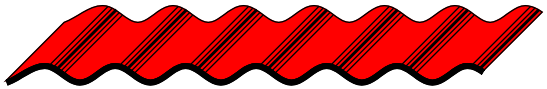
Types of wall and roofsystems based on thin metal profiles

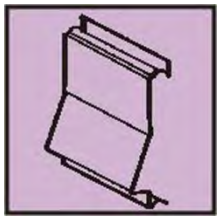
1. **Systems without thermal isolation**

- Trapezoidal profiles

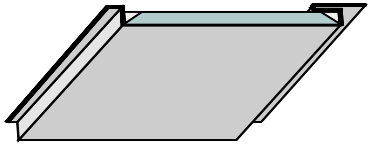
- Sinusoidal (waves) profiles



- Siding – facade lamellas



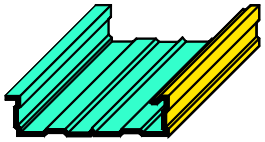
- Large facade cassettes



- ACM plates – bonds

2. **Systéms with integrated thermal isulation**

- Trays (C- lines) Kazetové stěny



- Sandwich panels


TESCO

Wallsystems wtihout thermal isolation

Trapezoidal profiles

Waves profiles

Facade lamelas – siding

C-lines walls

Komposit plates – bond

KOVOVÉ PROFILY

We offer for you:

Trapesoidal profiles:

We choose for you the optimal profil according your construction, necessary guarancy and price. We reduce your costs.

- A lot of types and designs, various materials, coatings, colours…
- Perforated –profiles, acoustic profiles
- With concrete structure combined
- Curved profiles, design profiles (Welltec, Montana, SAB,) for interior and exterior
- **Fire-resistant trapezoidal constructions untill the span of 7,5m!!!**
- **The cheapest wall systém for longlife maintenance-free lifespans, the cheapest system for thermal weatherproorfing**
- **<u>The key for economical using is the optimal choice of the profiles</u>**

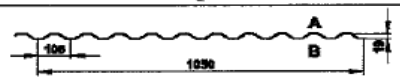
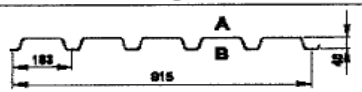
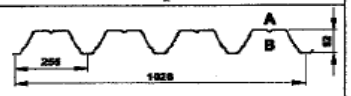
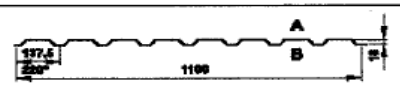
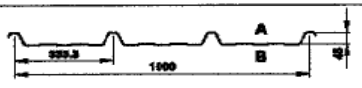
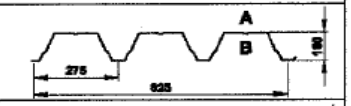
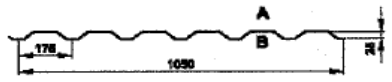
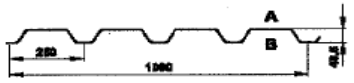
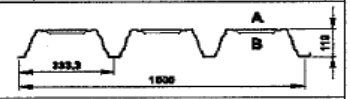
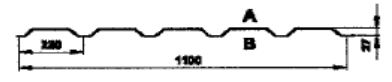
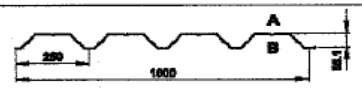
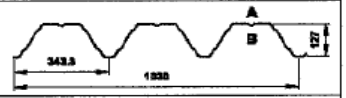
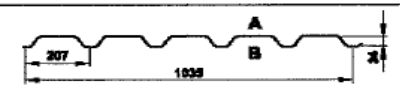
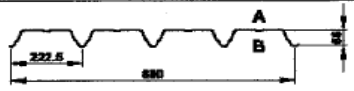
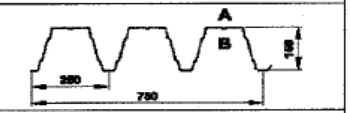
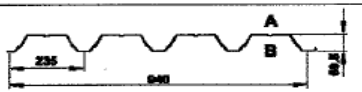
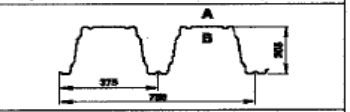
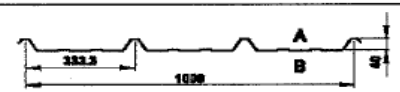
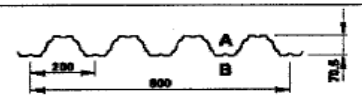
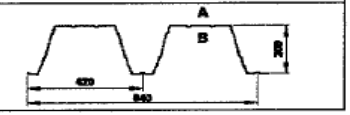
KOVOVÉ PROFILY

Trapezoidal profiles

Trapezoidal profiles – contruction profiles

- For roofs and walls, in the high of the profiles 6 till 200 mm. Produced from galvanised and coil-coiting painted steel.

Tab. 1 – Standard construction profiles – the part of sortiment

TRAPÉZOVÉ PROFILY					
Označení	Tvar profilu	Označení	Tvar profilu	Označení	Tvar profilu
TR 19/105		TR 40/183		TR 94/255	
TR 20/137,5 TR 20/220		TR 45/333 KD		TR 100/275	
TR 25/175		TR 50/250 TR 50R/250		TR 110/333	
TR 30/220		TR 55/250		TR 130/343	
TR 35/207		TR 56/222		TR 160/250	
TR 39/333		TR 60/235		TR 200/375	
TR 40/333		TR 70/200		TR 200/420	

KOVOVÉ PROFILY

Sample of using of trapezoidal profiles 1

SCONTO - Praha

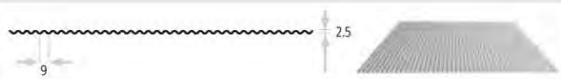
Airport Hamburk

GLOBUS - Olomouc

OBI - Praha

KOVOVÉ PROFILY

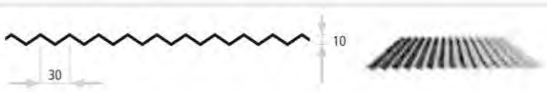
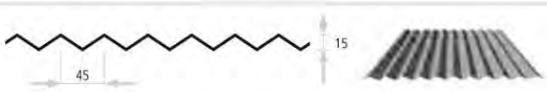
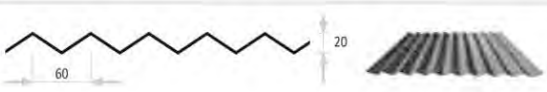
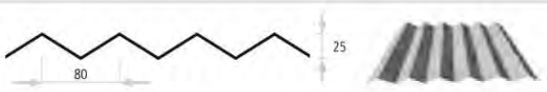
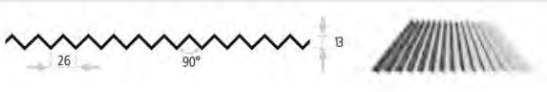
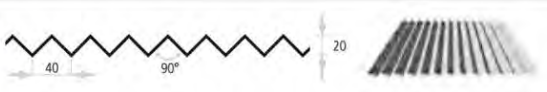
Design trapezoidal profiles

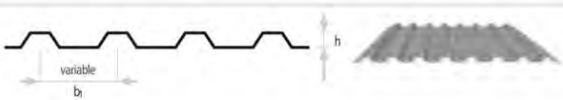
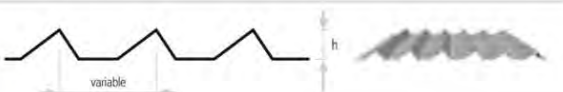
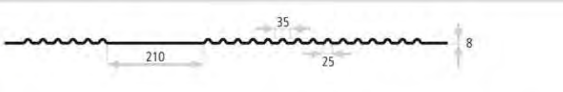
MN Art. No.	Sketch	max. panel length in mm
W-1.5/3 also available as metal plates curved in two planes		3,000
W-1.5/5 also available as metal plates curved in two planes		3,000
W-2.5/9 also available as metal plates curved in two planes		3,000
W-4/10		1,500
W-6/15 also available as metal plates curved in two planes		3,000
W-6/32 also available as metal plates curved in two planes		5,500
W-8/25 also available as metal plates curved in two planes		5,500
W-8/120 also available as metal plates curved in two planes		5,500
W-10/60 also available as metal plates curved in two planes		5,500

	MN Art. No.	Sketch	max. panel length in mm
	W-15/40		5,500
	W-18/76 also available as metal plates curved in two planes		5,500
	W-20/50		5,500
NEW	W-20/70		5,500
	W-27/100 also available as metal plates curved in two planes		5,500
	W-27/111 also available as metal plates curved in two planes		5,500
	W-30/135		5,500
	W-40/125		5,500
	W-42/160		5,500

KOVOVÉ PROFILY

Design trapezoidal profiles

MN® Art. No.	Sketch	max. panel length in mm
Z-10/30		3,000
Z-15/45		3,000
Z-20/60		3,000
Z-25/80		5,500
Z-50/120		3,000
Z-13/26		5,500
Z-20/40		5,500

MN® Art. No.	Sketch	max. panel length in mm
ST-H-R		3,000/ 5,500
SW-H-R		3,000/ 5,500
SZ-H-R		3,000/ 5,500
SZ-A-R		3,000
NEW Sample 1		

Flat sections can be realized nearly within every profile.

NEW Sample 2	

Varying axes can be realized nearly for every profile.

For outdoor use MN provides these fanfold profiles with a variable screw plate (e.g. SZ-35/35-R; find more profiles in Group S, pages 11, 12 and 13).

The basic forms for Group S can be found under Group W/T and Z. The quoted dimensions between axes are minimum.
The dimensions between axes in Group S can be increased variably through use of vertical plates.

KOVOVÉ PROFILY

Sample of using of trapezoidal profiles 2

KOVOVÉ PROFILY

Sample of using perforated trapezoid sheets

KOVOVÉ PROFILY

Sinusoidal profiles (waves profiles)

- For faccades, produced from galvanized and painted steel of alu. Delivered in the high of the profiles 18 till 55 mm.

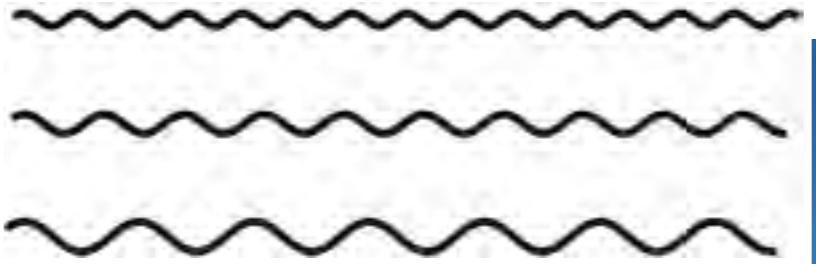
Sample of using

Sipral – sídlo firmy

Agromex – Čestlice

KOVOVÉ PROFILY

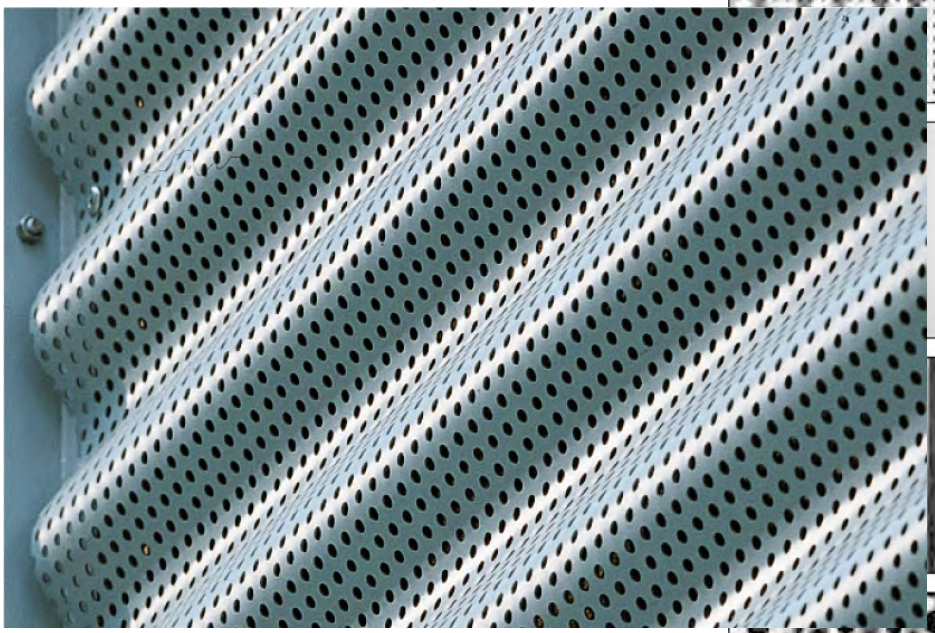
Sample of using with waves profiles

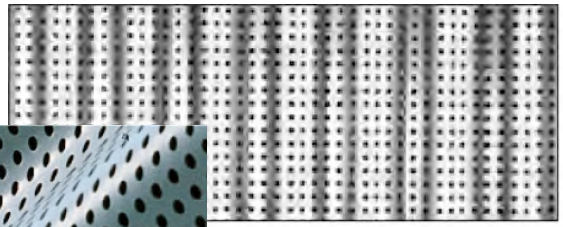


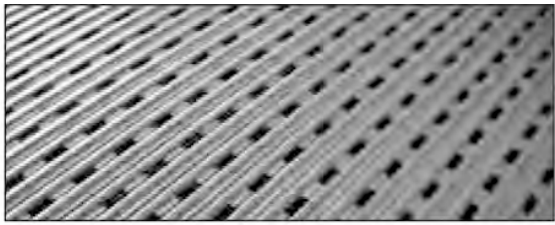
HADOVKA – OFFICE PARK – Praha

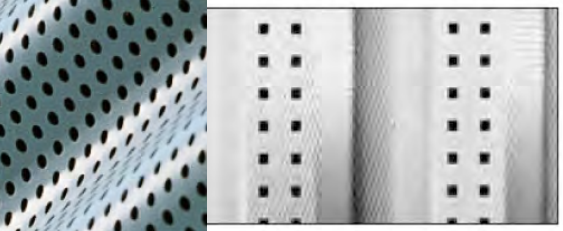
KOVOVÉ PROFILY

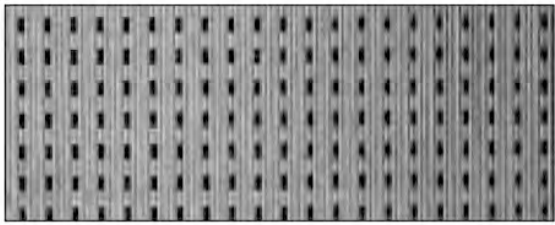
Perforated trapezoidal and waves profiles

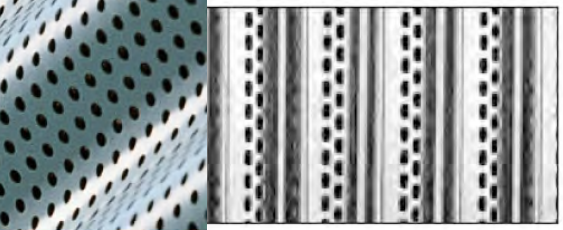


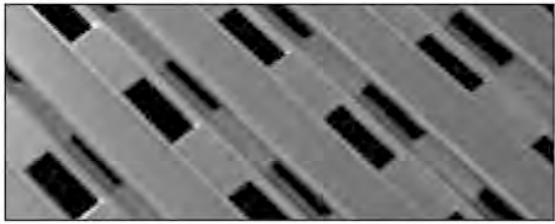


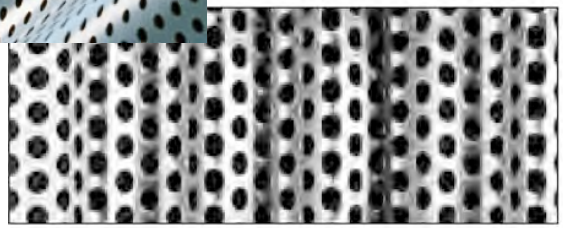


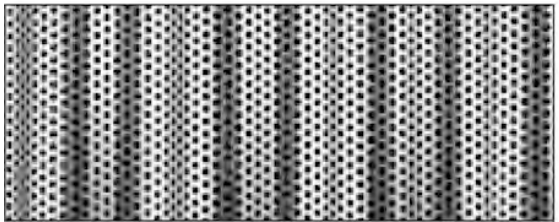


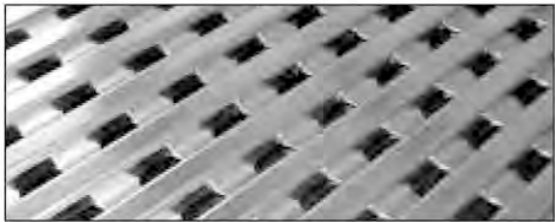












KOVOVÉ PROFILY

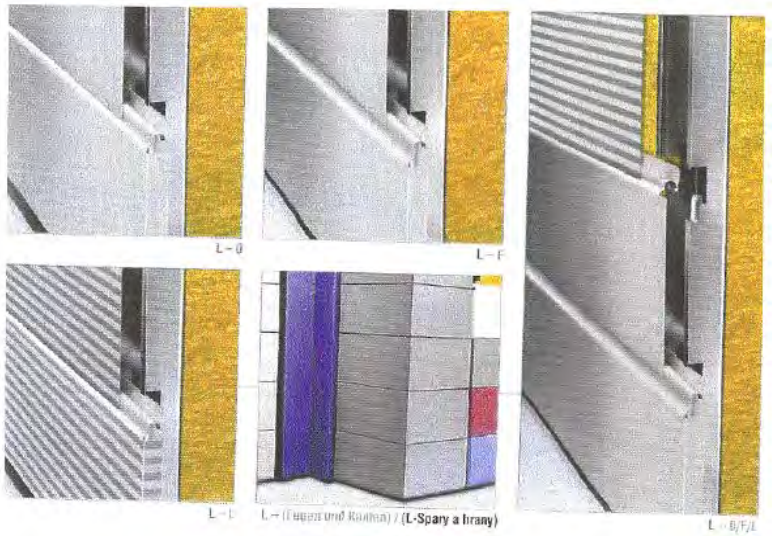
Sample of using with perofated trapezoid pr.

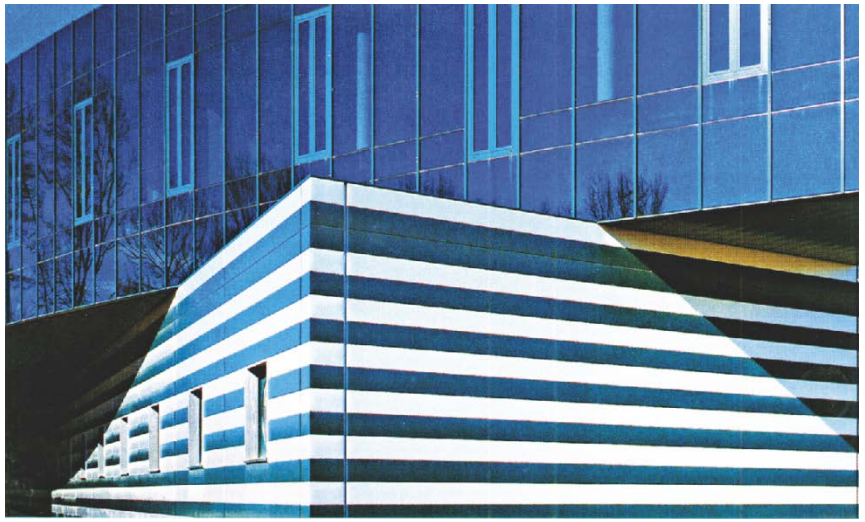
KOVOVÉ PROFILY

Sample of using with perofated waves profiles

KOVOVÉ PROFILY

Facade lamelas - siding



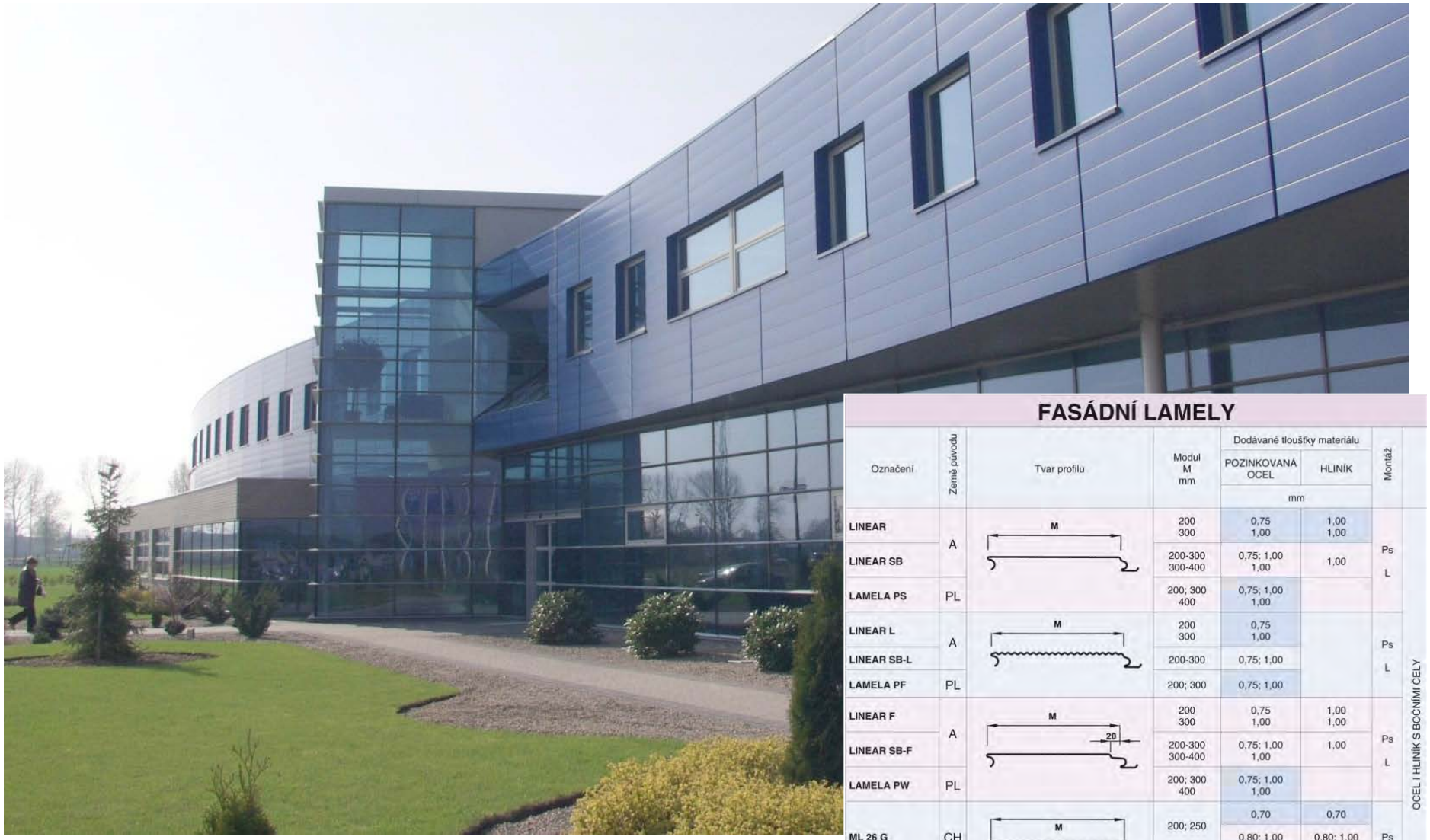


Hoffmann

RENAULT - Praha

KOVOVÉ PROFILY

Facade lamelas - siding



FASÁDNÍ LAMELY

Označení	Země původu	Tvar profilu	Modul M mm	Dodávané tloušťky materiálu: POZINKOVANÁ OCEL mm	Dodávané tloušťky materiálu: HLINÍK mm	Montáž	
LINEAR	A		200 300	0,75 1,00	1,00 1,00	Ps L	OCEL I HLINÍK S BOČNÍMI ČELY
LINEAR SB			200-300 300-400	0,75; 1,00 1,00	1,00		
LAMELA PS	PL		200; 300 400	0,75; 1,00 1,00			
LINEAR L	A		200 300	0,75 1,00		Ps L	
LINEAR SB-L			200-300	0,75; 1,00			
LAMELA PF	PL		200; 300	0,75; 1,00			
LINEAR F	A		200 300	0,75 1,00	1,00 1,00	Ps L	
LINEAR SB-F			200-300 300-400	0,75; 1,00 1,00	1,00		
LAMELA PW	PL		200; 300 400	0,75; 1,00 1,00			
ML 26 G	CH		200; 250	0,70	0,70	Ps	
				0,80; 1,00	0,80; 1,00		
			300	0,80; 1,00	0,80; 1,00		

KOVOVÉ PROFILY

Facade lamelas - siding

Advantages of facade lamelas:

- Machinely roll – production, good design and quality with low price
- Without the risk of unregulary unevenness until the modul of 400mm
- The possibility of the delivery long and short profiles also with forehead banding – better rigidity of the plate and less risk of waves

Disadvantages of facade lamelas :

- For even desing is necessary the absolut level supporint contruction
- Better the thickness minimal 1,00 mm, otherwise big risk not good flatness of the facade
- Maximal recommended modul 400 mm

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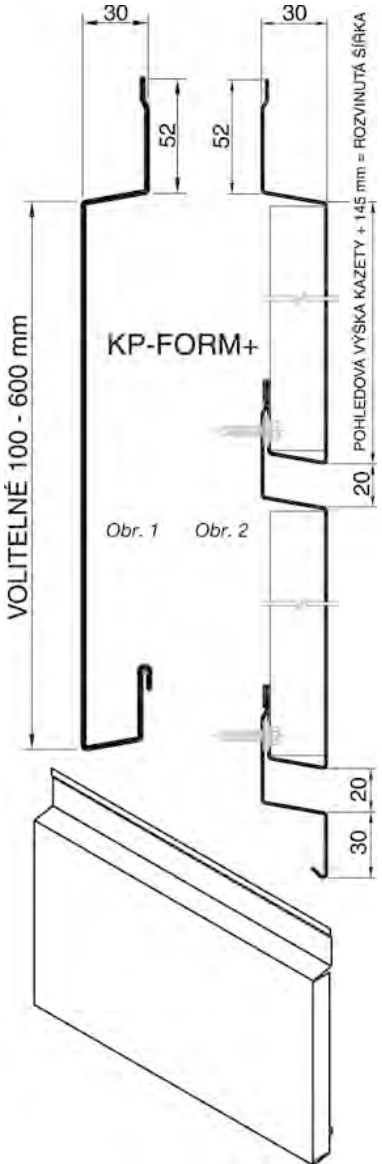
Sample of using of facade lamelas

INTERSPAR – Mladá Boleslav

KOVOVÉ PROFILY

Facade cassettes



KOVOVÉ PROFILY

Facade cassettes

Advantages:

- Large formats, custom production quadrat or rhomboid forms
- Partly hand-production, partly machine production
- More systems KP-FORM+ production in Prague, Liberta – production in Finland, Alumetal – production in Italy, aj.)
- **Intermediate stage between facade lamelas-siding and composit plates.**
- **Optimal by high buildings with required fire-resistance facade**

Disadvantages:

- It is necessary to have absolut flat supportin contruction, correct drawings and assembly staff having in order eliminate the efect of thermal expansivity of the material. Minimal thickness 1,0 or 1,2 5mm by steel, better 1, 5mm, by Aluminium 2 or 3 mm
- modul typical 400-800 mm, length max. 3000 mm, otherwise is necessary to use special alloy

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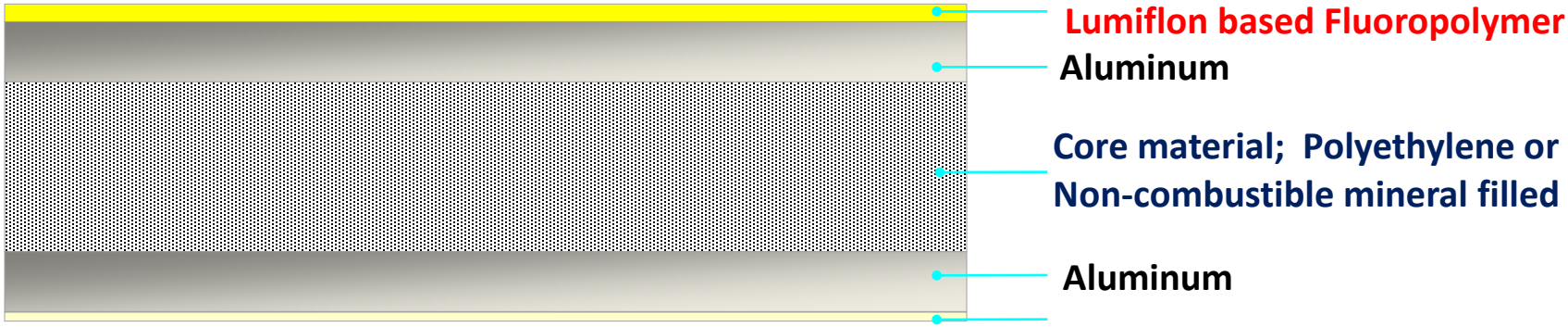
Facade cassettes

KOVOVÉ PROFILY

Composit panels – „bond“ systems

- Many production and qualities – high reccomended to prescribe the alloy, thickness of the plates and sheets, type of core and type and thickness of event. Painting
- Composit panels consist of two mainly (but not only – by Alpolic also other metals..) aluminium sheets connected by the core in theckness 2-6 mm
- **Optimal for the large representativ facade walls of all types of buidlings**
- Fire-resistance from F-D (types with polyethylen core - PE), B (types „fr“) and A2
- Composit plates not only with aluminum sheets, but by for ex. Mitsubishi production of Alpolic also with natural metals as Titanium, Inox-steel, copper or zinc).
- Lightweight – Lighter than solid metals of equivalent rigidity
- There are more panels with class B, it means core „fr“, but ac. CSN you can use core „B“ for the building higher than 12m only if the material passed the test according the normČSN ISO 13785-1. In this case is the wall-construction taken as DP1



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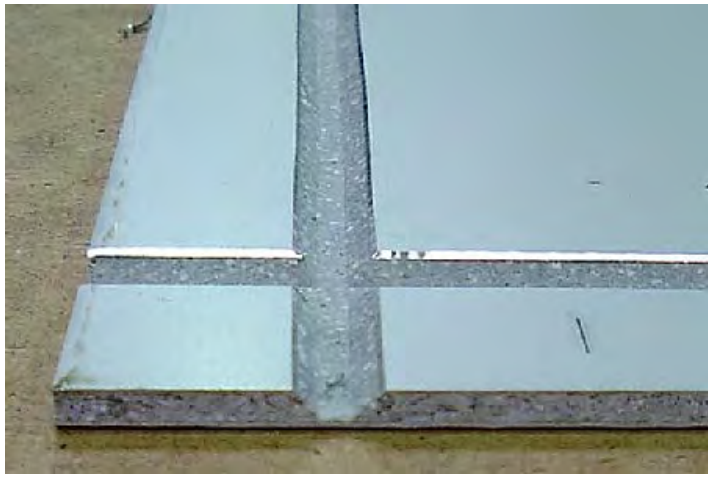
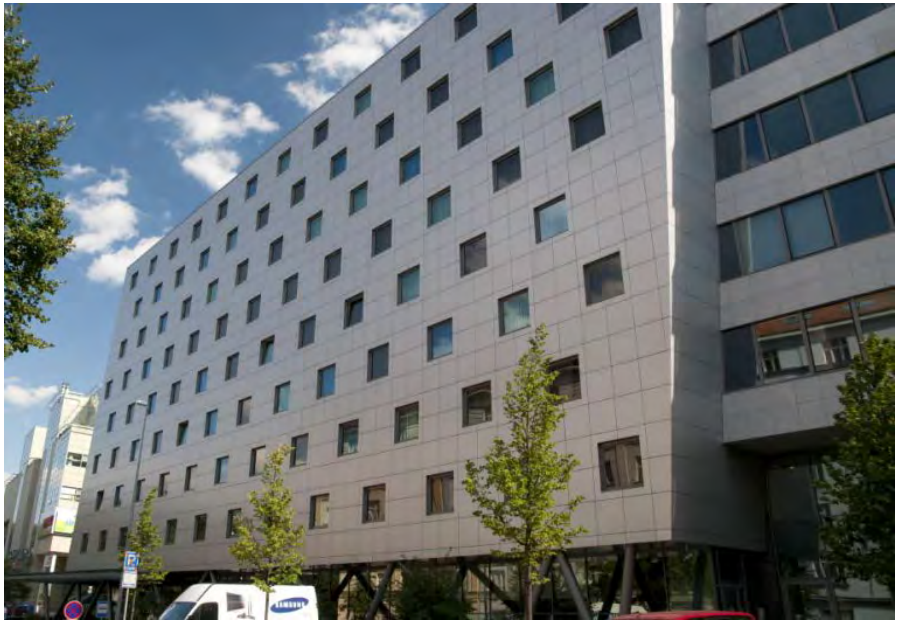
Composit plates - bond

City Green Court





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Sample of using composit plates - bond

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Sample of using composit plates - bond

Alpolic SCM

Alpolic TCM

Wall systems
with thermal isolation

Sandwich panels

C-lines walls

KOVOVÉ PROFILY

Sandwich panels

PANASONIC - Plzeň

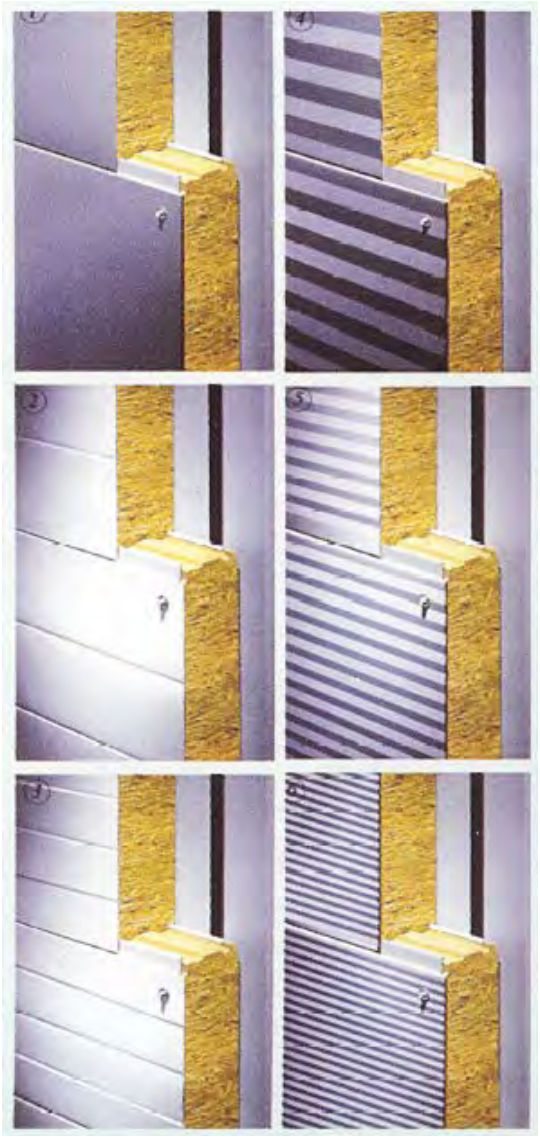
Würth – Mladá Boleslav

Horizontaly or vertically cladding.

Smooth surface finish.

Simple connection.

Sound insulation 26dB – PIR or 32dB mineralw.



Possible profilation Sandwich panels

KOVOVÉ PROFILY

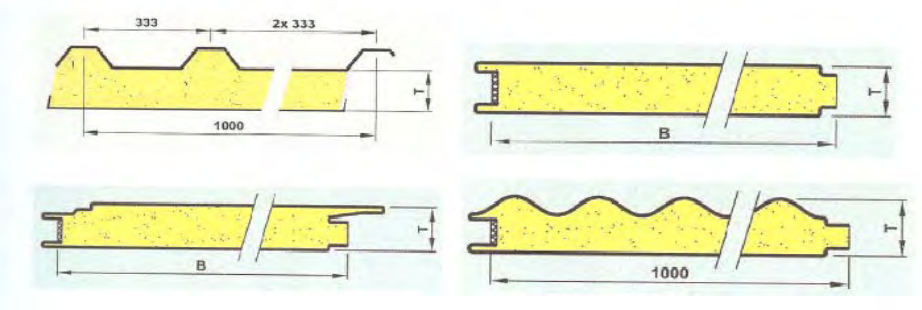
Sandwich panels + and -

Advantages of sandwich panels +++!

- Easy and quick installation – one piece, lightweight
- Excellent thermal insulaton properties, visible or unvisible instalation
- Guaranted fire-resistance untill 180 min (minerall woole)
- Choise of many designs and corematerials: PUR, PIR, mineral wool

Disadvantages of sandwich panels---!

- Relatively low load capacity can increase the costs of the construction of the building, espacially by big and by high builindings.
- Fire-resistance is limited with lower span, usualy untill 3-5m, exeptionally untill 6m.
- Be carefully by the fixing of the thick panels to concrete construction!!
- Minimal roof inclitanion7 % (=4°)



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Sample of using sandwich panels

Elektro Bartoš - Frenštát pod Radhoštěm

KOVOVÉ PROFILY

Types and characteristics of sandwich panels

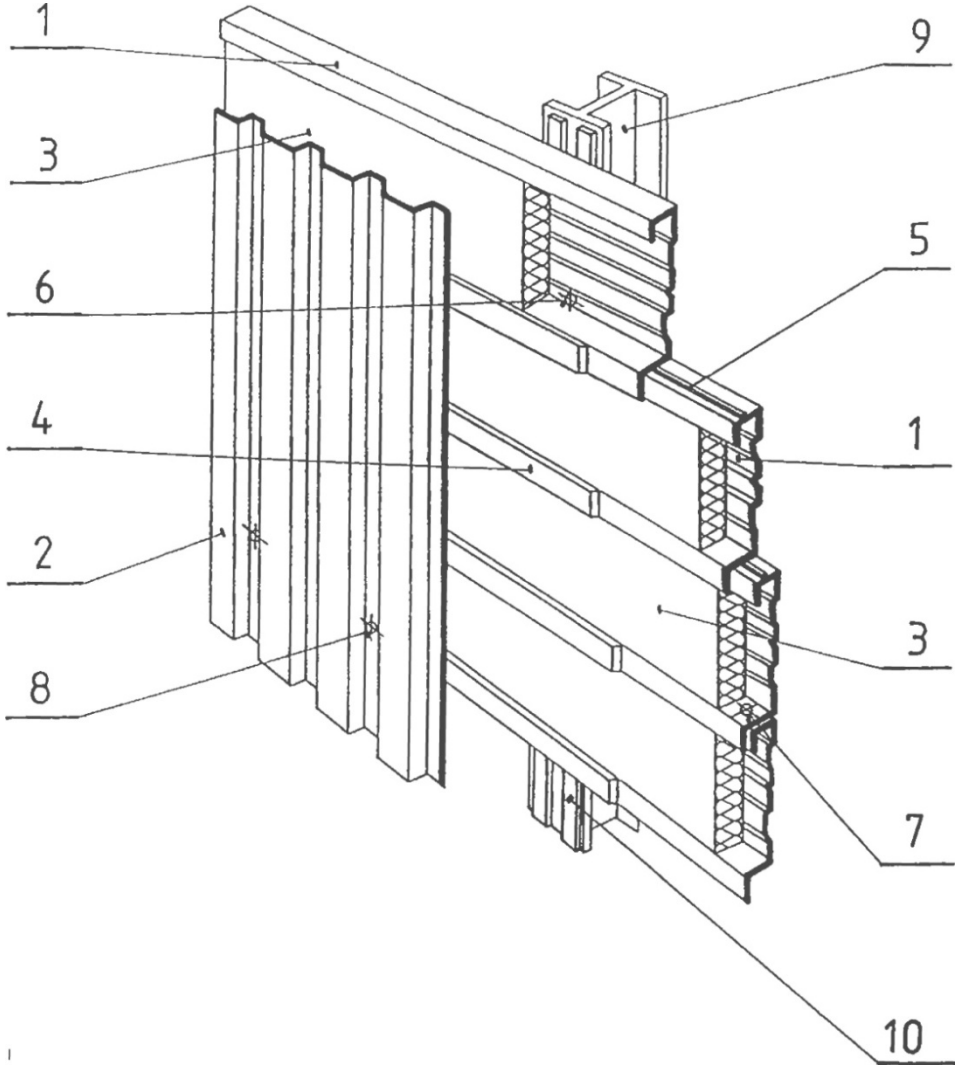
Choise of the sandwich panels core-insulation material

- **POLYSTYREN** (without fire-resistance, ageing of the material)
- **PUR** (the best isolation, stabil, , fire-resistance untill 15 min.)
-
- **PIR** (technicaly characteristics like PUR, but reduced combustibility, fire-resistance untill 30-60 min.)
- **MINERÁLNÍ VLNA**, good insulation together with excelent fire-resistance, acoustic resistance untill 32 dB.
- **Accoustics panels** for noise-absorption – not for exterior, but excelent inside noice reduction
- **Special panels:** Agropanels for animal husbandry, single-sheet panels

KOVOVÉ PROFILY

C-lines walls, trays walls

Typical c-lines wall with verticaly oriented exterior trapezoid sheet



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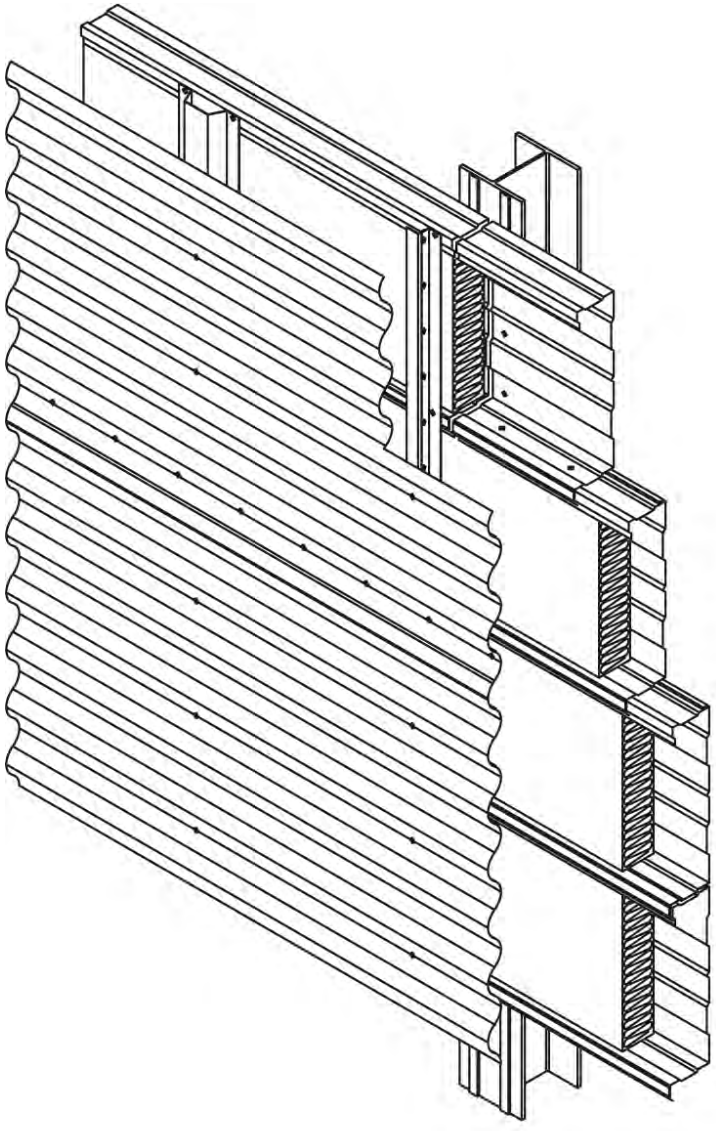
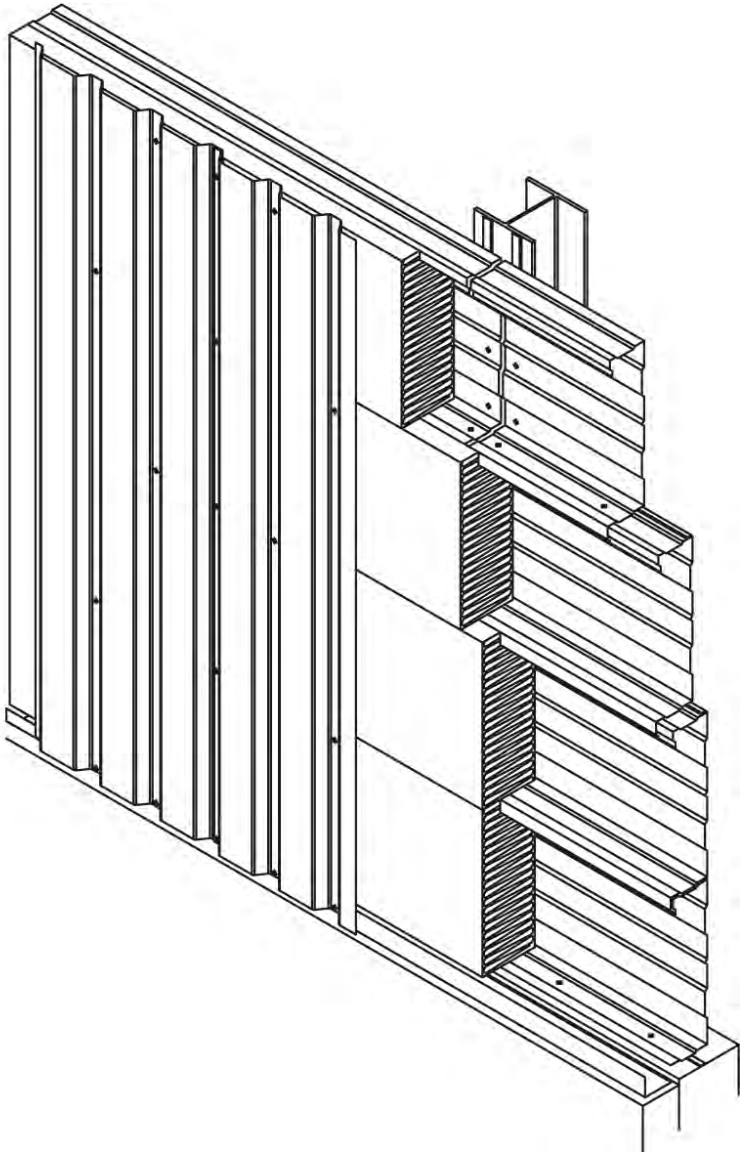
C-lines walls, trays walls





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Sample of using of C-lines walls, trays walls 1

KOVOVÉ PROFILY

Sample of using of C-lines walls, trays walls 2

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C-lines walls, trays walls + and -

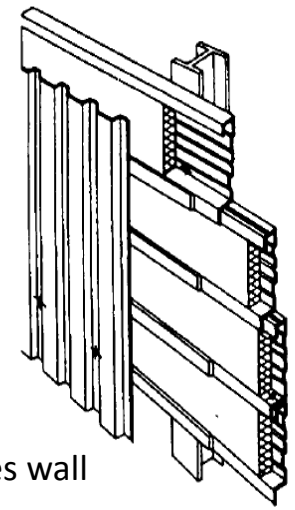
C-lines walls advantages +++!

- Optimal for long span constructions (till 7,5m), **essential saving of the cost for supporting construction**
- Advantageous for large buildings – it is possible to „close“ the hall with the cassettes and later go-on of the building-completion
- Optimal for HIGH industrial, trade and logistic buildings due to possible variability of the thickness of the cassettes, that could increase the load capacity of the wall by the not changed thickness of the wall
- **Accoustic reduction untill 53 dB**
- **U**-coefficient untill **0,175 W/m^{2}K^{-1}**
- **Fire-resistance untill 45 min untill the span of 7,5 m!!**
- Free interior of the hall – without purlins or windows-bracing profiles
- The free choise of external cladding-typy (trapezoid sheets, waves sheets, siding, facade cassettes, composit plates, sandwich panels) all with fire-resistance of the completion of the wall

C-lines walls disadvantages----!

- 3-steps mounting
- By classical typical mounting problem with heat bridges. The typical construction hase by the thickness of the mineral woole insulation inside U-value oinly 0,59 W/m^2K^{-1}
- **It is necessary to use heat bridge interrupted C-line wall systém with distance screws and special insulation removing the thermal bridge between a cassette and a exterior cladding profil. Rockprofil system,**
- **KI-KP Duohterm system…)**

By these systems is the value U= 0,28 with insulation izol. 160 mm a cassette 120/600 or
Value U 0,195 with insulation 195 mm and cassette 160/600.



Obr. 1 – Typical C-lines wall

C-lines walls, trays walls - Rockprofilsystem

KOVOVÉ PROFILY

KAZETOVÝ SYSTÉM

S PŘERUŠENÝM TEPELNÝM MOSTEM

ROCKPROFIL

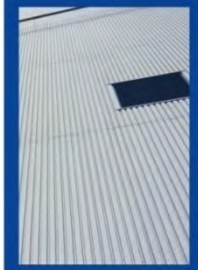
JEDINÝ SYSTÉM NA TRHU
CERTIFIKOVANÝ PRO RŮZNÉ TYPY PLÁŠŤŮ
VIZ. TABULKA NA DRUHÉ STRANĚ

1. Nosná kazeta Kovové profily, typ B, F
2. Tepelně izolační deska Airrock ND s naříznutou drážkou, s přesahem 40 mm
3. Vnější trapézový či vlnitý plech
4. Samovrtný odstupový šroub SDC2 z nerezavějící oceli nebo uhlíkové pozinkované oceli s těsnící podložkou

$U \leq 0{,}280\ Wm^{-2}K^{-1}$
při K 120 a Airrock ND 155 mm
E 120, EW 60, EI 45 (30)







KOVOVÉ PROFILY

C-lines walls, trays walls - Rockprofilsystem

C-lines walls, trays walls - Rockprofilsystem

C-lines systém Rockprofil

Is the only one in Czech Republic C-lines system with interrupt thermal bridge with **really done fire-test of the building with all types of exterior thin metall based cladding profiles** (trapezoid profiles, waves profiles, facade lamelas - siding, facade cassettes, composit plates or sandwich panels)

KOVOVÉ PROFILY

Aluminum extruded facade profiles Cotta

Substitution of the ceramic cladding with solid-aluminium facade systém with lower price and lower weight …

- Design of ceramic brigs facade based on solid aluminium profil thickness 1,8 mm
- Weight 6–8 kg/m^2
- International guaranty exterior surface Qualicoat
- Format 150, 200, 225 a 250 mm
- 15 standard colours

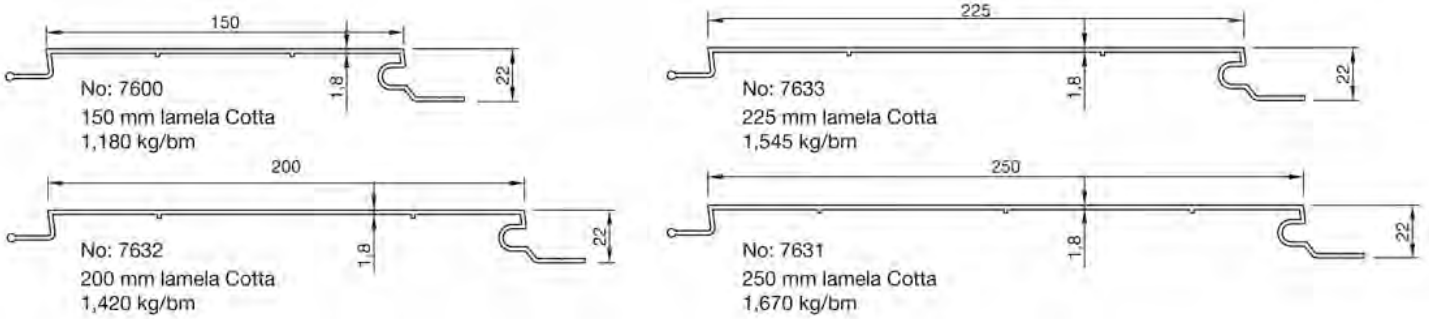
SARAY COTTA is a new aluminium fassade system that looks like ceramic fassades. SARAY COTTA system consists of vertical supports, aluminium extrusions for panelling, corner joint parts of which angles can be adjusted to suit the building and initial extrusions to commence the installation. Before installation of SARAY COTTA, outside of the building has to be insulated to provide thermal and water tightness. Then vertical supports are mounted with 750-800 mm space between eachother with L brackets. The panel joints are sealed with EPDM to prevent vibration and resonance in a way that air circulates between the panels and the building’s wall. Finishes and colours – by anodising, silver or colour anodised; - by powder coating on aluminium, RAL colour range, clay coloured rough appearance, wood or stone appearance.

KOVOVÉ PROFILY

Aluminum extruded facade profiles Cotta

KOVOVÉ PROFILY

Aluminum extruded facade profiles Cotta



Saray Cotta – Analiz Örnegi / Analysis Sample

(1,20 m x 3,12 m = 3,744 m^2 için) (1 m^2-7,72 kg)

Malzemenin Cinsi	Birim	Miktar	Toplam
7601 Dikme profili	0,870 kg/m	6,240 m (3,12 m x 2 ad)	5,43 kg
7631 250'lik cotta	1,670 kg/m	14,064 m (0,586 m x 24 ad)	23,49 kg
80 x 150 Ana Braket	3 adet	1 adet	3 adet
80 x 80 Ara Braket	3 adet	1 adet	3 adet
Epil 200	2 adet	24 adet	48 adet
4,8 x 15 mm Geniç Kafa Pop Perçin	3 x 3 = 9 ad (Ana braket) 3 x 1 = 3 ad (Ara braket)	9 ad+3 ad	12 ad
Çelik Dübel (paslanmaz)	3 x 2 = 6 ad (Ana braket) 3 x 1 = 3 ad (Ara braket)	9 ad+3 ad	12 ad

Uyarr.ProfU agirhklarimiz teorik olup; teslim anmdaki tartimiz geçerlidir.

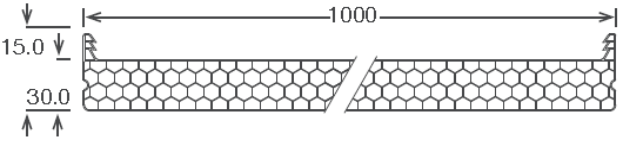
Polycarbonat roof and wall systems Danpalon

KOVOVÉ PROFILY

Polycarbonat systems Danpalon

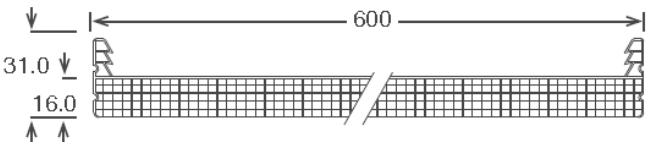
DANPALON systems – types of polycarbonate panels

- Honeycomb



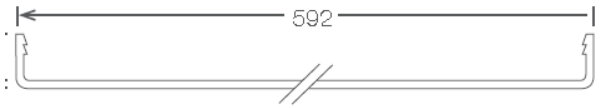
- Honeycomb structure
- Hexagon
- 19 standard colors
- Fire resistance : b-s1,d0
- Thickness 8; 10; 12 a 30 mm
- Standard width 600; 1000 a 1040 mm

- Multicell

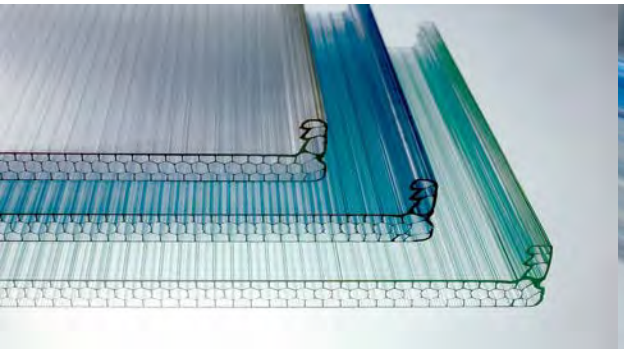


- Multicell structure
- Rectangle
- 19 standard colors
- Fire resistance: b-s1,d0
- Thickness 8; 10; 12 a 16 mm
- Standard width 600 a 1040 mm

- Compact DP4



- Solid panel th. 4 mm
- 6 standard colors
- Fire resistance: b-s1,d0
- Weight 5,14 kg/m^2
- A snap-on connector + transparent space profile
- Standard width 592 mm



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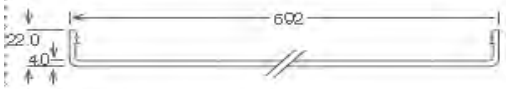
Polycarbonat systems Danpalon

Technical features and dimensions

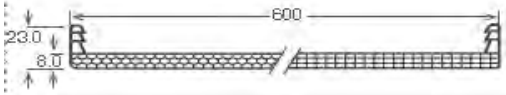
	DANPALON® 8 mm	DANPALON® 10 mm	DANPALON® 12 mm	DANPALON® 16 mm	DANPALON® 22 mm
Number of walls	4	4	4	6	6
Structure	Multicell (MC)	Multicell (MC)	Multicell (MC)	Multicell (MC)	Multicell (MC)
Width (mm)	600	600	600 - 900	600 - 900 - 1040	600 - 900
Length	Standard up to 12 m (longer upon request)				
Ug ($W/m^2.K$) Values calculated according to EN-ISO 10077	3	2.6	2.4	1.9	1.5
Fire resistance[1]	B-s2,d0				
Spanning (Aluminium connection)	up to 2.5 m[2]	up to 2.5 m[2]	up to 2.5 m[2]	up to 2.5 m[2]	up to 3.2 m[2]
Minimum slope (Specific use)	5° (or 9%) normal application				
Minimum radius for cold bending	1.6 m	2 m	2.5 m	3 m	3.5 m
Manufactured according to certification	ISO9001 - ISO14001				
Warranty	10 year manufacturer's warranty (panels)				
Soft and Hard Body Impact	D1,10J - M50,300J - M50,400J				
Technical agreements	SOCOTEC Specialised reviews to EN standards CSTB Technical Agreements issued for facade, roofing. (SOCOTEC: French Technical Control Office – CSTB: France's Scientific and Technical Centre for Building Industry)				

Panel Sizes

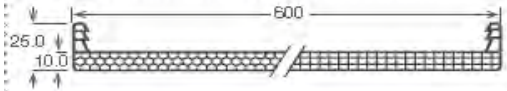
DP4 COMPACT



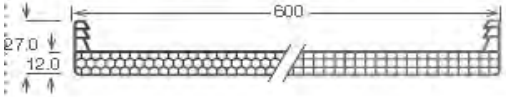
DP8 HONEYCOMB / MULTICELL



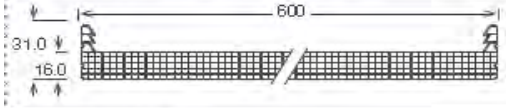
DP10 HONEYCOMB / MULTICELL



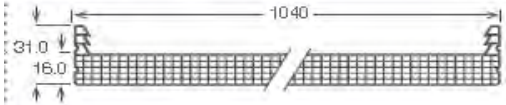
DP12 HONEYCOMB / MULTICELL



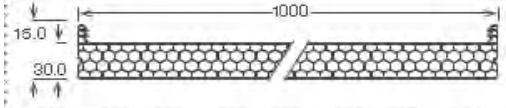
DP16 MULTICELL



DP16 1040 MULTICELL

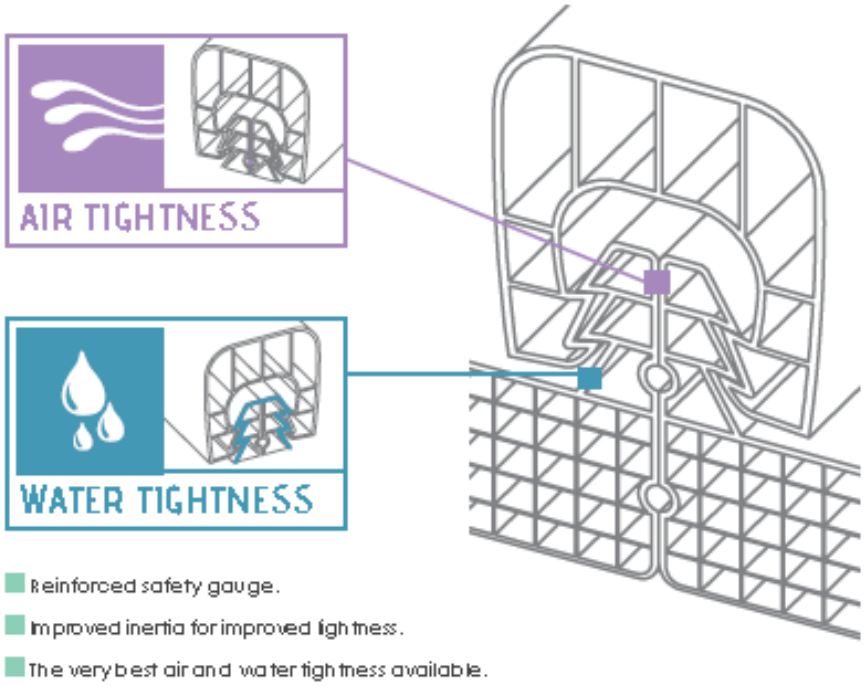


DP30 HONEYCOMB

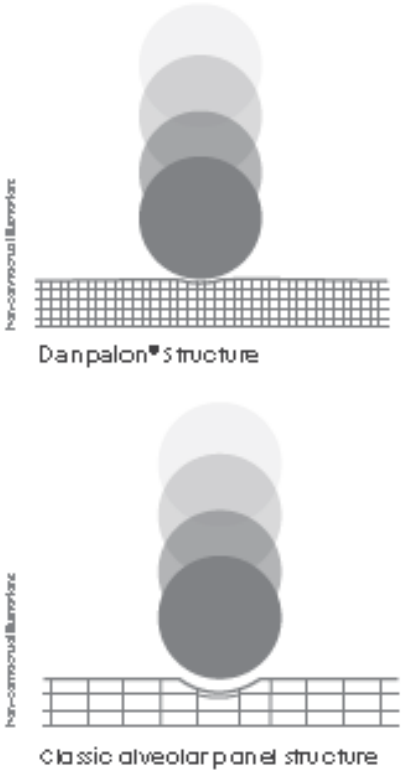


DANPALON systems

Double notching | Microcell structure



Double notching for high-security.



- Unique microcell structure – highest structural mechanical performance on the market
- Soft and hard body impact tested according: D1,10J-M50,300J-M50,400J

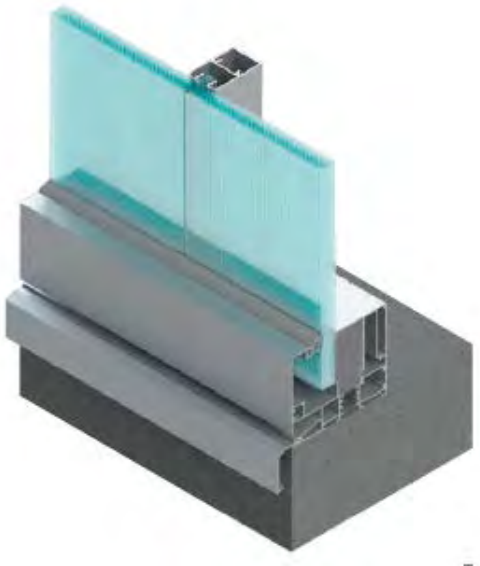
DANPALON systems

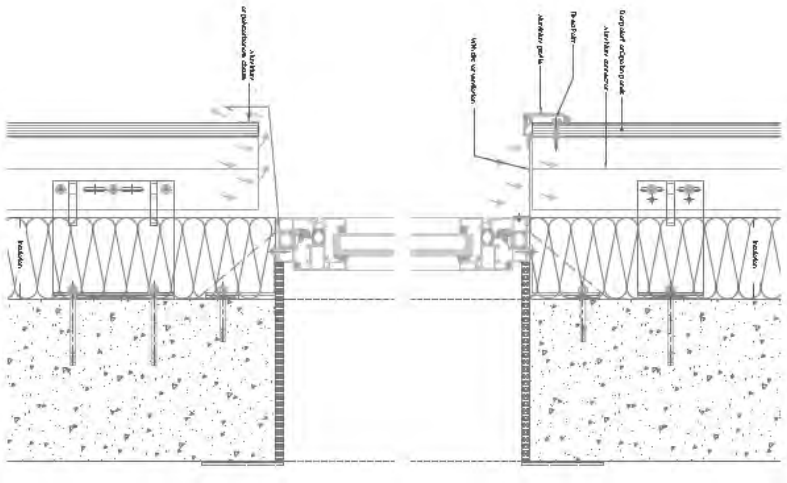
Facade

„Classic“ walls
- Great utility value / price
- All types of the panels
- FR: b-s1, d0

Ventilated rainscreen
- Aluminium subconstruction
- Full accessories
- Multicell panels
- FR: b-s1,d0

Cassettes wall
- High thermal insulation performance
- Completly factory assembled





KOVOVÉ PROFILY

Polycarbonat systems Danpalon

DANPALON systems

Facade – Cassette wall

Kazetové systémy K7 / K12

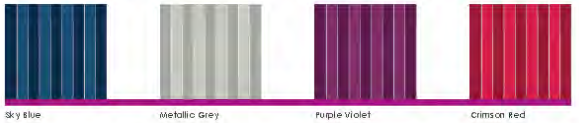
- Fire resistance B-s2,d0
- U value = from 1,2 to 0,39 W/m^{2}K
- Light transmission – 19 % to 46 %
- Span between supports 3000 mm
- Colored and illuminated facades
- Extremly quick end easy to install

DANPALON – polycarbonat systems

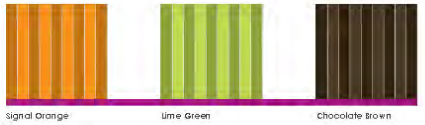
COLOURS

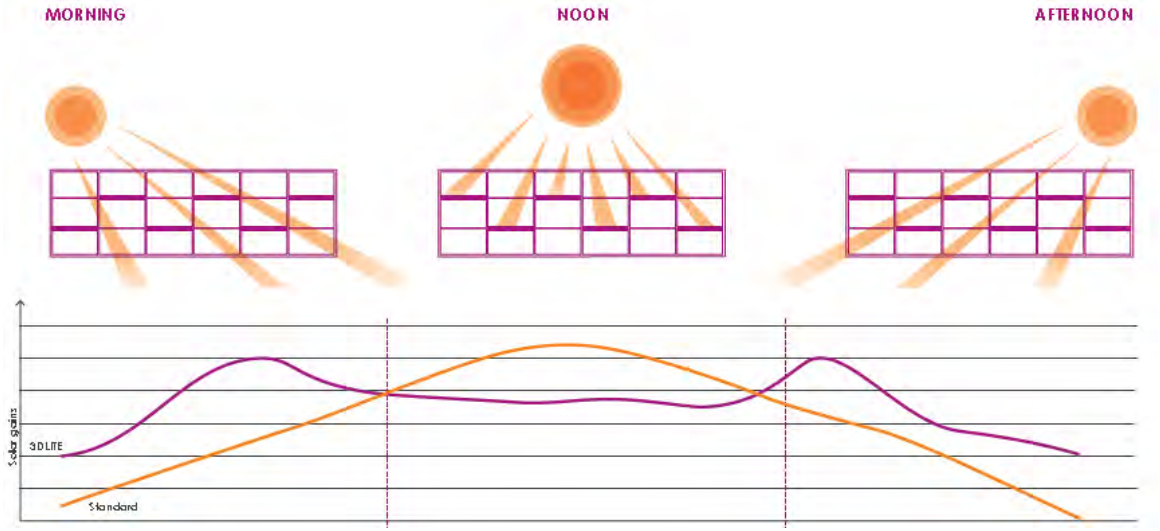
DANPALON –polycarbonat systems

3D LITE



3D lite standard colors





3D lite – harmonisation of solar gain troughout the day

Benefits of 3DLite : Astouding 3D light effect, easy installation, large spans, wide range of colors

DANPALON – polycarbonat systems

DECORATION: PRINTING – LED LIGHTS

On all types of the panels applicable.

UV resistant printing.

LED lights in DANPALON facade systems.

KOVOVÉ PROFILY

Polycarbonat systems Danpalon

DANPALON ®

- Representation exclusivity CZ/SK
- Roofs, walls and interiors full systems
- Fire resistance tested according EN 13501 for all types of panels
- Weathering, water penetration, air infiltration, impact and other tests are available
- Warranty 10 years
- Aluminium or transparent polycarbonate accessories
- Small projects available (from 1 sqm)

KOVOVÉ PROFILY

Polycarbonat systems Danpalon

KOVOVÉ PROFILY

Polycarbonat systems Danpalon

Anti-corrosion protection

- **Anticorossion protection**
of thin metal profiles
- And
- **Confidex guarancy**
the only really long life guarancy

Coating of lightweight profiles

- A lot of types of metals for cladding, for example stainless steel, exceptionally titan, titanium zinc, copper, mill finish aluminium or coating aluminium, due the high loading capacity and lower price is most used **steel with corrosion protection**
- **Good ratio between price and use value**
- Most used corrosion protection of the steel is **galvanizing** (a lot of types) **and duroplastics coating (a lot of types and thicknesses)**

UV resistance of different coatings

KOVOVÉ PROFILY

Anti-corrosion protection

Duroplastics coatings - types and characteristics

Colorcoat ® products									
Characteristics/ units			DU	Polyester	PVDF	Armatec® 35 µm	Armatec® 50 µm	Prisma®	HPS200® Ultra
1	Material		Z 275 according ČSN EN 10346:2009 (100% of Zinc)				ZA 265 according ČSN EN 10346: 2009 (95% Zinc, 5% Aluminium)		
2	Back side coating		service coating (OL, RSL)						
3	Thickness of coating	µm	15	25	25	35	50	50	200
4	Max. temperature	°C	90	80	100	90	90	120	60
5	Min. proccessing temp.	°C	16	16	16	15	15	16	16
6	UV resistance		Ruv2	Ruv3	Ruv4	Ruv4	Ruv4	Ruv4*	Ruv4
7	Gloss (60°)	%	20-40	10.90	10.35	30-50	30-50	30-40	20-40
8	Cohesion (100%)		2T	1T	1T	0,5T	0T	0T	0T
9	Elasticity, minimum bending radius	T	4-5T	3-4T	1-2T	1,5T in 15°C 3T in 10°C	1T in 15°C 3T in 10°C	0,5T	0T in 16°C 2T in 0°C
10	Abrasion resistance		limited	good	very good	very good	very good	excellent	excellent
11	Class of the corrosion resistance		RC2	RC3	RC3	RC4	RC4	RC5	RC5**
12	Maximum guarantee - exterior	years	-	5	10	10	15	25	40

* Prisma® - visible higher UV resistance than class RUV4, no higher class according DIN standards

** HPS200® Ultra - visible higher corrosion protection than class RC5, no higher class according DIN standards

Anti-corrosion protection

Confidex Guarantee max. 40 years

- For all types of mentioned coating on the top:
- Colorcoat Prisma 50 my (30 years)
- Corlorcoat HPS Ultra 200 my (40 years)
- Direct guarantee from TATA steel to the investor (registration of the building is necessary)

Confidex Colorcoat® Guarantee

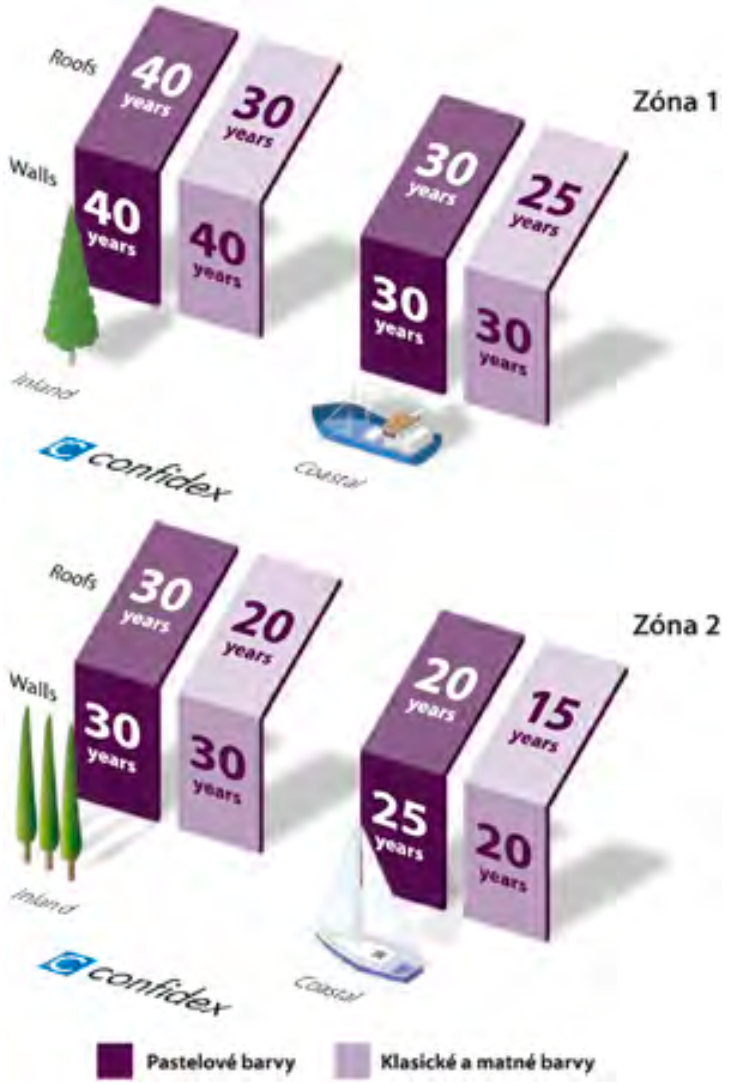
- **Is longest, 100% functionally, guarantee for the coating steel profiles** with guarantee up to 40 years for facades and roofs
- Covers cut edges for the entirety of the Confidex® Guarantee period
- 2 guarantees for the all colors
- Does not distinguish between different roof pitches down to 1°
- Is offered directly to the building owner
- Is fully transferable should the building ownership change

KOVOVÉ PROFILY

Anti-corrosion protection

Colorcoat HPS200® Ultra

- 200 µm coating thickness
- Up to 40 years Confidex® guarantee
- The color chart - Repertoire® Colour Consultancy for custom colors
- The embossed trademark for Scintilla® color is easy visible for checking the authenticity of the product
- Great corrosion protection thanks plating Galvalloy® according ČSN EN 10346:2009 (95 % Zn/5 % Al) with duroplastic coating



Anti-corrosion protection

Colorcoat® Prisma

- Colorcoat Prisma 50 µm coating thickness
- The best combination of the price, esthetics and long lasting
- Very good corrosion protection thanks plating Galvalloy® according ČSN EN 10346:2009 (95 % Zn/5 % Al) with duroplastic coating
- Up to 30 years Confidex® guarantee
- Excellent abrasion resistance of the coating
- Great color with long with gloss rentention

Filozofie firmy

The philosophy of our company:

- Not enforce to one product, one system or one producer, but:

- **To know exactly all the systems and products, and <u>choose the right one for each buildnig,</u> to provide the best aesthetic, economic and long lasting solution.**

Key feature – technical support

We provide:

- **Statical calculations** and optimization
- **Recommendations of the appropriate cladding type** for the investors and architects/engineers
- The processing and installation drawings and implementation documentation
- Solutions for difficult or non-standard requirements and details, etc.