



## Sheltering Commuters from Weather and Wind

A durable roof makes changing means of transportation a pleasant experience.

Residents and visitors of Saint-Nazaire, a town on the west coast of France, are now able to change between different modes of transport, comfortably sheltered from the forces of nature by a gigantic roof that covers the front of the railway station. Finished in September 2012, the so-called PEM (*Pôle D'échange Multimodal or transit center*) was designed by the Tetrarc architect office, engineered by MECA and manufactured by POLYECIM Composites.

POLYECIM Composites is a French-based company that for more than 20 years has specialized in putting together complex composite parts with high-level finishes, which clearly shows in the sleek, yet wavy roof of the Saint-Nazaire PEM. The company excels in the field of fire-resistant resins for hand lay-up processes and vacuum injection molding (RTM), using its expertise to help clients within the fields of construction, railways, shipbuilding and furniture manufacturing. Developing products from the 3D design phase through the production of prototypes to the manufacturing of the molds, POLYECIM Composites offers support throughout the process.

For the Saint-Nazaire PEM project, POLYECIM decided to use a Diab sandwich composite solution based on *Divinycell H* Grade. The excellent strength-to-weight ratio of composite sandwich has many advantages. For one, the non-corrosive composites offer great resistance to harsh weather conditions. The lightweight and formable material also offers architects the freedom to create intriguing shapes and forms, since the need for supporting

points is greatly reduced. Furthermore, onsite installation is fast as well as cost-efficient, and the material has a long life requiring minimum maintenance. In short, Diab sandwich composites add value as energy-efficient, sustainable solutions for almost any construction. This being the first project in cooperation with Diab, POLYECIM greatly benefitted from Diab's long-term experience and knowledge of materials and design. Diab supplied the core material for the *infusion* process and offered support during the construction work. The successful cooperation resulted in a modern, practical and pleasant-looking transit center that will provide shelter for the travelers to Saint-Nazaire for many years to come. (The construction is certified by VERITAS.)

[www.polyecim.fr](http://www.polyecim.fr)