Passivhaus Marlegno

New Construction

Primary energy need:
98 kWhpe/m².anno
(Calculation method: Primary energy needs)

ENERGY CONSUMPTION

Building Type: Terraced Individual housing
Construction Year: 2015
Delivery year: 2015
Address 1 - street: Via dei Platani s.n. 24060 BOLGARE (BG), Italia
Climate zone: [Csa] Interior Mediterranean - Mild with dry, hot summer.

Net Floor Area: 97 m² Superficie útil
Construction/refurbishment cost: 250 000 €
Number of Dwelling: 1 Dwelling
Cost/m²: 2577.32 €/m²

Certifications:

General information

Passivhaus Marling is a single two-floor villa located in Bolgare (BG), Lombardia, Italy.

It was made following the standards of the ENERGY EFFICIENCY dictated by the Passivhaus Institut: high thermal insulation, air tightness, reduction of thermal bridges, high-performance windows, solar gains and VMC with heat recovery, in order to minimize energy consumption and reduce the environmental impact.

SUSTAINABILITY is the key word: its backbone fact has been realized with the innovative system constructive Tavego: walls, wooden beams assembled without the use of adhesives. The main goal is to reduce GHG emissions and increase the healthiness of the interior spaces. This is in addition to the many qualities of a noble material such as wood.
In addition, the Passivhaus Marling is a house ALWAYS CONNECTED: the internal network provides optimum plant management and consumption, avoiding waste and saving money.

The careful design of the details, the brightness of the spaces and the high quality design make Passivhaus Marling a sustainable home, healthy and comfortable to live in.

A new way of designing, which give a great importance to the man and the environment.

See more details about this project

http://www.marlegno.it/casapassiva

http://www.marlegno.it/la-casa-a-impatto-zero

Data reliability

3rd part certified

Stakeholders

Function : Construction company

Marlegno s.r.l.

info@marlegno.it

http://www.marlegno.it/it

Contracting method

Build and sell construction

Owner approach of sustainability

Living in a passive house is beneficial both in terms of energy savings and the economic point of view. The ability to easily manage consumption thanks to your home network avoids energy waste and thus save. Also the use of sustainable materials for the construction of the building is a choice in favor of environmental protection, as well as bringing greater comfort to those who live there.

Architectural description

The S / V relation and the orientation of the building have been carefully studied in order to maximize the energy efficiency of the building.

Energy

Energy consumption

Primary energy need : 98,00 kWhpe/m².anno
Primary energy need for standard building : 120,00 kWhpe/m².anno
Calculation method : Primary energy needs
CEEB : 0.0001

Envelope performance

Envelope U-Value : 0,14 W/m²K
Indicator : n50
Air Tightness Value : 0,25

Renewables & systems

Systems

Heating system :
Heat pump

Hot water system:
- Heat pump

Cooling system:
- Reversible heat pump

Ventilation system:
- Double flow heat exchanger

Renewable systems:
- Solar photovoltaic

Products

Product
Tavego®
Marlegno s.r.l.
info@marlegno.it
http://www.marlegno.it/

Product category: Obras estructurales / Estructura - Albañilería - Fachada

Construction system for floor slabs and prefabricated load-bearing walls in wood, have been made by combining different layers of tables with only connectors wooden or steel screws, without the use of adhesives.

ENVIRONMENTAL SUSTAINABILITY is the key word for a design that puts the center of the MAN and NATURE:
- The raw material used is 100% Italian wood PEFC certificate.
- The absence of glues allows a fast prefabrication, with low energy consumption and minimal CO2 emissions, in addition to guaranteeing a better health of the environment.
- The section of the composition has been studied to ensure the maximum structural stability with reduced sections, to avoid any possible waste of raw material.
- The ceilings with exposed structure are characterized by a high aesthetic.

This is in addition to the structural quality, sustainable, insulating and aesthetic than a noble material such as wood already owns.

The Tavego® system is a registered patent.
For more info: www.tavego.it

The product has been extremely successful during construction operations due to its simplicity and speed of installation transport.
Users of the house believe that the absence of the glues inside the product is a great benefit to the healthiness of the interior spaces.

Costs

Urban environment

Villa perfectly integrated into the urban surroundings; Presence of public green spaces in the surrounding area and accessibility to public transport.

Building Environmental Quality

Building Environmental Quality
- indoor air quality and health
- acoustics
- comfort (visual, olfactive, thermal)
- energy efficiency
- renewable energies
- maintenance
- building end of life management
- products and materials
Building candidate in the category

Low Carbon

Users' Choice Award