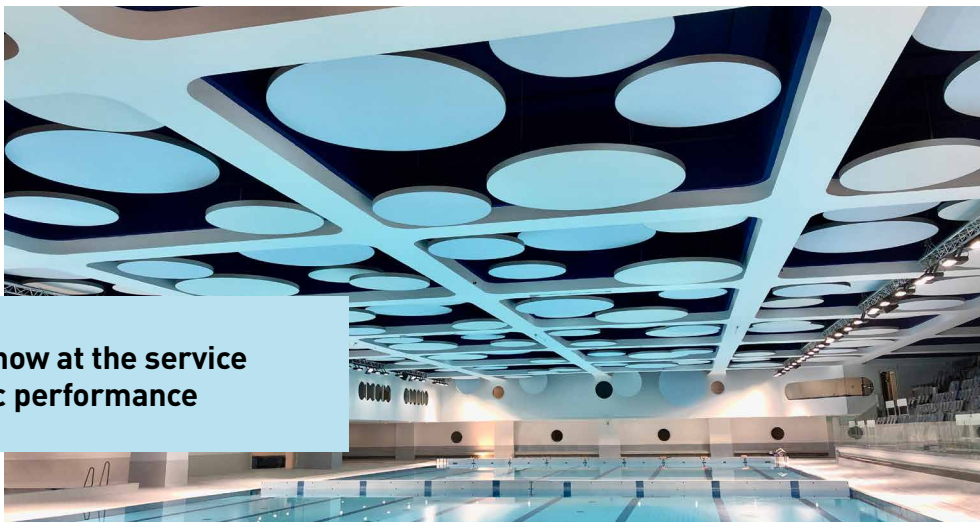


## Clipso acoustic dives into Monaco's Olympic swimming pool



More than 30 years after its creation, The Louis II of Monaco stadium is getting a makeover. The architectural firm ARCH Monaco has been appointed by the government to renovate and modernize all sports complexes. The first major project to deal with : the nautical center, consisting of an Olympic pool, an initiation pool and a diving tank. The work was to be carried out without the closure of the stadium and was set in four phases.

Regarding the ceiling renovation, the ARCH architectural firm represented by Oliver Veyres in charge of the project, had three imperatives to respect : acoustic, resistance and elegance, particular constraints linked to the environment with high degree of humidity. To meet this challenge, he called on the expertise of Clipso.



**Clipso Know-how at the service  
of the acoustic performance**

Louis II of Monaco pool stadium after renovation.

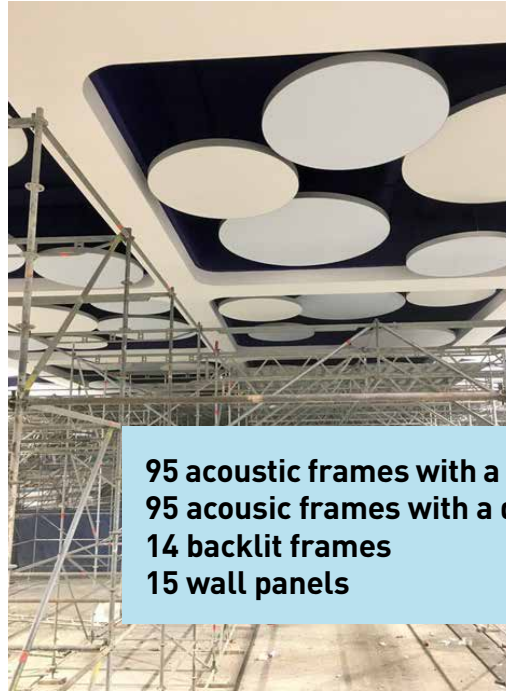
### Know-how, innovation and efficiency

Clipso solutions were chosen after comparative studies and the implementation of a mockup. A finished product along with a dedicated team made the difference according to the architectural firm and the stadium technical department.

By its know-how, Clipso and its installer/partner spider Design were able to respond appropriately to the constraints of the project. Clipso has proposed a specific treatment of the frames (QUALIMARINE treatment on all aluminum profiles) able to withstand to a high level of humidity, same for the batting/fleece. Furthermore, the set-up at a room temp has allowed to perform a quick installation within a very tight timeframe, the filling of the pool being scheduled and cannot to be postponed.

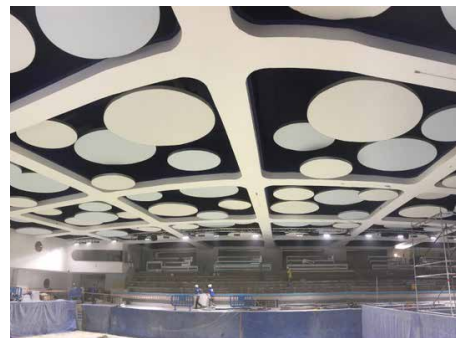
## 190 frames in stretch fabric to meet all requirements

Between school groups, swimming clubs, sport associations and public, the Monaco nautical center is almost open 360 days per annum/year and welcomes 500 people per day. Many complained about the noise inside the pool, hence a strong acoustic constraint to take into consideration during the renovation. The architect has chosen Clipso bespoke frames, backlit and acoustic. The 95 circles with a diameter of 2 meters and 95 circles with a diameter of 3 meters were harmoniously integrated into square structures. Made with SO ACOUSTIC fabric Ecume and Light Blue, the ceiling echoes the white/blue of the walls and the color of the water while blending into the immensity of the pool.



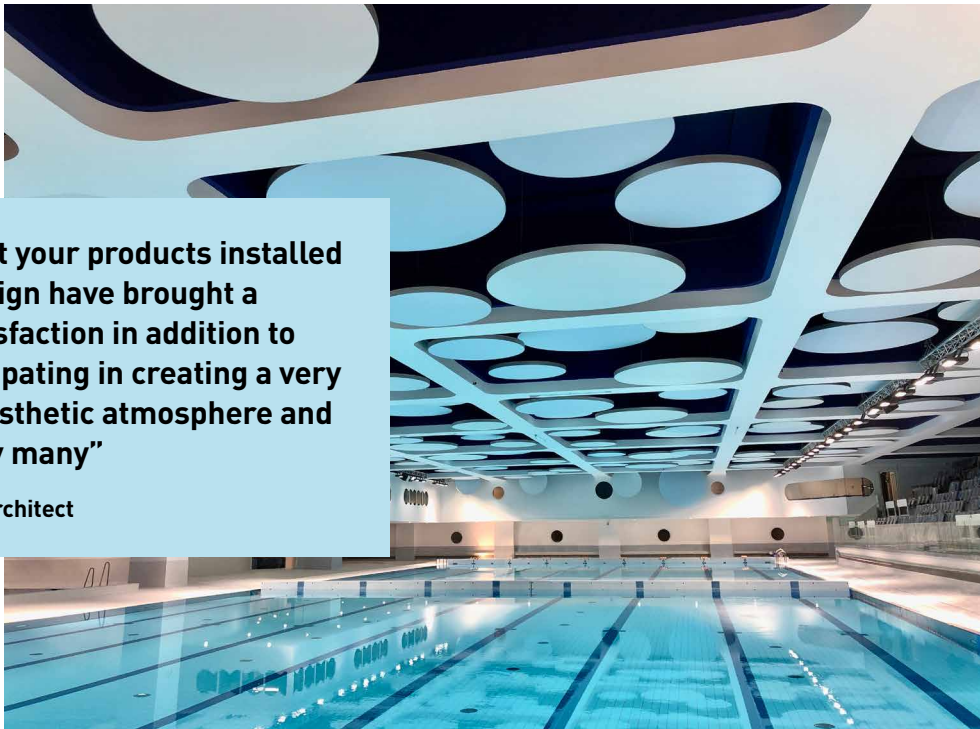
**95 acoustic frames with a dia of 2 meters**  
**95 acoustic frames with a dia of 3 meters**  
**14 backlit frames**  
**15 wall panels**

Louis II of Monaco pool stadium during the frames installation



**"I confirm that your products installed by Spider Design have brought a complete satisfaction in addition to greatly participating in creating a very interesting aesthetic atmosphere and highlighted by many"**

**Oliver VEYRES - Architect**



The original nautical center ceiling had collapsed after 20 years, too much corroded by humidity and the water treatment products. An open ceiling with aluminum frames held by threaded rods on which a mesh has been stretched was then installed. However, the stiffeners were beginning to age. To counter this corrosion problem, Clipso has chosen stainless steel slings to hold the acoustic frames. The latter allowed to hide disgraceful elements to the public, such as air ducts or cells receiving rainwater.

On the light side, 14 backlit SO LIGHT frames with integrated Leds complete the set in a seventies style brought up to date. Directly fixed to the wall, 15 wall panels of various sizes in acoustic fabric Ecume and Light Blue/ sky blue cover certain areas including the Olympic diving tank.



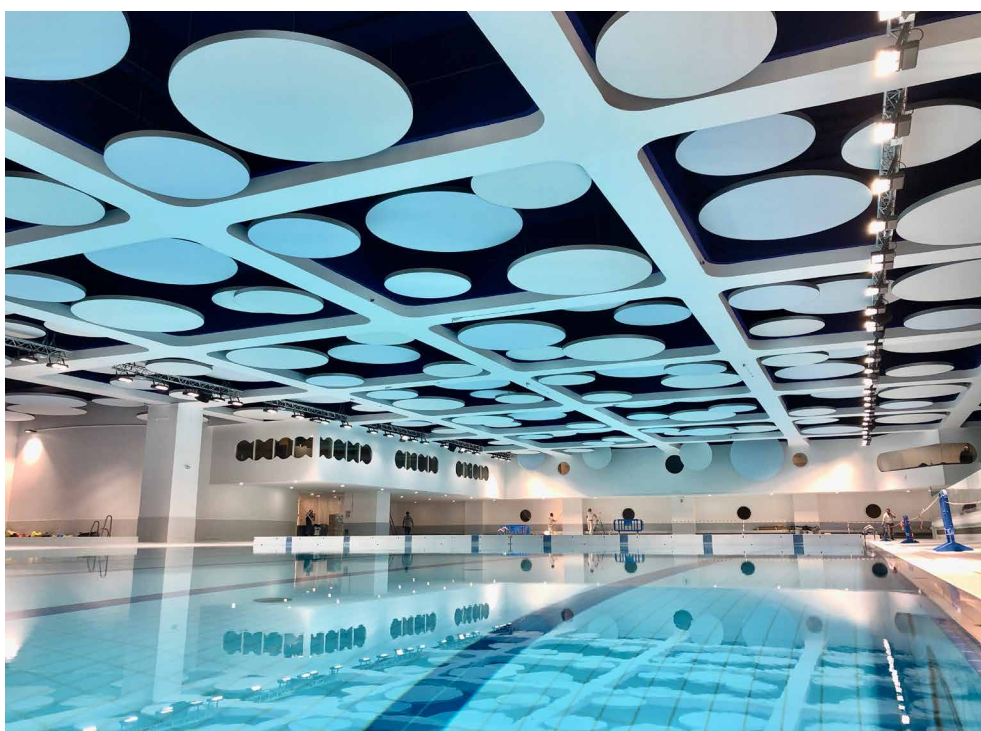
Louis II of Monaco pool stadium today.





In accordance with the requests of the technical management, all the frames are removable allowing access for maintenance at any time. The clipso solution also met all environmental expectations of the architectural firm offering an eco-environment label product (A+ and greenguard gold, PVC free)

Projet : **Piscine Olympique de Monaco**  
 Cabinet d'architecture : **Olivier VEYRES - ARCH Monaco**  
 Installateur : **SPIDER DESIGN**



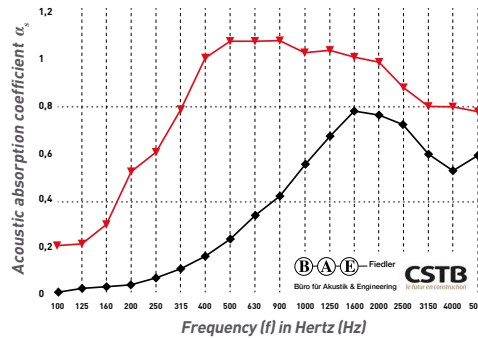
Piscine du Stade Louis II de Monaco aujourd'hui.

## Technical characteristics of the 495 D and 495 AC covering

### Polyester knitted fabric coated with polyurethane (PU)

Openwork mesh, 250 000 holes/m<sup>2</sup>  
 Width up to 5.10 m  
 Thickness: 0.4 mm  
 Weight: 235 gr/m<sup>2</sup> (+/- 10 %)  
 Colours: 3 (495 D) and 29 (495 AC)  
 Appearance: mat, smooth and uniform  
 Fire reaction: Euroclass  
 Tear strength: CH 5.5 daN/TR 7.5 daN  
 Light fastness > 8

The 495 D covering offers the same acoustic performance whether printed or not.



495 D / AC covering with insulation  
 $\alpha_s = 1$  - Classification: A

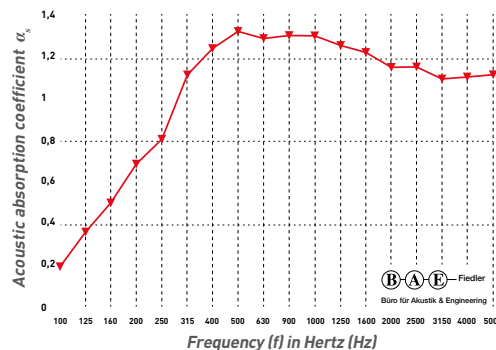
Original wall or ceiling  
 Insulation LA54 (50 mm)  
 Empty plenum space (55 mm)  
 495 D / AC covering (0.4 mm)

495 D / AC covering without insulation  
 $\alpha_s = 0.30$  - Classification: D

Original wall or ceiling  
 Empty plenum space (55 mm)  
 495 D / AC covering (0.4 mm)

## Technical characteristics of the proposed frameworks

**Round frames** diameter 2000 mm or 3000 mm  
 Anodised aluminium profiles thickness 100mm  
 with special qualmarine treatment  
 Brackets and reinforcements  
 Absorbent type Basotech 30mm  
 Acoustic coating in foam or light blue colour

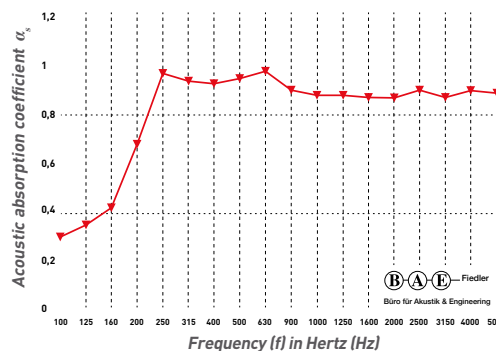


Test 1  
 CAC 100 Profil

Original wall or ceiling  
 Insulation (50 mm)  
 Empty plenum space (200 mm)  
 495D covering

## Technical characteristics of the 495 AT covering For backlit frames

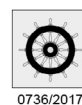
**Round frames** diameter: 2000mm or 3000 mm  
 Aluminium profiles 140 mm white lacquered  
 Including brackets, reinforcements and bottom plate.  
 Translucent acoustic cladding installed  
 double-layered  
 Light transmission of the whole: 40%.



495 AT covering with insulation  
 $\alpha_s = 0.95$  - Classification: A

Original wall or ceiling  
 Insulation LA54 (50 mm)  
 Empty plenum space (155 mm)  
 495 AT covering (0.4 mm)

Other acoustic tests are available on your Espace Pro, or by contacting our sales department:  
[service.commercial@clipso.com](mailto:service.commercial@clipso.com)



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 so different

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