

PANELS  
THAT  
CONNECT.

# Panel Solutions for Data Centre Applications





# Made by BRUCHA



# Decades of experience in production & assembly

*We have been producing high-quality insulated products for industrial and commercial buildings for over 75 years. Today, our customers see ourselves as a premium manufacturer and total envelope supplier, providing customized solutions for their needs.*

As a premium manufacturer, our fully tested and certified BRUCHA sandwich panels can be applied for various internal and external building solutions. Not just being a supplier, we have worked in panel assembly

for several decades, where we can provide installation solutions for data centres, controlled environment applications (CA/ULO storage, freezers & chillers, clean rooms) and clad rack solutions.

## Customer statement

*„We contacted Brucha, received an immediate and responsive reaction, providing us with the salient information needed to progress the design and the assurance that the team could meet our demanding programme. The design process was seamless, grounded in good communication and cooperation of the whole team. Overall, we, and most importantly the client, are very pleased with the end product and would seek to work with Brucha again.”*

Joaquin Dabezies  
Cooley Architects

Project:  
Global Switch Frankfurt





# Environmentally certified production



Head office/production plant  
Michelhausen in Lower Austria

*We all rely on the efficient use of energy. This requires work processes to be as sustainable as possible.*

This is firmly grounded in our corporate guidelines and reflects in our daily actions.

Bringing proof that we are a serious and responsible manufacturer, we are certified according to the environmental management system **ISO 14001:2015** and the standard for responsible sourcing **BES 6001**.

## BRUCHA - always one step ahead

We have always been a pioneer in the efficient implementation of energy-saving measures. Numerous actions and projects have been realized in recent years to significantly improve our energy consumption.

The implementation of further measures leads to continuous improvements of our production processes, our products and most importantly to new product developments.



# Single sourcing

PLANNING - ENGINEERING  
PRODUCTION - DELIVERY - ASSEMBLY







# Our panels Your advantages

FOR EXTERIOR  
AND INTERIOR



BRUCHA panel  
acoustic **WP-A**  
wall and ceilings



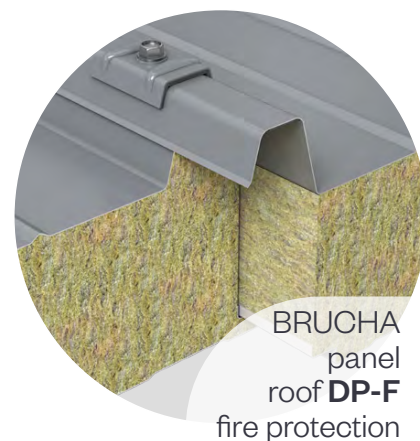
BRUCHA panel **WP-F**  
fire protection for  
exterior and interior



BRUCHA panel  
facade **FP-F**  
fire protection  
with concealed fixing



BRUCHA panel  
PIR+ non-halogen/iQTec  
wall **WP**



BRUCHA  
panel  
roof **DP-F**  
fire protection



LPS 1181part1/part2  
Cert No. 900a/b

BRUCHA panel fire protection  
Fire behavior Euroclass **A2s1d0, non-combustible**  
INSULATION CORE of mineral wool

density approx. 120 kg/m<sup>3</sup>,  
140 kg/m<sup>3</sup> available on request

BRUCHA panel PIR+ non-halogen  
Fire behavior Euroclass **Bs1d0**  
INSULATION CORE of halogenfree PIR-rigid foam

absolutely no chlorofluorocarbons and halogenated  
chlorofluorocarbons, pentane foaming system

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## Panel Solutions for Data Centre Applications

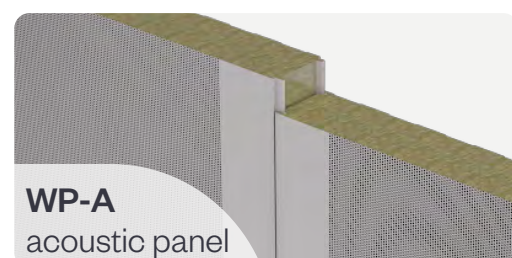




# Tested and certified BRUCHA Panel Solutions



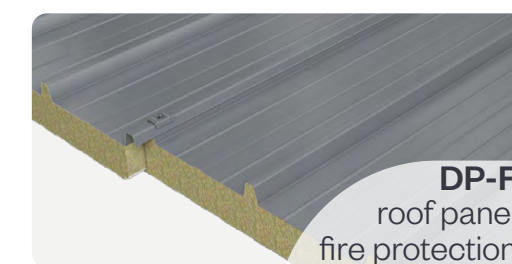
## INTERIOR wall, ceiling & doors



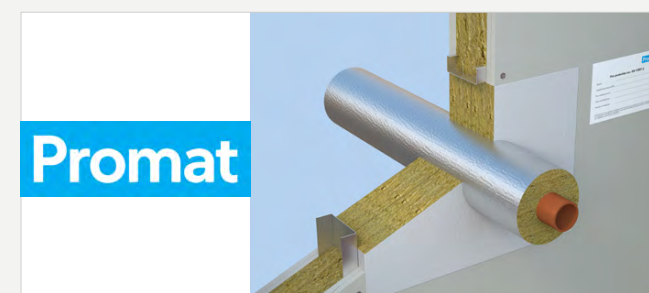
Panel and door  
fire rated system  
certification with  
our hinged and  
sliding doors up  
to **EI 90!**



## EXTERIOR facade & roof



We also hold certification and fire resistance testing for service installations – Promat penetration seals/fire dampers as an in-sandwich-panel solution according to EN 1366-3.



CLASSIFICATION OF  
FIRE RESISTANCE to EN 13501

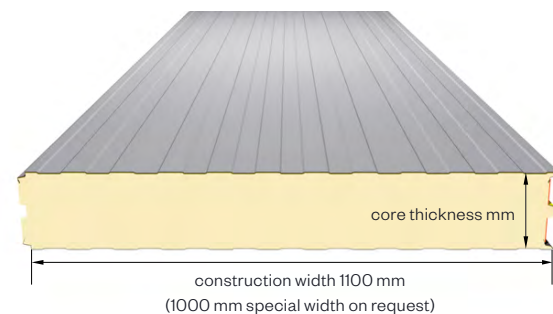


**WP 200**  
Fire resistance classification - EI 60





# INTERIOR wall & ceiling solutions



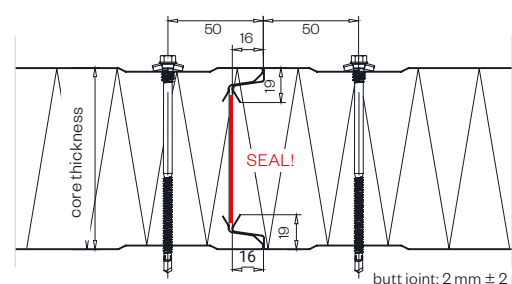
## BRUCHA panel PIR+ non-halogen / iQTec wall – WP

visible mounting

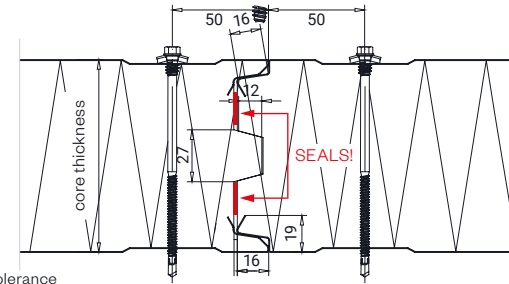
PROFILE options - close-up



DETAIL/joint geometry up to 80 mm core thickness



DETAIL/joint geometry from 100 mm core thickness



PANEL TYPE	WP 40	WP 50	WP 60	WP 80	WP 100	WP 120	WP 140	WP 150*	WP 160	WP 170	WP 180*	WP 200	WP 220*	WP 250*
core thickness mm	40	50	60	80	100	120	140	150	160	170	180	200	220	250
PIR+ non-halogen U-value W/m²K acc. EN 14509 including joint section	0.552	0.435	0.355	0.263	0.210	0.175	0.150	0.140	0.131	0.124	0.117	0.105	0.095	0.084
iQTec on request U-value W/m²K acc. EN 14509 including joint section	0.479	0.377	0.307	0.227	0.181	0.151	0.129	0.120	0.113	0.106	0.100	0.090	0.082	0.072
weight kg/m²	10.45	10.85	11.25	12.05	12.85	13.65	14.45	14.85	15.25	15.65	16.05	16.85	17.65	18.75

\*on request, from 500 m² (180 from 300 m²), max. production length 16 m

**MANUFACTURING TOLERANCES**  
according EN 14509

**MANUFACTURING LENGTHS**  
max. 18.4 m (from 13.6 m extra-long transport)

**SPAN WIDTH TABLES**  
according SandStat. calculation

**FIRE RESISTANCE CLASSIFICATION - EI 60**  
for WP 200 horizontal and vertical fixing

**SOUND REDUCTION**  
26 dB at 60/80 mm, 27 dB from 100 mm core thickness

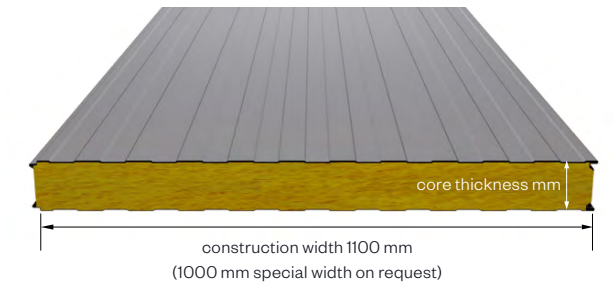
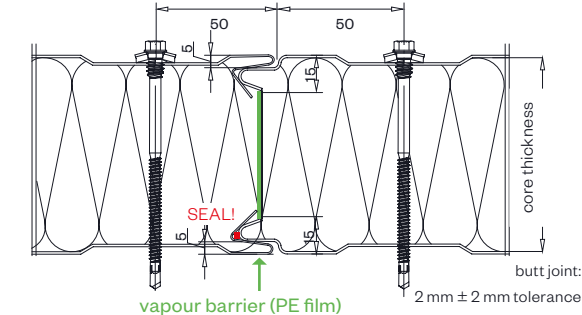
**FIRE BEHAVIOR**  
according EN 13501-1, Euroclass Bs1d0



## BRUCHA panel fire protection wall – WP-F

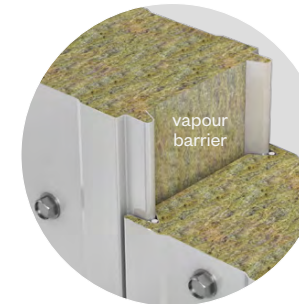
visible mounting - PROFILE options - profile 1 or 2

DETAIL/joint geometry



PANEL TYPE	WP-F 60	WP-F 80	WP-F 100	WP-F 120	WP-F 140	WP-F 150	WP-F 160	WP-F 180	WP-F 200	WP-F 240
core thickness mm	60	80	100	120	140	150	160	180	200	240
U-value W/m²K acc. EN 14509 incl. joint section	0.681	0.512	0.412	0.346	0.298	0.279	0.261	0.233	0.210	0.176
weight kg/m²	16.39	18.79	21.19	23.59	25.99	27.19	28.39	30.79	33.19	37.99
fire resistance*	EI 30	EI 90	EI 90	EI 180	EI 180	EI 180	EI 180	EI 180	EI 240	EI 240

\*Certificates must be checked for the specific application (horizontal/vertical/span width etc.).



**MANUFACTURING TOLERANCES**  
acc. EN 14509

**MANUFACTURING LENGTHS** max. 15.6 m (extra-long transport from 13.6 m)  
ATTENTION! Danger of kinking due to heavy weight in the case of long panels!

**SPAN WIDTH TABLES**  
according SandStat. calculation

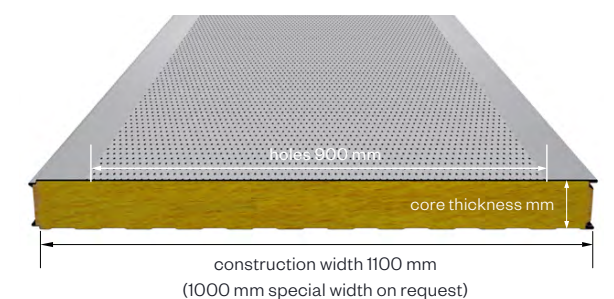
**SOUND REDUCTION**  
32 dB (frequency dependent)

**FIRE BEHAVIOR** acc. EN 13501-1,  
Euroclass A2s1d0, **non-combustible**

## BRUCHA panel Acoustic wall – WP-A

visible mounting - PROFILE options - profile 1 or 2

The BRUCHA panel Acoustic - WP-A provides a practical and clean solution for sound absorption and insulation against airborne sound, for interior walls and suspended ceilings.  
Insulation core with additional glass fibre mat SM60/10 as trickle protection, perforation: 32.5 %  
bore diameter: 3 mm round bore, offset (5 mm distance)  
holes: DIN RV 3-5 (R3T5) (730-000)



**PANEL CORE THICKNESS**  
60 mm - 240 mm

**weight kg/m²**  
about 1.7 kg less compared to WP-F

**APPROVAL** based on  
General building inspection approval Z-10.49-610

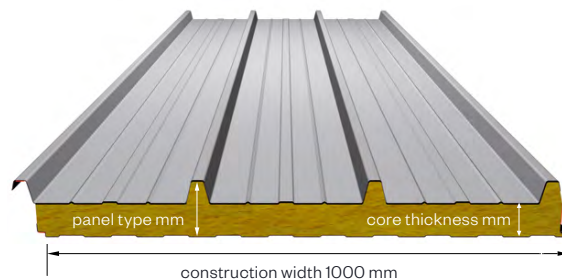
**SOUND REDUCTION**  
about 32 dB (frequency dependent)

**SOUND ABSORBER CLASS B**

**SOUND ABSORPTION COEFFICIENT  $\alpha_w$**   
0.90 in line with test report MA39-VFA 2017-0169.02

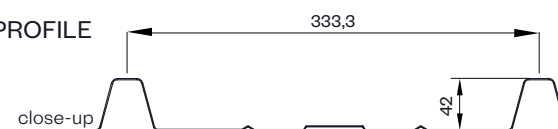
# EXTERIOR roof solutions

## BRUCHA panel fire protection roof – DP-F



Minimum roof pitch 3° (5.2 %)  
without transverse joint and penetration.

TRAPEZOID PROFILE  
exterior



PANEL TYPE	DP-F 102	DP-F 122	DP-F 142	DP-F 162	DP-F 182	DP-F 192	DP-F 202	DP-F 222	DP-F 242
core thickness mm	60	80	100	120	140	150	160	180	200
U-value W/m²K acc. EN 14509 incl. joint section	0.659	0.504	0.409	0.344	0.297	0.278	0.261	0.233	0.210
weight kg/m²	16.80	19.31	21.81	24.31	26.81	28.07	29.32	31.82	34.32
fire resistance*	REI 30	REI 90	REI 120	REI 120	REI 120	REI 120	REI 120	REI 120	REI 120

\*Certificates must be checked for the specific application (horizontal/vertical/span width etc.).

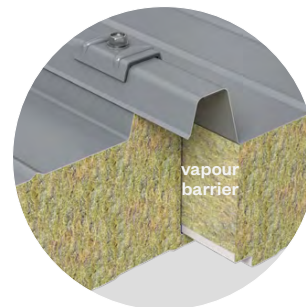
**MANUFACTURING TOLERANCES**  
according EN 14509

**SOUND REDUCTION**  
32 dB (frequency dependent)

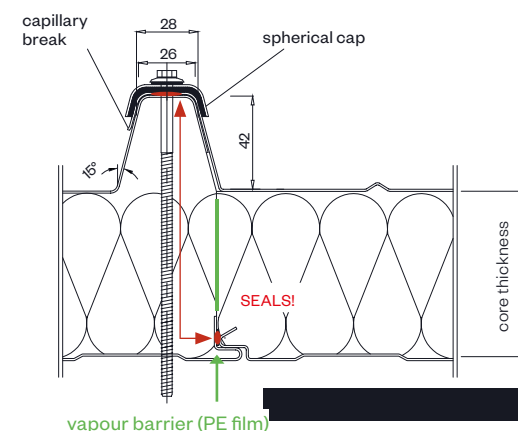
**MANUFACTURING LENGTHS** max. 15.6 m (extra-long transport from 13.6 m)  
ATTENTION! Danger of kinking due to heavy weight in the case of long panels!

**SPAN WIDTH TABLES**  
according SandStat. calculation

**FIRE BEHAVIOR**  
acc. EN 13501-1, Euroclass A2s1d0, **non-combustible**



DETAIL/joint geometry



## BRUCHA panel PIR+ non-halogen / iQTec wall – WP as flat roof solution

with waterproofing membrane

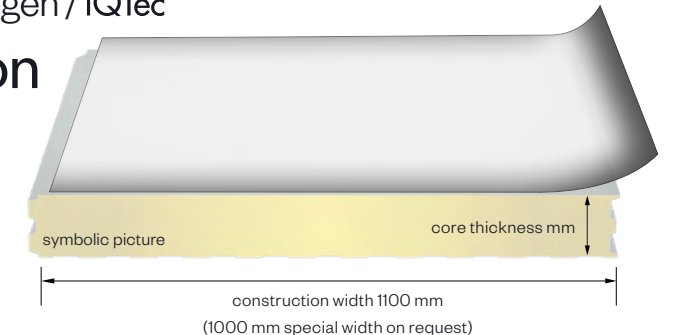
### Waterproofing of roofs

The repurposing of our wall panel WP as roof panel features its core values of optimized construction width of 1100 mm and perfect joint connection without thermal bridges, creating a homogeneous and dense surface. Due to numerous core thicknesses (up to 250 mm), literally any building physics requirement can be met.

**This cost-effective solution combines the benefits of a quick and easy installation with the smooth appearance of a flat roof.**

For application of BRUCHA panel WP as flat roof a self-adhered or adhered soft-nonmetallic membrane for waterproofing must be used.

The installation of the waterproofing membrane has to be carried out on site by a specialized company.

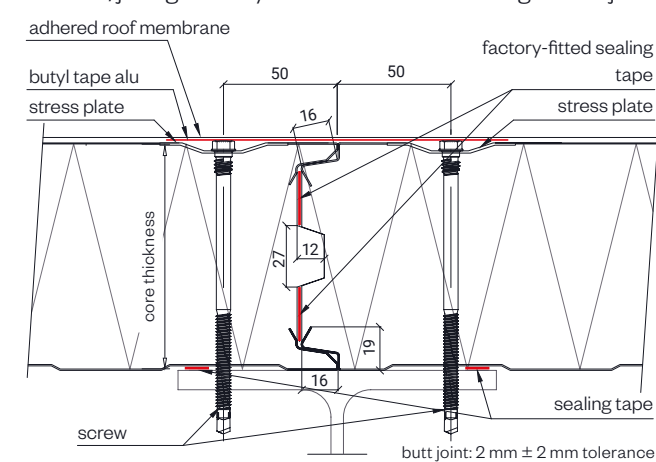


Note:

The selection of a suitable roof membrane is the responsibility of the customer. Verification of suitability of a roof membrane must be determined in consultation with the respective manufacturer.

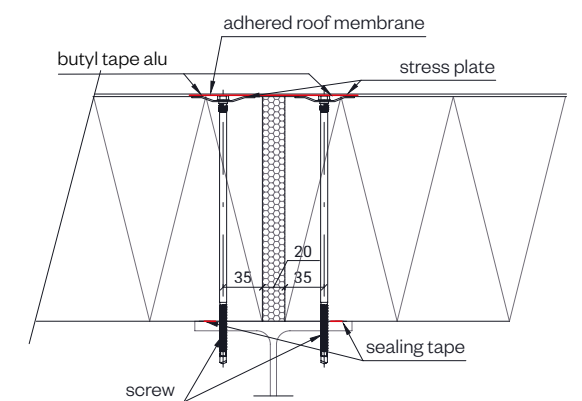
For determination of the minimum roof slope, please refer to the requirements of the roof membrane manufacturer. We can offer roof membranes from resale, as we work with renowned suppliers (e.g. Sika/Sarnafil). Upon request, we can provide technical support (e.g. preliminary structural calculations, shop drawings, etc.)

DETAIL/joint geometry



longitudinal joint

cross joint



PANEL TYPE	WP 40	WP 50	WP 60	WP 80	WP 100	WP 120	WP 140	WP 150*	WP 160	WP 170	WP 180*	WP 200	WP 220*	WP 250*
core thickness mm	40	50	60	80	100	120	140	150	160	170	180	200	220	250
PIR+ non-halogen U-value W/m²K - EN 14509 including joint section	0.552	0.435	0.355	0.263	0.210	0.175	0.150	0.140	0.131	0.124	0.117	0.105	0.095	0.084
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weight kg/m²	10.45	10.85	11.25	12.05	12.85	13.65	14.45	14.85	15.25	15.65	16.05	16.85	17.65	18.75

\*on request, from 500 m² (180 from 300 m²),  
max. production length 16 m

**MANUFACTURING TOLERANCES**  
according EN 14509

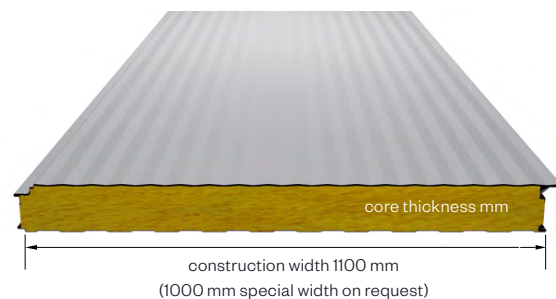
**MANUFACTURING LENGTHS**  
max. 18.4 m (extra-long transport from 13.6 m)



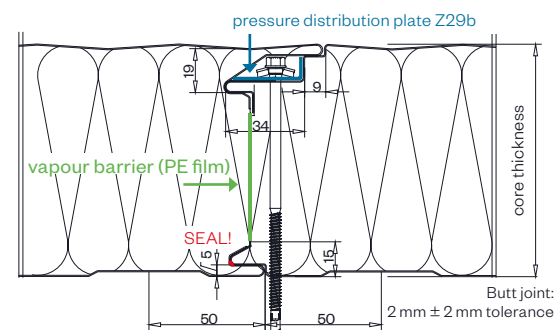


# EXTERIOR facade & wall solutions

## BRUCHA panel fire protection facade – FP-F concealed fixing



DETAIL/joint geometry



PANEL TYPE	FP-F 60	FP-F 80	FP-F 100	FP-F 120	FP-F 140	FP-F 150	FP-F 160	FP-F 180	FP-F 200	FP-F 240
core thickness mm	60	80	100	120	140	150	160	180	200	240
U-value W/m²K - EN 14509 including joint section	0.781	0.540	0.427	0.355	0.305	0.285	0.267	0.237	0.214	0.178
weight kg/m²	16.38	18.78	21.18	23.58	25.98	27.18	28.38	30.78	33.18	37.98
fire resistance*	NPD	EI 90	EI 90	EI 120	EI 120	EI 120	EI 120	EI 120	EI 120	EI 120

\*Certificates must be checked for the usage case in question (horizontal/vertical/span width etc.).

**MANUFACTURING TOLERANCES**  
according EN 14509

**SOUND REDUCTION**  
32 dB (frequency dependent)

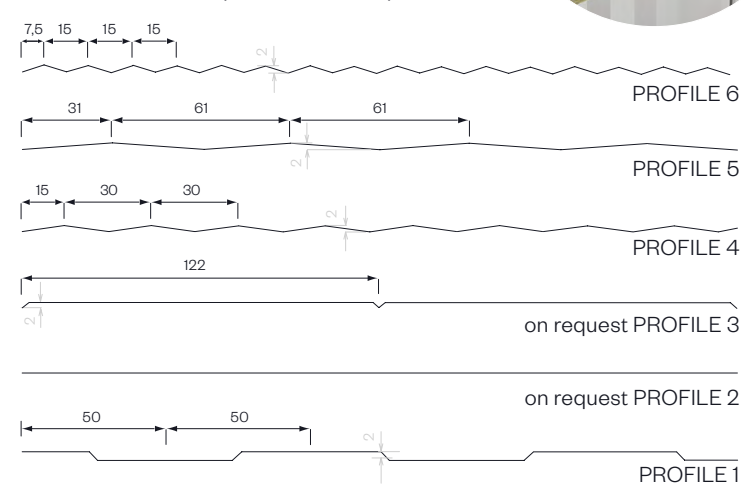
**MANUFACTURING LENGTHS** max. 15.6 m (extra-long transport from 13.6 m)  
ATTENTION! Danger of kinking due to heavy weight in the case of long panels!

**SPAN WIDTH TABLES**  
according SandStat. calculation

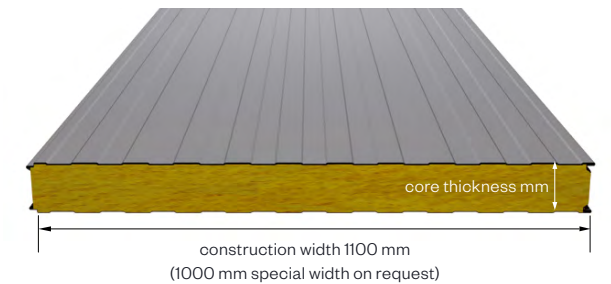
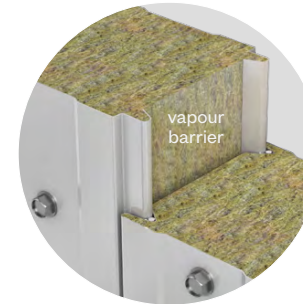
**FIRE BEHAVIOR**  
acc. EN 13501-1, Euroclass A2s1d0, **non-combustible**



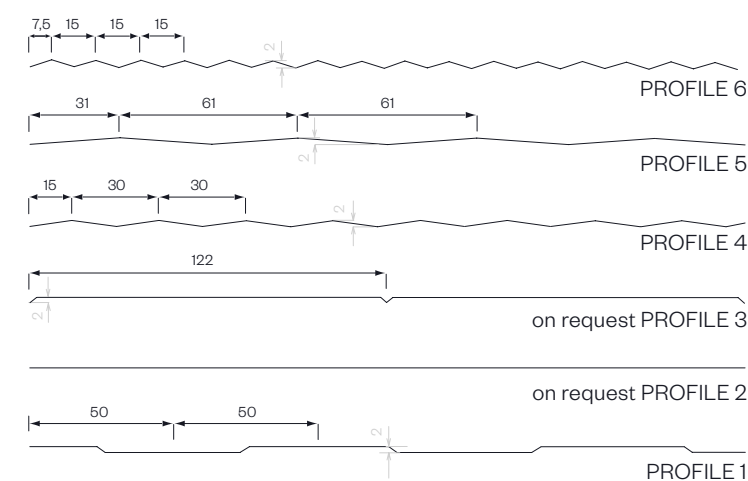
Exterior PROFILE options - close-up



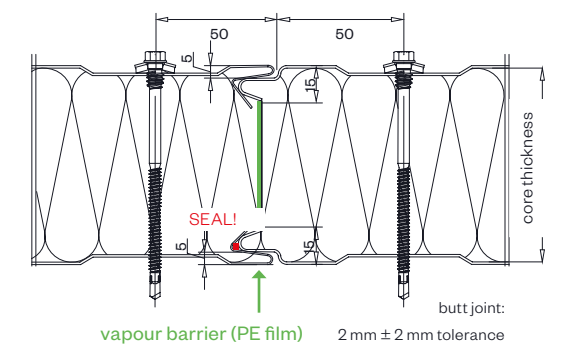
## BRUCHA panel fire protection wall – WP-F visible mounting



Exterior PROFILE options - close-up



DETAIL/joint geometry



PANEL TYPE	WP-F 60	WP-F 80	WP-F 100	WP-F 120	WP-F 140	WP-F 150	WP-F 160	WP-F 180	WP-F 200	WP-F 240
core thickness mm	60	80	100	120	140	150	160	180	200	240
U-value W/m²K acc. EN 14509 incl. joint section	0.681	0.512	0.412	0.346	0.298	0.279	0.261	0.233	0.210	0.176
weight kg/m²	16.39	18.79	21.19	23.59	25.99	27.19	28.39	30.79	33.19	37.99
fire resistance*	EI 30	EI 90	EI 90	EI 180	EI 180	EI 180	EI 180	EI 180	EI 240	EI 240

\*Certificates must be checked for the specific application (horizontal/vertical/span width etc.).

**MANUFACTURING TOLERANCES**  
according EN 14509

**SOUND REDUCTION**  
32 dB (frequency dependent)

**MANUFACTURING LENGTHS** max. 15.6 m (extra-long transport from 13.6 m)  
ATTENTION! Danger of kinking due to heavy weight in the case of long panels!

**SPAN WIDTH TABLES**  
according SandStat. calculation

**FIRE BEHAVIOR** acc. EN 13501-1,  
Euroclass A2s1d0, **non-combustible**





# PANELS THAT CONNECT.

## PRODUCTS

- > BRUCHA panels
- > Cold walk-ins
- > Doors
- > EPS insulation boards
- > Accessories

*Head office/plant*  
BRUCHA GesmbH  
Rusterstraße 33  
3451 Michelhausen  
Austria

T +43 2275 5875  
E [office@brucha.com](mailto:office@brucha.com)

## SERVICES

- > Assemblies for special and cold room construction
- > Maintenance and service
- > BRUCHA Food Engineering

*United Kingdom/Ireland*  
Platinum Panel Systems Ltd

T +44 (0)1744 747580  
E [info@platinumpanelsystems.com](mailto:info@platinumpanelsystems.com)  
**[platinumpanelsystems.com](http://platinumpanelsystems.com)**

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All information is considered to be subject to errors in composition or printing errors.