

Sant Cugat del Vallès inaugurates its first certified Passivhaus home

On Friday 8 November 2019 Sant Cugat del Vallès inaugurated its first certified Passivhaus home and received the Municipis Passivhaus award, becoming the eleventh Catalan municipality with a building to this standard.

Sant Cugat del Vallès joins the list of Catalan municipalities that already have a certified Passivhaus home. Adding a building of these characteristics to the local housing stock is a concrete contribution to three goals often framed as abstract: reversing climate change, curbing energy dependence and minimising families' energy mortgage.

An inaugural event open to the public

Sant Cugat's first certified Passivhaus home is inaugurated on Friday 8 November at 16.30 at avinguda Del Carril no. 86. The programme combines an official inaugural ceremony with a guided tour led by the construction company and the architects, and includes a technical talk aimed at people without specialist knowledge and at the press. The goal is for attendees and media to learn first-hand the benefits of this type of home, both for those who live in it and for the municipality and the environment.

Before the guided tour, the home is officially inaugurated and the Municipis Passivhaus award is presented to the authorities, accrediting Sant Cugat del Vallès as a Passivhaus municipality.

Catalonia's eleventh Passivhaus municipality

With this inauguration, Sant Cugat del Vallès becomes the eleventh Catalan municipality to have a certified passive house, positioning itself among the pioneering municipalities in building high-efficiency homes and promoting a shift in construction paradigm. The municipalities that already have buildings of this kind are L'Arboç, Cantonigròs, Castelldefels, Castellterçol, Collsuspina, Girona (two), Moià, Palau-solità i Plegamans, Sant Quirze del Vallès and Sitges.

The construction company, PAPIK Group, is based in Sant Cugat del Vallès and has established itself in recent years as a benchmark in the [construction of passive houses](#) across Catalan territory, with around fifty projects. Despite this track record, until now it had not built a certified home in the very municipality where it is based.

What a certified Passivhaus home is

A passive house is a high energy-efficiency home, able to guarantee great indoor comfort while reducing energy and financial expenditure to a minimum. In some cases it generates more energy than it needs, thereby becoming an energy producer. Passivhaus certification provides the methods and criteria that verify a home meets the requirements of this standard, which rests on five principles:

- **Thermal insulation.** Excellent insulation of the envelope prevents the temperature reached indoors from escaping outside.
- **High-quality, efficient openings.** Doors and windows are the weakest points of the envelope and require high-performance products that guarantee a good thermal insulation coefficient.
- **Absence of thermal bridges.** Thermal bridges are unwanted losses or gains of temperature, caused by poor installation, material defects or deficient design.
- **Airtightness.** The home must be highly hermetic, so that outdoor air and temperature do not pass to the interior.
- **Mechanical ventilation with heat recovery.** A ventilation unit renews the air without energy loss, reuses the indoor temperature and purifies the incoming air, filtering out insects, bad odours, pollen and pollution.

Three certification categories

Passivhaus certification adapts to each climate, so that great comfort without energy expenditure is always achieved, in both cold and warm climates. It currently has three categories: standard; plus, which means the house is self-sufficient and not connected to the grid; and premium, which means the house produces more energy than it needs and is therefore a net energy producer.

Social and environmental benefits

Beyond the technical questions that explain how they work, these houses have a significant impact on society and the environment. Because they need very little energy to guarantee indoor comfort, they reduce the likelihood of energy poverty. Energy savings translate into financial savings that allow that capital to be reinvested in other local sectors and revitalise them.

Reducing consumption makes it possible to redesign the generation and distribution of electricity more sustainably, and enables a reduction of power plants and distribution infrastructure such as high-voltage towers, an aspect that is especially relevant for homes able to generate more energy than they consume. In the process of building a PAPIK Group passive house, more CO₂ is absorbed than emitted, so raising the home delivers a net environmental benefit.

The Municipis Passivhaus award

During the celebration, the Municipis Passivhaus award is presented to the authorities, accrediting that Sant Cugat has a certified Passivhaus home. This recognition is granted to all municipalities that have a building of this kind. Sant Cugat will be the first municipality to receive it, inaugurating an honorary mention that the other ten certified municipalities will progressively obtain. The information will be available at www.municipispassivhaus.cat. The initiative, created by PAPIK Group, aims to spread awareness of the benefits these buildings bring to the territory and to promote their construction across Catalan municipalities.

Inauguration | Sant Cugat del Vallès's first certified home

Friday 8 November 2019. At 16.30, official inaugural ceremony and presentation of the Municipis Passivhaus award. At 17.00, guided tour led by the builder and the architect (PAPIK Group and Energiehaus). To attend the tour, register by sending an email to info@papik.cat. Avinguda Del Carril no. 86, Sant Cugat del Vallès.

Every certified home added to a municipality stops being a technical exception and becomes a local reference point, bringing the Passivhaus standard to the ground where the future of construction is actually decided.