Sandwich panel SPA S Energy

Sandwich panel **SPA S Energy** is available in thicknesses 150 - 230 mm.

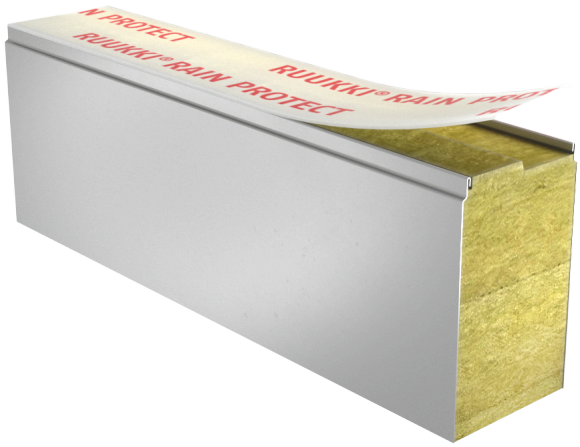
With precise and Ruukki specific manufacturing tolerances, and factory-fitted seals on the panel joints, the Ruukki® Energy panel structure with its seams forms a very airtight solution. Together with Ruukki Airtightness package it's possible to achieve excellent airtightness to the entire building. This can decrease energy costs and CO2 emissions up to 30%. Read more on airtightness package.

Using Ruukki's solutions you can receive more credits in LEED and BREEAM certification systems. Advanced technology contributing to the improvement of panel strength ensures **very good mechanical properties** of this sandwich panel. This panel type is **intruder resistant** in accordance with SSF 1047, class 2 (see Certificates & approvals).

With the filling consisting of non-combustible and environmentally friendly hard mineral wool, this sandwich panel ensures excellent fire resistance. Properly milled core increases **air-tightness** and contributes to **outstanding sound insulation**.

Application:

- External walls (standard fix)



Properties

Model name	Sandwich panel SPA S Energy
Standard module width	1200 mm
Minimum length	2000 mm
Maximum Length	13500 mm
External facing thickness	0.6 mm
Internal facing thickness	0.5 mm
Air Tightness	q50=0,01 m3/hm2 (pressure and suction)

Thickness D (mm)	**150**	**200**	**230**
Weight (kg/m^2)	28.9	34.5	38.5
U-value (W/m^2K)	0.29	0.22	0.19
Sound insulation Rw (dB)	31	31	31
Reaction to fire	A2-s1, d0	A2-s1, d0	A2-s1, d0

Wall fire resistance values & max span horizontal / vertical orientation (m):	**150**	**200**	**230**
EI 30	9.0 / 8.8	9.0 / 8.8	9.0 / 8.8
EI 30 (stainless steel)	7.5 / 7.5	7.5 / 7.5	7.5 / 7.5
EI 60	9.0 / 8.8	9.0 / 8.8	9.0 / 8.8
EI 60 (stainless steel)	7.5 / 7.5	7.5 / 7.5	7.5 / 7.5
EI 90	7.5 / 8.8	7.5 / 8.8	7.5 / 8.8
EI 90 (stainless steel)	7.5 / 7.5	7.5 / 7.5	7.5 / 7.5
EI 120	7.5 / 7.5	7.5 / 7.5	7.5 / 7.5
EI 120 (stainless steel)	6.0 / 7.5	6.0 / 7.5	6.0 / 7.5
EI 180	7.5 / 7.5	7.5 / 7.5	7.5 / 7.5
EI 240	6.0 / 6.0	6.0 / 6.0	6.0 / 6.0

Detailed information regarding the application of fire resistance ratings can be obtained from Ruukki Sales.

All properties are declared in accordance with EN 14509 and related standards.

Coatings and colors

Materials

Facing	Coating	Corrosivity category	UV resistance	Colours
External	HIARC MAX	C4	Ruv4	RR20, RR21, RR22, RR23, RR29, RR33, RR35, RR40, RR41, RR45
External	HIARC	C3	Ruv4	RR20, RR21, RR22, RR23, RR29, RR33, RR35, RR40, RR41, RR45
External	HIARC matt	C3	Ruv4	RR33, RR40, RR41
External	Polyester	C3	Ruv2-3	RR20, RR21, RR23, RR946
Internal	Polyester	C3	-	RR20
Internal	Foodsafe laminate *	C4	-	White
Internal	Stainless steel	C4	-	-

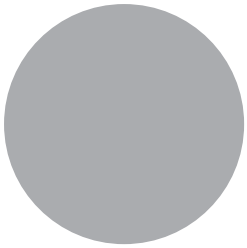
**) optional material*

UV resistance describes how well the coating is able to keep its original colour and gloss levels in accordance with EN10169. The higher the class, the better the resistance.

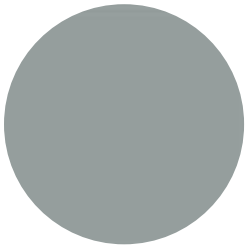
Corrosivity categories describe the outdoor climate conditions in accordance with EN12944. The higher the category, the more corrosive environment.

RR45 Metallic graphite

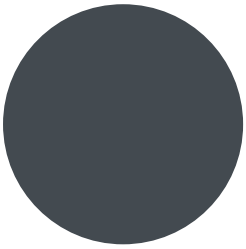
RR20 White



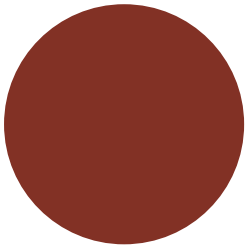
RR21 Light Grey



RR22 Grey

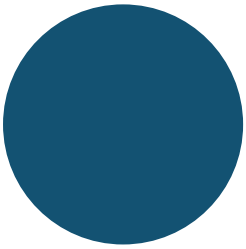


Graphite ~ RAL 7024



RR29 Red

RR33 Black



RR35 Blue

RR40 Silver matt

RR41 Dark silver matt

Profile options

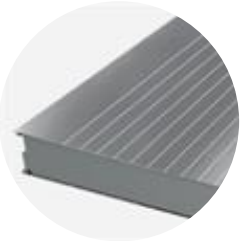
Micro 15

Rib 150

Rib 200

Rib 600

Flat F



Linear 50

Design tools

Traypan® software for designing sandwich panels

With TrayPan®, you can design metal faced sandwich panels made by Ruukki. A panel structure can be designed as a single- or multi-span construction. You can easily give, with a few parameters, both suction and pressure loads caused by the wind. The application also calculates the necessary fasteners.

Go to Traypan®

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Technical documents

Here you can find all technical documents related to Ruukki's sandwich panels. Documents are organised by document type. Click to enter document library.

Product descriptions

Accessory documents

Load tables

Installation instructions

Maintenance instructions

Sound insulation values

Certificates and approvals

Here you can find all certificates and approvals related to Ruukki's sandwich panels. Documents are organised by document type. Click to enter document library.

Declaration of performance

Environmental product declaration

Intruder resistance certificate