

Technical Data Standing Seam System



Description

SkyProof can be manufactured in any geometry necessary to clad buildings of any shape, providing architects and designers with maximum design freedom without compromising the technical requirements of the building. SkyProof is highly versatile, offering a wide range of customization options such as variable panel sizes and shapes, perforations, and edge details. This allows for the creation of unique and refined façade designs while maintaining the performance and durability of the cladding system. SkyProof also offers exceptional weather resistance, including wind, rain, and extreme temperatures, making it a reliable choice for building envelope applications.

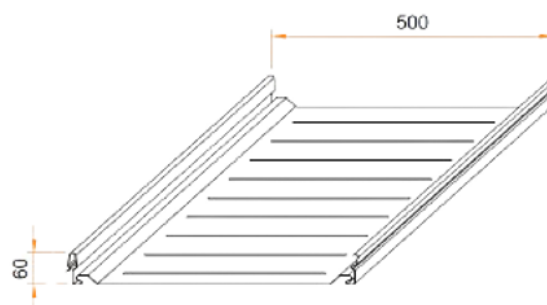
Materials

Aluminum, Steel, Copper, Zinc, Stainless Steel, Titanium, etc..

Application

SkyProof is designed for use in all roofing and cladding applications where the installed roof pitch from less than 1% to vertical SkyProof.

SkyProof 500



Profiles with special dimensions can be manufactured on request.

SkyProof Typical Weights

Cover Width (h)	Steel Thickness (mm)				Aluminum Thickness (mm)							
	0.5		0.7		0.7		0.8		0.9		1.0	
	kg/m ²	kg/lm	kg/m ²	kg/lm	kg/m ²	kg/lm	kg/m ²	kg/lm	kg/m ²	kg/lm	kg/m ²	kg/lm
400	7.11	2.85	9.96	3.98	3.45	1.38	3.94	1.58	4.44	1.77	4.93	1.97
500	5.77	2.88	8.08	4.04	2.80	1.40	3.20	1.60	3.60	1.80	4.00	2.00
600	4.87	2.92	6.82	4.09	2.36	1.42	2.70	1.62	3.04	1.82	3.38	2.03

Product Dimensions

Nominal thickness (mm): 0.70, 0.80, 0.90, 1.00, 1.10, 1.20 (aluminum) / 0.50, 0.70 (steel) Profile

depth (mm): 60

Sheet length (m): SkyProof sheets are designed to be on-site rolled for maximum efficiency - On-Site rolled length range: 0.2m to 200m / Additional charges apply for factory rolled SkyProof sheets - Factory rolled length range: 0.2m to 30m

The design of the SkyProof product involves on-site production using special mobile profiling machines, offering significant advantages in terms of reducing transportation needs and their associated environmental impacts and costs. A notable advantage is the ability to profile sheets without length limitations, allowing for continuous sheets from eave to ridge or eave to eave. In contrast, conventional building materials like sandwich panels typically require the transport of high volumes with reduced weight and very limited length. However, thanks to SkyProof's compact metal coils, transportation to the production site can be easily managed alongside the production machine.

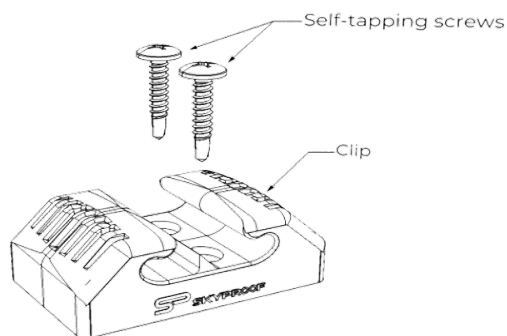
In addition to these benefits, the on-site production process offers greater flexibility in tailoring the product to the specific needs of each project. Custom sheet production reduces waste, allowing for more efficient resource utilization. This approach ensures that only the necessary amount of material is produced and used, minimizing environmental impact and excess material costs. All under the control of the Client.

Overall, SkyProof's on-site production approach aligns with the principles of sustainable construction, promoting efficient resource use and minimizing environmental impacts. Furthermore, this approach allows for the provision of customizable, high-quality products that can meet the specific needs of each project.

Sheet width (mm): 400, 500, 600

Technical Data

Standing Seam Bracket.



Description

- The SkyProof metal roofing system is designed to function as a cohesive unit with its unique fastening system, the bracket. The bracket's geometry is engineered to gather and concentrate all the forces acting on the roof, making it a crucial component for achieving unprecedented system performance. The superior design of the bracket ensures that it can withstand the demanding structural loads inherent to the SkyProof metal roofing system. It also features a robust fastening mechanism that ensures secure attachment to the roof substrate. These features combine to make the bracket a key element in delivering the high-quality performance for which SkyProof is renowned.
- By combining cutting-edge design principles with advanced materials and manufacturing techniques, SkyProof has created a metal roofing system that stands unrivaled in terms of strength, durability, and performance. The bracket is just one example of how SkyProof has leveraged its decades of experience to develop a truly innovative roofing solution.

Components

- n°1 clip
- n°2 self-tapping screws

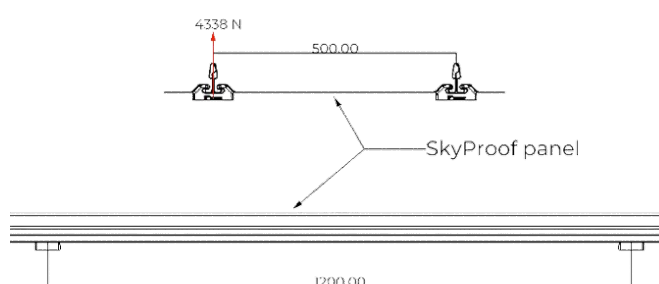
Notes:

- Mechanical performance was evaluated using the standardized ASTM E1592-05 test
- The test was performed in the complex clip+panels without any issues with the clips or fixation screws. The indicated value is not the limit of the clips
- No safety margin was applied to the upward load,
- The standardized ASTM test was performed with the clips at the specified distances
- The clips must be installed following a design made by an experienced technician
- SkyProof Company will not be responsible in case of incorrect design or wrong installation

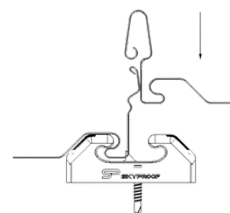
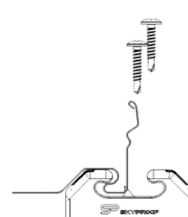
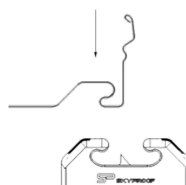
Materials

- An Extruded PA6GF30
- Galvanized steel (for screws)

MECHANICAL PERFORMANCES



ASSEMBLY PROCEDURE



Metals

	Aluminum	Galvanized Steel	Stainless Steel	Zinc	Copper
Aluminum	compatible	compatible	compatible	Generally compatible	Incompatible (galvanic corrosion)
Galvanized Steel	compatible	compatible	compatible	Generally compatible	Incompatible (galvanic corrosion)
Stainless Steel	compatible	compatible	compatible	Generally compatible	Incompatible (galvanic corrosion)
Zinc	Generally compatible	Generally compatible	Generally compatible	compatible	Incompatible (galvanic corrosion)
Copper	Incompatible (galvanic corrosion)	Incompatible (galvanic corrosion)	Incompatible (galvanic corrosion)	Incompatible (galvanic corrosion)	compatible

Compatible – Suitable for seamless integration without adverse effects.

Incompatible- Discouraged for combination due to potential adverse reactions.

Generally Compatible- Can be integrated with precautionary measures and careful consideration.

Aluminium:

Aluminium mill finish in AA5754, an aluminium alloy, showcases its brilliance in mill finish—a raw, untreated surface that effortlessly balances aesthetics and functionality. Renowned for its corrosion resistance, this alloy provides a clean, contemporary look without additional coatings, making it eco-friendly and cost-effective.

Versatility defines AA5754, adapting seamlessly across architectural, automotive, and industrial applications. Its lightweight strength and ease of fabrication offer a practical edge, while sustainability remains a focal point due to its recyclability and environmentally friendly production processes.

Elevate your projects with the unmatched qualities of AA5754 aluminium mill finish—an alloy that effortlessly combines aesthetics, durability, and sustainability, leaving a lasting impression across diverse applications.

Pre-painted aluminium:

Pre-painted aluminium roofing offers an unlimited range of colour options, allowing you to achieve the desired aesthetics while benefiting from the lightweight and low-maintenance properties of aluminium.

Copper:

For a timeless and elegant look, snap-lock copper roofing is an excellent choice. Over time, it develops a distinctive patina, adding character to your building.

Steel:

Known for its strength and durability, snap-lock steel roofing is a popular choice. It is available in various finishes and can be customized to fit your design vision.

Stainless Steel:

Stainless steel roofing is appreciated for its corrosion resistance and elegant appearance. It is the ideal choice for structures where durability and a glossy finish are essential.

Zinc:

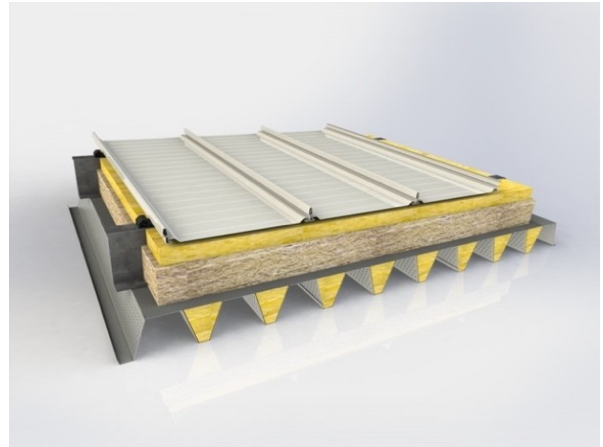
Zinc roofs offer a unique blend of aesthetics and functionality. It is an environmentally friendly option that withstands beautifully.

Titanium:

Titanium roofing combines exceptional strength with an extraordinary metallic finish. Its longevity and corrosion resistance make it an excellent choice for modern architectural projects.

SkyProof non-ventilated roof on trapezoidal perforated steel deck

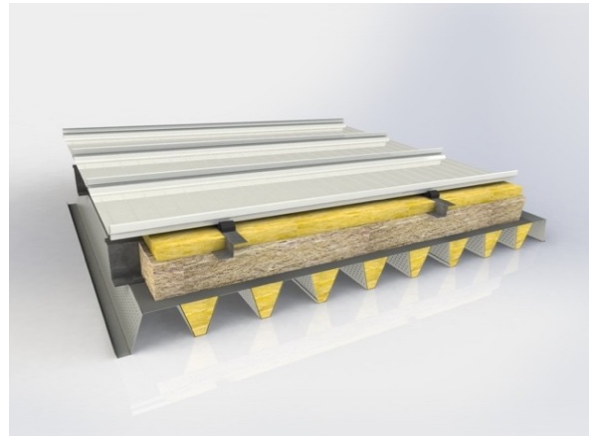
Roof Build-ups with perforated Trapezoidal profiles, Zed profile purlins in galvanized steel sheets, different layer of acoustical and thermal insulation



U-Value of 0,220 W/m²K

SkyProof non-ventilated roof on trapezoidal perforated steel deck and Transverse panels.

Roof Build-ups (**Transverse panels**) perforated Trapezoidal profiles, Zed profile purlins in galvanized steel sheets, different layer of acoustical and thermal insulation



U-Value of 0,220 W/m²K

SkyProof non-ventilated roof on corrugated steel deck

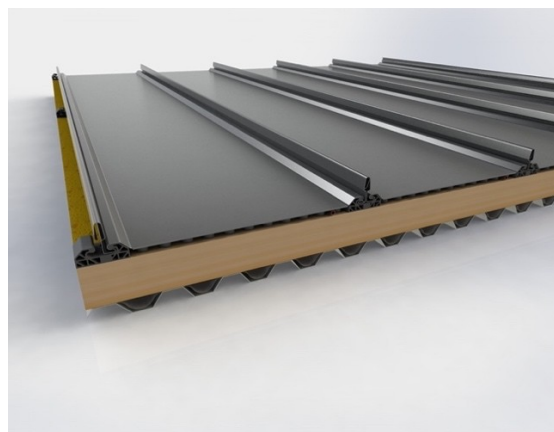
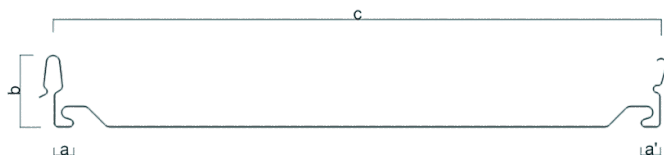
Roof Build-ups (corrugated steel profile profiles, timber purlins, different layer of thermal insulation).

Tolerances

All the tolerances under UNI EN 14782

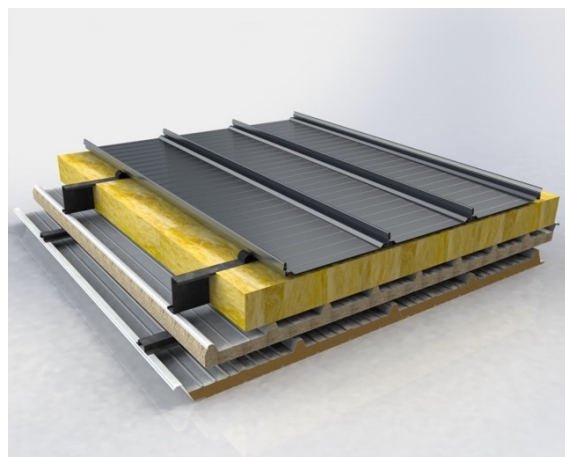
Cover width (item "c"): width of the panel +/- 1%

Cover panels length: length of the panel +/- 1% Cover panel high (item "b"): 59mm +/- 1,5mm



SkyProof non-ventilated roof on multilayer of roofing components including sandwich panels.

Roof Build-ups with multilayer of roofing components including sandwich panels as a lower layer.



U-Value of 0,220 W/m²K

SkyProof non-ventilated roof on trapezoidal perforated steel deck and Transverse panels.