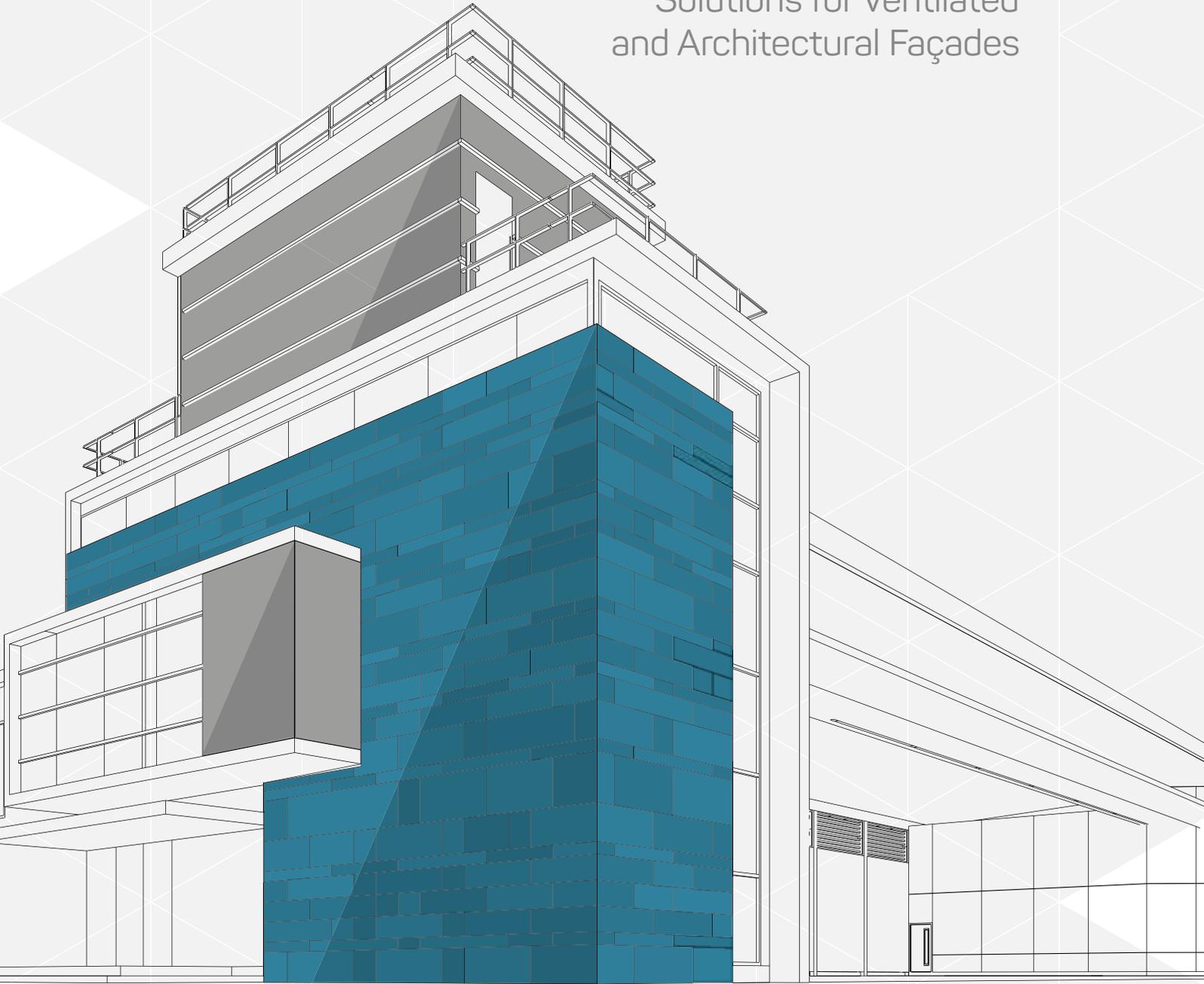


ADDWind

Solutions for Ventilated
and Architectural Façades



WORLDWIDE LEADERS

40

YEARS OF EXPERIENCE

4.205

CUSTOMERS PER YEAR

6

COMPANIES

9

PRODUCTION AND
COMMERCIAL FACILITIES

629

EMPLOYEES
THROUGHOUT THE WORLD

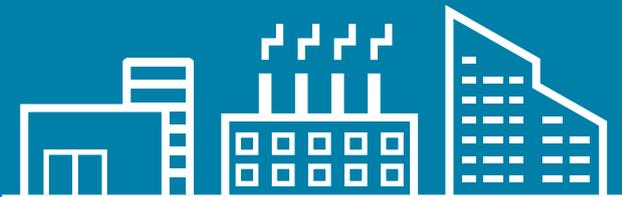
100%

ITALIAN DESIGN

298

MILLION EUROS
TURNOVER

MORE VALUE FOR YOUR PROJECT



A SOLUTION FOR EVERY NEED

thermal and sound insulation, sturdiness, airtightness, fire resistance; in addition to high technology and creative freedom. With the widest range of insulated panels for walls and roofs, Isopan is able to meet every need: aesthetic, functional and productive for any type of building.



MORE EFFICIENCY

The competence of a team of constantly updated professionals and highly specialised technicians will guide you in choosing the solution most suited for the thermal insulation of your building.



GREATER INNOVATION

Proven knowledge of the market, in-depth research on materials, continuous updates on the main trends of the sector and on reference standards allow us to create cutting-edge solutions with an innovative design which combine aesthetics and functionality.



GREATER QUALITY

The quality certification is Isopan's first commitment towards its customers. We only make use of selected suppliers, capable of assuring materials of proven reliability in full compliance with international regulations.



GREATER SAFETY

Thanks to their specific technical specifications, Isopan panels contribute to protecting buildings against fire, preventing it from spreading and limiting its extension (passive protection).



GREATER SUSTAINABILITY

Isopan promotes sustainable construction by providing solutions for building redevelopment, reducing consumption and increasing energy and resource savings. Our panels contribute to obtaining the BREEAM® and LEED certification for buildings and are manufactured in plants powered by renewable energy sources.



LEXUS


LEXUS
Bem vindo
Nome
Endereço
Cidade, Estado, CEP
Telefone
Fax
E-mail
Site

Table of contents

01
ADDWind

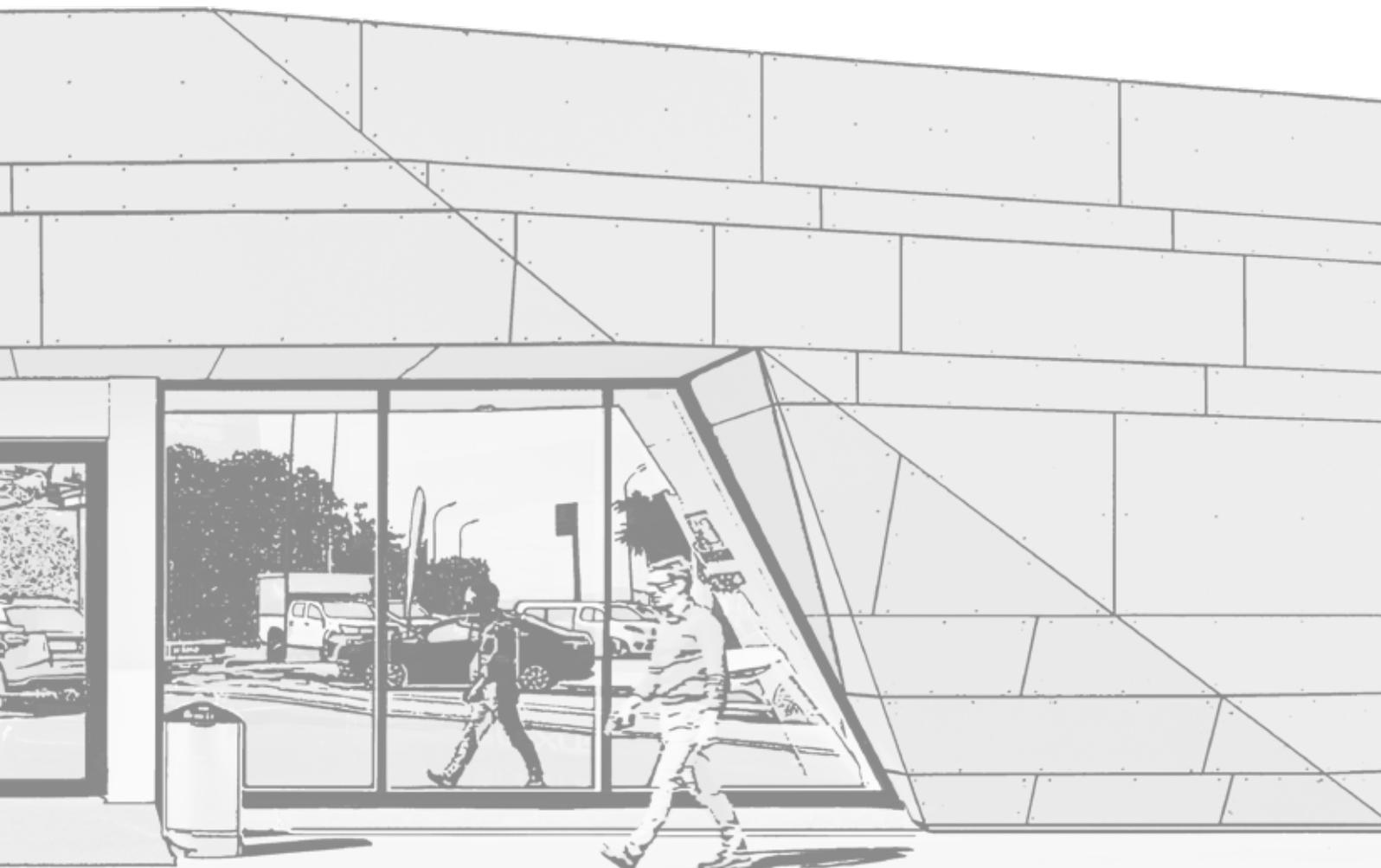
Page 08

02
The Isopan system

Page 20

03
ADD more
Surfaces

Page 32



ADDMIRA

ADDMIRA by Isopan represents the range of products and solutions dedicated to the world of architecture and the design of building façades. Thanks to **ADDMIRA** systems each project finds new merging points between technology, innovation and creativity, thanks to the variety of proposals for both the world of prefabrication as well as systems for on-site assembly.



ADD Vision



ADD Cross



ADD Wind



Between Idea and Project

The outer skin of the building represents the visible layer of the building's façade, and in addition to the technological aspect, it also plays a communication function.

ADDWind proposes multiple solutions for materials, colours, modules and finishes, so as to fulfil any design-based need.

The versatility of the systems makes it possible to realise any project, allowing ADDWind façades to reach high levels of architectural and aesthetic communication.

CUSTOMISABLE AND PERSONALISABLE PRODUCTS

The exterior facing can be customised in terms of measurement, modularity, shape and colour, depending on the project.

Based on what type of facing is chosen, additional possibilities of customisation open up, including notches, holes, imprinting and curves.





Ventilated façades

The ventilated façade is a technologically complex building facing that is installed dry and that uses mechanical anchoring to secure a new skin to the outer wall.

It features an air gap between the perimeter wall of the building, that an insulating layer is added onto, and the exterior facing.

The excellent energy performance and the remarkable architectural flexibility that a ventilated wall offers, make it a technological solution suitable for new builds as well as for refitting existing buildings.

PANEL FASTENING SCREW

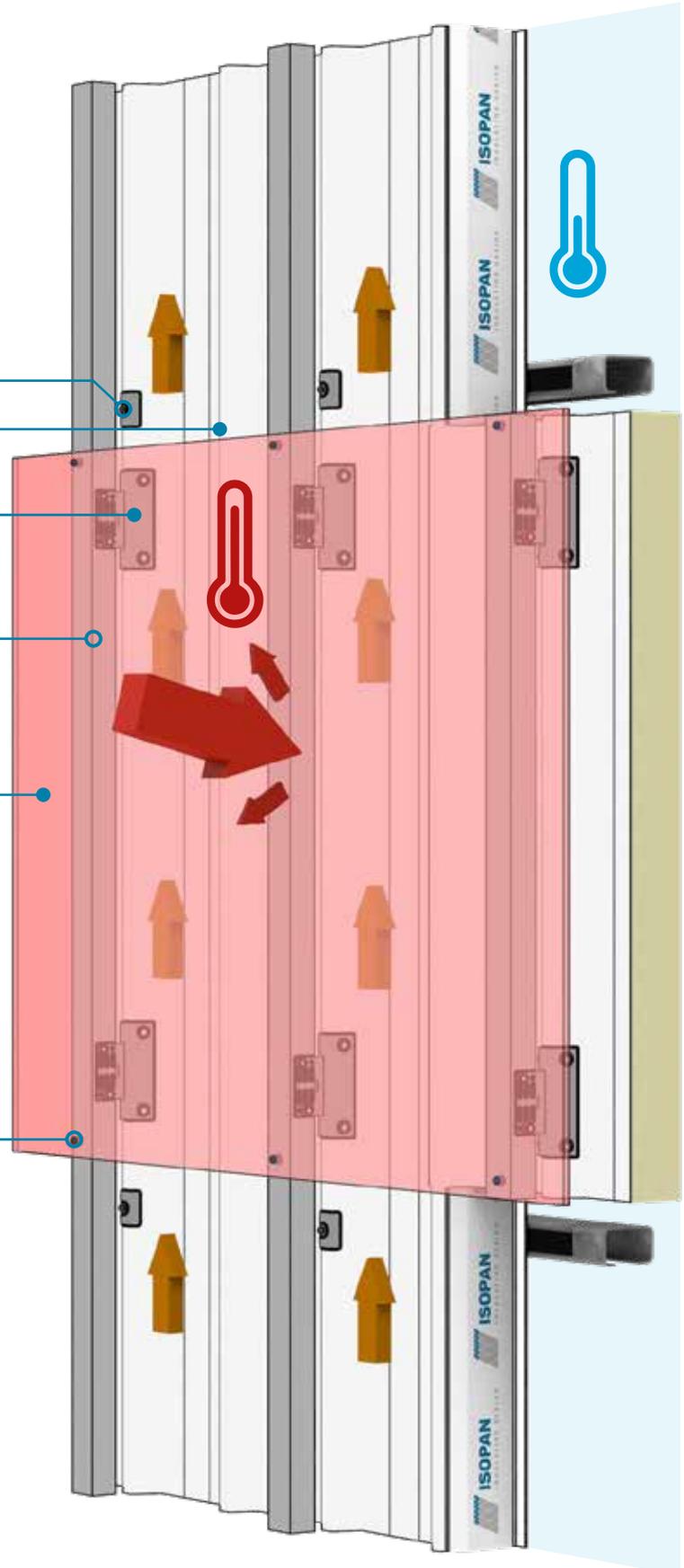
ISOCOP/ISOFIRE ROOF PANEL

ARKWALL 1.0 BRACKET

SUBSTRUCTURE

FACING MATERIAL

SCREW THAT SECURES THE FACING TO THE SUBSTRUCTURE



STACK EFFECT

The stack effect is a continuous ventilation phenomenon that is generated thanks to the temperature difference between exterior surface of the building envelope and the air gap. Through this principle, the air is continuously renewed on the insulating surface, thereby avoiding the accumulation of surface heat. Also in this way, the steam coming from inside is quickly eliminated, thereby reducing problems caused by condensation and any water leaks, on top of contributing to the drop in heat going into or out of the building.



Values and advantages

ENERGY SAVINGS



The best performance achieved through ventilation of the façade lead to an increase in the insulating properties of the wall pack. The result is better energy efficiency of the entire building.

DURABILITY



The use of materials that are resistant to the action of atmospheric agents, makes it possible to maintain the technological and aesthetic characteristics of the façade over time.

Also thanks to the presence of the metallic facings of the sandwich panels, the insulating layer is protected against external agents, thereby maintaining its characteristics in the long term.

SHOCK-RESISTANT



The materials are resistant to external mechanical shocks such as impact, abrasion or acts of vandalism. Accordingly this preserves the aesthetic cleanliness of the façade over time.

QUICK ASSEMBLY



ADDWind systems for façades involve the use of lightweight and easy-to-install materials without the use of adhesives or cement mortar.

The shorter installation times in comparison to traditional construction systems have a positive impact on site costs.

DRY CONSTRUCTION



All ADDWind solutions are realised with **dry construction systems**, without the use of sealants, glues, mortars or plasters. Accordingly the use of water in the work site is reduced, and setting and hardening times are no longer necessary.

The use of dry systems also allows work to continue on site **regardless of the weather conditions**, speeding up the installation times.

RESISTANCE TO HUMIDITY



The presence of the air chamber means that the wall is continuously aerated, thereby eliminating humidity before it can accumulate and penetrate into the layers of the wall. This prevents the formation of mildew on the indoor surfaces of the rooms.

RESISTANCE TO CHEMICAL AGENTS



The materials and components are resistant to aggressive chemical agents. The physical, performance-related and aesthetic characteristics therefore remain constant throughout the entire life cycle of the building.

UNLIMITED CREATIVITY



ADDWind solutions can be applied to any type of building, depending on the Customer's needs.

The variety of technological and aesthetic solutions allow for the use of products in the most diverse projects.



Quality and Performance

QUALITY AND REFERENCE STANDARDS

Isopan companies are ISO 9001 certified and the technical compliance of the products is assured according to the standards required by the reference markets.



CERTIFIED PERFORMANCE

WATER PERMEABILITY

Isopan panels have been tested and certified as required by EN standards 12865:2003 and 14509:2006. All certificates have been obtained through tests carried out at Certified Bodies and internationally recognised.



AIR PERMEABILITY

Isopan panels have been tested and certified as required by EN standards 12114:2000, EN 14509:2006 + A.C.2008. All certificates have been obtained through tests carried out at Certified Bodies and internationally recognised.



BEHAVIOUR IN CASE OF FIRE

Isopan panels, thanks to their technical specifications, help to protect buildings against fires, limiting their spread and consequent damage to structures. Isopan panels offer the best reaction to fire performance obtainable on the market (tested in accordance with EN standards 14509 and 13501).

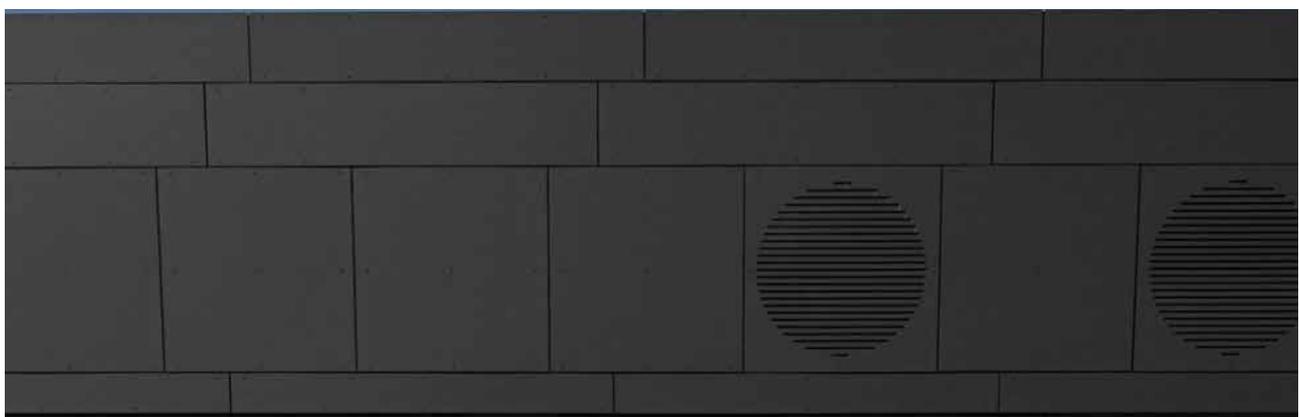


SUSTAINABILITY

Isopan promotes environmental sustainability by adapting to the most recent reference production standards. An example of this is the contribution of Isopan products to obtaining credits for environmental sustainability ratings such as LEED and BREEAM, in addition to the certified Environmental Product Declaration EPD (Environmental Product Declaration).

Isopan is increasingly committed to achieving the strictest requirements in terms of environmental procurement policies (Green Procurement) as a company commitment to the environmental sustainability of its products.

Thanks to the LEAF technology, Isopan is even more effective in regards to sustainability and respecting the environmental, through the use of formulations with high performance in terms of fire behaviour, without using halogenated flame retardants. Furthermore, the excellent insulating performance of LEAF enable to lower energy costs with a consequent reduction in CO2 emissions.



ADD more Insulation Technology

Leaf

Thanks to its excellent insulation performance, **LEAF** technology is particularly suitable for **wall and façade** systems.

UP TO 20% LESS HEAT LOSS

With a view of maximising thermal performance for the increasingly demanding reference regulations and standards, Isopan has worked to innovate production processes and use new generation formulas. The LEAF solution improves the thermal performance of the insulating material, in particular it lowers the thermal conductivity value of the polyurethane foam. Therefore, with the same thickness, it is possible to achieve lower thermal transmittance than a standard product. This technical improvement can result in a reduction of heat loss due to the building envelope up to 20%.

Leader in the production of sandwich panels, Isopan has developed a range of technologies, products and accessories suitable for any use. Isopan sandwich panels are manufactured by using continuous line production plants. This translates into optimising the time and costs required for even large orders.

The large selection of usable metal sheets also allows us to obtain durable products suitable for any type of application, from foodstuff storage rooms to processing rooms and clean rooms. Another key factor is the focus on sustainability, made possible thanks to the implementation of low energy consumption production technologies and the use of renewable energy sources.

Thanks to the **Leaf** Technology, Isopan is able to provide a cutting-edge and environmentally friendly insulating product, with high insulating performance and safe in the event of a fire, without the use of halogenated flame retardants.



**Greater comfort
less costs**



**Tangible
sustainability**



**Greater
fire safety**



ADD Wind

All-round training

ISOPAN
ACADEMY

ADD more Information Technology

The ADDWind system is the Isopan solution for the world of ventilated architectural façades. The variety of technological and architectural solutions are such that the systems can be applied to any type of building, in terms of both performance as well as aesthetics of the design.



INSTALLATION TECHNICIANS

The correct installation of the systems for façades is a crucial factor in the realisation of the works. For this reason Isopan spreads its experience through training events dedicated to the installation technicians working on site. Qualified Isopan personnel will be at disposal to illustrate the assembly methods of the various construction elements through theoretical notions and hands-on practice.



DESIGN ENGINEERS

The ADDWind world includes solutions that apply to various types of buildings and projects, and the correct design takes on an increasingly important role in the life cycle of a building. This is why Isopan promotes the Systems through information and training activities for industry Professionals such as Architects, Designers, Engineers and Installation Technicians.



GENERAL CONTRACTORS

The prefabrication of the construction elements makes ADDWind a suitable solution for the world of large projects and General Contractors. Isopan's training and consultation activities can guide you through the identification of the most suitable solution for every type of intervention, thanks to its production and technical-logistic network.



ADDWind

ADDWind



The Isopan system

Page 20

Overview Facings

Page 21

Insulation and Protection

Page 22

Composition of the System

Page 24

Insulating Panel Configuration

Page 26

Metal brackets

Page 27

Exposed Anchoring and Concealed Anchoring

Page 28

Finishing accessories

Page 30

The Isopan System

The ADDWind system is the Isopan solution for the world of ventilated architectural façades. The variety of technological and architectural solutions are such that the systems can be applied to any type of building, in terms of both performance as well as aesthetics of the design.

MORE EFFICIENT THERMODYNAMIC FLOW

The insulating layer is comprised of insulating sandwich panels with metallic facings and polyurethane or mineral wool insulation. The insulating core ensures high performance in terms of thermal insulation, and thanks to the great dimensional stability, performance remains constant over time.

Also thanks to the presence of the panel, the façade exploits the efficiency of the surface thermodynamic flow, which therefore increases the insulating performance.

DRY CONSTRUCTION SYSTEM

ADDWIND involves the installation of components on site without the use of adhesives, mortars or plasters.

The fastenings are set up exclusively with screws, metallic profiles and steel brackets.

FLEXIBLE SYSTEMS

The components of the ADDWind systems are designed to fulfil any type of project.

In this way there are no limits to the achievable architectural effect.

ARCHITECTURAL DESIGN

The vast choice of types, colours and dimensions of the facing elements make ADDWind a valid solution for any aesthetic need, from large and industrial logistic centres to modern building architecture, uniting design and technology.

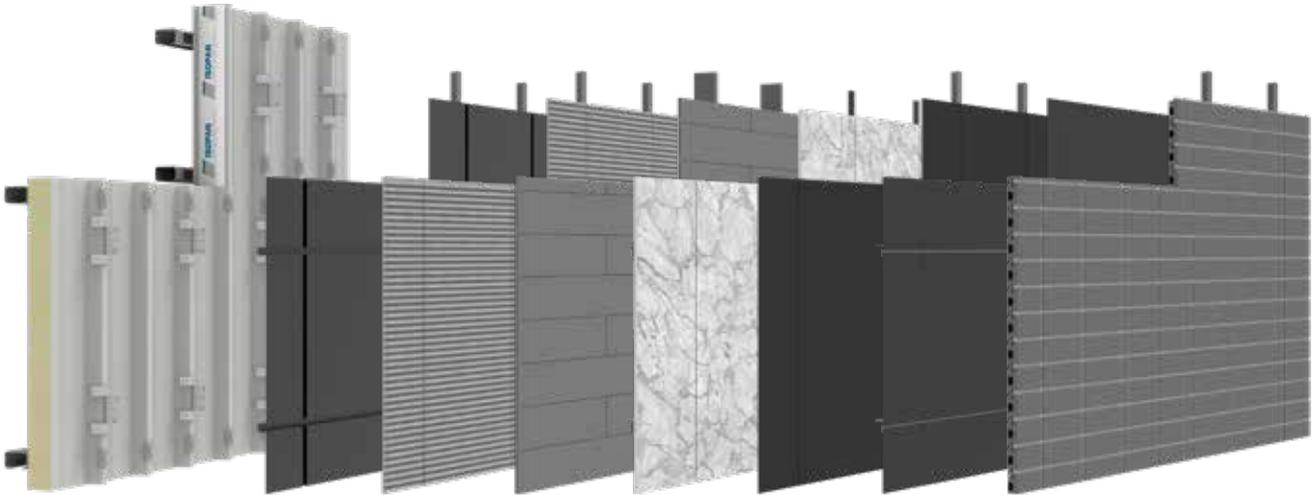
EXTERNAL FACINGS

ADDWind can be installed with multiple types of external layers, depending on the technical and architectural needs. All of the materials are distinguished by lightweight and long-lasting resistance.



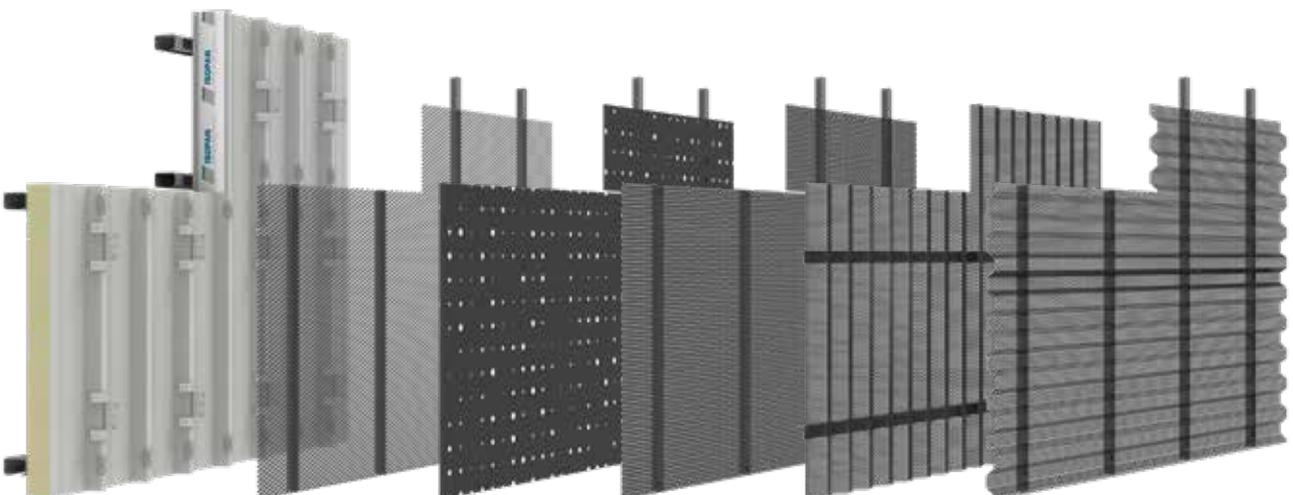
Overview of Facings

CLASSIC AND SPECIAL FACINGS



Range of different types of facings and compositions, distinguished by broad colour and texture ranges. The great choice of thicknesses, materials and formats also open the door to any type of architectural and geometric module.

METAL FACINGS



Profiled and flat sheets, customisable according to multiple types of processing, distinguished by durability and light weight.

Insulation and protection

The seamless insulating layer of the ADDWind system is composed of ISOCOP or ISOFIRE ROOF sandwich panels. The shape of the panels, thanks to the metallic facing sheets, offers resistant and long-lasting anchoring for the devices that will comprise the ventilated façade.

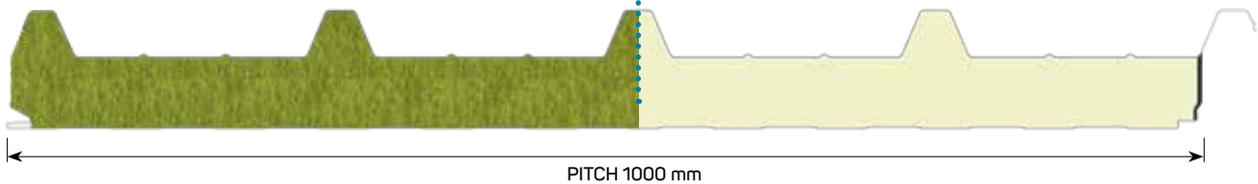
ISOFIRE ROOF ISOCOP

Panel with Rock Wool insulation

Panel with Polyurethane insulation

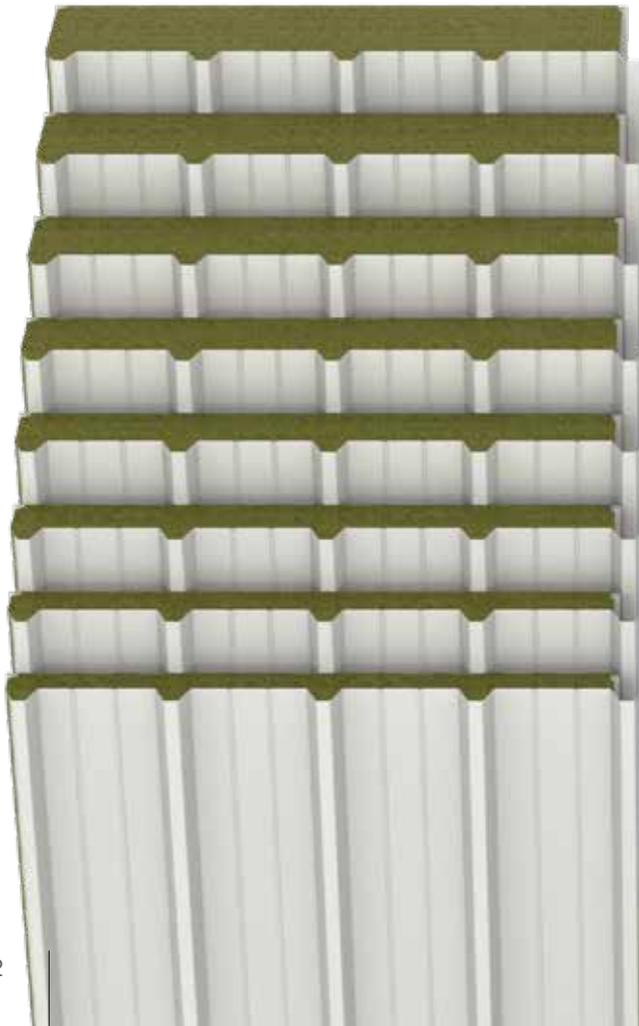
ISOFIRE ROOF - "U" thermal insulation (UNI EN 14509)								
mm	50	60	80	100	120	150	170	200
W/m²K	0.78	0.66	0.50	0.41	0.34	0.28	0.24	0.20

ISOCOP - "U" thermal insulation (UNI EN 14509)								
mm	30	40	50	60	80	100	120	150
W/m²K	0.71	0.54	0.44	0.37	0.28	0.22	0.19	0.15



AVAILABLE THICKNESSES (mm)

Performance achieved with Isofire Roof panels vertical configuration



Available with **Leaf**
Up to 20% less heat loss

- 200
- 170
- 150
- 120
- 100
- 80
- 60
- 50
- 40
- 30



ADD more RESISTANCE

The correct choice of metallic facings for Isocop and Isofire Roof Panels makes it possible to achieve high performance in terms of durability.

Thanks to the use of prime products, Isopan is able to ensure exceptional performance in terms of resistance to corrosion and colour maintenance, as well as maintaining all of the functional characteristics of the insulating panels over time.

ADD more Durability



The attention to production standards, controlling the supply chain and the extension of the protective services towards the End customer are, also for Isopan, synonymous with professionalism and reliability towards buyers.

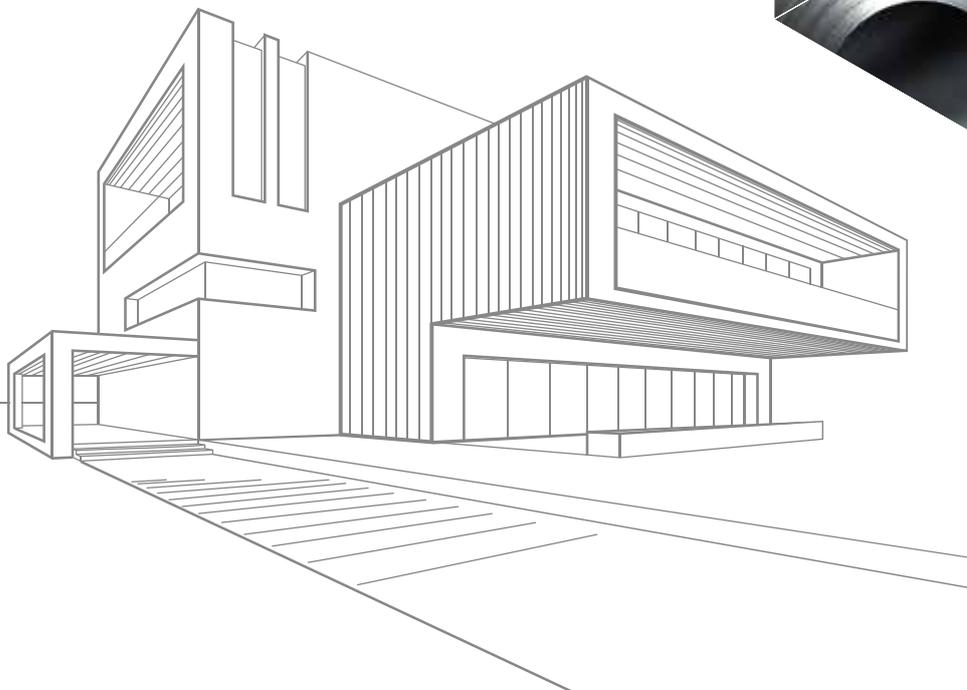
For this very reason we are constantly committed to procuring and using high quality metal laminates coming from worldwide recognised Producers.

ADD more Guarantee



Thanks to our know-how and the use of cutting edge materials, Isopan is able to offer its important Customers Guarantees on the strength of the metal facings.

In fact, maintaining the functional characteristics over time represents one of the most crucial aspects in choosing a metal laminate.



Composition of the System

Insulating Panel Configuration

Depending on the characteristics of the project, it is possible to install Icop or Isofire Roof Sandwich Panels with Vertical or Horizontal configuration.



Vertical Configuration



Horizontal Configuration



Metal brackets

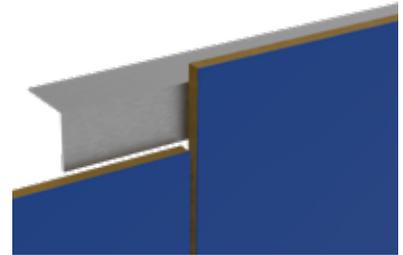
The ARKWALL brackets are devices that interface between insulating panel and facing. Using a given type of bracket depends on the installation configuration of the sandwich panels (horizontal or vertical) and on the architectural effect that needs to be achieved with the external facing.



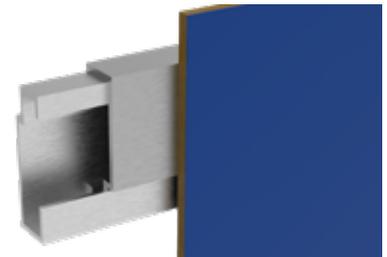
Type of Anchoring



Solutions with Exposed anchoring



Solutions with Concealed Anchoring

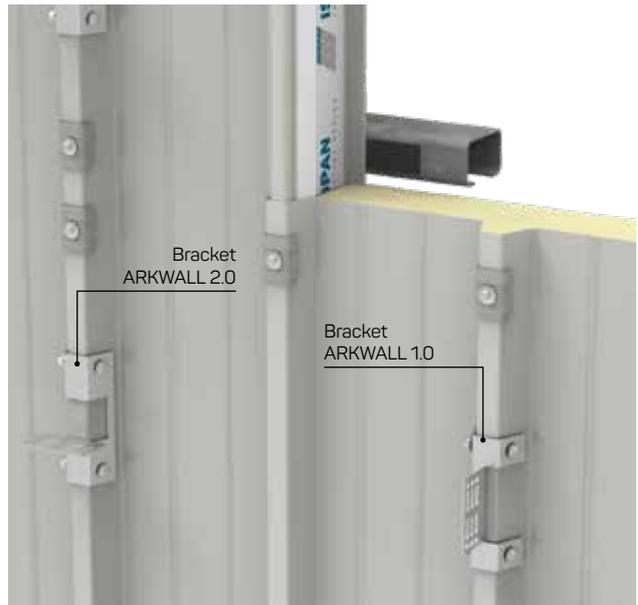


Insulating Panel Configuration

Vertical Configuration



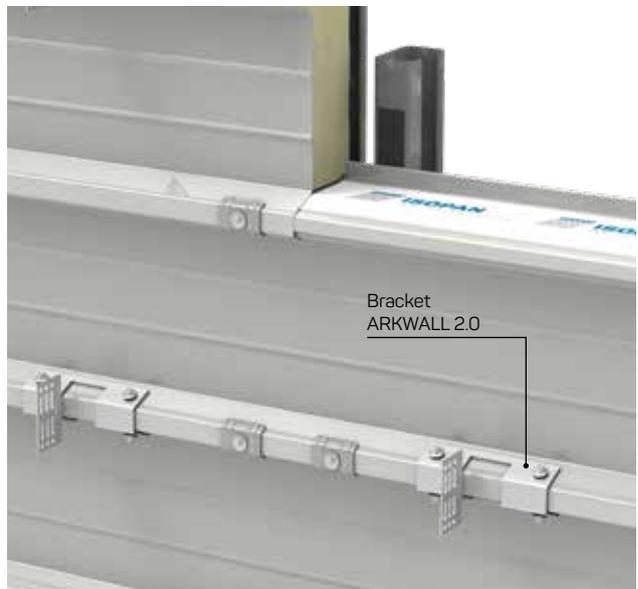
Suitable for a structural mesh characterised by few openings and large opaque surfaces that extend in width, with few openings on the façade (such as strip windows).



Horizontal Configuration

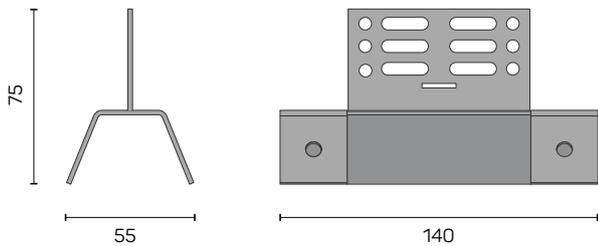


Suitable for the realisation of ADDWind façades on buildings that extend in height, where there are openings and interruptions on the opaque surfaces, such as doors and windows. The ARKWALL 2.0 bracket maximises the ventilation effects of the façade.

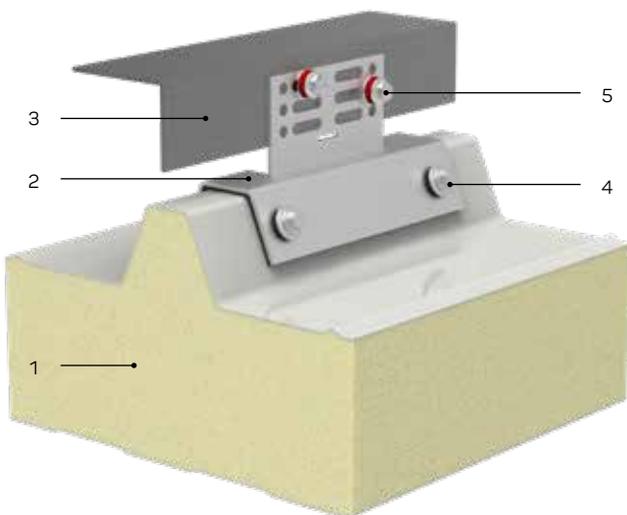


Metal brackets

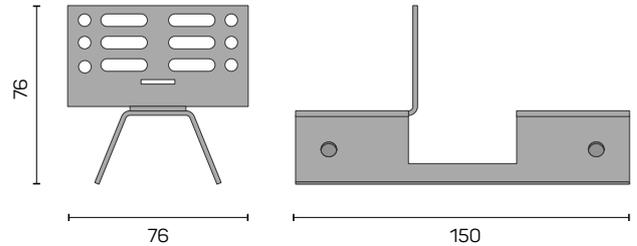
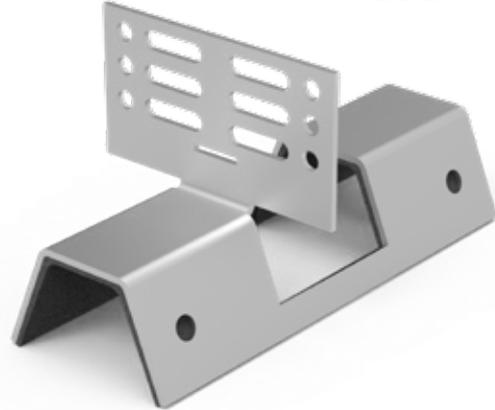
ARKWALL 1.0 bracket



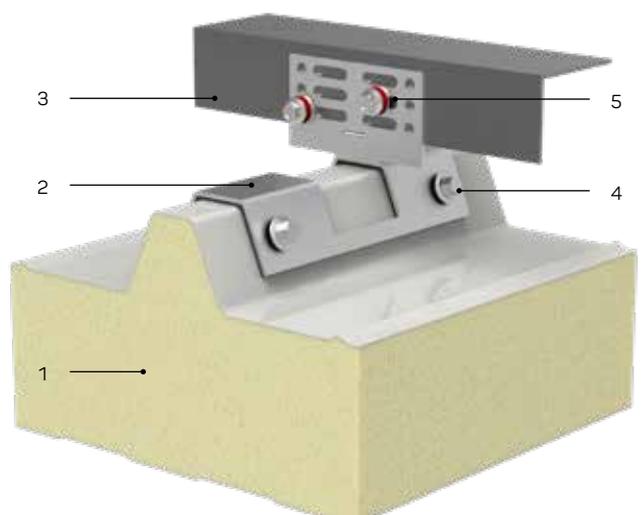
Compatible configurations



ARKWALL 2.0 bracket



Compatible configurations



1. Sandwich panel
2. ARKWALL 2.0 bracket
3. Aluminium profile
4. EJOT screw
5. EJOT VARIO screw



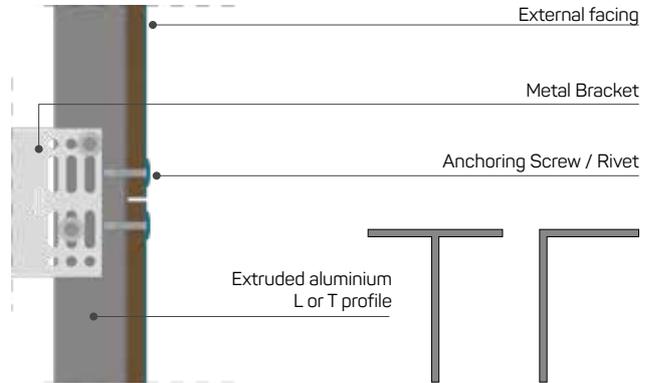
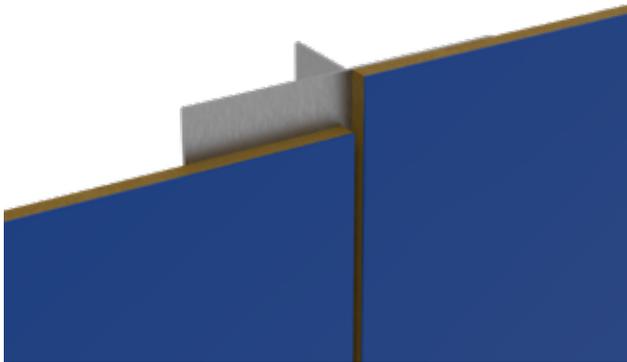
In collaboration with:



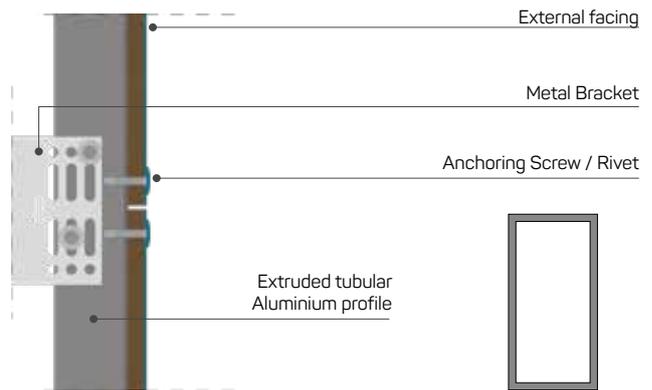
Exposed Anchoring



Anchoring on Extruded Profiles (L and T Profiles)



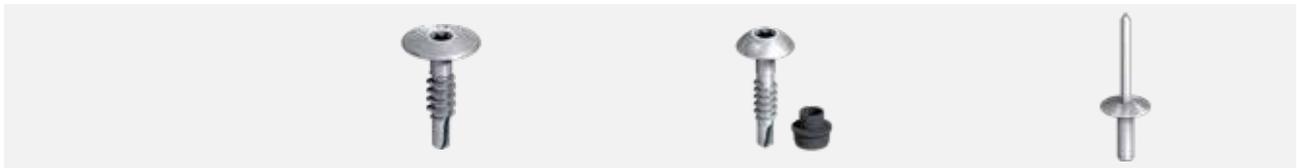
Direct anchoring on Tubular Extruded Profiles



In collaboration with:



For detailed information and other types of fastening, contact Isopan



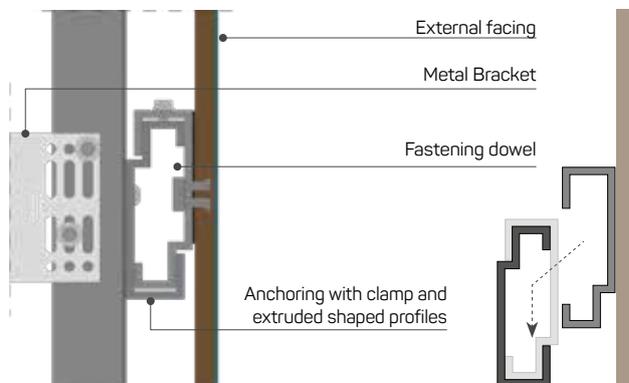
	Self-tapping screw	Self-tapping screw with centring compass	Rivet
Material	A2 Stainless Steel	A2 Stainless Steel	Steel and Aluminium
Ø Thread	6 mm	4.8 mm	-
Ø Head	16 mm	12 mm	-
H head	2 mm	3.4 mm	-

The types of concealed fastenings may be adapted depending on the type of Configuration and the type of Facing. For detailed information and other types of concealed anchorings, contact Isopan

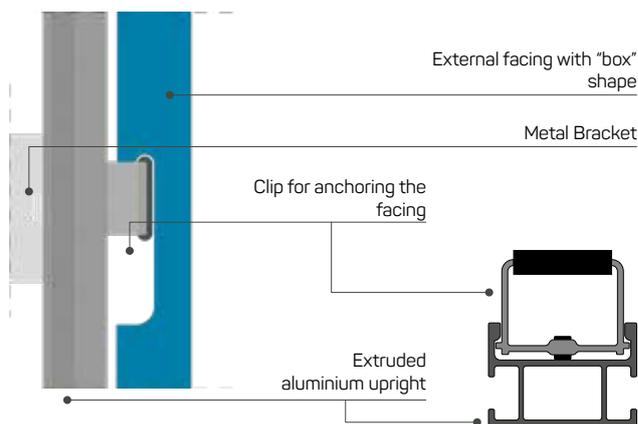
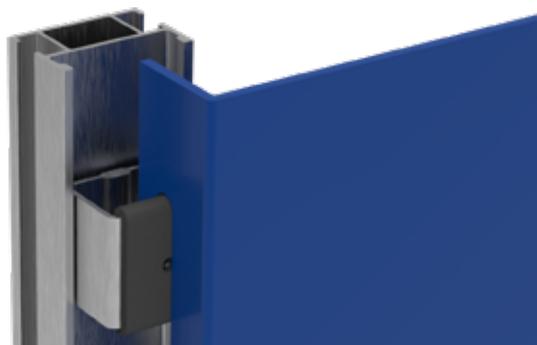
Concealed Anchoring



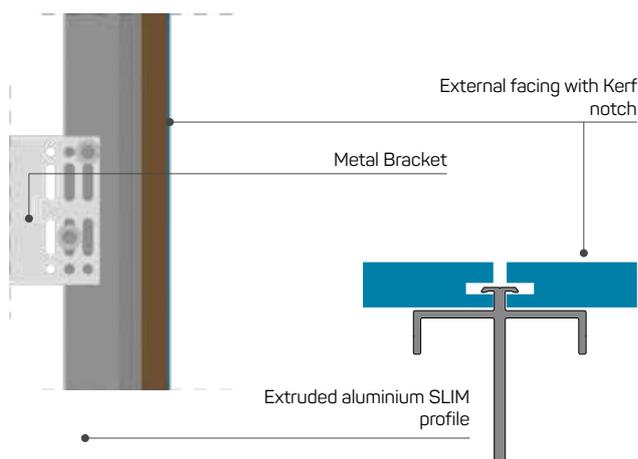
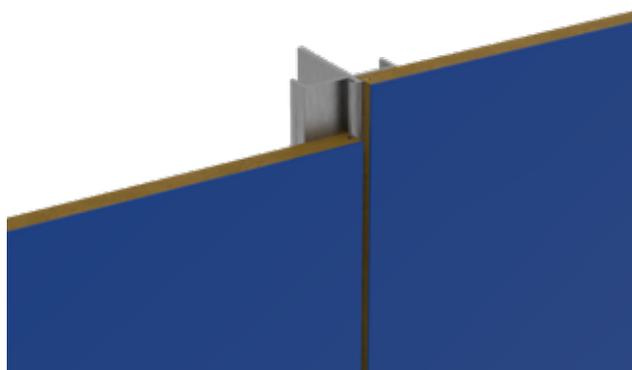
Anchoring on clamps



Box Mounting



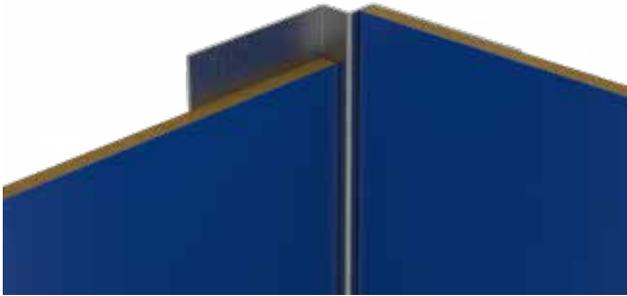
Fastening with Slim Profiles and Kerf Notch



The components and the anchoring systems may vary depending on the type of Configuration and the type of Facing. For detailed information and other types of concealed anchorings, contact Isopan

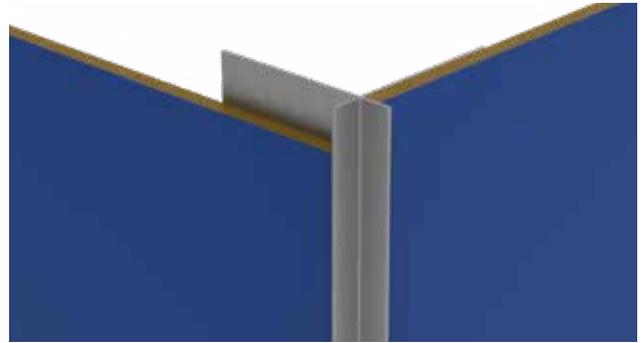
Finishing accessories

Recessed corner connection profile



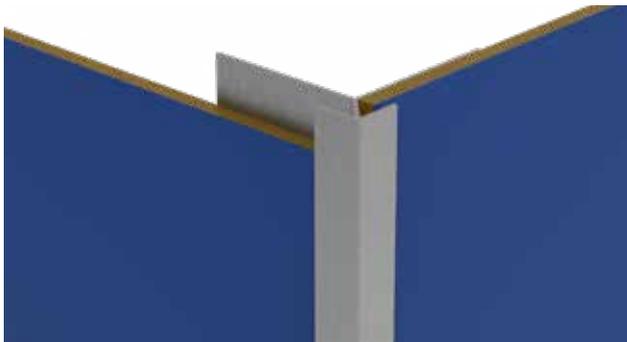
Material	Extruded aluminium
Thickness (mm)	10 mm
Standard length (mm)	2000 mm

Corner connection profile - type 1



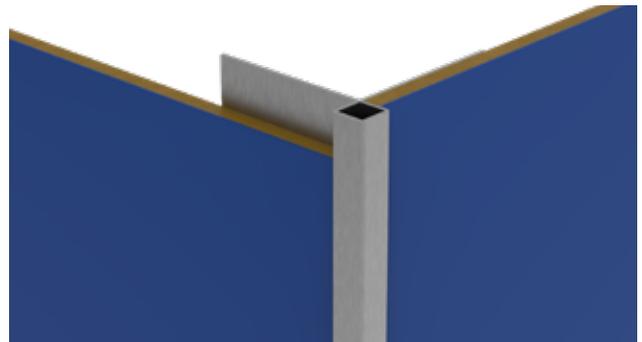
Material	Extruded aluminium
Thickness (mm)	10 mm
Standard length (mm)	2000 mm

Corner connection profile - type 2



Material	Extruded aluminium
Thickness (mm)	10 mm
Standard length (mm)	2000 mm

Corner connection profile - type 3

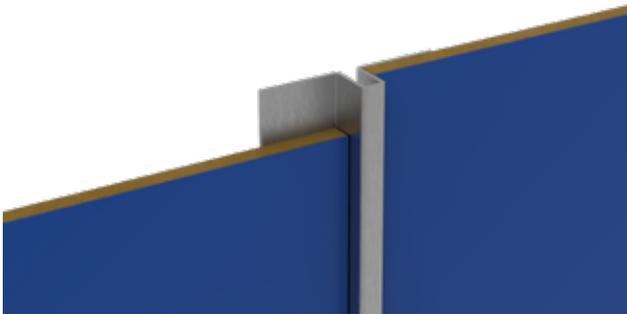


Material	Extruded aluminium
Thickness (mm)	10 mm
Standard length (mm)	2000 mm

The types of accessories can vary depending on the selected type of facing. For detailed information and other types of accessories, contact Isopan

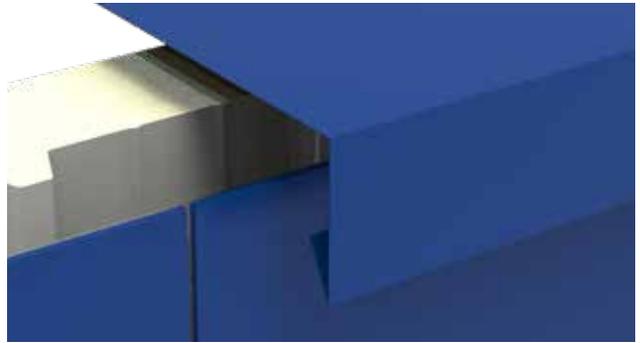
Finishing accessories

Gap-cover profile - type 1



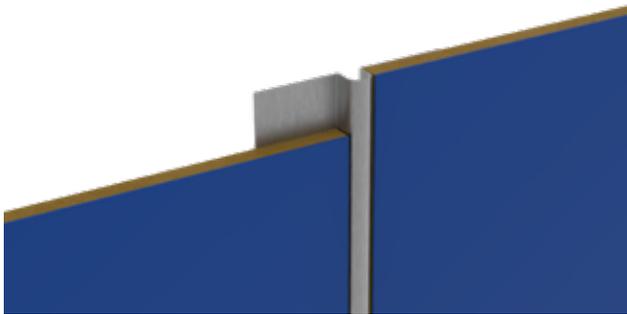
Material	Extruded aluminium
Thickness (mm)	10 mm
Standard length (mm)	2000 mm

Top closing tinwork



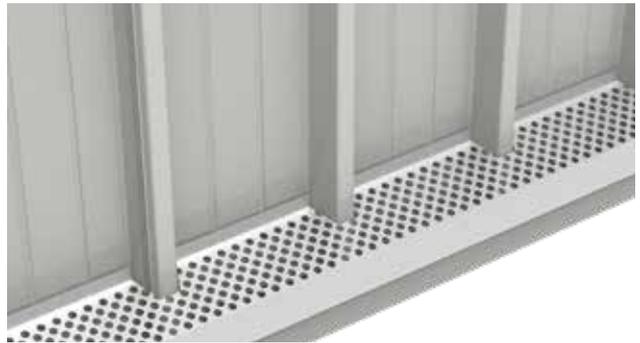
Material	Pre-painted sheet
Thickness (mm)	on request
Standard length (mm)	on request

Gap-cover profile - type 2



Material	Extruded aluminium
Thickness (mm)	10 mm
Standard length (mm)	2000 mm

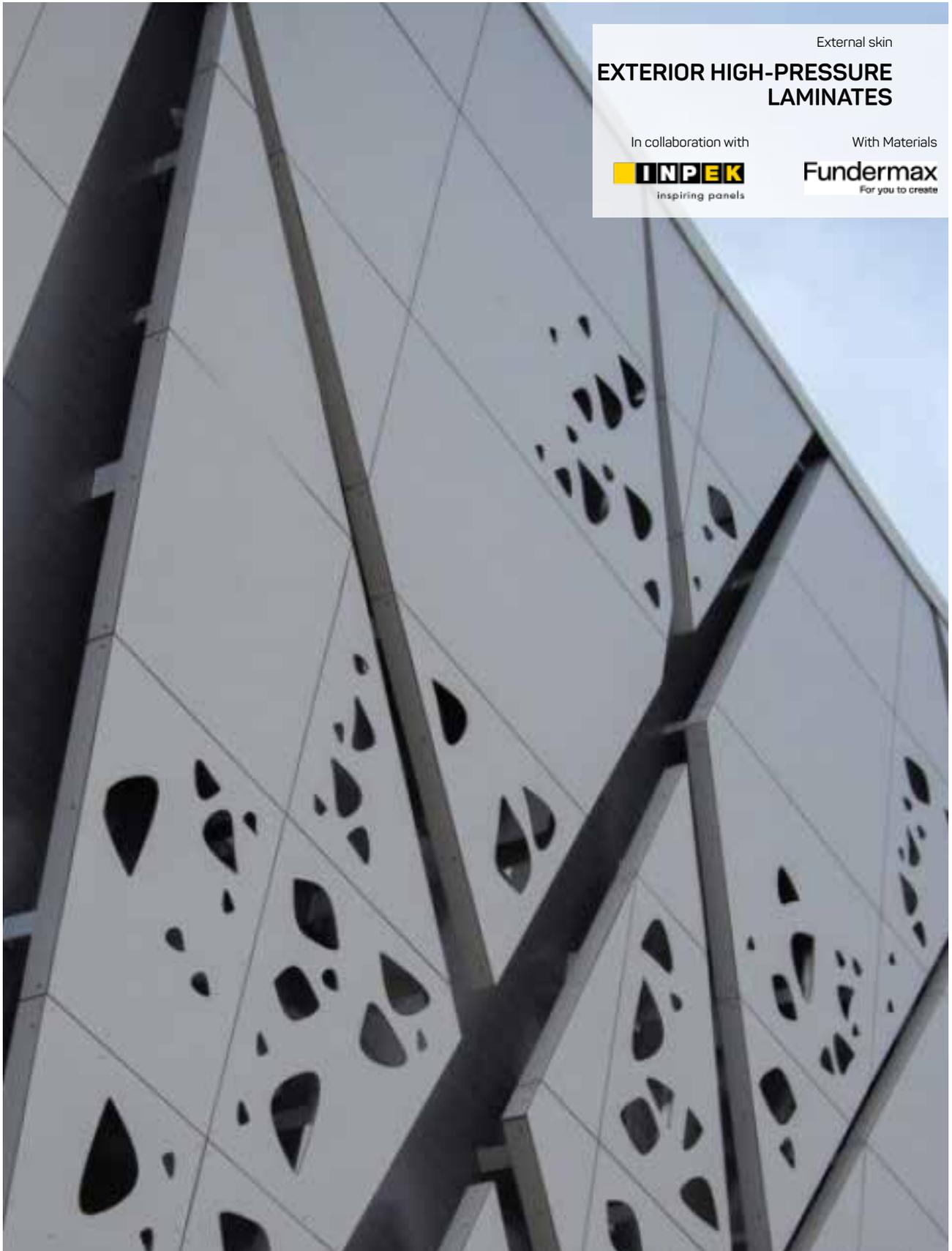
Perforated bottom closing tinwork



Material	Micro-perforated galvanised sheet
Thickness (mm)	on request
Standard length (mm)	on request

The types of accessories can vary depending on the selected type of facing. For detailed information and other types of accessories, contact Isopan

ADD more Surfaces





External skin

**FIBERS
OF BASALT**

In collaboration with



With Materials



ADD more Surfaces



External skin

ALUMINUM COMPOSITE PANEL

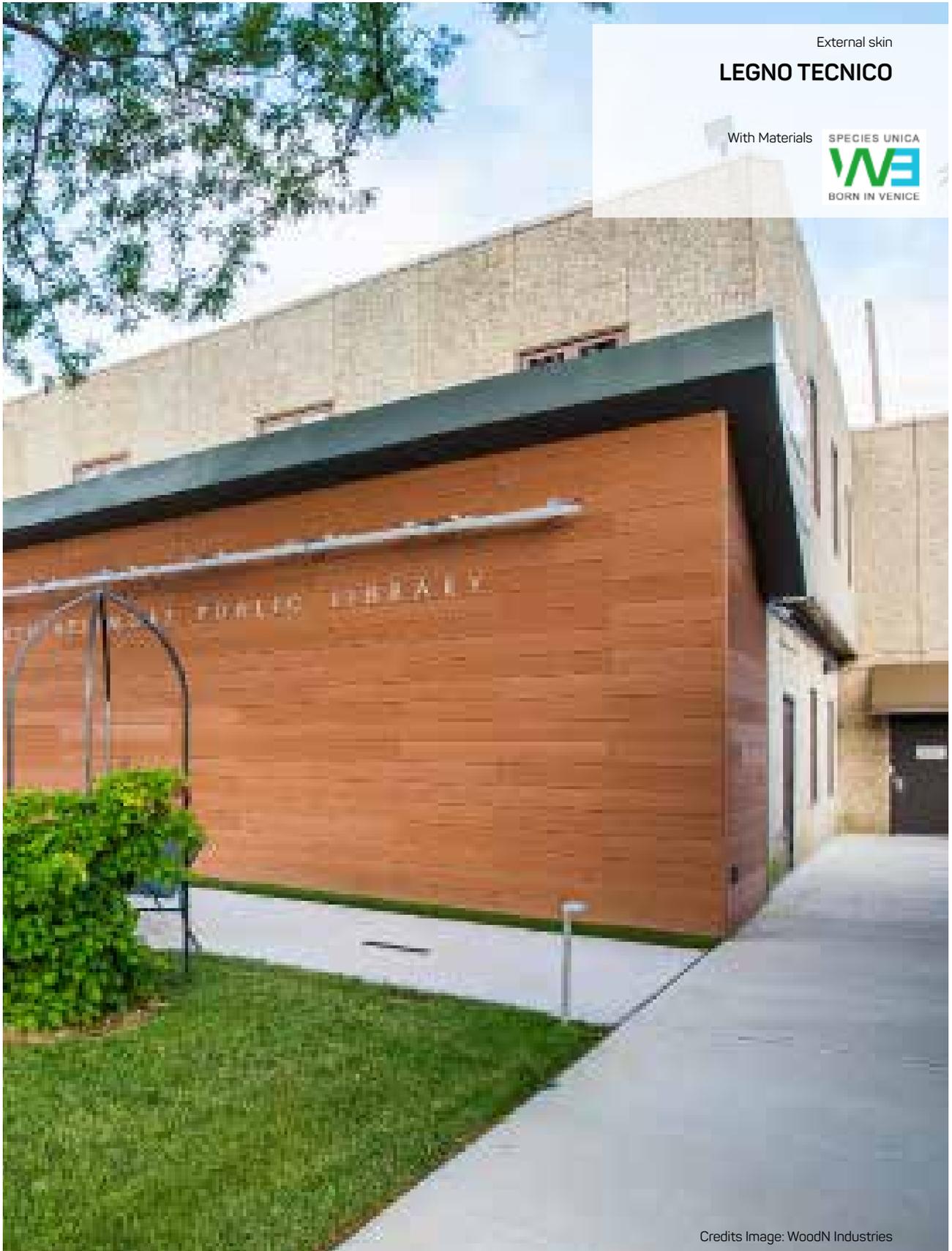
In collaboration with



With Materials



Credits Image:INPEK



External skin

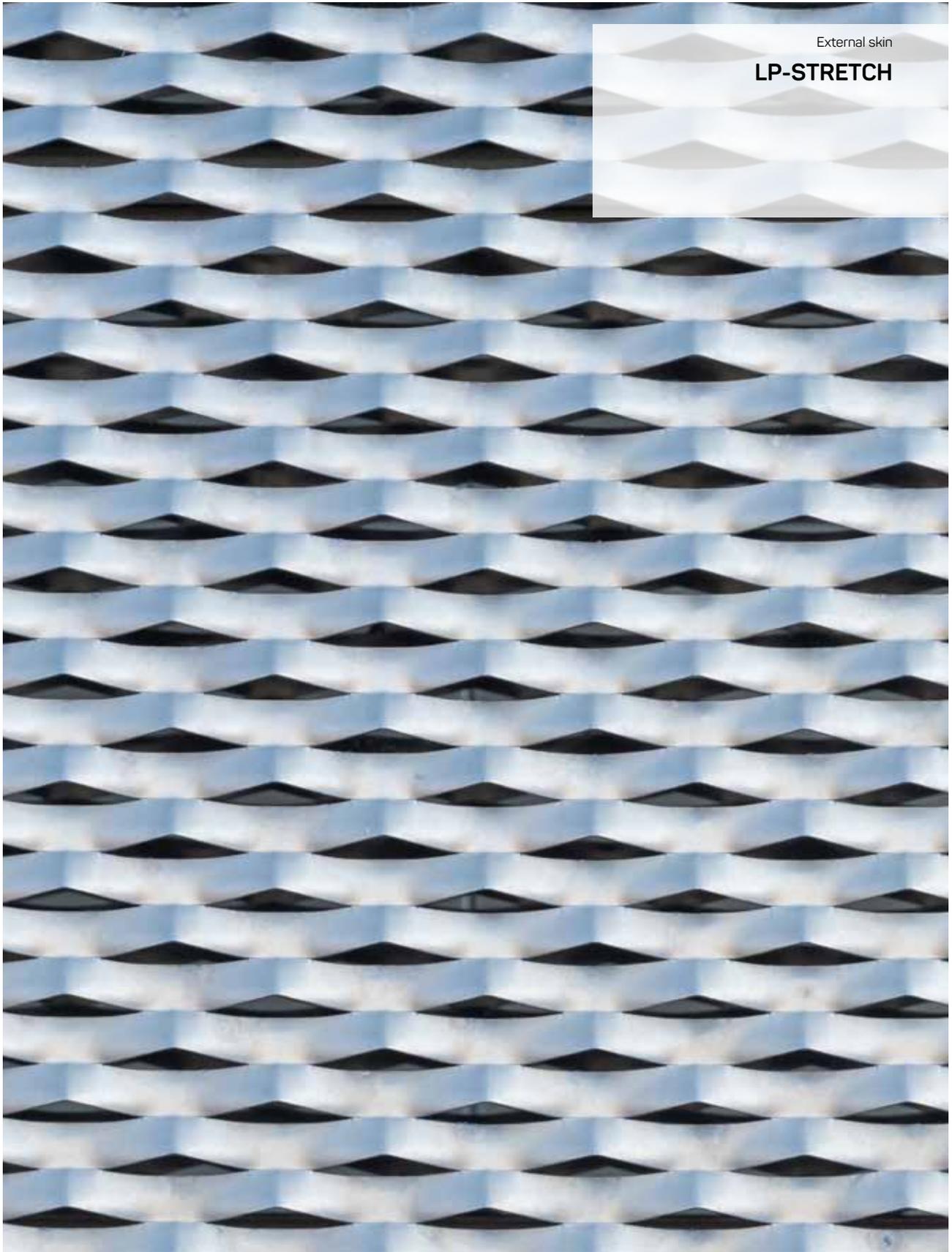
LEGNO TECNICO

With Materials



Credits Image: WoodN Industries

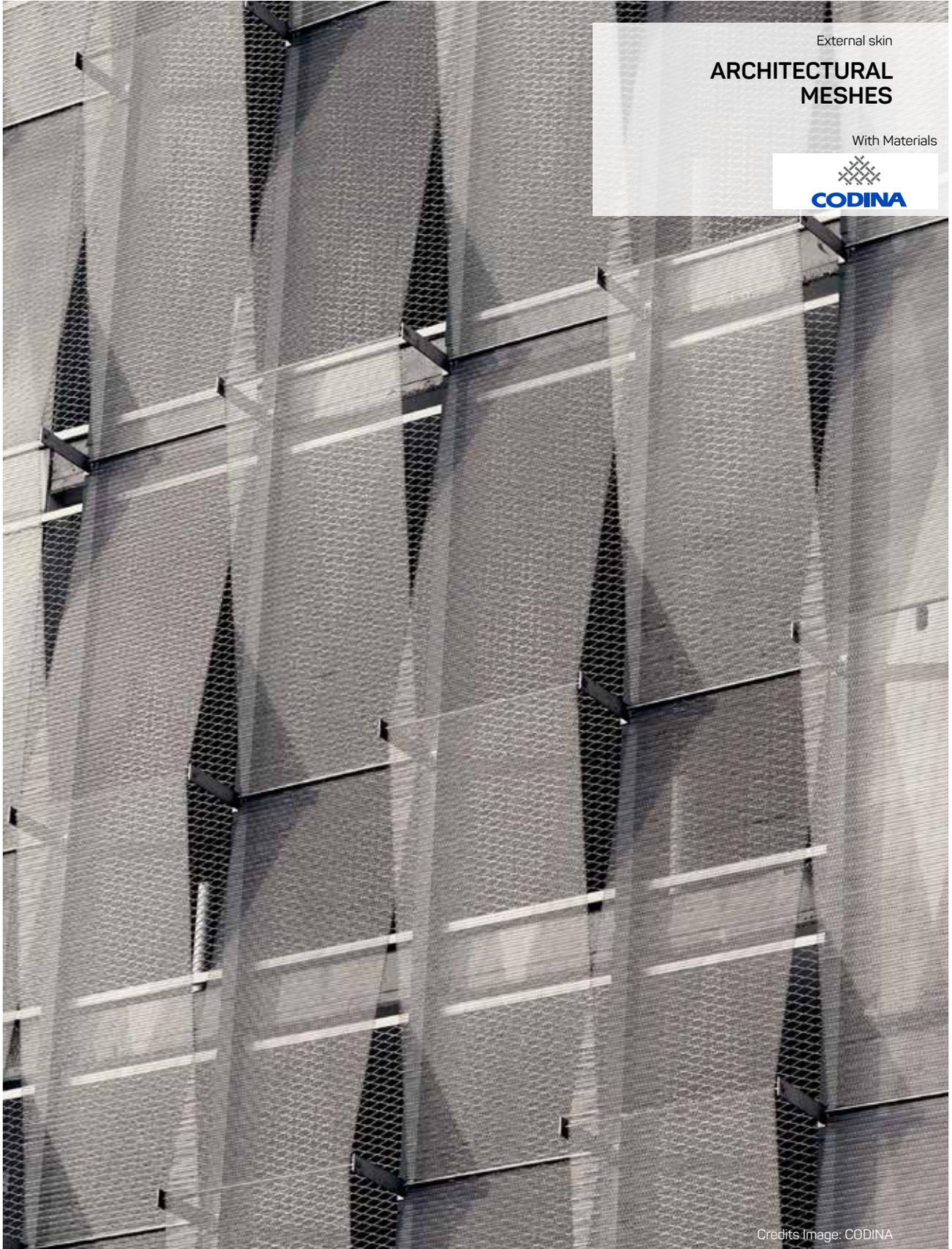
ADD more Surfaces



External skin

LP-STRETCH

ADD more Surfaces



External skin

ARCHITECTURAL MESHERS

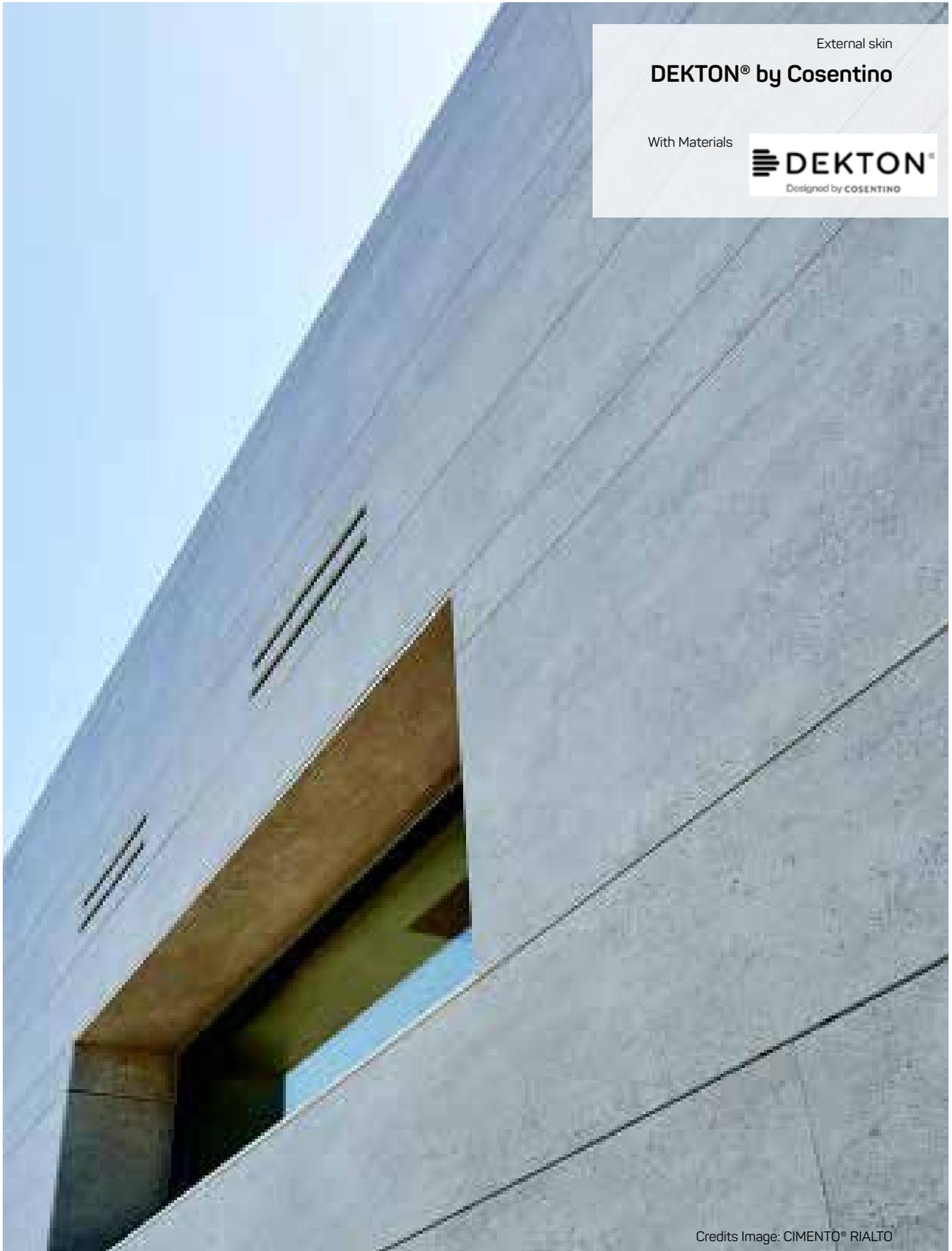
With Materials

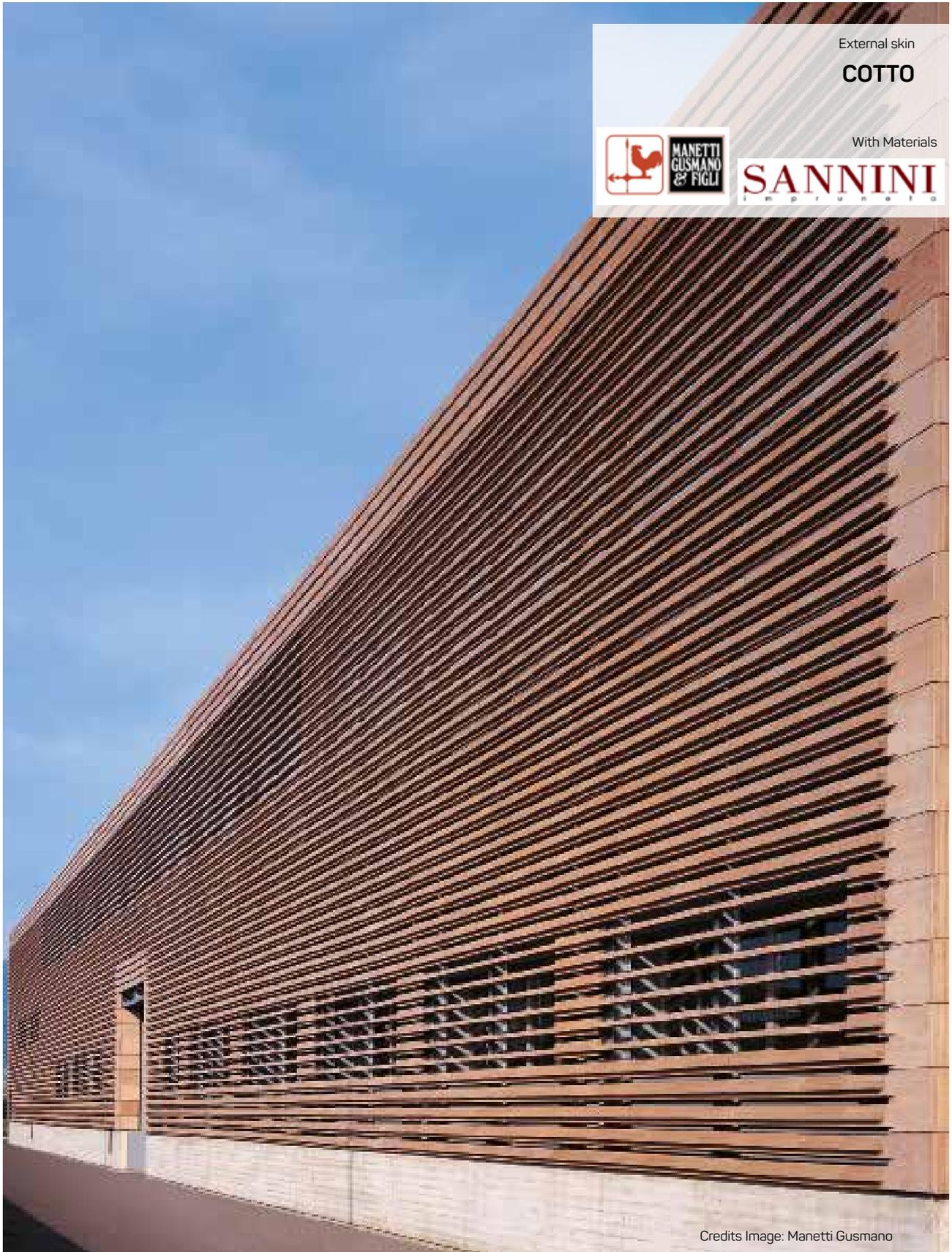


Credits Image: CODINA

ADD Wind

ADD more Surfaces





External skin
COTTO

With Materials



SANNINI
IMPIRUNESI

Credits Image: Manetti Gusmano

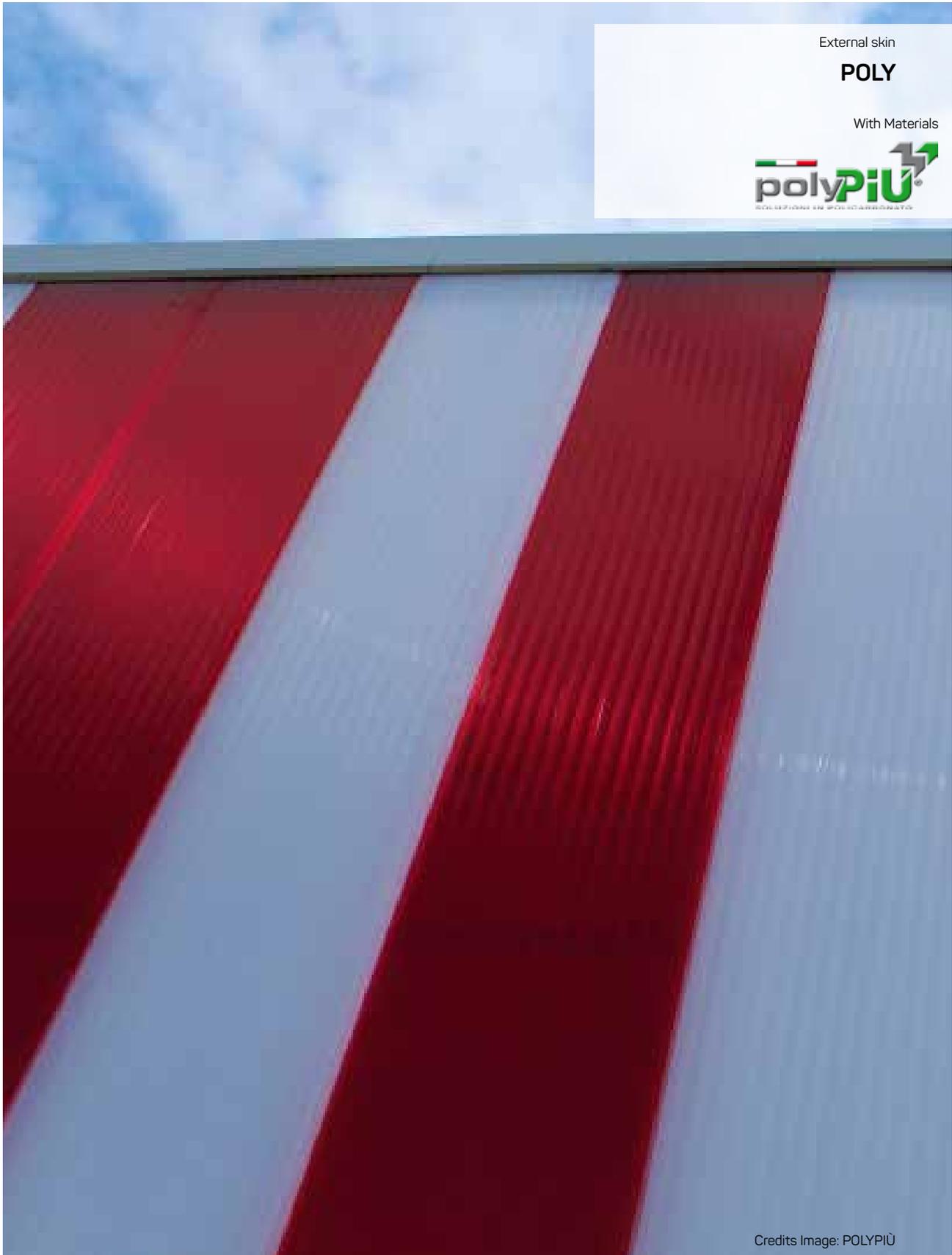
ADD more Surfaces



External skin

POLY

With Materials



Credits Image: POLYPIÙ



External skin
CIMENTO® RIALTO
With Materials
CIMENTO®

Credits Image: CIMENTO® RIALTO

ADD more Surfaces



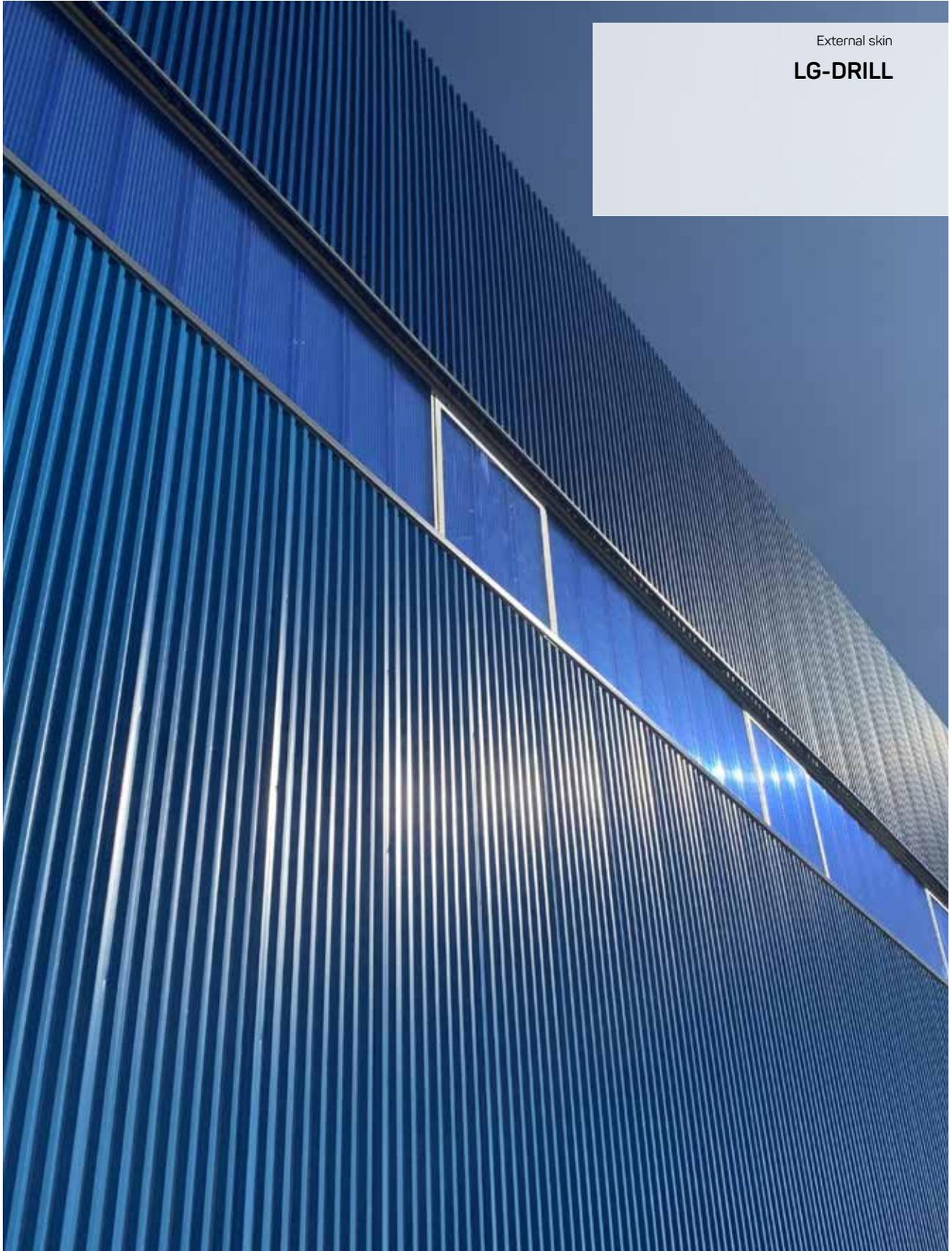
External skin

LP-DRILL

In collaboration with



Credits Image:
VYTROLMA



External skin
LG-DRILL

THE GROUP NUMBERS

“Transitioning towards a sustainable economy in the Industry 4.0 era entails significant changes. Today’s challenge is to combine the speed of digital evolution and the attention to environmental impacts with long-term goals.”

Enrico Frizzera, CEO Manni Group



Operational companies

14

Countries served

78

Customers

10.200

Investments 2018

12,3 milioni

Turnover in Euro

630,4 milioni

Employees

1.127

Tons/year of CO2eq avoided

oltre 32 mila

Square metres/year of panels sold

circa 15 milioni

Tons/year of steel purchased

circa 450 mila

Risultato attività Manni Energy 2018



MANNI GROUP

Headquarters
Sede di Verona

STEEL

● MANNI SIPRE
Mozzecane VR
Div. 1: lamiere
Div. 2: laminati e tubi
Div. 7: travi

Crema CR
Div. 8: travi
Div. 9: commercial

Monteprandone AP
Div. 6: travi

Campoformido UD
Div. 3 travi

● MANNI INOX
Verona
Div. via Righi
Div. Via Torricelli

● MANNI GREEN TECH
Verona

Houston (TX)
Manni Green Tech USA

RENEWABLE ENERGIES AND SERVICES

▤ MANNI ENERGY
Verona

▤ MANNI STORE
Turin

▤ MANNI IMMOBILIA
Verona

▤ ICOM ENGINEERING
Verona

PANELS

▲ ISOPAN

DIV. Trevenzuolo VR

Volgograd, Russia
Isopan Rus

Div. Patrica FR

Tarragona, Spain
Isopan Iberica

Guanajuato, Mexico
Isocindu

Bucarest, Romania
Isopan Est

Paris, France
Isopan France

Halle, Germany
Isopan Deutschland

Prague, Czech Republic
Isopan Manni Group CZ



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by Manni Group

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ITALY

Registered and Administrative HQ
Verona | Italy

Isopan Spa
Verona | Italy
Frosinone | Italy

WORLD

ISOPAN IBERICA
Tarragona | Spain

ISOPAN EST
Bucharest | Romania

ISOPAN DEUTSCHLAND
Halle (Saale) | Germany

ISOPAN RUS
Volgograd | Russia

ISOCINDU
Silao | Mexico

SALES COMPANIES

ISOPAN FRANCE
Paris | France

ISOPAN MANNI GROUP CZ
Praha | Czech Republic