Industrial building Bonatti irrigations

Last modified by the author on 10/10/2016 - 10:25

Building Type : Logistics warehouse
Construction Year : 2010
Delivery year : 2012
Address 1 - street : 37060 VIA PAPA GIOVANNI PAOLO II, 8 - BUTTAPIETRA, Italia
Climate zone : [Csa] Interior Mediterranean - Mild with dry, hot summer.

Net Floor Area : 3 000 m^2 Other
Construction/refurbishment cost : 3 150 000 €
Number of Installed Kw : 400 Installed Kw
Cost/m2 : 1050 €/m^2

General information

Industrial building working as a nearly energy building through passive construction system and active energy producer

See more details about this project

http://www.nicolapreti.it/#/fuori-dalle-righe/
http://www.nicolapreti.it/#/fuori-dalle-righe/

Data reliability

Self-declared

Stakeholders

Stakeholders

Function : Designer
Nicola Preti, Fabio Faoro

arch.nicolapreti@gmail.com

http://www.nicolapreti.com

Function : Investor
Bonatti Irrigazioni

http://www.bonattiirrigazioni.it/

Function : Structures calculist
Ing. Davide Caiani

Function : Construction company
http://www.progress.cc/

Function : Other consultancy agency
Ing. Alberto Spellini

Contracting method

Lump-sum turnkey

Owner approach of sustainability

Sustainability is a continuous work of innovation. Each of my project is the experimentation of a new approach with technology. In this case the scope of the project and the objectives of the client were: - create a nearly zero energy building - create a natural interior atmosphere thanks to natural lighting - make the building work as a thermal mass.

Architectural description

Sustainability is a continuous work of innovation. Each of my project is the experimentation of a new approach with technology. In this case the scope of the project and the objectives of the client were: - create a nearly zero energy building - create a natural interior atmosphere thanks to natural lighting - make the building work as a thermal mass.

If you had to do it again?

I think the project had a good outcome due to the successful communication and collaboration between the stakeholders involved. The architecture the materials, and the energy choices were deeply discussed before the implementation. I wouldn't change anything.

Building users opinion

The users are the worker of the warehouse and the employees of the offices. They are both very satisfied with the thermal comfort inside the building, both in winter and in summer. In particular the employees of the office are satisfied with the temperature with a very low power heating system.

Energy

Energy consumption

Primary energy need : 150,00 kWhpe/m^2.anno
Primary energy need for standard building :400,00 kWhpe/m^2.anno
Calculation method : UNI TS 11300
CEEB : 0.0001
Final Energy : 105,00 kWhfe/m^2.anno

Envelope performance

Envelope U-Value : 0,32 W/m^2K
More information :
Wall: two-slab walls with thermal insulation
Windows: polycarbonate Thermoclick thickness 40 mm
Roof:

Renewables & systems

Systems

Heating system :
- Condensing gas boiler
- Water radiator

Hot water system :
- Condensing gas boiler

Cooling system :
- No cooling system

Ventilation system :
- Natural ventilation

Renewable systems :
- Solar photovoltaic

Products

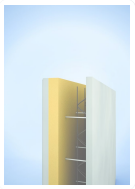
Product

Progress Thermowand

Progress

info@progress.cc

http://www.progress.cc/it
Product category : Opere strutturali / Struttura - Involucro - Finitura
Double prefabricated concrete wall with internal insulation



The product had a great success between the stakeholders thanks to the thermal comfort and the very low cost of other heating systems.

Lexan Thermoclick

Ampelite

vicorders@ampelite.com.au

http://www.ampelite.com.au/products/lexan-multiwall-polycarbonate/lexan-thermoclick/
Product category : Opere strutturali / Struttura - Involucro - Finitura
Polycarbonate panels used as screens for sunlight

Great acceptance thanks to the diffuse light it creates in the interior of the building.

Costs

Construction and exploitation costs

Renewable energy systems cost : 1 500 000,00 €
Total cost of the building : 1 650 000 €

Urban environment

The building is close to other industrial buildings. The surroundings are countryside areas.

Land plot area

Land plot area : 6 000,00 m^2

Built-up area

Built-up area : 50,00 %

Green space

Green space : 406,00

Parking spaces

322 mq

Building Environnemental Quality

Building Environmental Quality

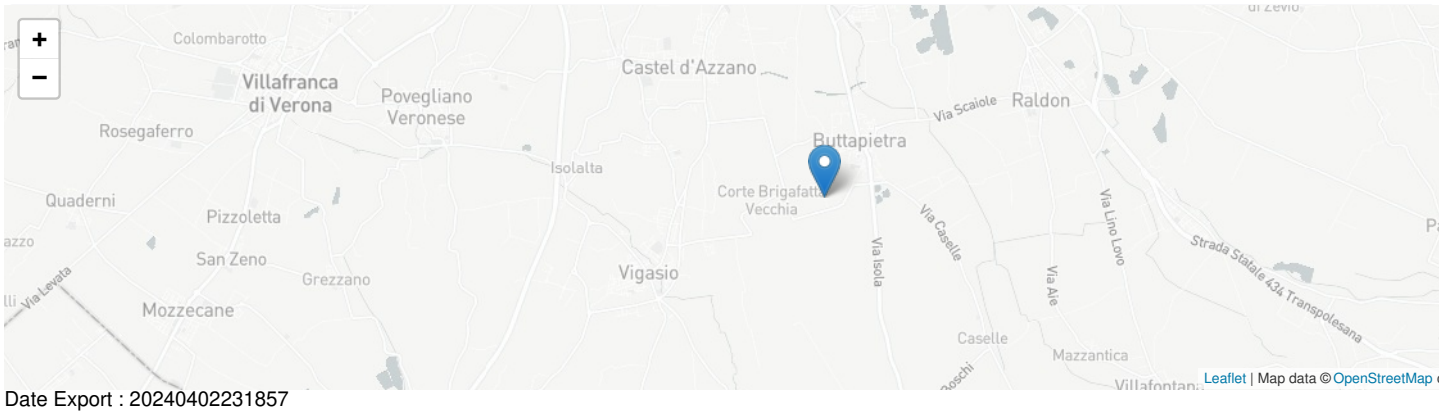
- comfort (visual, olfactive, thermal)
- renewable energies
- building process

Contest

Building candidate in the category

Energy & Temperate Climates

Users' Choice Award



Date Export : 20240402231857