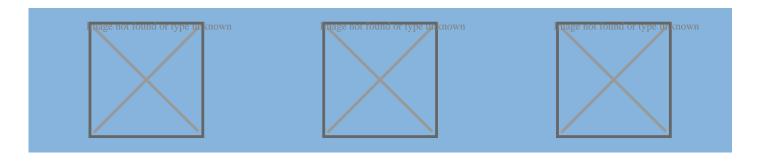


Under the heading eco-sustainable buildings we can see the beautiful synergy between the laminated wood beams and the multilayer Xlam panels that give life to an imposing coverage of 1,000 square meters, characterized by the significant volume related to the lightness of the structure: the ventilated wooden roof guarantees a high durability thanks to the sophisticated production techniques and the appropriate treatments that the wood receives. Furthermore, having greater flexibility, it is able to react better to the stresses deriving from the earthquake.

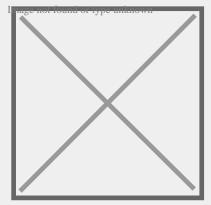
# PRODUCT SPECIFICATION

Sede aziendale	
Localization: Bologna	
Intended use: Factories	
Architetural and structural design: Polistudio A.E.S.	
Total area: 1000ft	



## **BUILDING SYSTEM**

#### Laminated and Solid



#### Reasons for choosing the Laminated and Solid system

This construction system guarantees the creation of timber roofs of various sizes and of different levels of complexity in compliance with specific static loading calculations and transferring vertical and horizontal loads to the foundations by means of conventional building elements, in certain cases.

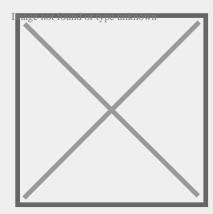
#### A durable and versatile timber roof

The unique characteristic of laminated wood and the connections between the various elements make it possible to create roof spans of more than 30 metres and to build roofs of very large surface areas without having to break up the ground plan of the building with awkward intermediate pillars.

#### High levels of insulation and strength

Depending on the thermal requirements, the **roof** can be completed with an insulating package and outer covering. The joists of the web roof structure can be designed in accordance with a very diverse range of geometries: the ridge beam establishes the shape of the roof while the wall plate beam can be adapted to match architectural, static or application requirements. The nodes of the web support structure can be created with metal plates fastened to the wood with screws and pins, with wood to wood joints, or by means of direct fastening with normal screws or full-threaded screws. Because they are extremely slender elements, timber joists or rafters must be braced with timber or steel elements designed to prevent the occurrence of lateral out-of-plane instability.

#### **XLAM**

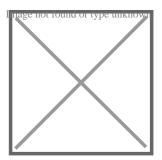


#### Reasons for choosing the Xlam system

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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