



## RoGBC uses Green Panel products in the most Challenging green demonstration project

## Premises:

Romania Green Building Council (RoGBC) and it's partners wishes to demonstrate that reaching the highest level of sustainability is possible in Romania. In the summer of 2010, RoGBC and Biblionet coorganized a contest that proposed improving access to information technology and providing a sustainable renovation of an existing library; typical for a small Romanian community. In addition to helping a small community create a state of the art library, the contest results would showcase an exemplary sustainable building; environmentally responsible in its design, renovation and operation, and transfer best building practices to the local communities and other libraries around Romania.

The public library of Cacica, Suceava county, won the contest for the green intervention and the project has been registered at the <u>International Living Future Institute</u>, in order to achieve the Living Building Challenge standard the most ambitious green building certification system worldwide

The Living Building Challenge certification it is comprised of seven performance areas (Site, Water, Energy, Health, Materials, Equity, and Beauty) with twenty Imperatives (petals), each of which focuses on a specific spheres of influence.

The Water, Energy and Materials imperatives are very challenging imperatives during the designing and construction period. The energy imperatives require that after the completion the building should be a Net Zero Energy Building. To achieve a Net Zero Energy Building the design should target a very low energy consumption building along with integration on site of renewable energy sources that covers the building's demand.

A very low energy consumption building can be achieved only if the building has a high energy performance envelope and mainly a very good thermal resistance. After a research regarding thermal insulation, the project team chose to use **Green Panel products** (SIP and DIP panels) that are the most efficient and accessible thermal insulation available in Romania. Another reason for choosing the SIP and DIP panels is the fact that the product respects the LBC certification Materials imperative. Green

Panels products successfully passed the Red List prerogative that requires to have just a very low impact on the environment during the production, usage and dismantle process.

Living Building Challenge is a philosophy, an advocacy tool and a certification system that addresses development at all scales.

Currently, there are only four Living Building Challenge certified projects in the world. And the <a href="ecoBiblioteca">ecoBiblioteca</a> project will be the first project of this kind that takes place in Europe and the first in Romania.

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