

# Sandwich panel nSPB WE Patina

Sandwich panel nSPB WE Patina 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.

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

The filling consisting of non-combustible and environmentally friendly soft mineral wool with low thermal conductivity coefficient ensures very good thermal insulation of this panel. Properly milled core increases air-tightness and provides high sound insulation.

Ruukki® Patina panel is made of natural and untreated Cor-Ten® steel. The unique joint structure of the panel prevents corrosion at the joints (patent pending). The new, innovative panel is also maintenance free since it repairs scratches over time itself.

#### Application:

External walls (standard fix)

The method for joining Cor-Ten® steel-based sandwich panels, preventing corrosion formation in the joint, is patented.





**SEND CONTACT REQUEST** 

## **Properties**

Model name	Sandwich panel nSPB WE Patina
Standard module width	1100 mm
Minimum length	2000 mm
Maximum Length	12000 mm
External facing thickness	0.7 mm
Internal facing thickness	0.5 mm
External Fire Exposure	NRO
Air Tightness	q50=0,01 m3/hm2 (pressure and suction)

Thickness D (mm)	150	180	200	230
Weight (kg/m²)	24.9	27.4	29.2	31.7
U-value (W/m <sup>2</sup> K)	0.26	0.22	0.19	0.17
Sound insulation Rw (dB)	29	30	30	30
Reaction to fire	A2-s1, d0	A2-s1, d0	A2-s1, d0	A2-s1, d0
GWP-total, A1-A3 (kg CO₂∜/m²)	31,7	32,8	33,5	34,6
Estimated GWP (A1-A3) for Ruukki® LowCarbon (kg CO₂�/m²)*	-	-	-	-

Wall fire resistance values & max span horizontal / vertical orientation (m):	150	180	200	230
El 30	7,5/-	7,5/-	7,5/-	7,5/-
El 60	7,5/-	7,5/-	7,5/-	7,5/-
El 90	6,0/-	6,0/-	6,0/-	6,0/-

## **Coatings and colors**



External facing: Cor-Ten

#### **Materials**

Facing	Coating	Corrosion class	UV resistance	Colours
External	Cor-Ten®	C3	-	-
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.

### **Surface variations**







**Profile option Linear** 

Facing	Profile options
External	Flat F
Internal	Flat F, Linear L, Linear 25

## **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**

ProLib 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 consistantly up to date. ProdLib can also be used as a standalone desktop application.

Go to BIM library

### **Technical documents**

#### **Detail drawings**



Sandwich panel SPA Patina - detail drawings 05\_2021 PDF. 1.4 MB



**Sandwich panel SPA Patina - detail drawings 12\_2021** DWG, 1.3 MB

#### Installation and maintenance instruction



Sandwich panel Patina - installation and maintenance instructions 12\_2023 PDF. 3.1 MB

#### **Sound insulation values**



Sound insulation values for sandwich panels and various structures 02\_2023 PDF, 5.9 MB

## **Certificates and approvals**

#### **Environmental product declaration**

### **Intruder resistance certificate**



**Sandwich panel Certificate on Burglary Protection Classes 1-3** 

PDF, 0.7 MB