References

Fujy



Uponor involvement

320

Fujy

Fujy-Natural Architecture

Project Facts:

Location	Completion
Madrid, Spain	2008
Building Type	Product systems
Single family home	Radiant Heating & Cooling, PEX Pipe Systems
Address	Project Type
El Escorial	New building

Partners

architect
Luca Lancini

Fujy-Natural Architecture Residential Project designed by architect Luca Lancini is the first sustainable architectural projects to be endorsed by different leading foundations, bodies, organisations and companies working within the construction sector.

It has been designated as the Emblematic Building Project of the Year within the Community of Madrid by that Autonomous Region’s Department for the Economy and Technological Innovation in recognition of its energy efficiency and for being a model of sustainability.

The construction project uses different systems in order to guarantee a low environmental impact during its working life cycle: construction, use and possible recycling/reuse.

The main architectural characteristics of this building project are:The way it blends in with the landscape in which it sits thanks to the bioclimatic design of the construction that sees each of the façades and lighting and ventilation shafts being treated differently in accordance with the direction in which they face.

The use of safe and renewable materials, finishes and fixtures and fittings thanks to a great extent to the use of certified wood.

The integration in the project design plan of different passive systems (inertia insulation, wood- and metalwork that breaks the thermal bridge, solar control slats, electrical grilles for preheating the living spaces, thermally glazed windows, solar controlled window roll blinds, greenhouses and solar drying room).Solar panel heat production, high-performance electronic modulation by condensation boilers and under floor cooling system inverted using propane gas coolers.

Access points free of architectural barriers and bathrooms adapted for the handicapped.Integrated system for controlling the energy efficiency of the installations.Domotic applications integrated into the domestic installations in order to guarantee not only their safety, but also the saving of energy.Non-renewable energy and water savings thanks to the use of:- Highly insulating materials.- High-performance lighting systems.- Rainwater collection.- Recycling of gray water for the irrigation of green spaces.- The use of mechanical and electronic tap timers.- The use of high-efficiency electrical appliances.- Introducing the use of domestic urinals.The Uponor Invisible Climate System.

The design of the dwellings, which implements bioclimatic architectural criteria, enables FUJY to make the most of the climatic characteristics of the region to enhance interior comfort and save energy.

This has been achieved by using Uponor’s Invisible Climate System, which is powered by solar thermal manifold headers and laid beneath low-temperature emission paving (less than 30ºC), resulting in imperceptible rising warm air and minimum movement of dust.

This system enables the most comfortable temperature to be programmed in each of the living spaces.As well as including Invisible Climate, the Fujy Project also uses Uponor’s Quick & Easy plumbing solutions. Thanks to the use of this system, a quicker, safer and more environmentally friendly installation was achieved. Furthermore, it guarantees healthier, higher quality water.

Fujy






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