

Insulating panel
& ideas.

The new **Practical** design

EPD

ENVIRONMENTAL PRODUCT DECLARATION



BREEAM®



LATTONEDIL



italian quality



Izolacijski paneli i sistemi za suhu gradnju.
Nova dizajnerska rješenja za nove
savremene projekte.

Insulation panels and systems for dry building
based architecture. New design solutions for new,
present day projects.

Osnovan 1969. u Brianzi, području koje opisuje visoka kultura rada kao društvene vrijednosti, Lattonedil® je s godinama rastao i postao uticajna grupacija koja sada ima 11 proizvodnih pogona: sedam u Italiji, jedan u Njemačkoj, u Španiji, u Bosni i Hercegovini i Francuskoj. 14 kompletnih proizvodnih linija s kontinuiranim ciklusom obrade osiguravaju da se svaka narudžba napravi "ad hoc" kontinuiranim ritmom proizvodnje.

Lattonedil izolacione ploče koje se prilagođavaju svim vašim projektima okarakterisane su fleksibilnošću i prednostima koje daju sistemi suve gradnje.

Founded in 1969 in Brianza, a region in which work has always had a strong social value, Lattonedil® has grown over the years to become a leading Group active in more than 11 manufacturing districts: Seven in Italy, one each in Germany, Spain, Bosnia-Herzegovina and France. 14 full continuous-cycle production lines ensure that each order is custom-tailored and completed in time as part of an uninterrupted manufacturing flow. Our collection showcases the flexibility and advantages of dry construction systems and equipment and the wide range of Lattonedil® insulation that can meet all your projects' requirements.





Sjedište u Karimatima (CO) pokriva ukupnu površinu od 126.000 kvadratnih metara i nalazi se u dolini Sevezo. Posjeduje tri proizvodne linije, zahvaljujući kojima je u mogućnosti da zadovolji potrebe sendvič panela za tržište sjeverne Italije. U fabrici Kantu (CO), koja je specijalizovana za montažu panela obloženih kamenom ili porcelanskom keramikom, moguće je posjetiti izložbeni prostor Lattonedil®. Proizvodni pogon u Venconeu (UD) specijalizovan je za proizvodnju panela sa izolacijom od mineralne i staklene vune, dok pogon u mjestu Krotone, na istočnoj strani Kalabrije, snabdijeva panele za industrijsku arhitekturu za tržišta Mediterana. U južnoj Italiji Lattonedil je takođe prisutan u Batipalji (SA) sa postrojenjem za proizvodnju polikarbonatnih ploča, a u novim fabrikama u Frozinone i Ređo Emilija, Lattonedil® proizvodi zakrivljene panele. Sjedište u Dinkelsbulu, Njemačka, koristi se za proizvodnju panela za tržište Sjeverne Evrope, dok je fabrika u Huerta Salamanci, Španija, kapija kompanije Lattonedil® na španskom i portugalskom području. Inauguracijom fabrike u Novoj Topoli, u Bosni i Hercegovini i otvaranjem iste u Francuskoj, Lattonedil® se potvrđuje kao jedna od najznačajnijih proizvodnih grupacija sendvič panela u Evropi.

Our headquarters in Carimate has an overall surface of 126,000 square meters, nestled into the Seveso Valley. It features three production lines, thanks to which it can meet the whole Northern Italy sandwich panels demand. The Cantù plant, in the Como area is specialised in assembling special stone, porcelain stoneware or box section panels plus the Lattonedil showroom (come visit us!). The production centre in Venzone, in Friuli is specialised in mineral fibre and glass wool insulated panels, while the Crotone plant, in Eastern Calabria, produces panels for industrial architecture for the Mediterranean area markets. The Battipaglia (near Salerno) Lattonedil plant manufactures polycarbonate sheets and at the new plants in Frozinone and Reggio Emilia manufacture curved panels with their own facilities. The Dinkelsbühl plant in Germany produces panels for the Northern European market, while the plant in Huerta Salamanca, Spain, is Lattonedil's gateway to the Spanish and Portuguese-speaking markets. With the inauguration of the Nova Topola plant in Bosnia and Herzegovina and the opening of the France plant, Lattonedil once again has proven to be one of the most important sandwich panels manufacturing groups in Europe.



Cantù - I



Crotone - I



Huerta Salamanca - E



La-roche-sur-Yon - F



Carimate - I



Dinkelsbühl - D



Venzone - I



Battipaglia - I



Frosinone - I



Reggio Emilia - I



Proizvodnja po najvišim
standardima kvaliteta
Manufacturing according to
the highest quality standards

Lattonedil® posmatra, proučava i stiče znanja iz sektora stambene i industrijske gradnje da bi ponudio proizvodne metode koje mogu u potpunosti iskoristiti mogućnosti koje nudi industrijalizacija. Njegov proizvodni proces je u potpunosti automatizovan kako bi se garantovali savršeni proizvodi i maksimalni kvalitet. Lattonedil® takođe pridaje veliku važnost ljudskim resursima, jer zahvaljujući kvalifikovanom i iskusnom osoblju, svaki proizvodni proces i korak se pažljivo prate, od dizajna pa do proizvodnje i isporuke.

Lattonedil® observes, studies and acquires knowledge from the residential and industrial construction sector, to offer manufacturing methods that take full advantage of the opportunities offered by industrialisation. Its manufacturing process is fully automated to guarantee perfect products and utmost quality and guarantee the utmost quality.

Lattonedil® also places great importance on people, as it is thanks to skilled and experienced staff that every step of the manufacturing process is carefully monitored by the keen and expert eyes of technical staff from the design stage all the way to manufacturing and delivery, from the design stage through to production and delivery.



Vodič za arhitekturu prema
ekološkoj tranziciji

Architecture Guide towards
the green transition.

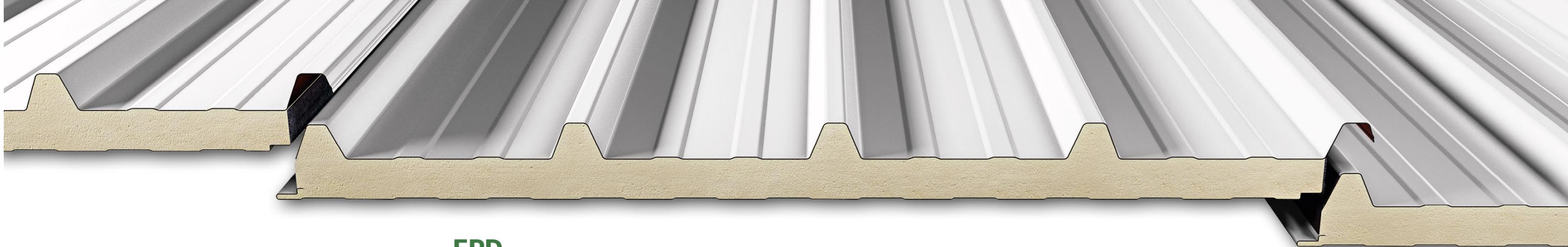
PUR PIR

Poliuretan i poliizocijanurat **paneli koji štite** dizajn



Na zahtjev
On request
Vanjska strana
External side
30
GODINA
GARANCIJE
YEARS
WARRANTY

PUR PIR

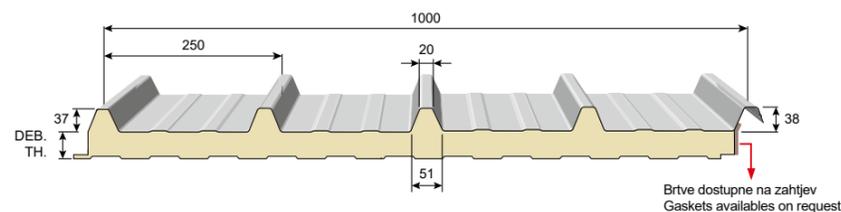


Eurocinque®

Krovovi za industrijsku i stambenu upotrebu od poliuretana
Polyurethane cover for civil and industrial purposes

EUROCIQUÉ® je krovni panel pogodan za stambene i industrijske zgrade. Ima pet rebara i sastoji se od sloja izolacijskog poliuretana između dva metalna lima. Ima prepoznatljiv izgled i dobru statičku otpornost, što rezultuje izvrsnom otpornošću na opterećenje. S ponosom možemo reći da ga je svestranost i ugodan izgled učinio najprodavanijim i najtraženijim panelom na tržištu.

EUROCIQUÉ® is a roof panel suitable for both residential and industrial buildings. It has five ribs and is composed of a layer of insulating polyurethane sandwiched between two sheet metal facings. It has a distinctive appearance and good static resistance, resulting in excellent load performance. We are proud to say that its versatility of use and pleasing appearance has made it the best selling and most sought after panel on the market.



Brtve dostupne na zahtjev
Gaskets available on request



Eurocinque® / Eurocinque® HP

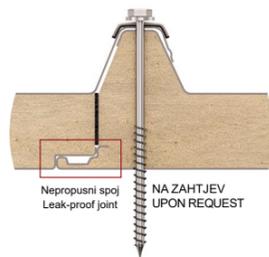
Statička svojstva (kg/m²)
Static properties (kg/sq.m.)



Debljina panela Panel thickness (mm)	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	TEŽINA WEIGHT (Kg/m ²)
30	250	195	105	70							7.42
40	290	200	135	90w	65						7.80
50	315	230	160	115	85	65					8.18
60	370	275	195	145	110	85	60				8.56
80	485	360	265	200	155	120	95	70	50		9.32
100	595	445	340	260	200	160	125	105	80	60	10.08
120	710	530	420	320	250	195	160	130	105	85	10.84
150	880	655	520	410	325	260	210	170	145	120	11.98
160	935	700	555	445	350	280	225	185	155	130	12.36
180	975	725	580	480	400	320	260	215	180	150	13.12
200	1000	745	595	495	420	360	295	245	205	170	13.88

Proračun statičkih dimenzija izveden u skladu sa Aneksom E UNI EN 14509 standard. Normalna granica otklona: 1/200 l.
Static sizing calculation performed in accordance with Annex E of the UNI EN 14509 standard. Normal deflection limit: 1/200 l.

Širina efektivnog raspona: 120mm
Effective span width: 120 mm



Eurocinque® HP

Krovovi za industrijsku i stambenu upotrebu od poliizocijanurata
Polyisocyanurate cover for civil and industrial purposes



SPOLJAŠNJI lim
Aluminijum 0,6 mm
UNUTRAŠNJI lim
Čelik 0,4 mm
EXTERNAL facing
Aluminium 0.6 mm
INTERNAL facing
Steel 0.4 mm

Debljina panela Panel thickness (mm)	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	TEŽINA WEIGHT (Kg/m ²)
30	260	150	115	80	55						5.88
40	332	196	150	110	80	60					6.26
50	386	245	185	145	105	80	60				6.64
60	435	295	220	180	135	100	75	55			7.02
80	485	360	285	235	195	150	110	85	65	50	7.78
100	600	445	355	295	250	200	155	120	95	75	8.54
120	710	530	420	350	300	250	200	155	125	95	9.30
150	880	660	525	435	370	320	260	215	175	140	10.44
160	940	700	560	460	395	345	280	230	190	155	10.82
180	975	725	580	480	410	355	315	265	220	185	11.58
200	1000	750	595	495	420	365	325	290	250	210	12.34

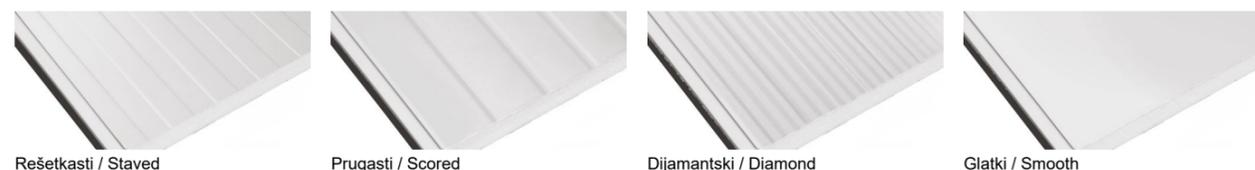
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Static sizing calculation performed in accordance with Annex E of the UNI EN 14509 standard. Normal deflection limit: 1/200 l.

Širina efektivnog raspona: 120mm
Effective span width: 120 mm

Eurocinque® .L

Krovovi za industrijsku i stambenu upotrebu od poliizocijanurata sa vanjskim limom 0,6 mm
Polyisocyanurate cover for civil and industrial purposes featuring 0.6 mm external steel layer

Mikroliniranje sa DONJE strane panela (navodi se prilikom naručivanja)
Micro-veining of the LOWER side of the panel (to be specified when ordering)



Rešetkasti / Staved

Prugasti / Scored

Dijamantski / Diamond

Glatki / Smooth



Ostali metali i različite debljine su dostupne na zahtjev
Other metal supports and different thicknesses are available upon request.

U Toplotna provodljivost Transmittance	30	40	50	60	80	100	120	150	160	180	200
W/sq.m. K	0.71	0.55	0.44	0.37	0.28	0.22	0.19	0.15	0.14	0.12	0.11
Kcal/sq.m. h °C	0.61	0.47	0.38	0.32	0.24	0.19	0.16	0.13	0.12	0.11	0.10



Eurocinque® HP

Krovovi za industrijsku i stambenu upotrebu od poliizocijanurata
Polyisocyanurate cover for civil and industrial purposes



BORGOTARO:
PROIZVODNJA PLOČA
SLAB FACTORY
65.000 M2

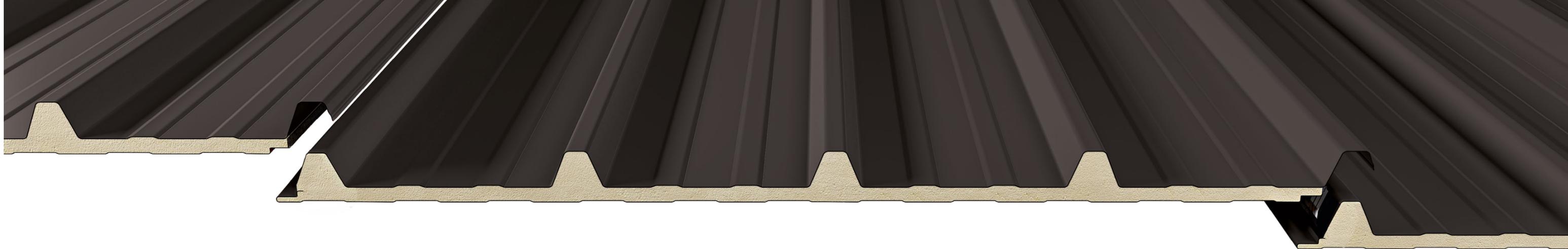
PANELI:
PANELS:
EUROCINQUE HP,
THERMO G5,
VELARIO;

DIMENZIJE:
BUILDING SIZE:
420 m x 55 m
160 m x 65 m

OPŠAVI
PROJEKTOVANI I
IZVEDENI NA MJERU
CUSTOM-DESIGNED
AND CUSTOM-MADE
TINSMITHERY

BR. ZIDNIH PANEĻA
SJEČENIH NA MJERU
NO. OF CUSTOM PIECES:
34.000

Na zahtjev
On request
Vanjska strana
External side
30
GODINA
GARANCIJE
YEARS
WARRANTY



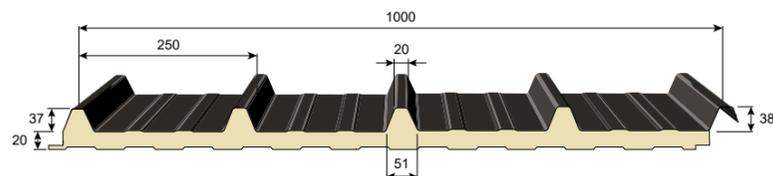
PUR PIR

Eurocinque® exclusive

Ekskluzivni proizvod višestruke upotrebe
Exclusive product for multiple use

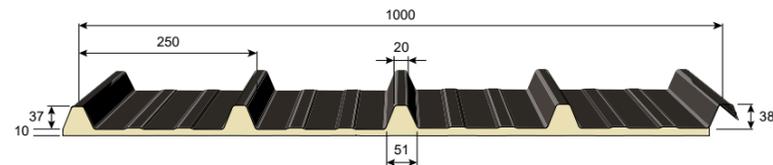
Zahvaljujući tehnološkim inovacijama i kontinuiranom radu na uvođenju novih proizvoda na tržište, Lattonedi® predstavlja liniju EURO CINQUE® EXCLUSIVE, specijalni proizvod odličnih izolacionih i statičkih karakteristika. Visokoperformantni panel sa duplim limom ili sa unutrašnjom stranom od aluminijumske folije, terpapira, fibreglasa, ali i sa ogoljenom unutrašnjom stranom (samo poliuretana).

Thanks to technological innovations and continuous work on introducing new products to the market, Lattonedi® presents new line EURO CINQUE® EXCLUSIVE, a special product with excellent isolation and static characteristics. High-performance panel with double side sheet metal or with inner side of aluminum foil, tar-paper, fiberglass, but also with bare inner side (polyurethane only).



Donja strana panela: fibreglas, karton, aluminijum ili samo PUR (odrediti prilikom naručivanja)

Lower side of the panel in: Fibreglass, paper-felt, Bijeli aluminijum only PUR (to be specified when ordering)



Donja strana panela: fibreglas, karton, aluminijum ili samo PUR (odrediti prilikom naručivanja)

Lower side of the panel in: Fibreglass, paper-felt, Bijeli aluminijum only PUR (to be specified when ordering)

Mikroliniranje sa DONJE strane (navodi se prilikom naručivanja)
Micro-veining of the LOWER side of the panel (to be specified when ordering)



Debljina 20 mm

SPOLJAŠNJI lim
Čelik 0,4 mm
UNUTRAŠNJI lim
Čelik 0,4 mm

EXTERNAL facing
Steel 0.4 mm
INTERNAL facing
Steel 0.4 mm

Širina efektivnog raspona: 120mm
Effective span width: 120 mm

Statička svojstva (kg/m²)
Static properties (kg/sq.m.)

NA DVA NOSAČA
SINGLE SPAN

Debljina panela Panel thickness (mm)	Statička svojstva (kg/m ²) Static properties (kg/sq.m.)				TEŽINA WEIGHT (Kg/m ²)
	1.5	2	2.5	3	
20	230	185	100	30	7.04

Proračun statičkih dimenzija izveden u skladu sa Aneksom E UNI EN 14509 standard. Normalna granica otklona: 1/200 ℓ
Static sizing calculation performed in accordance with Annex E of the UNI EN 14509 standard. Normal deflection limit: 1/200 ℓ

Debljina 10 / 20 mm monolamiera

SPOLJAŠNJI lim
Pocinčani čelik
UNUTRAŠNJI lim
Fibreglas

EXTERNAL facing
Prepainted zinc-plated steel
INTERNAL facing
Fibreglass

Širina efektivnog raspona: 120mm
Effective span width: 120 mm

Statička svojstva (kg/m²)
Static properties (kg/sq.m.)

NA DVA NOSAČA
SINGLE SPAN

Debljina metalne ploče Metal sheet thickness (mm)	Statička svojstva (kg/m ²) Static properties (kg/sq.m.)											TEŽINA WEIGHT (Kg/m ²)	TEŽINA WEIGHT (Kg/m ²)
	1	1.25	1.5	1.75	2	2.25	2.5	2.75	3	3.25	3.5		
0.4	340	225	156	114	88	65						3.93	4.31
0.5	495	322	224	164	126	93	68					4.69	5.07
0.6	595	381	265	195	148	111	81	61				5.65	6.03
0.8	795	508	353	259	198	149	108	81	63	49		7.56	7.94

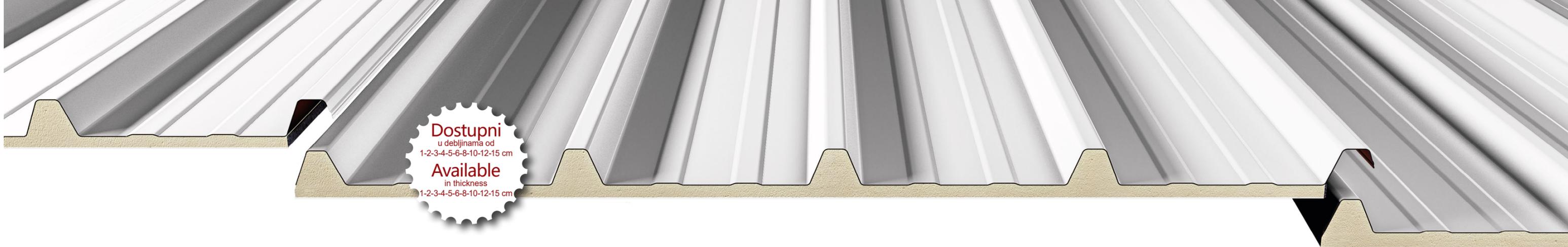
Proračun statičkih dimenzija izveden u skladu sa Aneksom E UNI EN 14509 standard. Normalna granica otklona: 1/200 ℓ
Static sizing calculation performed in accordance with Annex E of the UNI EN 14509 standard. Normal deflection limit: 1/200 ℓ

U Toplotna provodljivost Transmittance	10	20
	W/sq.m. K	1.43
Kcal/sq.m. h °C	1.23	0.86

Other metal supports and different thicknesses are available upon request.



Na zahtjev
On request
Vanjska strana
External side
30
GODINA
GARANCIJE
YEARS
WARRANTY



Dostupni
u debljinama od
1-2-3-4-5-6-8-10-12-15 cm
Available
in thickness
1-2-3-4-5-6-8-10-12-15 cm

PUR PIR

Isofactor® Eurocinque

Krovovi za farme
Roofing for livestock areas

ISOFACTOR® je paleta Lattonedil-ovih panela namijenjenih poljoprivrednoj i stočarskoj industriji zahvaljujući dodavanju fibreglasa koji daje panelu visoku otpornost na hemijska i bakterijska sredstva (posebno ureu i amonijak) i dobru otpornost na ogrebotine. ISOFACTOR® krovni paneli se stoga mogu očistiti i oprati sa unutrašnje strane, sprečavajući probleme s higijenom i korozijom, što znači da će trajati dugo vremena i zaštititi vaše ulaganje. ISOFACTOR® EUROCINQUE je samonosivi panel sastavljen od ekološki prihvatljivog, ekspaniranog poliuretanskog izolacijskog jezgra visoke gustoće, obloženog krutim vanjskim slojem čelika ili aluminija s pet rebara i dobrom otpornošću na statiku i fibreglas vlaknima. Maksimalna debljina izrade 150 mm.

ISOFACTOR® is a range of Lattonedil panels designed for use in the agricultural and livestock industry thanks to the addition of a fibreglass facing that gives the panel high resistance to chemical and bacterial agents (in particular urea and ammonia) and good scratch resistance. ISOFACTOR® insulated roof panels can therefore be cleaned and washed internally, preventing issues with hygiene and corrosion, meaning they will last well over time and protect your investment. ISOFACTOR® EUROCINQUE is a self-supporting sandwich panel composed of an environmentally friendly, high-density expanded polyurethane insulating core, faced with a rigid external layer of prepainted steel or aluminium with five ribs and good static resistance and a fibreglass facing, which may be subject to colour alterations. Maximum manufacturing thickness 150 mm.



SPOLJAŠNJI lim
Pocinčani čelik
UNUTRAŠNJI lim
Fibreglas
EXTERNAL facing
Prepainted
zinc-plated steel
INTERNAL facing
Fibreglas

Širina efektivnog raspona: 120mm
Effective span width: 120 mm

Težina
Weight table
(Kg/sq.m.)

Statička svojstva (kg/m²)
Static properties (kg/sq.m.)

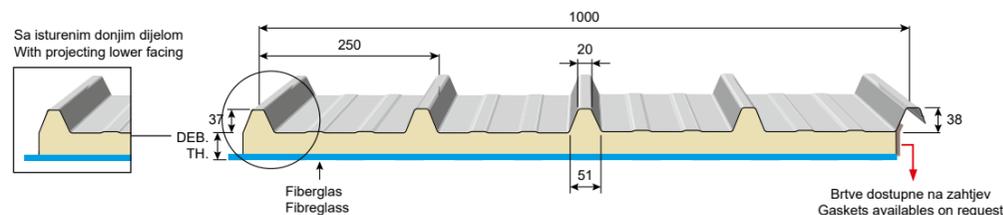
NA DVA NOSAČA
SINGLE SPAN

Debljina metalne ploče Metal sheet thickness (mm)	P									
	1	1.25	1.5	1.75	2	2.25	2.5	2.75	3	3.25
0.4	340	225	156	114	88	65				
0.5	495	322	224	164	126	93	68			
0.6	595	381	265	195	148	111	81	61		
0.8	795	508	353	259	198	149	108	81	63	49

Proračun statičkih dimenzija izveden u skladu sa Aneksom E UNI EN 14509 standard. Normalna granica otklona: 1/200 ℓ
Static sizing calculation performed in accordance with Annex E of the UNI EN 14509 standard. Normal deflection limit: 1/200 ℓ

Debljina metalne ploče Sheet metal thickness (mm)	U									
	10	20	30	40	50	60	80	100	120	150
0.4	3.93	4.31	4.69	4.87	5.25	5.63	6.39	7.15	7.73	9.07
0.5	4.69	5.07	5.45	5.83	6.21	6.59	7.35	8.11	8.49	9.84
0.6	5.65	6.03	6.41	6.79	7.17	7.55	8.31	9.07	9.45	10.79
0.8	7.56	7.94	8.32	8.70	9.08	9.46	10.22	10.98	11.36	12.70

Toplotna provodljivost Transmittance	U									
	10	20	30	40	50	60	80	100	120	150
W/sq.m. K	1.43	1.00	0.71	0.55	0.44	0.37	0.28	0.22	0.19	0.15
Kcal/sq.m. h °C	1.23	0.86	0.61	0.47	0.38	0.32	0.24	0.19	0.16	0.13



Profilacije vanjskog lima
Panel upper side micro-ribbing



Osali metali i različite debljine su dostupne na zahtjev
Other metal supports and different thicknesses are available upon request.

LATTONEDIL



Na zahtjev
On request
Vanjska strana
External side
30
GODINA
GARANCIJE
YEARS
WARRANTY



Dostupni
u debljinama od
3-4-5-6-8-10 cm
Available
in thickness
3-4-5-6-8-10 cm

PUR

TTCOPPO®

Krovovi privlačnog izgleda
The roof with real aesthetics

TTCOPPO® je izolacioni panel koji se koristi kada je važan estetski izgled stambenih objekata. Na završenom objektu stvara utisak pravog krova, budući da je iste boje kao crijep, a dostupna je i završna obrada koja podsjeća na starinske krovove. TTCOPPO®, zadovoljavajući određene norme, lako se uklapa u prirodno okruženje, a može se koristiti i za renoviranje starih objekata. TTCOPPO® garantuje odličnu toplotnu izolaciju zbog debljine poprečnog presjeka.

Tehničke karakteristike:

Metalni sendvič panel sa izolacijom od ekspaniranog poliuretana.

Širina: 1000 mm.

Gornji nosač: pocinčani prefarbani čelik, aluminijum i bakar.

Donji nosač: pocinčani prefarbani čelik; na zahtjev su dostupni drugi nosači i boje.

Dužina panela je određena poprečnim presjekom crijeva čiji se skenirani crtež nalazi ispod teksta, sa stalnom dimenzijom od 350 mm.

TTCOPPO® is an insulated panel suitable for use on residential buildings when appearance must be taken into account. The finished roof has the appearance of a traditional tiled roof and is proposed as standard in the same colour as real tiles, although an aged finish is also available. TTCOPPO® meets the landscape planning regulations that also apply to old towns. TTCOPPO® guarantees excellent thermal insulation thanks to the increased thickness of its distinctive section.

Technical characteristics:

Metal sandwich panel with expanded polyurethane insulation. Effective width: 1000 mm.

Upper facing: prepainted zinc-plated steel, aluminium or copper.

Lower facing: prepainted zinc-plated steel, other facings and colours available on request.

Panel length depends on the module dictated by the design of the tile, see illustration below, with a constant dimension of 350 mm.



Statička svojstva (kg/m²)
Static properties (kg/sq.m.)



SPOLJAŠNJI lim
Čelik 0,5 mm
UNUTRAŠNJI lim
Čelik 0,4 mm

EXTERNAL facing
Steel 0.5 mm
INTERNAL facing
Steel 0.4 mm

Debljina panela Panel thickness (mm)	NA DVA NOSAČA SINGLE SPAN					TEŽINA WEIGHT (Kg/m ²)	NA VIŠE NOSAČA DOUBLE SPAN				
	1.5	2	2.5	3	3.5		1.5	2	2.5	3	3.5
30	271	190	108	47	41	8.78	307	248	196	139	99
40	339	249	156	82	58	9.16	40	366	295	228	162
50	406	307	202	117	86	9.54	50	442	342	260	183
60	472	366	250	153	111	9.92	60	484	389	293	206
80	607	487	345	224	178	10.68	80	629	502	361	253
100	715	597	440	305	250	11.44	100	759	710	470	340

Širina efektivnog raspona: 120mm
Effective span width: 120 mm

p = Kg / m². ravnomjerno raspoređeno Radna granica: nagib 1/200 ℓ
p = Kg/sq.m. evenly distributed Operating limit: deflection 1/200 ℓ

p = Kg / m². ravnomjerno raspoređeno Radna granica: nagib 1/200 ℓ
p = Kg/sq.m. evenly distributed Operating limit: deflection 1/200 ℓ

SPOLJAŠNJI lim
Aluminijum 0,7 mm
UNUTRAŠNJI lim
Čelik 0,4 mm

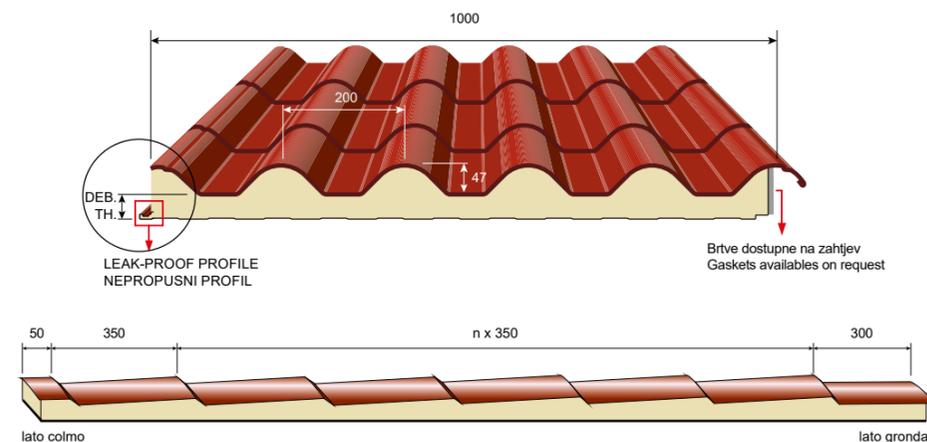
EXTERNAL facing
Aluminium 0.7 mm
INTERNAL facing
Steel 0.4 mm

Debljina panela Panel thickness (mm)	NA DVA NOSAČA SINGLE SPAN					TEŽINA WEIGHT (Kg/m ²)	NA VIŠE NOSAČA DOUBLE SPAN				
	1.5	2	2.5	3	3.5		1.5	2	2.5	3	3.5
30	231	162	82	36	31	6.60	30	249	185	146	105
40	253	186	117	64	44	6.98	40	275	219	171	122
50	305	231	152	87	64	7.36	50	318	256	196	136
60	353	275	187	115	83	7.74	60	276	293	220	155
80	455	366	258	168	120	8.50	80	471	382	276	190
100	545	446	328	228	170	9.26	100	570	426	303	235

Širina efektivnog raspona: 120mm
Effective span width: 120 mm

p = Kg / m². ravnomjerno raspoređeno Radna granica: nagib 1/200 ℓ
p = Kg/sq.m. evenly distributed Operating limit: deflection 1/200 ℓ

p = Kg / m². ravnomjerno raspoređeno Radna granica: nagib 1/200 ℓ
p = Kg/sq.m. evenly distributed Operating limit: deflection 1/200 ℓ



Mikroliniranje sa DONJE strane (navodi se prilikom naručivanja)
Micro-veining of the LOWER side of the panel (to be specified when ordering)



Profilacija u obliku crijeva
Shaped in the form of a pantile



Spajanje brtvom i okapnicom
Joint with gasket and drip element



Crijep sa preklapom
Overlapping tile

Osali metali i različite debljine su dostupne na zahtjev
Other metal supports and different thicknesses are available upon request.

LATTONEDIL





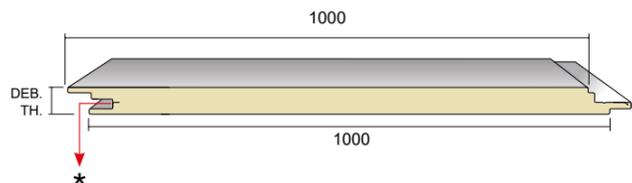
Isopar® Élite

Izolacioni zidni panel sa ispunom od poliuretana sa skrivenim spojem
Polyurethane insulation panel with concealed fastening

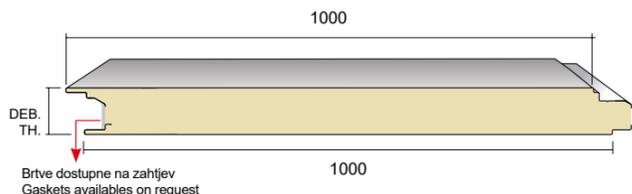
Estetski izgled zidova je jako bitan u mnogim slučajevima. ISOPAR®, nakon pažljivih studija, predstavljen je sa skrivenim spojem. Pričvršćivanje panela se odvija kroz spoj prikazan na crtežu. Sada se praktičnosti i kvalitetu ISOPAR® dodaje ljepota zida sa skrivenim spojem. ISOPAR® Élite je već dostupan u najmanjim debljinama: 30-40-50-60-80-100-120-150 mm.

The aesthetics of a wall are often even more important than its other features. ISOPAR® is now also available with concealed fastening parts, developed after a long and careful research. The panels fastening is carried out via a peculiar interlocking as shown in the drawing. Now you can use ISOPAR® panels' handiness and top quality in spectacularly beautiful walls thanks to the concealed fastening. ISOPAR® Élite is available even in very low panel thickness: 30-40-50-60-80-100-120-150 mm.

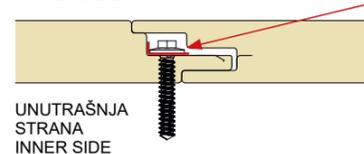
DEBLJINE 30 MM THICKNESS 30 MM



DEBLJINE OD 40 DO 150 MM THICKNESS 40 TO 150 MM

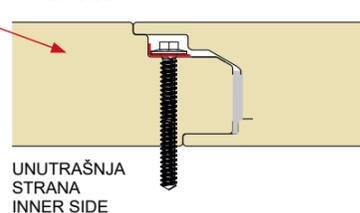


VANJSKA STRANA
OUTER SIDE



Lattenedil preporučuje da se tokom faze montaže koristi čelična pločica za pričvršćivanje. Pločica ima svrhu da raspodijeli naprezanja koja proizilaze iz fiksiranja i povećava otpornost na naprezanja pritiska koji djeluje na zidne panele. Položaj i broj tačaka pričvršćivanja mora da definiše projektant u fazi projektovanja, na osnovu naprezanja na konstrukciju. Lattenedil recommends: use a steel fastening plate for assembling! The steel plate distributes the forces caused by the fastening and increases compression and depression stress on the wall panels. The position and number of fastening points must be defined by the designer, during the design phase, taking into account the stresses the structure undergoes.

VANJSKA STRANA
OUTER SIDE

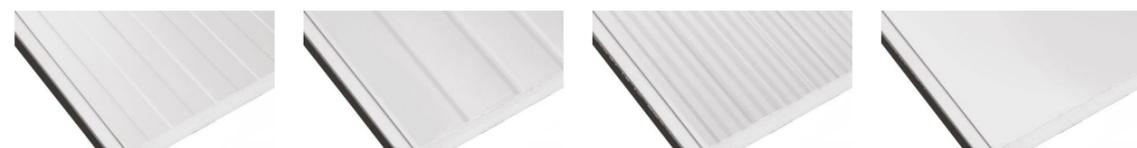


UNUTRAŠNJA
STRANA
INNER SIDE

Isopar® Élite HP

Izolacioni zidni panel sa ispunom od poliizocijanurata sa skrivenim spojem
Polyisocyanurate insulation panel with concealed fastening

Profilacija panela (naznačiti prilikom narudžbe)
Panel micro-ribbing (shall be requested when ordering)



Rešetkasti / Staved

Prugasti / Scored

Dijamantski / Diamond

Glatki / Smooth

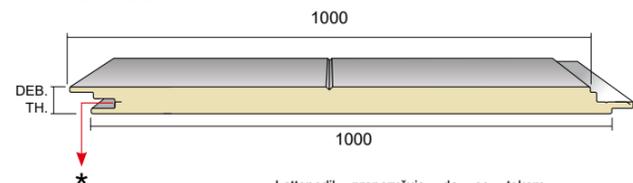
Isopar® Élite 500

Izolacioni zidni panel sa ispunom od poliuretana sa skrivenim spojem, efekat doga
Polyurethane insulation panel with concealed fastening and dowel effect

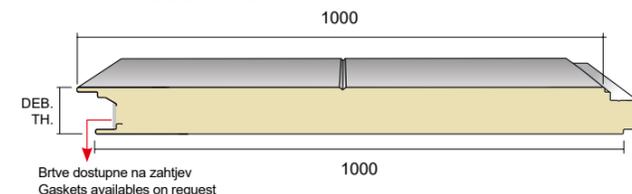
Praktičnosti i kvaliteti ISOPAR®-a pridodaje se i ljepota zida izrađenog skrivenim pričvršćivanjem s efektom "doga" u vanjskoj završnoj obradi. ISOPAR® ÉLITE 500 već je dostupan u najnižim debljinama: 30-40-50-60-80-100-120-150 mm.

The practicality and properties of ISOPAR® are combined with the beauty of a slat-effect wall with fasteners concealed in the outer finish. ISOPAR® ÉLITE 500 is available in the following thickness options: 30-40-50-60-80-100-120-150 mm. A thickness of 0.6 mm for the outer steel side is recommended.

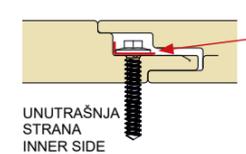
DEBLJINE 30 MM THICKNESS 30 MM



DEBLJINE OD 40 DO 150 MM THICKNESS 40 TO 150 MM



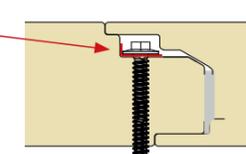
VANJSKA STRANA
OUTER SIDE



UNUTRAŠNJA
STRANA
INNER SIDE

Lattenedil preporučuje da se tokom faze montaže koristi čelična pločica za pričvršćivanje. Pločica ima svrhu da raspodijeli naprezanja koja proizilaze iz fiksiranja i povećava otpornost na naprezanja pritiska koji djeluje na zidne panele. Položaj i broj tačaka pričvršćivanja mora da definiše projektant u fazi projektovanja, na osnovu naprezanja na konstrukciju. Lattenedil recommends: use a steel fastening plate for assembling! The steel plate distributes the forces caused by the fastening and increases compression and depression stress on the wall panels. The position and number of fastening points must be defined by the designer, during the design phase, taking into account the stresses the structure undergoes.

VANJSKA STRANA
OUTER SIDE



UNUTRAŠNJA
STRANA
INNER SIDE

U Toplotna provodljivost Transmittance	30	40	50	60	80	100	120	150
W/sq.m. K	0.71	0.55	0.44	0.37	0.28	0.22	0.19	0.15
Kcal/sq.m. h °C	0.61	0.47	0.38	0.32	0.24	0.19	0.16	0.13

Isopar® Élite 500 HP

Izolacioni zidni panel sa ispunom od poliizocijanurata sa skrivenim spojem, efekat doga
Polyisocyanurate insulation panel with concealed fastening and dowel effect

Profilacija unutrašnjeg lima (naznačiti prilikom narudžbe)
Micro-ribbed inner side of the panel (to be specified when ordering)



Rešetkasti / Staved

Prugasti / Scored

Dijamantski / Diamond

Glatki / Smooth



Isopar® Élite HP

Izolacioni zidni panel sa ispunom od poliizocijanurata sa skrivenim spojem
Polyisocyanurate insulation panel with concealed fastening



LOGISTIČKI CENTAR
LOGISTICS CENTRE
107.000 m²

ZIDNI PANELI
WALL PANELS
ISOPAR ELITE HP
15.591 m²

FASADA REALIZOVANA
MOZAIKOM RAZLIČITIH
BOJA ZIDNIH PANELA
THE PANELS WERE
MADE IN CUSTOM
COLOURS

ZIDNIH PANELA
SJEČENIH NA MJERU
NO. OF CUSTOM PIECES:
2.370



Na zahtjev
On request
Vanjska strana
External side
30
GODINA
GARANCIJE
YEARS
WARRANTY



PUR PIR

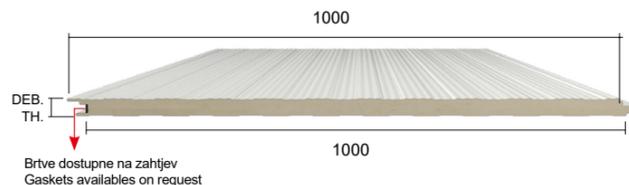
Isopar® Élite Diamantato plus

Izolacioni panel sa ispunom od poliuretana sa skrivenim spojem i vanjskom profilacijom diamantato-dogato
Polyurethane insulation panel for wall with hidden fixing and with external diamond slatted profile

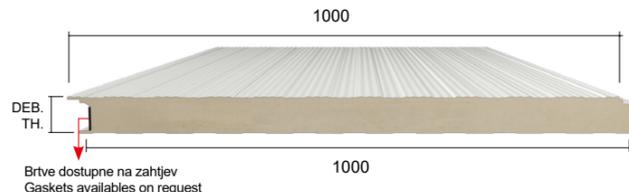
U većini slučajeva, estetska vrijednost zidova je ključna. ISOPAR® Élite diamantato plus sa ispunom od poliuretana, pored toga što pruža skriveni spoj, posjeduje i vanjsku profilaciju diamantato-dogato koja je čini jedinstvenim u smislu praktičnosti, kvaliteta i elegancije. ISOPAR® Élite Diamantato plus dostupan je u sledećim debljinama: 30-40-50-60-80-100-120-150 mm.

In many cases the aesthetic value of a wall is fundamental. ISOPAR® Élite diamantato plus, in addition to having hidden fixing, has an external diamond slatted profile that makes it unique in terms of practicality, quality and elegance. ISOPAR® Élite Diamantato plus is available in the following thicknesses: 30-40-50-60-80-100-120-150 mm.

DEBLJINE 30 MM THICKNESS 30 MM



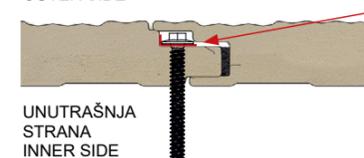
DEBLJINE OD 40 DO 150 MM THICKNESS 40 TO 150 MM



Isopar® Élite Diamantato plus HP

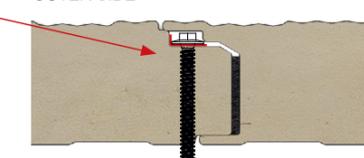
Izolacioni zidni panel sa ispunom od poliizocijanurata sa skrivenim spojem i vanjskom profilacijom diamantato-dogato
Polyisocyanurate insulation panel for wall with hidden fixing and with external diamond slatted profile

VANJSKA STRANA
OUTER SIDE



Lattonedil preporučuje da se tokom faze montaže koristi čelična pločica za pričvršćivanje. Pločica ima svrhu da raspodijeli naprezanja koja proizilaze iz fiksiranja i poveća otpornost na naprezanja pritiska koji djeluje na zidne panele. Položaj i broj tačaka pričvršćivanja mora da definiše projektant u fazi projektovanja, na osnovu naprezanja na konstrukciju. Lattonedil recommends: use a steel fastening plate for assembling! The steel plate distributes the forces caused by the fastening and increases compression and depression stress on the wall panels. The position and number of fastening points must be defined by the designer, during the design phase, taking into account the stresses the structure undergoes.

VANJSKA STRANA
OUTER SIDE



U Toplotna provodljivost Transmittance	30	40	50	60	80	100	120	150
W/sq.m. K	0.71	0.55	0.44	0.37	0.28	0.22	0.19	0.15
Kcal/sq.m. h °C	0.61	0.47	0.38	0.32	0.24	0.19	0.16	0.13

Mikroliniranje sa DONJE strane (navodi se prilikom naručivanja)
Micro-veining of the LOWER side of the panel (to be specified when ordering)



Rešetkasti / Staved



Prugasti / Scored



Dijamantski / Diamond



Glatki / Smooth



Na zahtjev
On request
Vanjska strana
External side
30
GODINA
GARANCIJE
YEARS
WARRANTY



PUR PIR

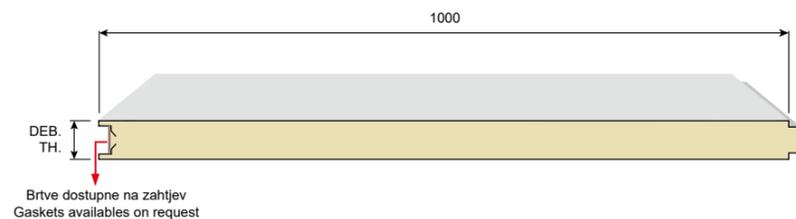
Isopar®

Izolacioni zidni panel sa ispunom od poliuretana
Polyurethane wall insulation panel

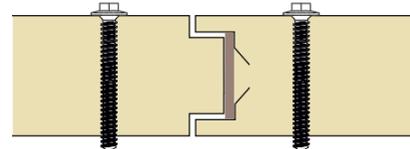


Tokom izgradnje važna je ušteda energije. Pažnja sektora je okrenuta građevinskim proizvodima koji već uključuju visoku izolaciju. ISOPAR® je ravni samonoseći panel, pogodan za izgradnju montažnih zidova, montažnih baraka, rashladnih komora, izložbenog prostora, kliznih kapija i stropova, a idealan je i za projekte koji zahtijevaju lagan, čvrst, izolacioni proizvod. ISOPAR® svojim «rešetkastim», «prugastim», «glatkim» i «dijamantnim» profilima doprinosi dizajnu nove arhitekture dajući joj jasan, jednostavan i pravilan izgled. Dostupan već od najmanjih debljina panela: 30-40-50-60-80-100-120-150-180-200-220-240 mm.

In the building industry, energy savings are an increasingly important issue. Therefore, the industry is focussing on building materials that include highly-insulating components. ISOPAR® is a self-supporting flat panel specially designed for mobile walls, prefabricated boxes, cooling chambers, exhibition stands, sliding doors, false ceilings and is an ideal component for those projects that require light, strong, insulating products. In the "staved", "scored", "smooth" and "diamond" versions, ISOPAR® improves the design of any new architecture: sleek, simple and even. Available for the thinnest thicknesses: 30-40-50-60-80-100-120-150-180-200-220-240 mm.



VANJSKA STRANA
EXTERNAL SIDE



UNUTRAŠNJA STRANA
INTERNAL SIDE

Isopar® HP

Izolacioni zidni panel sa ispunom od poliizocijanurata
Polyisocyanurate wall insulation panel



Isopar®.L

Izolacioni zidni panel sa ispunom od poliizocijanurata, sa vanjskim limom 0,6 mm
Polyisocyanurate wall insulation panel with 0.6 mm outer steel layer



U	30	40	50	60	80	100	120	150	180	200	220	240
Toplotna provodljivost Transmittance												
W/sq.m. K	0.71	0.55	0.44	0.37	0.28	0.22	0.19	0.15	0.12	0.11	0.10	0.09
Kcal/sq.m. h °C	0.61	0.47	0.38	0.32	0.24	0.19	0.16	0.13	0.11	0.10	0.09	0.08

Mikroliniranje sa DONJE strane (navodi se prilikom naručivanja)
Micro-veining of the LOWER side of the panel (to be specified when ordering)



Rešetkasti / Staved



Prugasti / Scored



Dijamantski / Diamond



Glatki / Smooth



Dijamantski PLUS / Diamond PLUS



Isopar® / Isopar® HP / Isopar® Élite / Isopar® Élite HP / Isopar® Élite 500 / Isopar® Élite 500 HP Isopar® Diamantato plus / Isopar® Diamantato plus HP

Statička svojstva / Static properties

Statička svojstva (kg/m²)
Static properties (kg/sq.m.)



SPOLJAŠNJI lim
Čelik 0,4mm
UNUTRAŠNJI lim
Čelik 0,4mm
EXTERNAL facing
Steel 0.4 mm
INTERNAL facing
Steel 0.4 mm

Debljina panela Panel thickness (mm)	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	TEŽINA WEIGHT (Kg/m ²)
30	190	110	85	65							6.86
40	236	145	115	90	65	50					7.22
50	297	185	150	115	85	65	50				7.61
60	357	225	180	140	105	80	60	50			8.00
80	460	305	245	190	140	105	85	65			8.78
100	515	385	305	240	175	135	105	85			9.56
120	620	465	370	290	215	165	130	105			10.34
150	775	580	465	365	270	205	160	130			11.51
180	935	700	560	440	325	245	195	155			12.68
200	1000	780	625	490	360	275	215	175			13.46
220	1000	860	685	540	395	305	240	195			14.22
240	1000	940	750	590	435	330	260	210			14.98

Širina efektivnog raspona: 120mm
Effective span width: 120 mm

Proračun statičkih dimenzija izveden u skladu sa Aneksom E UNI EN 14509 standard. Normalna granica otklona: 1/200 ℓ
Static sizing calculation performed in accordance with Annex E of the UNI EN 14509 standard. Normal deflection limit: 1/200 ℓ

Statička svojstva (kg/m²)
Static properties (kg/sq.m.)



SPOLJAŠNJI lim
Aluminijum 0,6 mm
UNUTRAŠNJI lim
Čelik 0,4mm
EXTERNAL facing
Aluminium 0.6 mm
INTERNAL facing
Steel 0.4 mm

Debljina panela Panel thickness (mm)	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	TEŽINA WEIGHT (Kg/m ²)
30	160	120	100	75							5.71
40	210	160	130	95	75						6.07
50	265	200	165	115	90	70	50				6.46
60	315	240	195	140	105	85	70	50			6.85
80	420	320	260	185	140	110	90	75			7.63
100	530	400	320	225	170	135	110	90			8.41
120	635	480	385	270	205	160	115	105			9.19
150	790	595	480	335	250	195	155	130			10.36
180	950	715	575	405	300	230	185	155			11.53
200	1000	780	625	430	315	245	200	170			12.31
220	1000	860	690	455	345	280	220	195			13.10
240	1000	940	755	480	375	315	240	220			13.87

Širina efektivnog raspona: 120mm
Effective span width: 120 mm

Proračun statičkih dimenzija izveden u skladu sa Aneksom E UNI EN 14509 standard. Normalna granica otklona: 1/200 ℓ
Static sizing calculation performed in accordance with Annex E of the UNI EN 14509 standard. Normal deflection limit: 1/200 ℓ

SPOLJAŠNJI lim
Čelik 0,4mm
UNUTRAŠNJI lim
Čelik 0,4mm
EXTERNAL facing
Steel 0.4 mm
INTERNAL facing
Steel 0.4 mm



Debljina panela Panel thickness (mm)	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	TEŽINA WEIGHT (Kg/m ²)
30	151	90	70	60	50						6.86
40	195	125	95	80	65	50					7.22
50	245	160	130	100	80	65	50				7.61
60	295	195	155	125	95	75	65	50			8.00
80	395	270	210	165	120	95	75	65	50		8.78
100	495	340	265	195	145	115	95	75	65	55	9.56
120	600	415	310	225	170	135	110	90	75	65	10.34
150	735	515	365	270	205	160	130	110	90	80	11.51
180	770	560	415	310	240	190	155	125	105	90	12.68
200	1000	590	450	335	260	205	170	140	115	100	13.46
220	1000	620	485	365	280	225	180	150	130	110	14.22
240	1000	650	510	390	305	240	195	165	140	120	14.98

Širina efektivnog raspona: 120mm
Effective span width: 120 mm

Proračun statičkih dimenzija izveden u skladu sa Aneksom E UNI EN 14509 standard. Normalna granica otklona: 1/200 ℓ
Static sizing calculation performed in accordance with Annex E of the UNI EN 14509 standard. Normal deflection limit: 1/200 ℓ

SPOLJAŠNJI lim
Aluminijum 0,6 mm
UNUTRAŠNJI lim
Čelik 0,4mm
EXTERNAL facing
Aluminium 0.6 mm
INTERNAL facing
Steel 0.4 mm



Debljina panela Panel thickness (mm)	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	TEŽINA WEIGHT (Kg/m ²)
30	135	105	75	60	50						5.71
40	185	135	95	70	65	50					6.07
50	230	165	110	80	65	65	50				6.46
60	280	190	125	95	75	75	65	50			6.85
80	380	235	160	115	90	70	75	65	50		7.63
100	465	280	185	135	105	85	70	75	65	55	8.41
120	530	320	215	155	120	95	80	70	75	65	9.19
150	620	380	255	185	140	115	95	80	70	68	10.36
180	705	440	300	215	165	130	110	90	80	70	11.53
200	745	480	325	235	180	145	115	110	85	75	12.31
220	785	520	365	245	200	155	125	115	90	80	13.10
240	825	560	405	275	220	165	135	120	95	85	13.87

Širina efektivnog raspona: 120mm
Effective span width: 120 mm

Proračun statičkih dimenzija izveden u skladu sa Aneksom E UNI EN 14509 standard. Normalna granica otklona: 1/200 ℓ
Static sizing calculation performed in accordance with Annex E of the UNI EN 14509 standard. Normal deflection limit: 1/200 ℓ

SPOLJAŠNJI lim
Čelik 0,4mm
UNUTRAŠNJI lim
Čelik 0,4mm
EXTERNAL facing
Steel 0.4 mm
INTERNAL facing
Steel 0.4 mm



Debljina panela Panel thickness (mm)	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	TEŽINA WEIGHT (Kg/m ²)
30	151	90	70	60	50						6.86
40	195	125	100	80	70	60	50				7.22
50	245	160	125	105	90	75	60	50			7.61
60	295	195	155	125	110	85	70	55	50		8.00
80	395	265	210	170	135	105	85	70	60	50	8.78
100	495	335	265	205	160	125	105	85	75	65	9.56
120	600	410	310	235	180	145	120	100	85	75	10.34
150	735	505	360	275	215	170	140	120	100	90	11.51
180	770	570	410	310	245	200	165	140	120	100	12.68
200	1000	605	445	335	265	215	180	150	130	110	13.46
220	1000	635	475	360	285	230	190	160	140	120	14.22
240	1000	665	505	385	305	250	205	175	150	130	14.98

Širina efektivnog raspona: 120mm
Effective span width: 120 mm

Proračun statičkih dimenzija izveden u skladu sa Aneksom E UNI EN 14509 standard. Normalna granica otklona: 1/200 ℓ
Static sizing calculation performed in accordance with Annex E of the UNI EN 14509 standard. Normal deflection limit: 1/200 ℓ

SPOLJAŠNJI lim
Aluminijum 0,6 mm
UNUTRAŠNJI lim
Čelik 0,4mm
EXTERNAL facing
Aluminium 0.6 mm
INTERNAL facing
Steel 0.4 mm



Debljina panela Panel thickness (mm)	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	TEŽINA WEIGHT (Kg/m ²)
30	135	105	75	60	50						5.71
40	185	135	95	70	65	50					6.07
50	230	165	110	80	65	65	50				6.46
60	280	190	125	95	75	75	65	50			6.85
80	380	235	160	115	90	70	75	65	50		7.63
100	465	280	185	135	105	85	70	75	65	55	8.41
120	530	320	215	155	120	95	80	70	75	65	9.19
150	620	380	255	185	140	115	95	80	70	68	10.36
180	705	440	300	215	165	130	110	90	80	70	11.53
200	745	480	325	235	180	145	115	110	85	75	12.31
220	785	520	365	245	200	155	125	115	90	80	13.10
240	825	560	405	275	220	165	135	120	95	85	13.87

Širina efektivnog raspona: 120mm
Effective span width: 120 mm

Proračun statičkih dimenzija izveden u skladu sa Aneksom E UNI EN 14509 standard. Normalna granica otklona: 1/200 ℓ
Static sizing calculation performed in accordance with Annex E of the UNI EN 14509 standard. Normal deflection limit: 1/200 ℓ

Vodič za arhitekturu prema
ekološkoj tranziciji

Architecture Guide towards
the green transition.

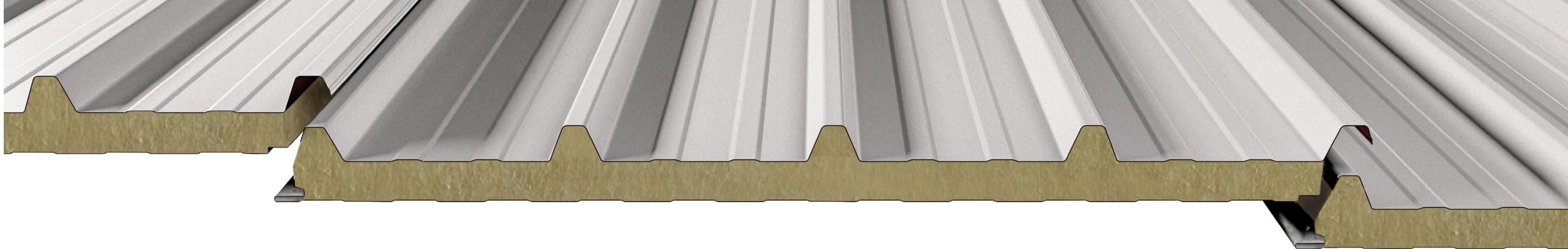
Vatrootporni paneli od **Mineralne vune.** Vaš najbolji izbor!

Mineralna vlakna su neorganski materijal koji se topi na temperaturama iznad 1000°C. Ovaj prirodni izolator ne doprinosi razvoju i širenju požara ili emisiji otrovnih plinova.

Mineral fibre is an inorganic material that melts at over 1000° C. This natural insulator will prevent fire from spreading, no toxic gas will be generated.



Na zahtjev
On request
Vanjska strana
External side
30
GODINA
GARANCIJE
YEARS
WARRANTY



MM

Eurofire® REI

Vatrootporni krovni panel od kamene vune
Fire-resistant roof panels in mineral fibre

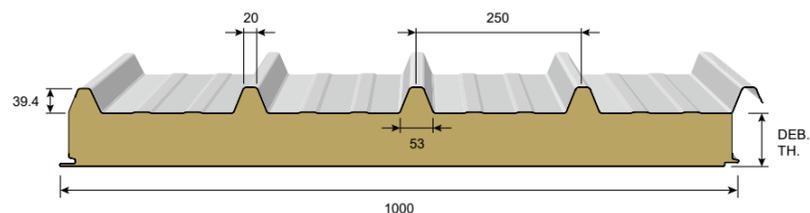
NA ZAHTJEV GUSTINA OD 120 DO 150 KG/M3

Povjerenje, garancija i sigurnost. Jednom riječju: EUROFIRE® REI, najbolja odluka za odličnu otpornost na vatru. Reakcija na vatru ovog panela se odnosi na klasu A2-s1,d0; otpornost na vatru zavisi od debljine: REI 30 za panel debljine 50 mm REI 90 za panel debljine 80 mm REI 120 za panel debljine 100 mm REI 240 za panel debljine 172 mm Zbog dobre statičke otpornosti vlakna kamene vune su okomito raspoređena u dva lima od čelika sa 5 rebara.

Izolaciona masa

Gustina: 100 kg/m3 ± 10%
Gustina: različite gustine na zahtjev

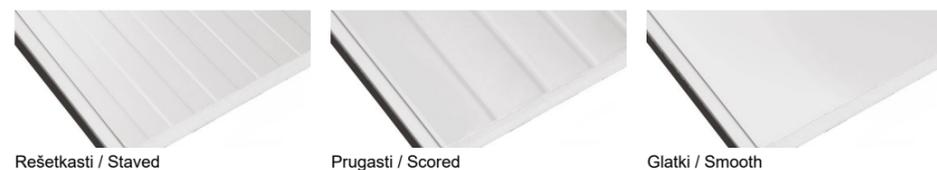
Napomena: Na proizvodnom nivou nije moguće popuniti unutrašnje utore zbog karakteristika vrste izolacije.



Eurofire® .L

Krovni paneli sa ispunom od mineralne vune sa vanjskim limom 0.6 mm
Mineral fibre roof panel with 0.6 mm outer steel layer

Mikroliniranje sa DONJE strane (navodi se prilikom naručivanja)
Micro-veining of the LOWER side of the panel (to be specified when ordering)



UPON REQUEST WITH DENSITY FROM 120 TO 150 KG/M3

Reliability, safety and peace of mind. In a word: EUROFIRE® REI, the top of the range roof panels with outstanding fire response. This panel's fire response can actually be summed up as Class A2-s1,d0; its fire resistance depends instead on thickness, namely: REI 30 for a 50 mm thick panel REI 90 for a 80 mm thick panel REI 120 for a 120 mm thick panel REI 240 for a 172 mm thick panel Mineral fibres are placed at right angles with the two 5-fret steel backings, for good static resistance.

Density of insulation

Density: 100 Kg/m3 ±10%
Other densities optionally available

Note: manufacturing-wise it is impossible to fill the lower lip. This is due to the characteristics of the type of insulation.

Eurofire® REI

SPOLJAŠNJI lim
Čelik 0,5 mm
UNUTRAŠNJI lim
Čelik 0,5 mm
EXTERNAL facing
Steel 0.5 mm
INTERNAL facing
Steel 0.5 mm

Širina efektivnog raspona: 120mm
Effective span width: 120 mm

Statička svojstva (kg/m2)
Static properties (kg/sq.m.)

Debljina panela Panel thickness (mm)	NA DVA NOSAČA SINGLE SPAN										TEŽINA WEIGHT (Kg/m2)
	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	
50	270	210	150	105							13.72
80	350	290	220	165	125	90					16.72
100	390	330	265	205	160	125	80				18.72
172	460	400	320	270	200	152	117	92	82		25.72

Proračun statičkih dimenzija izveden u skladu sa Aneksom E UNI EN 14509 standard. Normalna granica otklona: 1/200 ℓ
Static sizing calculation performed in accordance with Annex E of the UNI EN 14509 standard. Normal deflection limit: 1/200 ℓ

λ = 0.039 Watt/mK

U Toplotna provodljivost Transmittance	Debljina panela / Panel thickness (mm)			
	50	80	100	172
W/sq.m. K	0.72	0.47	0.38	0.22
Kcal/sq.m. h °C	0.62	0.40	0.32	0.19

λ = 0.041 Watt/mK

U Toplotna provodljivost Transmittance	Debljina panela / Panel thickness (mm)			
	50	80	100	172
W/sq.m. K	0.76	0.49	0.39	0.23
Kcal/sq.m. h °C	0.65	0.42	0.33	0.20

Ostali metali i različite debljine su dostupne na zahtjev
Other metal supports and different thicknesses are available upon request.



Eurofire® REI

Vatrootporni krovni panel od kamene vune
Fire-resistant roof panels in mineral fibre

Isoparfire® EI elegant

Vatrootporni zidni panel od kamene vune sa skrivenim spojem
Fire-resistant wall panels in mineral fibre with hidden fastening



LIVORNO:
CANTIERI NAVALI
BENETTI
26.420 m²

KROVNI PANELI:
ROOF PANELS:
EUROFIRE REI
10.420 m²

ZIDNI PANELI
WALL PANELS:
ISOPARFIRE EI ELEGANT
16.000 m²

DIMENZIJE:
BUILDING SIZE:
130 x 60 m
95 x 70 m

ZIDNIH PANELA
SJEČENIH NA MJERU
NO. OF CUSTOM PIECES:
4.550



Na zahtjev
On request
Vanjska strana
External side
30
GODINA
GARANCIJE
YEARS
WARRANTY



MM

Isoparfire® EI

Vatrootporni zidni panel od kamene vune
Fire-resistant wall panels in mineral fibre

NA ZAHTEJEV GUSTINA OD 120 DO 150 KG/M3

Lattonedil-ovi laboratorijski testovi pokazuju da je panel ISOPARFIRE® EI je najbolji u grupi samonosećih izolacionih panela zbog odličnih sposobnosti pri dodiru sa vatrom. Reagovanje na vatru panela ISOPARFIRE® EI je u klasi A2-s1, d0; otpornost na vatru zavisi od debljine panela:
EI 30 za panel debljine 50 mm
EI 60 za panel debljine 80 mm
EI 120 za panel debljine 100 mm
EI 180 za panel debljine 150 mm

Izolaciona masa

Gustina: 100 kg/m³ ±10%
Različite gustine na zahtjev.

NAPOMENA: Na proizvodnom nivou nije moguće popuniti unutrašnje utore zbog karakteristika vrste izolacije.

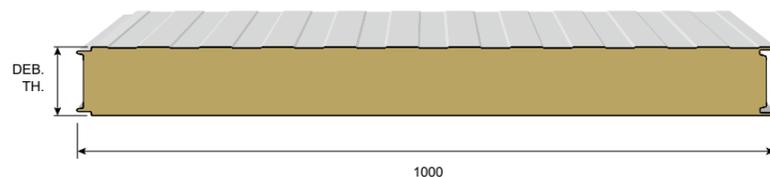
UPON REQUEST WITH DENSITY FROM 120 TO 150 KG/M3

Lattonedil's lab tests proved that the ISOPARFIRE® EI panel, with its outstanding fire response, is the top of the range panel for self-contained insulating walls. ISOPARFIRE® EI's fire response may be summed up as Class A2-s1, d0; while its fire resistance depends on how thick it is as follows:
EI 30 for a 50 mm thick panel
EI 60 for a 80 mm thick panel
EI 120 for a 100 mm thick panel
EI 180 for a 150 mm thick panel

Density of insulation

Density: 100 Kg/m³ ±10%
Other densities optionally available

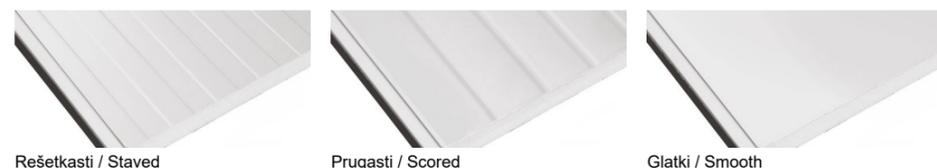
Note: manufacturing-wise it is impossible to fill the lip of the joint. This is due to the characteristics of the type of insulation.



Isoparfire® .L

Zidni paneli sa ispunom od mineralne vune sa vanjskim limom 0.6 mm
Mineral fibre wall panel with 0.6 mm outer steel layer

Mikroliniranje sa DONJE strane (navodi se prilikom naručivanja)
Micro-veining of the LOWER side of the panel (to be specified when ordering)



Isoparfire® EI

SPOLJAŠNJI lim
Čelik 0,5 mm
UNUTRAŠNJI lim
Čelik 0,5 mm
EXTERNAL facing
Steel 0.5 mm
INTERNAL facing
Steel 0.5 mm

Širina efektivnog raspona: 120mm
Effective span width: 120 mm

SPOLJAŠNJI lim
Čelik 0,5 mm
UNUTRAŠNJI lim
Čelik 0,5 mm
EXTERNAL facing
Steel 0.5 mm
INTERNAL facing
Steel 0.5 mm

Širina efektivnog raspona: 120mm
Effective span width: 120 mm

SPOLJAŠNJI lim
Čelik 0,5 mm
UNUTRAŠNJI lim
Čelik 0,5 mm
EXTERNAL facing
Steel 0.5 mm
INTERNAL facing
Steel 0.5 mm

Širina efektivnog raspona: 120mm
Effective span width: 120 mm

$\lambda = 0.039$ Watt/mK

U Toplotna provodljivost Transmittance	Debljina panela / Panel thickness (mm)			
	50	80	100	180
W/sq.m. K	0.72	0.47	0.38	0.21
Kcal/sq.m. h °C	0.62	0.40	0.32	0.18

Ostali metali i različite debljine su dostupne na zahtjev
Other metal supports and different thicknesses are available upon request.

Statička svojstva (kg/m²)
Static properties (kg/sq.m.)

Debljina panela Panel thickness (mm)	NA DVA NOSAČA SINGLE SPAN										TEŽINA WEIGHT (Kg/m ²)
	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	
50	185	130	110	81	73						12.94
80	266	187	158	116	105	85	65				15.94
100	319	224	190	140	126	102	78	61			17.94
150	422	296	251	185	166	135	103	81	56	45	22.94

Proračun statičkih dimenzija izveden u skladu sa Aneksom E UNI EN 14509 standard. Normalna granica otklona: 1/200 ℓ
Static sizing calculation performed in accordance with Annex E of the UNI EN 14509 standard. Normal deflection limit: 1/200 ℓ

Debljina panela Panel thickness (mm)	NA VIŠE NOSAČA DOUBLE SPAN										TEŽINA WEIGHT (Kg/m ²)
	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	
50	190	135	115	86	78						12.94
80	273	194	165	124	112	91	70				15.94
100	328	233	198	148	135	110	84	66			17.94
150	433	308	262	196	178	145	111	87	62	50	22.94

Proračun statičkih dimenzija izveden u skladu sa Aneksom E UNI EN 14509 standard. Normalna granica otklona: 1/200 ℓ
Static sizing calculation performed in accordance with Annex E of the UNI EN 14509 standard. Normal deflection limit: 1/200 ℓ

Debljina panela Panel thickness (mm)	NA VIŠE NOSAČA MULTIPLE SPAN										TEŽINA WEIGHT (Kg/m ²)
	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	
50	195	140	120	92	83						12.94
80	280	201	173	132	119	98	75				15.94
100	336	242	207	159	143	117	90	71			17.94
150	445	319	274	210	189	155	119	94	66	55	22.94

Proračun statičkih dimenzija izveden u skladu sa Aneksom E UNI EN 14509 standard. Normalna granica otklona: 1/200 ℓ
Static sizing calculation performed in accordance with Annex E of the UNI EN 14509 standard. Normal deflection limit: 1/200 ℓ

$\lambda = 0.041$ Watt/mK

U Toplotna provodljivost Transmittance	Debljina panela / Panel thickness (mm)			
	50	80	100	180
W/sq.m. K	0.76	0.49	0.39	0.22
Kcal/sq.m. h °C	0.65	0.42	0.33	0.19



Na zahtjev
On request
Vanjska strana
External side
30
GODINA
GARANCIJE
YEARS
WARRANTY

MM

Isoparfire® EI elegant

Vatrootporni zidni panel od kamene vune sa skrivenim spojem
Fire-resistant wall panels in mineral fibre with hidden fastening



NA ZAHTEJEV GUSTINA OD 120 DO 150 KG/M3

ISOPARFIRE® EI ELEGANT je panel koji se koristi za zidove koji zahtjevaju sigurnost i dobru estetsku izvedbu. ISOPARFIRE® EI ELEGANT je poseban jer ima skriveni spoj zahvaljujući kome zid izgleda ujednačeno; ima dva nosača od prefarbanog pocinčanog čelika ili nehrđajućeg čelika a svaki je standardne debljine 0,5 mm. Različite debljine su dostupne na zahtjev kupca. ISOPARFIRE® EI ELEGANT-ove požarne karakteristike spadaju pod klasu A2-s1, d0. Otpornost na vatru:

- EI 15 za panel debljine 80 mm
- EI 120 za panel debljine 120 mm

Izolaciona masa

Gustina: 100 kg/m3 +/- 10%.

Različite gustine na zahtjev.

Napomena: na proizvodnom nivou nije moguće ispuniti utore zbog karakteristika vrste izolacije.

UPON REQUEST WITH DENSITY FROM 120 TO 150 KG/M3

ISOPARFIRE® EI ELEGANT is a panel born to be used in walls that require safety and good aesthetic performance. The peculiarity of ISOPARFIRE® EI ELEGANT consists in the hidden anchoring for the continuity of the wall panels. It is finished by two supports in pre-painted galvanised steel, stainless steel of standard thickness of 0.5 mm. Different thicknesses of the double sheet are available upon request. ISOPARFIRE® EI ELEGANT's fire performance falls under Class A2-s1, d0.

Fire resistance:

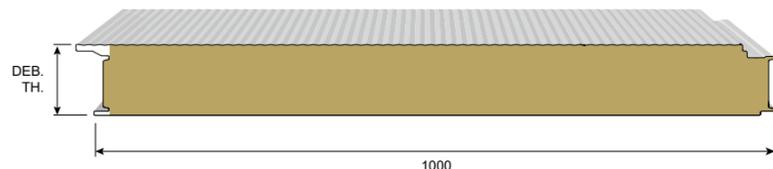
- EI 15 for panel of 80 mm thickness
- EI 120 for panel of 120 mm thickness

Density of insulation

Density: 100 Kg/m3 ±10%.

Other densities optionally available.

Note: manufacturing-wise it is impossible to fill the lip of the joint. This is due to the characteristics of the type of insulation.



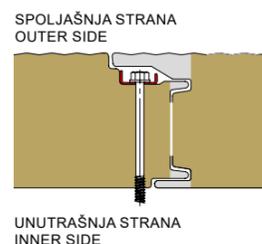
Vertikalni sklop panela
Vertically panel assembly



Horizontalni sklop panela
Horizontally panel assembly

Tokom faze sklapanja koristite čelični vijak. Vijak je namijenjen za raspodjelu napora koji proizlaze iz fiksiranja i povećanja otpora na pritisak i oštećenje. Položaj i broj mjesta vijaćenja mora odrediti projektant ovisno o naprezanjima na konstrukciji.

During the assembly phase, use the steel fastening plate. The plate is intended to distribute the efforts arising from fixing and to increase the resistance to compressive and depression stresses acting on the wall panels. The position and the number of fixing points must be defined by the designer depending on the stresses on the structure.



UNUTRAŠNJA STRANA
INNER SIDE

Isoparfire® elegant.L

Zidni paneli sa skrivenim spojem od mineralne vune sa vanjskim limom 0.6 mm
Fire-resistant wall panels in mineral fibre with hidden fastening with 0.6 mm outer steel layer



Mikroliniranje sa DONJE strane panela (navodi se prilikom naručivanja)
Micro-veining of the LOWER side of the panel (to be specified when ordering)

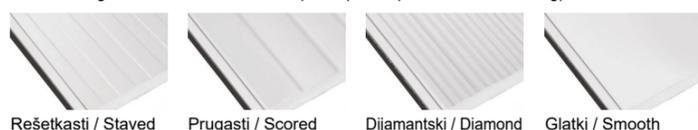


Rešetkasti / Staved

Prugasti / Scored

Glatki / Smooth

Mikroliniranje sa GORNJE strane panela (navodi se prilikom naručivanja)
Micro-veining of the UPPER SIDE of the panel (to be specified when ordering)



Rešetkasti / Staved

Prugasti / Scored

Dijamantski / Diamond

Glatki / Smooth

Isoparfire® EI elegant

Statička svojstva (kg/m2)
Static properties (kg/sq.m.)

NA DVA NOSAČA
SINGLE SPAN

Debljina panela Panel thickness (mm)	P										TEŽINA WEIGHT (Kg/m2)	
	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6		
80	266	187	158	116	105	85	65					15.94
120	377	265	224	165	149	120	92	72	50			21.66

Širina efektivnog raspona: 120mm
Effective span width: 120 mm

Proračun statičkih dimenzija izveden u skladu sa Aneksom E UNI EN 14509 standard. Normalna granica otklona: 1/200 ℓ
Static sizing calculation performed in accordance with Annex E of the UNI EN 14509 standard. Normal deflection limit: 1/200 ℓ

NA VIŠE NOSAČA
DOUBLE SPAN

Debljina panela Panel thickness (mm)	P P										TEŽINA WEIGHT (Kg/m2)	
	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6		
80	273	194	165	124	112	91	70					15.94
120	387	275	234	175	159	129	99	78	55			21.66

Širina efektivnog raspona: 120mm
Effective span width: 120 mm

Proračun statičkih dimenzija izveden u skladu sa Aneksom E UNI EN 14509 standard. Normalna granica otklona: 1/200 ℓ
Static sizing calculation performed in accordance with Annex E of the UNI EN 14509 standard. Normal deflection limit: 1/200 ℓ

NA VIŠE NOSAČA
MULTIPLE SPAN

Debljina panela Panel thickness (mm)	P P P										TEŽINA WEIGHT (Kg/m2)	
	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6		
80	280	201	173	132	119	98	75					15.94
120	397	285	244	187	169	138	106	84	59			21.66

Širina efektivnog raspona: 120mm
Effective span width: 120 mm

Proračun statičkih dimenzija izveden u skladu sa Aneksom E UNI EN 14509 standard. Normalna granica otklona: 1/200 ℓ
Static sizing calculation performed in accordance with Annex E of the UNI EN 14509 standard. Normal deflection limit: 1/200 ℓ

λ = 0.039 Watt/mK

U Toplotna provodljivost Transmittance	Debljina panela / Panel thickness (mm)	
	80	120
W/sq.m. K	0,47	0,32
Kcal/sq.m. h °C	0,40	0,27

λ = 0.041 Watt/mK

U Toplotna provodljivost Transmittance	Debljina panela / Panel thickness (mm)	
	80	120
W/sq.m. K	0,48	0,33
Kcal/sq.m. h °C	0,47	0,28

Ostali metali i različite debljine su dostupne na zahtjev
Other metal supports and different thicknesses are available upon request.

LATTONEDIL



Na zahtjev
On request
Vanjska strana
External side
30
GODINA
GARANCIJE
YEARS
WARRANTY

Vodič za arhitekturu prema
ekološkoj tranziciji

Architecture Guide towards
the green transition.

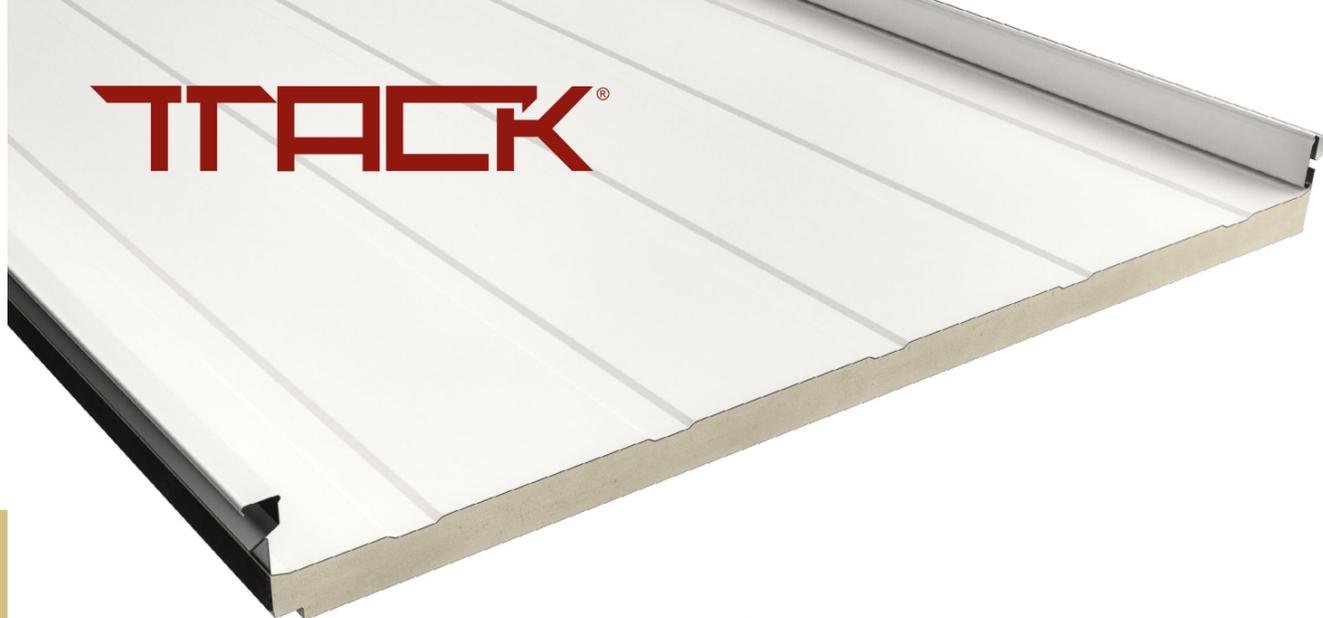
PUR PIR

Specijalni krovovi i krovi za fotonaponske module



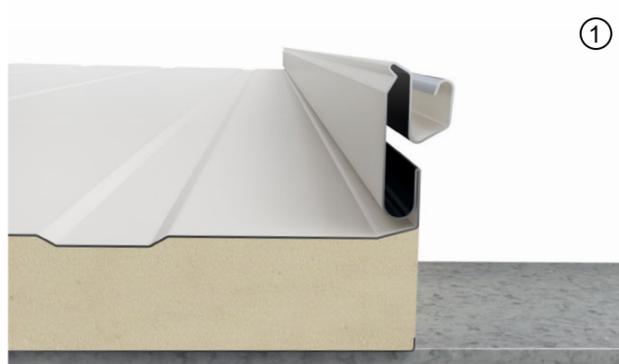
Na zahtjev
On request
Vanjska strana
External side
30
GODINA
GARANCIJE
YEARS
WARRANTY

TTACK®



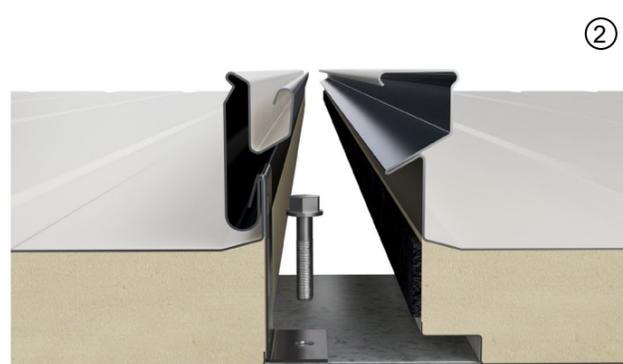
PUR PIR

Postaviti prvi krovni panel.
Position the first roof panel.



①

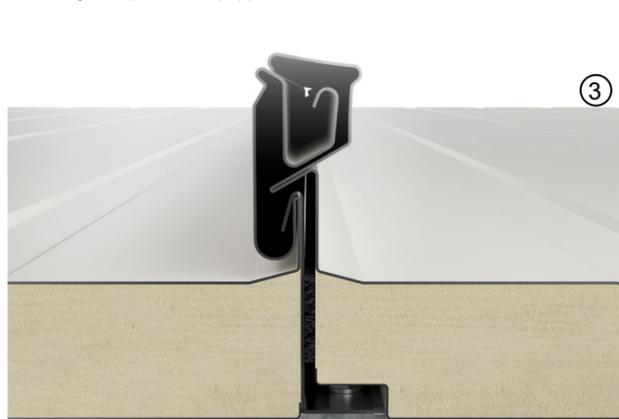
Postaviti drugi panel na mjesto, pritiskajući dichtung dok ne bude skroz pričvršćen za prvi panel.
Position the second panel slide it into place, Compressing the gasket until it is fully Attached to the first panel.



②

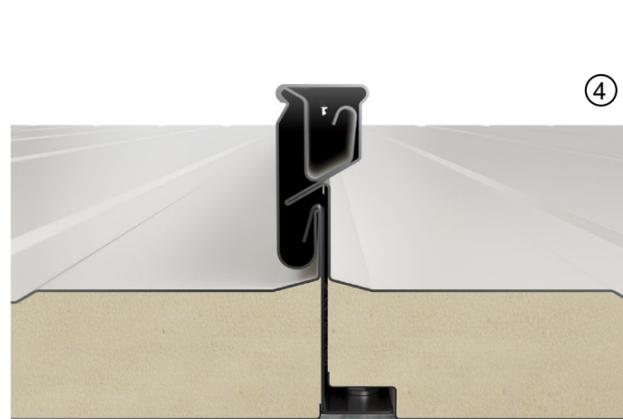
Pričvrstiti koristeći nosač za fiksiranje, što omogućava dilataciju spojeva. Mogućnost odabira između bočnog ili gornjeg pričvršćivanja. Za gornje pričvršćivanje, panel je opremljen kanalom za postavljanje vijka.

Fasten in place using a fixing bracket, which allows the expansion joints to slide. Choose between side fastening or upper fastening. For upper fastening, the panel is equipped with a channel to house the bolt.



③

TTack zvuk pokazuje da su paneli povezani.
The "TTack" sound indicates that the Panels are connected.



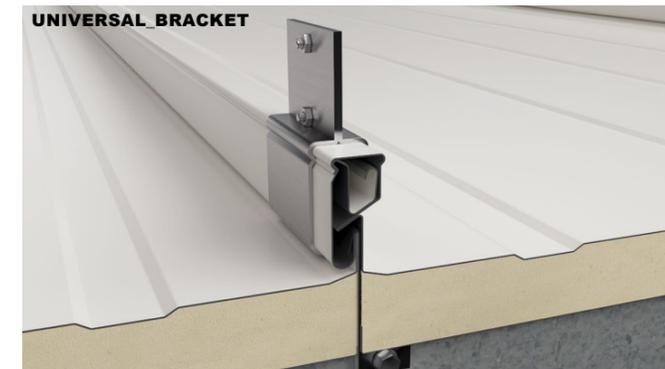
④

Ponaša se izvanredno u dodiru sa vodom. Posebni TTACK® sistem spajanja kreira dva prirodna sigurnosna kanala za odvod viška vode.

It performs incredibly well with water. The special TTACK® interlocking system creates two natural safety channels to drain away excess water.



WIND CLIP



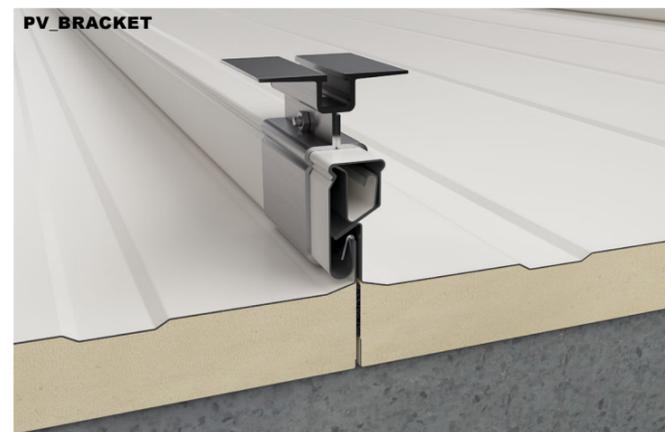
UNIVERSAL BRACKET

TTACK® dodaci: od spojnice za pričvršćivanje i pritezanje panela, do onih koji se koriste za pričvršćivanje fotonaponskih panela.

TTACK® accessories: from brackets for fastening and tightening the panels, to those used. To attach photovoltaic panels.

Mogućnost izbora prednjeg ili gornjeg povezivanja, utiče na tip željenog TTACK® panela.

The decision to opt for a front connection rather than an upper connection will affect the type of TTACK® panel required.



PV BRACKET



NOSAČ SA GORNJIM PRICVRŠĆIVANJEM
BRACKET WITH UPPER FASTENING

NOSAČ SA PREDNJIM PRICVRŠĆIVANJEM
BRACKET WITH FRONT FASTENING



Na zahtjev
On request
Vanjska strana
External side
30
GODINA
GARANCIJE
YEARS
WARRANTY

PUR PIR

TTACK®

Minimalan nagib 1%

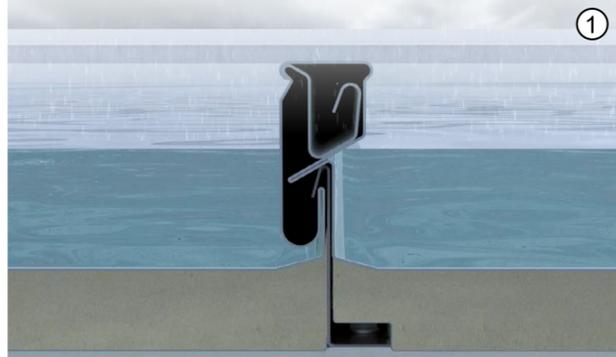
Maksimalna iskorištenost visine, u skladu sa zakonskim uslovima.

Mogućnost montiranja fotonaponskih modula **bez bušenja površine**.

Ušteda na vremenu montaže - brzo postavljanje sa posebnim "interlock" sistemom spajanja.

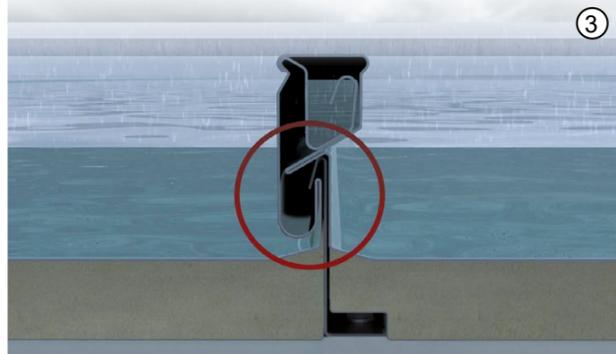
Prilikom intenzivne kiše, nivo vode može dosegnuti vrh rebra na TTACK® panelu.

Under intense rain, the level of the water could reach the top part of the rib on a TTACK® panel.



Za povećanu sigurnost, dodat je **DRUGI KANAL** da osigura potpunu vodootpornost krova.

For increased safety, a **SECOND CHANNEL** has been added to ensure the roof covering Remains fully watertight.



Minimum installation slope: 1%

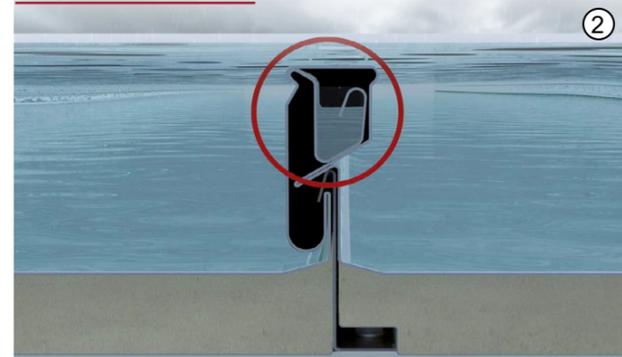
Exploits the maximum height allowed by municipal requirements.

Allows photovoltaic panels to be installed **without drilling the surface**.

Saves laying time - easy installation with the special interlock joint system.

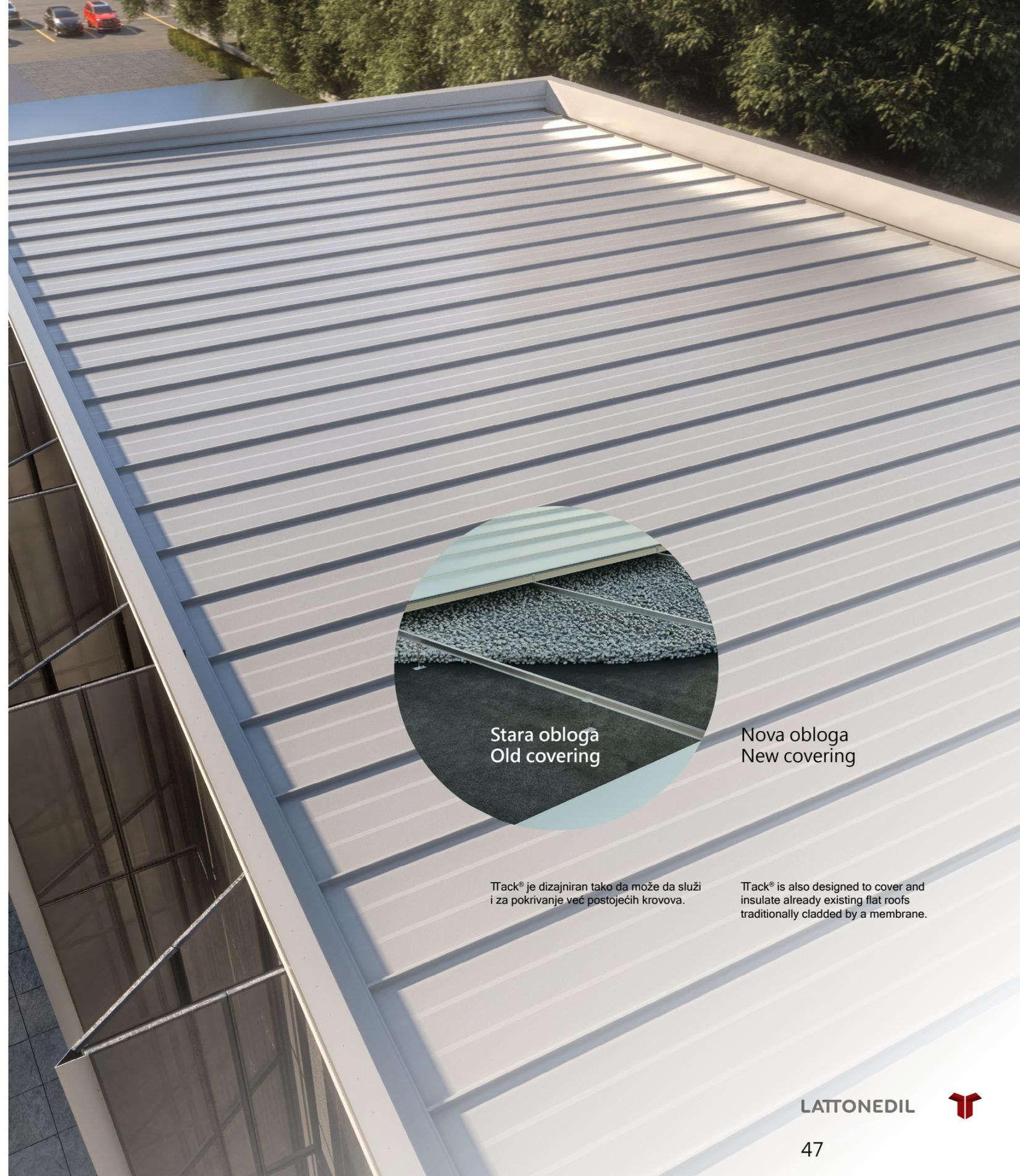
Pritisak vode zapečati rebro. Ako kiša istraje, može se filtrirati zbog kapilarnosti vode, u tom slučaju voda će se skupljati u **PRVOM SIGURNOSNOM KANALU**.

The pressure of the water seals the rib. If the rain persists, it may filter in due to water capillarity, in which case the water would be collected in the **FIRST SAFETY CHANNEL**.



Voda otiče kroz kanale u oluk čim Protok vode to dopusti.

The gutter as soon as the flow of water allows.



Na zahtjev
On request
Vanjska strana
External side
30
GODINA
GARANCIJE
YEARS
WARRANTY

PUR PIR

TTack®

Prvi i jedini na svijetu, panel za ravne krovove
The world's first and only panel for flat roofs

METALNE PODLOGE

SENDZIMIR sistem kontinuiranog vruće pocinčanog čelika (UNI EN 10346), premazan na kontinuiranim linijama ciklusima na bazi poliesterske smole, poliesterima visoke otpornosti ili PVDF (poliviniliden fluoridima) na vanjskoj strani. Na donju stranu panela nanosi se temeljni prajmer.

IZOLACIJA

Sastoji se od krute poliuretanske pjene koja je u skladu s evropskim propisima o reakciji na vatru.

- Sastav tipa poliuretanske smole (PUR, PUR B2 ili PIR podložno zahtjevu)
- Koeficijent toplotne provodljivosti $\lambda = 0,023 \text{ W/mK}$
- Prosječna gustina $40 \text{ kg / m}^3 \pm 10\%$
- Otpornost na pritisak $\geq 0,11 \text{ MPa}$ (pri deformaciji od 10%)
- Snaga istegljivosti $\geq 0,1 \text{ MPa}$
- Otpornost na sječenje $\geq 0,1 \text{ MPa}$
- Nehigroskopen kao materijal je više od 95% zatvorenih stanica
- Prianjanje na podloge 1 kg / cm^2
- U-vrijednost koeficijenta prolaska topline u skladu s EN14509

SPOJ

Spoj TTACK® panela je dizajniran da spriječi bilo kakvo curenje i ima termičke mostove. Neprekidni dihtung je umetnut tokom proizvodnog procesa.

STATICKE POJEDINOSTI

TTACK® paneli se klasifikuju kao samonosivi u skladu UNI EN 14509 propisu po kojem su definisani: "... panel koji je sposoban da, zahvaljujući svojim materijalima i obliku, podupire vlastitu težinu, a u slučaju panela pričvršćenih na razmaknute konstrukcije, sva primijenjena opterećenja (snijeg, vjetar, tlak zraka) i prijenos tih opterećenja na nosače." Vrijednosti opterećenja odnose se na panele postavljene vodoravno i podložne raspodijeljenom opterećenju, bez uzimanja u obzir toplinskih efekata, koji su provjereni od strane projektanta. Efekat puzanja za izolacioni materijal, prouzrokovan slučajnim preopterećenjima, uzima se u obzir u statičkom proračunu.



Za više informacija o certifikaciji CAM, kontaktirajte našu tehničku službu.

For further information on CAM certification, contact the technical department.

METALLIC COATINGS

SENDZIMIR sistem kontinuiranog vruće pocinčanog čelika (UNI EN 10346), precoat na kontinuiranim linijama ciklusima na bazi poliesterske smole, poliesterima visoke otpornosti ili PVDF (poliviniliden fluoridima) na vanjskoj strani. Na donju stranu panela nanosi se temeljni prajmer.

INSULATION

Composed of rigid polyurethane foam that complies with European regulations concerning reaction to fire.

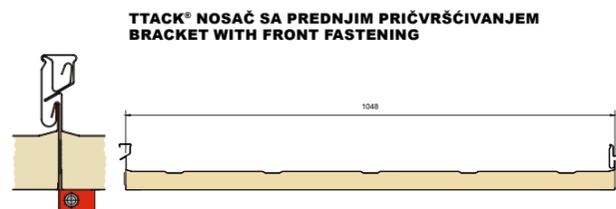
- Composition of polyurethane resin type formula (PUR, PUR B2 or PIR subject to request)
- Thermal conductivity coefficient $\lambda = 0.023 \text{ W/mk}$
- Average density $40 \text{ kg/m}^3 \pm 10\%$
- Compressive strength $\geq 0.11 \text{ MPa}$ (at 10% deformation)
- Tensile strength $\geq 0.1 \text{ MPa}$
- Shear strength $\geq 0.1 \text{ MPa}$
- Non-hygroscopic as material is more than 95% closed cell
- Adherence to support surfaces 1 kg/cm^2
- U-value thermal transmittance coefficient in accordance with EN14509

JOINT

The TTACK® panel joint has been designed to prevent any kind of leakage and has thermal bridges. A continuous gasket is inserted during the production process.

STATIC FEATURES

TTACK® panels are classed as self-supporting in accordance with that defined in the UNI EN 14509 regulation "... a panel capable of supporting, by virtue of its materials and shape, its own weight and in case of panels fixed to spaced structural supports, all applied loads (snow, wind, air pressure), and transmitting these loads to the supports." The load values refer to panels installed horizontally and subject to a distributed load, without taking into consideration thermal effects, which are verified by the designer. The creep effect for insulating material, caused by accidental overloads, is taken into account in the static calculation.



Statička svojstva (kg/m²)
Static properties (kg/sq.m.)

NA DVA NOSAČA
SINGLE SPAN

Debljina panela Panel thickness (mm)	1.5	2	2.5	3	3.5	4	TEŽINA WEIGHT (Kg/m ²)
50	260	195	155	105	75		10.84
80	415	315	255	205	155	120	12.04
100	520	390	315	260	215	170	12.84
120	625	470	380	310	265	220	13.64
150	785	590	470	390	335	290	14.84

Proračun statičkih dimenzija izveden u skladu sa Aneksom E UNI EN 14509 standard. Normalna granica otklona: $1/200 \ell$
Static sizing calculation performed in accordance with Annex E of the UNI EN 14509 standard. Normal deflection limit: $1/200 \ell$

Debljina panela Panel thickness (mm)	1.5	2	2.5	3	3.5	4	TEŽINA WEIGHT (Kg/m ²)
50	275	210	169	131	90		13.23
80	435	325	269	215	170	135	14.43
100	540	410	335	275	230	185	15.23
120	645	485	395	335	285	235	16.03
150	795	605	485	410	345	310	17.23

Proračun statičkih dimenzija izveden u skladu sa Aneksom E UNI EN 14509 standard. Normalna granica otklona: $1/200 \ell$
Static sizing calculation performed in accordance with Annex E of the UNI EN 14509 standard. Normal deflection limit: $1/200 \ell$

U toplotna provodljivost transmittance	50	80	100	120	150
W/m ² K	0.44	0.28	0.22	0.19	0.15
Kcal/m ² h °C	0.38	0.24	0.19	0.16	0.13

TOLERANCIJE (vidi Uredbu UNICMI)

Debljina oblaganja: u skladu sa referentnim standardima za proizvode koji se koriste.
Dužina: ako je $\leq 3000 \text{ mm} \pm 5 \text{ mm}$; ako $> 3000 \text{ mm} \pm 10 \text{ mm}$
Debljina panela: ako je $\leq 100 \text{ mm} \pm 2 \text{ mm}$; ako $> 100 \text{ mm} \pm 2 \text{ mm}$
Odstupanje perpendikularnosti: = horizontalno odstupanje tako $\leq 0,6\%$ od nominalne pokrivne širine
Od kvadrata: max. 3 mm

ZAŠTITA METALNIH OBLAGANJA

Svi paneli napravljeni od prefarbanih metala isporučuju se na zahtjev s ljepljivom zaštitnom folijom od polietilena kako bi se spriječio oštećenje vanjskih slojeva. LATTONEDIL neće biti odgovoran za bilo kakvo oštećenje slojeva u slučaju da se materijal isporučuje bez zaštitne folije. Zaštitna folija mora biti potpuno uklonjena prilikom ugradnje panela, u svakom slučaju u roku od trideset dana od kada je materijal pripremljen. Paneli koji su još uvijek pokriveni zaštitnom folijom ne smiju biti izloženi izravnom djelovanju sunčeve svjetlosti duže vrijeme.

TOLERANCES (See UNICMI regulation)

Coating thickness: in accordance with reference standards for the products used.
Length: if $\leq 3000 \text{ mm} \pm 5 \text{ mm}$; if $> 3000 \text{ mm} \pm 10 \text{ mm}$
Panel thickness: if $\leq 100 \text{ mm} \pm 2 \text{ mm}$; if $> 100 \text{ mm} \pm 2 \text{ mm}$
Perpendicularity deviation: so = horizontal deviation so $\leq 0.6\%$ of the nominal width covered
Out of square: max. 3 mm

PROTECTION OF METALLIC COATINGS

All of the panels pre-coated with the metallic coatings mentioned are supplied on request with an adhesive polyethylene protective film to prevent damage to the coated layer. LATTONEDIL will not be held liable for any damage to the coating in the event that the material is to be supplied without the protective film. The protective film must be completely removed during installation of the panels, and in any case within thirty days of when the material is prepared. Panels still covered with the protective film must not be exposed to direct sunlight for long periods of time.



Na zahtjev
On request
Vanjska strana
External side
30
GODINA
GARANCIJE
YEARS
WARRANTY

PUR PIR

Solarpan® Plus

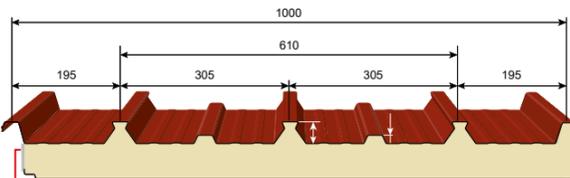
Izvrstan sistem za montažu fotonaponskih modula
Five star support for photovoltaic modules

Lattonedil predstavlja sistem koji je revolucionirao ugradnju fotonaponskih modula.

Ovdje je cjelovito rješenje SOLARPAN® PLUS:

- Njegova glavna prednost: osnovni dizajn
- Nema skupih potpornih struktura
- Nema dodatne brtve
- Nema potrebe za beskorisnim i skupim aluminijskim profilima
- Brza ugradnja fotonaponskih modula: komponente pričvršćene tako da se ugraju u zgrade
- Predizolirani krov koji se može montirati bez bušenja rupa
- Mala težina SOLARPAN® PLUS sistema u poređenju sa tradicionalnim krovnim pokrivačem nudi veće performanse u svim njegovim aplikacijama. SOLARPAN® PLUS nudi cjelovita, jeftina rješenja zahvaljujući uštedi materijala i vremena instalacije. SOLARPAN® PLUS sistem takođe nudi sve dodatke potrebne za ugradnju fotonaponskog modularnog sistema SOLARPAN® PLUS krov danas, fotonaponski sistem sutra.

Gledajući prema budućnosti, razmišljali smo o svemu: možete pokriti krov ili fasadu pomoću SOLARPAN® PLUS panela danas a odlučiti montirati fotonaponski sistem kasnije. Idealan je za korištenje na fasadi ili krovu i zahvaljujući upotrebi nagnute strukture, moduli se mogu montirati i na krov parcele koje nisu okrenute prema jugu i stoga se obično ne koriste. Vrijeme instalacije je vrlo brzo zahvaljujući upotrebi dodatne opreme kao što su potporni profili, spojnice i trokuti za spajanje, koji se mogu pričvrstiti na krovni pokrivač bez potrebe bušenja rupa; to čini SOLARPAN® PLUS sistem najboljim rješenjem za krovove sa fotonaponskim modulima.



Brtva dostupna na zahtjev
Gasket available on request

NEPROPUSNI PROFIL
LEAK-PROOF PROFILE

Mikroliniranje sa DONJE strane panela (navodi se prilikom naručivanja)
Micro-veining of the LOWER side of the panel (to be specified when ordering)



Rešetkasti / Staved

Prugasti / Scored

Glatki / Smooth



Za više informacija o certifikaciji CAM, kontaktirajte našu tehničku službu.
For further information on CAM certification, contact the technical department.



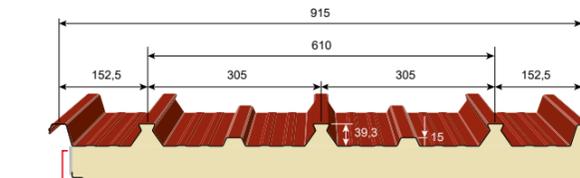
Lattonedil presents the system that revolutionised the installation of photovoltaic modules.

Here is the complete SOLARPAN® PLUS solution:

- Its main advantage: essential design
 - No costly supporting structure
 - No additional gasket
 - No need for useless and costly aluminium profiles
 - Quick installation of the photovoltaic modules: components are fastened by snapping them into the brackets
 - A pre-insulated roof that can be fitted without drilling any holes
 - The light weight of the SOLARPAN® PLUS system compared to a traditional roof covering offers greater performance in all of its applications. SOLARPAN® PLUS offers a complete, low cost solution thanks to savings in terms of material and installation time.
- The SOLARPAN® PLUS system also provides all the accessories needed for installation of the photovoltaic modules.

A SOLARPAN® PLUS roof today, a photovoltaic system tomorrow.

Looking towards the future, we have thought of everything: you can cover a roof or facade using SOLARPAN® PLUS panels today and decide to install a photovoltaic system in the future. Ideal for use on a facade or roof and thanks to the use of an inclined structure, the modules can also be mounted on roof pitches that do not face south and thus typically not used. Installation times are very fast thanks to the use of accessories such as support profiles, clamps and junction triangles, which can all be clipped onto the roof covering without the need to drill holes into it; this makes the SOLARPAN® PLUS system the best solution for roof coverings with photovoltaic modules.



Brtva dostupna na zahtjev
Gasket available on request

NEPROPUSNI PROFIL
LEAK-PROOF PROFILE



Nosač od nehrđajućeg čelika za priključak na Solarpan® Plus panel
Stainless steel bracket for connection to the Solarpan® Plus panel



Aluminijski nosač za priključak na Solarpan® Plus panel
Aluminium bracket for connection to the Solarpan® Plus panel



Aluminijski nosač za spajanje na Solarpan® Plus ploču sa ZETA učvršćenjem za PV module sa okvirom
Aluminium bracket for connection to the Solarpan® Plus panel with ZETA fixing for PV modules with frame



Aluminijski nosač za spajanje na Solarpan® Plus ploču s OMEGA fiksiranjem za PV module sa okvirom
Aluminium bracket for connection to the Solarpan® Plus panel with OMEGA fixing for PV modules with frame



Nosač za pričvršćivanje konstrukcija Solarpan® Plus panel
Bracket for fixing structures to the Solarpan® Plus panel



Aluminijski nosač za spajanje na Solarpan® Plus ploču s jednim fiksiranjem za staklo/staklo sa PV modulima
Aluminium bracket for connection to the Solarpan® Plus panel with single fixing for glass/glass PV modules



Aluminijski nosač za spajanje na Solarpan® Plus ploču s dvostrukim fiksiranjem staklo/staklo sa PV modulima
Aluminium bracket for connection to the Solarpan® Plus panel with double fixing for glass/glass PV modules



Sidreni nosač za povezivanje ljestava s Solarpan® Plus pločom
Anchor bracket for connecting a ladder to the Solarpan® Plus panel



Nosač za pričvršćivanje kaplaja na Solarpan® Plus ploči
Bracket for fixing snow guards to the Solarpan® Plus panel



Aluminijska konstrukcija za promjenu nagiba (kontaktirajte naše uredje za više informacija)
Aluminium structure for slope change (contact our offices for more information)

Statička svojstva (kg/m2)
Static properties (kg/sq.m.)

NA DVA NOSAČA
SINGLE SPAN



Debljina panela Panel thickness (mm)	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	TEŽINA WEIGHT (Kg/m2)
30	330	245	175	105	65						8.84
40	420	315	225	145	90	60					9.22
50	510	380	280	190	125	85	60				9.60
60	605	450	335	240	160	110	80	55			9.98
80	785	585	450	340	240	170	125	90	70	50	10.74
100	965	720	570	435	335	240	180	135	100	80	11.50
120	1000	855	680	535	420	320	240	180	140	110	12.26
150	1000	900	720	595	505	435	340	260	205	160	13.78

Proračun statičkih dimenzija izveden u skladu sa Aneksom E UNI EN 14509 standard. Normalna granica otklona: 1/200 ℓ
Static sizing calculation performed in accordance with Annex E of the UNI EN 14509 standard. Normal deflection limit: 1/200 ℓ

Debljina panela Panel thickness (mm)	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	TEŽINA WEIGHT (Kg/m2)
30	330	245	155	100	65						6.85
40	420	315	210	135	95	65					7.23
50	515	385	275	180	125	85	65				7.61
60	605	450	340	225	155	110	80	60			7.99
80	785	585	465	325	230	165	125	95	70	55	8.75
100	970	725	575	435	310	225	170	130	100	80	9.51
120	1000	860	685	555	400	295	220	170	135	105	10.27
150	1000	900	715	595	505	440	370	290	230	185	11.00

Proračun statičkih dimenzija izveden u skladu sa Aneksom E UNI EN 14509 standard. Normalna granica otklona: 1/200 ℓ
Static sizing calculation performed in accordance with Annex E of the UNI EN 14509 standard. Normal deflection limit: 1/200 ℓ

U toplotna provodljivost transmittance	30	40	50	60	80	100	120	150
W/m2 K	0.71	0.55	0.44	0.37	0.28	0.22	0.19	0.15
Kcal/m2 h °C	0.61	0.47	0.38	0.32	0.24	0.19	0.16	0.13

Vodič za arhitekturu prema
ekološkoj tranziciji

Architecture Guide towards
the green transition.

Sa sistemom **FROSTTEN** poboljšavamo termičke performanse rashladnih sistema u građevini

Na taj način možemo da dosegneemo energetska uštedu
do 25% sa istom debljinom. (18m W/mK lambda).

In this way we can achieve an overall energy saving of up
to 25% with the same thickness.

(18m W/mK lambda for aged material)



ENERGETSKA UŠTEDA

Prednosti TTPR1ME-a u smislu
energetske efikasnosti.

- Smanjenje potrošnje energije kroz vrijeme do 25%.
- Tehnologija izolacije nove generacije.
- Postizanje 18m W/mK lambda.
- Poboljšanje toplotnih performansi postrojenja.



UTICAJ NA ŽIVOTNU SREDINU

Prednosti TTPR1ME-a za životnu sredinu.

- Održiva izolovana skladišta.
- Pametni sastojci za smanjenje emisije CO².
- Lakši omotači zgrada sa istom toplotnom izolacijom.
- LATTONEDIL podaci prema LCA EPD standardima.
- Doprinos preduslovima i LEED V.4 kreditima.



PONAŠANJE U POŽARU

Prerogativi TTPR1ME-a za prevenciju požara.

- Visokokvalitetni izolacioni materijali za sigurnost od požara.
- Tehnologija usporenja plamena bez halogena.
- Reakcija na požarni sertifikat B-s1, d0.
- Sertifikat otpornosti na vatru do EI60.
- Postizanje standarda FM 4880 i 4881.



ENERGY SAVING

The advantages of TTPR1ME in terms
of energy efficiency.

- Reduction of energy consumption over time, up to 25%.
- New generation insulation technology.
- Value obtained 18m W/mK lambda for aged material.
- Improved heat transfer performance in all plants.

ENVIRONMENTAL IMPACT

Why TTPR1ME is good for the environment.

- You can build better insulated warehouses.
- Smart ingredients for reduced CO² emissions.
- Lighter building enclosures with the same heat insulation.
- LATTONEDIL data according to LCA EPD standards.
- Contribution to LEED V.4 requirements and credits.

FIRE PREVENTION PERFORMANCE

TTPR1ME is good at fighting fire too.

- High quality insulation materials for high fire safety.
- Halogen-free flame retardant technology.
- Fire Reaction Certification B-s1, d0.
- Fire Resistance Certification B-s60, d0.
- FM 4880 and 4881 standards compliant.

Vodič za arhitekturu prema
ekološkoj tranziciji

Architecture Guide towards
the green transition.

Apsolutna novina za hladnjače. Ušteda energije.

PUR izolacija

Napravljena od poliuretanskih smola (PUR) bez CFC i HCFC, ima indikativnu gustinu od 35-40 kg/m³, kao što je prikazano u EC deklaraciji o usaglašenosti i laboratorijskim ispitivanjima.

Koeficijent toplotne provodljivosti na 10° C (UNI EN 12667): **0,020-0,023 W/mK.**

PIR izolacija

Napravljena od poliizocijanurata bez CFC i HCFC indikativne gustine od 35-40 kg/m³, sposoban da dobije klasu reakcije na požar B-s1, d0, prema EC deklaraciji o usaglašenosti i laboratorijskim ispitivanjima.

Koeficijent toplotne provodljivosti na 10° C (UNI EN 12667): **0,020-0,023 W/mK.**

PIR TTPR1ME izolacija

Napravljena od poliizocijanurata bez CFC i HCFC indikativne gustine od 35-40 kg/m³, sposoban da dobije klasu reakcije na požar B-s1, d0, prema EC deklaraciji o usaglašenosti i laboratorijskim ispitivanjima.

Koeficijent toplotne provodljivosti na 10° C (UNI EN 12667): **0,018 W/mK.**

PUR insulator

Made of polyurethane resins (PUR) free of CFCs and HCFCs, it's density is usually in the 35-40 kg/m³ range as shown by the CE declaration of conformity and laboratory tests.

Thermal conductivity coefficient at 10°C (UNI EN 12667): **0.020-0.023 W/mK.**

PIR Insulation

Made of CFC and HCFC-free polyisocyanurate, density range 35-40 kg/m³ features fire reaction class B-s1, d0, as per CE declaration of conformity and laboratory tests.

Thermal conductivity coefficient at 10°C (UNI EN 12667): **0.020-0.023 W/mK.**

PIR TTPR1ME Insulation

Made of CFC and HCFC-free polyisocyanurate, density range 35-40 kg/m³ features fire reaction class B-s1, d0, as per CE declaration of conformity and laboratory tests.

Thermal conductivity coefficient at 10°C (UNI EN 12667): **0.018 W/mK.**

Na zahtjev
On request
Vanjska strana
External side
30
GODINA
GARANCIJE
YEARS
WARRANTY

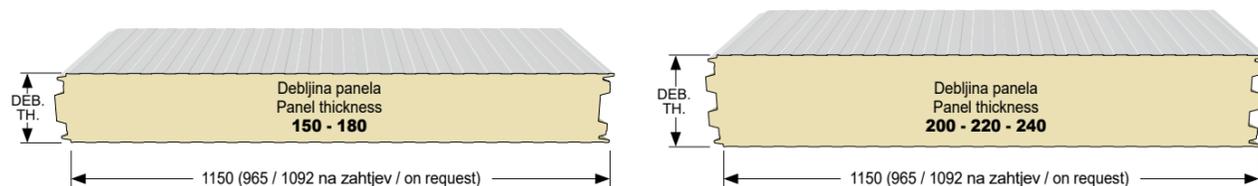
PUR PIR
PIR TTPR1ME

Frost

Panel za hladnjače visokih performansi
The panel for high-performance cold rooms

FROST panel je idealno rješenje za izradu hladnjača sa visokim performansima toplotne izolacije sa ograničenim vremenom ugradnje, FROST je izolacioni metalni panel na bazi poliuretana namijenjen za izgradnju industrijskih rashladnih komora za niske i srednje temperature. Performanse toplotne izolacije koje je postigao panel rezultat su dugog i pažljivog dizajna stečenog našim iskustvom u preko 50 godina dostignuća u sektoru rashladnih uređaja.

The FROST panel is the ideal solution to build cold rooms and refrigeration plants with high thermal insulation performance and short panel laying time FROST is a heat insulated metal panel with a polyurethane base designed for industrial cold rooms at low and medium temperatures. The panel's thermal insulation performance is the result of a long and careful design work built on over 50 years of experience in the refrigeration sector.



Korisna širina: 1150 mm (965/1092 na zahtjev)

Maksimalna dužina: 15000 mm

Dostupne debljine panela: 50-60-80-100-120mm.

Sertifikati: CE EN 14509; EPD UNI ISO 14025; PIR B-s2, d0 / PIR B-s1, d0; PIR EI30 / PIR EI45; PIR Zulassung Nr.Z-10.49-589; PIR VKF 5.3; PIR B-s1, d0 Avis technique 2/15-1684; PIR CLASSE 0-2 AS/NZS 1530.3-1999; LEED

Working width: 1150 mm (965/1092 on request)

Maximum length: 15000 mm

Panel thicknesses available: 50-60-80-100-120mm.

Certifications: CE EN 14509; EPD UNI ISO 14025; PIR B-s2, d0 / PIR B-s1, d0; PIR EI30 / PIR EI45; PIR Zulassung Nr.Z-10.49-589; PIR VKF 5.3; PIR B-s1, d0 Avis technique 2/15-1684; PIR CLASSE 0-2 AS/NZS 1530.3-1999; LEED

Mikroliniranje sa DONJE strane panela (navodi se prilikom naručivanja)
Micro-veining of the LOWER side of the panel (to be specified when ordering)



Rešetkasti / Staved Box / Box Glatki / Smooth

Mikroliniranje sa ORNJE strane panela (navodi se prilikom naručivanja)
Micro-veining of the UPPER SIDE of the panel (to be specified when ordering)



Rešetkasti / Staved Box / Box Dijamantski / Diamond Glatki / Smooth

Efektivna širina 100 mm. Proračun je izvršen u skladu sa Aneksom E standarda UNI EN 14509. Dejstvo vjetrova na spoljašnju stranu, toplotni gradijent $\Delta T = 0$, svjetle boje i granica normalnog skretanja 1/100. Podaci prikazani u tabelama se smatraju indikativnim, osim štamparskih grešaka ili propusta. Za ažurirane podatke pogledajte web stranicu www.lattonedil.it. Dizajner je odgovoran za provjeru vrijednosti prema pojedinačnim primjenama. Za sve što nije navedeno, pogledajte AIPPEG propise (www.aippeg.it).

Effective width of fixing point 100 mm. Calculated according to Annex E of the UNI EN 14509 Standard. Wind action on the outer side, thermal gradient $\Delta T = 0$, light colours and normal deflection limit 1/100. The data in the tables is an indication only and may contain typos or other printing errors. For updated data, please see www.lattonedil.it. The designer is responsible for checking the values depending on the individual applications. For any further non specified data/information please refer to the AIPPEG rules (www.aippeg.it).

VERTIKALNA MONTAŽA VERTICAL ASSEMBLY

Statička svojstva (kg/m²)
Static properties (kg/sq.m.)

NA DVA NOSAČA
SINGLE SPAN

P

SPOLJAŠNJI lim
Čelik 0,5 mm
UNUTRAŠNJI lim
Čelik 0,5 mm

EXTERNAL facing
Steel 0.5 mm
INTERNAL facing
Steel 0.5 mm

Širina efektivnog raspona: 100mm
Effective span width: 100 mm

Debljina panela Panel thickness (mm)	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	TEŽINA WEIGHT (Kg/m ²)
150	580	460	385	320	245	190	155	130	105	90	80	60	50					13.40
180	610	485	405	345	295	230	185	155	130	110	95	80	70	65	55	50		14.50
200	630	505	420	360	315	260	210	170	145	120	105	90	80	70	65	55	55	15.30
220	650	520	435	370	325	285	230	190	160	135	115	100	90	80	70	60	55	16.00
240	675	540	450	385	335	300	250	205	175	145	125	110	95	85	75	70	60	16.80

SPOLJAŠNJI lim
Čelik 0,6 mm
UNUTRAŠNJI lim
Čelik 0,5 mm

EXTERNAL facing
Steel 0.6 mm
INTERNAL facing
Steel 0.5 mm

Širina efektivnog raspona: 100mm
Effective span width: 100 mm

Debljina panela Panel thickness (mm)	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	TEŽINA WEIGHT (Kg/m ²)
150	585	465	390	330	260	205	165	140	115	100	85	75	65	55	50			14.20
180	615	490	410	350	305	250	200	165	140	120	100	90	75	70	60	55	50	15.40
200	635	510	430	365	320	275	225	185	155	130	115	100	85	75	65	60	60	16.10
220	650	520	435	370	325	290	245	205	170	145	125	110	95	85	75	65	60	16.90
240	680	545	455	390	340	310	270	220	185	160	135	120	105	90	80	75	65	17.70

HORIZONTALNA MONTAŽA HORIZONTAL ASSEMBLY

SPOLJAŠNJI lim
Čelik 0,5 mm
UNUTRAŠNJI lim
Čelik 0,5 mm

EXTERNAL facing
Steel 0.5 mm
INTERNAL facing
Steel 0.5 mm

Širina efektivnog raspona: 100mm
Effective span width: 100 mm

Debljina panela Panel thickness (mm)	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	TEŽINA WEIGHT (Kg/m ²)
150	565	450	375	290	230	180	145	115	95	75	60	50						13.40
180	595	475	395	335	290	240	195	155	130	105	90	75	60	50				14.52
200	620	490	405	345	300	265	225	185	155	130	105	90	75	60	50			15.28
220	640	505	420	355	310	275	245	210	175	145	125	105	90	75	65	55		16.04
240	660	525	435	370	320	285	255	230	190	160	135	115	100	85	75	65	55	16.80

SPOLJAŠNJI lim
Čelik 0,6 mm
UNUTRAŠNJI lim
Čelik 0,5 mm

EXTERNAL facing
Steel 0.6 mm
INTERNAL facing
Steel 0.5 mm

Širina efektivnog raspona: 100mm
Effective span width: 100 mm

Debljina panela Panel thickness (mm)	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	TEŽINA WEIGHT (Kg/m ²)
150	570	455	380	305	240	195	155	125	105	85	70	55						14.20
180	600	480	405	340	300	250	205	170	140	115	95	80	65	55				15.37
200	625	500	410	350	310	275	235	200	165	140	115	100	85	70	60	50		16.13
220	645	510	425	360	315	280	250	220	195	165	135	115	100	85	70	60	50	16.89
240	665	530	440	375	325	290	260	235	205	185	160	135	115	100	85	70	60	17.65

U Toplotna provodljivost Transmittance	150	180	200	220	240
(U) EN 14509 = W/m ² K	0.15	0.12	0.11	0.10	0.09
(K) EN ISO 6946 = W/m ² K	0.14	0.11	0.10	0.09	0.08



Na zahtjev
On request
Vanjska strana
External side
30
GODINA
GARANCIJE
YEARS
WARRANTY

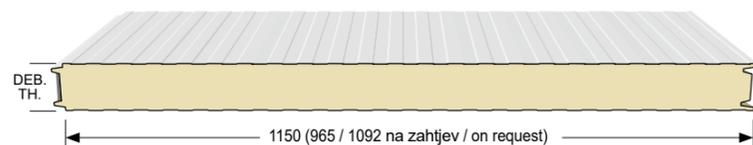
PUR PIR
PIR TTPR1ME

Ultra wet

Idealno rješenje za tržište uzgoja pečuraka
The ideal solution for the mushroom market

ULTRA WET je izolacioni metalni panel dizajniran za izvođenje spoljnih ili unutrašnjih zidova i obloga koje zahtijevaju visoke tehničke performanse, posebno za sektor uzgoja pečuraka. Nastao da garantuje toplotnu izolaciju, barijeru od vlage i kondenzacije, najbolju klasu reakcije na vatru i otpornost na vatru, ULTRA WET panel nudi maksimalne mehaničke performanse kroz spajanje limova na izolaciju do tri puta veće zahvaljujući specijalnom tretmanu "ultra", dizajniran da izbjegne odvajanje tokom termičkih promjena.

ULTRA WET is an insulated metal panel designed for all external or internal non load-bearing walls requiring high technical specifications, in particular for the mushroom farming sector. Designed to guarantee thermal insulation and top level moisture and condensation protection, better fire reaction class and fire resistance, the ULTRA WET panel offers maximum mechanical performance by providing a sheet/insulating material adhesion level up to three times higher than average by means of our special "ultra" treatment, designed to avoid detachment during temperature changes.



Korisna širina: 1150 mm (965/1092 na zahtjev)

Maksimalna dužina: 15000 mm

Dostupne debljine panela: 50-60-80-100-120 mm.

Sertifikati: CE EN 14509; EPD UNI ISO 14025; PIR B-s2, d0 / PIR B-s1, d0; PIR EI30 / PIR EI45; PIR Zulassung Nr.Z-10.49-589; PIR VKF 5.3; PIR B-s1, d0 Avis technique 2/15-1684; PIR CLASSE 0-2 AS/NZS 1530.3-1999; LEED

Working width: 1150 mm (965/1092 on request)

Maximum length: 15000 mm

Panel thicknesses available: 50-60-80-100-120 mm.

Certifications: CE EN 14509; EPD UNI ISO 14025; PIR B-s2, d0 / PIR B-s1, d0; PIR EI30 / PIR EI45; PIR Zulassung Nr.Z-10.49-589; PIR VKF 5.3; PIR B-s1, d0 Avis technique 2/15-1684; PIR CLASSE 0-2 AS/NZS 1530.3-1999; LEED

Mikroliniranje sa DONJE strane panela (navodi se prilikom naručivanja)
Micro-veining of the LOWER side of the panel (to be specified when ordering)



Rešetkasti / Staved Box / Box Glatki / Smooth

Mikroliniranje sa ornje GORNJE strane panela (navodi se prilikom naručivanja)
Micro-veining of the UPPER SIDE of the panel (to be specified when ordering)



Rešetkasti / Staved Box / Box Dijamantski / Diamond

Efektivna širina 100 mm. Proračun je izvršen u skladu sa Aneksom E standarda UNI EN 14509. Dejstvo vJetra na spoljašnju stranu, toplotni gradijent $\Delta T = 0$, svJetle boje i granica normalnog skretanja 1/100. Podaci prikazani u tabelama se smatraju indikativnim, osim štamparskih grešaka ili propusta. Za ažurirane podatke pogledajte web stranicu www.lattonedil.it. Dizajner je odgovoran za provjeru vrijednosti prema pojedinačnim primjenama. Za sve što nije navedeno, pogledajte AIPPEG propise (www.aippeg.it).

Effective width of fixing point 100 mm. Calculated according to Annex E of the UNI EN 14509 Standard. Wind action on the outer side, thermal gradient $\Delta T = 0$, light colours and normal deflection limit 1/100. The data in the tables is an indication only and may contain typos or other printing errors. For updated data, please see www.lattonedil.it. The designer is responsible for checking the values depending on the individual applications. For any further non specified data/information please refer to the AIPPEG rules (www.aippeg.it).

VERTIKALNA MONTAŽA VERTICAL ASSEMBLY

Statička svojstva (kg/m²)
Static properties (kg/sq.m.)

NA DVA NOSAČA
SINGLE SPAN

P

SPOLJAŠNJI lim
Čelik 0,5 mm
UNUTRAŠNJI lim
Čelik 0,5 mm

EXTERNAL facing
Steel 0.5 mm
INTERNAL facing
Steel 0.5 mm

Širina efektivnog raspona: 100mm
Effective span width: 100 mm

Debljina panela Panel thickness (mm)	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	TEŽINA WEIGHT (Kg/m ²)
50	510	340	250	200	140	105	80	60	50							9.60
60	615	410	305	245	170	125	95	75	60	50						10.00
80	825	550	410	325	230	170	130	100	80	65	55					10.70
100	1000	685	515	410	290	210	160	125	100	85	70	60	50			11.50
120	1000	730	545	435	345	255	195	155	125	100	85	70	60	55		11.50

SPOLJAŠNJI lim
Čelik 0,6 mm
UNUTRAŠNJI lim
Čelik 0,5 mm

EXTERNAL facing
Steel 0.6 mm
INTERNAL facing
Steel 0.5 mm

Širina efektivnog raspona: 100mm
Effective span width: 100 mm

Debljina panela Panel thickness (mm)	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	TEŽINA WEIGHT (Kg/m ²)
50	515	345	255	205	150	110	85	65	55							10.40
60	620	415	310	250	185	135	100	80	65	55	50					10.80
80	830	555	415	330	245	180	140	110	85	70	60	50				11.60
100	1000	690	520	415	310	225	175	135	110	90	75	65	55			12.30
120	1000	735	550	440	365	275	210	165	135	110	90	80	65	65	50	12.30

HORIZONTALNA MONTAŽA HORIZONTAL ASSEMBLY

SPOLJAŠNJI lim
Čelik 0,5 mm
UNUTRAŠNJI lim
Čelik 0,5 mm

EXTERNAL facing
Steel 0.5 mm
INTERNAL facing
Steel 0.5 mm

Širina efektivnog raspona: 100mm
Effective span width: 100 mm

Debljina panela Panel thickness (mm)	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	TEŽINA WEIGHT (Kg/m ²)
50	510	340	250	200	140	105	80	60	50							9.60
60	560	330	210	140	100	70	50									10,00
80	770	470	310	215	155	115	85	60								10,70
100	985	610	415	295	215	160	120	95	70	55						11,50
120	1000	720	515	375	280	210	160	125	100	80	60	50				11,50

SPOLJAŠNJI lim
Čelik 0,6 mm
UNUTRAŠNJI lim
Čelik 0,5 mm

EXTERNAL facing
Steel 0.6 mm
INTERNAL facing
Steel 0.5 mm

Širina efektivnog raspona: 100mm
Effective span width: 100 mm

Debljina panela Panel thickness (mm)	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	TEŽINA WEIGHT (Kg/m ²)
50	515	345	255	205	150	110	85	65	55							10.40
60	565	335	220	150	105	75	55									10.80
80	775	475	320	225	165	120	90	65	50							11.60
100	990	615	425	305	225	170	130	100	80	60						12.30
120	1000	725	525	385	290	225	175	135	105	85	70	55				12.30

U Toplotna provodljivost Transmittance	50	60	80	100	120
(U) EN 14509 = W/m ² K	0.43	0.36	0.28	0.22	0.18
(K) EN ISO 6946 = W/m ² K	0.40	0.33	0.25	0.20	0.17



Na zahtjev
On request
Vanjska strana
External side
30
GODINA
GARANCIJE
YEARS
WARRANTY

PUR PIR
PIR TTPR1ME

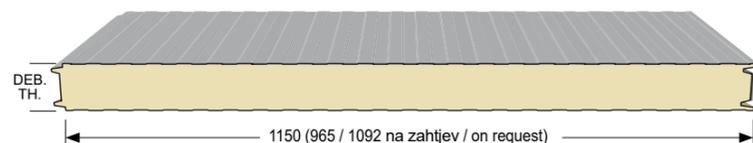


Wet

Panel sa barijerom za vlagu i kondenzaciju
The panel with moisture and condensation protection

WET je metalni panel dizajniran da obezbijedi visoke tehničke performanse: maksimalnu toplotnu izolaciju, barijeru protiv vlage i kondenzacije, najbolju klasu reakcije na požar i otpornost na vatra. Dizajniran posebno za sektor hlađenja sa klimatizovanim i kontrolisanim atmosferskim okruženjima i u oblasti prefabrikacije za izgradnju zidova kuća i stambenih modularnih kontejnera, WET panel je ustvari važno polje upotrebe u izgradnji rashladnih komora u kojima dolazi do ozbiljnih termičkih promjena.

WET is a metal panel designed to guarantee high technical performances: maximum thermal insulation, moisture and condensation protection, better fire reaction class and fire resistance. Designed for the refrigeration sector and for air-conditioned and controlled atmosphere environments and in the prefab sector for walls of houses and housing modules, the WET panel is in fact mostly used in the construction of climate chambers and wherever there are strong thermal changes.



Korisna širina: 1150 mm (965/1092 na zahtjev)

Maksimalna dužina: 15000 mm

Dostupne debljine panela: 50-60-80-100-120 mm.

Sertifikati: CE EN 14509; EPD UNI ISO 14025; PIR B-s2, d0 / PIR B-s1, d0; PIR EI30 / PIR EI45; PIR Zulassung Nr.Z-10.49-589; PIR VKF 5.3; PIR B-s1, d0 Avis technique 2/15-1684; PIR CLASSE 0-2 AS/NZS 1530.3-1999; LEED

Working width: 1150 mm (965/1092 on request)

Maximum length: 15000 mm

Panel thicknesses available: 50-60-80-100-120mm.

Certifications: CE EN 14509; EPD UNI ISO 14025; PIR B-s2, d0 / PIR B-s1, d0; PIR EI30 / PIR EI45; PIR Zulassung Nr.Z-10.49-589; PIR VKF 5.3; PIR B-s1, d0 Avis technique 2/15-1684; PIR CLASSE 0-2 AS/NZS 1530.3-1999; LEED

Mikroliniranje sa DONJE strane panela (navodi se prilikom naručivanja)
Micro-veining of the LOWER side of the panel (to be specified when ordering)



Rešetkasti / Staved Box / Box Glatki / Smooth

Mikroliniranje sa ornje GORNJE strane panela (navodi se prilikom naručivanja)
Micro-veining of the UPPER SIDE of the panel (to be specified when ordering)



Rešetkasti / Staved Box / Box Dijamantski / Diamond

Efektivna širina 100 mm. Proračun je izvršen u skladu sa Aneksom E standarda UNI EN 14509. Dejstvo vjetrova na spoljašnju stranu, toplotni gradijent $\Delta T = 0$, svjetle boje i granica normalnog skretanja 1/100. Podaci prikazani u tabelama se smatraju indikativnim, osim štamparskih grešaka ili propusta. Za ažurirane podatke pogledajte veb stranicu www.lattonedil.it. Dizajner je odgovoran za provjeru vrijednosti prema pojedinačnim primjenama. Za sve što nije navedeno, pogledajte AIPPEG propise (www.aippeg.it).

Effective width of fixing point 100 mm. Calculated according to Annex E of the UNI EN 14509 Standard. Wind action on the outer side, thermal gradient $\Delta T = 0$, light colours and normal deflection limit 1/100. The data in the tables is an indication only and may contain typos or other printing errors. For updated data, please see www.lattonedil.it. The designer is responsible for checking the values depending on the individual applications. For any further non specified data/information please refer to the AIPPEG rules (www.aippeg.it).

VERTIKALNA MONTAŽA VERTICAL ASSEMBLY

Statička svojstva (kg/m²)
Static properties (kg/sq.m.)

NA DVA NOSAČA
SINGLE SPAN

P

SPOLJAŠNJI lim
Čelik 0,5 mm
UNUTRAŠNJI lim
Čelik 0,5 mm

EXTERNAL facing
Steel 0.5 mm
INTERNAL facing
Steel 0.5 mm

Širina efektivnog raspona: 100mm
Effective span width: 100 mm

Debljina panela Panel thickness (mm)	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	TEŽINA WEIGHT (Kg/m ²)
50	510	340	250	200	140	105	80	60	50							9.60
60	615	410	305	245	170	125	95	75	60	50						10.00
80	825	550	410	325	230	170	130	100	80	65	55					10.70
100	1000	685	515	410	290	210	160	125	100	85	70	60	50			11.50
120	1000	730	545	435	345	255	195	155	125	100	85	70	60	55		12.20

SPOLJAŠNJI lim
Čelik 0,6 mm
UNUTRAŠNJI lim
Čelik 0,5 mm

EXTERNAL facing
Steel 0.6 mm
INTERNAL facing
Steel 0.5 mm

Širina efektivnog raspona: 100mm
Effective span width: 100 mm

Debljina panela Panel thickness (mm)	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	TEŽINA WEIGHT (Kg/m ²)
50	515	345	255	205	150	110	85	65	55							10.40
60	620	415	310	250	185	135	100	80	65	55	50					10.80
80	830	555	415	330	245	180	140	110	85	70	60	50				11.60
100	1000	690	520	415	310	225	175	135	110	90	75	65	55			12.30
120	1000	735	550	440	365	275	210	165	135	110	90	80	65	65	50	13.10

HORIZONTALNA MONTAŽA HORIZONTAL ASSEMBLY

SPOLJAŠNJI lim
Čelik 0,5 mm
UNUTRAŠNJI lim
Čelik 0,5 mm

EXTERNAL facing
Steel 0.5 mm
INTERNAL facing
Steel 0.5 mm

Širina efektivnog raspona: 100mm
Effective span width: 100 mm

Debljina panela Panel thickness (mm)	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	TEŽINA WEIGHT (Kg/m ²)
50	455	260	165	105	70	50										9.60
60	560	330	210	140	100	70	50									10.00
80	770	470	310	215	155	115	85	60								10.70
100	985	610	415	295	215	160	120	95	70	55						11.50
120	1000	720	515	375	280	210	160	125	100	80	60	50				12.20

SPOLJAŠNJI lim
Čelik 0,6 mm
UNUTRAŠNJI lim
Čelik 0,5 mm

EXTERNAL facing
Steel 0.6 mm
INTERNAL facing
Steel 0.5 mm

Širina efektivnog raspona: 100mm
Effective span width: 100 mm

Debljina panela Panel thickness (mm)	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	TEŽINA WEIGHT (Kg/m ²)
50	460	270	170	115	75	55										10.40
60	565	335	220	150	105	75	55									10.80
80	775	475	320	225	165	120	90	65	50							11.60
100	990	615	425	305	225	170	130	100	80	60						12.30
120	1000	725	525	385	290	225	175	135	105	85	70	55				13.10

U Toplotna provodljivost Transmittance	50	60	80	100	120
(U) EN 14509 = W/m ² K	0.43	0.36	0.28	0.22	0.18
(K) EN ISO 6946 = W/m ² K	0.40	0.33	0.25	0.20	0.17



Na zahtjev
On request
Vanjska strana
External side
30
GODINA
GARANCIJE
YEARS
WARRANTY

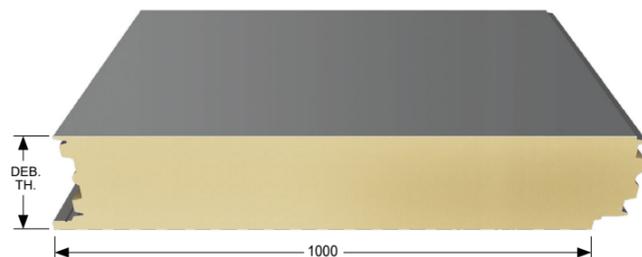
PUR PIR
PIR TTPR1ME

Storm

Panel za samonoseće hladnjače
The panel for self-supporting warehouses at low temperature

STORM je izolacioni metalni panel dizajniran za izgradnju rashladnih objekata i samonosivih skladišta na niskim i srednjim temperaturama, gdje je potreban visok estetski rezultat projekta. Kombinovane su veoma visoke vrijednosti toplotne izolacije, zapravo, sa jednostavnošću suve gradnje i sa jednim nevidljivim spojem. Specijalno glodanje spoja izolacionog sloja omogućava postizanje maksimalne preciznosti u geometriji spoja, pojačanog i dvostrukim lavirintom limova.

STORM is the insulated metal panel for the manufacture of refrigerated structures and self-supporting warehouses at low and medium temperatures, where an elevated aesthetic design result is required. The special milling of the insulation layer allows maximum precision to be obtained in the geometry of the joint, enhanced also by the double labyrinth of the sheet metal.



Korisna širina: 1000 mm

Maksimalna dužina: 15000 mm

Dostupne debljine panela: 180-200-220-240 mm.

Sertifikati: CE EN 14509; PIR B-s1, d0; PIR EI45 / PIR E60 / PIR REI60 / PIR RE90; LEED

Mikroliniranje sa DONJE strane panela (navodi se prilikom naručivanja)
Micro-veining of the LOWER side of the panel (to be specified when ordering)



Rešetkasti / Staved Box / Box Glatki / Smooth

Working width: 1000 mm

Maximum length: 15000 mm

Panel thicknesses available: 180-200-220-240 mm

Certifications: CE EN 14509; PIR B-s1, d0; PIR EI45 / PIR E60 / PIR REI60 / PIR RE90; LEED

Mikroliniranje sa ORNJE strane panela (navodi se prilikom naručivanja)
Micro-veining of the UPPER SIDE of the panel (to be specified when ordering)



Rešetkasti / Staved Box / Box Glatki / Smooth



Dijamantski / Diamond širina / cut pitch 15 Dijamantski / Diamond širina / cut pitch 100 Mikro onduliran / Micro-ribbed

Efektivna širina 100 mm. Proračun je izvršen u skladu sa Aneksom E standarda UNI EN 14509. Dejstvo vJetra na spojašnju stranu, toplotni gradijent ΔT = 0, sviJete boje i granica normalnog skretanja 1/100. Podaci prikazani u tabelama se smatraju indikativnim, osim štamparskih grešaka ili propusta. Za ažurirane podatke pogledajte veb stranicu www.lattonedil.it. Dizajner je odgovoran za provjeru vrijednosti prema pojedinačnim primjenama. Za sve što nije navedeno, pogledajte AIPPEG propise (www.aippeg.it).

Effective width of fixing point 100 mm. Calculated according to Annex E of the UNI EN 14509 Standard. Wind action on the outer side, thermal gradient ΔT = 0, light colours and normal deflection limit 1/100. The data in the tables is an indication only and may contain typos or other printing errors. For updated data, please see www.lattonedil.it. The designer is responsible for checking the values depending on the individual applications. For any further non specified data/information please refer to the AIPPEG rules (www.aippeg.it).

VERTIKALNA MONTAŽA VERTICAL ASSEMBLY

Statička svojstva (kg/m²)
Static properties (kg/sq.m.)

NA DVA NOSAČA
SINGLE SPAN

P

Debljina panela Panel thickness (mm)	P																TEŽINA WEIGHT (Kg/m ²)		
	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5		10	10.5
180	610	485	405	345	305	270	220	185	155	130	110	95	85	75	65	60	55	50	16.20
200	630	505	420	360	315	280	245	205	170	145	125	110	95	85	75	65	60	55	17.00
220	650	520	435	370	325	290	260	225	190	160	140	120	105	90	80	75	65	60	17.70
240	670	535	445	385	335	295	265	245	205	175	150	130	115	100	90	80	70	65	18.50

SPOLJAŠNJI lim
Čelik 0,5 mm
UNUTRAŠNJI lim
Čelik 0,6 mm

EXTERNAL facing
Steel 0.5 mm
INTERNAL facing
Steel 0.6 mm

Širina efektivnog raspona: 100mm
Effective span width: 100 mm

HORIZONTALNA MONTAŽA HORIZONTAL ASSEMBLY

SPOLJAŠNJI lim
Čelik 0,5 mm
UNUTRAŠNJI lim
Čelik 0,6 mm

EXTERNAL facing
Steel 0.5 mm
INTERNAL facing
Steel 0.6 mm

Širina efektivnog raspona: 100mm
Effective span width: 100 mm

SPOLJAŠNJI lim
Čelik 0,6 mm
UNUTRAŠNJI lim
Čelik 0,6 mm

EXTERNAL facing
Steel 0.6 mm
INTERNAL facing
Steel 0.6 mm

Širina efektivnog raspona: 100mm
Effective span width: 100 mm

Debljina panela Panel thickness (mm)	P																TEŽINA WEIGHT (Kg/m ²)		
	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5		10	10.5
180	595	475	390	335	290	245	200	165	135	110	95	75	65	55					16.20
200	615	490	405	345	300	265	235	190	155	130	110	95	80	65	55				17.00
220	635	505	420	355	310	275	245	210	175	145	125	105	90	80	70	60	50		17.70
240	655	520	430	370	320	280	250	230	190	160	135	115	100	85	75	65	55	50	18.50

Debljina panela Panel thickness (mm)	P																TEŽINA WEIGHT (Kg/m ²)		
	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5		10	10.5
180	610	485	400	345	300	255	215	175	145	120	100	85	70	60	50				17.10
200	625	500	415	355	310	275	245	205	175	145	125	105	90	75	65	55			17.80
220	645	515	430	365	320	285	255	220	200	170	145	120	105	90	75	65	55		18.60
240	665	530	440	380	330	290	260	240	205	190	165	140	120	105	90	75	65	55	19.40

U Toplotna provodljivost Transmittance	180	200	220	240
	(U) EN 14509 = W/m ² K	0.13	0.12	0.11
(K) EN ISO 6946 = W/m ² K	0.11	0.10	0.09	0.08



Na zahtjev
On request
Vanjska strana
External side
30
GODINA
GARANCIJE
YEARS
WARRANTY

PUR PIR
PIR TTPR1ME

Wind-Frigo

Idealan za izolacione zidove
Ideal for insulated non load bearing walls

WIND-FRIGO je izolacioni metalni panel za zidove, dizajniran za spoljne i unutrašnje industrijske vertikalne obloge i unutrašnje spuštene plafone. Jednostavan za postavljanje i izuzetno funkcionalan, zadovoljava višestruke potrebe stambenog i industrijskog sektora. Spoj panela, blago konusnog oblika, je dizajniran da omogući savršeno zatvaranje spoja tokom ugradnje i obezbijedi kontinuitet izolacije. Pored toga, specijalni dihtung postavljen u spoju obezbjeđuje dalju garanciju otpornosti na hladnoću.

WIND-FRIGO is an insulated metal panel for walls, designed for both external and internal industrial vertical walls and for internal false ceilings. Easy to install and extremely handy these panels suit the many needs of the civil and industrial sector. The panel joint has a slightly tapered shape designed to facilitate the perfect closure of the joint during installation and ensure uninterrupted insulation. In addition, a special sealing gasket in the joint further boosts thermal insulation.



Korisna širina: 1000 mm (1155/1185 na zahtjev)

Maksimalna dužina: 15000 mm

Dostupne debljine panela: 80-100-120 mm.

Sertifikati: CE EN 14509; EPD UNI ISO 14025; PIR B-s2, d0 / PIR B-s1, d0; PIR Zulassung Nr.Z-10.49-589; PIR VKF 5.3; PIR CLASSE 0-2 AS/NZS 1530.3-1999; PIR GROUP NUMBER 2 ISO 9702; LEED

Working width: 1000 mm (1155/1185 on request)

Maximum length: 15000 mm

Panel thicknesses available: 80-100-120 mm.

Certifications: CE EN 14509; EPD UNI ISO 14025; PIR B-s2, d0 / PIR B-s1, d0; PIR Zulassung Nr.Z-10.49-589; PIR VKF 5.3; PIR CLASSE 0-2 AS/NZS 1530.3-1999; PIR GROUP NUMBER 2 ISO 9702; LEED

Mikroliniranje sa DONJE strane panela (navodi se prilikom naručivanja)
Micro-veining of the LOWER side of the panel (to be specified when ordering)



Rešetkasti / Staved Box / Box Glatki / Smooth

Mikroliniranje sa ornje GORNJE strane panela (navodi se prilikom naručivanja)
Micro-veining of the UPPER SIDE of the panel (to be specified when ordering)



Rešetkasti / Staved Box / Box Dijamantski / Diamond

Efektivna širina 100 mm. Proračun je izvršen u skladu sa Aneksom E standarda UNI EN 14509. Dejstvo vjetrova na spoljašnju stranu, toplotni gradijent $\Delta T = 0$, svjetle boje i granica normalnog skretanja 1/100. Podaci prikazani u tabelama se smatraju indikativnim, osim štamparskih grešaka ili propusta. Za ažurirane podatke pogledajte veb stranicu www.lattonedil.it. Dizajner je odgovoran za provjeru vrijednosti prema pojedinačnim primjenama. Za sve što nije navedeno, pogledajte AIPPEG propise (www.aippeg.it).

Effective width of fixing point 100 mm. Calculated according to Annex E of the UNI EN 14509 Standard. Wind action on the outer side, thermal gradient $\Delta T = 0$, light colours and normal deflection limit 1/100. The data in the tables is an indication only and may contain typos or other printing errors. For updated data, please see www.lattonedil.it. The designer is responsible for checking the values depending on the individual applications. For any further non specified data/information please refer to the AIPPEG rules (www.aippeg.it).

VERTIKALNA MONTAŽA VERTICAL ASSEMBLY

Statička svojstva (kg/m²)
Static properties (kg/sq.m.)

NA DVA NOSAČA
SINGLE SPAN

Debljina panela Panel thickness (mm)	P														TEŽINA WEIGHT (Kg/sq.m.)	
	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5		8
SPOLJAŠNJI lim Čelik 0,5 mm UNUTRAŠNJI lim Čelik 0,5 mm EXTERNAL facing Steel 0.5 mm INTERNAL facing Steel 0.5 mm	80	825	550	410	325	230	170	130	100	80	65	55				10.50
	100	1000	685	515	410	290	210	160	125	100	85	70	60	50		11.40
	120	1000	730	545	435	345	255	195	155	125	100	85	70	60	55	12.20

Širina efektivnog raspona: 100mm
Effective span width: 100 mm

SPOLJAŠNJI lim
Čelik 0,6 mm
UNUTRAŠNJI lim
Čelik 0,5 mm

EXTERNAL facing
Steel 0.6 mm
INTERNAL facing
Steel 0.5 mm

Širina efektivnog raspona: 100mm
Effective span width: 100 mm

HORIZONTALNA MONTAŽA HORIZONTAL ASSEMBLY

SPOLJAŠNJI lim
Čelik 0,5 mm
UNUTRAŠNJI lim
Čelik 0,5 mm

EXTERNAL facing
Steel 0.5 mm
INTERNAL facing
Steel 0.5 mm

Širina efektivnog raspona: 100mm
Effective span width: 100 mm

SPOLJAŠNJI lim
Čelik 0,6 mm
UNUTRAŠNJI lim
Čelik 0,5 mm

EXTERNAL facing
Steel 0.6 mm
INTERNAL facing
Steel 0.5 mm

Širina efektivnog raspona: 100mm
Effective span width: 100 mm

Debljina panela Panel thickness (mm)	P														TEŽINA WEIGHT (Kg/sq.m.)	
	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5		8
SPOLJAŠNJI lim Čelik 0,5 mm UNUTRAŠNJI lim Čelik 0,5 mm EXTERNAL facing Steel 0.5 mm INTERNAL facing Steel 0.5 mm	80	770	470	310	215	155	115	85	60							10.50
	100	985	610	415	295	215	160	120	95	70	55					11.40
	120	1000	720	515	375	280	210	160	125	100	80	60	50			12.20
SPOLJAŠNJI lim Čelik 0,6 mm UNUTRAŠNJI lim Čelik 0,5 mm EXTERNAL facing Steel 0.6 mm INTERNAL facing Steel 0.5 mm	80	775	475	320	225	165	120	90	65	50						11.30
	100	990	615	425	305	225	170	130	100	80	60					12.30
	120	1000	725	525	385	290	225	175	135	105	85	70	55			13.00

U Toplotna provodljivost Transmittance	80	100	120
	(U) EN 14509 = W/m ² K	0.28	0.22
(K) EN ISO 6946 = W/m ² K	0.25	0.20	0.17



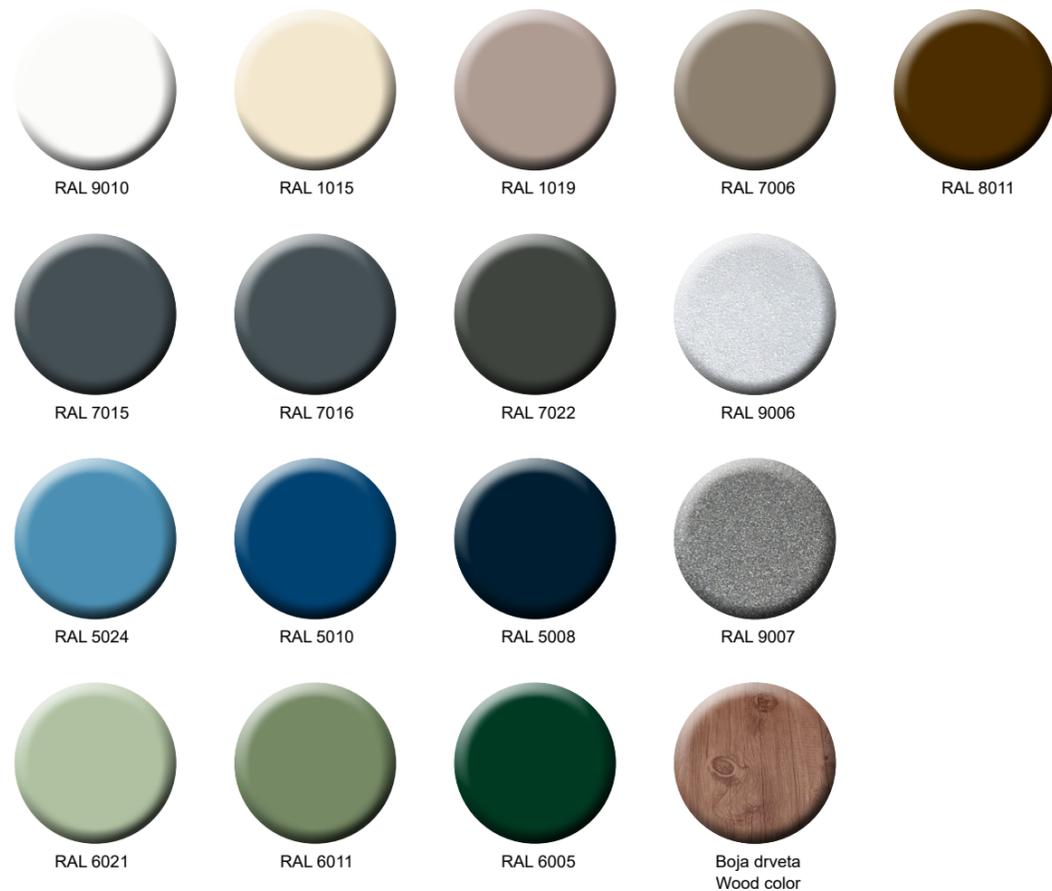
Za više informacija, kontaktirajte tehničku službu Lattonedil
For further information contact the Lattonedil technical department

BOJE
COLOURS

STANDARNE BOJE VANJSKE STRANE
STANDARD COLOURS EXTERNAL SIDE



SPECIJALNE BOJE VANJSKE STRANE
SPECIAL COLOURS EXTERNAL SIDE



STANDARDNE BOJE UNUTRAŠNJE STRANE
STANDARD COLOURS INTERNAL SIDE



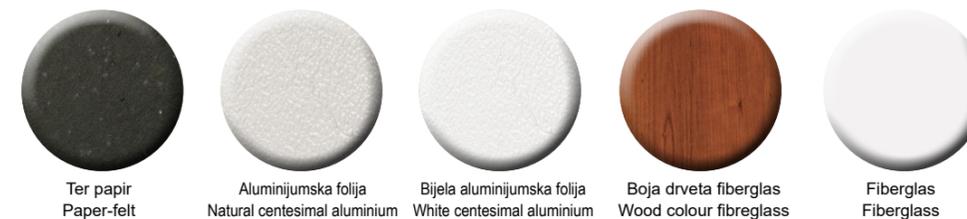
SPECIJALNE BOJE UNUTRAŠNJE STRANE
SPECIAL COLOURS INTERNAL SIDE



BOJE IMITACIJE DRVETA ZA UNUTRAŠNJU STRANU
WOOD COLOURS FOR THE INTERNAL SIDE OF THE SUPPORT



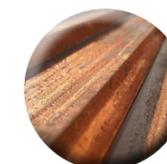
SPECIJALNE ZAVRŠNE OBRADJE ZA UNUTRAŠNJU STRANU
SPECIAL FINISHES FOR THE INTERNAL SIDE OF THE SUPPORT



TTCOPPO STANDARDNE BOJE
TTCOPPO STANDARD COLOURS



PRAVI BAKAR
COPPER



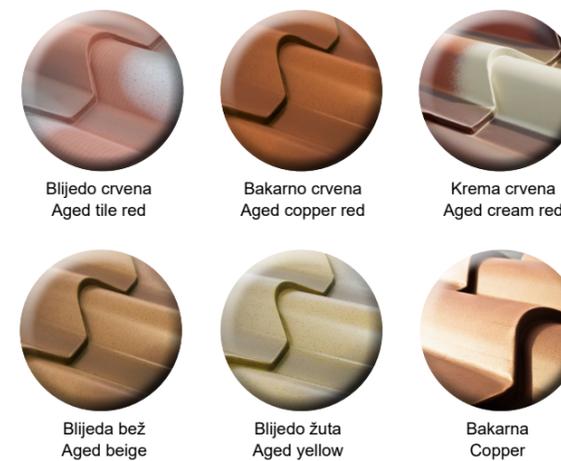
EUROCINQUE® I TTCOPPO® SU TAKOĐE DOSTUPNI SA ZAVRŠETKOM OD PRAVOG BAKRA.

EUROCINQUE® AND TTCOPPO® ARE ALSO AVAILABLE WITH THE EXTERNAL FACING IN REAL COPPER.

KOMPLETNA PALETA BOJA DOSTUPNA NA ZAHTJEV
MOŽETE NAPRAVITI PANEL U BILO KOJOJ BOJI, INFORMACIJE U U NAŠIM KANCELARIJAMA.

THE COMPLETE RAL COLOUR PALETTE IS AVAILABLE UPON REQUEST
YOU CAN BUILD PANEL IN ANY RAL COLOUR, REQUEST INFORMATION AT OUR OFFICES.

TTCOPPO SPECIJALNE BOJE (PO ZAHTJEVU)
TTCOPPO SPECIAL COLOURS (UPON REQUEST)





Colorcoat HPS200 Ultra[®] by Tata Steel

Colorcoat HPS200 Ultra[®] kompanije Tata Steel nudi performanse bez premca, kao što su Lattonedil krovne i zidne obloge. Testovi su pokazali da Colorcoat HPS200 Ultra[®] sa Galvalloy[™] podlogom značajno smanjuje rizik od oštećenja uzrokovanih korozijom i ljuštenjem premaza u oblastima reza po rubovima, nudeći na taj način maksimalnu pouzdanost.

- Galvalloy[™] metalna podloga optimalna je za otpornost na koroziju i zaštitu ivica sječenja;
- Široka paleta boja kreiranih u saradnji sa arhitektima i stručnjacima u sektoru;
- Confidex[®] garancija za industrijske i poslovne zgrade površine preko 500 m² sa rokom važenja do 30 godina bez potrebe za održavanjem ili inspekcijama da bi se održala validnost;
- Garancija na stambene objekte preko dobavljača sistema, do 25 godina za stambene zgrade;
- Potpuno reciklirajući i ekološki kako bi se eliminisali svi elementi štetni po životnu sredinu;
- Zadržavanje boje i sjaja dvostruko veće od standardnih plastisol proizvoda, zahvaljujući posebno naprednoj tehnologiji premaza;
- Isporučuje se sa brendom Scintilla[®] u reljefu koji garantuje njegovu autentičnost.

Za potpunu pouzdanost, preporučuje se upotreba Tata Steel's Colorcoat HPS200 Ultra[®] zajedno sa Galvalloy[™] podlogom.

Performanse proizvoda

Otpornost Colorcoat HPS200 Ultra[®] određuje jedinstvena metalna podloga, predtretman visokih performansi, prajmer i površinski premaz, a sve to je obezbeđeno sveobuhvatnim procesom testiranja i podacima iz stvarnog svijeta koji potvrđuju tvrdnje o našim proizvodima.

Galvalloy[™] podloga

Većina prethodno obojenih čeličnih proizvoda koristi metalni premaz od 99% cinka, koji pruža dobru otpornost na koroziju, ali ostavlja rezane ivice podložnim ljuštenju i prijevremenom raslojavanju boje.

Colorcoat HPS200 Ultra[®], kao i njegov prethodnik Colorcoat HPS200, koristi posebnu metalnu podlogu, Galvalloy[™], napravljen od posebne legure sa 95% cinka i 5% aluminijuma.

Ova legura obezbeđuje zaštitu bez premca, čak i u oblastima sječenja po rubovima.

Primjeri boja Colorcoat HPS200 Ultra[®]
Some examples of Colorcoat HPS200 Ultra[®] colours



Colorcoat HPS200 Ultra[®] by Tata Steel offers unrivalled performance, such as Lattonedil roof and wall coverings. Tests have shown that Colorcoat HPS200 Ultra[®] with a Galvalloy[™] support substantially reduce the risk of damage caused by corrosion and detachment of the coating layer in perimeter cutting areas, thus ensuring maximum reliability.

- Galvalloy[™] metal support optimized to resist corrosion and protect cutting edges.
- Wide range of colours created in collaboration with architects and experts in the field.
- Convidex[®] warranty of up to 30 years for industrial and commercial buildings with areas in excess of 500 m² with no maintenance or inspection requirements to maintain warranty validity.
- System supplier's residential warranty of up to 25 years for residential buildings.
- Fully recyclable and environment-friendly, to eliminate any harm to the environment.
- Colour and gloss preservation twice as high as standard Plastisol products, thanks to a particularly advanced coating technology.
- Supplied with the Scintilla[®] trademark embossed to ensure authenticity.

For complete reliability, we recommend using Tata Steel's Colorcoat HPS200 Ultra[®] with the Galvalloy[™] support.

Product performance

The strength of the HPS200 Ultra[®] Colorcoat is ensured by the special metal coated support, high-performance pretreatment, primer and surface coating, all processes that are exhaustively tested and supported by real-world data that validate and confirm our product claims.

Galvalloy[™] support

Most pre-painted steel products use 99% zinc metal coating, which ensures good corrosion resistance, but leaves the cutting edges vulnerable to peeling and premature paint delamination.

Colorcoat HPS200 Ultra[®], like its predecessor Colorcoat HPS200, uses a special metal support called Galvalloy[™], made from a special alloy with 95% zinc and 5% aluminium.

This alloy offers unparalleled protection, even in perimeter cutting areas.

Colorcoat Prisma[®] by Tata Steel

Estetika koja traje. Garantovano.
Aesthetic that lasts in time. Guaranteed

Colorcoat Prisma[®] je pravi pokazatelj promjene tako što koristi avangardne načine proizvodnje i tri sloja kako bi se napravio optimalan, čvrst proizvod bez hroma. Colorcoat Prisma[®] ne samo da zadovoljava gore navedene zahtjeve, nego i UV zahtjeve, te najstrožije standarde otpornosti na koroziju. Ovim postaje optimalan izbor za industrijsku upotrebu, komercijalnih zgrada, skladišta, pa i za stambenu upotrebu ili zgrada u kojima estetika igra veliku ulogu, a potrebno je da su dugotrajni.

- Revolucionarna troslojna tehnologija premaza koja poboljšava estetiku, izdržljivost i dugotrajne performanse.
- Confidex[®] garancija do 30 godina za površine izložene elementima industrijskih i poslovnih zgrada bez potrebe za pregledom ili održavanjem da bi se zadržala validnost.
- Poboljšani Galvalloy[™] metalna podloga sa izuzetnom otpornošću na koroziju i zaštitom ivica.
- Nezavisno je testiran na oslobađanje isparljivih organskih jedinjenja (VOC) u skladu sa EN ISO 16000-9 i dobio je ocjenu „A+“.
- Potpuno usklađen sa REACH zahtjevima i ne sadrži hromate, uključujući heksavalentni hrom.
- Proizveden u UK. BES 6001 sertifikat, standard odgovornog izvora.
- Potpuno usklađen sa BREEAM i LEED sertifikatima.

Primjena

Bez obzira na vrstu zgrade, bilo da se radi o magacinu, školi, poslovnoj ili rekreativnoj zgradi, novogradnji ili renoviranoj zgradi, Colorcoat Prisma[®] nudi niz rješenja koja vam omogućavaju da kreirate moderne, izdržljive i atraktivne krovove i zidove.

Galvalloy[™] podloga

Većina prethodno farbanih čeličnih proizvoda koristi premaz cinka, koji pruža dobru otpornost na koroziju, ali ostavlja ivice reza podložnim ljuštenju i prijevremenom raslojavanju boje. Colorcoat Prisma[®] koristi ekskluzivnu i provjerenu metalnu podlogu, Galvalloy[™] od Tata Steel-a, sastavljenu od specijalne legure sa 95% cinka i 5% aluminijuma, čime se obezbeđuje zaštita od korozije bez premca, čak i u oblastima sječenja po rubovima.

Primjeri boja Colorcoat Prisma[®]
Here are a few examples of Colorcoat Prisma[®] colors



The breakthrough product Colorcoat Prisma[®] uses state-of-the-art three-layer manufacturing technology to create an optimized, robust, chrome-free pre-painted steel product. Colorcoat Prisma[®] does not only override the limits imposed for UV performance, but also surpasses the most stringent European corrosion resistance standards. This makes it the best choice for commercial and retail buildings, warehouses, for the public sector and for buildings with special aesthetics requirement that need to last in time.

- Revolutionary 3-layer coating technology to improve aesthetics, durability and long-term performance.
- Convidex[®] warranty of up to 30 years for weatherproof surfaces in industrial and commercial buildings, without any inspection or maintenance needed to preserve its validity.
- Optimized Galvalloy[™] metal coating, with outstanding corrosion resistance and cutting edge protection.
- Tested by independent VOC (volatile organic compound) release agencies in accordance with EN ISO 16000-9 and classified as "A+".
- Fully compliant with REACH requirements and chromate-free (incl. hexavalent chromium).
- Made in the United Kingdom. Certified under BES 6001, the standard for responsible sourcing of construction materials.
- Fully compliant with BREEAM and LEED criteria.

Uses

Regardless of the type of building - whether it is a warehouse, an office building, a school or a recreational building, a new construction or a renovated building -, Colorcoat Prisma[®] offers a number of solutions for attractive, modern and durable roofs and walls.

Galvalloy[™] support

Most pre-painted steel products use zinc coating, which ensures good corrosion resistance, but leaves the cutting edges vulnerable to peeling and premature paint delamination. Colorcoat Prisma[®] uses a unique and proven metal support called Galvalloy[™], produced by Tata Steel, which is made of a special alloy with 95% zinc and 5% aluminium to ensure unparalleled protection against corrosion, even in perimeter cutting areas.



Uputstva za spojeve / Indications de Fixation

Za rebraste panele za krovove i zidne panele
For corrugated roof and wall panels

Za više informacija, kontaktirajte tehničku službu Lattonedil
For further information contact the Lattonedil technical department

Za pravilnu upotrebu izolacionih panela neophodno je utvrditi odgovarajući sistem spojeva. Sistem se treba odabrati u odnosu na vrstu strukture nosača da bi se garantovala sigurnost, stabilnost i vodonepropustljivost. Sistem spojeva podijeljen je na dvije kategorije: Strukturalni i nestrukturni spojevi. Prvi osiguravaju krovni ili zidni panel na noseću strukturu objekta da bi se obezbijedila nosivost opterećenja. Drugi služe da bi se uklopila limarija ili limovi panela međusobno. Raspored i broj strukturalnih spojeva određuje se u zavisnosti od broja nosača, nagiba terena i vjetrovitosti, ali ne treba da bude manji od n° 3 svakih m2. U odnosu na kaplaj, vertikalni lim ili na eventualne prednje preklope, grupe spojeva moraju biti postavljene na sva rebra panela.

In order to correctly use the insulated panels, it is necessary to identify the most suitable fixing system. The system must be chosen on the basis of the type of support structure, and is essential for guaranteeing safety, stability and watertightness. The fixing system is generally subdivided into two categories: structural fixing and nonstructural fixing. The first, fixes the roof or wall panel to the supporting structure of the building and must guarantee the capacity to support the applied loads. The second, on the other hand, only fixes the tinsmithery systems or the panel sheets together. The place and number of the roof structural fixing elements is established on the basis of the number of supports, the slope of the pitch and the windiness, but must not, however, be less than 3 for every sq.m.. On the ridge on the roof, the eaves and any front overlapping, the fixing groups must be applied on all the panel ribs.

STRUKTURALNI SPOJ ZA KROVNE PANELE NA NOSEĆU STRUKTURU OD ŽELJEZA

Koriste se grupe spojeva sa samozavrćućim vijcima za željezo, sa glavom vijka od obojenog najlona, prečnika 6.3 mm i različitih dužina u zavisnosti od debljine panela. Jahači od prefabranog lima ili aluminijuma sa prethodno postavljenim elementom za proširenje ispod i gumenom podloškom brtve.

STRUCTURAL FIXING OF LATTONEDIL ROOF PANELS ON STEEL SUPPORT STRUCTURE

Fixing groups with self-tapping screws for steel, with a coloured nylon head, 6.3 mm diameter and variable length, depending on the thickness of the panel. Pre-painted metal or aluminium capping with pre-assembled expanded element underneath, and sealing washer in pvc.



DEBLJINA PANELA PANEL THICKNESS (mm)	DUŽINA VIJKA (PREPORUČENO) SCREW LENGTH (RECOMMENDED)
30	Ø 6,3 x 100 mm.
40	Ø 6,3 x 110 mm.
50	Ø 6,3 x 120 mm.
60	Ø 6,3 x 130 mm.
80	Ø 6,3 x 140 mm.
100	Ø 6,3 x 160 mm.
120	Ø 6,3 x 180 mm.
150	Ø 6,3 x 210 mm.
160	Ø 6,3 x 220 mm.
180	Ø 6,3 x 240 mm.
200	Ø 6,3 x 260 mm.

STRUKTURALNI SPOJ ZA KROVNE PANELE NA NOSEĆU STRUKTURU OD DRVETA

Koriste se grupe spojeva sa samozavrćućim vijcima za drvo, sa glavom vijka od obojenog metala, prečnika 6.5 mm i različitih dužina, u zavisnosti od debljine panela. Jahači od prefabranog lima ili aluminijuma sa prethodno postavljenim elementom za proširenje ispod

STRUCTURAL FIXING OF LATTONEDIL ROOF PANELS ON WOOD SUPPORT STRUCTURE

Fixing groups with self-tapping screws for wood, with a coloured nylon head, 6.5 mm diameter and variable length, depending on the thickness of the panel. Pre-painted metal or aluminium capping with pre-assembled expanded element underneath.



DEBLJINA PANELA PANEL THICKNESS (mm)	DUŽINA VIJKA (PREPORUČENO) SCREW LENGTH (RECOMMENDED)
30	Ø 6,5 x 110 mm.
40	Ø 6,5 x 120 mm.
50	Ø 6,5 x 130 mm.
60	Ø 6,5 x 140 mm.
80	Ø 6,5 x 160 mm.
100	Ø 6,5 x 180 mm.
120	Ø 6,5 x 200 mm.
150	Ø 6,5 x 230 mm.
160	Ø 6,5 x 240 mm.
180	Ø 6,5 x 260 mm.
200	Ø 6,5 x 280 mm.

STRUKTURALNI SPOJ ZA PANELE ISOPAR® NA NOSEĆU STRUKTURU OD ŽELJEZA

Koristi se samozavrćući vijak za željezo, sa glavom vijka od bijelo-sivog najlona, prečnika 6.3. mm i različitih dužina u zavisnosti od debljine panela.

STRUCTURAL FIXING FOR ISOPAR® PANELS ON STEEL STRUCTURE

Fixing groups with self-tapping screws for steel, with a white/grey nylon head, 6.3 mm diameter and variable length, depending on the thickness of the panel.



DEBLJINA PANELA PANEL THICKNESS (mm)	DUŽINA VIJKA (PREPORUČENO) SCREW LENGTH (RECOMMENDED)
30	Ø 6,3 x 60 mm.
40	Ø 6,3 x 70 mm.
50	Ø 6,3 x 80 mm.
60	Ø 6,3 x 90 mm.
80	Ø 6,3 x 110 mm.
100	Ø 6,3 x 130 mm.
120	Ø 6,3 x 150 mm.
150	Ø 6,3 x 180 mm.
160	Ø 6,3 x 190 mm.
180	Ø 6,3 x 210 mm.
200	Ø 6,3 x 230 mm.
220	Ø 6,3 x 250 mm.
240	Ø 6,3 x 270 mm.

Za Tt Coppo® panele
For Tt Coppo® panels

Za pravilnu upotrebu izolacionih panela potrebno je identifikovati najpogodniji sistem pričvršćivanja. Sistem se mora izabrati na osnovu vrste potporne konstrukcije i od suštinskog je značaja da garantuje sigurnost, stabilnost i zaptivanje. Sistem za pričvršćivanje je podijeljen u dve kategorije: strukturalna pričvršćivanja i nestrukturna pričvršćivanja. Prvi pričvršćuju krov ili zidnu ploču na noseću konstrukciju zgrade i moraju garantovati nosivost primenjenih opterećenja. Ovi drugi se, s druge strane, koriste samo za držanje završnog lima panela između njih. Raspored i broj konstruktivnih pričvršćenja na krovu utvrđuje se na osnovu broja oslonaca, nagiba, vjetrovitosti, ali u svakom slučaju ne smije biti manji od 3 po kvadratnom metru. U skladu sa sljemenom, nadstrešnicom i svim prednjim preklopima, grupe za pričvršćivanje moraju se primjeniti na sve.

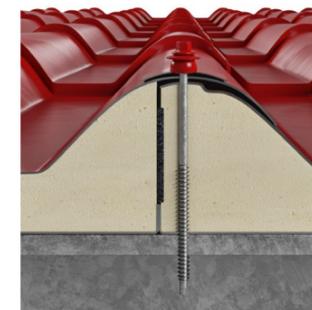
In order to properly use our insulated panels it is necessary to identify the most suitable fixing system. The system must be chosen according to the type of support structure and is essential to ensure safety, stability and tightness. Usually there are two types of fastening systems: structural fasteners and non-structural fasteners. The former secure the roof or wall panel to the load-bearing structure of the building and must be able to bear the applied loads. The latter, on the other hand, are only used to join the panel sheets together and for the metal finishes. The arrangement and number of structural fastenings is set basing on the number of fixing points, the slope of the ground, the wind, but in any case it must not be less than 3 per square meter. When joining with the ridge beam, the gutter and any front overlaps, the fastening units must be applied on all the ribbings of the panel.

KONSTRUKCIJSKO PRIČVRŠĆIVANJE TTCOPPO® LATTONEDIL PANELE NA KONSTRUKCIJU STRUKTURA OD GVOŽDA

Pričvršne jedinice se koriste sa vijcima sa samourezujućim navojem, obojenom najlonskom glavom ili šestougaonom glavom od obojenog gvožđa, prečnika 6,3 mm i promjenljive dužine, u zavisnosti od debljine panela. Prethodno ofarbani lim ili aluminijumski poklopci sa prethodno montiranim pjenom ispod i PVC podloškom za zaptivke.

STRUCTURAL FASTENINGS OF TTCOPPO® LATTONEDIL PANELS ON AN IRON SUPPORTING STRUCTURE

Fastening units use sheet metal self-drilling screws, coloured nylon heads or coloured iron hexagonal heads diameter 6.3 mm and variable length, depending on the thickness of the panel. Caps in sheet metal or pre-painted aluminium with pre-assembled foam underneath, and PVC gasket washer.



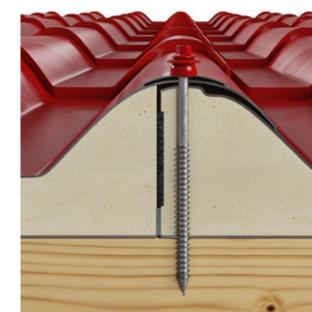
DEBLJINA PANELA PANEL THICKNESS (mm)	DUŽINA VIJKA (PREPORUČENO) SCREW LENGTH (RECOMMENDED)
30	Ø 6,3 x 110 mm.
40	Ø 6,3 x 120 mm.
50	Ø 6,3 x 130 mm.
60	Ø 6,3 x 140 mm.
80	Ø 6,3 x 160 mm.
100	Ø 6,3 x 180 mm.

KONSTRUKCIJSKO PRIČVRŠĆIVANJE TTCOPPO® LATTONEDIL PANELE NA KONSTRUKCIJU STRUKTURA OD DRVETA

Pričvršne jedinice se koriste sa samoureznim vijcima za drvo, obojenom najlonskom glavom ili šestougaonom glavom od obojenog gvožđa, prečnika 6,5 mm i promjenljive dužine, u zavisnosti od debljine panela. Prethodno ofarbani lim ili aluminijumski poklopci sa prethodno montiranim pjenom ispod i PVC podloškom za zaptivke.

STRUCTURAL FASTENINGS OF TTCOPPO® LATTONEDIL PANELS ON A WOODEN SUPPORT STRUCTURE

Fastening units use self-drilling screws for wood, coloured nylon heads or coloured iron hexagonal heads diameter 6.5 mm and variable length, depending on the thickness of the panel. Caps in sheet metal or pre-painted aluminium with pre-assembled foam underneath, and PVC gasket washer.



DEBLJINA PANELA PANEL THICKNESS (mm)	DUŽINA VIJKA (PREPORUČENO) SCREW LENGTH (RECOMMENDED)
30	Ø 6,5 x 120 mm.
40	Ø 6,5 x 130 mm.
50	Ø 6,5 x 140 mm.
60	Ø 6,5 x 150 mm.
80	Ø 6,5 x 170 mm.
100	Ø 6,5 x 190 mm.



ZA FIKSIRANJE KROVNIH I ZIDNIH PANELA FOR FIXING ROOFING PANELS AND WALLS



JAHAČ
U raznim bojama i od raznih materijala u zavisnosti od zahtjeva.
CAP NUT
Available in different colours and materials, depending on the client's requirements.



SISTEM SPOJEVA
Samourezujući vijak, podloška sa EPDM brtvom, jahač.
FIXING SYSTEM
Self-drilling screws, EPDM washer, cap nut.



VIJCI ZA KROVNI PANEL
Samozavrćući vijak za drvo ili željezo u standardnim bojama.
SCREW FOR ROOF PANEL
Self-tapping screw for wood and steel in standard colours.



VIJCI ZA ZIDNI PANEL
Samozavrćući vijak za drvo ili željezo u standardnim bojama.
SCREW FOR WALL PANEL
Self-tapping screw for wood and steel in standard colours.



VIJCI OD METAKRILATA
Poseban samozavrćući ili samourezujući vijak sa glavom potpuno prekrivenom plastičnim materijalom, metakrilatom.
METHACRYLATE SCREW
Self-tapping and self-drilling screw with a completely covered head in plastic material - methacrylate.



VIJCI
Samozavrćući vijci za drvo ili željezo u bojama dostupnim na zahtjev (za minimalne količine, kontaktirati naše poslovnice).
SCREW
Self-tapping screw for wood and steel, colours on request. (for minimum quantities, please contact our offices).



NERĐAJUĆA PODLOŠKA SA EPDM BRTVOM
Nerđajuća podloška sa EPDM brtvom za maksimalnu čvrstoću spoja
STAINLESS WASHER WITH EPDM GASKET
Stainless washer with gasket for the perfect watertightness of the fixing.



PODLOŠKA I OBOJENE EPDM BRTVE
Nerđajuća podloška sa EPDM brtvom koja se pravi u odnosu na boje krova (za minimalne količine, kontaktirati naše poslovnice)
WASHER AND COLOURED EPDM GASKET
Washer and edpm gasket with colour matching the roof colour. (for minimum quantities, please contact our offices).



JAHAČ ZA TTCOPPO®
U raznim bojama i od raznih materijala u zavisnosti od zahtjeva.
CAP NUT FOR TTCOPPO®
Available in different colours and materials, depending on the client's requirements.



VIJAK SA JAHAČEM ZA TTCOPPO®
Samourezujući vijak za drvo i željezo sa EPDM brtvom i jahačem.
SCREW FOR TTCOPPO®
Self-tapping screw for wood or steel with edpm gasket and cap nut.



VIJAK SA BRTVOM EPDM ZA TTCOPPO®
Samourezujući vijak za drvo i željezo sa EPDM brtvom.
SCREW WITH EPDM GASKET FOR TTCOPPO®
Self-tapping screw for wood or steel with edpm gasket.



INSERT NAMOTAN METRIČKIM VIJKOM
Element za fiksiranje od čelika koji omogućava postavljanje na posebne elemente malih debljina. Pored brze i praktične postavke, nudi i odličnu otpornost.
THREADED INSERT WITH METRIC SCREW
Special fixing element in steel than allows putting a thread on the particular elements with low thickness. Really fast and easy to apply, it has also high resistance.



POP NITNA
Ova zakovica posebno odgovara za spajanje na neki objekat, čaura zakovice se otvara u više dijelova tokom spajanja, osiguravajući tako odličan spoj.

FLOWER RIVET
This rivet is adapted for fixing of any stuffs, the bushing of the fastener opens in more parts during assembling thereby ensuring an excellent fixing.



OBLO
Oblast industrijskog građevinarstva zahtijeva integrisane sisteme i inovativne proizvode. Prethodno ugrađen prozor Oblo na izoliranim panelima ISOPAR sa dimenzijama dostupnim na zahtjev, od materijala kao što je kaljeni nelomljivi kristal, dvostruko staklo i polikarbonat. Štedi vrijeme postavljanja i troškove projekta. Dostupan je za panele debljina 30 do 60 mm

PORTHOLE
The industrial building sector requires integrated systems and innovative products. The pre-installed porthole in ISOPAR® insulated panels, with sizes on demand and with the use of materials like unbreakable tempered crystal, double glass and polycarbonate is able to considerably optimize the design times and the installation costs. It is available for 30 to 60 mm thick panels.

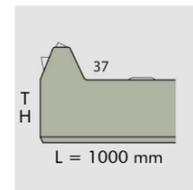
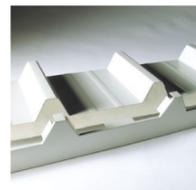
KOMPONENTE ZAVRŠNE OBRADJE NA KROVNIM I ZIDNIM PANELIMA FINISHING COMPONENTS FOR RIBBED ROOF AND WALL PANELS

Vrsta elemenata završne obrade za krovne panele Lattonedil®, kojima se mogu zadovoljiti sve potrebe projekta.

Materijal: Prefarbanani čelik debljine 0.5 mm, ili na zahtjev
Prefarbanani aluminijum debljine 0.6 mm, ili na zahtjev
Prirodni bakar debljine 0.6 mm
Boje: Bianco – Grigio, Testa di moro, Rosso siena, druge boje na zahtjev
Dimenzije: Standardna dužina 3m

Serie of finishing elements for lattonedil® roof panel, able to satisfy all design requirements.

Material: 0.5 mm thick prepainted steel or on demand
0.6 mm prepainted aluminium or on demand
0.6 mm natural copper.
Colour: White grey, chocolate brown, siena red, other colours on demand
Dimensions: Standard length 3 m

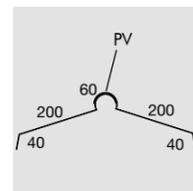


SILUETTE

Element završne obrade koji se koristi za krajeve krovnih panela debljine do 120 mm, i osigurava savršen estetski izgled i veću zaštitu. Dostupan od prefarbanog čelika.

SILHOUETTE

Closing element for the head of roof panels up to 120 mm thick, which ensures excellent aesthetic appearance and better protection. Available in prepainted steel.

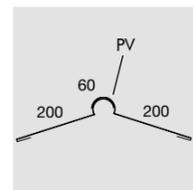


KAPLAJ KOJI SE OBLIKUJE

Kaplj sa zglobom (šarkom) koji se oblikuje pri postavci, za gornji čvor nagnutih strana.

RIDGE CAP TO BE SHAPED

Hinged cap to be shaped during installation, designed for the external joint of pitched roofs.

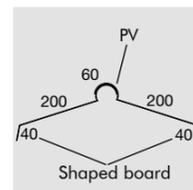
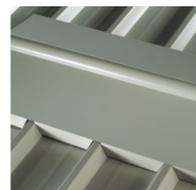


GLATKI KAPLAJ

Dupli element sa zglobom (šarkom).

SMOOTH RIDGE CAP

Double hinged element.

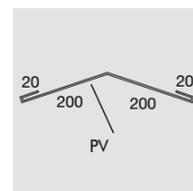


OBLIKOVANI KAPLAJ

Dupli element sa zglobom (šarkom).

SHAPED RIDGE CAP

Double hinged element.



POTKAPLAJ

Neophodan element u slučaju unutrašnjeg spoja između nagiba na konstrukcijama od željeza

SUBRIDGE

Essential element designed for the internal joint of the pitches on steel constructions.

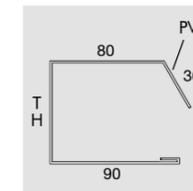


BRTVA POTKAPLAJA

Sunderasta brtva koja se postavlja ispod metalnog kaplaja, preporučuje se naročito za blage nagibe, da bi se spriječilo prodiranje jakog vjetro.

SUBRIDGE CAP LINING

This is a spongy lining to be applied under the metal ridge cap; it is primarily recommended for slightly sloping pitches, in order to prevent infiltration caused by strong wind.

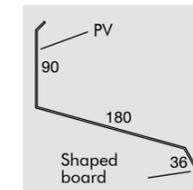
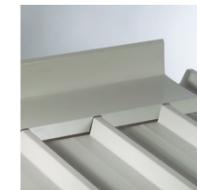


VJETAR LAJSNA

Za oblaganje bočne ivice panela, upotrebljiva kako za dio punog rebra, tako i za dio preklapnog rebra.

SIDE FLASHING

To cover the side edge of the panel, can be used for both the full rib and the overlapping rib.

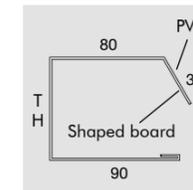


FRONTALNA LAJSNA

Upotrijebiti u slučaju spoja između krovnih panela i zida u frontalnom položaju.

FRONT FLASHING

It be used in case of joint between the roof made of panels and an existing wall, placed in frontal position.

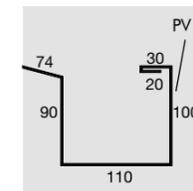


LAJSNA ZAVRŠNOG DIJELA

Za oblaganje gornjih ivica panela, koristi se za krovove sa jednim isturenim nagibom.

TAIL FLASHING

To cover the upper edge of the panels, to be used in single protruding single pitch roofs.

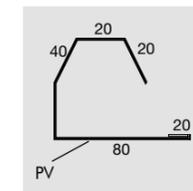
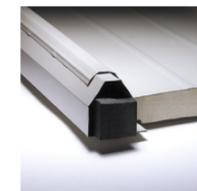


OLUK

Koristi se za nadstrešnice i verande sa kratkim nagibima, na zahtjev je moguće obezbijediti bočne krajeve i šipke nosača

EAVES

Useful complementary element for roofs and porches with short pitches; side heads and fastening rods can be supplied on request.

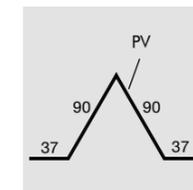


PROFIL BOČNOG POJAČANJA

Koristi se kao pojačanje ispod praznog rebra preklapa na panelu, uparuje se sa svjetlarnicima. Preporučuje se punjenje sunderastom brtvom da bi se spriječilo kondenzacija.

SIDE SUPPORT PROFILE

To be used as a support under the empty overlapping rib, in combination with fixed rooflights. We recommend to fit a spongy lining in the cavity in order to prevent any condensation.



SNJEGOBRAN

Neophodan za još potpuniju i sigurniju pokrivenost.

SNOW STOPPER

Necessary for a complete and safe roof.



SPREJ ZA DOTJERIVANJE

Radi se o posebnoj vrsti spreja za dotjerivanje panela, u slučaju površinskih ogrebotina ili slučajnih udubljenja. Dostupne boje su bianco grigio, rosso siena, testa di moro i rosso coppo. Druge boje su dostupne na zahtjev.

TOUCH UP PAINT

This is a special spray paint for touching up the panels in the case of surface scratches or accidental dents. The available colours are white grey, siena red, dark brown and red tile. Other colours are available on demand.

KOMPONENTE ZAVRŠNE OBRADJE ZA TTCOPPO® FINISHING COMPONENTS FOR TTCOPPO®

Elementi za završnu obradu dodatka za TTCoppo® seriju završnih elemenata za TTCOPPO® krovni panel, sposobni zadovoljiti sve oblike zahtjeva.

Materijal: Čelik debljine 0,5 mm ili na zahtjev
Aluminijum debljine 0,6 mm ili na zahtjev
Prirodni bakar debljine 0,6 mm.

Boja: Standardna crvena ploča, druge boje na zahtjev

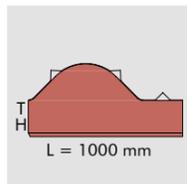
Dimenzije: Standardna dužina 3 m.

Accessories finishing components for TTCoppo® serie of finishing elements for TTCOPPO® roof panel, able to satisfy all design requirements.

Material: 0.5 mm thick prepainted steel or on demand
0.6 mm thick prepainted aluminium or on demand
0.6 mm thick natural copper.

Colour: Standard tile red, other colours on demand

Dimensions: Standard length 3 m.

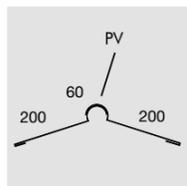


SILUETA

Element završne obrade koji se koristi za krajeve krovnih panela debljine do 50 mm, i osigurava savršen estetski izgled i veću zaštitu. Dostupan do prefarbanog čelika za panele debljine 30, 40 i 50 mm. Druge debljine na zahtjev.

SILHOUETTE

Closing element for the head of TTCOPPO® panels up to 50 mm thick, which ensures excellent aesthetic appearance and better protection. Available in prepainted steel for 30, 40 and 50 mm thick panels. Different thicknesses on demand.

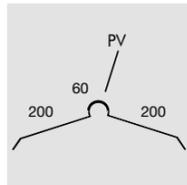


GLATKI KAPLAJ

dupli element sa zglobom (šarkom), bez oblikovanog krilca

SMOOTH RIDGE CAP

Double hinged element, without shaped fin.

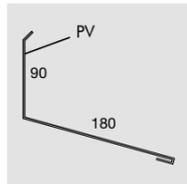
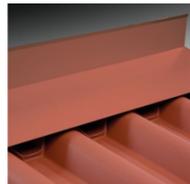


OBLIKOVANI KAPLAJ

Dupli element sa zglobom (šarkom) koji je oblikovan kao gornji profil panela

SHAPED RIDGE

Double hinged ridge, shaped as the external panel profile.

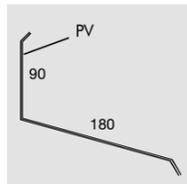
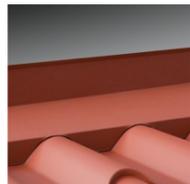


FRONTALNA LAJSNA

Element za upotrebu u slučaju spoja između krovnog panela i zida u frontalnom položaju

FRONT FLASHING

To be used in case of joint between the roof made of panels and an existing wall, placed in frontal position.

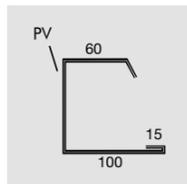
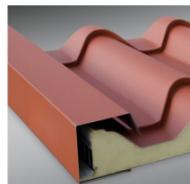


OBLIKOVANA FRONTALNA LAJSNA

Element koji je oblikovan kao gornji profil panela. Upotrebljava se u slučaju spoja između krovnog panela i zida u frontalnom položaju

FRONT SHAPED FLASHING

Shaped element, shaped as the external panel profile. to be used in case of joint between the roof made of panels and an existing wall, placed in frontal position.

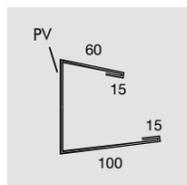


BOČNA LAJSNA

Za oblaganje bočne ivice panela, upotrebljava se kako za dio punog rebra, tako i za dio preklopnog rebra

SIDE FLASHING

To cover the side edge of the panel, can be used for both the full rib and the overlapping rib.



MASKA

Za oblaganje gornje ivice panela.

TAIL FLASHING

To cover the upper edge of the panels.

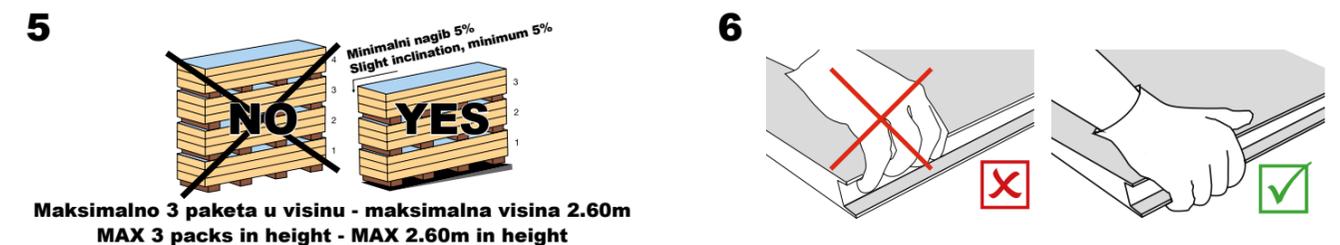
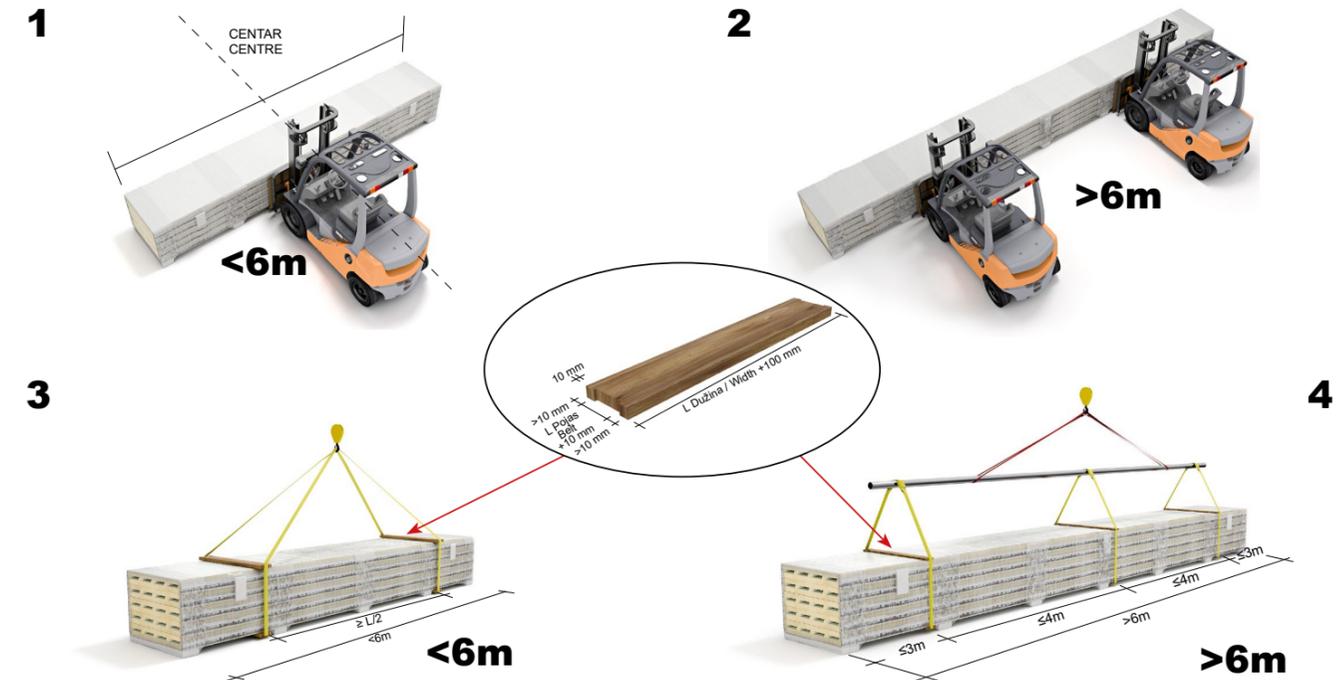


NORME O ODRŽAVANJU, POMIJERANJU I SKLADIŠTENJU IZOLACIONIH METALNIH PANELA I DODATAKA RULES CONCERNING TRANSPORTATION, HANDLING AND STORAGE

Podizanje i rukovanje Lifting and handling

U slučaju rukovanja i podizanja pomoću viljuškara, preporučuje se upotreba jednog uređaja za panele dužine do 6 metara (1) i dva uređaja za panele dužine preko 6 metara (2), data su uputstva za dizanje i rukovanje kroz dizalicu, priveznice i balans točak. Potrebno je uvijek paziti da viljuške dizala imaju noževe sa sigurnosnim zaštitama ili širinom koja ne oštećuje kontaktnu površinu s panelima. Za podizanje i rukovanje panelima preporučuje se korištenje dizalice i priveznica s dvije spojne tačke dužine do 6 metara. (3) Za veće dužine preporučeno je korištenje dizalice s balansirajućim točkovima i priveznicama s tri tačke spajanja (4). Međutim, kupac je odgovoran za provjeru, prije istovara i prema vrsti proizvoda i pakovanju, da je moguće da razmaknice i priveznice stvore oštećenja prikladna za stvaranje oštećenja. U ovom slučaju se preporučuje povećanje broja potpornja i priveznica kako bi se dobio odgovarajući sistem za podizanje i rukovanje. Ipak, donji odstojnici moraju biti dovoljne dužine da spriječe težinu pakovanja da uzrokuje trajne deformacije proizvoda. Pakovanje se vrši pomoću balansa i prikladne najlonske priveznice širine preko 100 mm, kako bi se rasporedilo opterećenje na remen da bi se izbjegle deformacije. Moraju se koristiti prikladni razmaknici smješteni ispod i iznad pakovanja, koji se sastoje od čvrstih ravnih elemenata od drva ili plastike materijala koji sprječavaju izravan kontakt priveznica s paketom. Ovi razmaknici moraju udovoljavati minimalnim dimenzijama. Dužina mora biti veća od 5 cm po strani, u odnosu na širinu. Ukupna širina mora biti najmanje 30 mm veća u usporedbi sa širinom trake s utorom za zadržavanje priveznica koje odgovaraju njihovoj veličini za najmanje 10 mm; mora se obratiti pažnja da se priveznice i potpornja ne pomiču tokom dizanja i rukovanja, a manevri se izvode oprezno i postupno. Deponiranje pakovanja na krovnu konstrukciju mora se obavljati samo na ravnim površinama koje su pogodne za njihovo podupiranje otpornost, uslovi polaganja i sigurnosni aspekti, takođe u odnosu na radove koji se izvode. Preporučuje se da uvijek zatražite unaprijed, upravitelju radova, odobrenje za polaganje materijala i provjeru prikladnosti odabranog mjesta. Paketi odloženi na visini uvijek moraju biti ispravno vezani za strukture. Postavite pakiranje na ravnu i krutu površinu i umetnite polistirenske elemente ili drvene daske minimalne debljine 50 mm i minimalne širine 200 mm, na maksimalnoj udaljenosti od 1000 mm. Skladištenje mora biti na blagoj kosini kako bi se olakšalo oticanje potencijalnog kondenzata i izbjegla stagnacija vode. (5) Zaštitna oprema koja se koristi (rukavice, zaštitne cipele, kombinezone itd.) moraju biti čisti da ne bi uzrokovali oštećenje na elementima. Kada podizete ploču nemojte koristiti dijelove koji su najosjetljiviji na deformacije kao tačke za spajanje i uhvatite ploču samo tako da potpuno prihvatite debljinu. (6) Korištenje viljuškara nije preporučljivo kod rukovanja elementima jer uzrokuju oštećenja. Paketi pohranjeni na visini uvijek moraju biti ispravno vezani za strukture. Ručno rukovanje pojedinim elementom mora se uvijek obavljati podizanjem elementa bez povlačenja na dno (7) Prijevoz mora obaviti najmanje dva operatera na temelju dužine i težine ploče, držeći element čvrsto. (8, 9).

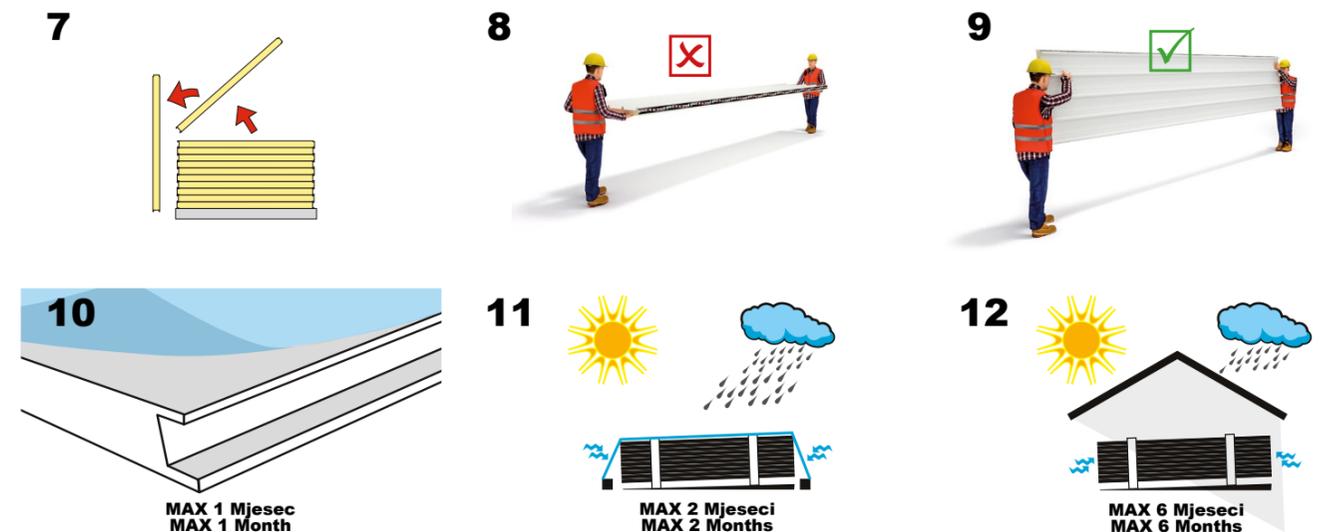
In case of handling and lifting by means of fork lifts, it is recommended to use a single device for panels up to 6-metre long (1) and two devices for panels of length over 6 metres (2), granted the lifting and handling instructions through crane, slings and balance wheel. It is necessary to always make sure that the forks of the lifts feature blades with safety guards or width such not to damage the contact surface with the panels. The use of a crane and slings with two hooking points is recommended to lift and handle panels of length up to 6 metres. (3) For greater lengths, the use of crane with balance wheel and slings with three hooking points are recommended (4). However, the customer is responsible to verify, prior to unloading and according to the type of products and pack weight, that the positioning of the spacers and slings is suitable not to create crushing phenomena or damages. In this case, it is recommended to increase the number of supports and slings in order to obtain a proper lifting and handling system. Nonetheless, the lower spacers must be of sufficient length to prevent the pack weight to cause permanent deformations to the products. Sling using the balance wheel and suitable nylon slings of width over 100 mm, in order to distribute the load on the sling to avoid deformations. Suitable spacers located below and above the pack must be used, consisting of sturdy flat elements in wood or plastic materials that prevent the direct contact of the slings with the pack. These spacers must comply with minimum dimensions. The length must be greater than at least 5 cm per side, in relation to the pack width. The width must be in total, at least 30 mm greater compared to the band width with a groove to retain the slings corresponding to their size increased by at least by 10 mm; attention must be paid so that the slings and supports do not move during lifting and handling operations and manoeuvres are performed with caution and gradually. Deposit of the packs on the roof structure shall take place only on flat surfaces suitable to support them in terms of resistance, laying conditions and safety aspects, also in relation to the works being executed. It is recommended to always request beforehand, to the Works Manager, the authorisation to deposit the materials and check the suitability of the selected place. Packs deposited at a height must always be properly bound to the structures. Position the pack on a flat and rigid surface, interposing polystyrene elements or wood planks of 50 mm minimum thickness and 200 mm minimum width, at a maximum distance of 1000 mm. Storage must be on a slight slope to favour the run-off of potential condensate and avoid water stagnation. (5) Elements must be handled using suitable PPE (gloves, safety shoes, overalls, etc.) in compliance with applicable laws. When picking up the panel, make sure not to use the parts most sensitive to deformations as hooking points and grab the panel only by fully embracing the thickness. (6) Pick-up equipment and work gloves must be clean and such not to cause damages to the products. The use of fork lifts is not recommended to handle elements, as they cause damages. Packs deposited at a height must always be properly bound to the structures. The manual handling of the single element must always take place by lifting the element without dragging it on the bottom one and rotating it on the side of the pack. (7) Transport must be executed by at least two operators based on the length and weight of the panels, holding the element firm. (8, 9).



Skladištenje Storage

Najbolji uslovi skladištenja se postižu u zaštićenim prostorijama, lagano prozračenim, bez vlage i prašine. U svakom slučaju, mora postojati stabilna potpora kako bi se spriječila stagnacija vode. Paketi se ne smiju postavljati u područjima blizu radova (npr. metal rezanje, brušenje, bojanje, zavarivanje itd.), niti u podržcima gdje prolaze ili se parkiraju uređaji koji rade, mogu uzrokovati oštećenja (sudari, prskanja, ispušni plinovi, itd.). Prema težini i vrsti isporučenog materijala (ocjenjuje ga kupac), maksimalno tri paketa mogu se složiti s ukupnom visinom od oko 2,6 metara. U tom slučaju, nosači se moraju odgovarajuće povećati. (5) U slučaju da su materijali pokriveni zaštitnom folijom, ona se mora potpuno ukloniti tokom faze sklapanja i, u svakom slučaju u roku od trideset (30) dana od datuma proizvodnje materijala, pod uslovom da su paketi pohranjeni u tamnom, pokrivenom, prozračenom prostoru zaštićenom od loših vremenskih uslova. (10) Period skladištenja na otvorenom ne smije biti duži od dvije (2) mjeseci. (11) U svakom slučaju, materijali moraju uvijek biti zaštićeni od sunčevih zraka kako bi se izbjegle promjene. U slučaju korišćenja zaštitnih cerada, potrebno je osigurati nepropusnost i prikladno provjetravanje kako bi se izbjegla stagnacija kondenzata i nakupljanje vode. Skladištenje ne smije biti duže od šest (6) mjeseci u zaštićenom, suhom i hladnom stanju i ventilisanom mjestu (12)

The best storage conditions are obtained in sheltered rooms, slightly ventilated, with no humidity and dust. In any case, a suitable stable support must be arranged to prevent water stagnation. Packs must not be positioned in areas near the works (e.g.: metal cutting, sanding, painting, welding, etc.), neither in areas where the transit or parking of operating devices may cause damages (collisions, splashes, exhaust gases, etc.). According to the weight and type of supplied material (to be evaluated by the customer), maximum three packs can be stacked with an overall height of about 2.6 metres. In this case, the supports must be suitably increased. (5) In case the materials are covered by protective film, this must be completely removed during the assembly phase and, anyhow, within thirty (30) days from the production date of the materials, provided the packs are stored in a shaded, covered, ventilated area protected by bad weather. (10) The storage period outdoor must never exceed two (2) months. (11) In any case, the materials must always be protected from sun rays to avoid alterations. In case of protection through cover, ensure impermeability and suitable ventilation to avoid condensate stagnation and water accumulations. Storage must never exceed six (6) months in a sheltered, dry and ventilated environment. (12).



Enterprise certifiée :
UNI EN ISO 9001:2015
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ENVIRONMENTAL PRODUCT DECLARATION



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