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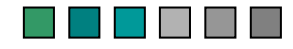
**EXPERIMENTAL INVESTIGATION FOR MECHANICAL BOND  
FOR COMPOSITE FLOORS**

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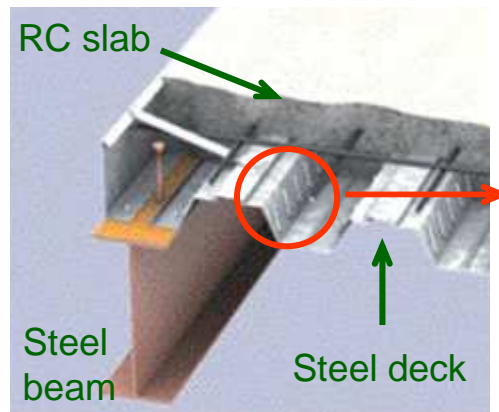
**LECTURER: Noémi SERES**

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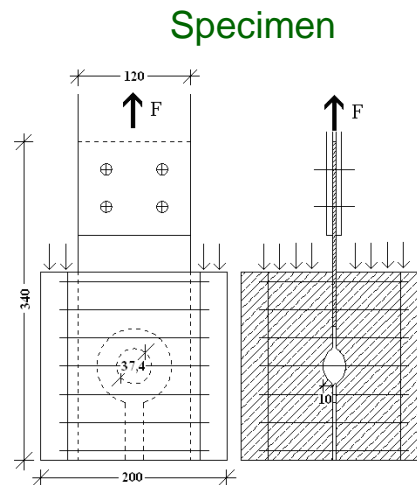
## EXPERIMENTAL PROGRAM

### Structural layout

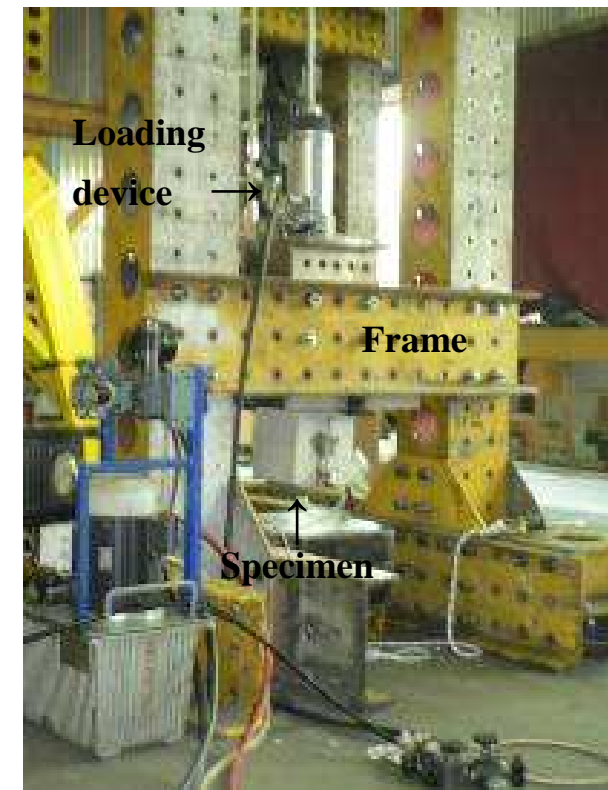


- Frictional interlock +  
Mechanical interlock:**
- rolled embossments
  - end anchors
  - shear studs

### Pull-out test for an individual rolled embossment



Execution ↓



### Measurement:

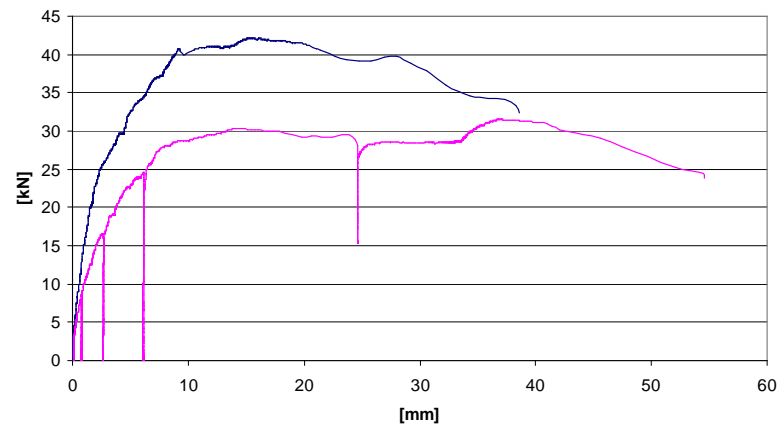
- strains inside the embossment



- load – displacement

## Test Results

### Load – displacement

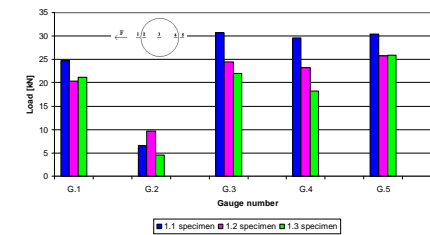


### 3 curve sections

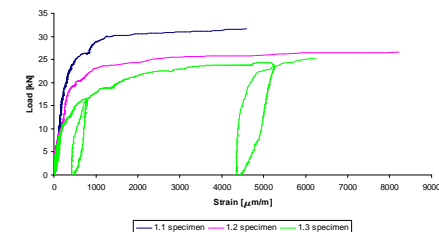
- initial rigid phase
- quasi-linear following phase
- nonlinear final phase  
with gradually decreasing slope

### Strain measurement

Appearance of yielding  
at base gauge positions



Strain distribution in the  
middle of the embossment



### Failure

- first mark of the failure  
on the concrete block
- crack propagates all  
over the height
- steel plate slips out of  
the concrete block

**More information at the Poster No. 106**

Poster Nr. 106