



Carrier Panels System

# Carrier Panels System

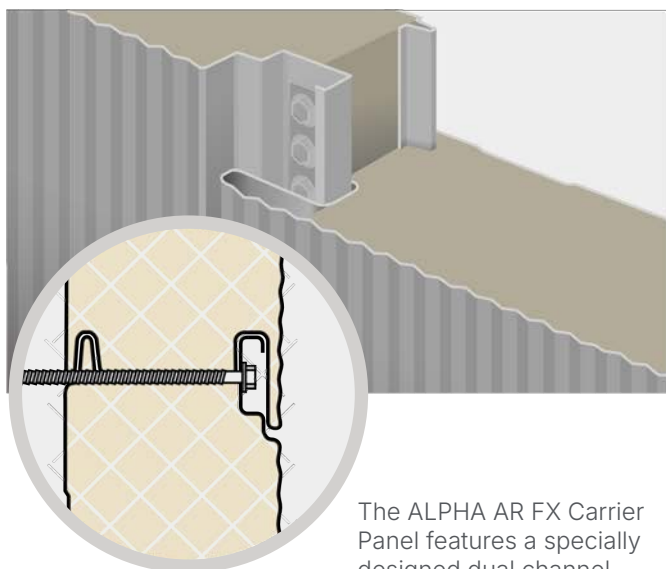
The Carrier panel system can act as a base to a variety of facade designs having been developed for a quick and reliable assembly process.

Carrier panels include specially design slots which join together allowing rapid-build construction substrate. These slots also act to seal the panels which, in combination with the core material, effectivley insulate the building. The assembled panels, fittings and components are simpler than other build up options and act as an effective substrate for applying traditional standing seam, intalok reveal panel or other facade systems.

These premium carrier panels are available in two formats, BETA AR FX with through fixings suitable for adding facade rails and ALPHA AR FX which is designed with a concealed fixing profile for flush face applications. Both panels types can be supplied with PIR Rigid Foam (KV) or Mineral Wool (MW) insulation.

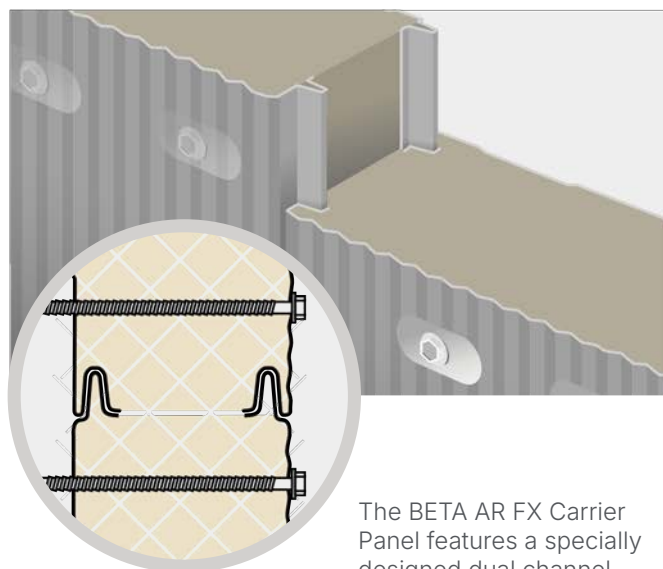
Panels can be installed horizontally or vertically and whilst they are supplied in standard sizes they can also be manufactured in various lengths, widths and thinknesses to meet your project requirments.

## ALPHA AR FX Carrier Panel



The ALPHA AR FX Carrier Panel features a specially designed dual channel profile with slot for bolt screws. This effectively conceals the fittings, providing a flush surface for facade cladding or standing seam.

## BETA AR FX Carrier Panel

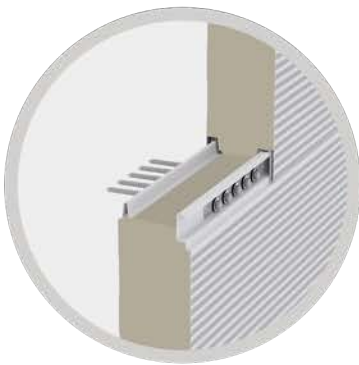
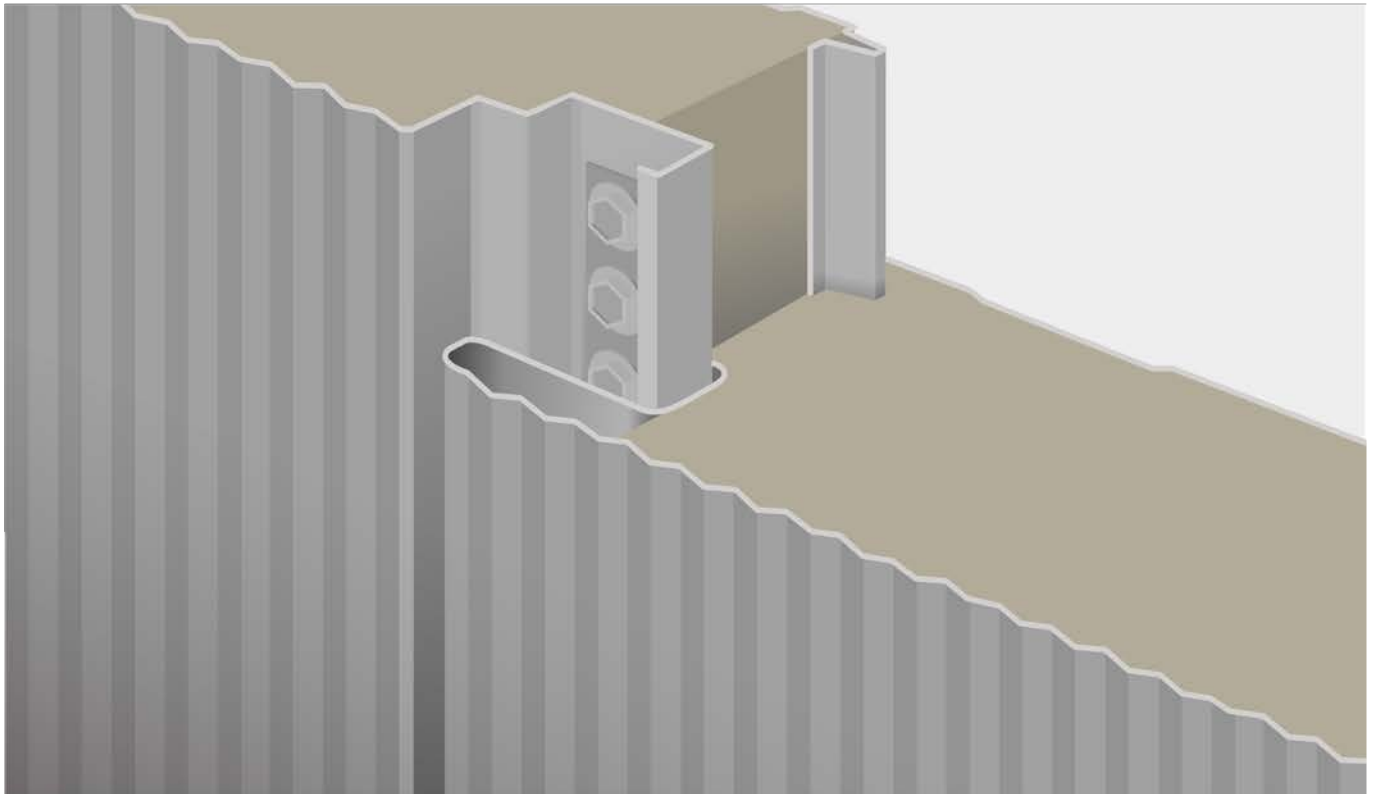


The BETA AR FX Carrier Panel features a specially designed dual channel profile for locking panels together which seals joints effectively. Use countersunk load spreading washers for flush fitting applications.



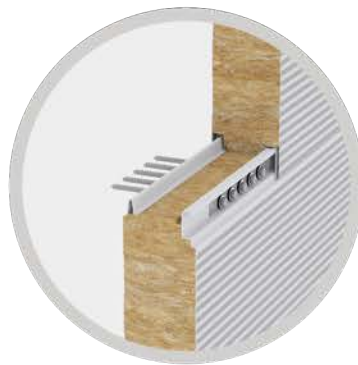
# ALPHA AR FX Carrier Panel

Premium carrier panel with hidden fixing method, available with a rigid PIR insulation (KV) or mineral wool insulation (MW) option



ALPHA AR FX Features

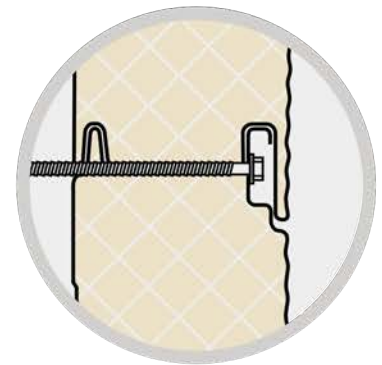
- Quick and simple assembly process
- Concealed fittings
- 1000mm Standard Width
- 120mm Standard Thickness
- 2m-13.5m Standard Lengths
- Vertical or horizontal facade applications
- Thermally Efficient
- Fire Resistant
- Air tight and water tight
- 10 year manufacturer's warranty



ALPHA AR FX Introduction

The Premium ALPHA AR FX Carrier Panel features a specially designed dual channel profile with slot for bolt screws. This effectively conceals the fittings, providing a flush surface for facade cladding or standing seam.

Available in two insulation options, both cores choices are warm, weather tight and fire resistant. Comes with a standard 10 year manufacturer's warranty on structural and thermal performance and a coating guarantee up to 40 years.



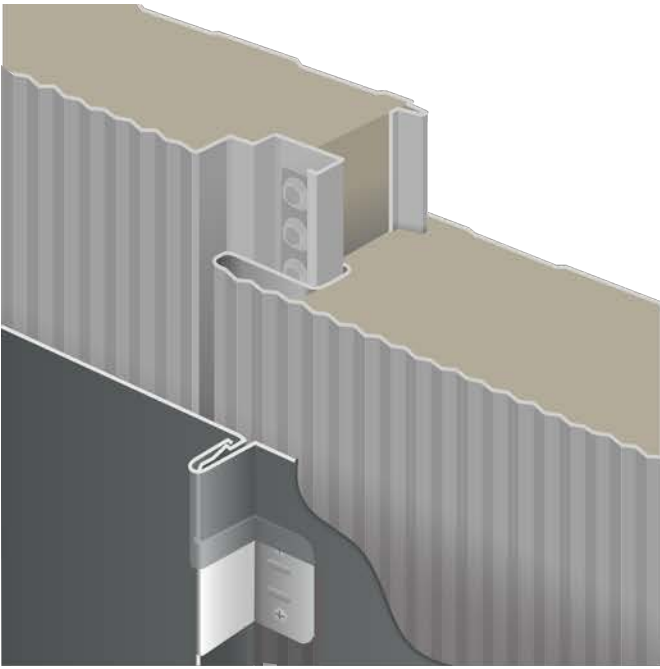
ALPHA AR FX Coatings

## Exterior coatings

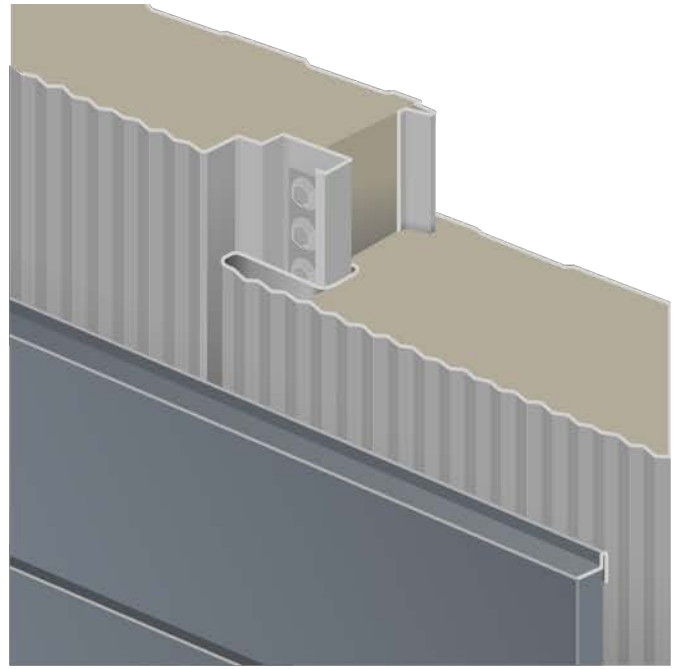
Durable and attractive, the exterior coating delivers good performance in both UV resistance and corrosion protection, ensuring great colour retention.

## Standard interior coatings

Base polyester coating is suitable for most regular indoor environments and can be used on facades, roofs and ceilings.



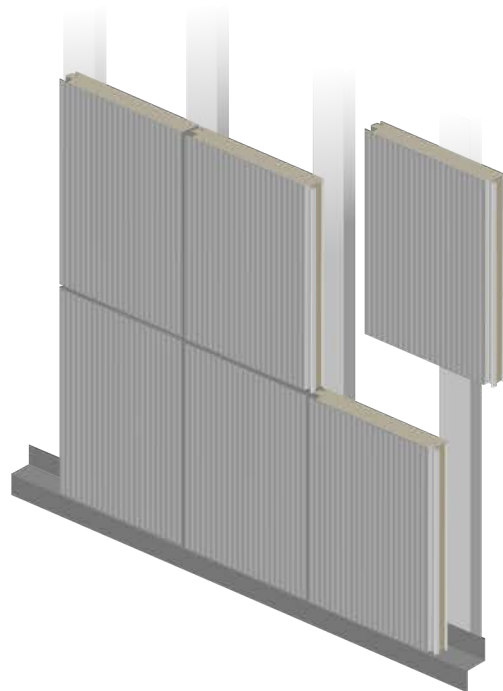
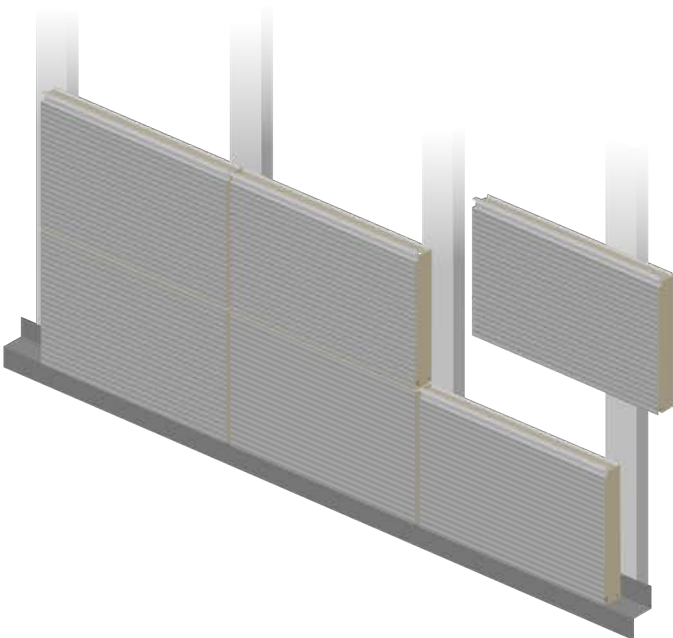
Snaplock® Standing Seam applied to ALPHA AR FX Carrier Panel



Intalok® Reveal Panels applied to ALPHA AR FX Carrier Panel

*Install Horizontally*

*Install Vertically*



*These Carrier Panels are the standard specification however they may also available in different thicknesses, widths and lengths. Non standard coatings and materials are also available for specialist applications such as food and agricultural sectors, wet areas or other aggressive environments. If you have special requirements, contact our technical team for advice and guidance.*

# Premium ALPHA AR FX (KV) PIR Rigid Hard Foam Carrier Panel

## Working width

This product is available as standard in a working width of 1000mm and on request in 900mm.

## Thermal efficiency

Premium ALPHA AR FX (KV) Carrier Panel has a fire-resistant hard foam core with 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 construction quality correction factor).

## Fire class

Premium ALPHA AR FX (KV) Carrier Panel complies with the European fire classification B-s1-d0 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 Premium ALPHA AR FX (KV) Carrier Panel see table.

## Air permeability

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

Positive(+)		Positive(-)	
C	0,1136	C	0,2451
n	0,2931	n	0,1187

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 dm<sup>3</sup>/s per m<sup>2</sup> of usable area.

There are therefore no specific requirements for the facade panels (individual materials). This product meets the highest 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.

## Environment

The Premium ALPHA AR FX (KV) Carrier 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).

## Management systems

The Premium ALPHA AR FX (KV) Carrier Panels are produced under the following management systems; EN ISO 9001, EN ISO 45001 and EN ISO 14001.

## General certifications

The Premium ALPHA AR FX Carrier is manufactured from the highest quality materials and meets the strictest standards and quality controls. This product is CE and Dibt(zulassung) certified.

## Lengths

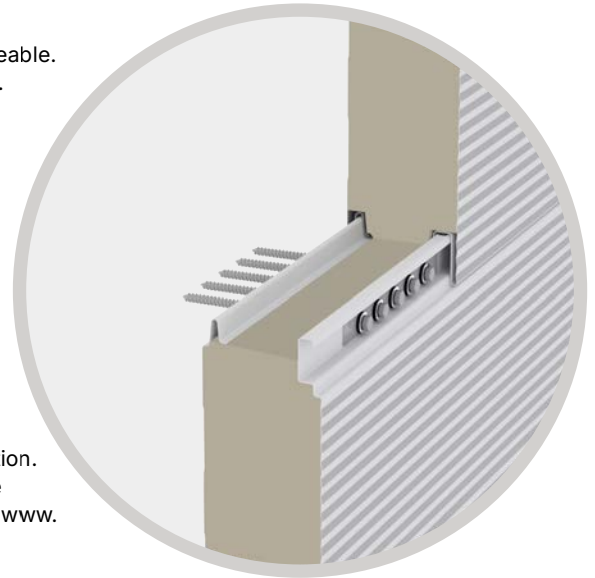
## Tolerances

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

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

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

Tolerances are in accordance with EN14509



## Exterior coatings

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 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 25µm 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.

## Premium ALPHA AR FX (KV) Fire Resistant Properties

### Premium ALPHA AR FX (KV) Carrier

Thickness (mm)	Fire resistance [EN 13501-2]		Max. overspanning [mm.]*[EN14509]	
	Facade	Partition wall	Horizontal	Vertical
Heating direction from inside to outside (i > o)				
≥ 100	EI 15	EI 15	7.500	7.500
	EW 20	EW 20	7.500	7.500
	-	EI 20	4.000	4.000
	EW 30	EW 30	3.000	4.000
	EI 30	EI 30	-	-
≥ 120	EW 30	EW 30	3.000	4.000
	EI 30	EI 30	-	4.000
Heating direction from outside to inside (o > i)				
≥ 100	EI 15ef	-	-	7.500
	EW 30ef	-	-	7.500
	EI 30ef	-	-	3.000
	EW 60ef	-	-	7.500
≥ 120	EW 20	EW 20	-	7.500
	EI 20	EI 20	-	7.500
	EW 30	EW 30	-	4.000
	EW 60ef	-	-	7.500
Heating direction from both sides (i < o)				
≥ 100	EI 15	EI 15	-	4.000
	-	EI 20	-	4.000
≥ 120	EI 30	EI 30	-	4.000

Always ask about the conditions regarding installation and/or fire reporting.

\*Concerns max. fire-resistant spans. Static overvoltage's must be tested separately.

## Premium ALPHA AR FX (KV) Technical Properties

### Premium ALPHA AR FX (KV) Carrier

Thickness (mm)	60mm	80mm	100mm	120mm
Total panel weight (kg/m <sup>2</sup> )				
Outer plate thickness 0.6 mm	11,00	11,70	12,50	13,20
Inner plate thickness 0.5 mm				
Noise Reduction (Rw (C,Ctr)dB)	~25 (-2;-4)	~25 (-2;-4)	~25 (-2;-4)	~25 (-2;-4)
Rc-value (m <sup>2</sup> .K/W), NTA8800	2,40	3,64	4,70	5,72
Thermal Performance (u-values)	0.40	0.29	0.23	0.19

\* Fire resistance applies to thickness 100 and 120 mm.

# ALPHA AR FX (MW) Mineral Wool Carrier Panel

## Working width

This product is available as standard in a working width of 1000mm.

## Thermal efficiency

Premium ALPHA AR FX (MW) Carrier Panel has a mineral wool insulation core. This with a density of 105kg/m<sup>3</sup>. 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

Premium ALPHA AR FX (MW) Carrier complies with the European fire classification A2-s1-d0 in accordance with EN 13501-1. This product is equipped with an FM approval mineral wool core.

## Fire resistance

For more information about the fire performance of the Premium ALPHA AR FX (MW) Carrier Panel; see table.

## Air permeability

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

Positive(+)		Positive(-)	
C	0,149	C	0,164
n	0,672	n	0,666

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 dm<sup>3</sup>/s per m<sup>2</sup> of usable area. There are therefore no specific requirements for the facade panels (individual materials). This product meets the highest 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.

## Environment

The Premium ALPHA AR FX (MW) Carrier 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).

## Management systems

The Premium ALPHA AR FX (MW) Carrier Panels are produced under the following management systems; EN ISO 9001, EN ISO 45001 and EN ISO 14001.

## General certifications

The Premium ALPHA AR FX (MW) Carrier Panel is manufactured from the highest quality materials and meets the strictest standards and quality controls. This product is CE and Dibt(zulassung) certified.

## Lengths

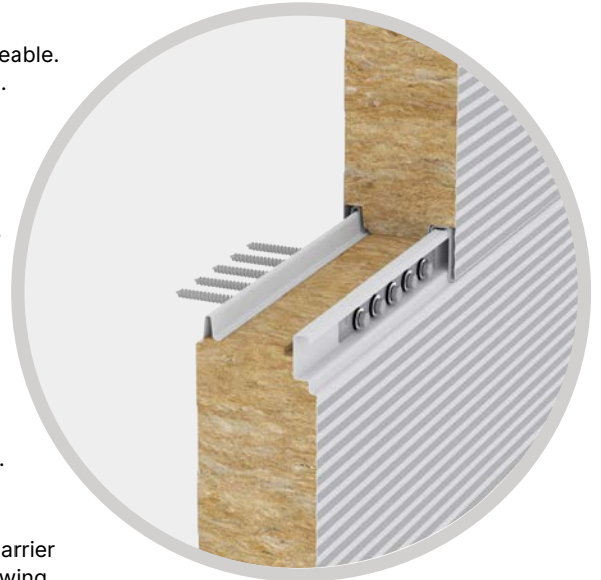
## Tolerances

Production lengths	Possible up to 14.500mm
Length (standard)	2.000mm-13.500mm
Length* (non-standard)	400mm-2.000mm 13.500mm-14.500mm

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

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

Tolerances are in accordance with EN14509



## Exterior coatings

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 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 25µm 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.

## ALPHA AR FX (MW) Fire Resistant Properties

ALPHA AR FX (MW) Carrier				
Thickness (mm)	Fire resistance [EN 13501-2]		Max. overspanning [mm.]* [EN14509]	
	Facade	Partition wall	Horizontal	Vertical
Heating direction from inside to outside (i > o)				
≥ 100	EI 30	-	-	4.000
≥ 120	EI 30	-	-	7.500
≥ 150	EI 60	-	-	7.500
≥ 200	EI 90	-	-	7.500
≥ 240	EI 120	-	-	7.500

Always ask about the conditions regarding installation and/or fire reporting.

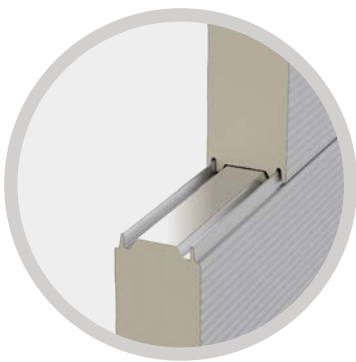
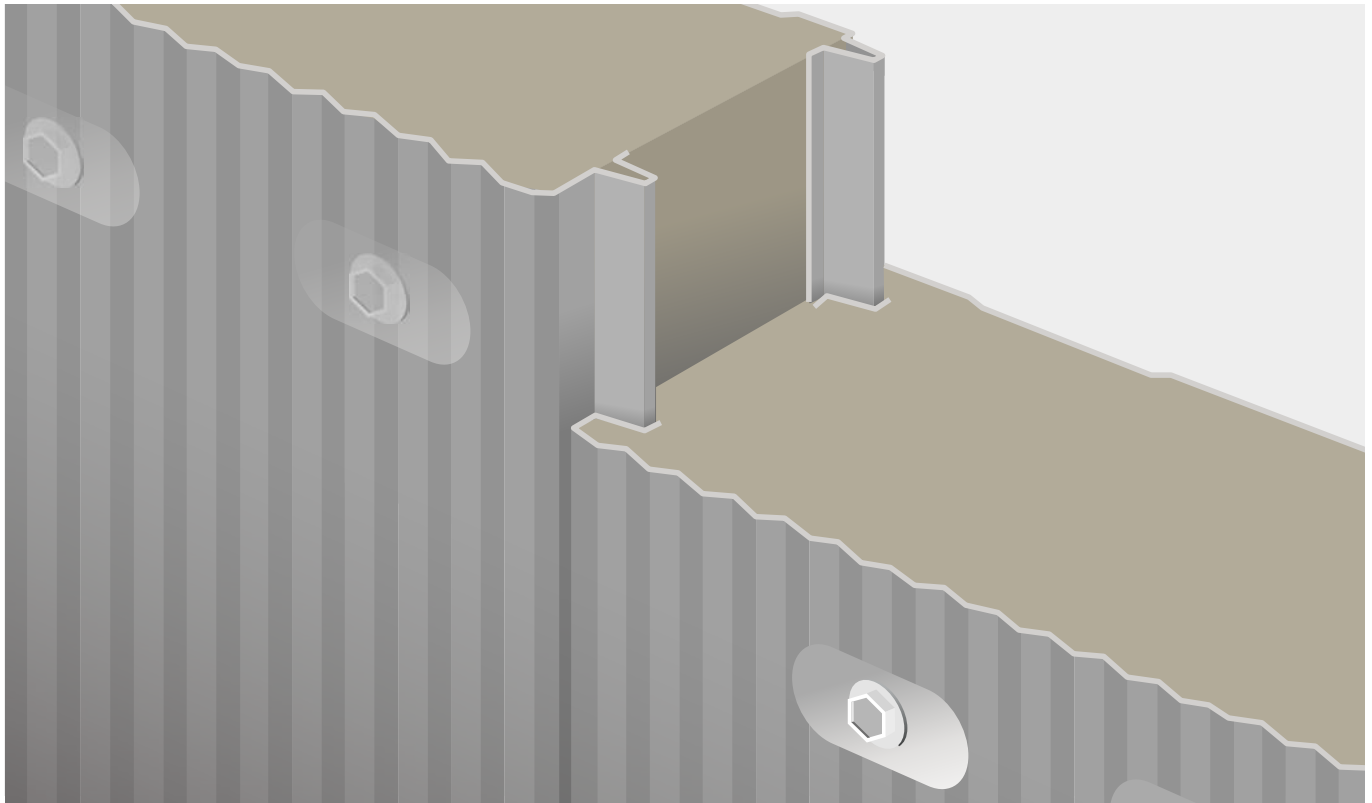
\*Concerns max. fire-resistant spans. Static overvoltage's must be tested separately.

## ALPHA AR FX (MW) Technical Properties

ALPHA AR FX (MW) Carrier					
Thickness (mm)	100mm	120mm	150mm	200mm	240mm
Total panel weight (kg/m <sup>2</sup> )					
Outer plate thickness 0.6 mm	20,50	22,60	25,90	31,30	35,80
Inner plate thickness 0.5 mm					
Noise Reduction (Rw (C,Ctr)dB)	~31 (-2;-3)	~30 (-2;-4)	~31 (-2;-3)	~30 (-2;-4)	~30 (-2;-4)
Rc-value (m <sup>2</sup> .K/W), ALPHA-AR MW FX, NTA 8800	2,35	2,86	3,62	4,88	5,91
Thermal Performance (u-values)	0.40	0.33	-	-	-

# BETA AR FX Carrier Panel

Premium carrier panel with through fixing method, available with a rigid PIR insulation (KV) or mineral wool insulation (MW) options



*BETA AR FX Features*

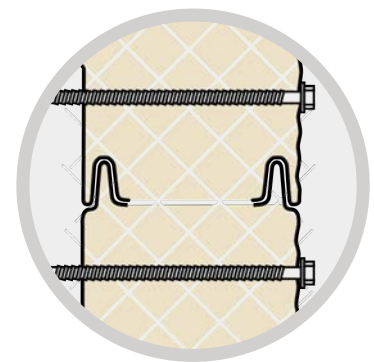
- **Quick & simple assembly process**
- **1150mm Standard Width**
- **120mm Standard Thickness**
- **2m-13.5m Standard Lengths**
- **Vertical or horizontal facade applications**
- **Thermally Efficient**
- **Fire Resistant**
- **Air tight and water tight**
- **10 year manufacturer's warranty**



*BETA AR FX Introduction*

The Premium BETA AR FX Carrier Panel features a specially designed dual channel profile for locking panels together which seals joints effectively.

Available in two insulation options, both cores choices are warm, weather tight and fire resistant. Comes with a standard 10 year manufacturer's warranty on structural and thermal performance and a coating guarantee up to 40 years.



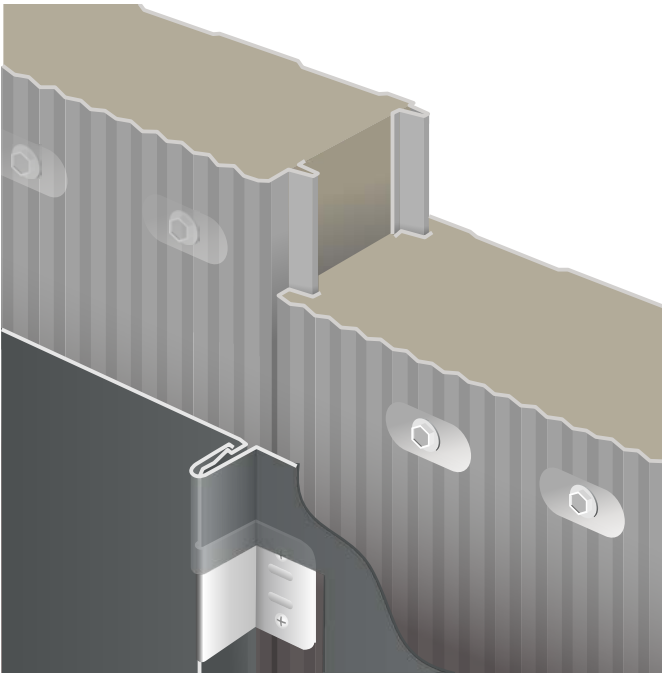
*BETA AR FX Coatings*

## **Exterior coatings**

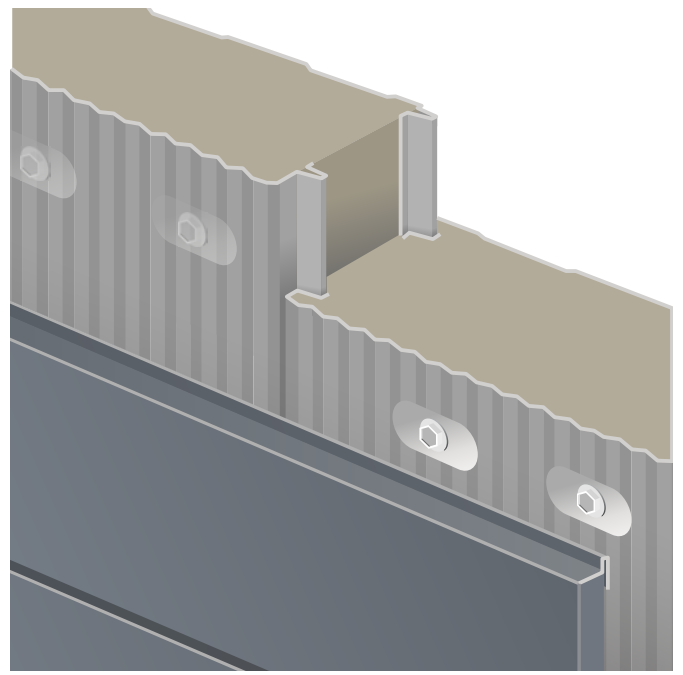
Durable and attractive, the exterior coating delivers good performance in both UV resistance and corrosion protection, ensuring great colour retention.

## **Standard interior coatings**

Base polyester coating is suitable for most regular indoor environments and can be used on facades, roofs and ceilings.

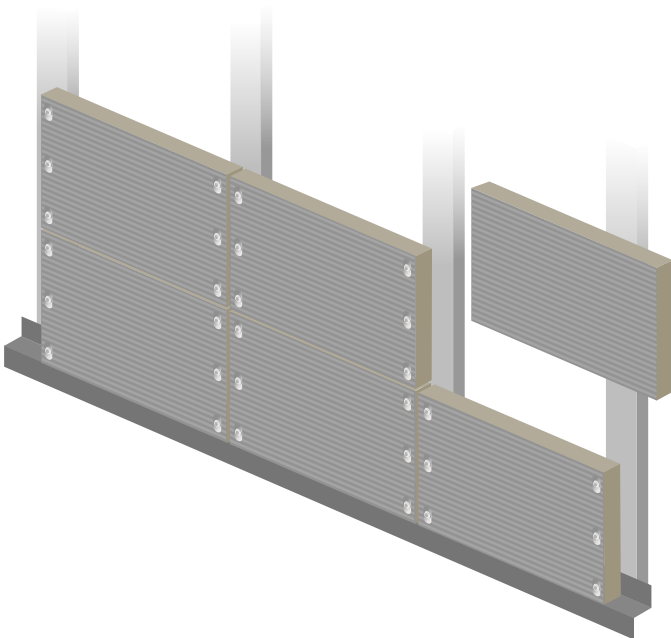


Snaplock® Standing Seam applied to BETA AR FX Carrier Panel

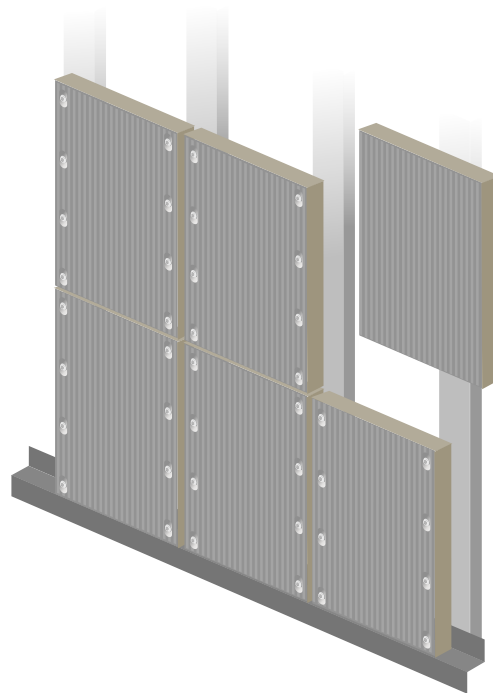


Intalok® Reveal Panels applied to BETA AR FX Carrier Panel

*Install Horizontally*



*Install Vertically*



*These Carrier Panels are the standard specification however they may also available in different thicknesses, widths and lengths. Non standard coatings and materials are also available for specialist applications such as food and agricultural sectors, wet areas or other aggressive environments. If you have special requirements, contact our technical team for advice and guidance.*

# BETA AR FX (KV) Carrier Panel

## Working width

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

## Thermal efficiency

Premium BETA AR FX (KV) Carrier Panel has a hard foam core with 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 construction quality correction factor).

## Fire class

Premium BETA AR FX (KV) Carrier Panel 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 about the fire performance of the The Premium BETA AR FX (KV) Carrier Panel; see table.

## Air permeability

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

Based on the above assessment, it can be concluded that the contribution of the Carrier Panels, i.e. the interseamconnection to the total air permeability of a building is limited. In order to meet the requirements, it is

Positive(+)		Positive(-)	
C	0,2630	C	0,0227
n	0,5313	n	0,4764

C= Air flow coefficient  
n = Air flow exponent

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

## Statics

To correctly determine the static capabilities of this product, please contact our technology department.

## Environment

The Premium BETA AR FX (KV) Carrier 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).

## Management systems

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

## General certifications

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

## Lengths

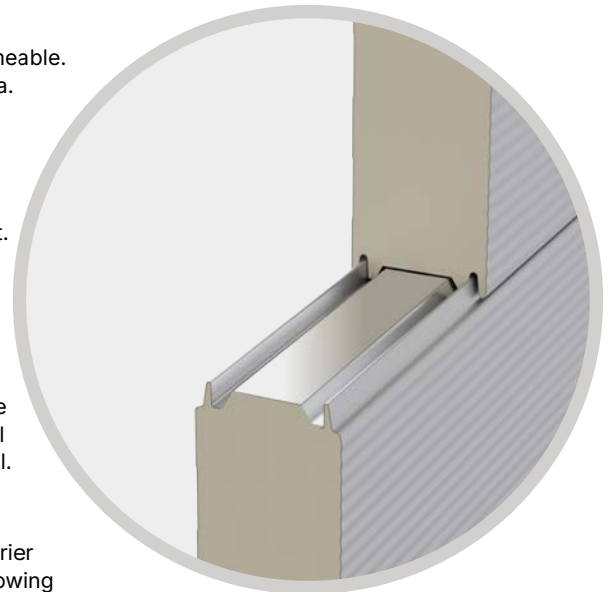
## Tolerances

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

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

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

Tolerances are in accordance with EN14509



## Exterior coatings

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 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 25µm 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.

## Premium BETA AR FX (KV) Fire Resistant Properties

### Premium BETA AR FX (KV) Carrier

Thickness (mm)	Fire resistance [EN 13501-2]		Max. overvoltage [mm.]* [EN14509]	
	Facade	Partition wall	Horizontal	Vertical
	Heating direction from both sides (i o) Caution! Ceiling (a b)			
≥ 60	EI 15	EI 15	-	4.000
≥ 80	EI 15	EI 15	4.000	4.000
	EW 20	EI 20	4.000	4.000
≥ 100	EW 20	EW 20	7.500	7.500
	-	EI 20	7.500	7.500
	EW 30	EW 30	4.000	4.000
	EI 30	EI 30	4.000	4.000
≥ 120	EW 20	EW 20	7.500	7.500
	-	EI 20	7.500	7.500
	EW 30	EW 30	4.000	4.000
	EI 30	EI 30	4.000	4.000
≥ 140	EW 30	EW 30	6.000	7.500
	EI 30	EI 30	4.000	4.000
≥ 160	EW 30	EW 30	7.500	7.500
	EI 30	EI 30	4.000	7.500
≥ 200	EW 30	EW 30	7.500	7.500
	EI 30	EI 30	7.500	7.500
	-	EI 45	4,000	4,000
	EW 60	EW 60	-	6,000

Always ask about the conditions regarding installation and/or fire reporting.

\*Concerns max. fire-resistant spans. Static overvoltage's must be tested separately.

## Premium BETA AR FX (KV) Technical Properties

### Premium BETA AR FX (KV) Carrier

Thickness (mm)	60mm	80mm	100mm	120mm	140mm	160mm	200mm
Total panel weight (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), NTA8800	2,81	3,86	4,88	5,92	6,93	7,95	9,97
Thermal Performance (u-values)	0.37	0.27	0.22	0.18	0.16	0.14	0.11

\* Fire resistance applies to thickness 100 and 120 mm.

# BETA AR FX (MW) Carrier Panel

## Working width

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

## Thermal efficiency

Premium BETA AR FX (MW) Carrier has a fire-resistant mineral wool core with a density of 105kg/m<sup>3</sup> and/or XL 113kg/m<sup>3</sup>. 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

Premium BETA AR FX (MW) Carrier complies with the European fire classification A2-s1-d0 in accordance with EN 13501. This product is equipped with an FM approval mineral wool core.

## Fire resistance

For more information about the fire performance of the The Premium BETA AR FX (MW) Carrier Panel; see table.

## Air permeability

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

Positive(+)		Positive(-)	
C	0,2630	C	0,0227
n	0,5313	n	0,4764

C = Air flow coefficient  
n = Air flow exponent

Based on the above assessment, it can be concluded that the contribution of the Carrier 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 dm<sup>3</sup>/s per m<sup>2</sup> of usable area. There are therefore no specific requirements for the facade panels (individual materials). This product meets the highest 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.

## Environment

The Premium BETA AR (KV) Carrier 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 for the possibilities.

## Management systems

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

## General certifications

Premium BETA AR FX (KV) Carrier 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
Length (standard)	2.000mm–13.500mm
Length* (non-standard)	400mm–2.000mm 13.500mm–18.500mm

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

## Tolerances

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

Tolerances are in accordance with EN14509



## Exterior coatings

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 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 25µm 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.

## BETA AR FX (MW) Fire Resistant Properties

BETA AR FX (MX) Carrier				
Thickness (mm)	Fire resistance [EN 13501-2]		Max. overvoltage [mm.]* [EN14509]	
	Facade	Partition wall	Horizontal	Vertical
	Heating direction from both sides (i o) Caution! Ceiling (a b)			
≥ 80	EW30	EW30	7.500	7.500
	EI 30	EI 30	7.500	7.500
	EW 60	EW 60	4.000	4.000
	EI 60	EI 60	4.000	4.000
≥ 100	EW 60	EW 60	7,500	7.500
	EI 60	EI 60	7.500	7.500
	EW 90	EW 90	7.500	4.000
	EI 90	EI 90	6.000	4.000
≥ 120	EW 90	EW 90	7.500	7.500
	EI 90	EI 90	7.500	7.500
	-	-	-	-
	-	-	-	-
≥ 150	EW 120	EW 120	7.500	4.000
	EI 120	EI 120	7.500	4.000
	EW 120	EW 120	7.500	7.500
	EI 120	EI 120	7.500	7.500
≥ 180 (XL)	-	EI 180	6,000	7.500
	-	EI 240	-	4,000
	EI 90	EI 90	10.000	7.500
	EI 120	EI 120	8.000	7.500
	-	EI 180	7.500	7.500
	-	EI 240	4.000	4.000

Always ask about the conditions regarding installation and/or fire reporting.

\*Concerns max. fire-resistant spans. Static overvoltage's must be tested separately.

## Premium BETA AR FX (MW) Technical Properties

Premium BETA AR FX (MX) Carrier									
Thickness (mm)	80mm	100mm	120mm	150mm	160mm	180mm	200mm	220mm	240mm
Total panel weight (kg/m <sup>2</sup> )									
Outer plate thickness 0.6mm Inner plate thickness 0.5mm	18,40	20,20	22,00	24,80	25,70	27,50	29,30	31,10	32,90
Noise Reduction (Rw (C,Ctr)dB)	~30(-1;-2)	~32(-1;-3)	~32(-1;-3)	~32(-2;-4)	~32(-2;-4)	~32(-3;-5)	~31(-1;-3)	~33(-2;-4)	~33(-2;-4)
Rc-value (m <sup>2</sup> .K/W), NTA8800	1,92	2,43	2,94	3,69	3,94	4,44	4,95	5,45	5,96
Total weight XL panel (kg/m <sup>2</sup> ), density 113 kg/m <sup>3</sup>									
Outer panel thickness 0.6mm Inner plate thickness 0.5mm	o.a.	21,20	22,90	25,50	26,40	28,10	29,80	31,50	33,30
Noise Reduction(Rw(C, Ctr)dB)XL	o.a.	~30(-1;-3)	~30(-1;-3)	~30(-1;-3)	~30(-1;-3)	~30(-1;-3)	~31(-1;-3)	~31(-1;-3)	~31(-1;-3)
Rc-value(m <sup>2</sup> .K/W), BETA-ARMWXLFX, NTA8800	o.a.	2,40	2,89	3,64	3,88	4,38	4,87	5,37	5,87
Thermal Performance (u-values)	0.48	0.39	0.32	0.26	0.24	0.22	0.18	0.16	-

This Carrier Panels brochure is intended as an aid in the understanding the Carrier Panels system and refers to standard situations. The general fully supported metal roofing guidelines must be observed. The data contained in this publication is based on our own practical experience and we accept no liability for the accuracy or completeness. We would always advise that project proposals are checked by an engineer prior to installation.



### Metal Solutions Ltd

Bolton Head Office  
Opal House, Bentinck Street,  
Bolton, Greater Manchester  
BL1 4QG  
t: 01204 491800

Glasgow Branch  
Unit 4, Dalmarnock North  
305 Dunn Street, Glasgow  
G40 4DE  
t: 0141 732 7777

[sales@metalsolutions.uk.com](mailto:sales@metalsolutions.uk.com)  
[www.metalsolutions.uk.com](http://www.metalsolutions.uk.com)  
[www.roofing-tools.com](http://www.roofing-tools.com)

