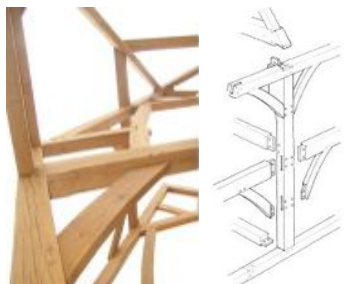


Prefabrication internationally

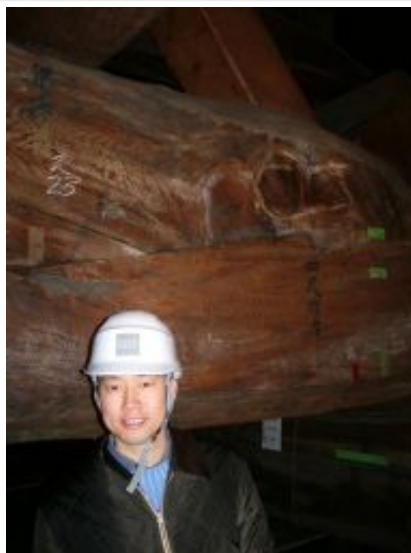
Shanks and Zankl

*Centre for Sustainable Architecture with Wood,
School of Architecture and Design,
University of Tasmania*

Superstructure - traditional



Superstructure - traditional



Superstructure - traditional



Superstructure - traditional



Superstructure - civic



WISE at CAT
Pat Borer & David Lea Architects
Buro Happold Engineers

Superstructure - civic



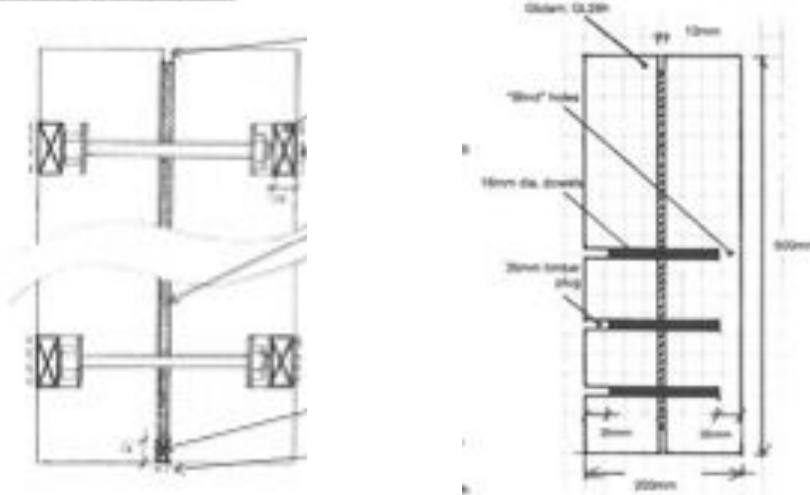
Superstructure - civic



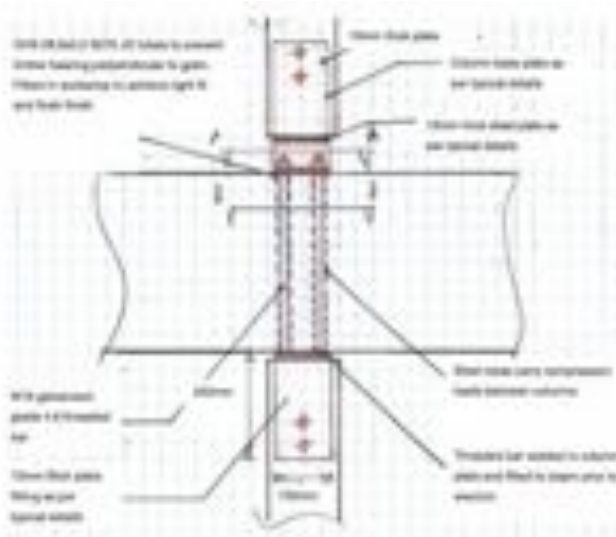
Superstructure - civic



Section through lateral beam connection



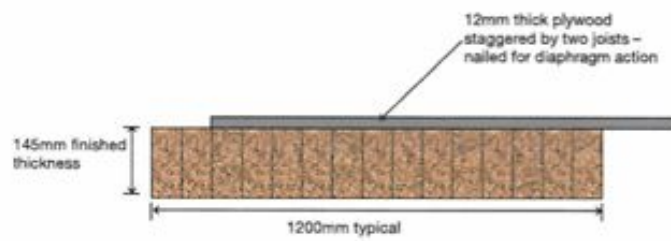
Superstructure - civic



Superstructure - civic



Superstructure - civic



Superstructure - civic



5. Care when handling/storing timber

Chairs laid onto glitch wall surface will be damaged



Superstructure - civic



1. Grouted bearing supports



See sketch below for original connection details, and proposed solution for retrospectively fitting galvanneal steel plates.

Superstructure - civic



Scunthorpe Sports Academy
Andrew Wright Architects
Buro Happold Engineers

Superstructure - civic



Superstructure - civic



Superstructure - civic



Superstructure - envelope



Superstructure – digi fab





Building with wood internationally



Bavaria



Tasmania



Building with wood internationally



Building with wood internationally



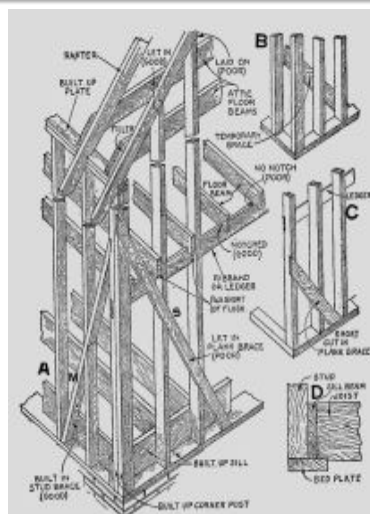
Timber frame



Timber frame constructions since 1980

vast development in prefabrication due to

- high quality standards
- high labour costs
- low material costs
- climatic conditions



Thermal performing requirements



U-value < 0.24 as a standard

in W/m^2K < 0.15 "Passivhouse"

- Superinsulation
- Airtightness
- High performance windows (triple glazed)
- Mechanical ventilation with heat recovery



Thermal performing requirements



goal: "1,5 liter house"



Prefabrication of walls



Prefabrication of walls



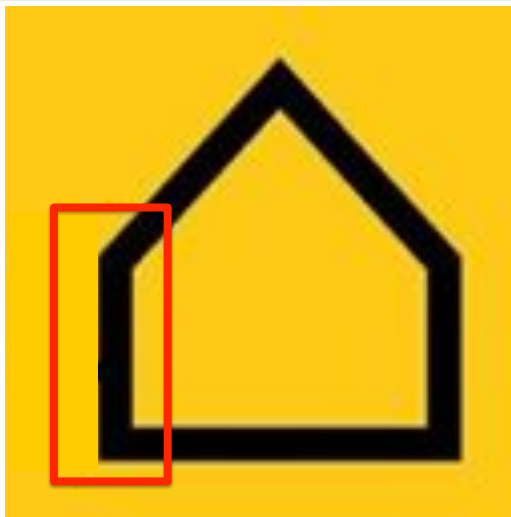
- Walls
- Floors
- Roofs
- Modules



Prefabrication of walls



- Walls
- Floors
- Roofs
- Modules



Prefabrication of walls



Prefabrication of walls



Prefabrication of walls



Prefabrication of walls



Prefabrication of walls



Prefabrication of walls



Prefabrication of walls



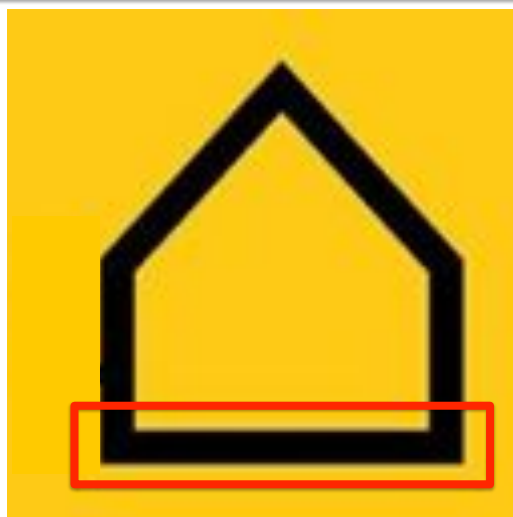
Prefabrication of walls



Prefabrication of roofs



- Walls
- **Floors**
- Roofs
- Modules



Prefabrication of floors



mechanically laminated



glue laminated



composite elements



Prefabrication of floors



mechanically laminated



Prefabrication of floors



glue laminated



Prefabrication of floors



glue laminated

Support example



from WWW.holzverbindung.de

Prefabrication of floors



composite elements



from WWW.holzverbindung.de

Prefabrication of floors



composite elements

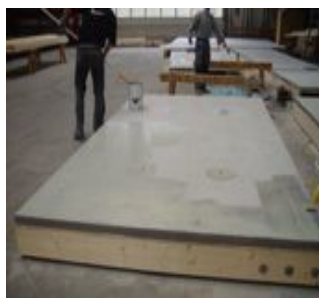


from WWW.LIGNATUR.ch

Prefabrication of floors



wood-concrete composite slab

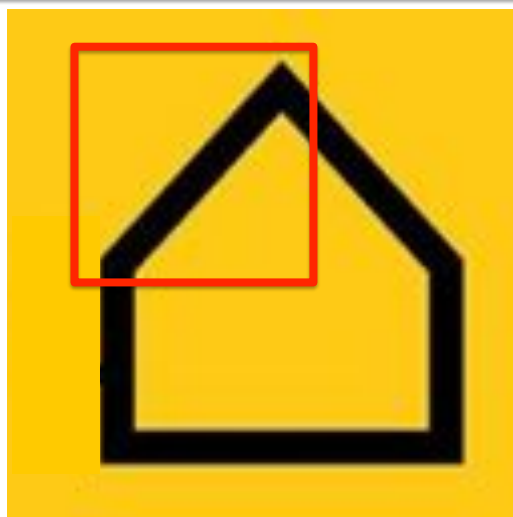


from WWW.holzverbindung.de

Prefabrication of roofs



- Walls
- Floors
- **Roofs**
- Modules



Prefabrication of roofs



Prefabrication of roofs



Prefabrication of roofs



- Walls
- Floors
- Roofs
- **Modules**



Prefabrication of modules



Prefabrication of modules



Prefabrication of modules



Prefabrication of modules



Hotel Ammerwald, BMW-Group

Architect: Oskar Leo Kaufmann



Prefabrication of modules



Prefabrication of modules



Prefabrication of modules



Prefabrication of modules



Prefabrication of modules



Prefabrication of modules



Questions?



Greg Nolan
Jon Shanks
Karl Zankl

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Wood,
School of Architecture and Design,
University of Tasmania*



More Information

