SITES	SS Credit 2: Density and Community Connectivity	5	<p>The objective of this credit is to preserve as much undeveloped area as possible by focusing development to areas with existing infrastructure.</p> <p>The modular size of Concrete Masonry Units and Segmental Retaining Walls facilitate effective designs for small or irregularly-shaped sites, and reduce the need for large construction equipment</p>	<p>Concrete Masonry Units</p> <p>Allan Block Products</p>
	SS Credit 5.1: Site Development: Protect or Restore Habitat	1	<p>The objective of this credit is to conserve the existing habitat and promote biodiversity.</p> <p>Segmental Retaining Walls (SRW's) and pavers are palletized and do not require large staging areas or large equipment to move around the site. Concrete Pavers provide an immediately usable surface once installed. Grid pavers and some styles of Permeable pavers can be planted with grass to create islands of cooling in the urban landscape.</p>	<p>Allan Block Products</p> <p>Concrete Pavers</p> <p>Permeable Pavers</p>
	SS Credit 5.2: Maximize Open Space	1	<p>Maximizing open space relative to the project footprint is the objective of this credit.</p> <p>For projects that qualify for SS Credit 2, pedestrian-oriented concrete paver walkways may qualify for this credit.</p>	<p>Concrete Pavers</p> <p>Permeable Pavers</p>
	SS Credit 6.1: Storm Water Design: Quantity Control	1	<p>The objective of this credit is to reduce storm water runoff.</p> <p>The use of permeable pavers can reduce or eliminate storm-water runoff.</p>	<p>Permeable Pavers</p>
	SS Credit 6.2: Storm water Design-Quality Control	1	<p>The objective of this credit is to improve the quality of storm water runoff.</p> <p>Studies indicate that Permeable Paver installations can reduce suspended solids by up to 80% and pollutants by up to 40%.</p>	<p>Permeable Pavers</p>
	SS Credit 7.1: Heat-Island Effect-Non-Roof	1	<p>The objective of this credit is to reduce heat island and minimize heat effect on habitat.</p> <p>Air Vol Block can manufacture paver colors with a Solar Reflective Index greater than 29. Grass can be planted in Turf Pavers and Eco-Perm pavers to reduce outdoor air temperatures.</p>	<p>Concrete Pavers</p> <p>Permeable Pavers</p>

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EA = ENERGY AND ATMOSPHERE	EA Prerequisite 2: Minimum Energy Performance		<p>The objective of this credit is achieve an established minimum level of energy efficiency and to minimize the building's environmental impact and energy costs.</p> <p>Concrete Masonry Structures enjoy reduced heating and cooling loads due to their inherent thermal mass and high specific heat. Interior concrete masonry walls act as heat sinks that collect heat during the day and maintain the building's temperature overnight thereby minimizing interior temperature swings. This characteristic allows shifts heating and cooling loads to non-peak hours. This energy efficient characteristic is recognized by ASHRAE Standard 90.1.</p>	Concrete Masonry Units
	EA Credit 1: Optimize Energy Performance	1 To 17	<p>The objective of this credit is to optimize energy performance beyond the prerequisite standard.</p> <p>Concrete Masonry Structures enjoy reduced heating and cooling loads due to its inherent thermal mass and high specific heat. Interior concrete masonry walls act as heat sinks that collect heat during the day and maintain the building's temperature overnight thereby minimizing interior temperature swings. This characteristic allows shifts heating and cooling loads to non-peak hours. This energy efficient characteristic is recognized by ASHRAE Standard 90.1.</p>	Concrete Masonry Units

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MR = MATERIALS AND RESOURCES	MR Credit 1.1: Building Reuse-Maintain Existing Walls, Floors, Roof	1 to 3	<p>The objective of this credit is to extend the life of existing buildings by utilizing the majority of its existing structure.</p> <p>Concrete Masonry Building Shells have a long life-cycle whose interiors can be refurbished to accommodate changing needs.</p>	Concrete Masonry Units
	MR Credit 1.2: Building Reuse-Maintain Interior Nonstructural Elements	1	<p>The objective is to extend the useful life of existing buildings thereby conserving resources, reduces waste, and environmental impacts of new construction.</p> <p>Durable concrete masonry facilitates renovation and lessens the need for tear-down and the resulting waste stream.</p>	Concrete Masonry Units
	MR Credit 2: Construction Waste Management	1 to 2	<p>The objective is to divert construction waste from landfills back into the manufacturing process, and to direct reusable items to another site.</p> <p>Used or damaged concrete products can be crushed into aggregates that can be used to produce new products. Unused and undamaged concrete products like concrete pavers and Allan Block can be used on other sites.</p>	Concrete Masonry Units Allan Block Concrete Pavers Permeable Pavers

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	LEED Credit	Points Possible	Objectives and Solutions	Air Vol Block Manufactured Product Solutions:
MR = MATERIALS AND RESOURCES	MR Credit 3: Materials Reuse		<p>The objective of this credit is to reduce the environmental impacts associated with manufacturing and transport of new materials.</p> <p>Undamaged Allan Block, Concrete Pavers, and Permeable Pavers are durable enough to be transported and reused on a different site.</p>	<p>Allan Block</p> <p>Concrete Pavers</p> <p>Permeable Pavers</p>
	MR Credit 4: Recycled Content		<p>The objective of this credit is to lower the demand for new raw materials by utilizing recycled content.</p> <p>All of these products can be made using recycled content.</p>	<p>Concrete Masonry Units</p> <p>Allan Block</p> <p>Concrete Pavers</p> <p>Permeable Pavers</p>
	MR Credit 5: Regional Materials		<p>The objective of this credit is to obtain locally manufactured products that utilize raw materials extracted within the region and thereby reduce the environmental impacts incurred from transporting materials long distances.</p> <p>All of these Air Vol Block manufactured items are made in San Luis Obispo from raw materials that are extracted regionally.</p>	<p>Concrete Masonry Units</p> <p>Allan Block</p> <p>Concrete Pavers</p> <p>Permeable Pavers</p>

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	LEED Credit	Points Possible	Objectives and Solutions	Air Vol Block Manufactured Product Solutions:
ID = INNOVATION IN DESIGN	<p>ID Credit 1: Innovation in Design</p> <p>Exemplary Performance Contributions:</p>	1 to 5	<p>The objective is to achieve performance above and beyond the requirements set by the LEED Green Building Rating System and/or to create innovation in categories not specifically referenced by the LEED Green Building Rating System. Some possible contributions from Air Vol manufactured products include:</p> <p>Energy Performance Optimization – The use of concrete masonry walls can assist in achieving the 50% efficiency level required to get this additional point.</p> <p>Heat-Island Effect – Using concrete pavers with a solar reflective index greater than 29 on all non-roof surfaces may be eligible for an additional point.</p> <p>Construction Waste- Crushing and recycling concrete masonry units or re-using undamaged concrete pavers, permeable pavers, or Allan Block mortarless walls can help in achieving the 95% diversion from landfill threshold required for this credit.</p> <p>Material Reuse- Reusing undamaged concrete pavers, permeable pavers, or Allan Block Segmental Retaining wall units on another site can help achieve the 15% material reuse level.</p> <p>Recycled Material – An additional point can be attained by utilizing 30% recycled content on the project.</p> <p>Site Development- one additional point can be gained by leaving a larger portion of the site undisturbed or by restoring natural habitat. All of the Air Vol manufactured product can assist in minimizing site disturbance, and may be useful in restoring eroded areas.</p> <p>Storm Water Design- Permeable pavers can assist in the treatment of storm water beyond the requirements contained within SS Credit 6.1 and SS Credit 6.2.</p>	<p>Concrete Masonry Units</p> <p>Allan Block</p> <p>Concrete Pavers</p> <p>Permeable Pavers</p>

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ID = INNOVATION IN DESIGN	<p style="text-align: center;">ID Credit 1: Innovation in Design</p> <p style="text-align: center;">Innovation Contributions:</p>	<p>1 to 5</p>	<p>Additional Credits may be available through innovation, where the designer develops additional criteria and documents performance.</p> <p>Durability- The long life expectancy and low maintenance requirements of these Air Vol manufactured products reduces long-term environmental impacts as compared to those incurred by using less durable products.</p> <p>Low/No VOC's- Unpainted concrete masonry is not currently addressed within the LEED low-VOC Credit; however, it possible that unpainted masonry could qualify under a LEED interpretation ruling.</p> <p>Mold Inhibitor- Concrete masonry does not provide a food source for mold, and it is possible a credit could be developed using the Mold Prevention credit in <i>LEED for Schools</i>.</p> <p>Acoustics- While there currently is no acoustic requirement addressed in LEED for new construction, it is possible a credit could be developed by using IEQ Credit 9 in <i>LEED for Schools</i> as a guide.</p>	<p style="text-align: center;">Concrete Masonry Units</p> <p style="text-align: center;">Allan Block</p> <p style="text-align: center;">Concrete Pavers</p> <p style="text-align: center;">Permeable Pavers</p>

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R.P. = REGIONAL PRIORITY CREDITS	RP= Regional Priority Credits	4	<p>The objective of Regional Priority Credits is to encourage designers to focus on regional priorities which vary from region to region.</p> <p>Rather than being new credits, these typically consist of increased levels of conformance or performance over and above those required to achieve the existing credits. Air Vol products may contribute to these in the manners discussed within each credit section.</p>	<p>Concrete Masonry Units</p> <p>Allan Block</p> <p>Concrete Pavers</p> <p>Permeable Pavers</p>