

# Sandwich panel SPA E for external wall

Sandwich panel **SPA E** is available in thicknesses 100 - 230 mm.

It is a perfect solution for most buildings and structures, combining high quality with very good technical properties.

The gaskets integrated in the joint provide reliable airtightness of the panel as a standard. For maximum performance of the wall as a whole upgrade to the full Ruukki Airtightness package including dedicated details and accessories.

[Read more on airtightness package.](#)

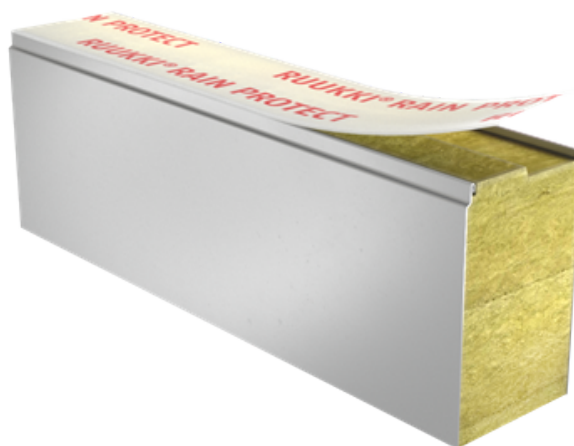
With the filling consisting of non-combustible and environmentally friendly hard mineral wool, this sandwich panel ensures high **fire resistance**.

## Application:

- External walls

**This product is optionally available with following sustainable features:**

- Steel facings made of recycled steel (SSAB Zero) for significantly lower CO2 emissions and high circularity - available as Ruukki LowCarbon
- Ruukki Airtightness package for lower CO2 emissions during the use phase of the building



**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 E for external wall                               |
| 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) for thicknesses $\geq 150$ mm |

| Thickness D (mm)                                                              | 100       | 125       | 150       | 200       | 230       |
|-------------------------------------------------------------------------------|-----------|-----------|-----------|-----------|-----------|
| Weight (kg/m <sup>2</sup> )                                                   | 18.4      | 21        | 23.4      | 27.5      | 30.6      |
| U-value (W/m <sup>2</sup> K)                                                  | 0.40      | 0.31      | 0.26      | 0.20      | 0.17      |
| Sound insulation Rw (dB)                                                      | 29        | 30        | 30        | 31        | 31        |
| Reaction to fire                                                              | A2-s1, d0 | A2-s1, d0 | A2-s1, d0 | A2-s1, d0 | A2-s1, d0 |
| GWP-total, A1-A3 (kg CO <sub>2</sub> ◇/m <sup>2</sup> )                       | 29,5      | 30,5      | 31,4      | 33        | 34,1      |
| GWP-total, A1-A3 (kg CO <sub>2</sub> e/m <sup>2</sup> ) for Ruukki® LowCarbon | -         | -         | -         | ~18,5     | ~20       |

| Wall fire resistance values & max span horizontal / vertical orientation (m): | 100       | 125       | 150       | 200       | 230       |
|-------------------------------------------------------------------------------|-----------|-----------|-----------|-----------|-----------|
| EI 30                                                                         | 7.5 / 7.5 | 7.5 / 7.5 | 9.0 / 8.8 | 9.0 / 8.8 | 9.0 / 8.8 |
| EI 30 (stainless steel)                                                       | -         | -         | 7.5 / -   | 7.5 / -   | 7.5 / -   |
| EI 60                                                                         | 7.5 / 7.5 | 7.5 / 7.5 | 9.0 / 8.8 | 9.0 / 8.8 | 9.0 / 8.8 |
| EI 60 (stainless steel)                                                       | -         | -         | 7.5 / -   | 7.5 / -   | 7.5 / -   |
| EI 90                                                                         | -         | 7.5 / 7.5 | 7.5 / 8.8 | 7.5 / 8.8 | 7.5 / 8.8 |
| EI 90 (stainless steel)                                                       | -         | -         | 6.0 / -   | 6.0 / -   | 6.0 / -   |
| EI 120                                                                        | -         | 7.5 / 7.5 | 7.5 / 7.5 | 7.5 / 7.5 | 7.5 / 7.5 |

|        |   |   |         |         |         |
|--------|---|---|---------|---------|---------|
| EI 180 | - | - | 4.0 / - | 4.0 / - | 4.0 / - |
|--------|---|---|---------|---------|---------|

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) | Corrosion class | 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              | -             | -                                        |

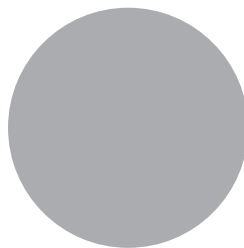
*\*) optional material*

*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.*

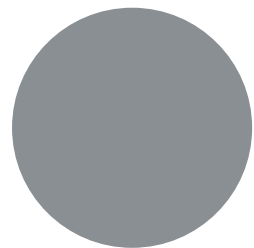
*Corrosivity categories describe the outdoor climate conditions in accordance with EN12944. The higher the category, the more corrosive environment.*



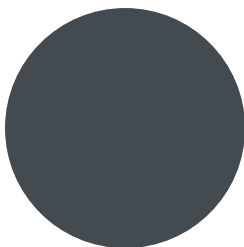
RR20 Winter White



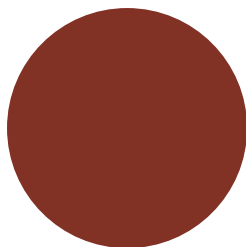
RR21 Pebble Grey



RR22 Stone Grey



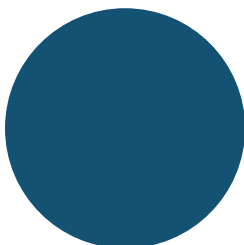
RR23 Mountain Grey



RR29 Cottage Red



RR33 Nordic Night Black



RR35 Lake Blue



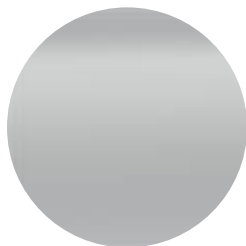
RR40 Metallic Silver



RR41 Metallic Dark Silver



RR45 Metallic Titanium



RR946 Metallic Silver

## Profile options



Micro 15



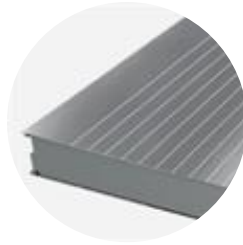
Rib 150



Rib 200



Rib 600



Linear 50



Flat F

## 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**

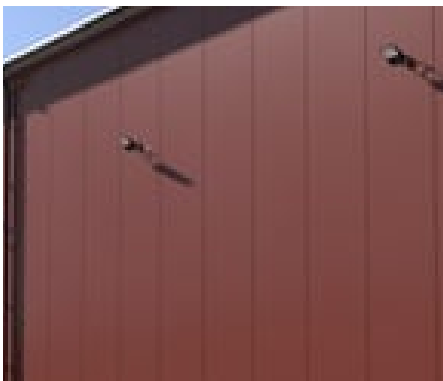


**M1 Emission  
Classification**



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## 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](#)