

iCurvi[®]

VARIABLE RADIUS CURVED PANELS



medacciai

Above us... the sky



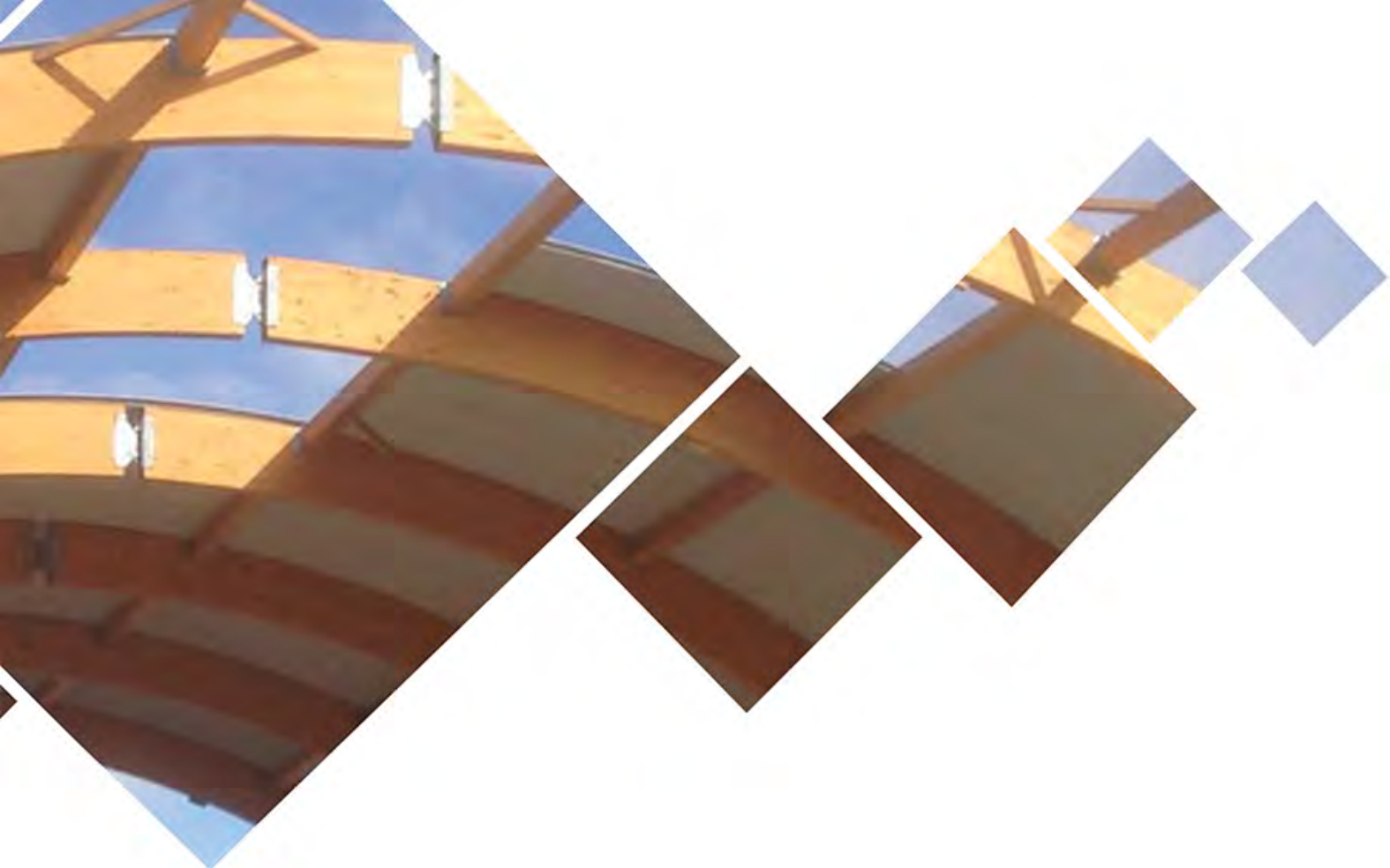
PANEL C

the King of Curved Panels



Quality of the materials according to standards:
Corrugated sheets EN 10346 - EN 10143 - EN 10169-93
EN 14782 - 2006
Rock wool insulation UNI EN 13162 - EC Reg. 790/2009
D.E. 97/69 / EC
Insulation in EPS EN 13163
Adhesives 2002/95 / FC 2003/11 / EC





VARIABLE RADIUS CURVED PANELS

We have created a panel with unique features and superior technology, thanks to our exclusive patent. Its extreme versatility makes it usable in industrial, commercial, zootechnical, residential, sports and social field and in large structures.

Our Staff

our strengths

6-7 patented double
coupling system

8-9 savings in transport
convenient installation

10-11 Waterproofing,
thermal and acoustic
insulation
increased load-bearing
reaction to fire
absence of imperfections

12-13 record length
versatility

special sizes

14-15 special sizes
skylights

fields of application

16-17 laminated wood
structure

18-19 Asbestos remediation

20-23 Commercial
great works
industrial
sports
zootechnical

technical data

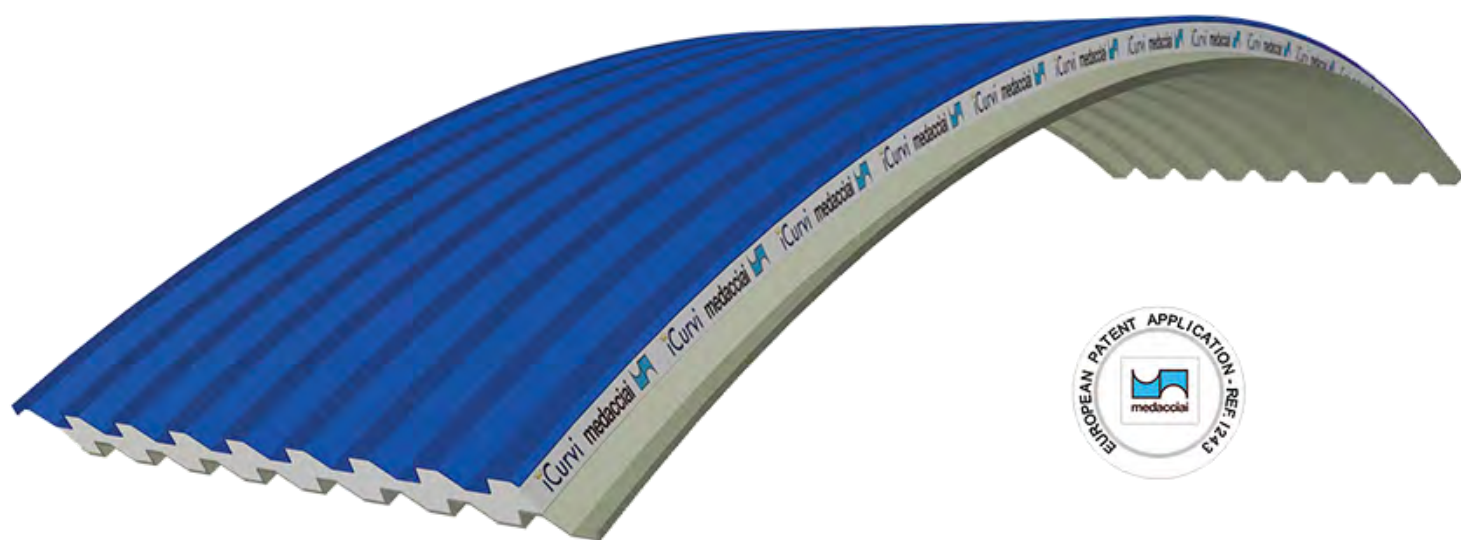
24-33 technical sheets
materials

34-35 planning
assistance
instructions



iCurvi®

VARIABLE RADIUS CURVED PANELS



above us... the sky



The **PANEL** line, including curved panels called "Panel C" and straight panels called "Panel R", is the result of many years of experience of professionals working for Medacciai, with the aim of solving problems that have always been typical of curved and straight insulated panels.

Through the experience on site, the strong attention to customer needs, and constant dialogue with all the experts, we have created a line of Panels able to fill the gaps of the products existing on the market. Panel C and R revolutionize the world of roofing panels! This is particularly true for those roofs with large spans, where it is necessary to overlap several panels, which is the weak point of traditional panels.

*Thanks to our patented system,
overlapping is a strength for us!*

With **Panel C** and **Panel R** you can create endless combinations by simply overlapping, or we can produce curved/straight or curved/counter-curved panels for a single item, always creating different shapes suitable for each structure.

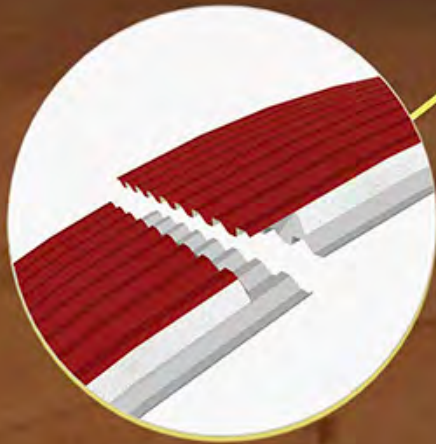
In the next pages, you will find the other features revealing the innovation of the Panel Line. With a wide range of claddings, interiors and exteriors, and insulation, all of high quality, we can satisfy every need.



DOUBLE COUPLING SYSTEM

PANEL C with variable radius, thanks to the use of corrugated sheets on both faces and to the patented double coupling system, is a versatile product, suitable to be used even in difficult climate conditions, 100% waterproof, able to collect and convey in the eaves any possible condensation of joints.

VARIABLE RADIUS CURVED PANELS

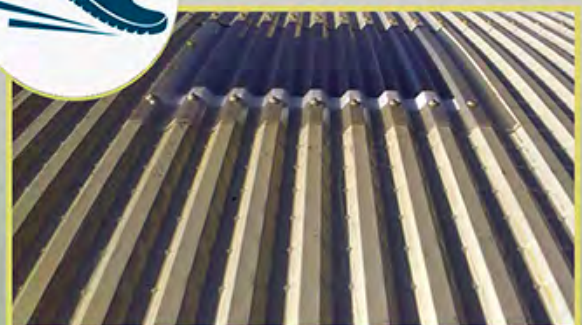


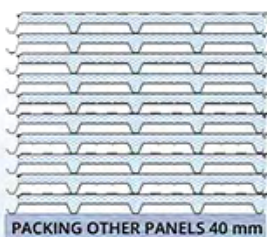
Unparalleled safety and reliability thanks to the patented **double coupling system**

The **double coupling of PANEL C** allows the collection of condensation that can be generated inside the joints of the panels, thanks to the double overlapping of the upper and lower sheets, in the **longitudinal and transverse joints**

Guaranteed walkability

The use of multi-wave sheets (ten waves 27 mm high for each linear meter of width) provides Panel C with an excellent **walkable roofing**, unlike all other curved roofing on the market that use metal sheet with four or five waves. Due to the dense corrugation of Panel C, there are no large flat parts, as it happens for the other profiles, allowing thus a perfect overlapping between the panels or between panels and translucent slabs, avoiding the unaesthetic and bothersome swellings that cause ascents and often passage of water, wind and dust.





Saving in transport



Due to its characteristic shape, "Panel C" allows unparalleled savings in transport, up to 50% compared to other insulated curved roofing solutions on the market.



Saving in installation

Often in cement-asbestos roofing renovations, the structures feature longitudinal small section purlins. In these cases the use of **Panel C** facilitates installation avoiding, thus, the replacement or increase of purlins, unlike the other products on the market. The wide **UNDER LAPPING** of our panel allows to keep the junction of the panels hidden without modifying the existing structures, thus guaranteeing an excellent result from an aesthetic, functional and economic point of view.



COVERINGS IN ETHERNIT OR ASBESTOS CEMENT

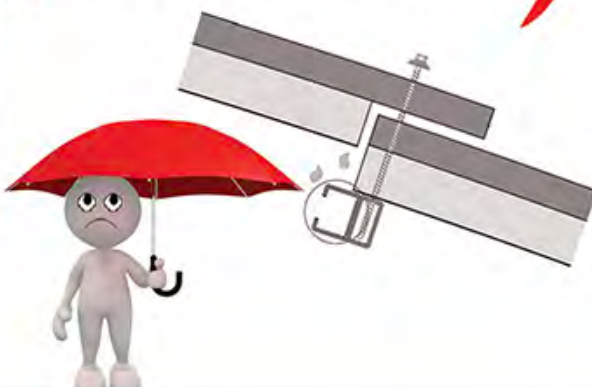


AFTER REMEDIATION WITH PANEL C

PANEL C comparison with traditional panels

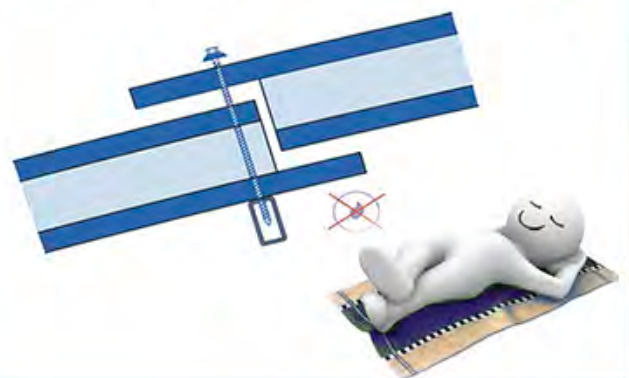
OVERLAPPING OTHER PANELS

- ✗ they cause condensation percolation
- ✗ they need supplementary supports



OVERLAPPING PANEL C

- ✓ anti-condensation **underlapping**
- ✓ installable on any purlin





Impermeability

The impermeability and absence of condensation are essential characteristics for an industrial panel and the I CURVI panels by Medacciai, thanks to the particular shape of the patented coupling system, ensure a perfect sealing against atmospheric agents and the collection of any possible condensation on the longitudinal and transversal joints, making the roofing perfectly waterproof.



Thermal and acoustic insulation

Medacciai has chosen to use high quality insulating materials ensuring excellent performance in terms of thermal and acoustic insulation. Based on the customer's technical-economic needs, it is possible to personalize the characteristics of the insulation.



White EPS



Grafite EPS



Mineral wool



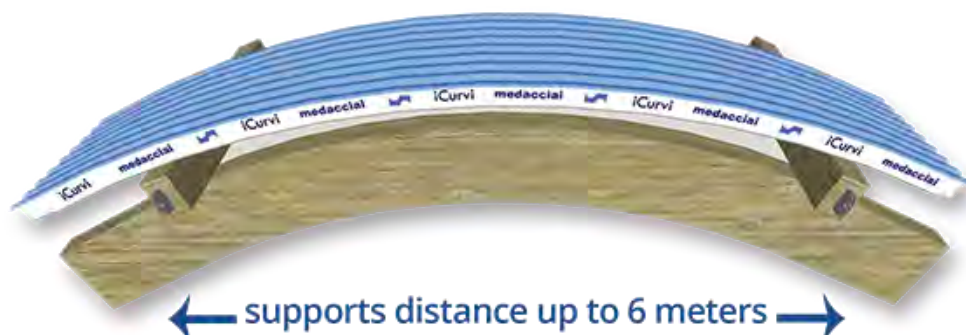
Polyurethane

Coming
SOON



Higher loading-bear

The particular shape of the Panel C section allows our panel to cover lights higher than those of curved panels on the market. Panel C is, in fact, made with a sandwich that presents, both in the extrados and in the intrados, H27 profiled corrugated sheets with nine or ten waves, differently from the other panels that install flat sheets in the intrados. The peculiarity of the Panel C section, thanks to the multi-wave double profile with high effective section, makes it a panel of increased rigidity and loading-bear.





Reaction to fire

In relation to the "Classification of fire reaction and approval for fire prevention purposes", PANEL C has been certified by the Giordano Institute following tests of reaction to fire and exposure to fire from outside, performed according to the Ministry's decree of the Interior of 26th June 1984, amended by the Ministerial Decree of 03 September 2001, and in compliance with the UNI EN 13501-5 2016 standard.

In the Panel C-GG in white EPS and EPS with graphite versions, our panel was assigned the Class 1 (ONE) of reaction to fire, according to the UNI 9177 standard; Class 0-0 (ZERO-ZERO) in the ventilated and non-ventilated rock wool versions, Panel C-GG RW AIR and Panel C-GG RW, according to the DM 03/09/2001. All versions have also obtained the BROOF classification (t2) in rela-

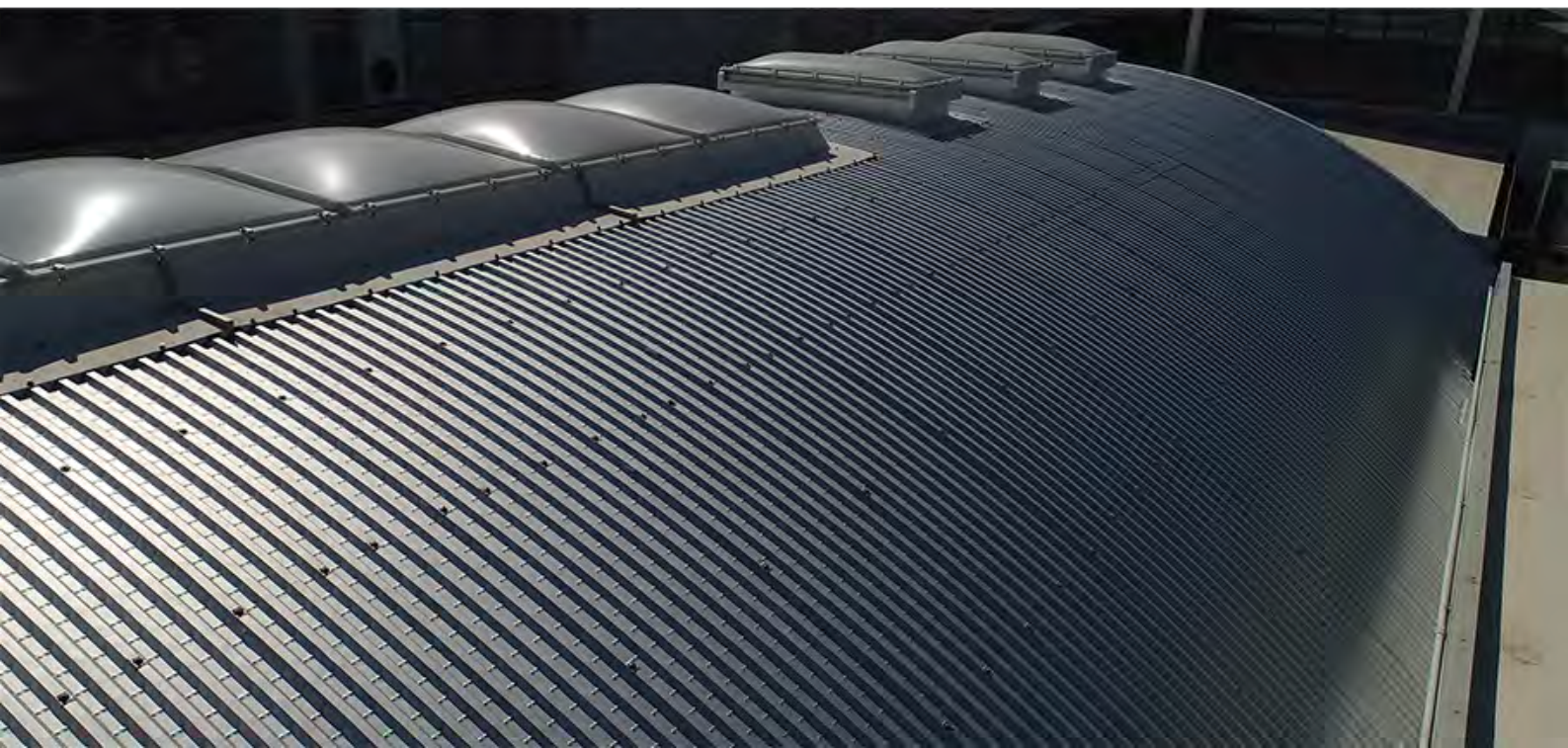
the European standard UNI EN 13501-5 2016.



Total absence of imperfections

Internal and external continuity of the roofing

We assure the continuity of the covering both in the extrados and in the intrados, guaranteeing an aesthetically uniform looking thanks to the particular features of the patented joint.

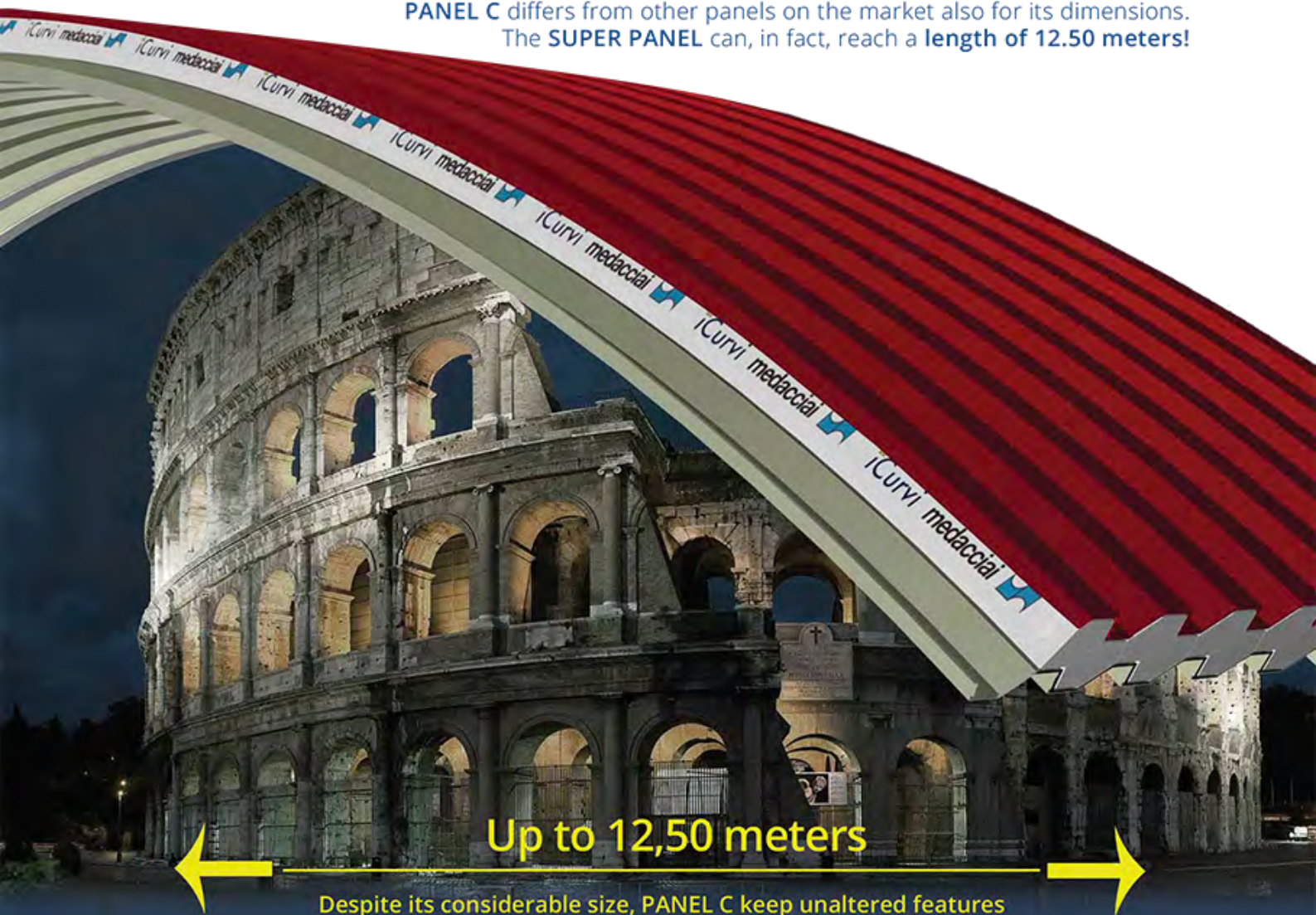




our strenghts

Record length

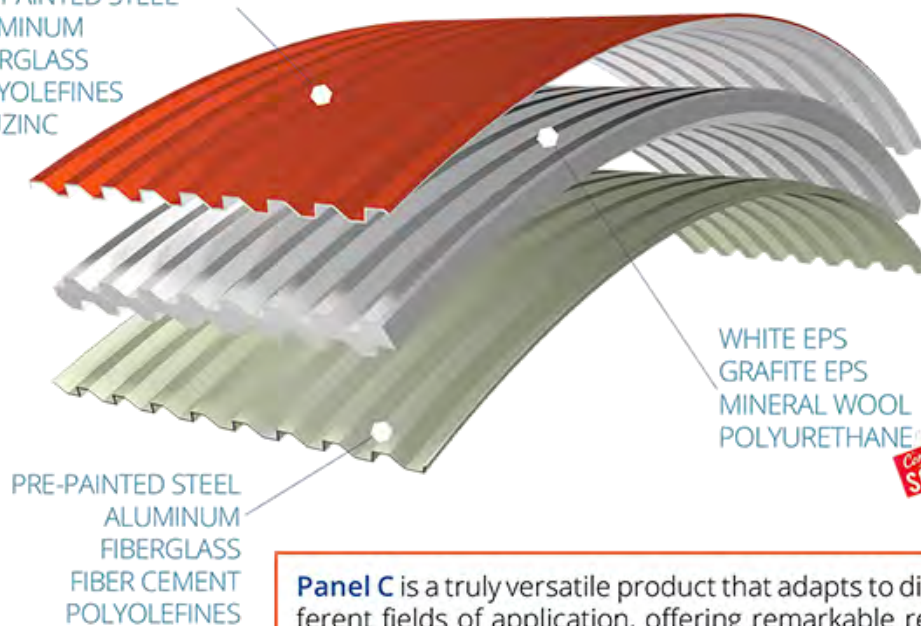
PANEL C differs from other panels on the market also for its dimensions.
The **SUPER PANEL** can, in fact, reach a **length of 12.50 meters!**



Versatility

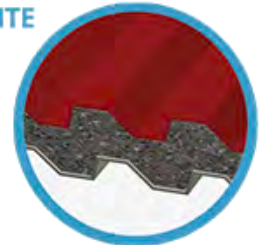
Panel C consists of two corrugated sheets and an insulating layer. The corrugated sheets can be in Pre-painted Steel, Aluzinc, Aluminum or Fiberglass. Furthermore, it is possible to request a covering in corrugated fiberglass, flat or corrugated Polyolefin, or inner layer with flat Fibrocement.

PRE-PAINTED STEEL
ALUMINUM
FIBERGLASS
POLYOLEFINES
ALUZINC

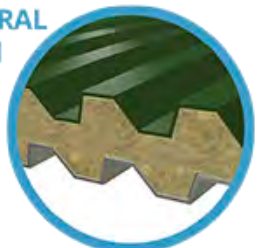


Panel C is a truly versatile product that adapts to different fields of application, offering remarkable results in terms of functionality and aesthetics. The insulating layer is made of **sintered expanded polystyrene, in graphite or mineral wool. Polyurethane** "Coming soon".

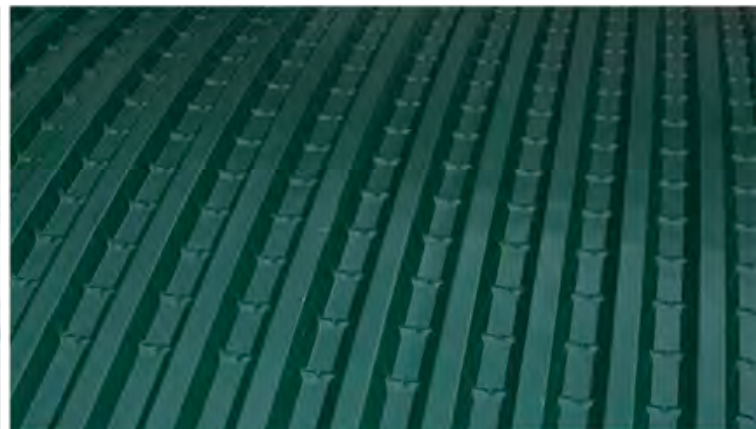
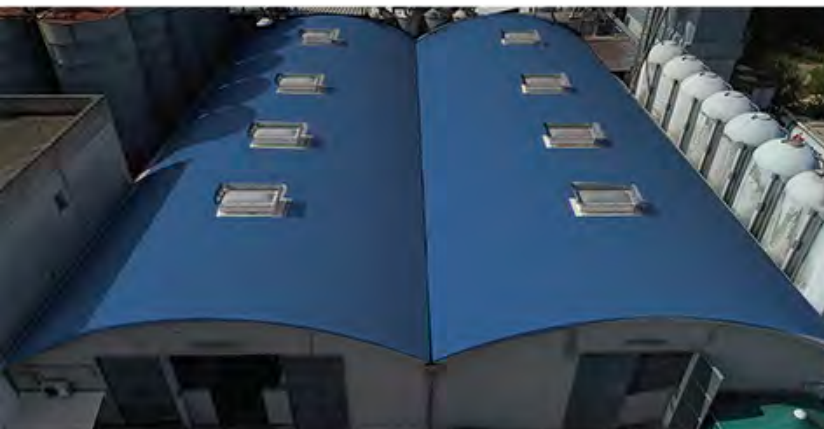
GRAFITE
EPS



MINERAL
WOOL



WHITE
EPS

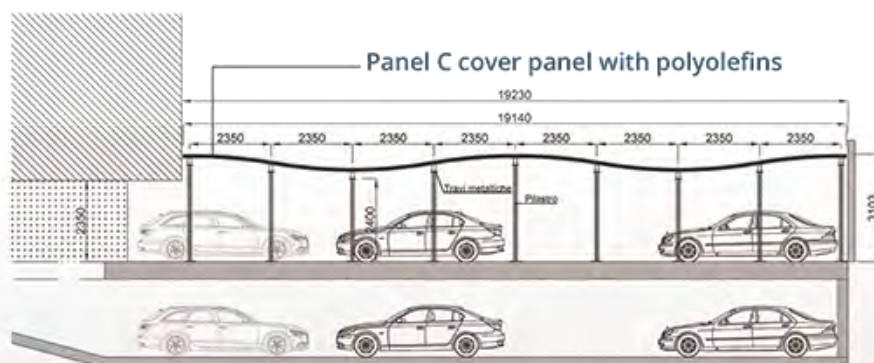


Special sizes



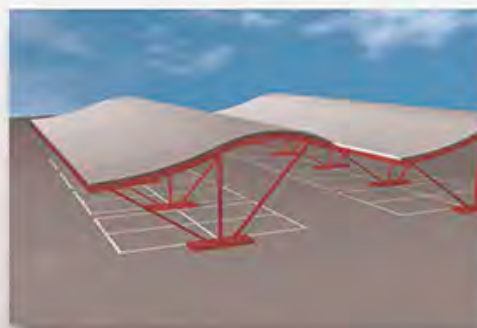
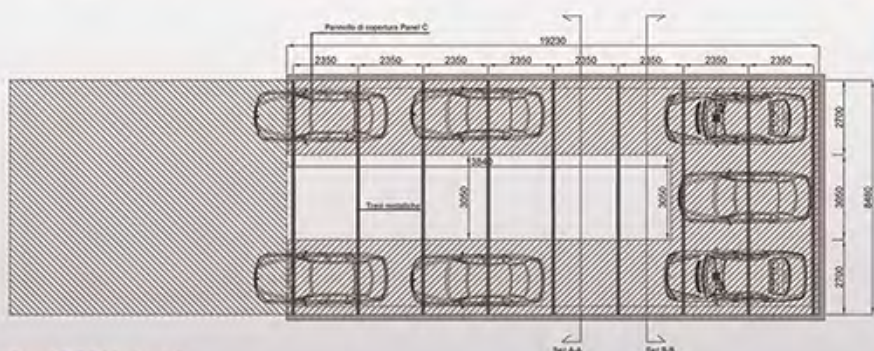
Panels in special sizes

We can offer, in addition to curved and counter-curved panels, even straight panels and mixed straight/curved panels, which perfectly match the shape of the existing structure, or curved panels with cusps to connect those straight or curved layers that join the ridge with a narrower radius.

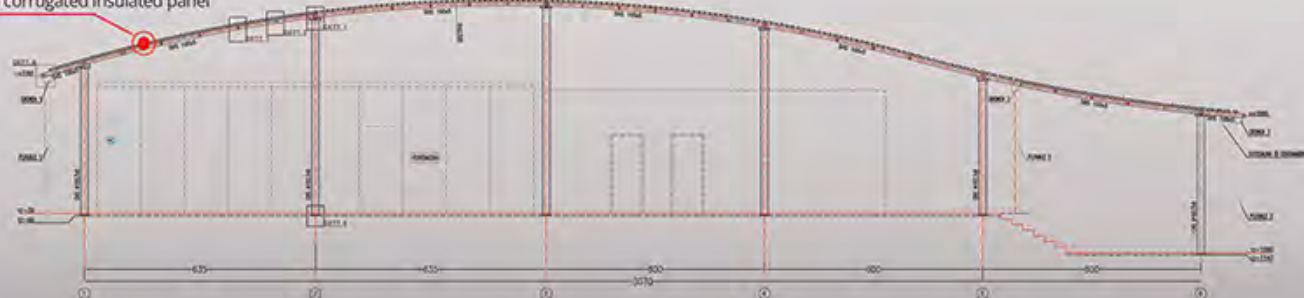


Construction details: curved and counter-curved

Panel C is the only roofing panel in the world that allows mounting in curvature and counter-curvature, managing to cover particular structures and leaving the widest creativity to design.



Panel C-GG Medacciai curved corrugated insulated panel

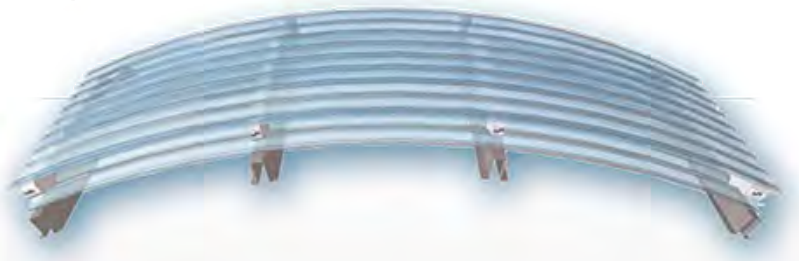


Skylights

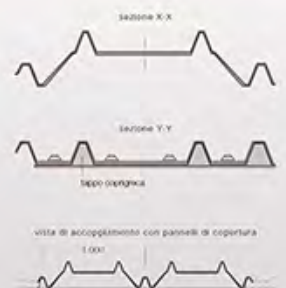
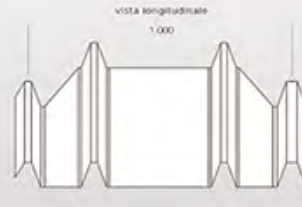
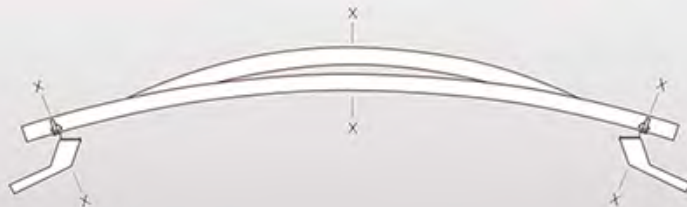
To the straight and curved roofing of the Panel line, it is possible to add different types of skylights: **Thermoformed**, suitable for large lights, **Domes** or **NSCHEVs**, if ventilation or smoke exhaust is required, **Double corrugated sheets** to guarantee the necessary lighting levels, keeping the continuity of the covering mantle and the right thermal insulation. As previously described, we would like to underline the uniqueness and perfect overlapping of Panel C and R with all types of skylights. Thanks to the use of a multi-waved profile, only the Panel line guarantees excellent sealing of the overlaps.

The picture below leaves no room for doubt.

DOUBLE POLYCARBONATE CORRUGATED SHEET



THERMOFORMED



SHEV smoke and heat exhaust ventilation system



Uprand with fixed or openable dome



Fixing accessories





fields of application

Laminated wooden structures



VARIABLE RADIUS CURVED PANELS



The particular shape of such structures often requires the simultaneous use of: **curved panels**, **mixed panels (straight-curved)**, **curved and counter-curved panels** and **straight panels**; the supporting purlins also have free lights that often exceed 4 meters. These requirements are specific traits of the "iCurvi" panel line of Medacciai and make them the only products on the market able to meet this type of needs.



Remediation of cement- asbestos roofing

Thanks to the possibility of adapting to any pre-existing structure, **PANEL C** allows the rebuilding of roofing following the **removal of the asbestos**. It is common to find metal structures covered with cement asbestos with small purlins, while our panel can be installed without any additional structure.



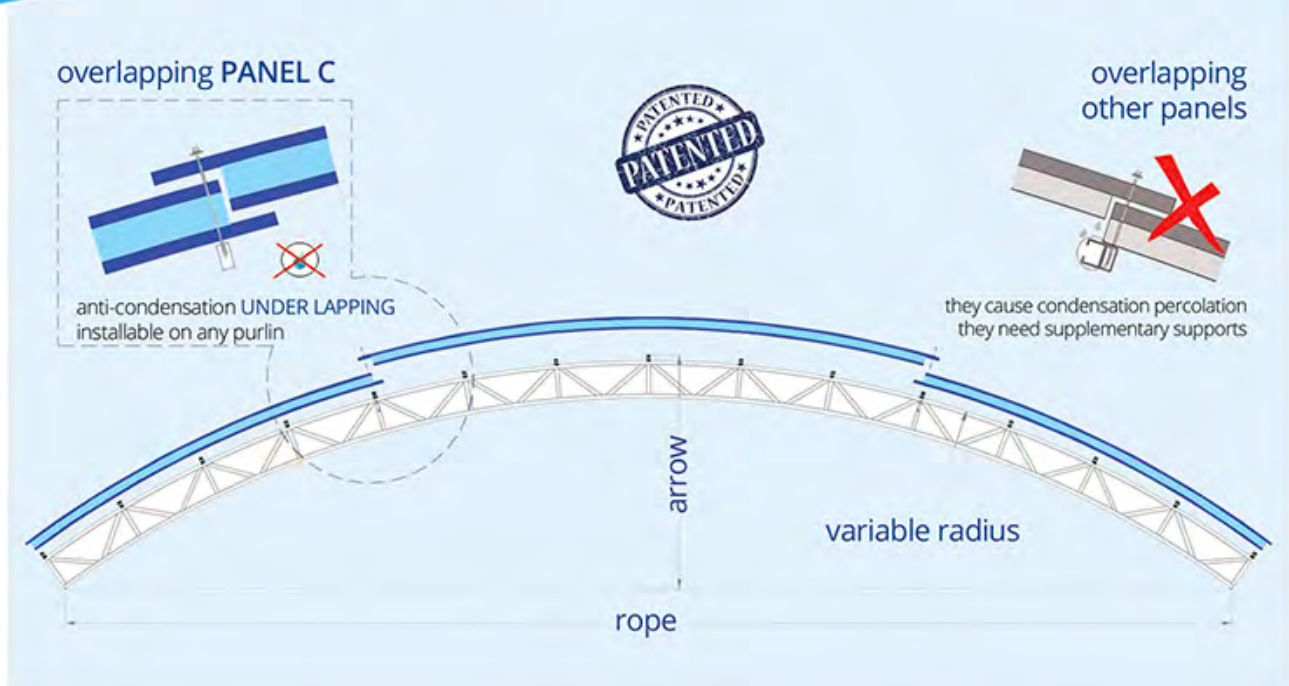
Eternit or cement-asbestos roofing

In the case of existing structures and in the absence of reliable executive graphic drawings, a precise survey of the main dimensions of the supporting structure needing roofing or cladding is required. On request, the Technical Office of Medacciai is available to assist installers and planners in the survey phase on the construction site or to provide forms indicating the main measurements to be taken on site.



After remediation with panel C

VARIABLE RADIUS CURVED PANELS

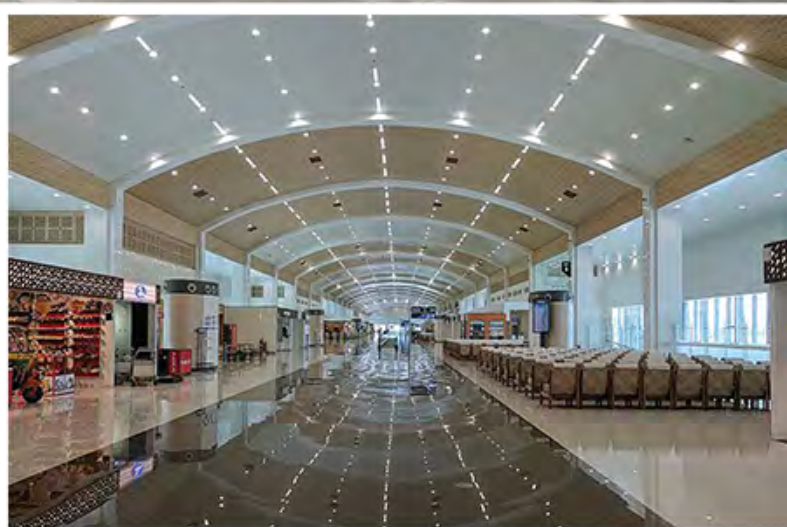


The correct survey of the existing structure is the necessary condition to obtain the radius of curvature of the structures to be covered and the most suitable lengths of the panels (with relative overlaps).





COMMERCIAL



Our panels meet the needs of building **architectures with extended surfaces**, requiring maximum reliability and robustness



Repertoire images

GREAT WORKS





INDUSTRIAL





SPORT



ZOOTECHNICAL





PANEL C TPO

The panel for extreme climate conditions



UNIQUE AND INNOVATIVE

Where others do not dare



No more corrosion caused by salt spray and atmospheric agents

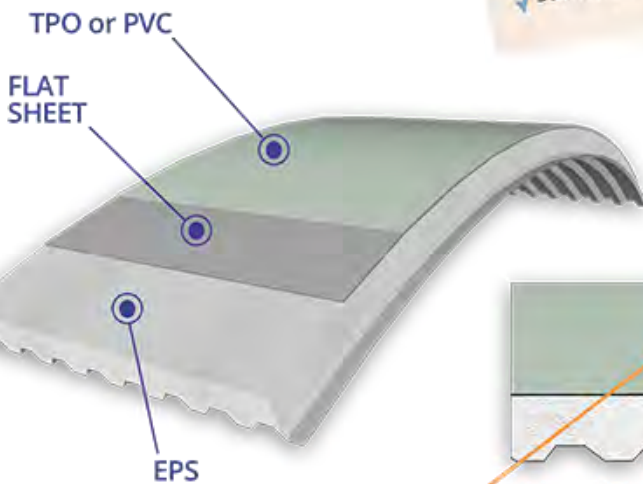


PANEL C TPO

Our panels resist over time even in extreme climate conditions thanks to the skillful combination of materials that make them unique



PANEL C-GP TPO CURVED PANEL WITH VARIABLE RADIUS



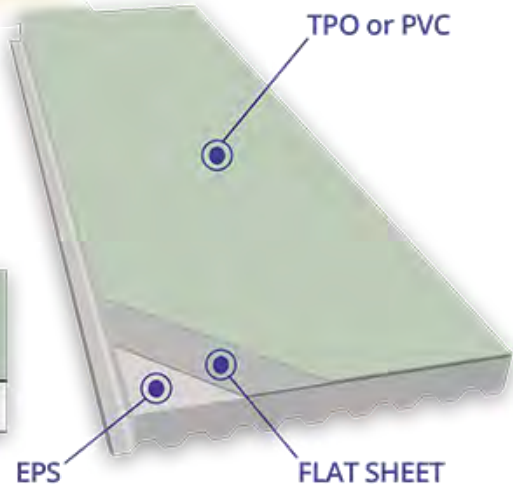
DIMENSIONAL FEATURES

- ✓ Wave height mm 27,5
- ✓ Useful pitch mm 905 +/-5mm
- ✓ Wave Interaxle distance 113 mm
- ✓ Quality of the materials according to standards: EN 10346 - EN 10143 - EN 10169-93
- ✓ Standard length up to 8,3 mt
- ✓ Standard length upon request



Particular fixing with galvanized plate and sealing band in TPO

PANEL R-GP TPO STRAIGHT PANEL



Roofing **straight or curved metal panel with variable radius**, composed by an outer galvanized flat sheet, pre-coupled with a **synthetic membrane in TPO Polyolefin or PVC**, an inner corrugated galvanized and pre-painted steel sheet, having a thickness of 0.4 to 0.8 mm (according to request and availability), and by an insulating material interposed between the sheets in expanded polystyrene **EPS White or Graphite**, having thickness from 40 to 200mm.

The use of a flat or corrugated outer layer, in TPO Polyolefin or PVC with selva or with a separate band to weld, allows the panel to be used in situations where the slope or other technical-climatic conditions do not allow the use of a traditional panel. Also available with intrados in metal sheet pre-coupled with synthetic membrane in TPO Polyolefin or PVC.

POLYOLEFIN PANEL

S _i insulating	S _t panel	EPS_B 150 - UNI EN 6946		EPS_G 150 - UNI EN 6946		Panel weight - Kg/mq			
		K=(W/m²K)	R=(m²K/W)	K=(W/m²K)	R=(m²K/W)	0,4/0,4+TPO	0,4/0,5+TPO	0,4/0,6+TPO	0,4/0,8+TPO
40 mm	70 mm	0,56	1,79	0,51	1,96	10,39	11,41	12,43	14,47
50 mm	80 mm	0,48	2,08	0,43	2,33	10,63	11,65	12,67	14,71
60 mm	90 mm	0,42	2,38	0,38	2,63	10,88	11,89	12,91	14,95
80 mm	110 mm	0,34	2,94	0,30	3,33	11,36	12,38	13,40	15,44
100 mm	130 mm	0,28	3,57	0,25	4,00	11,85	12,87	13,89	15,92
120 mm	150 mm	0,24	4,17	0,22	4,55	12,33	13,35	14,37	16,41
150 mm	180 mm	0,20	5,00	0,18	5,56	13,06	14,08	15,10	17,14
180 mm	210 mm	0,17	5,88	0,15	6,67	13,79	14,81	15,83	17,87
200 mm	230 mm	0,16	6,25	0,14	7,14	14,28	15,30	16,32	18,36

PANEL C- GTPO CURVED PANEL WITH VARIABLE RADIUS



TPO or PVC

EPS

DIMENSIONAL FEATURES

- ✓ Wave height mm 27,5
- ✓ Useful pitch mm 905 +/-5mm
- ✓ Wave Interaxle distance 113 mm
- ✓ Quality of the materials according to standards: EN 10346 - EN 10143 - EN 10169-93
- ✓ Standard length up to 8,3 mt
- ✓ Standard length upon request

PANEL R-GTPO STRAIGHT PANEL

TPO or PVC

EPS

Particular fixing
in low wave

Roofing straight or **curved metal panel with variable radius**, composed by an **outer synthetic membrane in TPO Polyolefin or PVC**, an inner corrugated galvanized and pre-painted steel sheet, having a thickness of 0.4 to 0.8 mm (according to request and availability), and by an insulating material interposed between the sheets in expanded polystyrene **EPS White or Graphite**, having thickness from 40 to 200mm.

The use of an outer flat layer in TPO Polyolefin or PVC with selva or with a separate band to weld, allows the panel to be used in situations where the slope or other technical-climatic conditions do not allow the use of a traditional panels. Also available with TPO or PVC inside.

S _i insulating	S _t panel	EPS_B 150 - UNI EN 6946		EPS_G 150 - UNI EN 6946		Panel weight - Kg/mq			
		K=(W/m²K)	R=(m²K/W)	K=(W/m²K)	R=(m²K/W)	0,4 + TPO	0,5 + TPO	0,6 + TPO	0,8 + TPO
40 mm	70 mm	0,56	1,79	0,51	1,96	6,71	7,73	8,75	10,79
50 mm	80 mm	0,48	2,08	0,43	2,33	6,95	7,97	8,99	11,03
60 mm	90 mm	0,42	2,38	0,38	2,63	7,20	8,22	9,24	11,27
80 mm	110 mm	0,34	2,94	0,30	3,33	7,68	8,70	9,72	11,76
100 mm	130 mm	0,28	3,57	0,25	4,00	8,17	9,19	10,21	12,25
120 mm	150 mm	0,24	4,17	0,22	4,55	8,66	9,68	10,69	12,73
150 mm	180 mm	0,20	5,00	0,18	5,56	9,39	10,40	11,42	13,46
180 mm	210 mm	0,17	5,88	0,15	6,67	10,11	11,13	12,15	14,19
200 mm	230 mm	0,16	6,25	0,14	7,14	10,60	11,62	12,64	14,68

PANEL C - GGTPo

CURVED PANEL WITH
VARIABLE RADIUS

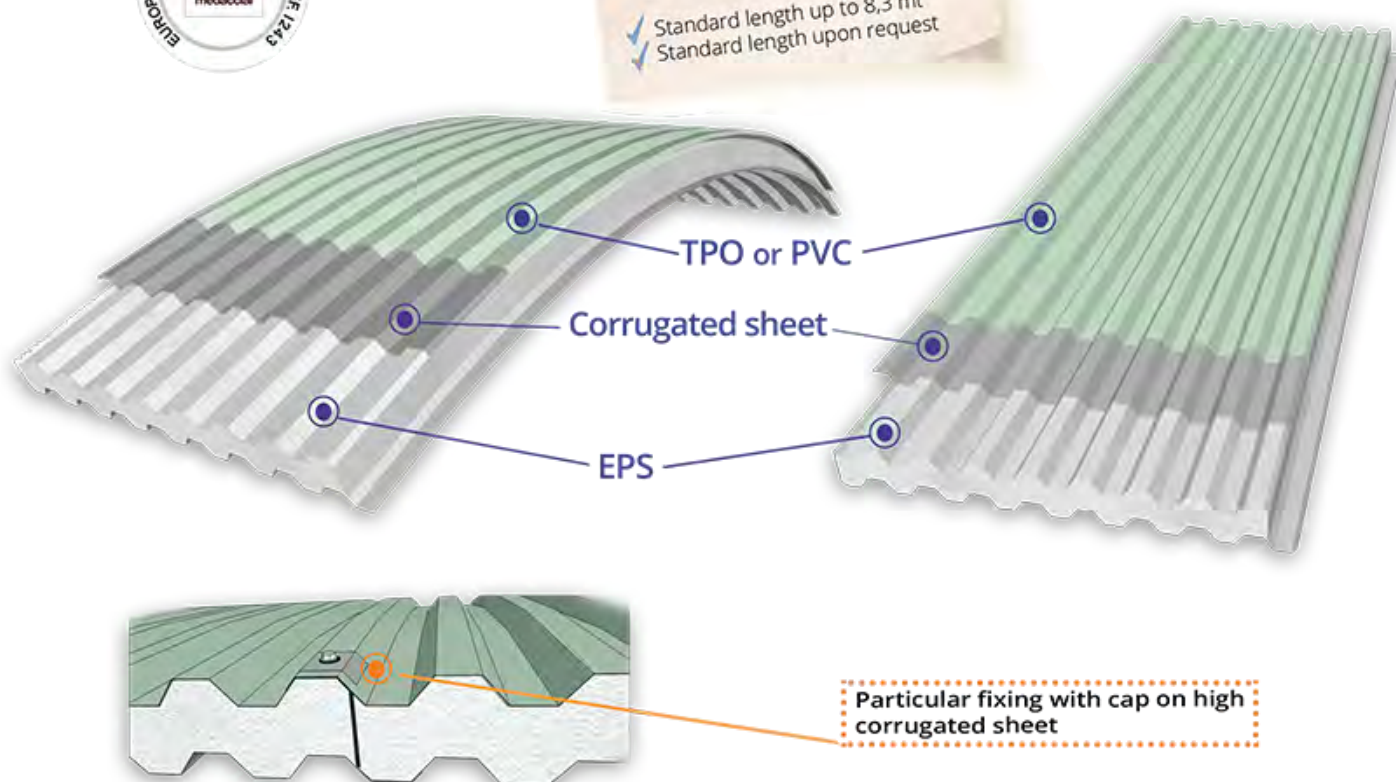


DIMENSIONAL FEATURES

- ✓ Wave height mm 27,5
- ✓ Useful pitch mm 905 +/-5mm
- ✓ Wave Interaxle distance 113 mm
- ✓ Quality of the materials according to standards:
EN 10346 - EN 10143 - EN 10169-93
- ✓ Standard length up to 8,3 mt
- ✓ Standard length upon request

PANEL R - GGTPo

STRAIGHT
PANEL



Roofing straight or **curved metal panel with variable radius**, composed by an outer galvanized corrugated sheet, pre-coupled with a **synthetic membrane in TPO Polyolefin** or PVC, an inner corrugated galvanized and pre-painted steel sheet, having a thickness of 0.4 to 0.8 mm (according to request and availability), and by an insulating material interposed between the sheets in expanded polystyrene **EPS White or Graphite**, having thickness from 40 to 200mm. The use of an outer layer coupled with a membrane in TPO Polyolefin or PVC allows the panel to be used in extreme situations in which the technical-climate conditions prevent the use of a panel with a standard outer sheet. Also available with inner sheet pre-coupled with a synthetic layer in TPO Polyolefin or PVC.

S _i insulating	S _t panel	EPS_B 150 - UNI EN 6946		EPS_G 150 - UNI EN 6946		Panel weight - Kg/mq			
		K=(W/m²K)	R=(m²K/W)	K=(W/m²K)	R=(m²K/W)	0,4 / 0,4	0,5 / 0,4	0,6 / 0,4	0,8 / 0,4
40 mm	70 mm	0,70	1,43	0,63	1,59	9,78	10,80	11,82	13,86
50 mm	80 mm	0,58	1,72	0,52	1,92	10,02	11,04	12,06	14,10
60 mm	90 mm	0,50	2,00	0,44	2,27	10,27	11,29	12,30	14,34
80 mm	110 mm	0,39	2,56	0,34	2,94	10,75	11,77	12,79	14,83
100 mm	130 mm	0,31	3,23	0,28	3,57	11,24	12,26	13,28	15,32
120 mm	150 mm	0,27	3,70	0,24	4,17	11,72	12,74	13,76	15,80
150 mm	180 mm	0,22	4,55	0,19	5,26	12,45	13,47	14,49	16,53
180 mm	210 mm	0,18	5,56	0,16	6,25	13,18	14,20	15,22	17,26
200 mm	230 mm	0,16	6,25	0,15	6,67	13,67	14,69	15,71	17,75

PANEL C-GG

CURVED PANEL WITH VARIABLE RADIUS

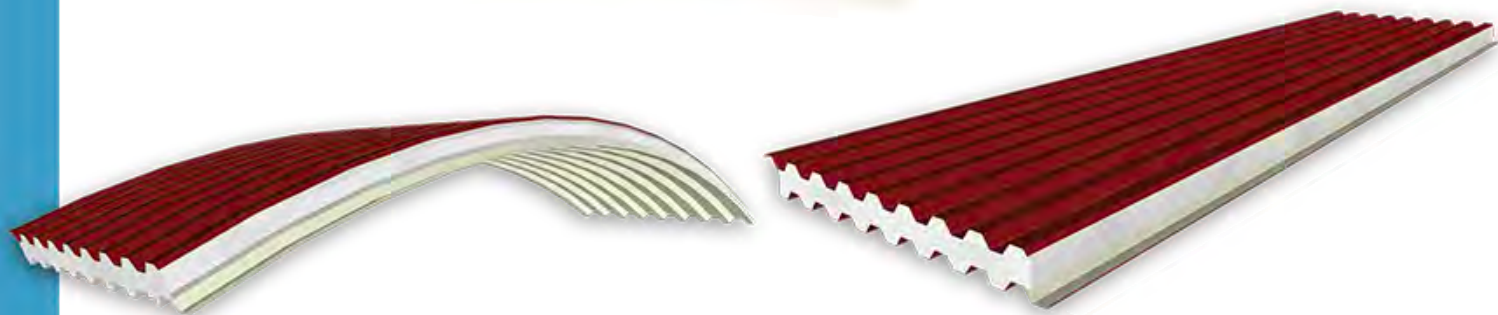


DIMENSIONAL FEATURES

- ✓ Wave height mm 27,5
- ✓ Useful pitch mm 905 +/-5mm
- ✓ Wave Interaxle distance 113 mm
- ✓ Quality of the materials according to standards: EN 10346 - EN 10143 - EN 10169-93
- ✓ Standard length up to 8,3 mt
- ✓ Standard length upon request

PANEL R-GG

CORRUGATED DOUBLE STRAIGHT PANEL



Roofing **curved metal panel with variable radius**, consisting of two H27 profiled corrugated sheets, made of Sendzimir galvanized steel, with a thickness from 0.4 to 0.8 mm (according to request and availability), pre-painted STD or PvdF, with interposed a layer of insulating material obtained with the use of **sintered expanded polystyrene**, having a thickness from 40 to 200 mm upon request.

Straight metal panel, composed by two corrugated H27 profiled sheets, made of Sendzimir galvanized steel, with a thickness from 0.4 to 0.8 mm (according to request and availability), pre-painted STD or PvdF, with interposed an insulating layer obtained with the use of **sintered expanded polystyrene**, with a required thickness from 40 to 200 mm.



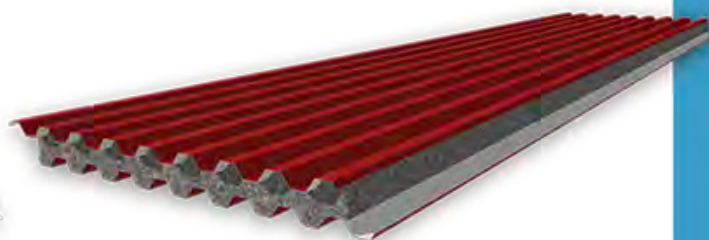
S _i insulating	S _t panel	EPS_B 100 - UNI EN 6946		EPS_B 150 - UNI EN 6946		Panel weight - Kg/mq			
		K=(W/m²K)	R=(m²K/W)	K=(W/m²K)	R=(m²K/W)	0,4 / 0,4	0,5 / 0,4	0,6 / 0,4	0,8 / 0,4
40 mm	70 mm	0,77	1,30	0,70	1,43	9,12	10,14	11,16	13,19
50 mm	80 mm	0,64	1,56	0,58	1,72	9,36	10,38	11,40	13,44
60 mm	90 mm	0,55	1,82	0,50	2,00	9,60	10,62	11,64	13,68
80 mm	110 mm	0,43	2,33	0,39	2,56	10,09	11,11	12,13	14,17
100 mm	130 mm	0,35	2,86	0,31	3,23	10,58	11,59	12,61	14,65
120 mm	150 mm	0,29	3,45	0,27	3,70	11,06	12,08	13,10	15,14
150 mm	180 mm	0,24	4,17	0,22	4,55	11,79	12,81	13,83	15,87
180 mm	210 mm	0,20	5,00	0,18	5,56	12,52	13,54	14,56	16,60
200 mm	230 mm	0,18	5,56	0,16	6,25	13,01	14,03	15,05	17,08

PANEL C-GG^{GRAPHITE} CURVED PANEL WITH VARIABLE RADIUS

DIMENSIONAL FEATURES

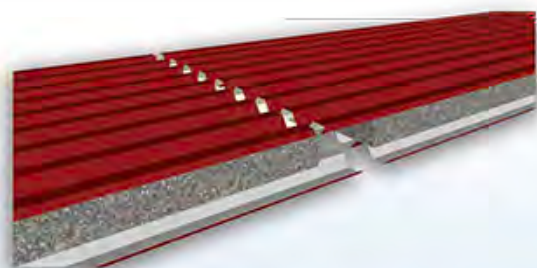
- ✓ Wave height mm 27,5
- ✓ Useful pitch mm 905 +/-5mm
- ✓ Wave Interaxle distance 113 mm
- ✓ Quality of the materials according to standards: EN 10346 - EN 10143 - EN 10169-93
- ✓ Standard length up to 8,3 mt
- ✓ Standard length upon request

PANEL R-GG^{GRAPHITE} CORRUGATED DOUBLE STRAIGHT PANEL



Roofing **curved metal panel with variable radius**, consisting of two H27 profiled corrugated sheets, made of Sendzimir galvanized steel, with a thickness from 0.4 to 0.8 mm (according to request and availability), pre-painted SDT or PvdF, with interposed a layer of insulating material obtained with the use of **graphite sintered expanded polystyrene**, with a required thickness from 40 to 200 mm.

Straight metal panel, consisting of two corrugated sheets H27 profile, made of Sendzimir galvanized steel, with a thickness from 0.4 to 0.8 mm (according to request and availability), pre-painted SD or PvdF, with interposed a layer of insulating material obtained with the use of **graphite sintered expanded polystyrene**, with a required thickness from 40 to 200 mm.



S _i insulating	S _t panel	EPS_G 100 - UNI EN 6946		EPS_G 150 - UNI EN 6946		Panel weight - Kg/mq			
		K=(W/m ² K)	R=(m ² K/W)	K=(W/m ² K)	R=(m ² K/W)	0,4 / 0,4	0,5 / 0,4	0,6 / 0,4	0,8 / 0,4
40 mm	70 mm	0,65	1,54	0,63	1,59	9,12	10,14	11,16	13,19
50 mm	80 mm	0,54	1,85	0,52	1,92	9,36	10,38	11,40	13,44
60 mm	90 mm	0,46	2,17	0,44	2,27	9,60	10,62	11,64	13,68
80 mm	110 mm	0,35	2,86	0,34	2,94	10,09	11,11	12,13	14,17
100 mm	130 mm	0,29	3,45	0,28	3,57	10,58	11,59	12,61	14,65
120 mm	150 mm	0,24	4,17	0,24	4,17	11,06	12,08	13,10	15,14
150 mm	180 mm	0,20	5,00	0,19	5,26	11,79	12,81	13,83	15,87
180 mm	210 mm	0,17	5,88	0,16	6,25	12,52	13,54	14,56	16,60
200 mm	230 mm	0,15	6,67	0,15	6,67	13,01	14,03	15,05	17,08

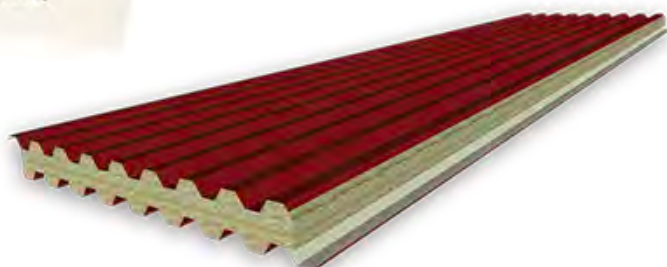
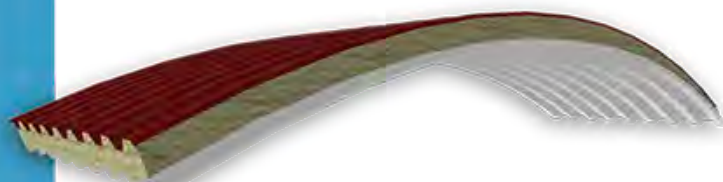
PANEL C-GG RW CURVED PANEL WITH VARIABLE RADIUS



DIMENSIONAL FEATURES

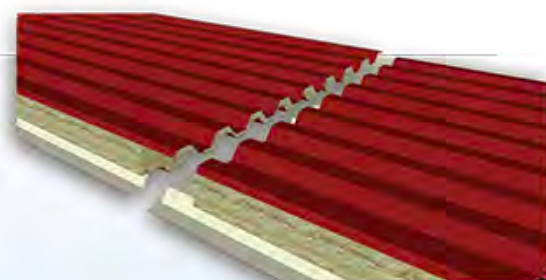
- ✓ Wave height mm 27,5
- ✓ Useful pitch mm 905 +/-5mm
- ✓ Wave Interaxle distance 113 mm
- ✓ Quality of the materials according to standards: EN 10346 - EN 10143 - EN 10169-93
- ✓ Standard length up to 8,3 mt
- ✓ Standard length upon request

PANEL R-GG RW CORRUGATED DOUBLE STRAIGHT PANEL



Roofing **curved metal panel for roofing, with variable radius**, consisting of two H27 profiled corrugated sheets, made of Sendzimir galvanized steel, with a thickness from 0.5 to 0.8 mm (according to request or availability), pre-painted Std or Pvd, with interposed one insulating layer made of **high-density mineral wool panels**, water-repellent, treated with thermosetting resin based on organic vegetable components, with fire reaction classification 0-0, with thickness from 60 to 200 mm upon request.

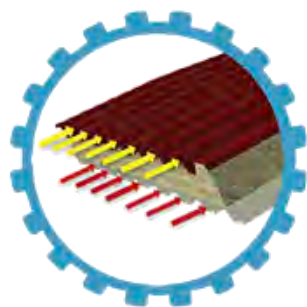
Roofing **curved metal panel for roofing** consisting of two H27 profiled corrugated sheets, made of Sendzimir galvanized steel, with a thickness from 0.5 to 0.8 mm (according to request or availability), pre-painted Std or Pvd, with interposed one insulating layer made of **high-density mineral wool panels**, water-repellent, treated with thermosetting resin based on organic vegetable components, with fire reaction classification 0-0, with thickness from 60 to 200 mm upon request.



S _i insulating	S _t panel	WOOL 100 - UNI EN 6946		Panel weight - Kg/mq			
		K=(W/m²K)	R=(m²K/W)	0,5 / 0,5	0,6 / 0,5	0,6 / 0,6	0,8 / 0,6
60 mm	90 mm	0,58	1,72	16,26	17,28	18,30	20,34
80 mm	110 mm	0,44	2,27	18,24	19,26	20,28	22,32
100 mm	130 mm	0,36	2,78	20,22	21,24	22,26	24,30
120 mm	150 mm	0,30	3,33	22,20	23,22	24,24	26,28
150 mm	180 mm	0,25	4,00	25,17	26,19	27,21	29,25
180 mm	210 mm	0,21	4,76	28,14	29,16	30,18	32,00
200 mm	230 mm	0,19	5,26	30,12	31,14	32,16	34,20

PANEL C RW-GG AIR

VENTILATED CURVED PANEL WITH VARIABLE RADIUS

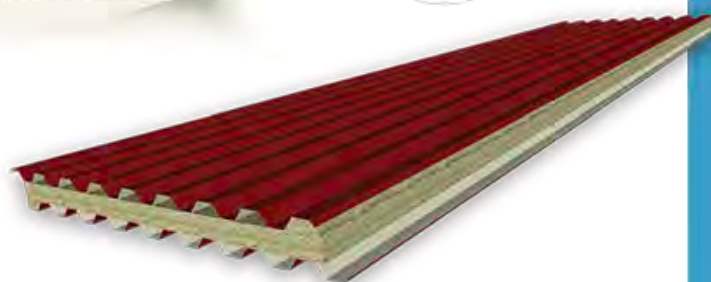


DIMENSIONAL FEATURES

- ✓ Wave height mm 27,5
- ✓ Useful pitch mm 905 +/-5mm
- ✓ Wave Interaxle distance 113 mm
- ✓ Quality of the materials according to standards: EN 10346 - EN 10143 - EN 10169-93
- ✓ Standard length up to 8,3 mt
- ✓ Standard length upon request

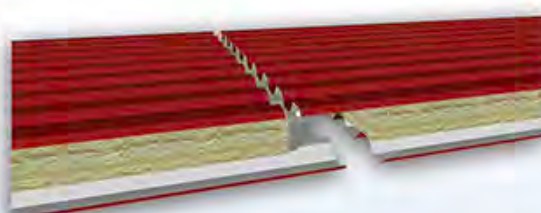
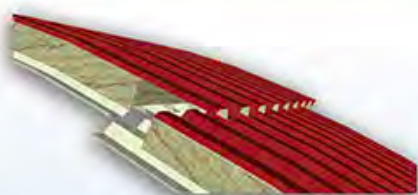
PANEL R RW-GG AIR

VENTILATED CORRUGATED DOUBLE STRAIGHT PANEL



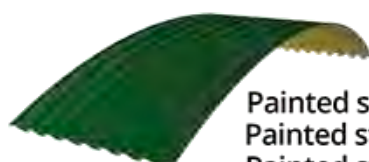
Roofing **ventilated curved metal panel** with variable radius, consisting of two H27 profiled corrugated sheets, made of Sendzimir galvanized steel, with a thickness from 0.5 to 0.8 mm (according to request or availability), pre-painted Std or Pvd, with interposed one insulating layer made of **high-density mineral wool** panels, water-repellent, treated with thermosetting resin based on organic vegetable components, with fire reaction classification 0-0, with thickness from 30 to 200 mm. In the "AIR" version, only the waves at the extremities contain mineral wool; the remaining waves constitute air chambers in semi-ventilation regime.

Roofing **ventilated straight metal panel** with variable radius, consisting of two H27 profiled corrugated sheets, made of Sendzimir galvanized steel, with a thickness from 0.5 to 0.8 mm (according to request or availability), pre-painted Std or Pvd, with interposed one insulating layer made of **high-density mineral wool** panels, water-repellent, treated with thermosetting resin based on organic vegetable components, with fire reaction classification 0-0, with thickness from 30 to 200 mm. In the "AIR" version, only the waves at the extremities contain mineral wool; the remaining waves create air chambers in semi-ventilation regime.

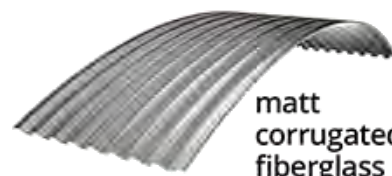


S _i insulating	S _t panel	WOOL 100 - UNI EN 6946		Panel weight - Kg/mq			
		K=(W/m ² K)	R=(m ² K/W)	0,6 / 0,5	0,6 / 0,6	0,8 / 0,5	0,8 / 0,6
50 mm	110 mm	0,48	2,08	16,68	17,69	18,71	19,72
80 mm	140 mm	0,35	2,86	19,68	20,69	21,71	22,72
100 mm	160 mm	0,29	3,45	21,68	22,69	23,71	24,72
120 mm	180 mm	0,26	3,85	23,68	24,69	25,71	26,72
150 mm	210 mm	0,21	4,76	26,68	27,69	28,71	29,72
180 mm	240 mm	0,18	5,56	29,68	30,69	31,71	32,72
200 mm	260 mm	0,17	5,88	31,68	32,69	33,71	34,72

EXTERNAL SUPPORT



Painted steel STD
Painted steel PVDF
Painted steel SHIMOCO



matt
corrugated
fiberglass

INSULATION

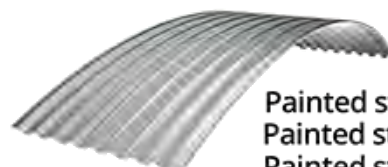


White EPS

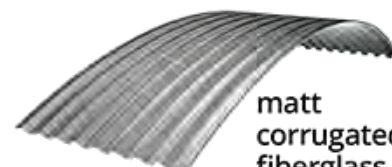


Grafite EPS

INTERNAL SUPPORT



Painted steel STD
Painted steel PVDF
Painted steel SHIMOCO



matt
corrugated
fiberglass

MATERIALS

Insulated curved panel with variable radius.

The MEDACCIAI curved panels, in the standard versions with filled waves and in the AIR version with waves in the semi-ventilation regime, are made up of a sandwich panel that provides:

- **External side** made of corrugated H27 profiled metal sheet, thicknesses from 0,4 to 0,8mm, made of structural steel class S250GD or higher, hot-dip galvanized according to EN 10346, with a wide range of possible finishes such as standard polyester pre-painting (PS) guaranteed up to 10 years, special pre-painting systems with high durability (P_HD) or with increased resistance to UV and chemical agents (PVDF) guaranteed for up to 20 years as well as anticorrosive and anti-UV systems with painting based on SCHIMOCO polyester resins with a guarantee of up to 30 years. It is also possible to use corrugated sheets in carbon steel coated with an aluminum-zinc alloy (ALUZINC) guaranteed up to 25 years against corrosion, aluminum sheets, flat or corrugated sheets pre-glued to a synthetic polyolefin (TPO) membrane and, lastly, fiberglass corrugated sheets in opaque color;

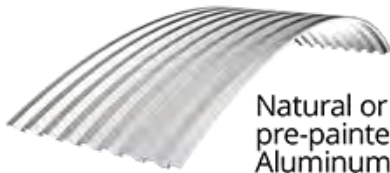
- **internal side** made of metal sheet, with H27 corrugated profile and with the same characteristics of the external sheet but with additional finishes, in addition to the aforementioned pre-painting systems, such as thick PVC-based painting. For environments subject to severe chemical aggression it is possible to provide flat or corrugated sheets pre-glued to a synthetic polyolefin (TPO) membrane or corrugated sheets in opaque fiberglass. Another option is the panel with internal finish in autoclaved fibrocement;

- **Thermal insulation** interposed between the external supports, consisting of sheets in self-extinguishing expanded polystyrene (EPS) in the standard white or graphite-enriched versions, thicknesses from 40 to 200mm, or from panels in high-density mineral wool and oriented fibers, with thicknesses from 30 to 230mm. In the near future, the production process will be implemented with the polyurethane foam insulation variant.

COLORS

PANEL C is available in a wide range of colors: from the standard colors white-gray, white 9010, sienna red, dark brown, to colors upon request in many types of RAL; special finishes can also be obtained with ALUZINC and SHIMOCO sheets, which combine the functional value of high corrosion and UV resistance with a pleasant aesthetic impact given by the textured look of the coating.

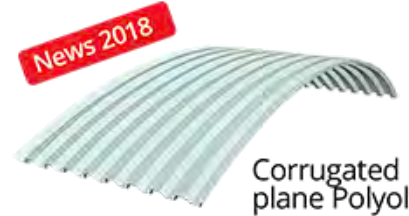
VARIABLE RADIUS CURVED PANELS



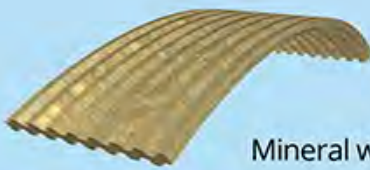
Natural or
pre-painted
Aluminum



Aluzinc



Corrugated
plane Polyolefins



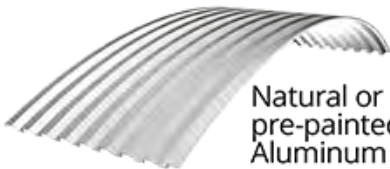
Mineral wool



Mineral wool AIR



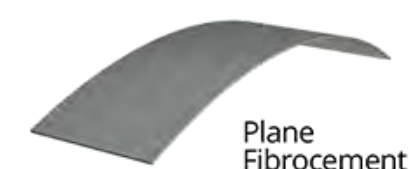
PUR



Natural or
pre-painted
Aluminum



Corrugated
plane Polyolefins



Plane
Fibrocement

TYPE	INSULATION	CHARACTERISTICS	THICKNESS	INSULATING POWER	FIRE CLASS	BROOF
Panel C-GG	EPS white	Class from 80 to 150	40-200 mm	good	CLASS 1	BROOF (t2)
Panel C-GG Graphite	EPS with Graphite	Class from 80 to 150	40-200 mm	excellent	CLASS 1	BROOF (t2)
Panel C-GG RW	Mineral Wool	Density 90/100 kg/mc	60-230 mm	good	CLASS 0	BROOF (t2)
Panel C-GG RW AIR	Mineral Wool	Density 90/100 kg/mc	30-200 mm	good	CLASS 0	BROOF (t2)

DIMENSIONS

Standard panel length up to 8.300mm
Panel length upon request up to 12.500mm
Width from 905 to 1.200 mm
Thickness from 30 to 230 mm

RADIUS OF CURVATURE

Fixed radius: 3,5 and 6 m
Standard variables radius from 6 to 100 m
Variable radius upon request from 2 to 6 m

OVERLAPPING

END-LAPPING from 0 to 100 mm
UNDER-LAPPING from 50 to 100 mm
OVER-LAPPING from 100 to 300 mm



White grey



Aluzinc AZ 185



White 9010



Green 6005



Faux aged copper



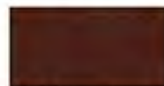
Faux copper



Pre-painted Aluminum



Natural Alluminum



Dark brown



Blue 5010



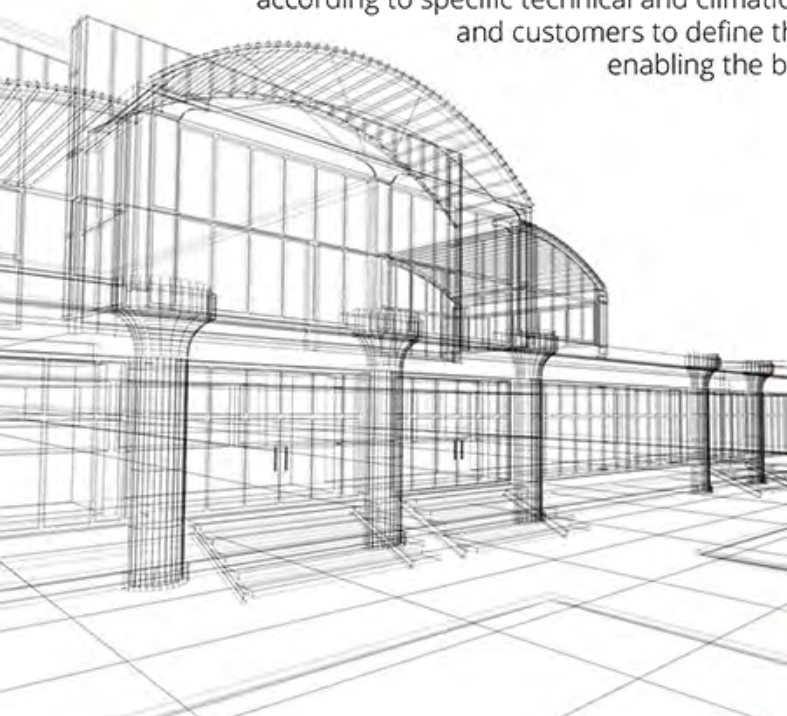
Silver grey 9006



Brick red 3009

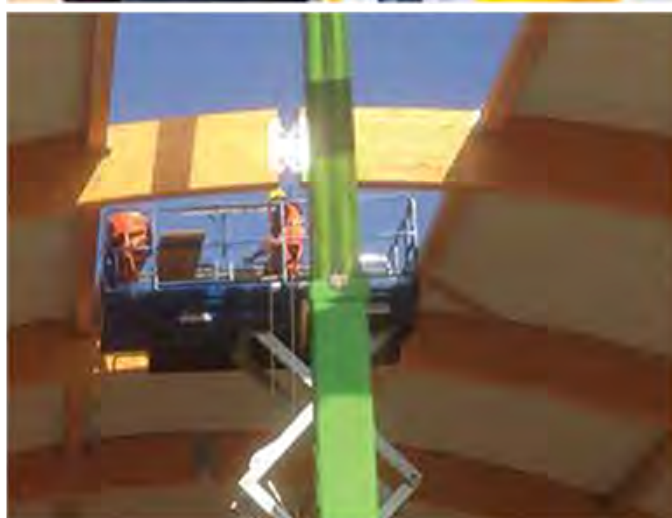
Design and assistance

Assistance during preliminary design and roofing analysis to choose the best building type and quality, according to specific technical and climatic requirements. Medacciai stands next to the designers and customers to define the types of products best suited to specific needs, thus enabling the best roofing solutions with excellent quality / price ratio.



In the design of a building, the roofing is an essential element to ensure inside a microclimate well insulated from noise, heat / cold, rain and humidity, as well as resistance to loads and corrosion. Durability, the ability of products to withstand certain technical and climate conditions, is another essential feature in the choice of products, often conditioned by the search for immediate but only apparent savings.

We offer technical assistance on site for the phase of the executive surveys to make the final design and the subsequent production of the panels simpler and more reliable.



Transport, handling and lifting instructions on site

PANEL C: supporting thermo-insulating curved panel

Find below the instructions for the correct mode of transport, handling, and lifting of PANEL C insulated metal panels according to the UNI 10372 standard "Instructions for planning, execution and maintenance of roofing made of sheets with metal elements", for more details see the complete document. Failure to comply, even partially, with the following instructions, exempts Medacciai S.r.l. from any kind of responsibility.

General indications

1.1 Make sure the surfaces of the support structures, which will come in contact with the sheets of PANEL C panels, are compatible between them or potentially protected from possible electrochemical corrosions.

1.2 Verify that the construction site area for storage and handling of the material is a suitable one to avoid any kind of damage.

1.3 Perform all installation operations in accordance with and fulfilling the current safety regulations.

Packaging and wrapping

2.1 PANEL C panels are packed and wrapped by Medacciai S.r.l. with film of extensible or heat-shrinkable polyethylene. The boxes are equipped with an identifying label with a progressive number, which guarantees the traceability of the product.

2.2 The boxes are equipped with a support consisting of expanded polystyrene joists, placed at a suitable interaxle distance distributing the weight homogeneously and allowing to take the package for handling.

2.3 Any customized packaging or in any case different from the standard described above, as per number of panels per package or methodology of packaging, must be agreed upon when ordering.

Transport

3.1 The load must be on a suitable, free and clean platform.

3.2 boxes on vehicles must absolutely be positioned with the identification label facing the outside of the load (female side).

3.3 Suitable angular protection brackets provided by Medacciai S.r.l. must be interposed between the package and the fixing strap.

3.4 Packages must be well tied by the haulier to the means of transport by using fastening belts, taking specific care to ensure the pressure exerted by the binding points does NOT cause deformations to the product.

3.5 It is allowed for transport to overlap 2 boxes in such a way as to reduce the space.



Storage

4.1 Boxes must always be kept off the ground both in the warehouse and in the construction site.

4.2 DO NOT remove the heat shrinkage material before installation.

4.3 If storage on the building site lasts for a long time, it is recommended to cover the boxes with protective sheets. In the case of protection by means of tarpaulin, it is necessary to ensure both impermeability and adequate ventilation to avoid stagnation of condensation and formation of water pockets. During this phase, the boxes of panels should never be stacked to avoid any possible deformation of the radius of curvature due to the weight of the sheets.

4.4 It is preferable NOT to stack the boxes; if necessary, it is allowed, for a limited time, to stack max. 2 boxes, so as to reduce storage space to a minimum level, but it is important not to overload the panels placed in the lower part of the boxes.

Lifting and handling

5.1 boxes must absolutely be harnessed in at least 2 points, distant from each other NOT less than half the length of the same boxes.

5.2 Lifting should preferably be done with woven belts with synthetic fibers (nylon) of a width not less than 10 cm, so that the load on the belt is distributed and does not cause deformations.

5.3 Lifting must be done exclusively by a bar of length and capacity suitable for the box to be lifted.

5.4 Appropriate spacers located below and above the box must be used, consisting of sturdy flat elements in wood or plastic material, which prevent the direct contact of the belts with the box. In any case the lower and upper spacers will need to be wide enough to prevent the weight of the box from causing permanent deformations to the panels.

5.5 Unloading the boxes on the roofing must be made only on platforms suitable to support them, both for resistance (weight of PANEL C: from 10 to 18 kg / m² for EPS and from 16 to 35 kg / m² for WOOL) and support and safety conditions.

5.6 unloading the boxes on the roofing must be done transversal to the roof frame of tiles or purlins.

5.7 Check if, due to wind and support conditions, you have to tie the boxes to the main structure, especially after opening them.



Recommendations during installation

6.1 The personnel involved in the installation must use safety footwear having rubber soles, to avoid damage to exterior of the panels while walking on the roofing.

6.2 The manual handling of the single PANEL C panel must be carried out at least by two people. The manipulation of the elements must be done using adequate means of protection (gloves, safety shoes, overalls, etc.), in compliance with current regulations.

6.3 For cutting operations on site suitable tools (eg circular saw with disc or chain) should be used, avoiding the use of tools with abrasive disks. In case of cutting, timely remove the chips and waste from the roofing, making sure to clean the panel from said residues that can generate unwanted oxidation. In case of cutting the panels, cover the cut parts with suitable zinc-rich coatings to protect the cut areas from the onset of oxidizing phenomena.

6.4 Before placing the panels in place, it is necessary to check they perfectly match and are aligned. Subsequently, after fixing, it is necessary to promptly remove from the roofing all the residual materials with particular attention to the metallic ones in order to avoid electrochemical corrosion.

6.5 If the roofing is tampered, the installer is responsible to restore the coating or galvanizing of the panels as soon as possible with suitable products available on the market.

6.6 The number and type of fixings must be suitable to the accidental load estimated in the project.

Retailer / Area agent



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