



# CASTELNUOVO RANGONE ECO-CONDOMINIUM

The Eco-Condominium commissioned by the Castelnovo Rangone municipal council and Acer Modena is an innovative expression of social housing. The project received the **Federcasa 2012 Quality Mark in recognition of its characteristics of eco-sustainability and social integration**. The four-storey structure, which is built entirely of Xlam timber panels, offers exceptional levels of seismic resistance and living comfort. The complex contains seven apartments. This timber condominium building, which complies with requirements of an environmental and social nature, has been used to house elderly persons.

## Characteristics of the timber condominium

The condominium in Castelnovo Rangone was constructed using **Xlam timber panels**, with the use of **Casa Natura** packages having a total thickness of 30.5 cm for the exterior walls and 43.5 cm for the floors. The construction system is dry and it uses exclusively **eco-compatible materials** with CE marking and **PEFC certification**, sourced from sustainably managed **forests**.

## A timber condominium building with energy class A

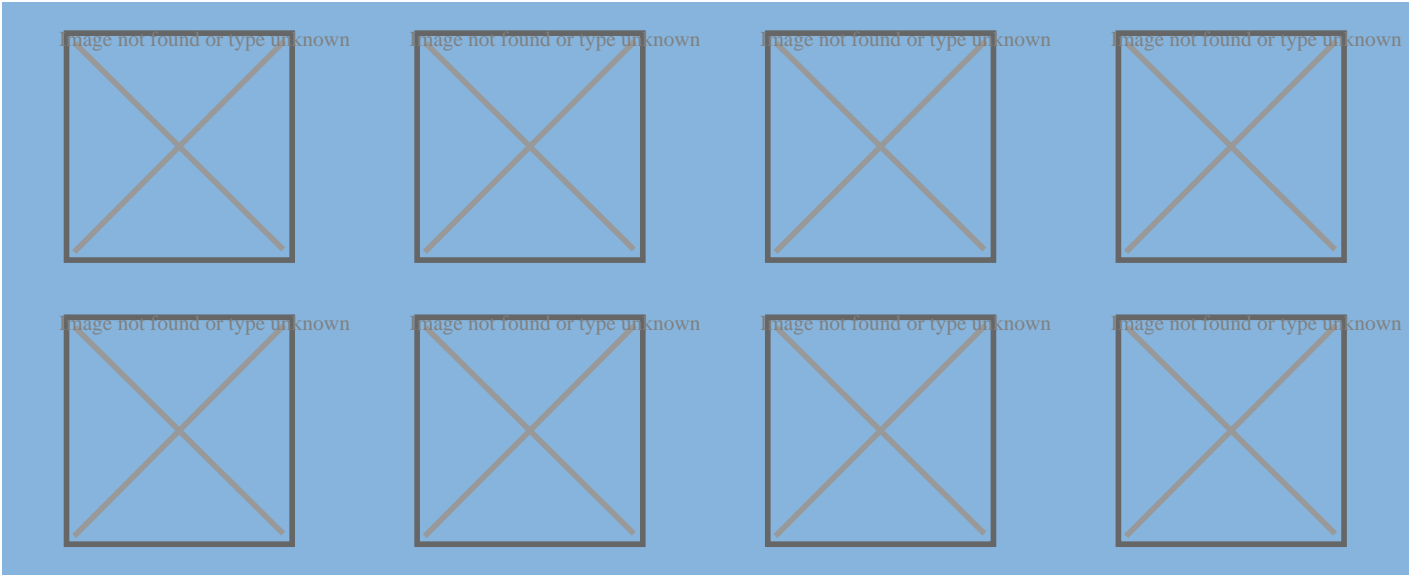
The building offers **high levels of energy savings** for its residents: energy efficiency is class "A", and the complex has **solar thermal and photovoltaic panels** on the roof to provide **70% of the domestic hot water required by users** and 7.2 kW of clean electrical power. The electrical system in all the apartments features home automation type technology, with video entry terminals in the bedroom and living room and an anti-intruder alarm system. The lighting system in all interior and exterior communal areas of the complex **has been created using LED light sources**.

## A social space

In addition to the seven apartments, the condominium includes **a utility room for each unit**, a **ground floor communal space for the residents, functioning as a meeting place and coffee bar, but also adaptable** to accommodate medical services if required. The external courtyard offers recreational functions and contains reserved parking spaces for the residents. The apartments can be accessed by means of an elevator **system of the latest generation, powered by low consumption batteries**.

# PRODUCT SPECIFICATION

Timber condominium building
<b>Localization:</b> Castelnovo Rangone (Modena)
<b>Intended use:</b> Condominiums, Multi-Storey Buildings and Social Housing
<b>Architeturual and structural design:</b> Architect Grazia Nicolosi - Acer Modena
<b>Total area:</b> ft



# BUILDING SYSTEM

## XLAM



### Reasons for choosing the Xlam system

The Xlam system is a technical innovation in the construction of timber homes and buildings. The system's exceptional versatility allows the creation of a wide range of architectural constructions, including multi-storey **timber buildings**. The system assures **optimal thermal insulation** and a high level of **fire resistance**, a fast drying process and exceptional **acoustic insulation**.

### About the Xlam system

The Xlam panel is composed of crossed layers bonded together, making the construction system extremely **versatile**. Composed of 99.4% timber and 0.6% adhesives, Xlam is considered to be a monolithic material **capable of supporting very high loads and withstanding external stresses and seismic activity**.

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