



Business Line  
Sandwichpanelen  
*by Cladding Point*

**BETA-AR (KV) FX**

PIR rigid foam (visible fixing)



Fire-resistant sandwich panels  
Facade, partition wall and ceiling  
applications

Technical Information

# BETA-AR (KV) FX

PIR rigid foam (visible fixing)

**Business Line**  
Sandwichpanelen  
*by Cladding Point*



## DISCOVER AND EXPERIENCE

BETA-AR (KV) FX is a visibly attached fire-resistant rigid foam sandwich panel from our Business Line range with a standard working width of 1150mm. The sandwich panel is available in 4 different (exterior) profiles and 3 (interior) profiles and can be used both vertically and horizontally. The abbreviation KV stands for KoelVries application (see labyrinth connection thickness 120-200mm). With this product, we contribute to the Circular Construction Economy. Discover the possibilities in simplicity and certainty.



For the climate



Corporate Responsibility



Circular construction economy



Building together

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

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

We realize it won't be easy, but waiting is not an option. Together we are building a better future.



### Working width

This product is available in a working width of 1150mm as standard and available in 1100mm and 1000mm on request.

### Thermal efficiency

BETA-AR (KV) FX has a fire-resistant hard foam core with the PIR technology. This with a density of 40kg/m<sup>3</sup>, completely HCFC-free. 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 correction factor for construction quality).

### Fire class

BETA-AR (KV) FX complies with the European fire classification B-s1-d0 in accordance with EN 13501-1. This product is equipped with an FM approval rigid foam core.

### Fire resistance

For more information on the fire performance of the

BETA-AR (KV) 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 (-)	
C	0,2630	C	0,0227
n	0,5313	n	0,4764

C =Airflow coefficient  
n =Airflow exponent

Based on the above assessment, we can conclude that the contribution of the sandwich panels, i.e. the interseam connection to the total air permeability of a building is limited.

In order to meet the requirements, it is particularly important that extra attention is paid to finishing the connection joints with other materials. You can think of window and door frames, penetrations, other façade and day openings, floor and roof connections and the like.

The Building Decree only sets requirements at building level. This is the so-called qv10 value. In other words, the leakage loss through the entire building envelope in dm<sup>3</sup>/s per m<sup>2</sup> of usable area. There are therefore no specific requirements for the façade panels (individual materials). This product meets the highest requirements in accordance with the Building Decree.

### Water

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

### Statics

For a correct determination of the static capabilities of this product, please contact our technical department.

### Environment

The BETA-AR (KV) FX sandwich panels can be used in the Environmental Performance Calculation.

The data for this can be found in the National Environmental Database at [www.milieudatabase.nl](http://www.milieudatabase.nl).

We also have the BES 6001(Excellent) certificate. Ask about the possibilities.

### Management systems

The BETA-AR (KV) FX sandwich panels are produced under the following management systems; EN ISO 9001, EN ISO 45001 and EN ISO 14001.



### 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 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 environment. This is done in the environmental performance for buildings calculation, also known as the MPG.

By selecting this sandwich panel, you reduce the environmental damage of your building. What is special is that our products have an EPD with a category 1 card that complies with the regulations from the RVO. This is the highest achievable level. When you apply this product in a circular building, you can achieve substantial tax benefits. Ask about the possibilities.



If you choose this sandwich panel in combination with our circular Cirpa® concept, you significantly reduce the environmental damage and achieve a better result in an MPG computation. By demonstrating circularity, we achieve the highest achievable level in the field of sustainability! This unique data is included in a unique EPD sheet that belongs to this product as soon as you choose the Cirpa® concept. When you apply this sandwich panel in a circular building, the building owner can directly obtain substantial tax benefits through the MIA subsidies of the RVO. The Cirpa® concept does not apply to this product by default. Ask about the possibilities or look at [www.cirpa.nl](http://www.cirpa.nl).

### General Certifications

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

### Lengths

Production lengths	Possible up to 18.500mm
Lengths (standard)	2.000mm - 13.500mm
Lengths* (non-standard)	400mm - 2.000mm 13.500mm - 18.500mm

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

### Tolerances

Joint connection (2mm)	+2mm	-2mm
Lengths ≤3000mm >3000mm	+5mm	-5mm
	+10mm	-10mm
Working width	+2mm	-2mm
Thickness (d)≤100mm (d)>100mm	+2mm	-2mm
	+2%	-2%
Squareness (s)	<0,6%	

Tolerances are in accordance with EN 14509

### Standard Exterior Coatings

The base coating is polyester 25µm and suitable for standard indoor environments. This polyester (PE) interior coating can be used on façades, roofs and ceilings, related parts and accessories.

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

Terracoat 27µm 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 pleasing 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 25µm and suitable for standard indoor environments. This polyester (PE) interior coating can be used on façades, roofs and ceilings, related parts and accessories.

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

### Total 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 guarantee with a

Possibility of up to 40 years (depending on the type of coating and project-specific information). Project-specific guarantees are possible and on request.

### Supplies

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

### Assembly Instructions

Our assembly 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](http://www.tekla.com)

### Product Name

Product name of our manufacturer ARpanel for this product is S PIR (40-100mm) and CH PIR (120-200mm) is therefore mentioned as such on relevant certificates. Ask about the conditions and any additional costs for the above certifications.

## Fire-resistant properties

Type panel	Thick-ness [mm]	Fire resistance [EN 13501-2]			Max. overvoltage [mm.]* [EN 14509]		
		Facade	Dividers	Ceiling	Horizontal	Vertical	Ceiling
<b>BETA-AR (KV) FX</b> EN 13501-1 Brandklasse B-s1-d0	Heating direction from both sides (i o) Caution! Ceiling (a b)						
	≥ 60	EI 15	EI 15	EI 15	-	4.000	2.000
	≥ 80	EI 15	EI 15	EI 15	4.000	4.000	2.000
		EW 20	EI 20	-	4.000	4.000	2.000
	≥ 100	EW 20	EW 20	EI 15	7.500	7.500	5.850
		-	EI 20	-	7.500	7.500	-
		EW 30	EW 30	-	4.000	4.000	-
	≥ 120	EI 30	EI 30	EI 30	4.000	4.000	2.000
		EW 20	EW 20	EI 15	7.500	7.500	5.850
		-	EI 20	-	7.500	7.500	-
		EW 30	EW 30	-	4.000	4.000	-
	≥ 140	EI 30	EI 30	EI 30	4.000	4.000	2.000
		EW 30	EW 30	-	6.000	7.500	-
		EI 30	EI 30	EI 30	4.000	4.000	2.000
	≥ 160	EW 30	EW 30	-	7.500	7.500	-
		EI 30	EI 30	EI 30	4.000	7.500	2.000
	≥ 200	EW 30	EW 30	-	7.500	7.500	-
EI 30		EI 30	EI 30	7.500	7.500	2.000	
-		EI 45	-	4.000	4.000	-	
	EW 60	EW 60	-	-	6.000	-	

Always ask for the conditions regarding the installation and/or the fire report.  
\* Concerns max. fire-resistant spans. Static spans must be tested separately.

Technical characteristics

BETA-AR FX	KV ❄️						
Thickness (mm)	60	80	100	120	140	160	200
Total weight panel (kg/m <sup>2</sup> )							
Outer plate thickness 0.5 mm	10,70	11,60	12,70	13,10	13,80	14,50	15,90
Inner plate thickness 0.5 mm							
Noise reduction (Rw (C,Ctr) dB)	-25 (-2;-4)	-25 (-2;-4)	-25 (-2;-4)	-24 (-2;-4)	-24 (-2;-4)	-24 (-2;-4)	-24 (-2;-4)
Rc value (m <sup>2</sup> .K/W), NTA 8800	2,81	3,86	4,88	5,92	6,93	7,95	9,97

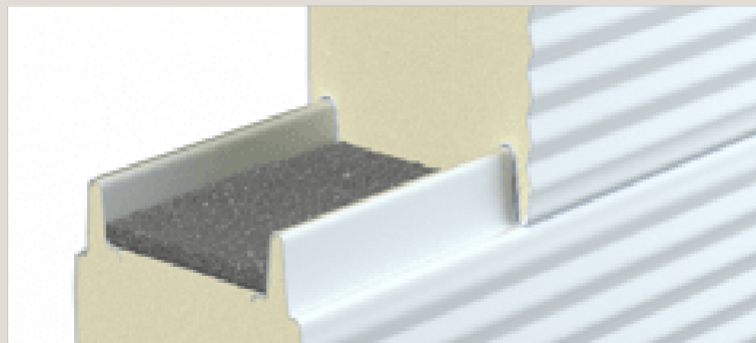
Panel diameter (thickness 60 - 100mm)



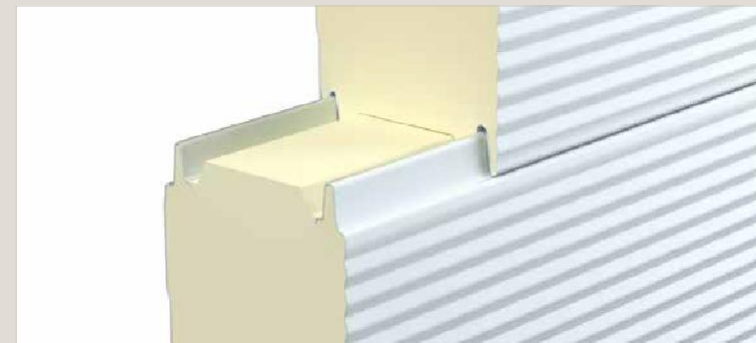
Panel cross-section (thickness 120 - 200mm)



Connection (visible fastening, thickness 60 - 100mm)

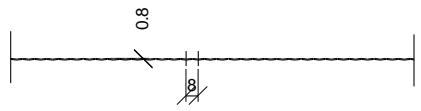


Connection (visible fastening, thickness 120 - 200mm)

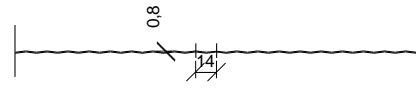
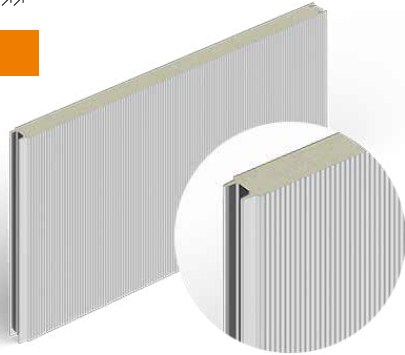


# Profiling

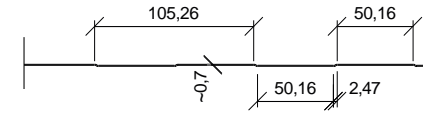
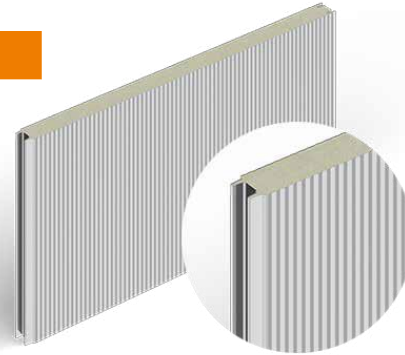
BETA-AR (KV) **FX** PIR rigid foam (visible fixing)



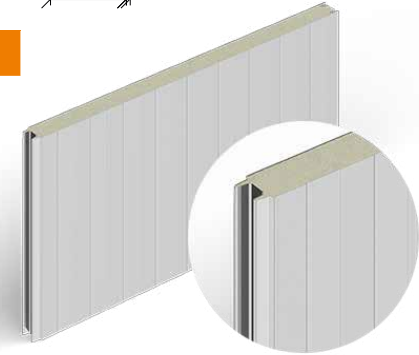
RIB 8



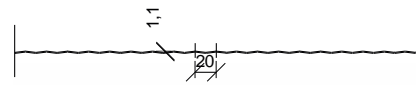
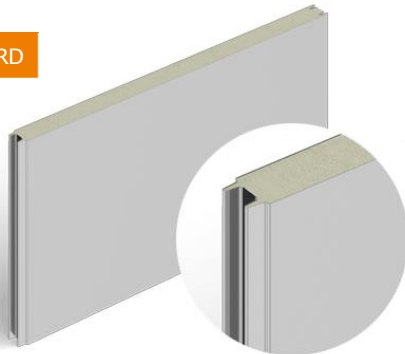
RIB 14



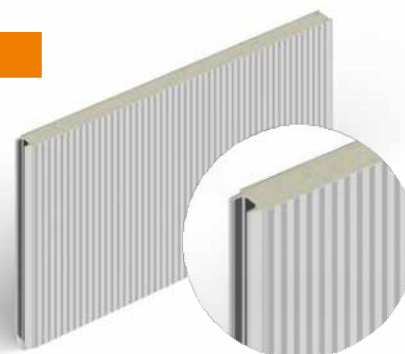
BOX



ONGEPROFILEERD



RIB 20

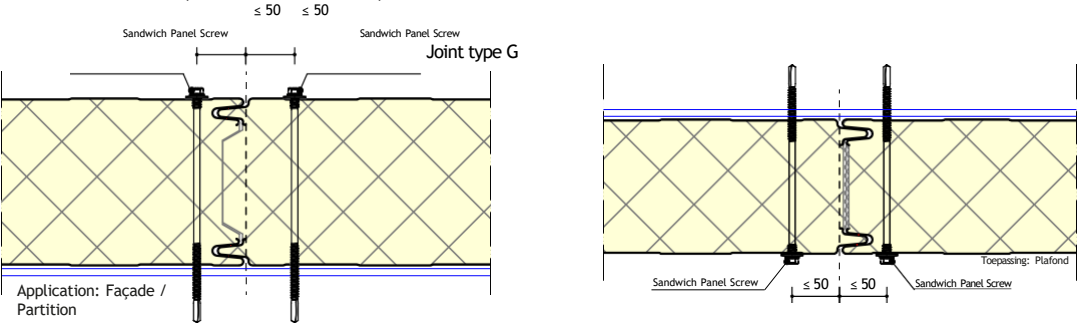


PROFILING	EXTERIOR A-SIDE	INTERIOR B-SIDE
Rib 8	Yes	No
Rib 14	Yes	No
Box	Yes	Yes
Ongeprofileerd	Yes*	Yes
Rib 20	No	Yes

\*On request



Confirmation (visible confirmation)

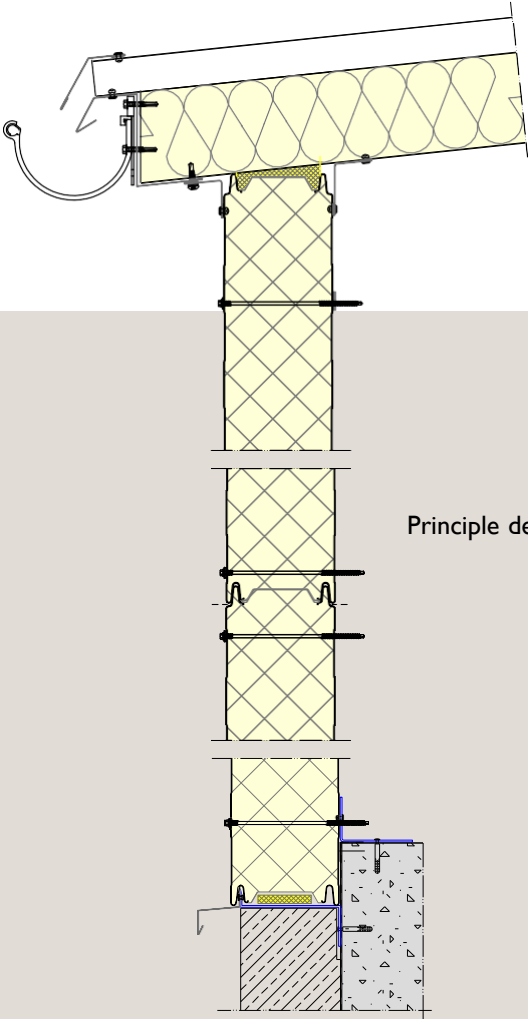
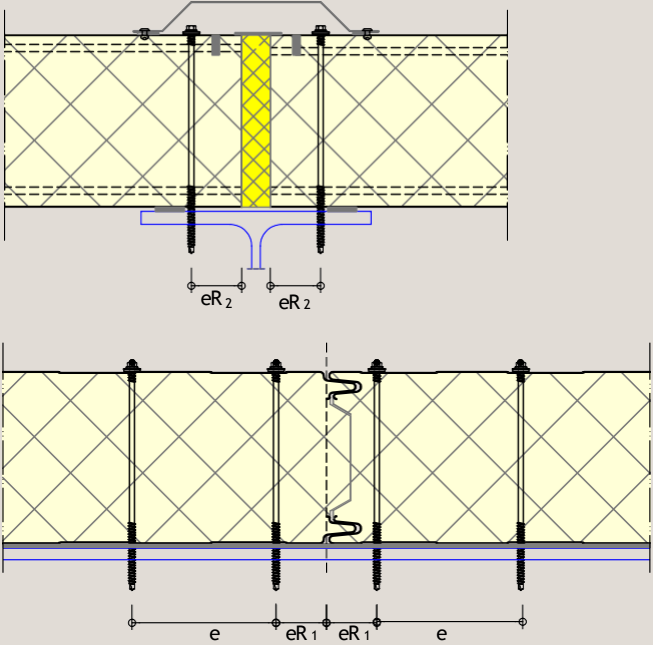


Always ask for the conditions regarding the installation and/or the fire report.

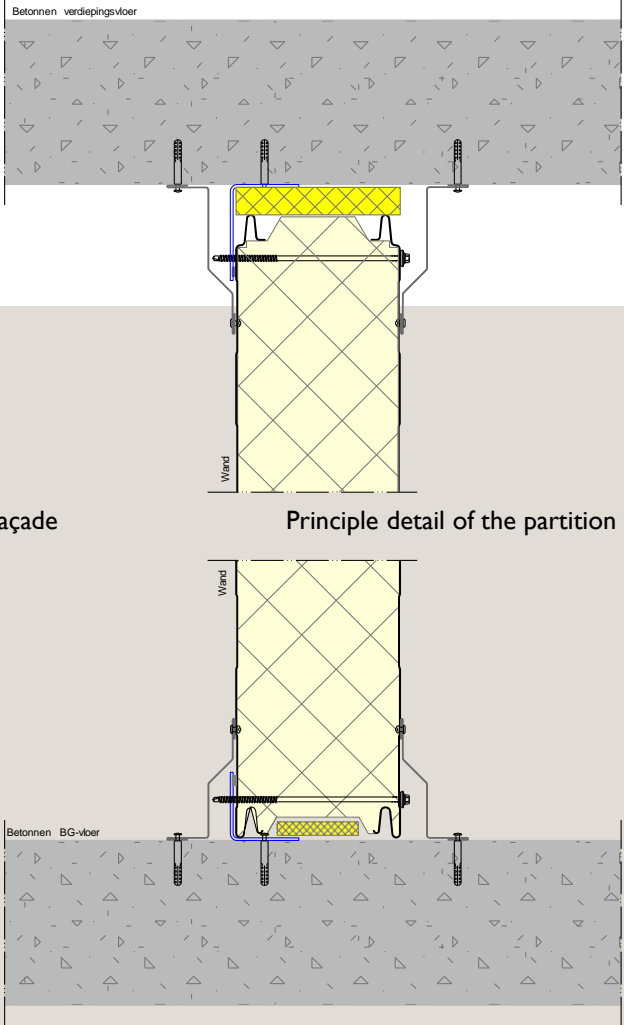
Confirmation methodology

Screw spacing	Distance between them (e)	From panel edge (eR)
Perpendicular to mounting direction (see illustration)	≥ 100mm	≥ 50 mm (eR <sub>1</sub> )
Parallel to mounting direction	H.o.h. remote support	≥ 20 mm & ≥ 3 d (eR <sub>2</sub> )

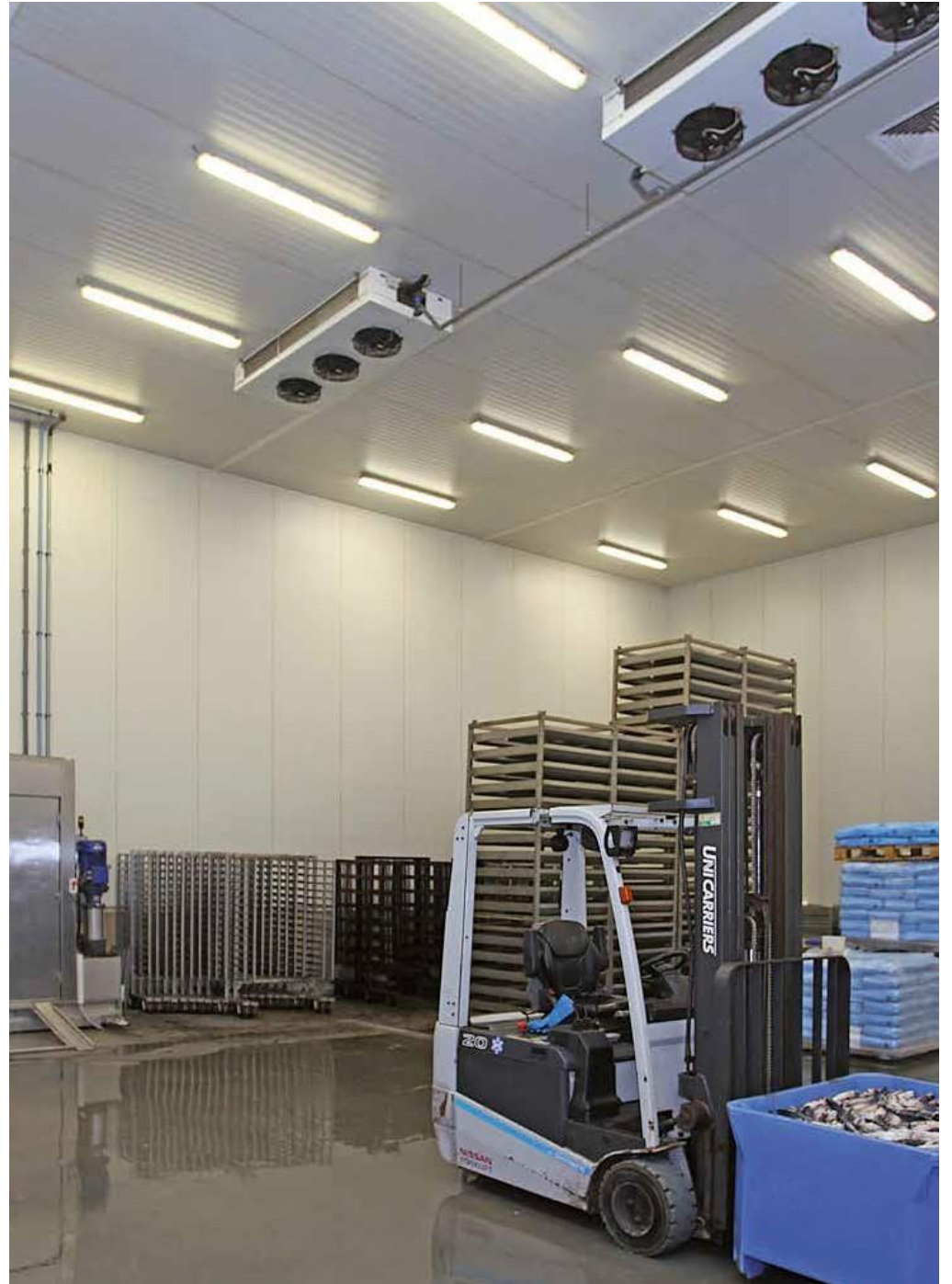
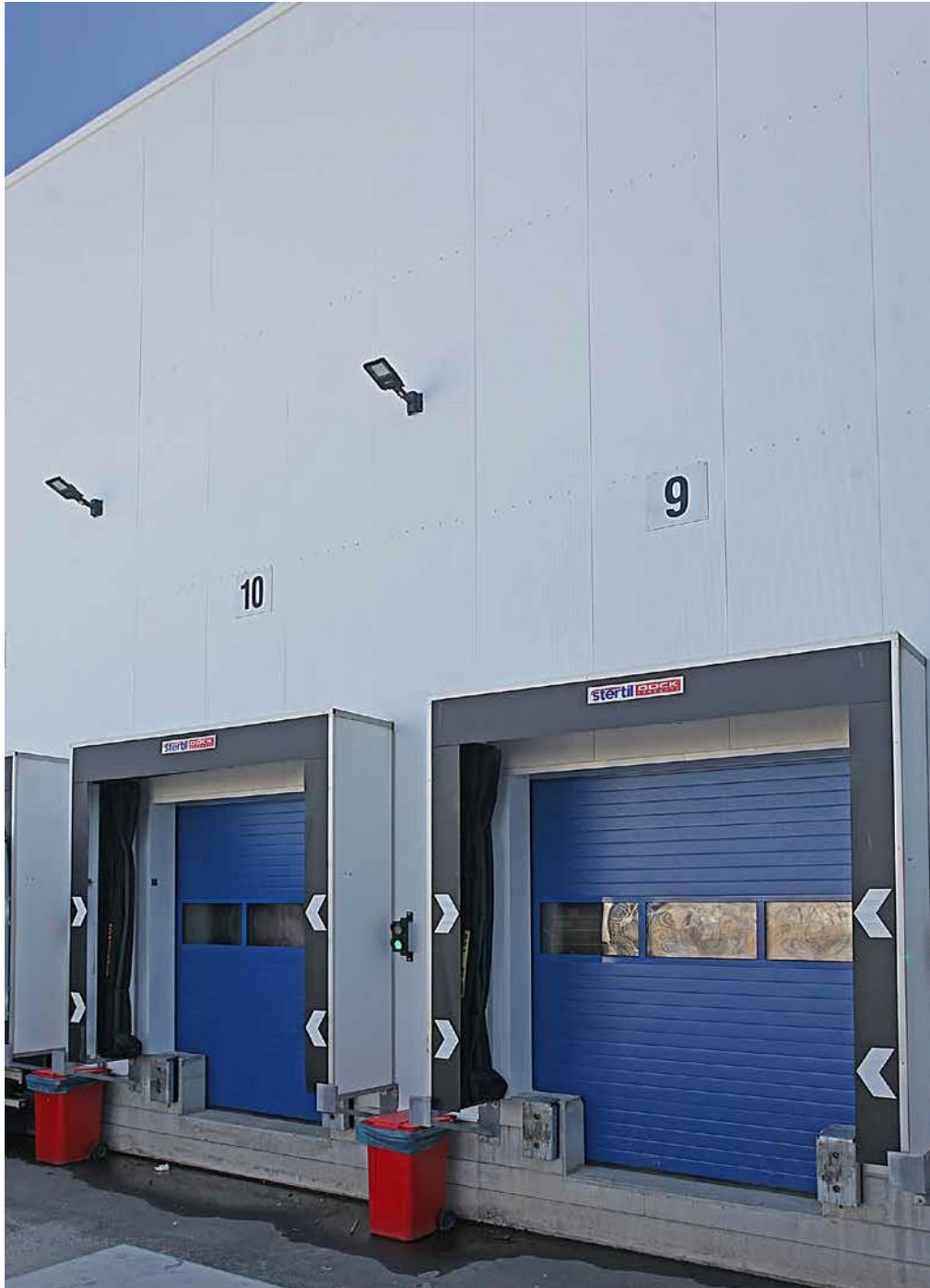
d: Screw diameter



Principle detail façade



Principle detail of the partition wall







### 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 fire resistance with any associated conditions, which apply to your project are not included in the manual, please contact the technical department for the possibilities and/or the latest state of affairs. In many cases, we can offer you a suitable solution.

**Business Line**  
Sandwichpanelen  
*by Cladding Point*

Platinum Panel Systems LTD  
T: [+44 \(0\) 1744 747580](tel:+44201744747580)  
E: [Info@platinumpanelsystems.com](mailto:Info@platinumpanelsystems.com)

