Year: 2016
Location: Japan
Program: House

Vin Sante + N house



In Japan, the level of timber engineers and fabricators, and the development of timber engineering is far behind Europe, especially Switzerland and Germany. Under such constraints, considered a rigid timber frame structure with a simple connection that could be built in Japan and minimized the use of metal connection hardware. The columns and beams in the longitudinal direction are wide laminated wood members (450mm columns and 600mm beams) that overlap, and eight drift pins are driven into the wide overlapped surface (600 x 450mm) to form a rigid connection through shear force. The beam's in the transverse direction were also shifted from the longitudinal beam and penetrate through the column to create a lip that further supports the longitudinal beam. At the connection of the short direction beams, a triangular wooden strut helps to form this rigid connection.