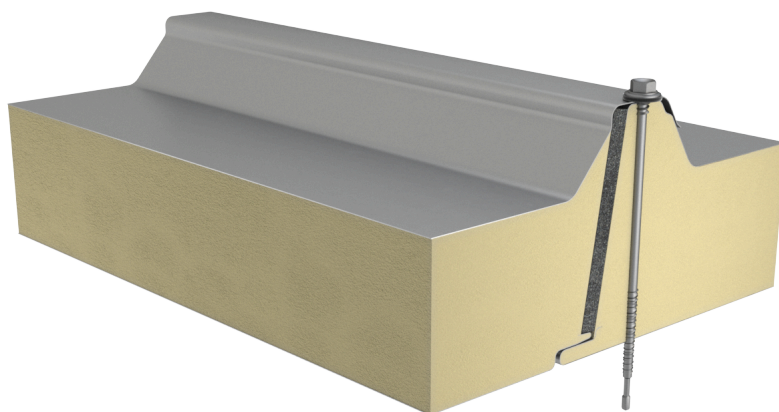# Sandwich panel SP2C E-PIR

Sandwich panel **SP2C E-PIR** is available in thicknesses 80/40 - 210/170 mm.

It is a perfect solution for roofs, combining **high quality** with **very good technical properties**.

The core of this sandwich panel is made of rigid, HCFC-free, self-extinguishing and sustainable polyisocyanurate foam (PIR). Its **excellent thermal insulation properties** enable the decrease of panel thickness which transfers directly to lower transportation and assembly costs, as well as **significant savings** of building's life cycle costs.

Application:

- Roofs

Properties

Model name	Sandwich panel SP2C E-PIR
Standard module width	1000 mm
Minimum length	2000 mm
Maximum Length	18500 mm
External facing thickness	0.5 mm
Internal facing thickness	0.4 mm
External Fire Exposure	BROOF(t1)

Thickness D (mm)	80/40	100/60	120/80	140/100	160/120	190/150	210/170
Weight (kg/m^2)	10.5	11.3	11.9	12.7	13.4	14.5	15.5
U-value (W/m^{2}K)	0.50	0.34	0.26	0.21	0.18	0.15	0.13
Sound insulation Rw (dB)	24	24	24	24	24	24	24
Reaction to fire	B-s2, d0	B-s2, d0	B-s2, d0	B-s2, d0	B-s2, d0	B-s2,d0	B-s2, d0

Fire resistance & bending moment at field/support (kNm/m); snow load 0.2xS; stitched joint on upper facing	80/40	100/60	120/80	140/100	160/120	190/150	210/170
REI 15	0.151 / -0.270	0.147 / -0.262	0.202 / -0.360	0.170 / -0.304	0.165 / -0.295	0.159/-0.284	0.154 / -0.275
REI 20	-	-	0.202 / -0.360	0.170 / -0.304	0.165 / -0.295	0.159/-0.284	0.154 / -0.275
RE 15	0.151 / -0.270	0.147 / -0.262	0.202 / -0.360	0.170 / -0.304	0.165 / -0.295	0.159/-0.284	0.154 / -0.275
RE 20	0.151 / -0.270	0.147 / -0.262	0.202 / -0.360	0.170 / -0.304	0.165 / -0.295	0.159/-0.284	0.154 / -0.275
RE 30	0.151 / -0.270	0.147 / -0.262	0.202 / -0.360	0.170 / -0.304	0.165 / -0.295	0.159/-0.284	0.154 / -0.275

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

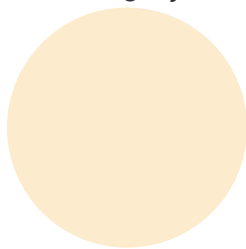All properties are declared in accordance with EN 14509 and related standards.
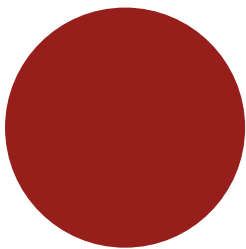
Coatings and colors

Materials

Facing	Coating	Corrosivity category	UV resistance	Colours
External	GreenCoat HI ARC MAX	C4	Ruv4	RAL9006 (RR40)
External	Polyester	C3	Ruv2-3	RAL1015, RAL3013, RAL6011, RAL7015 (RR23), RAL7016 (RR288), RAL7035, RAL9002, RAL9006, RAL9010
Internal	Polyester	C3	-	RAL9002, RAL9010

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.
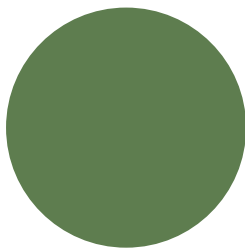
Corrosivity categories describe the outdoor climate conditions in accordance with EN12944. The higher the category, the more corrosive environment.
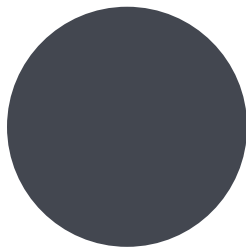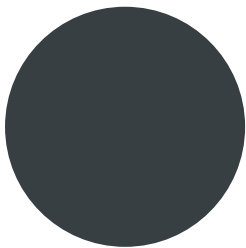
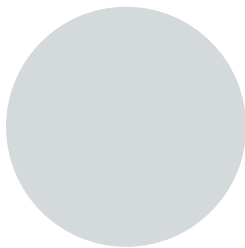RAL1015 Light ivory

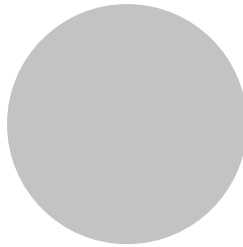RAL3013 Tomato red

RAL6011 Reseda green

RAL 7015 Slate grey

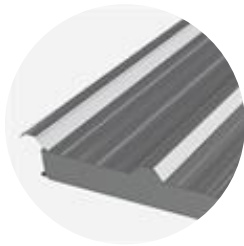RAL7016 Anthracite grey

RAL7035 Light grey
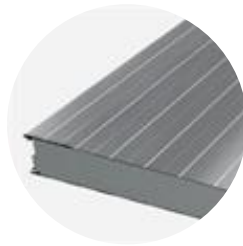
	RAL9002 Grey white		RAL9006 White aluminium		RAL9010 White

RAL9002 Grey white   **RAL9006 White aluminium**   **RAL9010 White**

Profile options

Trapezoidal T   **Linear L**

External profiling	T
Internal profiling	L

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
>

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 ›