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I.P.

# RIVER CLACK NEWS

## COVERING THE ACTION

# Riverclack's High Scoring Sport Facilities





## COVERING THE ACTION

### Riverclack metal roofing for sports facilities

Sports facilities are the pride of many local facilities, both for the image value they offer and due to their high visibility to the public.

Sports complexes are a costly investment that often only pays off after long periods of time.

For these reasons the roofing of a sports building is an aspect to be treated with due care.

In addition, the roof often takes on a significant architectural value and is usually the main feature of the building

Riverclack, with its patented joint drainage sheets, has been the solution for hundreds of sports facilities around the world, covering the stands of stadiums, gymnasiums, swimming pools, and playgrounds.



# COVERING THE ACTION

Riverclack metal roofing for sports facilities.



*La Flota swimming pool, Murcia – Spain*



*Lansingerland Swimming Pool, Lansingerland – The Netherlands*

In extreme weather conditions, where heavy rainfall and snow accumulates, a combination of strong winds and water could undermine the roof's integrity. Riverclack provides the customer and the client with a guarantee which has meaning.

Every Riverclack roof is "PV ready" which allows the installation of any photovoltaic technology system without perforating the metal roof sheets.

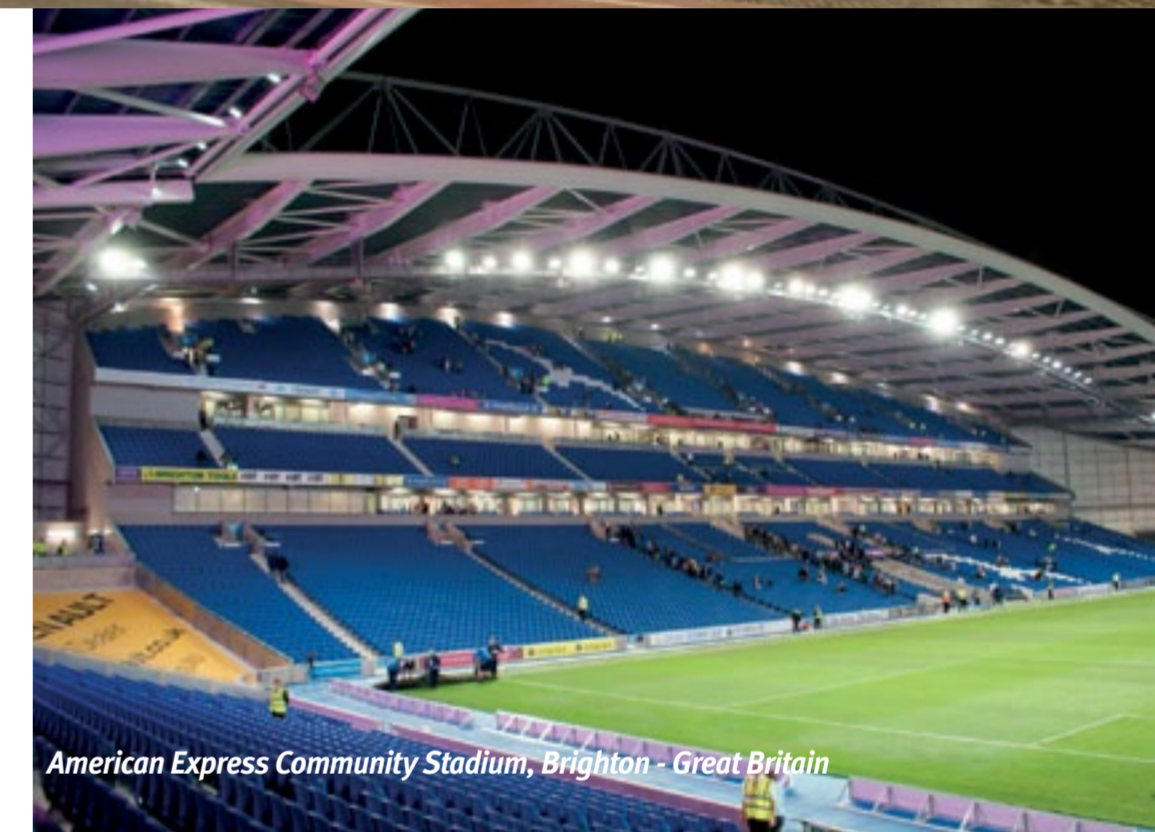
### Riverclack and Swimming Pools

Among sports facilities, swimming pools require well thought out detailing because in addition to the typical problems of any enclosed building are those related to its specific intended use.

Environments with high humidity and a particularly aggressive internal atmosphere due to the chlorination of water, make the use of an appropriate roof build-up essential for the efficient functioning of the facility. For this reason Riverclack work with renowned international companies such as Euramax and Foamglas to provide the appropriate solution.

The opportunity of producing sheets on site, using a mobile profiling machine enables the creation of unique sheets of any length (over 100m) and at the same time responds to the aesthetic and functional needs of large-scale roofs almost always characteristic of sports facilities building types.

The experience of ISCOM (parent company of Riverclack) and its consolidated business partners in design assistance and when required, in the direct execution of works around the world, is another key element that makes the Riverclack option a winning roof for sports facilities.



*American Express Community Stadium, Brighton - Great Britain*



*Larissa Stadium, Larissa - Greece*



*Morlaix swimming pool, Morlaix – France*



*Ypenburg Gym, Den Haag – The Netherlands*



## Being Flexible Scores. Customized width sheets to meet with design requirements at Kamchya Sport Centre

Alessandra Lugli  
Technical Support Engineer at  
ISCOM

The new Sports Centre has been built in the seaside resort of Kamchya (Bulgaria) between the forest of a natural reserve and the Black Sea coast.

The complex was conceived to provide conditions for practicing several sport activities all year round for the visitors.

The concept of this project was of OJC "St. Petersburg zonal research and design institute of housing and civil buildings" and it was adapted in correspondence with Bulgarian Standards by a Bulgarian design company.

The Sports Centre consists of three separate buildings ("Swimming Pool", "Administrative building" and "Ice Skating Hall") whose shape in horizontal plan is rectangular while the oval shape resulting from the roof structure create an

architectural image in unison with nature.

The structure of the building is a compound of concrete and steel for the floors while the roof is composed of arch shaped steel trusses and a system of horizontal and vertical bracings. What is typical of the roof is its partitioning into modules resulting from skylight placement, that's why it was necessary to develop and installed customized width Riverclack sheets to be combined with standard Riverclack 55.

The oval shape of the roof is created by two rows of variable radius sheets (from 3 m up to 76 m), at top of the roof we installed straight sheets self-bended to suit the radius of the structure, while at the connection between roof and façade we installed sheet curved mechanically.

As the longest sheet is 70 m on site production allowed us to produce sheets exceeding the maximum transportable length. Also the curving process was organized on site to adapt each radius to suit the arch shaped steel trusses. Because of its coastal location, the sheets are made of aluminum alloy 5754 PVDF 3 coated that have excellent corrosion resistance to sea atmosphere.



- Designer: Design studio
- Investor: SOK Kamchya EAD
- Location: Res.complex Kamchya, municipality Avren

### ROOF

- Surface: 10.000 m<sup>2</sup>
- Profile: Riverclack 55, Riverclack 50 h.46
- Material: Alu 0.7 mm 9006 PVDF 3L



# Slovenia: a modern gym in a typical rural village

Sasha Snejf

A young team of architects under the direction of Blaz Budja and Rok Jereb entered into open competition for the building of a gym in a small village near Novo Mesto. The typical rural houses, the church in the village centre and the green hills in the surrounding province posed a challenge for designers in the incorporation of a modern public building within such typical Slovenian countryside.

The challenge was met successfully by architects Jereb&Budja who responded with a project that won a public design competition in 2007. With the concept of a hall, reminiscent of a big wooden barn rising in the middle of a circumferential connecting ring. The “Ring” serves as the communicating element, as well as an architectural

device for incorporating the landscape and compensating the scale of the building.

With a limited budget and a “less is more” philosophy, the designers decided to use natural high quality materials with little or no maintenance. The same philosophy inspired the choice of the outer shell, designed to resist weather conditions for years. Riverclack 55 roof system was used as an alternative to the traditional standing seam roof given the key advantage of the drainage channel and the possibility to install easily at anytime, integrated photovoltaic plant on top of the roof.

[www.jerebinbudja.si](http://www.jerebinbudja.si)

GYM STOPIČE  
STOPIČE, NOVO MESTO, 2011

- Commissioner: Municipality of Novo Mesto
- Open competition: 2007
- Project: 2008/09
- Construction: 2010/11
- Area: 2350 m<sup>2</sup>

- Investment: Euro 4,200,000
- Opening: 30th September 2011
- Architects: Jereb and Budja Architects, Rok Jereb udia, Blaz Budja udia
- Project Team: Rok Jereb udia, Blaz Budja udia, Petra Cegnar udia, Sara Zorzut udia, Tadeja Bozicnik udia, Nina Majoranc abs. arh., Ana Krizaj u.d.i.a.
- Photos: Blaz Budja





# American Express Community Stadium, Brighton

Seagulls set to soar in their new stadium



Mark Thomson & Tracy Watson  
Marketing at CA GROUP

**CA** Roofing Services and Specialist Cladding Systems have done their part in assisting Brighton and Hove Albion FC's return to the championship by completing work at the new 22,500 seat community stadium.

The state-of-the-art, £93 million project is set to be a fitting new home for the south coast club, nicknamed the Seagulls, who have waited 14 years for this stadium after the Goldstone ground was sold by the club's former board. The stadium also makes a striking addition to the Brighton & Hove landscape.

The new stadium has been designed specifically to provide as much natural light as possible for the players. The translucent roof panels, installed in the area above the main stand, are sky blue and these are combined with a reflective silver wall cladding which further enhances natural light.

The successful abutment of the various different elevation types, together with the stadium's unique façade, has resulted in one of the most visually appealing sports stadiums in the UK. It is a stadium that every Seagull fan can be proud of as they watch their local team in action.

CA Roofing Services & Specialist Cladding Systems worked on the project together with Buckingham Group Contracting Ltd, one of the fastest growing multi-disciplinary contractors in the UK and the main contractors for the build.

The stadium roof is made up of CA Group's River-Therm® secret fix roof system with its unique drainage channel, critical to the stadium's design, and features Colorcoat HPS200 Ultra®, in Merlin Grey, which is guaranteed for up to 40 years.

CA Roofing Services was awarded the contract on the basis of three main factors: The ability to install a wide range of roof and wall systems on the same building together; a reputation for meeting challenging programmes and high standards of workmanship. This project was completed on time and according to plan.

Due to the specialist knowledge required on the project, CA Roofing Services will continue on in an advisory role to the lighting and PA contractors, after its work on the installation is complete.

In addition to football matches, the stadium is designed for music concerts and conferences as well as offering a teaching and exhibition space.

- Project: American Express Community Stadium (Brighton & Hove Albion Football Club)
- Project Type: Stadia
- Client: Brighton & Hove Albion Football Club
- Project Architect: KSS Design
- Main Contractor: Buckingham Group
- Cladding Contractor: CA Roofing Services & CA Specialist Cladding Systems
- Materials: Colorcoat HPS200 Ultra® Goosewing Grey Roof and Walls, Rainscreen in Reynobond® ACM.



Photo Credit: James Boyes



# A swimming pool roof needs the utmost care



Paolo Massi  
Export Sales Director

The roof build up of a swimming pool presents one of the most challenging situations for sports facilities. A swimming pool roof must provide for:

1. Total water-tightness and full resistance to external climatic factors
2. Suitable thermo hygrometric behavior considering the high levels of hygrometry
3. Suitable soffits capable to withstand one of the most aggressive indoor atmospheres found in any building environment.

Providing watertight and durable roof cladding becomes simple when using Riverclack® secret fix standing seam roof system. Thanks to its drainage channel, even in the case of low slopes and submerged profiles, any possible water infiltration through the side lap is channeled directly to the gutter, therefore eliminating any risk of leakage in the building. The use of long life materials such as aluminum provides a major confidence level in its lifespan.

Swimming pool buildings are classified as high hygrometric environments and therefore require an accurate and precise

thermo hygrometric insulation design. With the given U-values and vapor permeability figures, appropriate thermal insulation materials as well as a suitable vapor barrier can be easily specified. One of the options available on the market is FOAMGLAS® insulation. FOAMGLAS® is a glass cell based material that is completely vapor-tight, non-combustible, pest proof and highly insulating. The combined use of Riverclack® and FOAMGLAS® has been certified and proven in several swimming pool projects across Europe.

Coming to the internal face of our roof built up, the aggressive atmosphere is a major factor to be taken into consideration in a design phase. The chlorine based chemicals used to disinfect pool water produce chloramines that are very volatile and when in contact with the atmosphere create deposits on metal surfaces, which in decomposition in the condensate, form a very corrosive solution. Repeated cycles of condensation followed by evaporation cause this accumulation of aggressive compounds on metal surfaces. Ideally, a stainless steel deck should be used, however, this solution quite often does not satisfy the ever increasing budget demands. An aluminum or galvanized steel deck instead, presents a good solution provided that it is suitably coated.

*What type of coating has to be considered in such an aggressive environment either for aluminum or galvanized steel decks? I forwarded the question to Maël de la Bellière, sales area manager of EURAMAX coated products:*

As EURAMAX, we would supply a paint system with a PVDF, minimum of 2 layers and a primer thickness doubled compared to a standard PVDF system. Because of chlorine's high level of aggressiveness, it's important to have this thicker primer to reinforce the durability of the paint. We also advise the protection of the unpainted edges of the metal (coil or sheets) to avoid any risk of corrosion between the paint and the metal. Protection can be anything which creates a barrier and avoids direct contact with strong chemical environments.

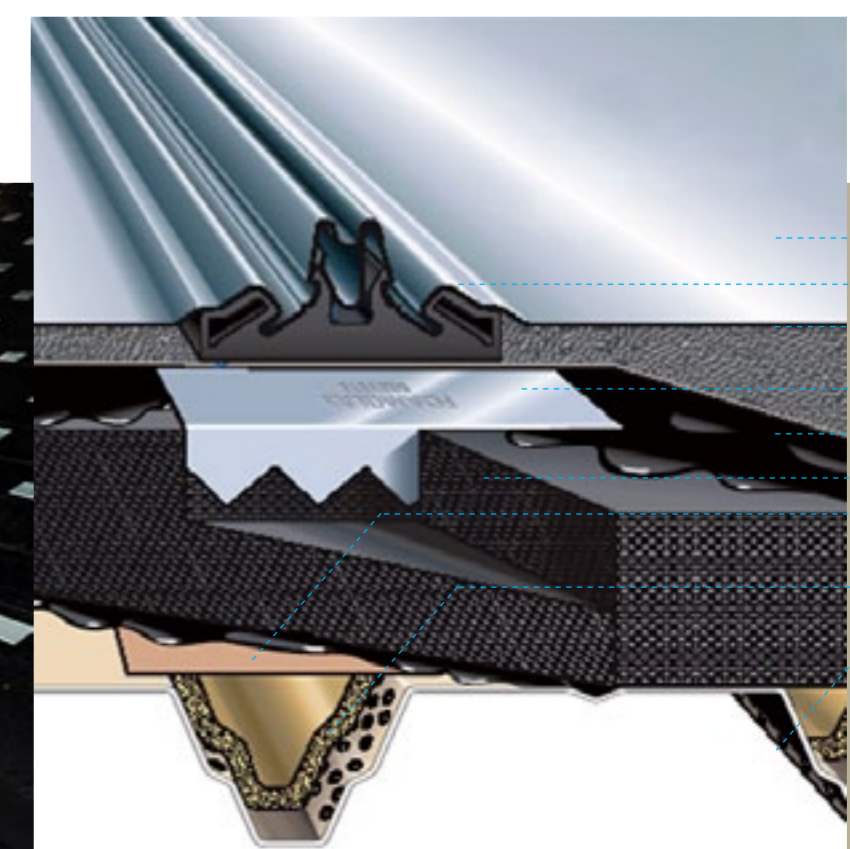
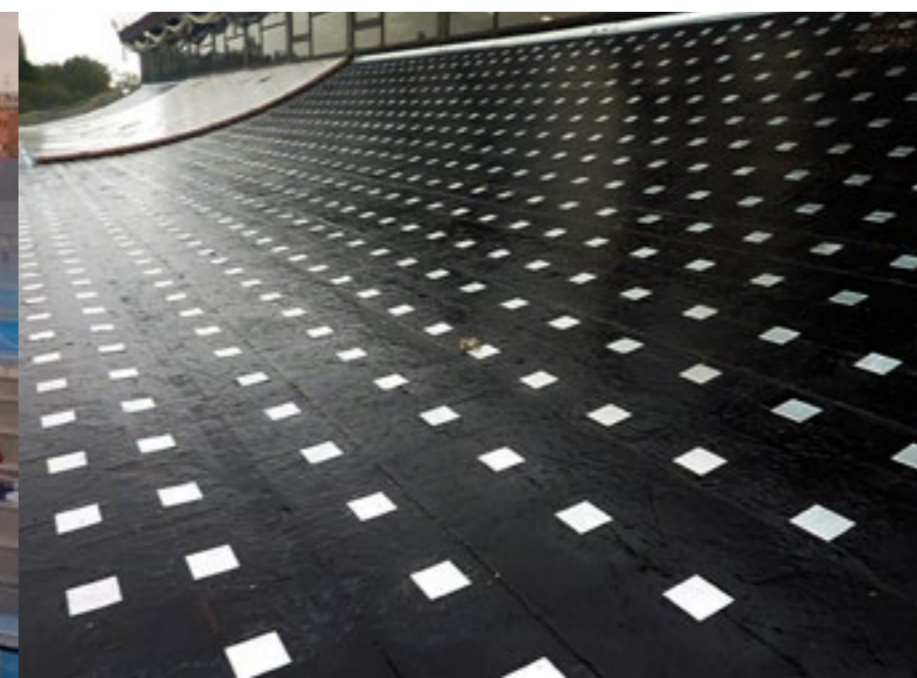
*Is the use of acoustic perforated decks allowed and if so what are the precautions to undertake in order to keep the deck's protective coating effective and guarantee a long lifespan?*

When the statics make it possible to use aluminium as a base material for the perforated deck/ liner, this option is clearly recommended, given aluminium's material performance in

aggressive environments. If a perforated steel support deck must be used, it is important to make sure that the perforating process does not damage the coating in the punched areas; given the aggressiveness of the chemical products, any paint failure could cause the de-lamination of the metal and of the paint.

*What is the warranty that your company provides for suitable coatings in aggressive environments like pools?*

On aggressive chemical or coastal environments, we can provide extended warranties when a highbuild® set-up is supplied, when edges are protected and when the maintenance of the surface is executed according to our guidelines. With detailed instructions and specifications on materials and applications we can offer up to 25 years on functional warranties and 30 to 35 years with limited refunds. Such specifications, warranties and conditions are to be stipulated in written contracts with EURAMAX.



- Riverclack Roof Sheets
- Riverclack Clip
- Bituminous Membrane
- Foamglas Plate
- Bitumen
- Foamglas Insulation
- Adhesive Stripe (in case of perforated steel deck)
- Acoustic insulation (in case of perforated steel deck)
- Perforated/plain Steel Deck



**The “engine” counts, but the chassis counts as well.**

**Speed, performance and strength  
with the Photovoltaic integration provided by a Riverclack® Roof.**

If the panel is the engine of a PV plant, how important is the structure that connects it with the roof? If you want the performance of your photovoltaic investment to last, you'll be in pole position with Riverclack®. Riverclack® is the incomparable metal roof system with incorporated drainage channel that enables installation even on very low slopes. The result of an Italian technology, it is known and utilised worldwide. The unique geometric locking action of the Riverclack® roof sheets and related PV panels fixing accessories, allow us to transform any installation team in to pit-crew with timing, efficiency and precision. Riverclack® is compatible with any type of Photovoltaic system. Secret fix, long lasting materials along with walk-ability provide a reliable and cost saving solution for big and small projects. For your photovoltaic roof, get on track Riverclack®.

**R I V E R C L A C K**

**Long-Life Maniac Roofing Solutions**

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