

Timber Construction Manual

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Floor plate using edge-glued elements

85 · School for special needs children

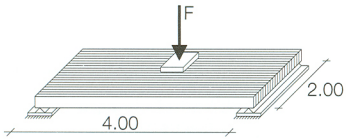
Garbsen, D; 2002

Architects: Despang Architekten, Hannover, D

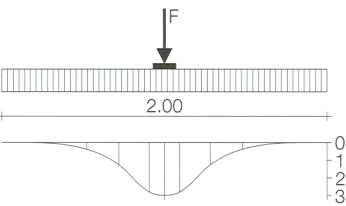
Structural engineers: Ingenieurgesellschaft Lieberum und Steckstor, Hannover, D

The four single-storey classroom wings and the upper floor of the administration block are built entirely of prefabricated edge-glued elements, which enabled quick erection on site. As with log construction, the large mass of timber and its heat storage capacity results in a comfortable interior climate. The floors and walls of edge-glued elements are profiled on the exposed faces and backed with oriented strand boards (OSB) to provide stiffness. The building services are installed in the cavities of the double-leaf internal walls.

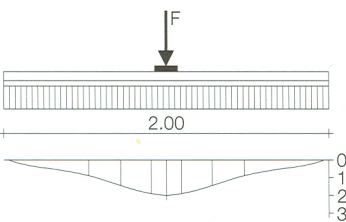
Variations for edge-glued elements



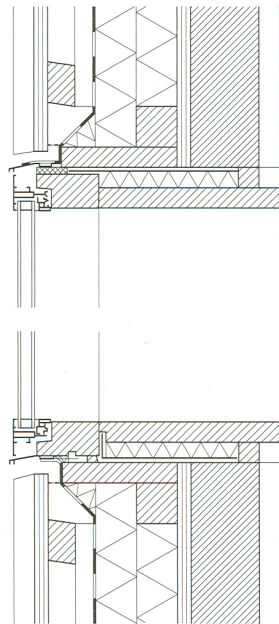
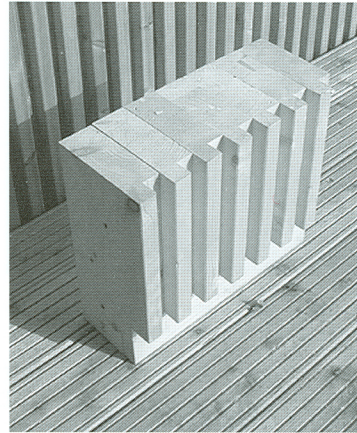
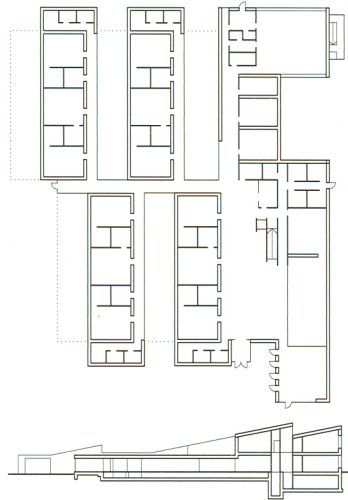
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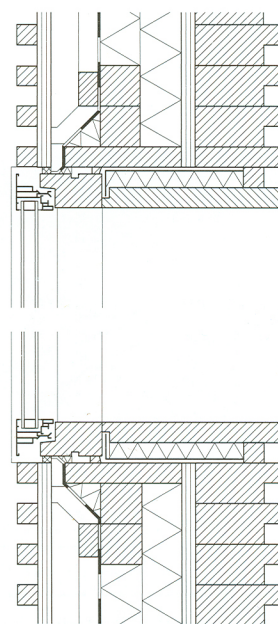
Load distribution of point load without floor finishes



Load distribution of point load with floor finishes (wood-based boards and impact sound insulation)



Facade, vertical section



Facade, horizontal section

