

K-TEN

A single-family home in Matadepera with very high energy efficiency, built with the Eskimohaus system. Contemporary architecture, comfort and next to no energy use.

Contemporary architecture and high efficiency

K-TEN is a single-family home in Matadepera built with the Eskimohaus system, where energy efficiency sits hand in hand with architecture, design and comfort. The house captures the character of the new generation of Eskimohaus homes: calm, elegant and made to age gracefully.

Beyond its low energy use, K-TEN is an aspirational home, one where very high efficiency is simply part of the design.

Technical data

- **Location:** Matadepera, Vallès Occidental
- **Year:** 2024
- **Type:** detached single-family, new build
- **Construction system:** Eskimohaus, industrialised light timber frame
- **Structure:** industrialised timber
- **Certification:** very high energy efficiency home, developed under Passivhaus criteria
- **Climate control:** aerothermal
- **Ventilation:** dual flow with heat recovery
- **Renewable generation:** photovoltaic, depending on project configuration
- **Objective:** nearly zero energy building (nZEB)

Architectural concept

The project favours a calm, restrained architecture: horizontal lines throughout, clean massing, no ornament for its own sake, large glazed surfaces, an easy flow between inside and out, flat roofs and generous overhangs for shade.

The home reads as contemporary without reaching for showy gestures. That restraint is exactly what lets it age well.

Spatial layout

The home follows the familiar Eskimohaus scheme: a large open living area with the kitchen flowing into the dining room and lounge, broad sightlines and daylight everywhere.

The bedrooms are clearly set apart, and the home stays in close touch with the gardens and terraces. The design keeps circulation space to a minimum so the rooms where daily life happens can breathe.

Construction system

K-TEN is built with the industrialised Eskimohaus system, based on a light timber frame. Much of the structure is made off-site, which brings dimensional accuracy, shorter build times and far less waste on site.

The envelope is designed around the principles of passive construction: continuous insulation, no thermal bridges, high airtightness, high-performance windows and careful control of water vapour. The result is a building that performs well beyond what the regulations require.

Building services

As with the rest of the Eskimohaus range, the energy strategy comes down to simplicity and efficiency. The aérothermal system handles heating, cooling and hot water with high efficiency, and the dual-flow ventilation with heat recovery keeps the air constantly fresh and filters out particles.

The home is designed so that solar panels can be added to cut the amount of electricity drawn from the grid.

Comfort and efficiency

K-TEN holds steady comfort all year, with even temperatures, no draughts and excellent indoor air quality, along with the minimal running costs you'd expect from a nearly zero energy building.

A home where very high efficiency is simply part of the design, not a technical add-on.