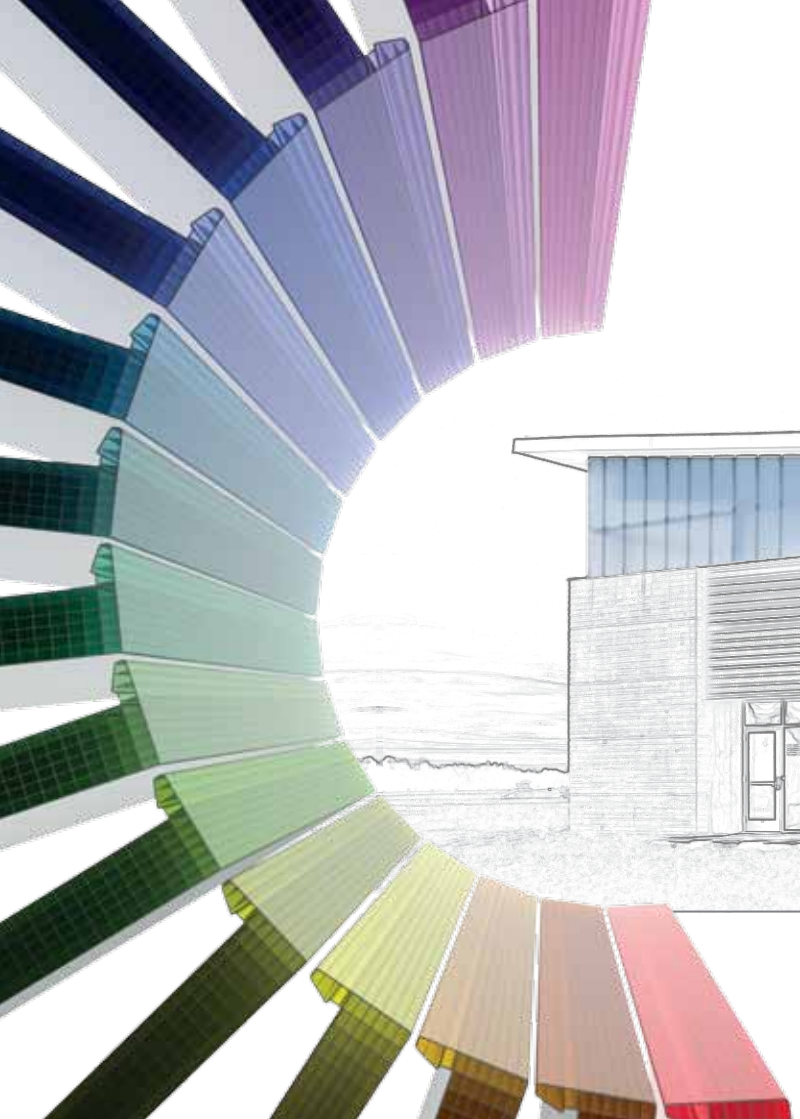
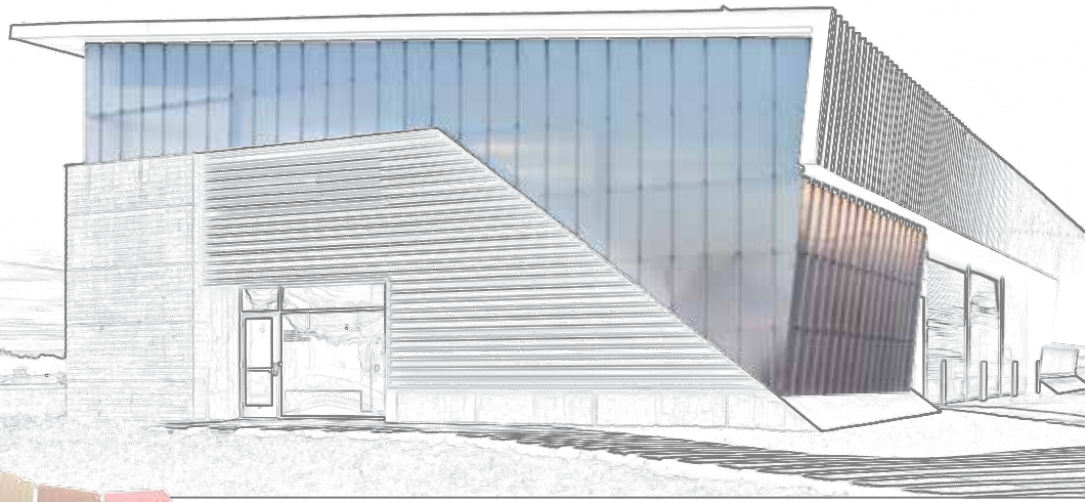
Architecture dressed in light





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POLYCARBONATE SYSTEMS & SHEETS

POLYCARBONATE SYSTEMS & SHEETS

Quality **Reiability** **Innovation** **Customization**

arcoplus®

Architecture dressed in light.

POLYCARBONATE SYSTEMS & SHEETS

dott.gallina company can give shape to your idea creating customised products suitable for each design need. A continous work in collaboration with architects and builders allow to adapt the productions capacity following the customer requirements, pleasing also the most stringet specifications. In order to meet the new architectural application requirements, it has been conceived a range of surface treatments that could improve the performance of polycarbonate panels according to the specific use.

lightness

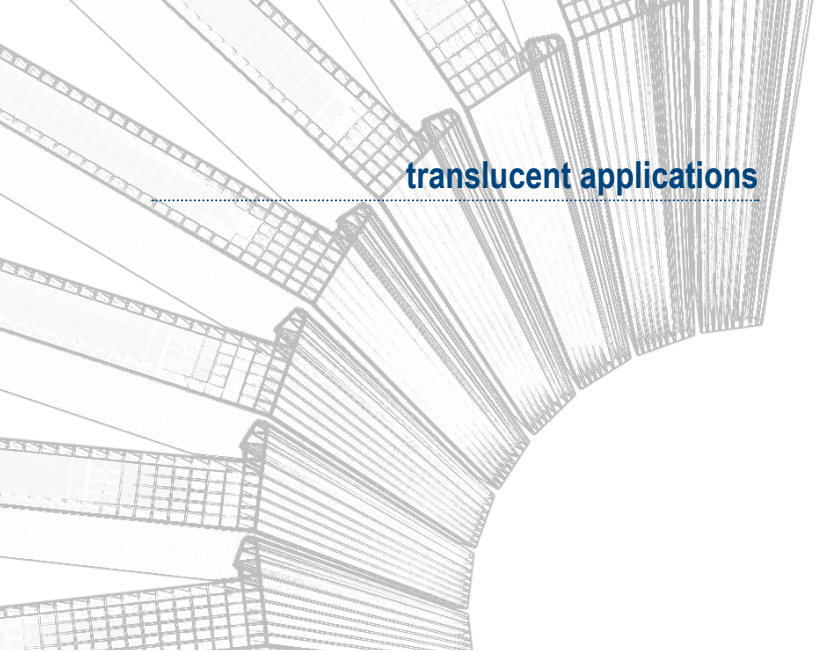
transparency

sustainability

energy saving

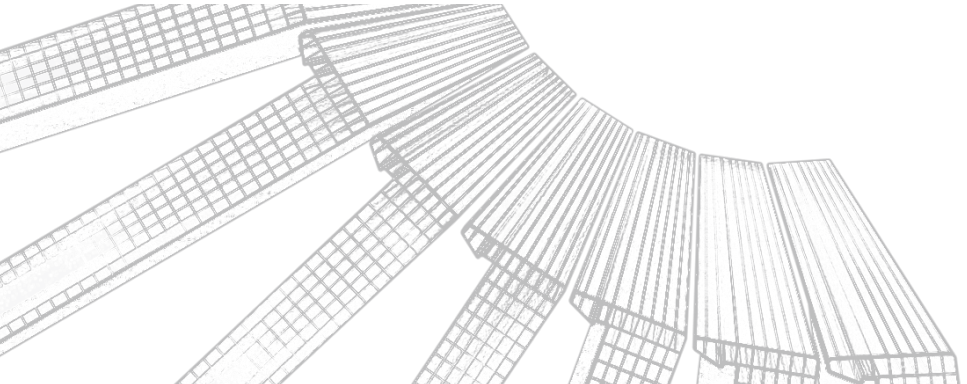
thermal insulation

natural lightning



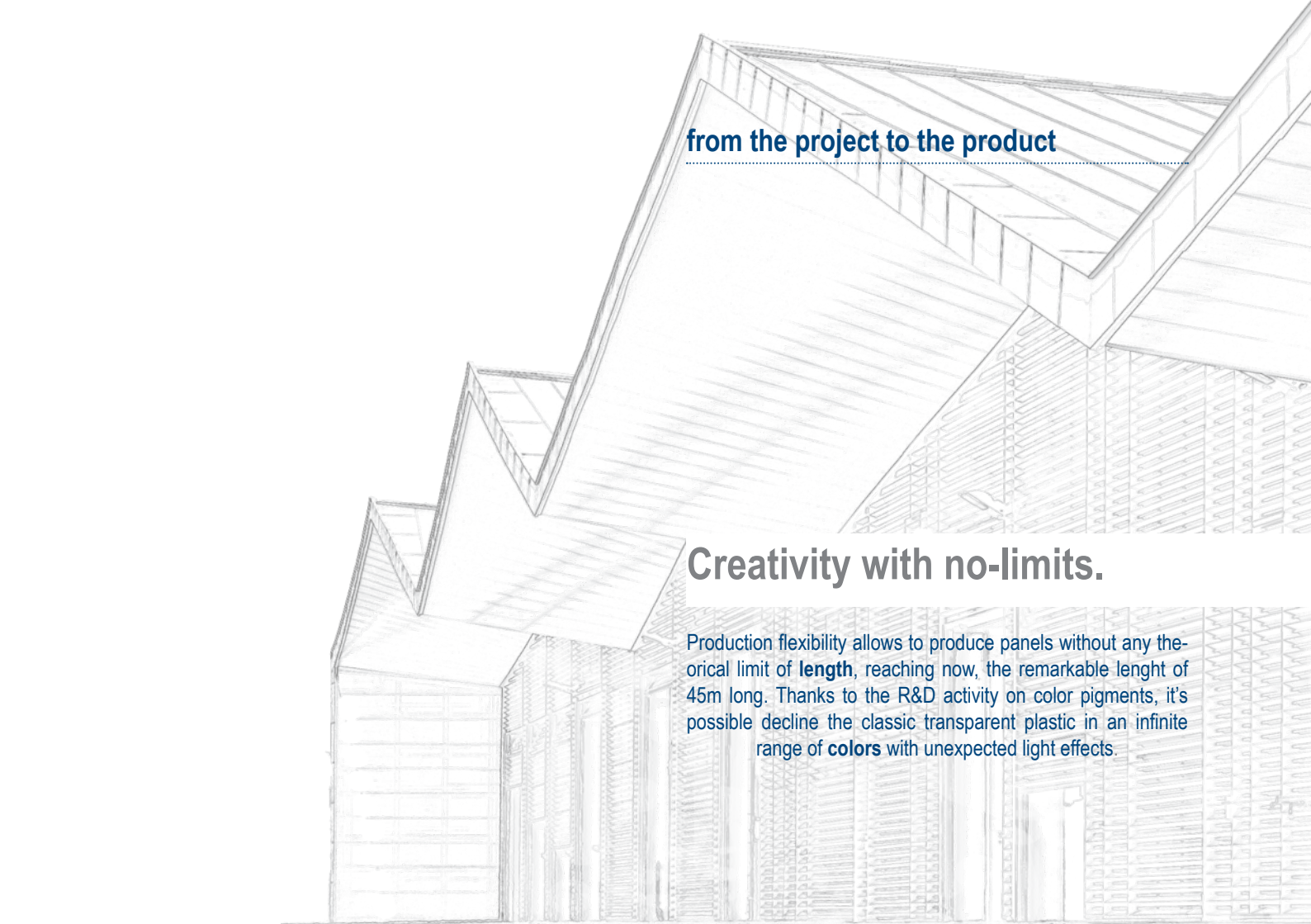
translucent applications

Enjoy the sunlight.



- continous facades
- building envelopes
- windows
- internal partitions
- curved or flat roofings
- curved or flat skylight
- canopies
- shed

from the project to the product



Creativity with no-limits.

Production flexibility allows to produce panels without any theorical limit of **length**, reaching now, the remarkable lenght of 45m long. Thanks to the R&D activity on color pigments, it's possible decline the classic transparent plastic in an infinite range of **colors** with unexpected light effects.

Sorbonne Clignancourt Université

The reconstruction project of the university center founded in 1968 is part of the urban renewal of Clignancourt district, with the aim of reconcile the educational infrastructures with the city innovation: the new design has given vitality, color and value to the neighborhood. This project is focused on the creation of a hub that includes a sports center, a library, a residential college and an auditorium that will be open to non-academic public. Well-differentiated use destinations in well-defined volumes...where the cladding colors want to identify each area and attract the attention of a specific audience to facilitate visitor orientation: yellow is used for the envelope of the library *(see photo left)*, the gold highlights the main building that houses the auditorium *(see photo right)*, finally the gray surfaces distinguishes the teaching wing and the gym.The choice of installing multiwall polycarbonate modular systems as the only material marks the contemporary identity of the Center, that requires presence of green natural elements to ensure relaxing mood.
The arcoPlus®VT system flexibility has lent to be installed for different applications: vertical stripes, continous facades, inclined walls giving emphasis to transparencies or hiding structural elements to create new aesthetic shapes.

Place: Paris, FRANCE
PC Surface: 8.400 m^2
PC panel length: 17 m

arcoPlus® VT facade


PELLIZ

IL CENTRO Shopping Mall

Here a perfect example of post-industrial recovery project for trasforming the main plant of Alfa Romeo car's factory in the largest European shopping mall. The whole design is inspired by the geometries of the ancient local cortyards architecture, where pergolas, windows, arcades become meeting places to increase the social life. This commercial gallery, in 120.000m^2 located in two floors, hosts 205 shops, 25 restaurants, several paly-areas and a medical center. The project's characterizing element is the wide translucent ceiling witch harmonizes the visual impact of the immense building. So the roofing emphasizes the perspective effect of wooden beams mesh, allowing at the same time the diffusion of natural sun light giving an extraordinay indoor uniforn lighting. In this way, visitors seem to walk along the streets of historic Italian city. The entire building was developped following strict criteria of energy saving and bio-sustainability. The goal is to create a structure that will have a more and more natural aspect as it ages, thanks to the impact of natural enery sources. PC panels have been installed to facilitate the internal solar light diffusion and the special IR treatment colud reduce the irradiation caused by traditional transparent surfaces, blocking the infrared rays and avoiding the increase of temperature inside the gallery. These performanses ensure high thermal insulation, reducing the heating or cooling costs in all sesons.

Place: Arese - MI, ITALY
PC Surface: 17.000 m^2
PC panel length: 31 m

arcoPlus® Reverso 9207

Garage Museum

Give a new value to the history... with the aim of counter the abandonment of the famous 1960s Vremena Goda, it has been relised a redevelopment project to transform the old Sovietic building in a cultural center witch includes exhibition spaces, offices, a cretive learning center for childrens, a caffee and a conference auditorium. The new eco-design is based on original elements, including briks, tiles, pillars and mosaics, wrapped with an innovative translucent envelope. The contrast between these two architectual styles presents essential indoor areas pervaded by sunlight, allowing both a considerable saving of artificial lighting cost and the integration between the natural flow of time and the unfolding of human activities, in fact the light transmission change according with the different sun positions during the day. In the same way, the external aspect of the facades combines as a mirror, reflecting in real time the landscape and the weather conditions. To realise the envelope it has been used a special full-translucent polycarbonate double-wall system with a total thickness of 950mm including vertical interspaces, that allow the installation of an air-circulation tool able to keep keep the indoor temperature uniform during the various seasions. The perfect climate comfort has been reached also through the use of IR panel surface, that increae the thermal insultaion performances, blocking the passage of infrared sun energy.

Place: Moscow, RUSSIA
PC Surface: 7.000 m^2
PC panel length: 10 m

arcoPlus® DB connect

PROTOSHOP Lamborghini

The first multi-floors industrial site in Italy to be certified in ClassA from the environmental point of view has the brand Lamborghini. This new building, dedicated to the development of prototypes and pre-series cars, is an excellent example of functional architecture where every technical aspects contribute increasing to energy saving. The design would create a distintive look for rapresenting by the use of corporate colours “absolute white and black”, reiterated on innovative materials including polycarbonate panels to create large translucent facades. Coatings and claddings have played a vital role in achieving the maximum energy class: the system arcoPlus®DBconnect has made it possible to considerably decrease the heat dispersion that you would have expected from transparent walls. While an high-performance frame infix is able to reach a thermal transmittance value of 1,2 W/m^{2}K, our DB system composed by three polycarbonate layers, separated by 2 interspaces, achieves U_t=0,62 W/m^{2}K. Morever, the IR treatment, co-extuded into the panel mass, absorbs the infrared component of solar radiation, preventing the greenhouse effect, but permitting the passage of the visible light component. We must not forget the benefits in terms of visual comfort for workers who benefit from the maximum natural light diffusion during all the day without annoying gleams, also reducing the need for artificial light sources.

Place: Sant’Agata Bolognese, ITALY
PC Surface: 5.000 m^2
PC panel length: 5 m

arcoPlus® DB connect

Cluj Sport Hall

The multipurpose hall has been designed both to be aesthetically integrated with the others architectures of the sport district where is located and to be easily joint with the city center in order to really be used by citizens. The project is characterized by a powerful urban design aiming to represent the conflicting-values of the present contemporain generations, using the balance between transparency and opacity, warming light effects and regular geometries. This meaning takes shape especially during the night, when the building looks like a lamp that attracts attention and calls to itself the people who want to spend time interacting with friends and doing physical/cultural activities. The uniqueness of this envelope cames from the the union of two surfaces: the external one made with a huge wire mesh and the internal one composed by a double layer of polycarbonate arcoPlus® intelocking modular system in order to guarantee the maximun light trasmission, thermal insulations and waterproofing protection such as a skin. A project target is to reduce the impact on the surronding environment using a energy saving policy and producing the most of natural resources: the use of PC paneling has been necessary to achive this goal, in fact it has been possible to reach U_t value of 1,7 W/m^{2}K.

Place: Cluj Nepoca, ROMANIA
PC Surface: 18.500 m^2
PC panel length: 13,5 m

arcoPlus® 547


>>Render

Beacon of Light

The Beacon will be an exciting and inspiring education, training and sports facility and an important catalyst for the wider regeneration of this quarter of the city... Facilities will include sports halls, football pitches, flexible informal learning spaces, education suites and a 'players' lounge', health and wellness centers. The Foundation of Light, Sunderland AFC's official charity, wants the building to use "the power of football to inspire people and change lives," helping people to gain skills and qualifications, while teams will work with families and re-energise communities. The Beacon will give an important platform to expand these pioneering programmes focused on community mutual-aid.This centre will be the first of its kind in the UK and will welcome through its doors thousands of children, young people and adults from across the North East every week. The venue is expected to welcome over 300.000 people through its doors every year.
The striking cube-shaped development will be built nearby the Stadium of Light and it will be spread over three storeys occupying 4,75 hectares. The translucent envelop occupies the upper part of the building with the double purpose of maximize the natural lighting of the football playground during the day time and of draw attention calling citizens during the night time event.


>>Real building

Place: Sunderland, ENGLAND
PC Surface: 4.300 m^2
PC panel length: 18 m

arcoPlus® 626

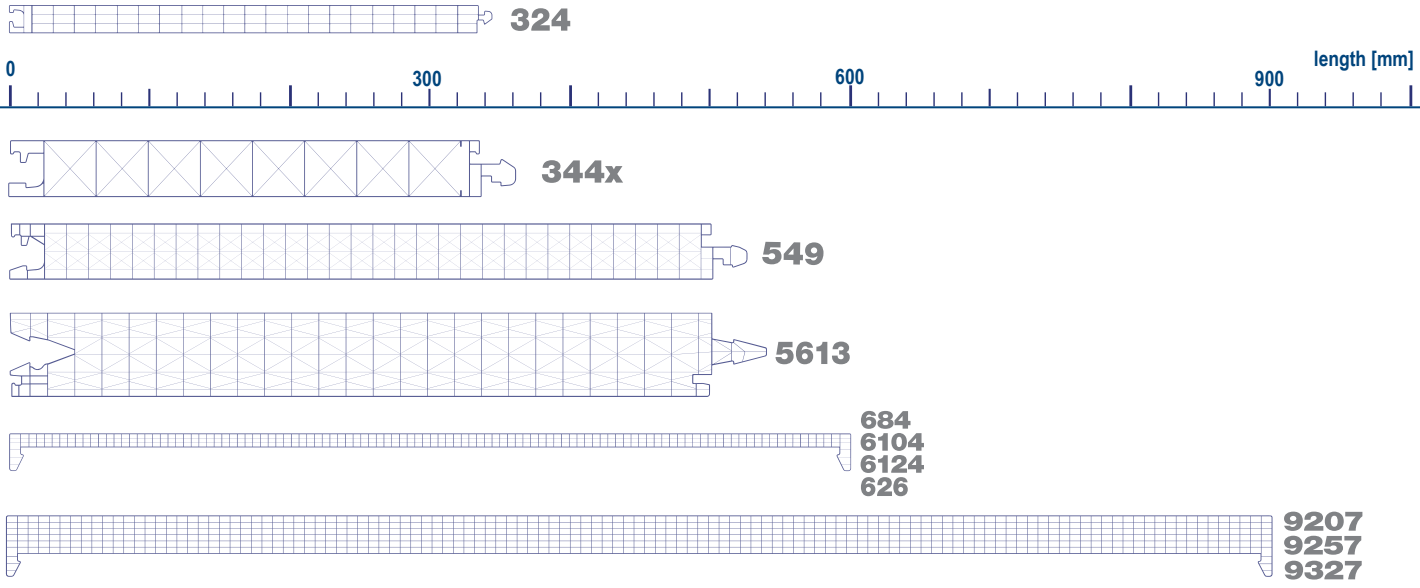
© photo by Kate Joyce studios

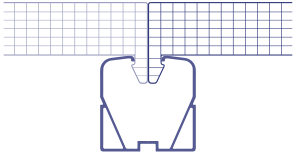
MORGAN Station

The elevated station at Morgan and Lake Streets is located in the geographic center of Chicago's Fulton Market District and represents the new behavior of the multi-ethnic neighborhood where an industrial area has been transformed in a modern melting pot urbanisation with emerging residential and retail approach. To reinforce this distinctive character, material selections of the project take cues from nearby steel, glass, concrete, polycarbonate, granite and cast iron used in adjacent structures. Accessibility, durability, and easy maintenance were prime functional themes. Materials were chosen to reinforce the feeling of openness. Platform canopies are constructed from arcoPlus® 626Reversò translucent polycarbonate sistem providing weather protection and natural lighting advantages but keeping supporting structure costs down thanks to the panel low weight. Moreover, the anti-glare AR treatment, coextruded directly into the panel surface so that it remains unaltered over time, allows to diffuse the sunlight avoiding glare or reflections that could disturb drivers and travelers. The location with its sweeping views of the skyline creates both a literal and metaphorical gateway to the Chicago Loop serving a strong emblem of the modernity of Chicago's mass transit system.

Place: Chicago, USA
PC Surface: 1.900 m^2
PC panel length: 5 m

arcoPlus® Reversò 626





arcoPlus®**9207-9257-9327**

th. 20|25|32 mm

U$_t$ 1,7|1,4|1,3 W/m²K

arcoPlus®**626**

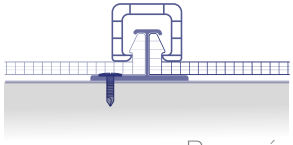
th. 20 mm

U$_t$ 1,7 W/m²K

arcoPlus® **684-6104-6124**

th. 8|10|12 mm

U$_t$ 3,0|2,7| 2,5 W/m²K



Reversó

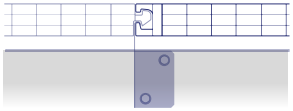
arcoPlus®**684-6104-6124**

th. 8|10|12 mm

U$_t$ 3,0|2,7|2,5 W/m²K

polycarbonate Modular Systems

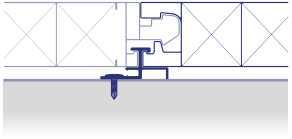
technical sections with multiwall panels



arcoPlus®**324**

th. 20 mm

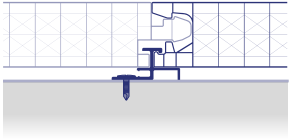
U_t 1,8 W/m²K



arcoPlus®**344x**

th. 40 mm

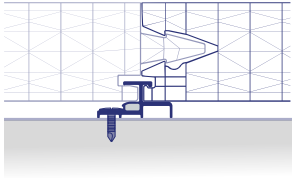
U_t 1,7 W/m²K



arcoPlus®**549**

th. 40 mm

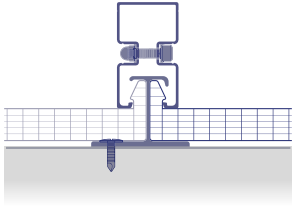
U_t 1,0 W/m²K



arcoWall®**5613**

th. 60 mm

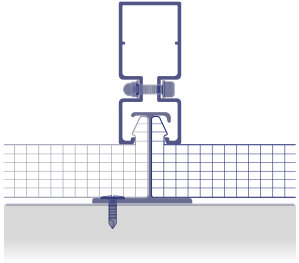
U_t 0,7 W/m²K



arcoPlus® Reversó **626**

th. 20 mm

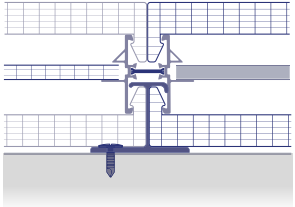
U_t 1,7 W/m²K



arcoPlus® Reversó **9207-9257-9327**

th. 20|25|32 mm

U_t 1,7|1,4|1,3 W/m²K

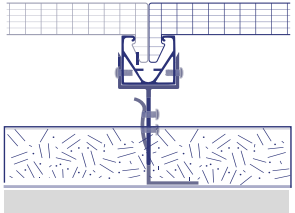


arcoPlus® **DBconnect**

th. 90 mm *[th.panels 20+8+20mm]*

114 mm *[th.panels 32+8+32mm]*

U_t 0,7-0,5 W/m²K



arcoPlus® **VTfacade**

th. 20|32 mm

U_t 1,7-1,3 W/m²K

surface treatments

AR

anti glares
for visual comfort

IR

IR solar rays blocking
for heat control

UV
UV-MATT

light diffusion
with silk soft touch

AB
ABSOLUTE

opaque covering surface
for cladding apps

ANTIGRAFF

anti scratch protection
to prevent surface damages

UV
TECH

sun exposure resistance
with special warranty

BC
BICOLOR

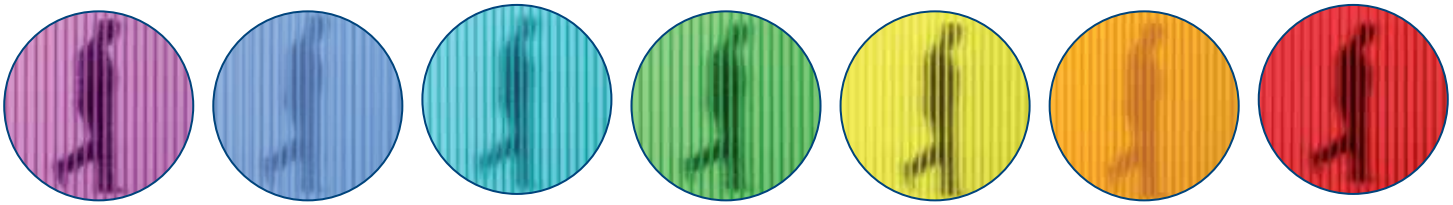
double color
on two sides of same panel

Style your projects the way you like.

In order to meet the new architectural application requirements, it has been conceived a range of surface treatments that could improve the performance of polycarbonate panels according to the specific use. By analyzing the critical issues, we can offer a product that anticipates the user's needs, providing solutions to ensure climatic comfort, visual comfort and energy savings.

INFINITE TRANSPARENCY DEGREES

A rich wardrobe of nuances



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