Year: 2016 Location: Japan Program: Residential

## 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 ( $450 \, \text{mm}$  columns and  $600 \, \text{mm}$  beams) that overlap, and eight drift pins are driven into the wide overlapped surface ( $600 \, \text{x} \, 450 \, \text{mm}$ ) 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.