

## **For Immediate Release**

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### **SEFAR® Architecture PTFE Fabric Stuns in Medina, Saudi Arabia**

*250 Giant Operable Umbrellas Provide Pilgrims with Optimal Shade and Environment*

**DEPEW, NY...** A total of 143,000 square meters of SEFAR® Architecture's PTFE fabric ensure plenty of shade for pilgrims to the Medina Haram Piazza in Medina, Saudi Arabia.

Each year, millions of pilgrims flock to the mosque in Medina al-Munawwarah. In recent years, the traditional time of pilgrimage has been in the cooler fall and winter months. This time frame is changing gradually, however. According to the lunar calendar, the time of pilgrimage is returning to the extremely hot summer months, making a sunshade absolutely essential. To answer this need, SEFAR Architecture provides 250 giant umbrellas covered with its PTFE fabric.

As general contractor, the Saudi Binladin Group contracted the architectonic planning of the project to SL-Rasch GmbH in Leinfelden-Echterdingen, Germany. It was clear from the very beginning of the project that only PTFE fabric would be able to meet the exceptional situational demands. Other materials would not withstand the aggressive UV radiation or satisfy the stringent standards required by the customer.

In addition to UV-stability, the material had to have an extremely high tensile strength owing to wind load, maximum flexibility, colorfastness, fire resistance, as well as effective shading and appropriate light transmission.

The extra tough PTFE fabric developed by SEFAR Architecture for this huge project could not remain pure white, owing to the intensity of the light that passes through it. Its strong transmission would have blinded people beneath the sunshade. For this reason, the customer chose a sand-colored fabric.

In addition, oriental patterns made from blue PTFE ribbons were applied to the underside of the umbrella. With careful adjustment of the weaving machine, the consistent quality of the giant fabric surface was guaranteed. The outcome of shading with PTFE fabric was a reduction in ambient temperature by at least 8 °C.

The final "go" for the project, however, was given only after the production of four actual-size prototypes. They were tested under real conditions in collaboration with the umbrella control system manufacturer, Liebherr from Ehingen in Germany.



**SEFAR® Architecture/Medina – Plus One – Contact: Nick Murosky, 412-831-1959 x123**

Since September 2010, a total of 250 umbrellas, each with a surface area of 25.5 x 25.5 meters (when open) and 15 meters high, have been installed in the area surrounding the mosque in Medina al-Munawwarah.

The umbrellas work together to form a shaded area of 143,000 square meters – greater than the floor area of the mosque itself. When closed, each umbrella – including its working parts – is encased in a narrow, elegant column. The opening and closing procedure only takes three minutes.

The Medina Haram Piazza project was completed in November 2010. Members of the project team included customer Saudi Arabian Ministry of Finance, general contractor Saudi Binladin Group (SBG), architect SL-Rasch, Germany, umbrella manufacturer Liebherr, Germany and manufacturer Taiyo Kogyo, Japan.

For more information about SEFAR Architecture exterior fabrics, visit <http://www.sefar.us/exterior>.

**About SEFAR Architecture:** SEFAR Architecture is a leading manufacturer of monofilament precision and ePTFE yarn fabrics and fabric systems for interior and exterior architectural applications. With comprehensive knowledge in textile architecture, Sefar has cooperated with experienced lighting technicians and polymer experts to develop a new generation of fabrics for the architectural and design community. For more information on SEFAR Architecture's products and services, call Peter Katcha at 727-388-4919 or visit [www.sefar.us](http://www.sefar.us).

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