



SkyProof Sheets
Standing Seam Systems

Standing Seam System **LEED** **GUIDELINES**

SkyProof

LEED GUIDELINES

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Prerogative ecologiche / Ecological features

Sostenibilità oltre il ciclo di vita.

Sustainability beyond the lifecycle.

Un passo verso un
futuro sostenibile



A step towards a
sustainable future

Materiali riciclati
nel design



Recycled materials
in design

Coperture
ecosostenibili



Environmentally
sustainable roofing

Prestazioni eccezionali
senza compromessi



Exceptional performance
without compromises

SkyProof è stato progettato fin dall'inizio per essere realizzato nel massimo rispetto dell'ambiente, in termini di riciclabilità, durata e modelli produttivi. Il sistema è costruito con materiali di alta qualità e sostenibili, che possono essere facilmente smontati e riciclati alla fine della loro vita utile. Inoltre, la lunga durata del sistema riduce la necessità di sostituirlo frequentemente, riducendo così il consumo di risorse e l'impatto ambientale complessivo. I modelli produttivi adottati sono anche progettati per minimizzare gli sprechi e l'emissione di sostanze inquinanti, garantendo una produzione sostenibile ed eco-friendly.

The SkyProof System was designed from the outset to be implemented with the utmost respect for the environment in terms of recyclability, durability, and production methods. The system is manufactured from high quality recyclable materials and is designed to last for many decades, reducing the need for frequent replacements. Additionally, the production process of the SkyProof System has been optimized to minimize waste and energy consumption, further reducing its environmental impact. By choosing the SkyProof System, architects and builders can contribute to sustainable building practices and reduce the overall environmental footprint of their construction projects.

Analisi del ciclo di vita

Il Sistema SkyProof ha un impatto ambientale minimo: oltre ad utilizzare materiali riciclati e completamente riciclabili, è un sistema che non richiede alcuna manutenzione per l'intera durata della sua vita. Inoltre, la durata prevista del sistema, nelle corrette condizioni di utilizzo, è praticamente illimitata. Sono state realizzate strutture in rame o alluminio che hanno resistito alla prova del tempo per centinaia di anni.

Life-Cycle assessments

The SkyProof System has a minimal environmental impact: in addition to using recycled and fully recyclable materials, it is a system that requires no maintenance throughout its entire lifespan. Furthermore, under the correct conditions of use, the expected life of the system is virtually unlimited. Copper or aluminium roof cladding have been built and have withstood the test of time for hundreds of years.



Materiale delle lastre

L'impiego del metallo nella realizzazione del Sistema SkyProof è stato scelto in linea con la massima sostenibilità del progetto, rispettando le più moderne aspettative del settore dell'edilizia civile, in particolare per le infrastrutture pubbliche. Il metallo è un materiale altamente resistente e duraturo nel tempo, che permette una facile riciclabilità al 100% e una quasi completa origine dal recupero degli scarti. Inoltre, il processo di produzione del metallo consente di ridurre al minimo l'impatto ambientale, attraverso l'adozione di tecnologie avanzate e il controllo rigoroso delle emissioni inquinanti. Grazie alla scelta del metallo come materiale principale per la realizzazione del Sistema SkyProof, si garantisce una elevata efficienza energetica, una lunga durata del sistema, la massima sostenibilità ambientale e una riduzione dei costi di manutenzione nel tempo.

Roofing sheets materials

The use of metal in the SkyProof System was a deliberate choice made with the utmost sustainability in mind, in line with the latest expectations of the civil construction industry, particularly for public infrastructure. Metal is 100% recyclable and is largely derived from scrap recovery, making it an environmentally responsible choice. Moreover, the SkyProof System is designed with durability in mind, ensuring a long-lasting and reliable roofing solution. The manufacturing process is optimized for efficiency and environmental responsibility, minimizing waste and reducing the carbon footprint of the system. Architects and builders can rely on the SkyProof System to provide a sustainable and technically advanced roofing solution for their construction projects.



Materiale delle staffe

I supporti utilizzati nel Sistema SkyProof sono realizzati con un materiale composito ad alte prestazioni: poliammide rinforzato con fibre di vetro. Questa composizione avanzata non solo garantisce una durata eccezionale, ma si allinea anche ai principi di sostenibilità. I supporti sono prodotti esclusivamente con un materiale composto dal 100% di contenuto riciclato, dimostrando un impegno per la conservazione delle risorse. Inoltre, il design privilegia le considerazioni di fine vita, rendendo i supporti completamente riciclabili e contribuendo così a un ciclo di vita del materiale a circuito chiuso.

Brackets material

The support brackets employed in the SkyProof System are engineered from a high-performance composite material: glass fibre reinforced polyamide. This advanced composition not only ensures exceptional durability, but is also in line with the principles of sustainability. The brackets are manufactured exclusively from a material that is 100% recyclable, demonstrating a commitment to resource conservation. Furthermore, the design prioritizes end-of-life considerations as the brackets fully recyclable, thereby contributing to a closed-loop material cycle.

SkyProof System

Introduction: SkyProof Company is thrilled to present this comprehensive LEED Guidelines for our SkyProof System, showcasing our unwavering commitment to delivering innovative, sustainable standing seam roofing solutions.

Overview of LEED: Leadership in Energy and Environmental Design (LEED) Requirements is at the core of our commitment, ensuring that our SkyProof System aligns seamlessly with the highest standards of environmental responsibility and energy efficiency. This requirements underscores our dedication to creating products that contribute to a greener and more sustainable future.

Sustainable Material Selection: The SkyProof System is intricately designed with sustainability as a guiding principle. Our premium aluminum materials, sourced from reputable suppliers guaranteeing recycled content, exemplify our commitment to recyclability, durability, and a minimized environmental footprint. The conscious selection of materials reflects our dedication to responsible manufacturing practices.

Environmental Impact of Aluminum: The aluminum materials undergo a meticulous low-impact production process, emphasizing recycled content and adhering to energy-efficient practices. This approach not only ensures the quality and durability of our products but also minimizes the ecological impact, aligning with our broader sustainability goals.

LEED Criteria Addressed: The SkyProof System actively contributes to LEED certification across various categories:"

LEED Criteria	SkyProof System Contribution
Sustainable Sites	Implementation of environmentally conscious practices, considering rainwater management systems, and evaluating site selection strategies.
Energy and Atmosphere	Utilization of cool roofing properties to enhance energy efficiency and reduce the urban heat island effect.
Materials and Resources	Incorporation of aluminum with guaranteed recycled content, demonstrating our commitment to sustainable sourcing practices.
Indoor Environmental Quality	Integration of materials promoting superior indoor air quality, fostering healthier living spaces.
Innovation in Design	Incorporation of cutting-edge features that not only meet but exceed the sustainability benchmarks set by LEED.

Technical Specifications:

- Aluminum Recyclability: - Our aluminum components, sourced from suppliers guaranteeing recycled content, boast 100% recyclability, contributing to a closed-loop system. This approach not only emphasizes environmental responsibility but also supports a circular economy.
- Heat Island Effect: - Integration of reflective surfaces and advanced cool roofing technologies to mitigate the heat island effect. Our design choices prioritize creating roofing solutions that actively contribute to a cooler urban environment.

Requirements:

Use roofing materials with a solar reflectance index (SRI) equal to or greater than the values in the table below for a minimum of 75% of the roof surface.

$$\left[\text{Area of Roof A} \times \frac{\text{SRI of Roof A}}{\text{Required SRI}} \right] + \left[\text{Area of Roof B} \times \frac{\text{SRI of Roof B}}{\text{Required SRI}} \right] + \dots \geq \text{Total Roof Area} \times 0.75$$

Roof Type	Slope	SRI
Low-sloped roof	≤ 2:12	78
Steep-sloped roof	> 2:12	29

- Solar Reflectance Index (SRI): - The SkyProof System reflects a Solar Reflectance Index (SRI) surpassing industry standards, promoting energy efficiency. The SRI values for selected colors are as follows:
Solar Reflectance Index (SRI) is determined according to ASTM E 1980. This method uses the measured TSR (according to ASTM E 903) and measured thermal emissivity (according to ASTM C 1371). SRI gives an estimation of the steady state surface temperature and is quoted at three different convective coefficients (hc); low (0-2 m.s-1), medium (2-6 m.s-1) and high (6-10 m.s-1) wind speeds. A value of 100 is considered to be the reference white surface and a value of 0 the reference black surface



Color	SRI
Cool White	110
Silver Gray	95
Forest Green	80
Ocean Blue	75
Terracotta Red	85
Sunflower Yellow	92

COLOR	REFLECTANCE	EMITTANCE	SRI
RAL 3009	0.249	0.825	22
RAL 5024	0.428	0.86	47
RAL 6021	0.398	0.830	42
RAL 7016	0.068	0.860	1
RAL 7037	0.222	0.820	18
RAL 9002	0.601	0.840	70
RAL 9006	0.459	0.680	44
RAL 9006 MET	0.459	0.680	44
RAL 9010	0.731	0.87	89
PATINA COPPER I	0.241	0.87	23
PATINA COPPER II	0.214	0.89	20
WEATHERED ZINC I	0.479	0.88	55
WEATHERED ZINC II	0.331	0.88	35
PYRITE GOLD / SILVER	0.544	0.86	63
PYRITE GOLD / RED	0.495	0.85	56
PYRITE GOLD / BLUE	0.413	0.88	46

Our color choices are not only aesthetic but have been carefully selected to optimize energy performance, reflecting our commitment to both form and function.

d. Emitting Materials: - Utilization of low-emitting materials to minimize the release of pollutants or harmful substances. This conscientious choice ensures that our products contribute positively to indoor air quality, prioritizing the well-being of occupants.

e. Low Emitting Materials: - Selection of materials with low emissions to enhance indoor air quality. Our commitment to low-emitting materials goes beyond compliance, creating environments that promote health and comfort.

Requirements:

- For all the works located inside the weatherproofing system, use adhesives and sealants which comply and do not exceed the volatile organic compounds (VOC)

content limit as stated in the South Coast Air Quality Management District (SCAQMD) Rule #1168, effective January 7, 2005.

- Aerosol adhesives must comply with the Green Seal Standard for Commercial Adhesives GS-36 requirements, Second Edition, September 1, 2011.0
- Our silicone soudasil 205 meets the requirements of reference standards and of the following standards or institutions:
ISO 11600: Classification of sealant for Building Construction F+G-25 LM
UNI 9610, 9611: Silicone sealant for joint – requirements and tests, packaging

f. Paints and Coatings: - Application of environmentally friendly paints and coatings with low-VOC content, contributing to improved air quality. Our coatings not only provide durability and aesthetics but also align with our dedication to reducing environmental impact.

Requirements:

- Paints and coatings used on the interior of the building (i.e. inside of the weatherproofing system and applied on-site) must comply with the following criteria as applicable to the project scope:

Regarding interior walls and ceilings out of our scope of work, regarding area without ceiling we can confirm that corrugated sheet comply with the Recycled Content and Regional Materials credit requirements outlined under the Materials and Resources key performance category of the LEED® rating system.



LEED Material Transmittal Form

Document Number	Revision	Submittal Number	Project Name	Contractor	Date
			Buildings		
CSI Division	Material Description				
	Aluminium Sheet				

Material Cost (Excluding Labor & Equipment)	LEED Credit	Material Applies to Credit?	
		Yes	No
	MRc4: Recycled Content	√	
	MRc5: Regional Materials		√
Material Manufacturer	MRc6: Rapidly Renewable		√
Skyproof	MRc7: Certified Wood		√
	IEQc4.1: Low-Emitting Materials - Adhesives & Sealants		√
Material Name or Product Number	IEQc4.2: Low-Emitting Materials - Paints & Coatings		√
Skyproof/ Aluminium Flashings	IEQc4.3: Low-Emitting Materials - Flooring Systems		√
	IEQc4.4: Low-Emitting Materials - Composite Wood & Agrifiber Products		√

MRc4		MRc5			MRc6	MRc7	
Post-Consumer %	Pre-Consumer %	Qualifying % (For Assembly Products)	Extraction Distance (from Project Site)	Manufacturing Distance (from Project Site)	Rapidly Renewable %	Wood Component %	Certified Wood %
0	25		More than 500 miles	More than 500 miles	N/A	N/A	N/A
IEQc4.1		IEQc4.2		IEQc4.3		IEQc4.4	
VOC Content (g/L)		VOC Content (g/L)		CRI GL/GLP# or FloorScore Certified		Urea Formaldehyde Free	
N/A		N/A		N/A		N/A	

Documentation Source	Documentation Attached?		Type of Documentation Attached
Material Manufacturer	Yes	No	Manufacturer's letter.
	√		

Contact Details



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