

Holz-Glasverbund:



Collaboration :
Alexis JAFFIER
Jan HUBER
Membre :
UTS
Contribution for Technology
and Innovation
Parade | 1905 1387

TIMBER AND GLASS IN STRUCTURAL GLAZING

PRINCIPLES

- Timber and glass glued to form composite sections
- Timber-glass composite elements for facades, greenhouses, windows, etc

TESTS

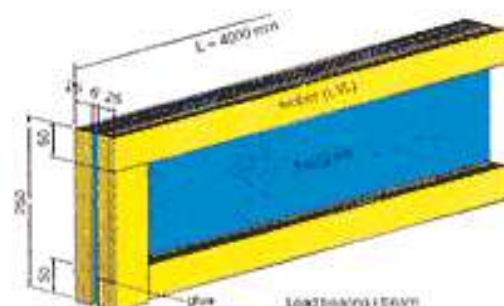
- Shear compression tests on small specimens under climatical variations → right glue
- Horizontal elements submitted to 4-point bending tests
- Vertical elements under horizontal load
- I-beams submitted to 4-point bending tests

ADVANTAGES

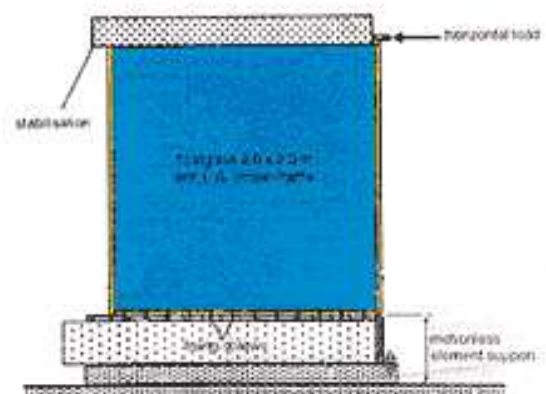
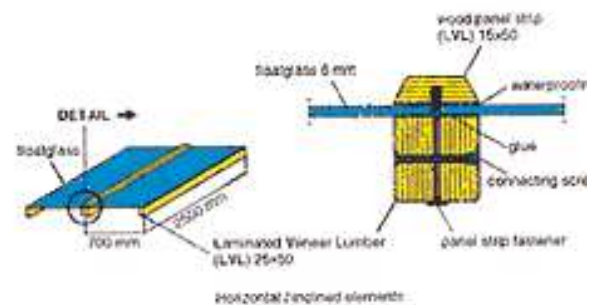
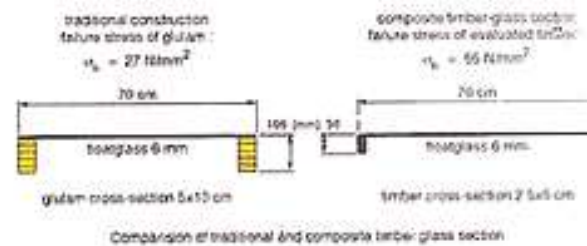
- Timber in tension and glass in compression (horizontal elements)
- Ecological
- Light structure
- Optimised energetic profile
- Minimal cold bridges
- High degree of prefabrication
- Economical

ELEMENTS

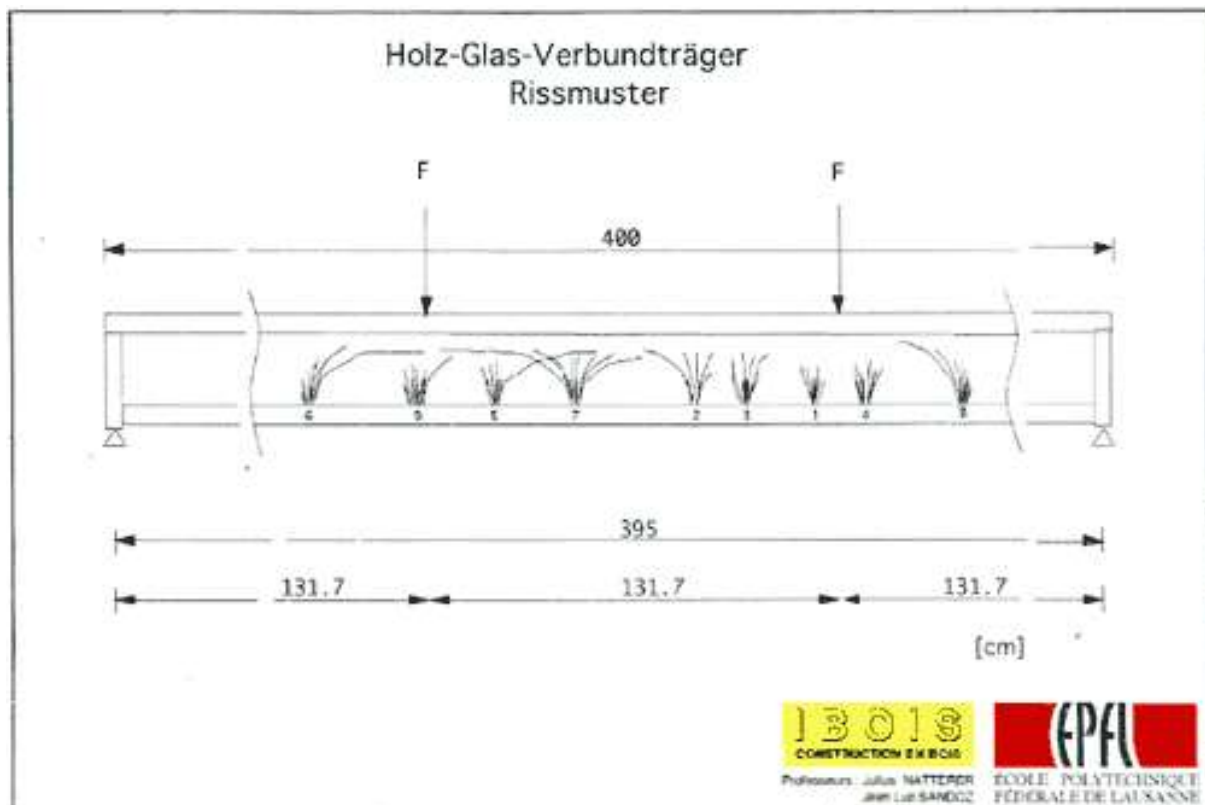
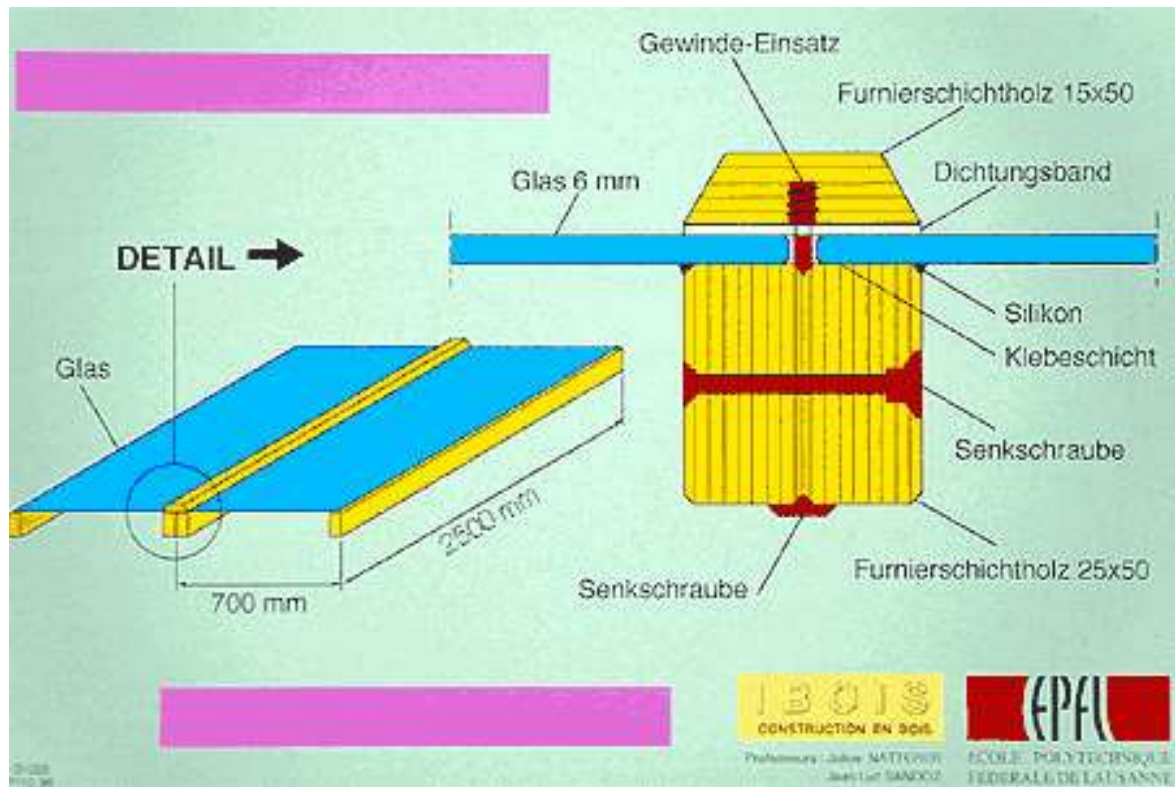
- Horizontal/inclined elements for roof structures
- Vertical elements as bracing systems
- Load bearing i-beams



Bending test on horizontal element



Test on vertical element as bracing system



Holz-Glas-Verbundträger Kraft-Verformungskurve

