



## Events

### VIDURSOLAR presents its products to the architecture studio FOSTER+PARTNERS in London

On October 8th of 2009, VIDURSOLAR was invited by the well-known architectural firm FOSTER+PARTNERS in London, to present its photovoltaic products to the different working teams.

The presentation had good success and the Studio now has available the necessary information for working with VIDURSOLAR constructive photovoltaic elements in its future projects. An important number of architects from different departments and working groups attended the meeting showing big interest in the building integration of photovoltaic technology that is gaining importance for the building sector.

This presentation has been realised in the scope of a dissemination campaign that VIDURSOLAR is promoting in the architectural sector. In these conferences not only commercial aspects related to our products are treated. But, especially practical knowledge, constructive and design solutions are transmitted, in order to give the architects the necessary tools for the incorporation of photovoltaic technology in their projects from the beginning.



## Selected Projects

### VIDURSOLAR present in the U.S.: Designer PV canopies for a public space in Washington DC



VIDURSOLAR photovoltaic glass, in its exclusive conception and tailor-made fabrication, are part of the public lighting units of artistic design, that decorate the public space "Columbia Heights Plaza" in Washington DC (USA).

For this project, VIDURSOLAR counted on the collaboration with our partners TELLING ARCHITECTURAL Ltd. (UK) who managed the project and took over the design and supply of the substructure and point fixing system together with the photovoltaic glass units.



The attractively designed public lighting units were conceived by the well-known architectural firm Zimmer Gunsul Frasca (ZGF architects) based in the USA. Each lighting unit is equipped with a glass canopy formed by 7 photovoltaic glass units of different shapes and a special PV cell distribution designed by the architects and turned into reality by VIDURSOLAR.

The location of the holes for the SFS-intec spider and point fixing system, the design of the substructure and the overall structural calculations turned out to be a major challenge and were perfectly solved by the engineers from TELLING. For the electrical interconnection between PV glasses the TYCO Solarlok system was used.

The decision of the architects for using VIDURSOLAR PV glass has been mainly our capacity to convert the ideas of an architectural design into a constructive and an electrically operative element by means of the broad range of design possibilities of the product. Additionally, as the safety aspects in public spaces is a major concern, the use of PVB (polyvinyl butyle) as interlayer for the PV safety glasses was another decisive point of the VIDURSOLAR offer.

The resistance of VIDURSOLAR PV-glass has been immediately tested in a natural way. The project withstood perfectly the heavy snowfalls in Washington during this winter 2009-2010.



Photo courtesy of ZGF architects, Washington DC



Photo courtesy of ZGF architects, Washington DC

## VIDURSOLAR supplies the PV glass modules for the south façade of the new building of Technological Centre LEITAT in Terrassa, Spain



The south elevation, above the central entrance, of the new headquarters of Technological Centre LEITAT in Terrassa (Spain) counts with a rain-screen façade consisting of 42 VIDURSOLAR PV-glass modules equipped with black mono-crystalline PV cells from the German manufacturer SUNWAYS. In addition to this, the façade is completed with 28 screen-printed glasses that simulate mono-crystalline PV cells.

With this 186 sqm façade a conventional roof-mounted PV installation has been substituted that was initially previewed to be installed.



Like this, several costs could be saved, like costs for the support structures of the conventional PV-system, the glass cladding elements substituted by PV-glass and the shading elements for the windows. These savings compensate quite well the extra-cost of the custom-made PV-glass.

The total installed power is 11,8 kWp according to the requirements imposed by the Spanish Technical Building Code.

The 4 different PV glass models have been produced on a custom-made basis according to the specifications of the architecture studio B01 Arquitectes from Barcelona, author of the façade design. The installation has been executed by Construcciones Baldó S.A.

The PV glasses make up a second skin taking over the functions of a traditional rain-screen façade but additionally showing an attractive, modern design and representing an energetically active element that locally generates green electricity.

VIDURSOLAR has started to work in the Italian market: PV glass canopies as solar protection units

VIDURSOLAR is actively entering the Italian market. After the participation in the 2009 edition of MADE EXPO fair in Milano, we have provided PV glass modules to 3 installations of photovoltaic canopies in Italy.



Photo: Ragosolar



Photo: KWpower

A very usual application demanded by our Italian clients is a PV canopy, conservatory or pergola that also takes over a sun-shade function. We get quite a lot inquiries for smaller private installations up to 3 kWp as these profit from good economic conditions in the framework of the Italian feed-in-tariff regulations "conto energia". According to this law PV energy generated by a building integrated PV system of 3 kWp or lower, can actually be sold for 0,48 c€ (2009 level).

In Italy, in addition to our usual offer of completely tailor-made PV-glass, we have opted for the distribution of 4 models of pre-defined PV glass modules. On this basis, VIDURSOLAR is collaborating closely with the Italian firm KWPOWER with offices in Pescara and Brescia.



## The skylight of the public library of Corbera de Llobregat incorporates VIDURSOLAR PV glass modules



The newly built public library of Corbera de Llobregat, Spain, is made of 15 VIDURSOLAR PV glass units forming a skylight that covers part of the lecture hall. The PV power of each PV glass is 100 Wp reached by the series connection of 32 poly-crystalline PV cells.

This PV installation with VIDURSOLAR PV glass modules is part of a global PV installation of which another part is on-roof mounted. The total PV power installed is complying with the requirements of the Spanish Technical Building Code.

The PV glasses have been designed in order to provide a certain amount of shadowing without renouncing natural daylight transmission into the interior. They are produced as insulating glass units in order to provide an approximate U-value of 2,6 W/m<sup>2</sup>K. Any VIDURSOLAR PV glass module can be produced as insulating unit with U-values below 1,5 W/m<sup>2</sup>K.

The electrical connection between PV glass modules is realised with an edge connector glued to the edge of each PV glass unit. This connector, once the glass is installed, is hidden inside the profiles of the support system, so that it becomes completely invisible. The chosen TECHNICAL aluminium support system is prepared for the integration of such PV glasses and the corresponding electrical interconnections.