

Structural & Security

Case Study

Estadio Único de Santiago del Estero,
Argentina



Photo: © Courtesy of Vidrial



SentryGlas® ionoplast interlayer

Estadio Único de Santiago del Estero, Argentina

SentryGlas® stands up to the passions and frustrations of South American soccer fans

Sporting venues are all about the visuals and the experience, so visibility must be unhindered, while safety and security are maintained. There are very few ways you can provide this balance, and SentryGlas® is one of them.

SANTIAGO DEL ESTERO, ARGENTINA, 2021.

The Unique Mother of Cities Stadium, located in Santiago del Estero – Argentina's oldest city – is designed and built not only to look beautiful, but also strong, delivering robustness in the face of passionate sporting fans.

Complying with all AFA, Conmebol and FIFA regulations, the 30,000-capacity stadium held its first international match – between Chile and Argentina – on the 3rd June 2021 in a 2022 FIFA World Cup qualification match. As well as being a venue for qualification matches for the Argentinian national team, it was also chosen as one of the host stadiums for the 2021 Copa América, before the

competition eventually moved to Brazil. And, looking further ahead, it is expected to be named as a host venue for the 2030 FIFA World Cup, if the joint bid by Uruguay, Argentina, Chile and Paraguay is successful.

In addition to the extensive sport facilities, the stadium site also offers restaurant spaces, public areas and a covered parking lot, in addition to an interactive sports museum with a number of 4D and virtual elements.

Early in the design phase, a circular layout was chosen for the stadium on the 20-hectare site, not only to represent the sun – an element in the province's coat of arms – but



The balustrade panels are fabricated from 10 mm fully tempered glass + SentryGlas® + 10 mm fully tempered glass

Freedom of sight line, had to be balanced with safety and security

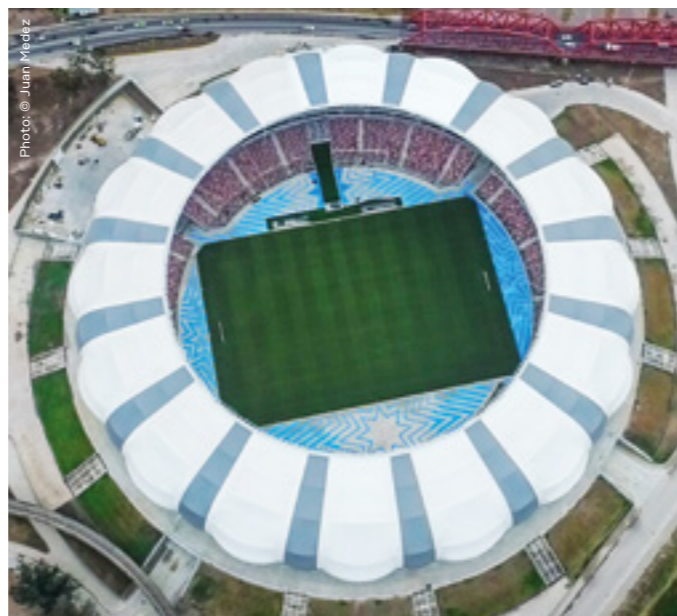
also to give visitors maximum visibility of the field. But this freedom of sight line, had to be balanced with safety and security. So, to deliver unhindered views inside the stadium, but also maintain segregation, protection and crowd control, glazed balustrades were chosen, incorporating SentryGlas® Ionoplast interlayers from Kuraray.

The decision to use glazed balustrades was to provide a safe, secure and clear viewing experience for all soccer fans and visitors to the stadium while maintaining thrilling sporting experiences.

The architects were concerned about the potentially negative actions of soccer crowds, especially vandalism, so for that reason they were looking for the safest glass-based system. And, in order to convince the architects of the capabilities of the glazed panels and their supports, Vidrial, the laminator, performed glass-impact tests on the balustrade solution system – incorporating the SentryGlas® interlayers – with the results highlighting the system's ability to deliver both security and visual clarity.

The balustrade panels are fabricated from 10 mm fully tempered glass + SentryGlas® + 10 mm fully tempered glass and are mounted along their bottom edge using the ALUWIND system, for which Vidrial is a distributor. The stadium employs two panel sizes: 1,500 x 2,500 mm and 1,500 x 1,700 mm. An estimated 1,000 sqm of laminated glass was used in total.

SentryGlas® regularly proves that clear glazing can be used in both structural and aesthetic architectural designs – from Florida's stormy coast to stadiums and monuments in South America and onto worldwide airports, embassies and museums. It's outstanding strength, clarity and post-breakage performance have seen it specified and deployed in some of the world's most demanding glazing applications. And with architects and structural engineers constantly pushing the envelope for glazing-based inspiration, the applications for SentryGlas® just keep getting more and more impressive.



• The architects were looking for the safest glass-based system

Architect **Enrique Lombardi**
 Construction **UTE Astori-Mijovi**
 Laminator **Vidrial**
 Glazier **INSA Aluminio**

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 Please contact: trosifol@kuraray.com

Kuraray is the global leader in PVB and ionoplast interlayers for laminated safety glass in the architectural segment.
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- **UV Control:** from full UV protection to natural UV transmission
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Note to the editor:
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