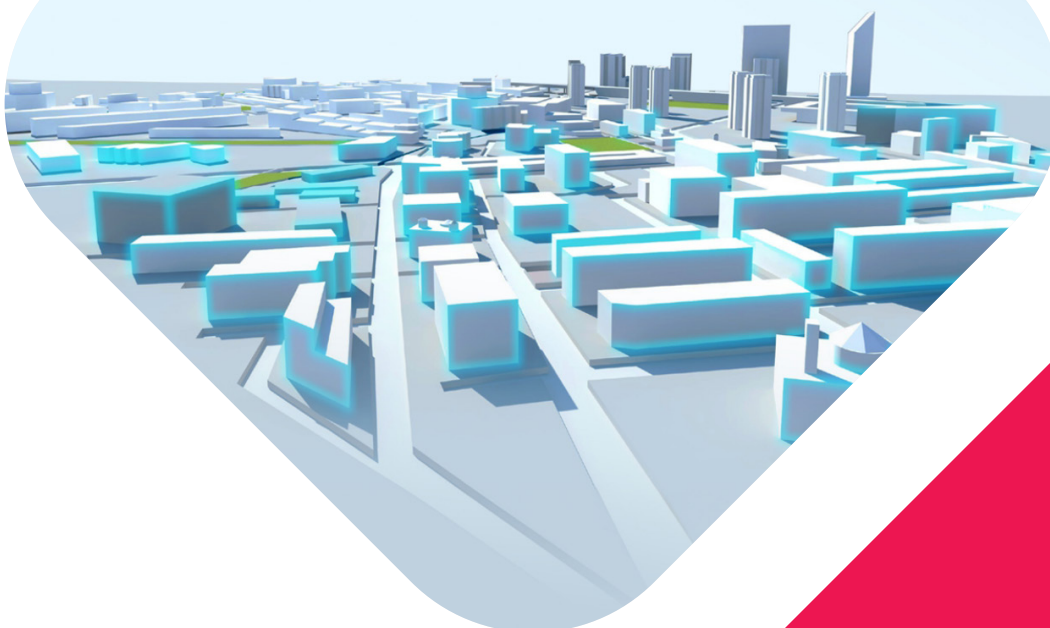


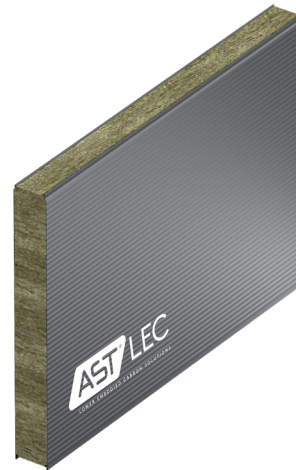
AST® E LEC Shadow Architectural Wall Panel

Product Data Sheet

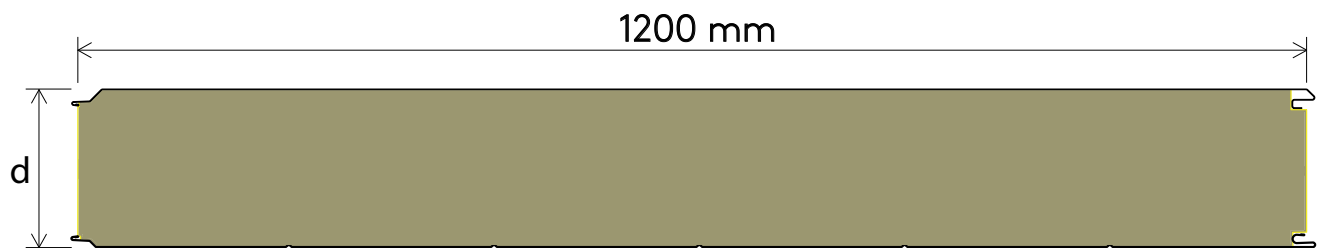
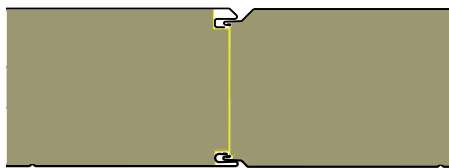


Product Overview

AST® E LEC Shadow Architectural Wall Panel is part of our Lower Embodied Carbon solutions. The AST® E LEC Shadow Architectural Wall Panel has a Life Cycle Assessment (LCA) showing a 50 % reduction in embodied carbon (measured in Global Warming Potential 'GWP' kgCO₂e) for modules A1-A3 and a 47 % reduction in embodied carbon for modules A-C compared to the standard 80 mm thick AST® E Shadow Architectural Wall Panel verified to EN 15804:2012+A2:2019/AC:2021.



Panel Cross Section



Technical Parameters

Module width / Cover width [mm]	Nominal Thickness [mm]	Mass [kg/m ²]	Thermal Transmittance (U-value) acc. EN 14509:2013 [W/m ² K]	Airborne Sound Insulation R _a (C,C _v)	Weighted Sound Absorption Coefficient [α _w]	GWP for modules A1-A3 [kg CO ₂ -eq./m ²]	GWP for modules A-C [kg CO ₂ -eq./m ²]
1,200 / 1,196	80	19.25	0.53	31 (-3; -3) dB	NPD	14.9	16.5
	100	21.65	0.43	31 (-3; -3) dB	NPD	15.8	17.5
	120	24.05	0.36	31 (-3; -3) dB	NPD	16.7	18.5
	150	27.65	0.29	31 (-3; -3) dB	NPD	18.2	20.1
	175	30.65	0.25	31 (-3; -3) dB	NPD	19.5	21.5
	200	33.65	0.22	30 (-3; -3) dB	NPD	20.6	22.7
	240	38.45	0.18	30 (-3; -3) dB	NPD	22.6	24.9
	300	45.65	0.14	30 (-3; -3) dB	NPD	25.3	27.9

The technical data is valid for a face thickness of Ext / Int. 0.60 / 0.50 mm

Fire Performance

AST® E LEC Shadow Architectural Wall Panel has been tested and approved to comply with EN 14509:2013.

Product technical specifications relating to fire classification are available from Paroc Panel System Technical Support. FM Approved product specifications are available in the [FM Approval Guide](#) and from Paroc Panel System Technical Support.

Module width / Cover width [mm]	Nominal Thickness [mm]	Reaction to Fire	Fire Resistance - External Wall - Horizontal	Fire Resistance - External Wall - Vertical
1,200 / 1,196	80	A2-s1, d0	NPD	NPD
	100	A2-s1, d0	NPD	NPD
	120	A2-s1, d0	NPD	NPD
	150	A2-s1, d0	NPD	NPD
	175	A2-s1, d0	NPD	NPD
	200	A2-s1, d0	• EI 120 (o↔i) - 7.5m • EI 180 (o↔i) - 4m	NPD
	240	A2-s1, d0	• EI 120 (o↔i) - 7.5m • EI 180 (o↔i) - 4m	NPD
	300	A2-s1, d0	• EI 120 (o↔i) - 7.5m • EI 180 (o↔i) - 4m	NPD

¹ See details in the relevant classification reports and/or in technical documentation available on request.

³ Class is not defined in standard EN 13501-2 for this application, but the product meets its criteria.

Dimensions

Length

Shorter lengths (non-standard) [mm]	200-1499
Standard lengths [mm]	1500-12100
Longer lengths (non-standard)	

Additional costs and transport restrictions may apply for non-standard lengths.

Width

Module width is 1,200 mm and cover width 1,196 mm .

Product Tolerances

Product tolerances are measured according to the standard EN 14509:2013

Length tolerance	L≤3m, -	5 mm
Length tolerance	L≤3m, +	5 mm
Length tolerance	L>3m, -	10 mm
Length tolerance	L>3m, +	10 mm
Cover width tolerance	-	2 mm
Cover width tolerance	+	2 mm
Thickness tolerance	-	2 mm
Thickness tolerance	+	2 mm
Thickness tolerance	D>100mm, -	2 %
Thickness tolerance	D>100mm, +	2 %
Deviation from squareness		0.006 x w
Deviation from straightness (on length)		1mm/m, maximum 5 mm/m

Materials

Insulation Core

Paroc stone wool insulation core with a Thermal Conductivity (λ) of 0.045 W/m·K according to EN 14509:2013.

External facing

The standard thickness of the coil coated steel sheet is 0.6 mm.

Standard coating: Spectrum®.

Internal facing

The standard thicknesses of the coil coated steel sheet is 0.5 mm.

On request also other steel sheet thicknesses are available.

Standard coating: Polyester SP25.

Seals

Factory applied side joint seals. All side joints have a factory applied seal fitted into the groove to automatically seal the joint between panels.

Panels intended for external walls are usually delivered with an on the production line installed sealant in internal and external grooves.

Panels for high or vertically installed facades always have to be provided with sealant in both grooves of the joint.

Profiles

For available profiles, see the supplementary overview available further down.

Colours

For available colours, please refer to the "Colour Indications" brochure.

Mechanical Resistance

For load / span tables, please refer to the "Technical Guide" brochure or contact Paroc Panel System Technical Support.

Environmental Performance

Facilities located in Parainen generate renewable energy onsite which contributes to that sites energy mix.

Paroc Panel Systems procure steel that is made from 15-25% recycled content.

Paroc Panel Systems directly contribute to BREEAM® and LEED® credits.

Production Standard

Paroc Panel System applies to the European Standard EN 14509:2013 Self-supporting double skin metal faced insulating panels.

Quality

Paroc Panel System products are manufactured from the highest quality materials, using state of the art production equipment to rigorous quality control standards, complying with ISO 9001:2015 Quality management systems standards.

The panels are also being manufactured under Environmental management system certification EN ISO 14001:2015, Energy management system certification EN ISO 50001:2018, Safety certification EN ISO 45001:2018 and Compliance management system certification ISO 37301:2021.

Packing

Standard Packing - Road Transportation

AST® E LEC Shadow Architectural Wall Panel is stacked weather side to internal side.

The top, bottom, sides and ends are protected with foam and timber packing and the entire palette is wrapped with protection film.

The number of panels in a pack depends on panel thickness and length.

Quantities are reduced for exceptionally long panels.

Nominal Thickness [mm]	80	100	120	150	175	200	240	300
Number of Panels	15	12	10	8	7	6	5	4

Delivery

All deliveries, unless indicated otherwise, are by road transport to a project site. Off-loading is the responsibility of the client.

Sea Freight

Fully timber crated packs are available on projects requiring delivery by sea freight shipping, at additional costs. Alternatively, steel containers can be used. Special loading charges apply.

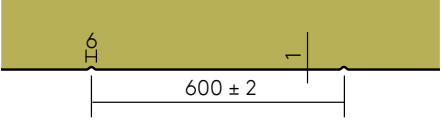
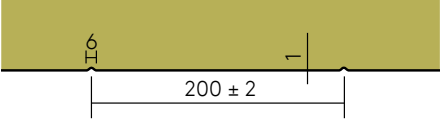
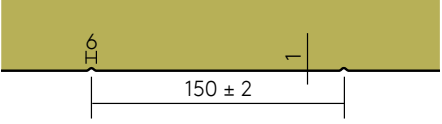
Site Storage & Installation

Site storage and installation instructions are available from Paroc Panel System Technical Support.

Warranty

Paroc Panel System's warranty are individually assessed for each project, especially depending on the aggressiveness of the environment and the type of surface treatment chosen.

Profiles

Profile	External	Internal
F - Smooth		
1 - Line 600		
5 - Line 200		
7 - Line 150		

Contact Details



Paroc Panel System
Sysilähden teollisuusalue 2
Parainen, Fi-21600



[Click here](#) for the most up to date version of this document.

The information provided in this datasheet is accurate as of its date of publication and represents our commitment to quality and transparency. However, Paroc Panel System reserve the right to modify product specifications without prior notice to reflect advancements or improvements.

For applications not explicitly covered within this datasheet, consultation with our Technical Advisory Service is strongly advised to ensure the product meets your specific requirements.

Users are responsible for verifying the product's suitability for their particular needs and for ensuring compliance with all applicable laws and regulations.

For the most up to date and comprehensive product details, always refer to the latest version of this datasheet by scanning the QR code above.

We reserve the right to update this datasheet, and any other informational materials, at our discretion and without notice.

For the latest information, please visit: www.parocpanels.com