



# RANCHON PLAYA MELIA MARIA AGUILAR TRINIDAD - CUBA

## A SPECIAL LAMINATED WOOD COVER FOR AN EXCLUSIVE STRUCTURE

For the beach restaurant of the Hotel Meliá Maria Aguilar in Trinidad, Cuba, Sistem Costruzioni created and assembled the octagonal roof in laminated wood. The work, in the shape of a "cone", is characterized by a diameter of 30m at the base and a "lantern at the top" with a diameter of 9m. Under construction, the five-star Meliá Trinidad hotel will be located near the beach of María Aguilar, a dream site on the southern Cuban coast with an area of 5.9 hectares. A three-level main building will be erected in a prime beachfront location, located just over 10 kilometers from the historic center of the city of Trinidad, declared a World Cultural Heritage Site in 1988.

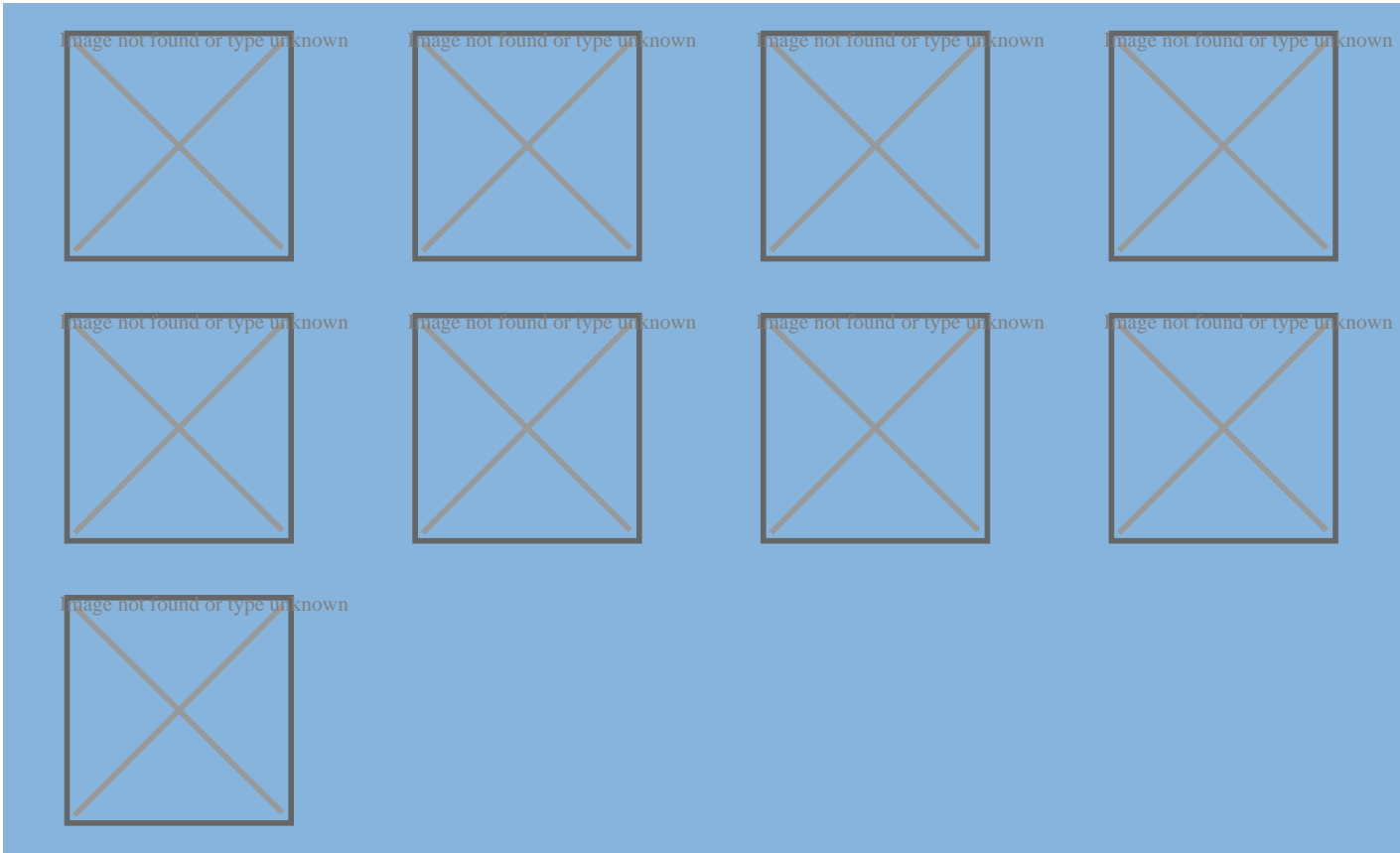
### PRODUCT SPECIFICATION

**Localization:** Trinidad - Cuba

**Intended use:** Hotellerie Receptive infrastructure

**Architetur and structural design:**

**Total area:** ft



# 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.



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