

WHY CHOOSE A WOODEN BUILDING

✓ Availability

Wood is a natural and ecological material: it is currently the most widely available renewable raw material. The wood used comes from responsibly managed and certified forests.

✓ Structural and Seismic Resistance

Wood has an excellent strength-to-weight ratio. This allows wooden houses to withstand very strong seismic shocks without suffering serious deformation.

✓ Thermal and Acoustic Insulation

The physical and technical properties of wood make it the most suitable material for designing healthy and balanced environments. Wooden houses with adequate insulation and compliant with energy-saving regulations provide a comfortable indoor environment and reduce energy consumption costs.

✓ Fire Resistance

Wooden houses have fire resistance comparable to that of traditionally built structures.

✓ Maintenance

Wood, when properly treated and processed, is one of the materials most resistant to weathering. Wooden structures do not require constant maintenance.

✓ Assembly

Wooden structures have short assembly times and great versatility in design. Panels and structural elements are manufactured in our facilities and, once ready, transported and assembled on-site.

✓ Guaranteed Timelines

Once the wooden house project is defined, construction times are significantly reduced.

✓ Cost Certainty

In many traditional constructions, poor planning and the absence of detailed specifications and bills of quantities often lead to cost variations, usually to the client's disadvantage. With wooden houses, all of this is carefully controlled, avoiding unpleasant surprises.

MAIN CONSTRUCTION SYSTEMS

✓ X-Lam System – Cross Laminated Timber (CLT)

This represents technological innovation in the construction of wooden houses and buildings. Its high versatility allows for outstanding architectural solutions, including multi-story wooden buildings. It ensures excellent thermal insulation, high fire resistance, fast drying processes, and good acoustic insulation.

✓ Timber Frame System

This construction system uses vertical columns and horizontal beams in laminated wood to form

the load-bearing structure of the building. These elements are arranged to ensure full flexibility in the design of façades and internal partitions. Its strengths include freedom in floor plan distribution, the possibility of relocating internal walls even later, architectural flexibility in façade design, and reduced wood volume per square meter built.

✓ Block House System

This system allows the construction of prefabricated wooden houses and villas that are solid, compact, and perfectly thermally and acoustically insulated. It consists of overlapping squared wooden beams with longitudinal grooves and end joints that facilitate corner interlocking. Wall stability and resistance to horizontal forces are achieved through interlocking orthogonal walls, characterized by distinctive corner joints that are also aesthetically appealing.

COMPANY MISSION

✓ Respect for the Environment

The company, holding all required certifications, follows a production process that meets environmental sustainability standards. It uses high-tech cutting and impregnation systems with CNC machinery and employs CE-certified, environmentally friendly materials that help neutralize up to 70% of the formaldehyde present in indoor air.

✓ Custom-Made Homes

Through accurate design, specialized software, and CNC cutting machinery, the company creates tailor-made homes. It holds a “Processing Center” certification for structural works in public projects and ISO 9001 Quality Management certification.

During the design phase, the process moves from executive planning to detailed construction design, including all necessary operations on each wooden element (cuts, chamfers, dovetail joints, milling, slots, pockets, etc.).

Through a process of product engineering, the structure becomes a true industrial prefabricated system. Each wooden component (load-bearing beams, purlins, studs, ridge beams, etc.) is numbered and stored according to its structural function (roof framework, wall frame, etc.), ready for precise assembly following technical instructions and installation drawings.

This production method promotes wood savings, eliminates waste in the factory, and focuses strongly on environmental sustainability.

✓ Product Care and Attention

Wood elements undergo water-repellent and moisture-regulating treatments using water-based protective and decorative impregnating agents. The treatment process takes place in the factory before final storage, using an automatic CNC-controlled impregnation system. Pre-treatment ensures complete protection of all wooden surfaces, preserving and extending durability and resistance over time.

✓ Extremely Green Product

The goal is to offer a highly sustainable, possibly zero-impact product designed to guarantee comfort for its users. Bio-architecture is not merely a combination of technologies and materials but focuses on the physical and psychological well-being of people in deep connection with their environment.

✓ Respect for the “Genius Loci”

Designing in harmony with the territory and the feelings of its inhabitants. Every place requires specific responses.

✓ Collaboration and Dialogue

Providing support to professionals designing passive and eco-sustainable structures by sharing company know-how.

TYPES OF MATERIALS USED

- Laminated spruce beams (red spruce)
- Solid spruce beams (river grade – Trieste grade)
- Laminated larch beams
- Cross-laminated timber (X-Lam) panels (crossed spruce boards)
- Chestnut wood beams and planking
- Spruce or larch paneling and boards
- OSB3 structural panels (Oriented Strand Board)
- Phenolic plywood panels in Chilean pine, birch, okoumé
- Spruce lumber (joists, planks, battens)
- Certified steel carpentry (heavy structural steel made to design, column bases, brackets, concealed supports, structural screws, CE-marked accessories)
- Natural insulating panels with CAM certification (glass wool, mineral wool, wood fiber, cork, hemp) for thermal insulation of vertical, horizontal, and sloped surfaces
- Synthetic insulating panels with CAM certification (EPS, XPS, polyurethane, etc.)
- Waterproofing materials (vapor control layers, vapor barriers, elastoplastomeric membranes)
- Insulated metal sandwich panels for roofing or vertical closures
- Continuous roofing materials (membranes, bituminous/synthetic sheeting, metal) or discontinuous materials (clay or concrete tiles, curved tiles, sheets)

- Metal roofing accessories in copper, aluminum, zinc-titanium, stainless steel, pre-painted sheet metal for gutters, downpipes, flashings, vertical cladding, and double-lock standing seam systems
- Polycarbonate sheets (solid, multiwall, corrugated) for horizontal and vertical enclosures
- Roof windows for flat roofs, low-slope, and pitched roofs, including accessories such as sun tunnels for zenithal lighting, available in manual or electric systems
- Interior and exterior cladding materials such as high-performance plasterboard and gypsum fiber boards that ensure environmental sustainability, improve acoustic insulation, regulate moisture absorption, enhance indoor air quality, and increase fire resistance
- Exterior cladding in composite wood (WPC – Wood Plastic Composite), highly resistant to weathering, suitable for vertical and horizontal screening, ventilated façades, decking, and external coverings.