

Summary of Applicable Green Star Credits for Armstrong Ceiling Products

Environmental



This verification report was developed independently by Environmental Assurance after a comprehensive assessment of Armstrong Ceiling products for the purpose of the Good Environmental Choice label and Green Star performance attributes.

		BIOGUARD Acoustic	DUNE	DUNE Max	DUNE Second Look	ERIS	FINE FISSURED	FINE FISSURED Ceramaguard	FINE FISSURED High Acoustic	FINE FISSURED Second Look	PRIMA FINE FISSURED	PRIMA SAHARA	TEXTURA	ULTIMA	ULTIMA OP
Office Design v3															
Management															
Waste Management	Man-7	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Indoor Environment Quality															
Daylight	IEQ-4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Internal Noise Levels	IEQ-12	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Energy															
Conditional Requirement	Ene -	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Energy Improvement	Ene-2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Office Interiors v1															
Management															
Waste Management During Tenancy Fitout	Man-6	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Indoor Environment Quality															
Daylight	IEQ-3	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Internal Noise Levels	IEQ-10	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Energy															
Conditional Requirement	Ene -	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Energy Improvements	Ene-2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Education Pilot															
Management															
Waste Management	Man-7	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Indoor Environment Quality															
Daylight	IEQ-4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Internal Noise Levels	IEQ-11	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Volatile Organic Compounds	IEQ-12	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Energy															
Conditional Requirement	Ene -	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Energy Improvement	Ene-1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Materials															
Recycled-Content & Reused Products & Materials	Mat-11	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Health Pilot															
Management															
Waste Management	Man-7	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Indoor Environment Quality															
Daylight	IEQ-4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Internal Noise Levels	IEQ-12	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Energy															
Conditional Requirement	Ene -	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Energy Improvement	Ene-1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Materials															
Recycled-Content Products & Materials	Mat-4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Ceilings, Walls & Partitions	Mat-10	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Shopping Centre Design Pilot															
Management															
Waste Management - Construction	Man-7	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Indoor Environment Quality															
Daylight	IEQ-4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Internal Noise Levels	IEQ-7	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Energy															
Conditional Requirement	Ene -	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Energy Improvement	Ene-1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Materials															
Recycled-Content Products & Materials	Mat-9	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Note:

* Armstrong ceiling products do not directly contribute to Waste Management Credit points however, Armstrong's product take back programme can support support a contractor to meet this credit.



Detailed Summary of Green Star Credits – Shopping Centre Design Pilot

Environmental Impact Category	Credit Title	Credit No	Available Credits	Credit Contribution	Compliance Requirements
Management - Construction	Waste Management - Construction	Man-7	2	<p>This credit is about contractor Waste Management Plans to reduce construction waste.</p> <p>Whilst Armstrong Ceiling tiles do not directly contribute credits points for this criteria, the Armstrong product take-back program will support a contractor to satisfy the compliance requirements for this credit. 1 point where 60% of waste by weight is reused or recycled; 2 points where 80% of waste by weight is reused or recycled;</p>	<p>Armstrong can provide a contract for the collection and recycling of ceiling waste.</p>
Indoor Environment Quality	Daylight	IEQ-4	1	<p>If 100% of ceiling systems used are Armstrong Ceilings*, use of these systems may contribute to the achievement of up to 1 credit point.</p> <p>Compliance to this credit will involve integration of Armstrong ceilings* into the design solution. The design solution must demonstrate compliance to 2.5% daylight factor at the floor level for 30% of the base building common areas.</p> <p>All submissions must demonstrate through Daylight modelling and calculations that the Credit criteria has been met. A description of the building model includes values of reflectance and transmittance used for the glazing, ceiling, walls and floor.</p>	<p>Armstrong has published technical data for values of reflectance for its ceiling materials.</p> <p>As a general guidance, the general reflectance of surfaces should be middle to high and light in colour including walls and ceilings.</p>
	Internal Noise Levels	IEQ-7	1	<p>If 100% of ceiling systems used are Armstrong Ceilings*, use of these systems may contribute to the achievement of up to 1 credit point.</p> <p>Compliance to this credit will involve integration of Armstrong ceilings* into the design solution.</p> <p>1 point is awarded where the building services noise meets the recommended design sound levels provided in Table 1 of AS/NZS 2107:2000.</p>	<p>Armstrong has published technical data for acoustic properties for its ceiling materials.</p>
	Volatile Organic Compounds	IEQ-8	3	<p>This credit is about setting low VOC benchmarks for materials used in interior fit-outs. 1 point is awarded where 95% of all painted surfaces are low-VOC paints (GECA 23-2005) or no paint is used.</p> <p>Whilst Green Star Office Interiors does not currently specify a requirement for low-VOC Ceiling panels, many panels are factory painted and may emit VOC's.</p> <p>GECA certified Armstrong ceiling panels are finished with protective coatings that have a total VOC Content below the maximum required for painted surfaces by Shopping Centre Design PILOT IEQ-8.</p>	<p>Armstrong has independent laboratory test reports from CTEC confirming total VOC levels of its Ceiling Panels.</p>
Materials	Recycled-Content Products & Materials	Mat-9	2	<p>The use of Armstrong Ceilings* may contribute towards achievement of up to 2 points when combined with other building construction materials that collectively exceed 50% .</p> <p>Compliance to this credit will involve demonstrating that materials selected for building construction representing at least 2% of the project's total contract value have a post consumer recycled content of at least 20% or are reused from the existing or any other building.</p>	<p>Armstrong Ceiling Panels and systems have a recycled content ranging between 42% and 77%.</p> <p>GECA certified Armstrong Ceiling panels contain at least 15% post consumer recycled content typically newspaper and other recycled paper content.</p>