

Business Line Sandwichpanelen by Cladding Point



PIR hardfoam (concealed mounting)

Fire-resistant sandwich panels Façade Applications

Technical Information



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DISCOVER AND EXPERIENCE

ALPHA-PR FX is a concealed fire-resistant hard foam sandwich panel from our Business Line range with a standard working width of 1050mm. The sandwich panel is available in 4 different (exterior) profiles and 2 (interior) profiles and can be used both vertically and horizontally. Discover the possibilities in Simplicity and Security.













At Cladding Point we take responsibility, that's why we work hard on things that really matter. By using responsible materials in our sandwich panels, we strive for a Circular Construction Economy.

And how we work with our suppliers? We ensure that we have a positive impact on everyone we do business with, based on fairness and equality.

We realize that it will not be easy, but waiting is not an option. Together we build a better future.

ALPHA-PR FX PIR hardfoam (concealed mounting)

Working width

This product is available as standard in a working width of 1050mm and on request in 1000mm.

Thermal efficiency

ALPHA-PR FX has a fire-resistant hard foam core with PIR technology. This with a density of 40kg/m3, completely HCFCfree. The insulation values of the sandwich panels have been calculated in accordance with NEN-EN 10211-1, NTA 8800 and EN 14509 (including

fasteners, transition resistances and construction quality correction factor).

Fire class

ALPHA-PR FX complies with the European fire classification B-s2-d0 (100mm) and B-s1-d0 (120mm) in accordance with EN 13501-1. This product is equipped with an FM approval hard foam core.

Fire resistance

For more information about the fire performance of the ALPHA-PR FX sandwich panel; see conditions table on page 4.

Air permeability

The air permeability with regard to the seam connection in accordance with EN 12114.

	Positive (+)	Negative (-)		
С	0,086	С	0,1616	
n	0,6638	n	0,5103	

C = Air flow coefficient n = Air flow exponent

A.d.h.v. the above assessment we can conclude that the contribution of the sandwich panels,

i.e. the mutual seam connection, the total air permeability of a building is limited.

To meet the requirements, it is particularly important that extra attention is paid to finishing the connecting joints with other materials. This includes window and door frames, penetrations, other facade and day openings, floor and roof connections and the like.

The building decree only sets requirements at building level. This concerns the so-called qv10 value. I.e. the leakage loss through the complete building envelope in dm³/s per m² of usable area.

There are therefore no specific requirements for the facade panels (individual materials). This product meets the requirements in accordance with the Building Decree.

Water

Water vapor permeability is impermeable. Water permeability Class A-1200 Pa.

Statics

To correctly determine the static capabilities of this product, please contact our technology department. We recommend that you use pressure distribution plates during installation.

Management systems

The ALPHA-PR FX sandwich panels are produced under the following management system: EN ISO 9001.

General certifications

ALPHA-PR FX is manufactured from the highest quality materials and meets the strictest standards and quality controls. This product is CE and Dibt (zulassung) certified.

Length

Product Lengths	Possible up to 16.000mm		
Length (standard)	2.000mm - 13.500mm		
Length* (not standard)	400mm – 2.000mm 13.500mm – 16.000mm		

* Additional costs and transport surcharges may apply. Ask about the options and conditions.

Tolerances

Façade Connection (2mm)	+2mm	-2mm
Length <u><</u> 3000mm >3000mm	+5mm +10mm	-5mm -10mm
Working width	+2mm	-2mm
Thickness (<i>d</i>)<100mm (<i>d</i>)>100mm	+2mm +2%	-2mm -2%
Squareness (s)	<0,6%	

Tolerances are in accordance with EN 14509

Fire-resistant sandwich panels Façade Applications

Exterior coatings

Terracoat 27 μ m is a durable and aesthetically pleasing product and delivers good performance. The UV resistance (RUV3) and increased corrosion protection (RC3) ensure good colour retention.

Granite® HDX (type G) 55µm is a technical, durable and aesthetically high-quality product and delivers very good performance. Excellent UV resistance (RUV4) and increased corrosion protection (RC5) ensure excellent colour retention.

Standard interior coatings

The base coating is polyester $25\mu m$ and suitable for standard indoor environments. This interior coating made of polyester (PE) can be used on facades, roofs and ceilings, related parts and accessories.

The interior coating can also be carried out on request in a suitable coating for the food sector, agricultural sector, wet areas and an aggressive environment. On request, this product is also available in stainless steel 304/316.

Complete overview of coatings/colours

View all coatings and colour options in our colour palette.

Guarantee

Standard 10 year manufacturer's warranty on structural and thermal performance. Coating warranty with a possibility of up to 40 years (depending on the type of coating and project-specific information).

Project-specific guarantees are possible and upon request.

Deliveries

Our deliveries from the Business Line are unloaded free of charge and are largely transported by road transport and are based on Lean and Green and Euro 6-7.

Assembly instructions

Our installation instructions can be downloaded from our website or available from Cladding Point Technical Services. The 3-D models are included in the Tekla library: www.tekla.com

Technical Information

Product name

Product name of our manufacturer Pruszynski for this product is PWS PIR PL and is stated as such on the relevant certificates. Ask about the conditions and possible additional costs for the above-mentioned certifications.



Circular Construction Economy

Cladding Point believes it is important that the Circular Construction Economy is also measurable. That is why we have chosen to draw up an EPD for a large portion of our products.

An EPD (Environmental Product Declaration) gives the customer insight into how sustainable our sandwich panels are. In the Netherlands we also use the EPDs to calculate how much environmental damage a building causes compared to its surroundings. This is done in the environmental performance for buildings calculation, also known as the MPG.

The Business Line PR sandwich panels are not included in our Circular Construction Economy concept.

The sandwich panels from Business Line ARpanel and Brucha can provide the desired solution for reducing the environmental damage of your building. What is special is that these products have an EPD with a category I card that complies with the regulations of the RVO. This is the highest achievable level. If you apply this in a circular building you can achieve substantial tax benefits. You should always contact Cladding Point for advice on this.

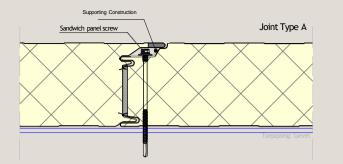


Fire-resistant Properties

Panel	Thick ness [mm]		Fire Reisstance [EN 13501-2]	Mutual joint connection				tion		
Туре		Facade	Partition Wall	Ceiling	Horizontal	Vertical	Ceiling	Horizontal	Vertical	Ceiling
				Heating dire	ction from ins	ide to outside	e (i → 0)			
ALPHA-PR FX 3501-1 Fire Class B-s1-d0	<u>></u> 120	EI 15	EI 15	-	7.500	-	-	JointType A	-	-
		EVV 20	EVV 20	-	7.500	-	-	JointType A	-	-
		-	EI 20	-	7.500	-	-	JointType A	-	-
		EVV 30	EVV 30	-	7.500	-	-	JointType A	-	-
-PR Cla		EI 30	EI 30	-	7.500	-	-	JointType A	-	-
HA	Heating direction from outside to inside $(o \rightarrow$				e (0→i)					
ALPI EN 13501-1	<u>></u> 120	El 15ef	-	-	7.500	-	-	JointType A	-	-
		EVV 30ef	-	-	7.500	-	-	JointType A	-	-
		El 30ef	-	-	7.500	-	-	JointType A	-	-
		EVV 60ef	-	-	6.000	-	-	JointType A	-	-
		El 60ef	-	-	4.000	-	-	JointType A	-	-

* Concerns max. fire-resistant spans. Static overvoltages must be tested separately.

Mutual joint connection





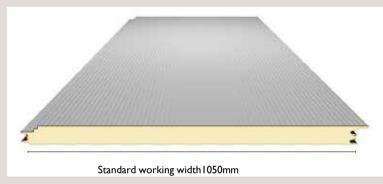


Technical Properties

ALPHA-PR FX	
Thickness (mm)	120
Total panel weight (kg/m²) Outer plate thickness 0.5 mm Inner plate thickness 0.5 mm	12,60
Noise Reduction (Rw (C,Ctr) dB)	~25 (-3;-5)
Rc-Value (m².K/VV), NTA 8800	5,72



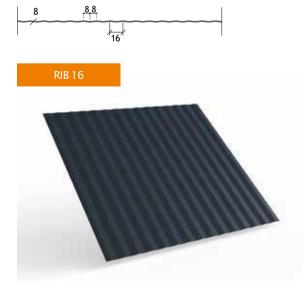
Cross Section Panel

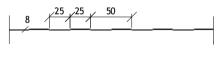


Connection (concealed mounting)



Profiling













UNPROFILED



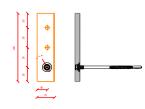
PROFILING	EXTERIOR	INTERIOR
Rib 16	Yes	No
Minibox	Yes	No
Box	Yes	No
Unprofiled	No	No*

*On request.



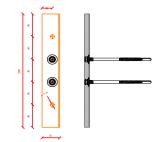
ALPHA-PR FX PIR hardfoam (concealed mounting)

Initial Laying-up: Minimum distance from the first screw to the panel edgeEr = 25 mm



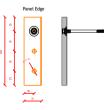
Pressure distribution plate Alpha-PR FX Dimensions: 120* 31* 9* 1,5 Item no.: 1008906

Interim Imposition: - Screws into the middle two holes of the pressure distribution plate - If it is a cantilever, it is assessed as an intermediate support



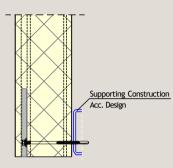
Pressure distribution plate Alpha-PR FX Dimensions: 200* 31* 9* 1,5 Item no.: 1009059

Final Impositions: Minimum distance from the first screw to the panel edge Er = 25 mm

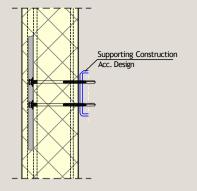


Pressure Distribution plate Alpha-PR FX Dimensions: 120*31*9*1,5 Item no.: 1008906

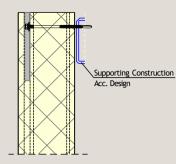
Initial Laying-up:

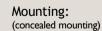


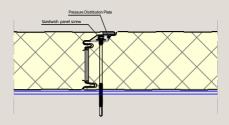
Interim Imposition: Er = 500 mm (minimum)



Final Impositions:















Do you want to know more?

Cladding Point is continuously improving and testing its products. New test results are added on a regular basis. Should the desired specifications, with any associated conditions, apply to your project

applies, are not included in the manual, please contact the technical department for the options and/or the latest status. In many cases we can offer you a suitable solution.

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