



# ELEVATION FOR AN ATTIC IN PIAZZA PIO XI IN MILAN

## PREFABRICATED PLATFORM FRAME AND FRAME STRUCTURE MADE ON SITE

In Milan, in the central Piazza Pio XI, Sistem Costruzioni built the elevation used as an attic in a five-storey building. The surface is about 200 square meters with Platform - Frame technology, a frame structure. With a view to maximum efficiency and flexibility, the walls of the elevation were built on site, directly on site, while the roof was prefabricated in the factory, thus reducing installation times and simplifying logistics. Made with: Montorfano Srl Construction Company - Cantù - Milan

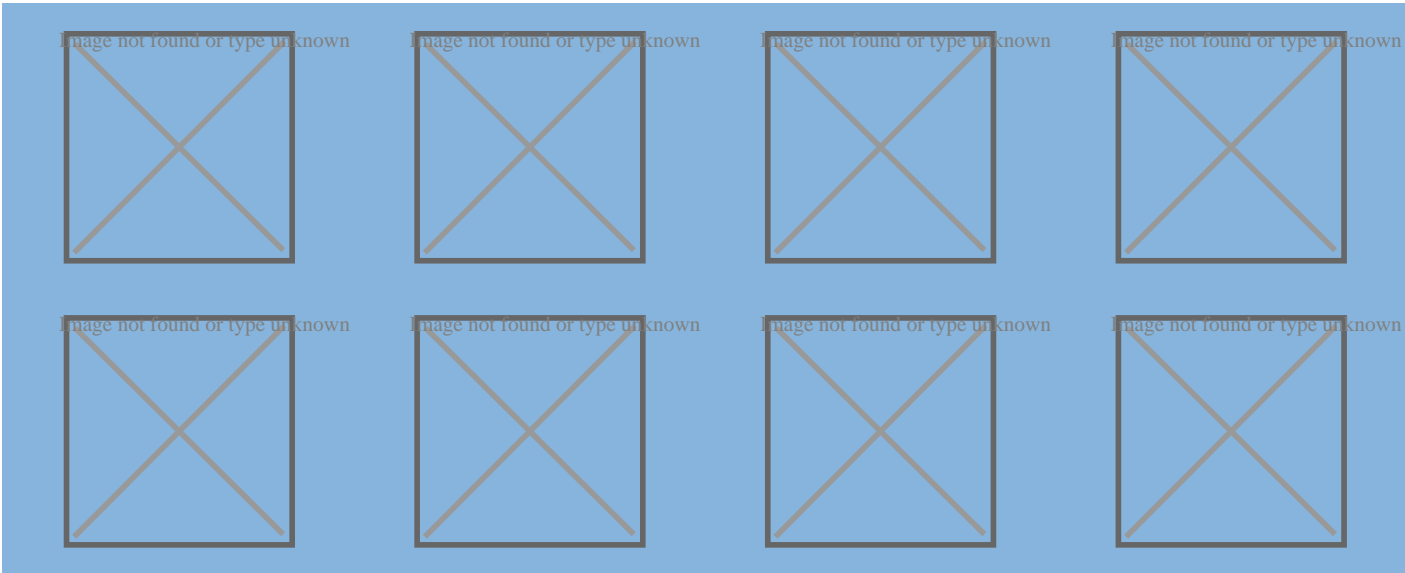
## PRODUCT SPECIFICATION

**Localization:** Milano

**Intended use:** Added storeys and extensions

**Architeturale and structural design:**

**Total area:** 200ft



# BUILDING SYSTEM

## Platform-Frame



### Reasons for choosing the Platform-Frame system

**The Platform-Frame system is ideal for building prefabricated multi-storey homes and other types of timber buildings.** This system can be used to create single residential units and condominium buildings of up to four floors in elevation. That explains why this construction technique is especially suitable for **timber buildings for social housing needs:** structures for emergency accommodation needs and shared community spaces. The system also offers excellent **insulation and antiseismic properties:** it offers the highest structural coefficient of all timber construction types. It's also an **economical and easy to erect system.**

### About the Platform-Frame system

**In the Platform-Frame construction system each floor of a building functions as a platform to support the floors above.** Although developed in Northern Europe, the Platform-Frame system is widely used in North America. **Each wall or floor is composed of evenly spaced laminated wood or KVH structural timber studs.** The building frame is covered on the exterior side by OSB structural cladding, fixed by means of ring-shank nails and metal angle brackets. The Platform-Frame system is generally built on a reinforced concrete plinth. The connection between timber building and foundations is assured by threaded steel bars or expansion anchors.

## Post & beam



### The frame of the timber house – a solid, eco-sustainable and versatile load-bearing structure

The post & beam construction system uses **laminated wood columns** (vertical members) **and beams** (horizontal members) **to** create the building's load-bearing structure. These loading elements are arranged in such a way as to guarantee **total flexibility for the design of the facades and internal partition walls.** The strengths of this construction technology, which is perfect for multi-storey buildings, lie in the **freedom for distribution of the interior walls and the facility to reposition them also at a later date,** the **architectural flexibility in the design of the facades,** and the **low incidence of cubic metres of timber per square metre of building space.**

### A timber building with high seismic resistance

**The functions of stiffening and bracing to withstand seismic loads are performed by diagonal braces** made of timber or steel, or alternatively by column-beam nodes designed as interlocking or semi-interlocking joints.



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