

At the beginning of the sixteenth century, the aristocratic Cappello family from Venice began building a magnificent villa at Galliera Veneta with an adjacent large park. The stylistic features of the oldest part of Villa Cappello indicate that the author was immersed in the culture of Padua and not that of Vicenza, in other words, totally estranged from Palladianism. Later extensions and modifications made the villa grandiose: the palace has a long façade interrupted by pairs of pilasters on which a long trabeation embracing the entire building lies. The entrance is colonnaded and raised with a terrace and lantern. A beautiful fountain stands in front of the entrance pronaos.



RENOVATION OF THE FLOORS

**Villa Imperiale
Galliera Veneta (PD)**

Opposite, there are two arcades with porticoes, separated towards the road by an iron gate. The ends of the arcades terminate with two battlemented towers with pagoda roofs. The western arcade incorporates the oratory with a classical façade crowned by statues. From 1808 on, the property changed hands several times. In 1858, it went to Anna Maria of Savoy who had married the Austrian Emperor Ferdinand I: from then on it became known as "Imperial". During the 1st World War, the Villa became the 4th Italian Army HQ. In 1929, by then in a state of neglect, it was put up for auction. The Villa was purchased by the Italian Social Security Institute which converted it into a Sanatorium. It is currently occupied by various hospital departments. The Imperial Villa park, which is also interesting from the botanical point of view, is now open to the public.

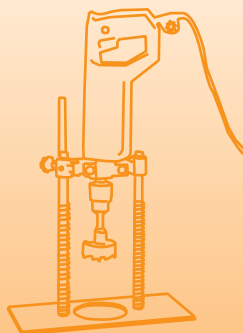
During the renovation, the existing wooden floors were replaced with new ones that, due to architectural constraints, had to be rebuilt in wood. The need to upgrade the load capacities to current standards and the need to increase rigidity, both to prevent damage to rigid floors and cracks in the supporting surfaces, and to optimise comfort by limiting impact vibration and improving soundproofing, induced the designers to adopt composite wood-concrete floors. Consolidation work also had to create a fire barrier between floors.

Applications of "BASE" connectors with board core boring

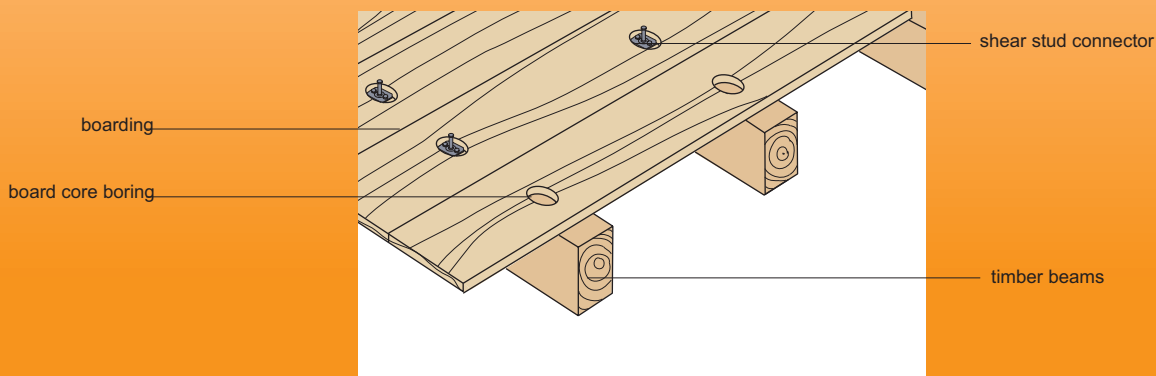
Due to the decay of the structure, both internally and externally, it was considered necessary to replace the existing wooden floors with new ones that, due to architectural constraints, had to be rebuilt in wood. The need to upgrade the load capacities to current standards and the need to increase rigidity, both to prevent damage to rigid floors and cracks in the supporting surfaces, and to optimise comfort by limiting impact vibration and improving soundproofing, induced the designers to adopt composite wood-concrete floors. Consolidation work also had to create a fire barrier between floors.



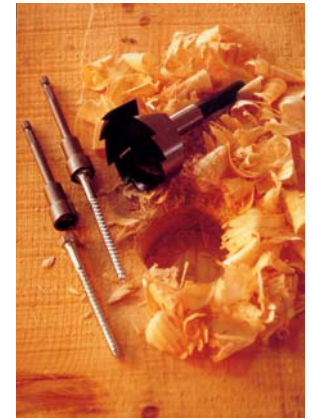
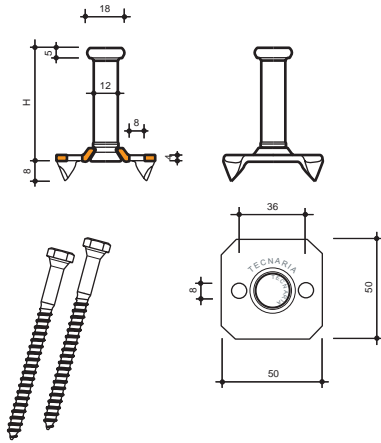
After fitting the new wooden beams in the existing holes, the boarding was laid and nailed on top.



L'assito è stato carotato in corrispondenza delle travi portanti utilizzando un trapano con apposita fresa. Sono state fatte inoltre dei raccordi perimetrali tramite gabbie e ferri a V.



applications



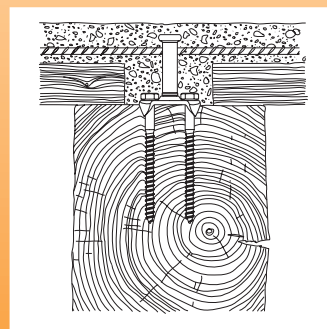
65 mm diameter holes were drilled in the boarding in order to expose the extrados of the wooden beam. This solution offers elevated rigidity to the connection between the wood and the concrete.



The connector was fixed to the beam with the two sleeper screws using an air impact wrench.



The job was completed by recovering the string-courses with cages and rods inserted in the load-bearing wall.



After laying the electro-welded mesh in order to uniformly distribute the load, the concrete was cast. It should be pointed out, of course, that before casting the concrete the floors were suitably shored for the time required for the concrete to cure.



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