

Kalzip Ltd

Press release

Superdome re-clad with Kalzip 'Fix Click' rainscreen system

24 August 2010

The Louisiana Superdome has been re-clad with a total of 34,000 sqm of the new Kalzip FC rainscreen façade including 26,000 sqm of panels installed on the upper curved wall area. Stylish, non-penetrative and extremely cost-effective, the ingenious aluminium Kalzip FC rainscreen is installed on vertically fixed modular click rails - each lightweight aluminium panel is simply hooked at the top then push-clicked into place at the bottom.

Kalzip FC rainscreen's innovative bi-directional installation capability (top down / bottom up) allows flexible project scheduling where on-site requirements such as scaffolding or subsequent construction work can be coordinated independently of the fixing process. No rivets or screws are used - and in the event of future damage or desire to change the façade's appearance, the system allows for individual panels to be replaced quickly and easily without affecting adjacent components thereby negating the costly task of renewing the entire façade.

At over 83 metres high and with a diameter of 207 metres, the state-owned Louisiana Superdome is still the world's largest fixed dome structure. Originally opened in 1975, the iconic building quickly became one of the USA's busiest multipurpose stadiums - but when Hurricane Katrina unfortunately struck in 2005, the Louisiana Superdome sustained severe damage to its roof and walls whilst famously protecting nearly 30,000 people from the raging storm outside.

After evaluating the damage, the State of Louisiana's Facility Planning & Control Agency produced a set of performance-based criteria that included restoring the Superdome's original unique aluminium appearance with a new system that would provide resistance to hurricane wind load conditions and crucially, allow for the speedy removal and replacement of individual panels without affecting those adjacent. A team of specialist firms were appointed to work together on this massive refurbishment project with Trahan Architects the lead architect in the joint venture.

At the beginning of 2009, Kalzip's FC rainscreen system was in the early stages of its development when the call for a system to meet the demanding criteria for re-cladding the Louisiana Superdome presented their engineers with an ideal opportunity to accelerate the process and enable the company to compete for the prestigious contract.

The architectural team considered a number of design proposals for the biggest stadium reconstruction project ever attempted in the USA before deciding on the final solution - the Kalzip FC rainscreen system. During this rigorous decision-making process, the Kalzip FC rainscreen system was ASTM laboratory tested specifically for the Louisiana Superdome project and exceeded 250 psf (11.97 kN/m²) loading.

Brad McWhirter, project manager for Trahan Architects said, "The entire wall system, not just the panels, had to meet specifications for wind resistance and other severe weather conditions. Kalzip came up with the concept and their performance is commendable. It really looks like this system has met, and in some cases exceeded, our expectations for flexibility and ease of installation."

Doug Bruza, senior project manager for general contractor Gibbs Construction, who also managed the installation of the Superdome's new façade and was involved in the project from the outset said, "The biggest thing was to provide an individually replaceable metal wall panel and attachment system. Kalzip was the only one that could come up with this feature. The original system was installed from bottom to top so, if a panel was damaged, you would have had to take off 36 metres of panels to replace just one. The Kalzip FC rainscreen system is excellent - because of its ease of installation, it can drastically reduce time and labor."

The Kalzip FC rainscreen used on the Louisiana Superdome has been tailored to replicate the original panel size and meet the desired stiffening requirements with a rib design and an anodized light bronze colour that now features a fade-proof finish.

Suitable for all common substructures, the rear-ventilated Kalzip FC rainscreen system is ideal for external, internal, new build and retrofit applications. Supplied with edge folding as standard, panels are available in 6 cover widths ranging from 250mm - 500mm, in lengths of up to 10 metres and in a variety of surfaces including stucco embossed aluminium, AluPlusZinc and AluPlusPatina. Smooth surfaced panels are available in the wide range of RAL standard colour options and special micro-ribbed or perforated panels can also be supplied on request to provide architects with tremendous creative design scope and flexibility.

For more details please visit: www.kalzip.com

