

MULTI-STOREY APARTMENT BUILDING IN ROVERETO (MODENA, ITALY)

STARTING AGAIN FROM THE WOOD AFTER THE EARTHQUAKE

This apartment building was created to replace homes that had been structurally damaged in the 2012 earthquake.

Composition of the prefabricated Xlam timber apartment building

The new building has two storeys in addition to the ground floor. The ground floor features an apartment with private garden, designed to accommodate a disabled person, a multi-purpose resident's communal room with bathroom and external courtyard, garages (one per apartment) and a boiler room. The first and second floor have 4 apartments each with the same layout.

Timber apartment block thermal insulation

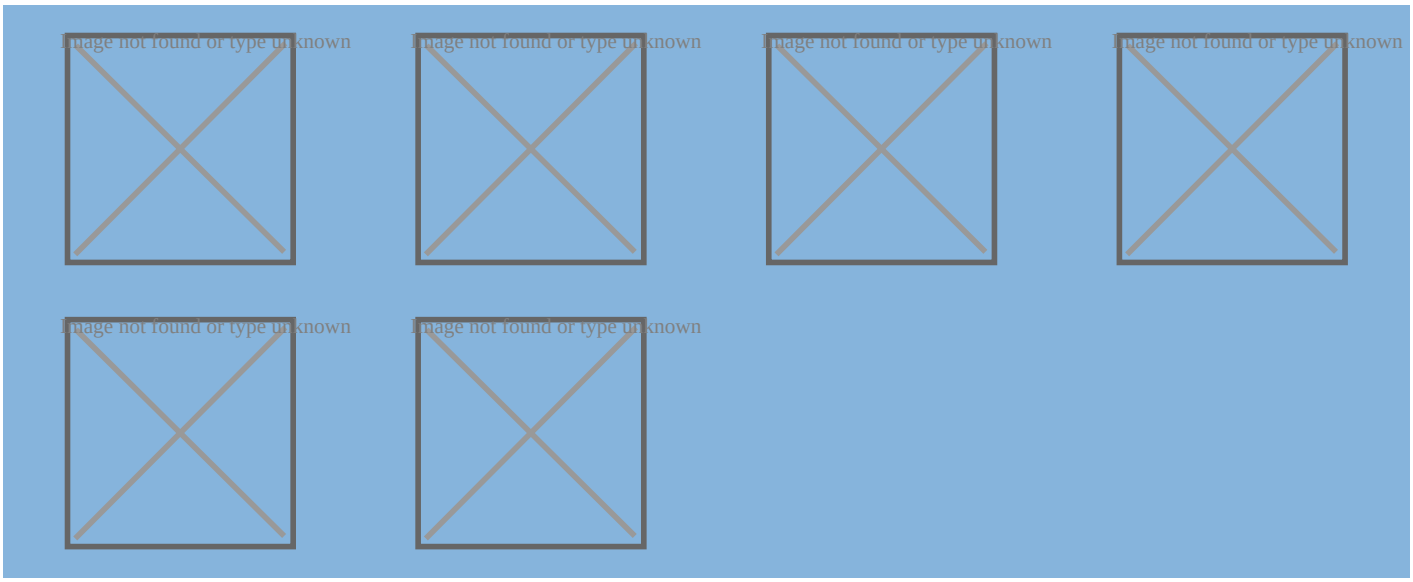
Special attention was devoted to creating the external envelope of the building by installing an insulated package, completed with **thermal cladding**, elimination of **thermal bridges** and installation of **high-performance wood framed windows**. The outer envelope described above also guarantees acoustic insulation between interior/exterior **and** from **apartment to apartment**, both vertically through the intermediate floor packages and horizontally, with Xlam walls and plasterboard cavity walls with cavity filled with rock wool insulating material.

Cutting edge technical system for timber residential units

With regard to the building's energy performance, winter heating and domestic hot water production and also summer cooling are provided by a heat pump; each apartment is fitted with fan coils with radiant panels in the apartment and towel warmer radiator in the bathrooms. The technological systems are also integrated with alternative energy sources (photovoltaic panels for electricity production, solar thermal panels for domestic hot water, etc.).

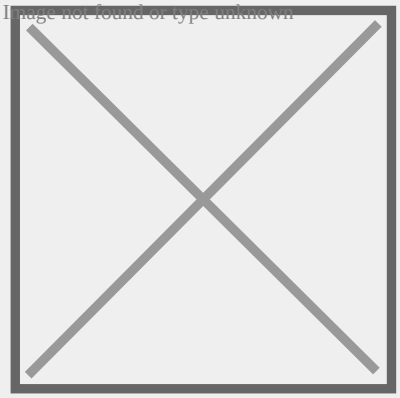
PRODUCT SPECIFICATION

Multi-storey Apartment Building
Localization: Rovereto (Modena)
Intended use: Condominiums, Multi-Storey Buildings and Social Housing
Architetural and structural design: Architect Marco Toni
Total area: 940ft



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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