

# Sandwich panel SPA F Energy

Sandwich panel **SPA F Energy** is available in thicknesses 200 - 230 mm.

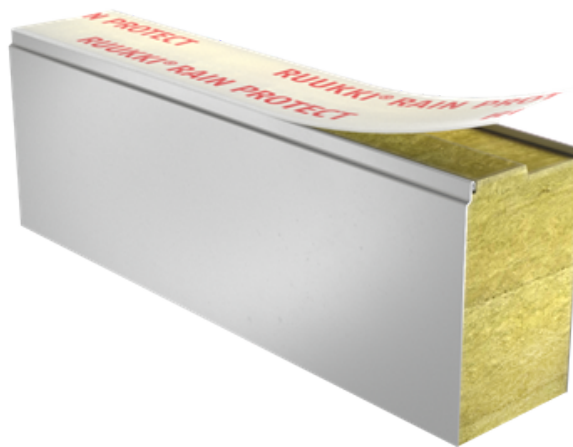
With precise and Ruukki specific manufacturing tolerances, and factory-fitted seals on the panel joints, the Ruukki® Energy panel structure with its seams forms a very airtight solution. Together with Ruukki Airtightness package it's possible to achieve excellent airtightness to the entire building. 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. The panel's excellent quality ensures **very good fire resistance properties**, thus increasing fire safety of buildings. This panel type is **intruder resistant** in accordance with SSF 1047, classes 2 & 3 (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)



[SEND CONTACT REQUEST](#)

The information on our website is accurate to the best of our knowledge and understanding. Although every effort has been made to ensure accuracy, the company cannot accept any responsibility for any direct or indirect damages resulting from possible errors or incorrect application of the information of this publication. We reserve the right to make changes.

# Properties

Model name	Sandwich panel SPA F 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)	200	230
Weight (kg/m <sup>2</sup> )	32.5	36.4
U-value (W/m <sup>2</sup> K)	0.22	0.19
Sound insulation Rw (dB)	31	31
Reaction to fire	A2-s1, d0	A2-s1, d0
GWP-total, A1-A3 (kg CO <sub>2</sub> ◇/m <sup>2</sup> )	35,7	37,4
GWP-total, A1-A3 (kg CO <sub>2</sub> e/m <sup>2</sup> ) for Ruukki® LowCarbon	-	22,8

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

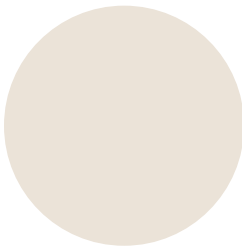
## Materials

Facing	Coating	Gloss level (GU)	Corrosivity category	UV resistance	Colours
External	GreenCoat Pural BT Satin	20	C4	Ruv4-5	RR20, RR21, RR22, RR23, RR29, RR33, RR35
External	GreenCoat Pural BT Metallic	40	C4	Ruv4	RR40, RR41, RR45
External	Polyester	35	C3	Ruv2-3	RR20, RR21, RR23, RR946
Internal	Polyester	35	C3	-	RR20
Internal	Foodsafe laminate *		C4	-	White
Internal	Stainless steel		C4	-	-

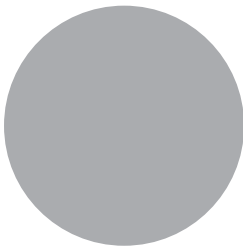
*\*) optional material*

*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.*

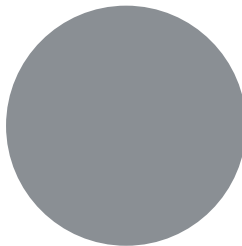
*Corrosivity categories describe the outdoor climate conditions in accordance with EN12944. The higher the category, the more corrosive environment.*



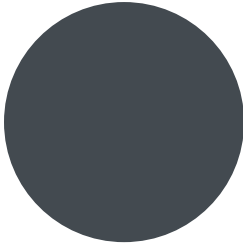
RR20 Winter White



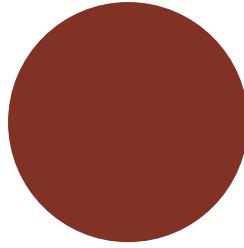
RR21 Pebble Grey



RR22 Stone Grey



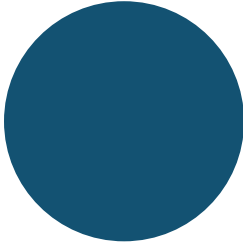
RR23 Mountain Grey



RR29 Cottage Red



RR33 Nordic Night Black



RR35 Lake Blue



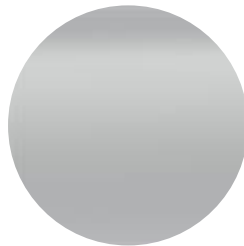
RR40 Metallic Silver



RR41 Metallic Dark Silver



RR45 Metallic Titanium



RR946 Metallic Silver

## Profile options



Micro 15



Rib 150



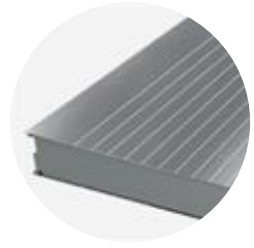
Rib 200



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®](#)



### Download BIM objects to your desktop

ProdLib brings Ruukki products as BIM models directly to your desktop in 3D form for design programs AutoCAD, Autodesk Revit, Archicad and Tekla Structures. Product libraries compile all necessary design models and detailed drawings in one place. Library updates are automatically notified, so as a user you can be sure that your product information is constantly up to date. ProdLib can also be used as a standalone desktop application.

[Go to BIM library](#)

## 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**



**Detail  
drawings**



## 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**

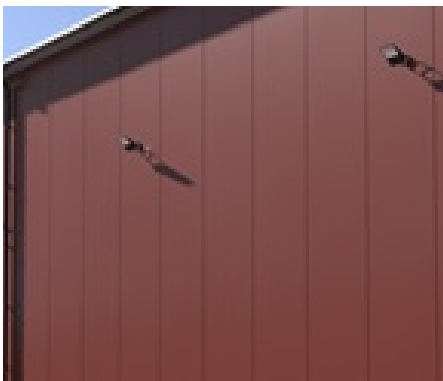


**Intruder  
resistance  
certificate**



---

## Visualization tool



### Get inspired with our Sandwich Panel visualization tool

With our interactive Visualization tool for Ruukki sandwich panels, you can easily explore and customize the perfect combination for your building project.

[Go to visualization tool](#)