

Press release

### **Pritzker Prize winner selects Mermet fabrics again**

*Centro Botín* is located in Santander, north-western Spain. It hosts the artistic, educational and cultural events of the *Fondation Botín*, the largest private cultural foundation in the country. To pay homage to a spectacular vista on the Atlantic Ocean waterfront, architects Renzo Piano worked closely with Madrid agency Luis Vidal + Architects. Here they focused on natural lighting and a lightweight structure, which required that solar shading be integrated in the actual building design.

To protect the artwork collections and ensure optimal visual and thermal comfort for visitors throughout the year, an ingenious combination of Mermet fabrics Satine 5500, SV 10% and Karellis 11301 was developed.

### **When light and transparency cohabit**

This two-part arts centre is built on the waterfront in the *Jardines de Pereda* gardens. It has become a major tourist attraction, not simply because of the 270,000 ceramic discs that embellish its outer walls.

Two curved structures enclosing 10,000 m<sup>2</sup> of space are supported by tree-high pillars to provide an unrestricted vista enabling onlookers a direct view of the bay from the historical old-town:

- the west wing houses 2,500 m<sup>2</sup> of gallery space on two 5-metre high levels,
- the east wing hosts classrooms, workspaces and a 300-seat auditorium, which features a 7.5 metre-high double-glazed façade facing south across the water.

For the architects, several points were essential:

- allow as much natural light in as possible while limiting glare,
- ensure seamless transparency, both inwards and outwards, to enjoy this remarkable construction that offers magnificent visual links with the water of the bay and the surrounding park,
- protect art installations while ensuring visitors enjoy optimal thermal comfort.

Developed and installed by blind maker Resstende s.r.l, the solution to meet all these requirements involved overlaying three Mermet fabrics up to 8 m high (a total of 300 blinds):

- a tall external blind (1.20 x 7.90 m) to control light and heat: the Satine 5500 fabric 0201 White Grey filters 94% of solar radiation to deliver thermal comfort while preventing glare and blocking UV radiation to protect exhibited works,
- two internal fabrics complete the solar shading:
  - to darken and block out sun rays, zip internal blinds measuring 0.8 x 7.90 m and using Karellis 11301 thin and lightweight fabric 608 Chartreux, serve to regulate light and provide full blackout capability,
  - to enhance the light levels in open spaces, the SV 10% fabric 0102 Grey White was selected for use on 0.80 x 4 m roller blinds due to its light diffusion capabilities and transparency.

### **Excellent fabrics for an excellent project**

#### **• Mermet, unique fabrics with glass fibre material**

Due to their composition, Mermet fabrics are especially well-suited to the new norms of contemporary architecture, especially large glass façades like those on the *Centro Botín*. The fabrics stand out through:

- their excellent mechanical strength for tensioning,
- their M1 (French) and BS fire ratings which satisfy the requirements for public-access buildings,
- their excellent dimensional stability, which is all the more important for tall window walls,
- their remarkable durability, as demonstrated by the 10,000 cycle mechanical endurance test.

#### **• Satine 5500, the external solar shading solution**

Satine 5500 is the ally of the façade as it provides:

- unrivalled heat protection: up to 96 % of solar radiation is eliminated in external applications (gtot 0.04 where reference glass g = 0.32 and U = 1.1)
- high-quality transparency with clear outward vision,
- ideal visual comfort with excellent glare control due to the diagonal weave of the satin fabric, while optimising the influx of natural light: up to 96% of light rays are filtered (Tv: 4 %)

#### **• SV 10%, for optimal transparency and influx of natural light**

This open-basket weave design blends visual comfort and transparency to optimise the natural lighting level. It blocks out up to 90% of UV rays and eliminates up to 85% of solar radiation.

12 colours are available in 3 widths: 200, 250 and 320 cm.

The *Centro Botín* project is substantial and offers Mermet the opportunity to once again demonstrate its unrivalled know-how in terms of solar shading. With fabrics that ensure excellent thermal and optical performance, and which meet all requirements even in a marine environment, the French company can be proud of another successful prestigious international project.