

Red Dot Design Concept Yearbook

2014 / 2015



Glass Shelter

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This design for an interactive, all-glass bus shelter uses advances in new media, structure and lighting technology in its construction. Glass Shelter proposes an innovative and intelligent solution to a public transport need with a view to an immediate future.

Glass Shelter is a solar-powered bus stop with LED-embedded screens that provide transit route information as well as data for weather and time. The schedule is illuminated on the shelter wall. While waiting for the bus users can also interact via smart phone apps to confirm the next scheduled stop, timetable and more, as well as enjoy full Wi-Fi connectivity.

The concept focuses on the application of cutting-edge glass technology to create an elegant and user-friendly product that allows commuters to make the most of their transport experience. A panellised-glass enclosure system with simple yet sophisticated components

will make it an iconic element in the streetscape. Two panel types will form the shelter – bent panels that form the wall and roof, and vertical media panels. Simple stainless-steel angle plates hold the cantilevered glass sheets.

The shelter is composed of three distinct zones: an open but wind-protected zone, a roofed area, and a covered as well as enclosed area for seating. Views of the surroundings can be enjoyed while people sit or stand. The length and depth of the shelter can be adjusted to suit the site.

Lighting and data cabling run parallel to the glass support structure to feed the media wall, bench (with embedded heating and lighting elements) and its thermostat during cold weather months.

The various PV cell, LED media, structure and lighting technologies have been integrated seamlessly into the glass panel structure. The photovoltaic array, the LED ambient lighting, and the media wall system are under development. The media will provide real-time information in a two-way display embedded in the glass panels. There will also be a smaller integrated tactile monitor located on the internal face of the enclosure.

Virtual and physical mock-ups of the glass structure have been prepared to establish the optimum system for bent glass lamination, base support fixings, interlayer thickness and edge detailing of the curved/ circular glass bench. A prototype of the main wall and roof is being planned.

BORGOS
PIEPER

Borgos Pieper

Borgos Pieper is an architecture and design studio directed by Etienne Borgos and Nadine Pieper, with offices in London and Barcelona. The practice pursues design excellence at every scale of the built environment. From urban to product design, the studio philosophy embraces sensitivity to context through an elegant modern approach and careful detailing to achieve responsible and timeless projects.

The team brings a wealth of experience developed from over twenty years of realising complex building and design projects internationally. Borgos Pieper's concern for its surroundings has produced projects that are sensitive to the culture and climate of their place.

The studio's pursuit of quality in the development and execution of work is constantly evolving as new materials, working methods and technical demands require the team to be consistently on top of the process of change.

Borgos Pieper works with a thoughtful integrity to make buildings that will last and be cared for in the future. Through dialogue, drawing, modelling and critical analysis, the team establishes the principal clues that can be drawn out of each site, its limitations, and its requirements. The studio is currently developing work in Europe, the Middle East and the Americas. The studio has won a number of competitions and been the recipient of international awards.

