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RIVER CLACK NEWS

I.P.

A Portuguese with smooth curves

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A Portuguese with smooth curves

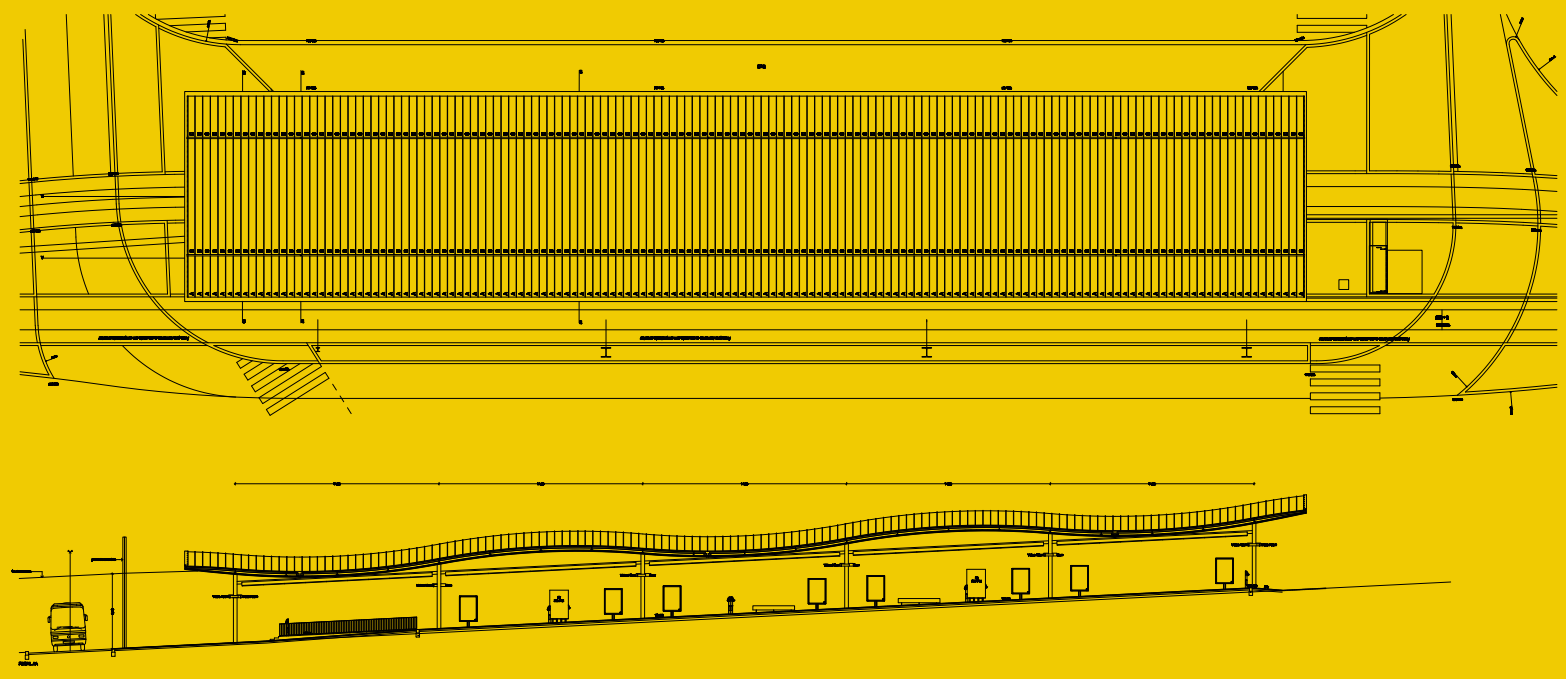
INTERFACE D. JOÃO II Linha D | Metro do Porto Vila Nova de Gaia - 2010

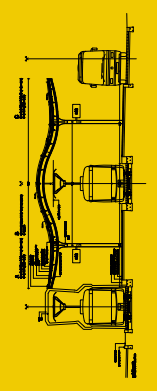
Roberto Ragazzi
Correia_Ragazzi Arquitectos

The metro interchange is located on the Avenida da República, the main axis of Vila Nova de Gaia, a Portuguese city, south of the Duero river and adjacent by the city of Oporto. The INTERFACE D. JOÃO II is part of the D Line of the Metro do Porto, the transport system of the metropolitan area of the same name that alternates underground sections to subsurface sections, where it acts as an intermodal hub station with intercity buses through a series of covered parallel platforms.

The architectural design of the Rogério Cavaco Arquitectos's has provided a unique continuous covering, whose deceptively simple plan, rectangular, surprisingly catches the eyes with its sinuous profiles accompanying the accentuated longitudinal slope of the land and the

transversal succession of the public transport lines and their platforms.
The extreme geometric complexity of alternating concave / convex / concave surfaces along both axes allowed us to test the technical limits of the installed material: curved Riverclack 55 sheets in mill finish aluminum with 0.7 mm thickness, alternate different radius of curvature to variable slopes, were fixed with special brackets for the regulation of the tensions and transversal compressions.
Two long sinuous gutters of 80 meters each separate the lateral sheets (concave) of 3.10 meter length from the central sheets with triple curvature (concave / convex / concave) of 8.60 meter length.
The total area covered was more than 1,200 square meters; it is expected soon the realization of the next station, about 680 square meters.
Technical advice was provided by architect Roberto Ragazzi along with ISCOM, while the installation of the Riverclack 55 system was performed in an exemplary way by the company INSTALCLACK S.A. (Instalclack.sa @ gmail.com).





A
CHAPAS RC55 TIPO "A"

150 UN. (146+4)
L=3.120 mm

257,40 m2

B
CHAPAS RC55 TIPO "B"

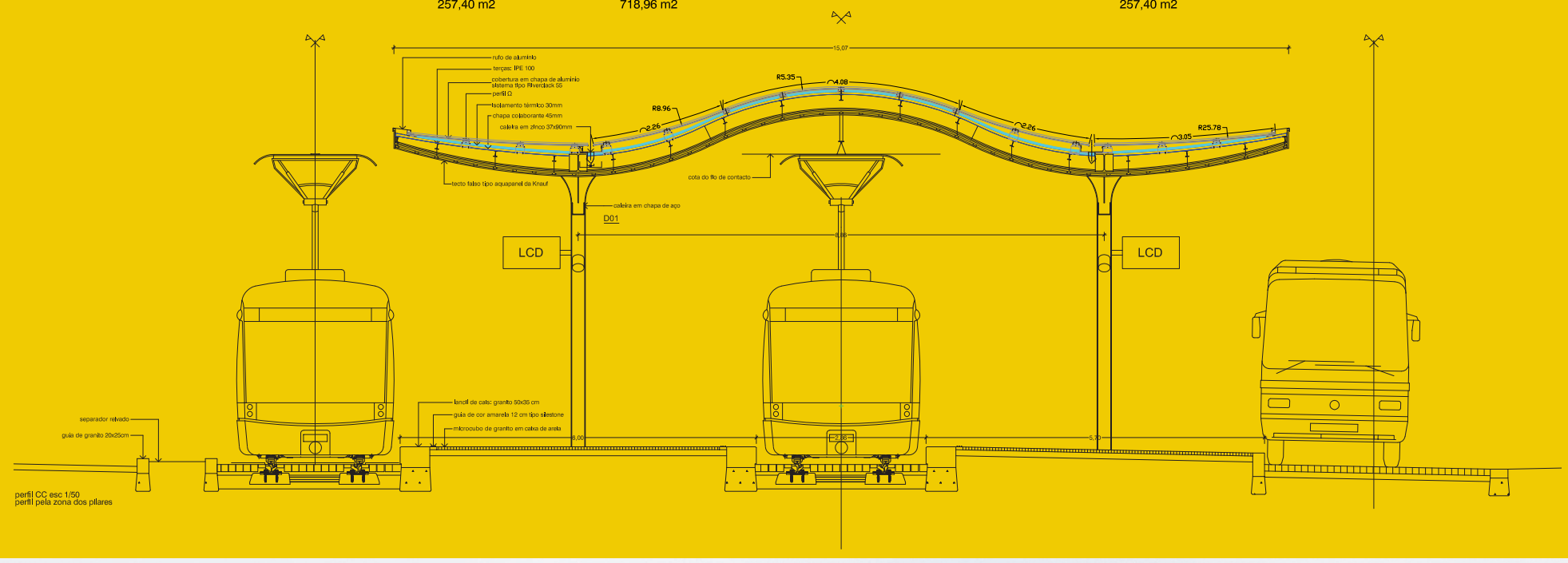
152 UN. (146+6)
L=8.600 mm

718,96 m2

C
CHAPAS RC55 TIPO "C"

150 UN. (146+4)
L=3.120 mm

257,40 m2



The renaissance of an educational complex in Croatia

School Sport Hall „Veli vrh“ in Pula

“If at least 10 pupils from that school doesn’t end up in Harvard, then we have done nothing!“
Idis Turato, architect

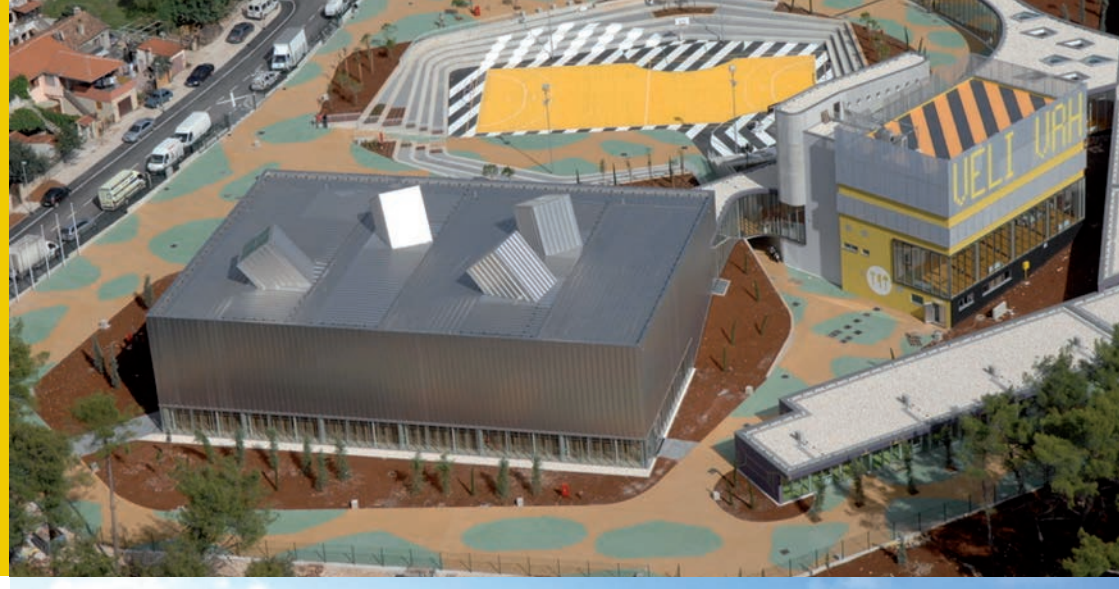
After the devastating conflagration of „Primary school Veli vrh“ on February 24th 2008, the City Pula has done everything to build a new one as soon as possible. The new school populary called „a five stars school“ has been built in only 13 months and opened on September 6th 2010.

The new school complex with numerous activities involves, of course, a sport hall with telescopic scaffolds and about 1 300 m2 of floor area wich can be devided with partitions for different purpose like football, volleyball, field-ball, basketball and badminton.
The design was coordinated by the project author, Idis Turato from Randi_-Turato d.o.o., while the main contractor was Strabag d.o.o.. Carefull planning, coordination and good communication among the parties were essential to achieve the sucessful result.
The idea to adopt the same techniques on facade, roof and the skylights, was pursued by the architect so as to give an aesthetic and material continuity to the whole Sport Hall building.
Main contractor adopted a technical solution for roof and facade cladding based on Riverclack® system proposed by the roofing company Lego-lim from Croatia. Their proposal was found to be the most suitable by quality and price, complying with all project requirements and criterions as well as meeting strict demands such as durability under severe weather conditions including strong winds and light corrosive atmosphere due to closeness of the sea.

Preparation and construction time were very short in order to be ready for the official opening on September 6th 2010. The easy and quick installation, besides the other exclusive qualities of Riverclack® was a key factor for success.
Adequate acustic and thermal properties were required As the sport halls are usualy used for different festivals and ceremonies, it was very important to provide proper acoustic absorption systems by using perforated corrugated panels on the inner side of the hall with combination of felt and sound absorbent insulation.

The biggest challenge was to fulfill the architect demand that all corners of the building including skilights should look the same, and the lightest possible without any kind of braiding (bordering, tag, edging, orlare). For this purpose, a special corner element was developed from standard Riverclack® sheets as well as a handy bending tool for bending on site. For achieving such corner instalation the subconstruction on facade was made with different thickess of insulation layer and had to be constructed faultlessly without even a one milimeter deviation. On skylights, as their steel construction

Filip Baborski
Dharma InŽenjering d.o.o.



have already been made, a combination of Riverclack® and Rivergrip® sheets was used in order to achieve the perfect module.

Other demand from the architect was to make a flat roof wich is almost impossible using standard metal roof products therefore the choice of Riverclack® was driven by the exclusive draining channel capable to whitstand a full water submersion of the roof. The Riverclack® 55 sheets, the longest of 26 m and thickness of 0.7 mm, were installed in a 1.2% slope configuration generated by a. subconstruction of 2 mm galvanized steel Z profilesDuring the exploitation period skylights windows will need to be washed, lightning rods will need to be checked, the gutters will need to be cleaned. Riverclack® is strong and safe enough to be fully walkable, with no need for specific walkways or underneath supports The use of Riverclack® sheets allows the full integration photovoltaic panels on the roof even in a separate time if required. Solar panels will be installed without penetrating the roof or compromising the elegance of the hall, while the watching pupils from elevated building of social sciences have a chance to think on ecology and renewable power sources.

B&Q Headquarters, Eastleigh

The UK's first horizontal River-Therm® Wall

Mark Thomson
Marketing Manager at CAGROUP

When DIY giant B&Q embarked upon its state of the art headquarters to bring together its 1,500 staff it wanted to create a base that was a long term investment which didn't have a negative impact on the environment.

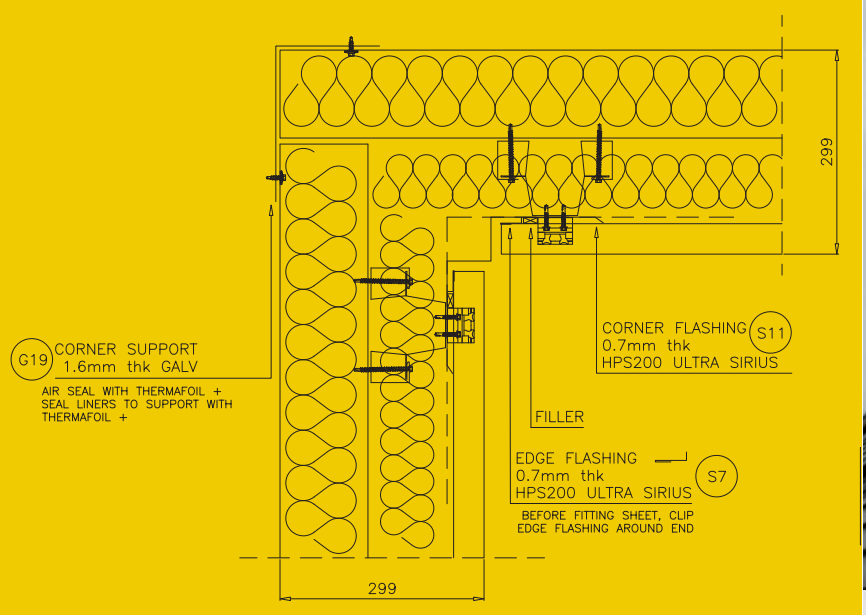
Having worked with CA Group since 1999, it looked to CA Building Products to provide a sustainable and aesthetically pleasing solution and to CA Group's contracting business unit, SCS, to provide a high quality installation.

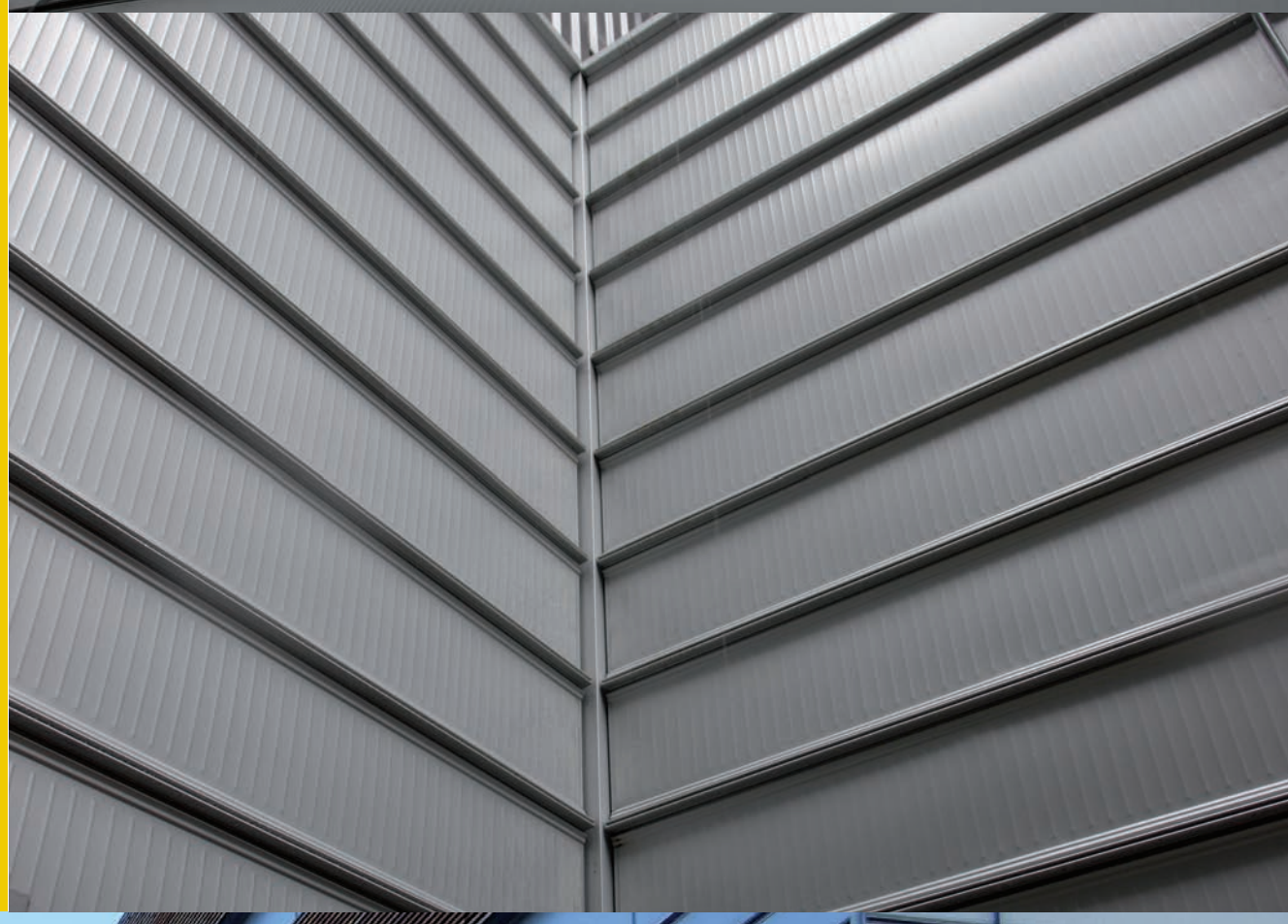
At the request of the architect a mixture of cladding systems including Twin-Therm® and River-Therm® were used on the facades to give the building a varied look.
Twin-Therm® from CA Building Products is a cost effective, reliable solution that gives guaranteed U-values.

River-Therm® is usually supplied as a roof cladding system but in this instance it was installed horizontally on the walls then some sections over-clad with timber. It is the first installation of River-Therm® horizontally on the walls in the UK although it has been selected on many prestigious projects on the continent to enhance the aesthetics of a building.

Sustainability and environmental factors were key on this build making CA Building Products Twin-Therm® and River-Therm® perfect for the metal facades. Both Twin-Therm® and River-Therm® are supplied with the Corus Confidex Sustain® Guarantee, ensuring all of the avoidable carbon emissions created throughout the life of the systems are offset by investing in environmental projects worldwide. Both systems are also fully recyclable to enable a low 'cradle to cradle' carbon footprint and are future proof.

SCS played a major part in the installation of the entire facade of the Head Office which is to house a merchandising laboratory, training centre, meeting room suites, fitness centre, crèche and kitchens, plus roof top car parking for 918 cars. They ensured that all elements were completed to a high standard by interfacing with other envelope contractors supplying louvers, glazing, timber and asphalt. This quality workmanship was a key factor in delivery the standard B&Q have come to expect from CA Group.





Project:	B&Q Headquarters
Client:	B&Q
Project Architects:	BDP
Main Contractor:	Sir Robert McAlpine
Roofing Contractor:	SCS
System Manufacturer:	CA Building Products
System:	Twin-Therm® and horizontally laid River-Therm® walls with a timber cladding overlay
Material:	Twin-Therm® in Corus Colorcoat Prisma® in Zeus and River-Therm® in Corus Colorcoat HPS200 Ultra® in Sirius

Borg El Arab International Airport chooses Riverclack® for its modernization

Paolo Massi
Export Manager at ISCOM

The new Alexandria Airport confirms the increasing appreciation for Riverclack roofing system in this type of infrastructures.

Last year we dedicated an entire issue of our Newsletter "Riverclack NEWS" to Airport Roofing, given the consistent number of airports that have been roofed with Riverclack over the years. We couldn't imagine that very soon, if we wished, we would be able to write another monographic issue on the subjet including many new airport buildings. Borg El Arab Airport is in fact just the first in the list of new airports that in 2011 will see Riverclack system providing their terminals with a nice, reliable and long lasting roof. Amongst others, a Riverclack roof has been chosen also for the 70.000 sqm terminal of the new Hurgada Airport whose completion is expected in late 2011.
Borg El Arab Airport is located 40km from Alexandria, Egypt's second largest city. Inaugurated in 1998 BEA Airport has been for more than 10 years secondary to Alexandria's main airport El Nouzha. Over the years the increase of passengers and cargo business made El Nouzha begin to suffer from its inadequateness: the modernisation and expansion of the secondary airport Borg El Arab was the response to the critical situation. The upgraded terminal has become the main airport for Alexandria, replacing EL Nouzha.
An arc shaped roof with a curved airside facade is the main architectural feature of the terminal building. The glazed curved facade not only generates a dynamic interior space but also allows the accomodation of more wide bodied aircarfts.
Polytech Egypt, Iscom's exclusive distributor in Egypt, provided the arc shaped roof with a Riverclack RAL 9006 aluminium sheeting 0.7mm that was also used to clad on top the fingers' tunnels.
Japan Airport Consultants and NACO were the main designers of the modernisation plans while the contract was awarded to Orascom and Besix Group joint venture.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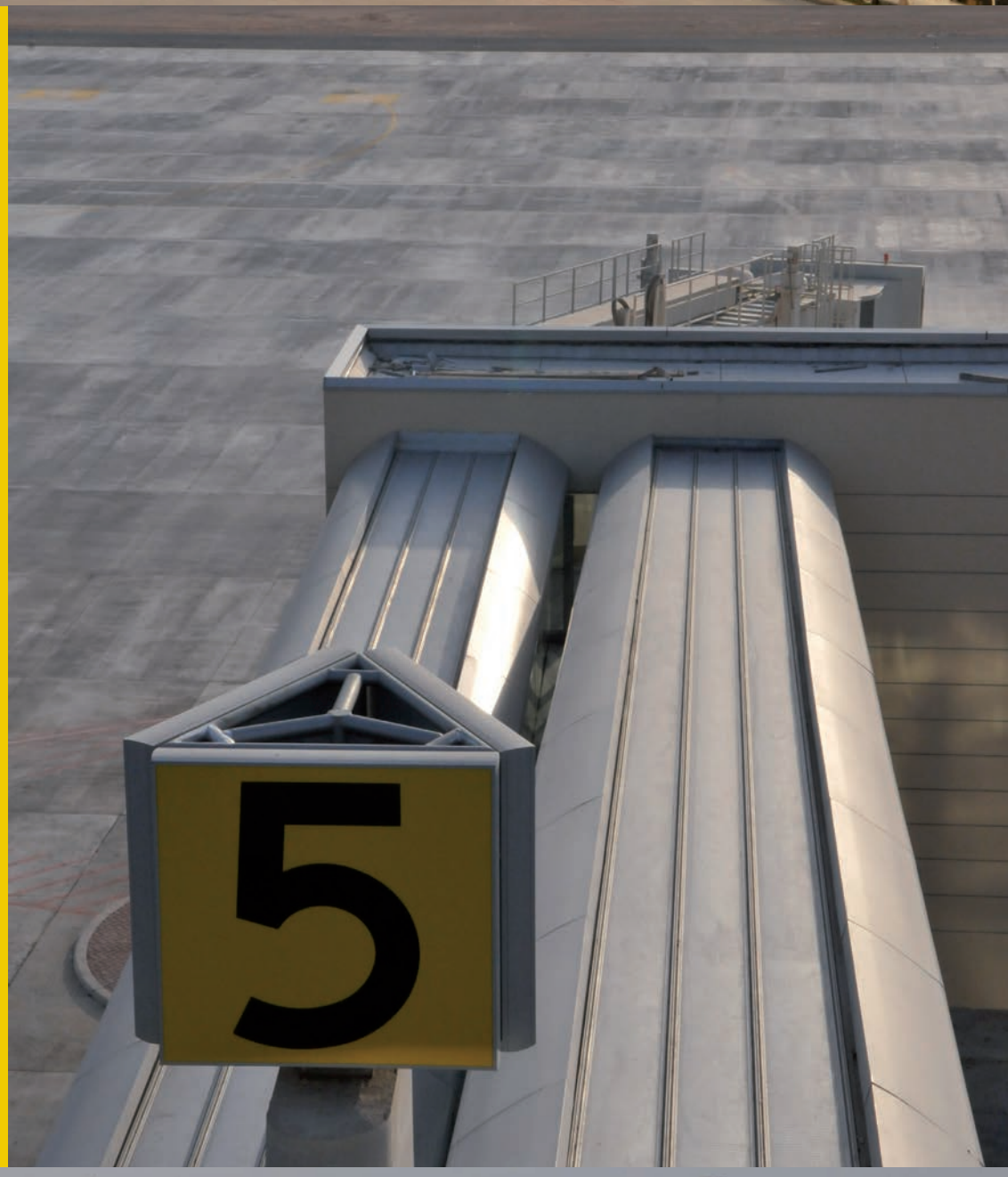
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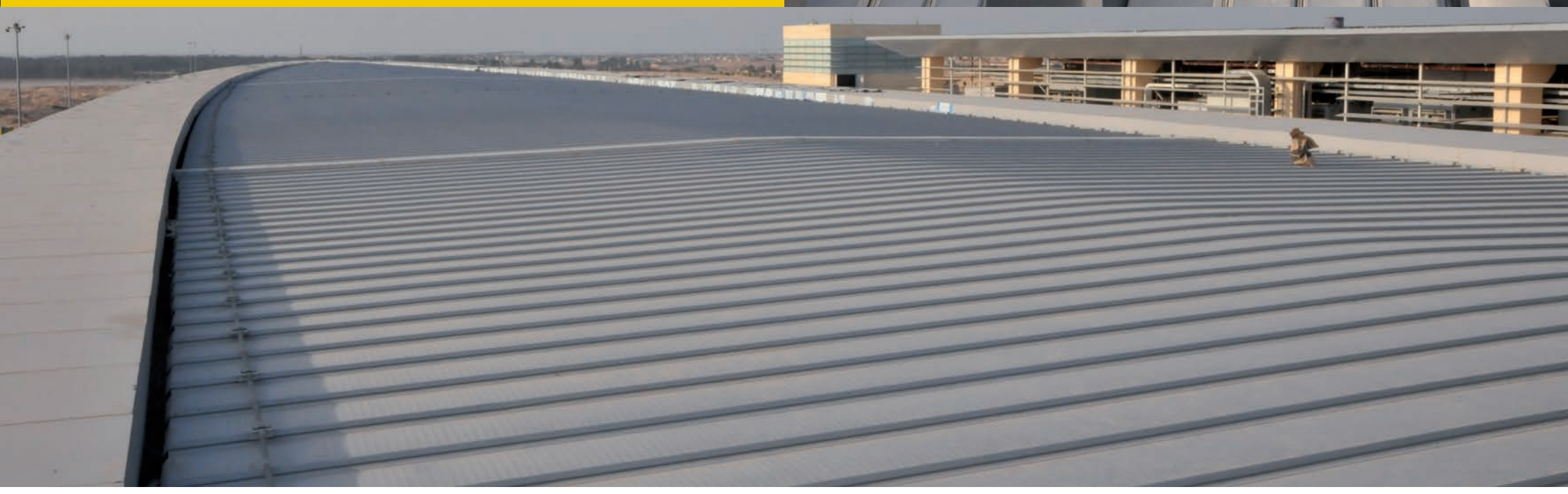
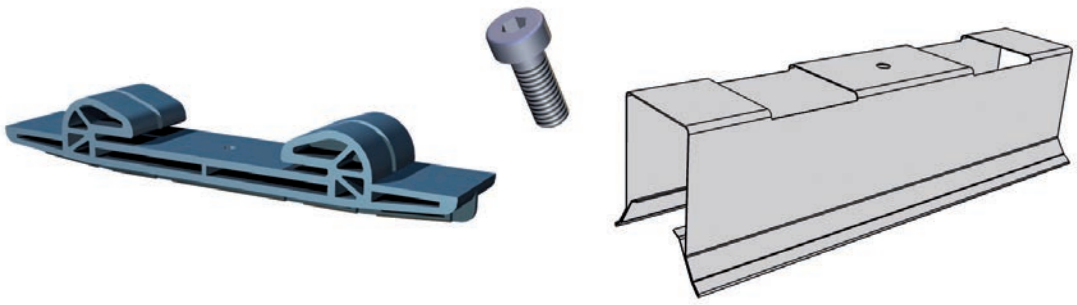




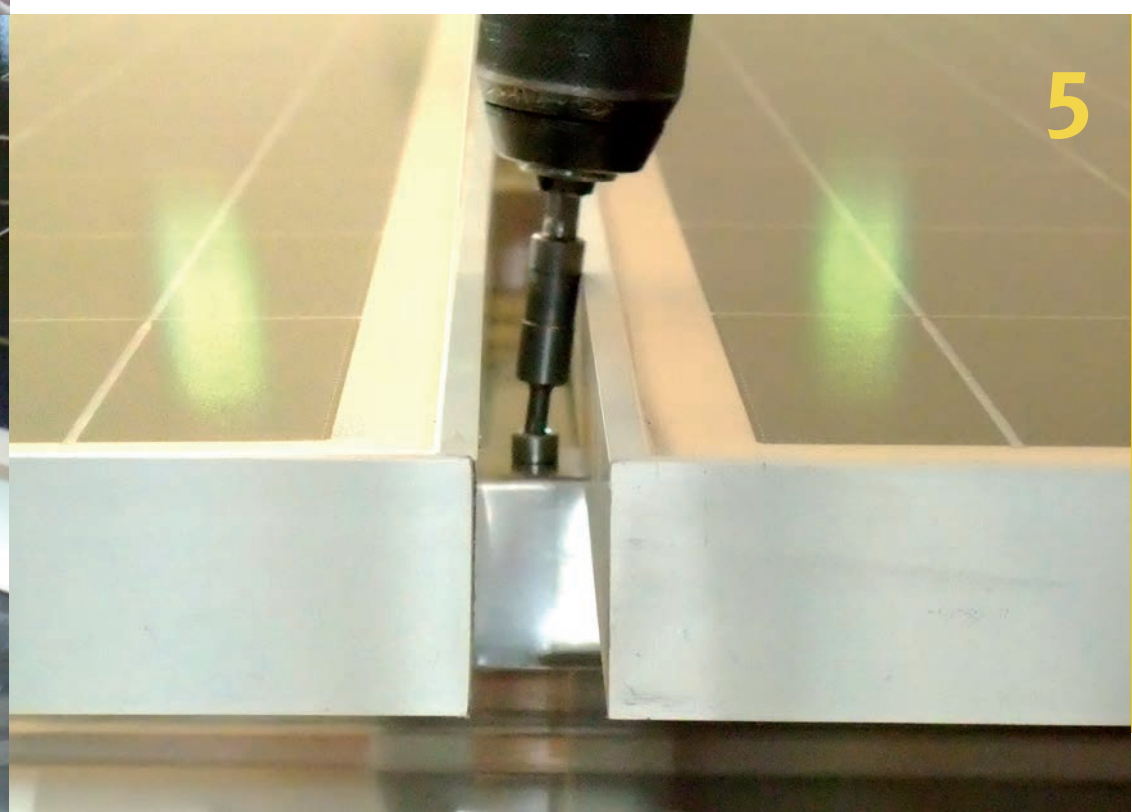
Climpo, so simple, it's genius.

Paolo Massi
Export Manager at ISCOM

Designed to prevent perforations of any kind when mounting framed PV panels on a Riverclack roof.

After the innovative Elios, Elios Deck and Krystal integrated solar roofing systems, the last born in the Riverclack Solar Roofing family is an accessory ,at the same time simple and ingenious, which allows the application of any kind of framed PV panel to the Riverclack roof.
Climpo is composed by a polyamide two slots bracket, a locking metal profile in aluminum alloy 5754 and a blocking screw which keeps the PV panel's frame in position into the slots, preventing any sliding.

The geometric locking action of the aluminum clamp allows to secure the polyamide bracket to the roof profile. The Framed PV panel is then fastened to the polyamide bracket and tied up by the screws.
Compared to other supporting accessories for PV Panels Climpo is easy and quick to install, it allows thermal



movements and above all it is cost saving by eliminating the need to mount heavy frames on the roof. The last but not the least Climpo allows to remove and replace a PV panel in any part of the roof at any time.

The combination Riverclack roof and Climpo provide an integrated highly reliable solution for the installation of a Photovoltaic plant, given the total absence of through perforations at any level from the roof metal sheeting to the PV panels installing. Even additional electrical devices can be, in case, placed on top the roof always by using special clamps to be clipped into the roof system external profile. All Riverclack Solar Roofing systems and accessories include in fact SNAP-IN mechanisms ensuring beside a quick, solid and functional installation, a long lasting roof.