

Concrete cylinder 150x300mm



d = 150mm

unstrengthened



strengthened with  
one layer of CFRP



strengthened with  
two layers of CFRP



strengthened with  
three layers of CFRP

CFRP: S&P C-Sheet 240 200g/m<sup>2</sup>

# Second part of the laboratory competition: prediction of the failure load of four cylinders

### Time schedule:

Casting on 22.09.2023

20.10.2023 after 28 Tagen: Testing of concrete cube compressive strength

29.11.2023: Application of CFRP sheet on the cylinders

13.12.2022: Failure tests

# Lab competition

- Video of the experiment on the beam will be presented on 29.11.2023
- Lap experiments on the cylinders will be performed on 13.12.2023
- Who makes the best prediction? The best predictions are awarded with a price.
- Predictions (in kN):
  - Failure load of Beam** (by 28.11.2023) **Extended to 12.12.23**
  - Failure load of Cylinder 1-4** **(by 12.12.2023)**
- →Submission of the numbers by email to:  
[ali.jafarabadi@empa.ch](mailto:ali.jafarabadi@empa.ch)