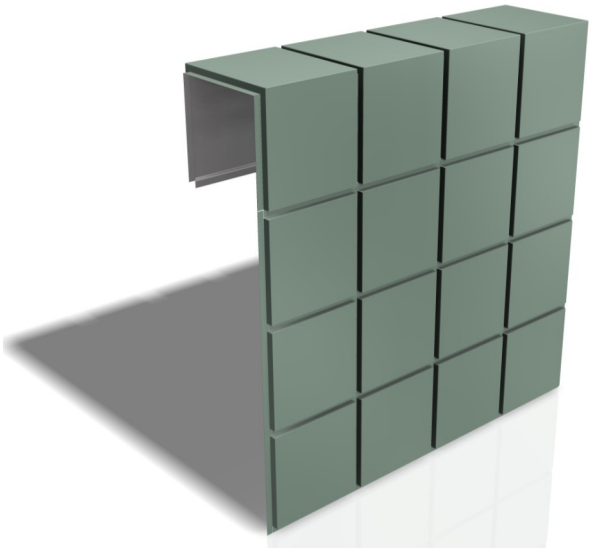
Product Data Sheet

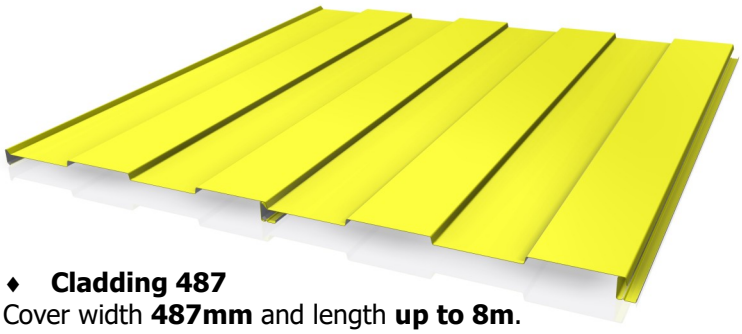
Metal profiles S P T
Wall Cladding and Facades

Fully-supported metal facade profiles, galvanized or pre-painted, for wall covering and internal cladding.



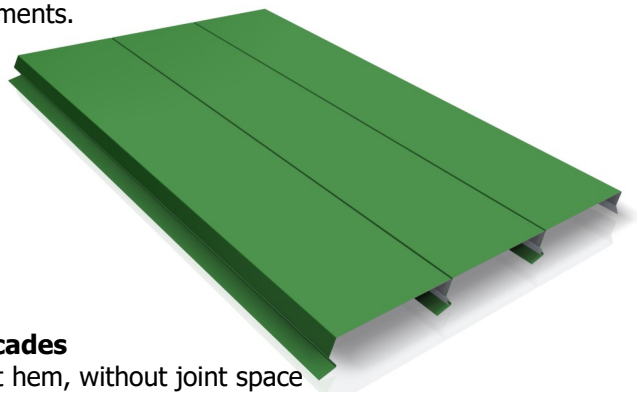
Advantages

- Application in all types of buildings
- Can be used as external and internal wall faces
- Excellent aesthetic effect with hidden fixing
- Weather and corrosion resistance
- Easy and fast standard mounting
- Column and corner cover



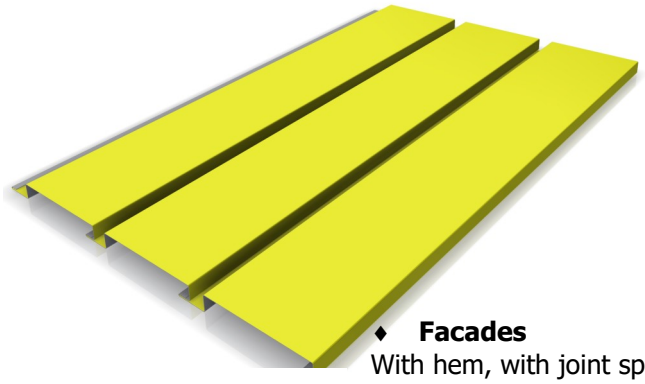
♦ **Angular facades**
Dimensions adjusted according to project requirements.

♦ **Cladding 487**
Cover width **487mm** and length **up to 8m**.



♦ **Flat facades**
Dimensions adjusted according to project requirements. Faces with high architectural requirements and large cover wall faces areas.

♦ **Facades**
Without hem, without joint space
Cover width **205mm.**
Length up to 8m



♦ **Facades**
With hem, with joint space
Cover width **187mm.**
Length up to 8m

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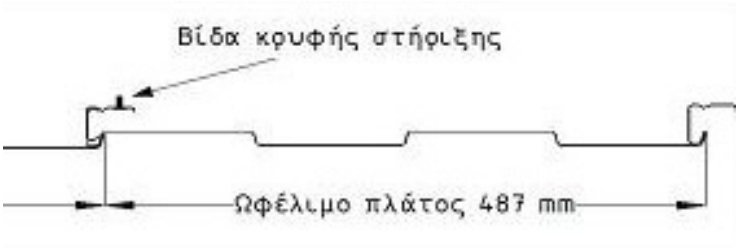
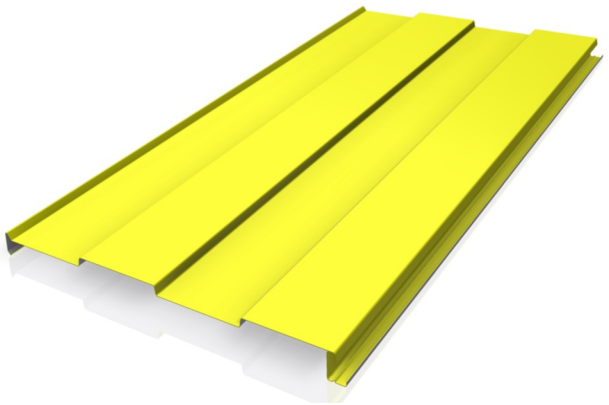
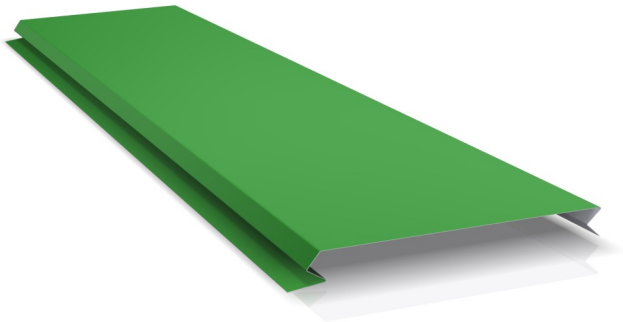
Profile selection

The architectural profile **cladding 487** was designed as a building wall cladding that resembles a wood paneling. The specific design of the joint offers robustness to the construction and gives an excellent aesthetic effect.

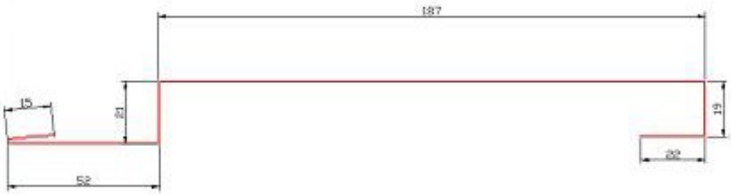


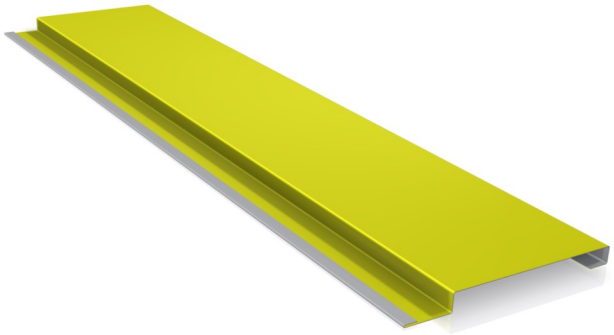


The architectural profile **facade without hem**, was designed as a wall cladding of the building. The specific design of the joint offers a perfect fit and excellent aesthetic effect.

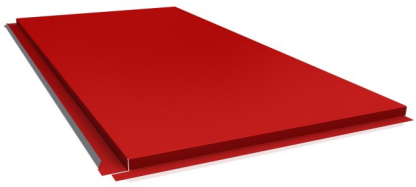


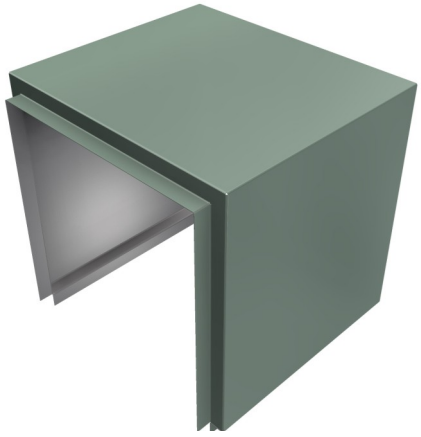
The architectural profile **façade with hem**, was designed as a wall cladding of the building. The specific design of the joint offers a perfect fit and gives a feeling of dark space.





The architectural profile **facade with hem**, was designed as a wall cladding of the building. Flat or angular can be used for the total wall cover of the wall face (external corners, columns, beams, recesses). The specific design of the joint offers a perfect fit and excellent aesthetic effect with a dark space. Their dimensions are adjusted accordingly to meet all construction requirements.





Metal sheet color coating options. Please visit our website: https://www.metallemporiki.gr/products/xromatologio

Contact with the technical department of the company to be informed about design and development of new products.

Metal profiles S P T - Wall Cladding and Facades

Metal sheet options

Steel, with galvanized protection, produced according to EN 10346 and EN 10143.
- Metal grade DX51D up to S350GD
- Hot-dip zinc coating, Z70 to Z275 gr/m^2
- AluZinc protection, AZ70 to AZ265 gr/m^2
- Nominal thickness from 0,40 mm **to 1,50mm**

Steel pre-painted, with galvanized protection, produced according to EN 10346 and EN 10143.
- Metal grade DX51D up to S350GD
- Hot-dip zinc coating, Z70 to Z275 gr/m^2
- AluZinc protection, AZ70 to AZ265 gr/m^2
- Nominal thickness from 0,35 mm **to 1,50mm**
- Polyester color coating with min 20µm thickness

Aluminum uncoated with aluzinc protection or pre-painted, produced according to EN485, EN573, EN546, EN1396, EN602, ASTM-B209
- Aluminum alloy of series 1xxx, 3xxx ή 5xxx
- Hardness degree H14, H24 ή H44
- AluZinc protection from AZ70 gr/m^2
- Nominal thickness from 0,50 mm **to 1,0mm**
- Polyester color coating with min 20µm thickness

Stainless Steel, inox, produced according to EN 10346, EN 10088-1
- Metal grade AISI 304 2B ή AISI 316 L
- Nominal thickness from 0,50 mm **to 1,50mm**
- Mat or gloss color coating

Color coating options

Typical Polyester coating

Polyester paints are the most common and the most economical coatings. They are suitable for both external and internal surfaces.

With a nominal thickness > 15µm, it has a very good resistance to external environmental conditions.

Durable Plastisol coating

Plastisol coating is very durable to external environmental conditions. It is suitable for outdoor applications where the durable requirements are high. The nominal coating thickness is up to 200µm.

High req PVDF coating

PVDF coating is suitable for buildings of architectural applications where the texture and color conservation are important. Also its reaction to fire is excellent because it has limited production of smoke, **class s1.** The nominal thickness is > 50mm.

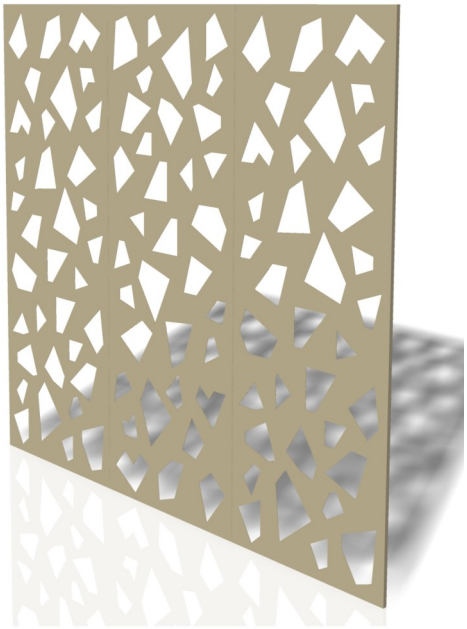
High Hygiene requirements PVC coating

PVC coating is suitable for high hygiene requirement constructions, where the profile may be in contact with food. The coating thickness of 50µm offers antibacterial protection.

Profile Weight

Type of profile	Cover width [mm]	Length [mm]	Weight of Steel [kg/m]*	Weight of Aluminium [kg/m]*
Cladding 487	487	1000	2,44	0.86
Facades without joint space	205	1000	1,22	0,43
Facades with joint space	187	1000	1,22	0,43
Flat facades	540	540	1,53	0,54

Weight per unit length was calculated taking into account the nominal thickness 0.50mm of metal sheets and the specific weight of steel = 7850 kg/m^3 and aluminum = 2750 kg/m^3



Metal profiles S P T - Wall Cladding and Facades

Dimensional Tolerances (according to the norm EN 14783 and norm EN 508)			
		Liner trays Without stiffeners	Linear trays With stiffeners
Sheet Thickness	t	According to EN 10143 for steel and EN 485-4 for aluminium	
Depth of profile	h	h ≤ 50 mm : ± 1,0 mm, 50 mm < h ≤ 100 mm : ± 1,5 mm, h ≤ 100 mm : ± 2,0 mm,	
Depth of stiffeners	hr vs		-1,0 mm ~ +3,0 mm -0,15*v < 1,0 mm ~ +2,0 mm
Position of stiffeners	ha, hb, bk		± 3,0 mm
Width of flange	bs	h ≤ 100 mm : -1,0 mm ~ +2,0 mm h > 100 mm : ±4,0 mm	-1,0 mm ~ +4,0 mm
Cover width	w1,2,3	± 5,0 mm	
Radius of bends	r	0 mm ~ +2,0 mm	± 2,0 mm
Longitudinal edge upstand	s	-2,0 mm ~ +5,0 mm & s ≥ 10,0 mm	
Length of the profile	ℓ	L ≤ 3000 mm : -5,0 mm ~ +10,0 mm, L > 3000 mm : -5,0 mm ~ +20,0 mm,	
Deviation of side lap	D	≤ ± 2,0 mm, l < 500 mm	
Deflection of flange	fs	≤ l/300 mm ≤ 20,0 mm	
Corner angle flange	φ	± 3,0o	
Lateral curvature	fq	-0,01*b < 10,0 mm +0,02*b ≤ 10,0 mm	
Longitudinal corrugation	fw	b = 400 mm : ± 2,0 mm, b = 500 mm : ± 3,0 mm, b = 600 mm : ± 5,0 mm,	
Hole diameter	dn	Φ ≤ 5,0 mm : ± 0,2 mm, Φ > 5,0 mm : -0,4 mm ~ +0,2 mm	
Hole pitch	ux	- 1,0 mm ~ +2,0 mm,	
Offset	v	± 2.0 mm	
Row spacing	uy	± 2.0 mm	
Total number of lines		± 3.0 %, completely perforated sheets	
Total number of columns		± 3.0 %, completely perforated sheets	

Concerns, steel sheets of thickness >0,6mm, aluminium sheets of thickness >0,7mm & stainless steel sheets of thickness >0,7mm.
For technical drawings of dimension tolerances please contact with the company's technical department or in Annex D of EN508.

Metal profiles S P T - Wall Cladding and Facades

Dimensional Tolerances (according to the norm EN 14783 and norm EN 508)			
		Standing seam profiles Cladding 487	Sidings, façade profiles Facades with or without joint space, Flat or angular facades
Sheet Thickness	t	According to EN 10143 for steel and EN 485-4 for aluminium	
Depth of profile	h	h ≤ 50 mm : ± 1,0 mm, 50 < h ≤ 100 mm : ± 1,5 mm, h > 100 mm : ± 2,0 mm,	
Depth of stiffeners	hr vs	hr/vs ≤ 1,5 mm : +2,0 mm ~ -0,15*hr/vs ≤ 1,0 mm hr/vs > 1,5 mm : hr : +3,0 mm ~ -1,0 mm vs : +2,0 mm ~ -1,15*vs ≤ 1,0 mm	hr/vs ≤ 6,0 mm : +2,0 mm ~ -0,3*hr/vs hr/vs > 6,0 mm : +3,0 mm ~ -2,0 mm
Position of stiffeners	ha, hb, bk	± 3,0 mm	
Width of crown and valleys	b	1,0 mm ~ +2,0 mm	Constructional : -2,0 mm ~ +20,0 mm Functional : -1,0 mm ~ +2,0 mm
Width of flange	bs	3,0 mm ~ +2,0 mm	Broad flange : ± 2,0 mm
Cover width	w1, w2	± 5,0 mm	± 3,0 mm In package : max w - min w ≤ 4,0 mm
Contraction or bulging	w3		(w1+w2)/2-2 ≤ w3 ≤ (w1+w2)/2+2
Length of the profile	l	L ≤ 3000 mm : -5,0 mm ~ +10,0 mm 3000 mm < L ≤ 10000 mm : -5,0 mm ~ +20,0 mm L > 10000 mm : -0,0005*l mm ~ +0,002*l mm	L ≤ 3000 mm : ± 5,0 mm L > 3000 mm : - 5,0 mm ~ +10,0 mm In one package : max l - minl ≤ 6,0 mm
Radius of bends	r	± 2,0 mm Additional condition : r ≥ 2,0 mm	For aluminum : 0 mm ~ +2 mm For steel : ± 2,0 mm
Deviation from straightness	δ	2,0 mm/m sheet length	≤ 2,0 mm/m
Deviation from squareness	S	S ≤ 0,005*w S ≤ 5 mm	S ≤ 0.005*w
Length of the profile	ℓ	-5 mm ~ +10 mm, L ≤ 3000 mm & -5 mm ~ +20 mm, L > 3000 mm	
Deviation of side lap	D	≤ ± 2.0 mm, l < 500 mm	
Deflection of flange	fs	≤ l/300 mm ≤ 20 mm	
Longitudinal edge upstand	s	-2,0 mm ~ +5,0 mm	-1,0 mm ~ +0,0 mm
Longitudinal edge width	buf	± 5,0 mm	
Corner angle flange	φ	± 3,0o	
Lateral curvature	fq		± 0,005 x b_o
Longitudinal corrugation	fw		± 0,6 mm, L = 200 mm ± 1,0 mm, L = 400 mm ± 1,5 mm, L = 700 mm

Concerns, steel sheets of thickness >0,6mm, aluminium sheets of thickness >0,7mm & stainless steel sheets of thickness >0,7mm.
For technical drawings of dimension tolerances please contact with the company's technical department or in Annex D of EN508.