

FIGURES

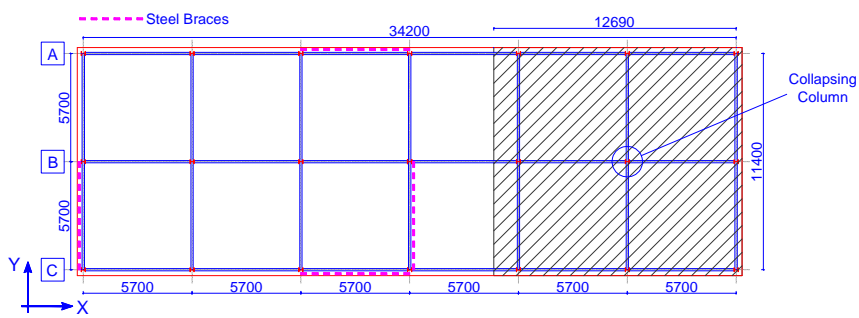


Fig. 1. Floor-framing plan of case study structure - Symmetric configuration (dimensions in mm).

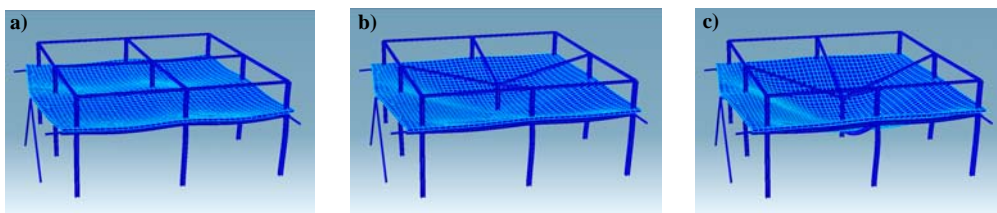


Fig. 2. Sequence of response for the sub-frame structure under the following loading steps: a) Factored vertical load; b) Removal of column; c) Tension load applied at the central column location.

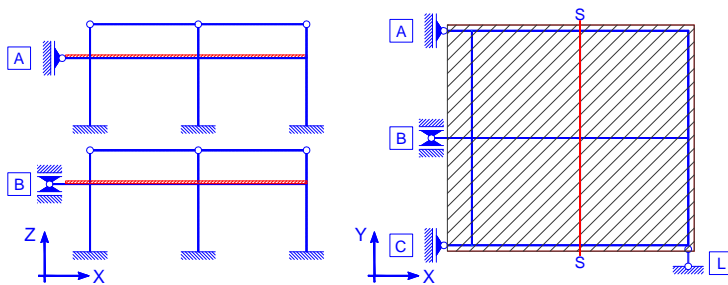


Fig. 3. Restraining conditions for the sub-frame.

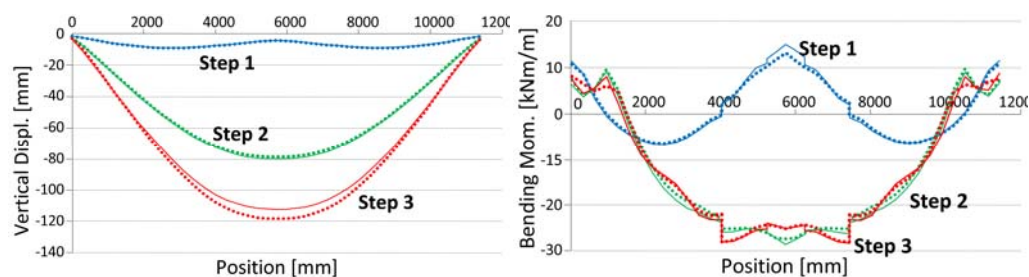


Fig. 4. Comparison of the Vertical displacements and Bending moments on the Section S-S.

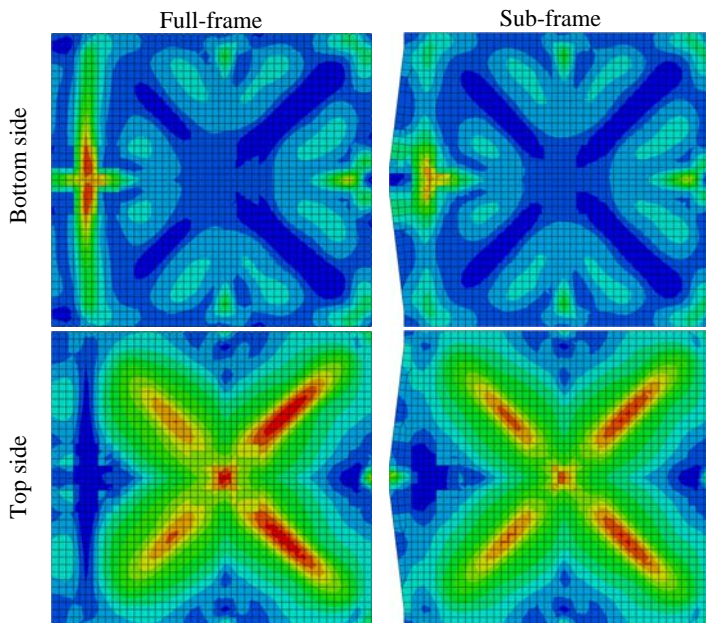


Fig. 5. Comparison of the von Mises Stresses on the slab.

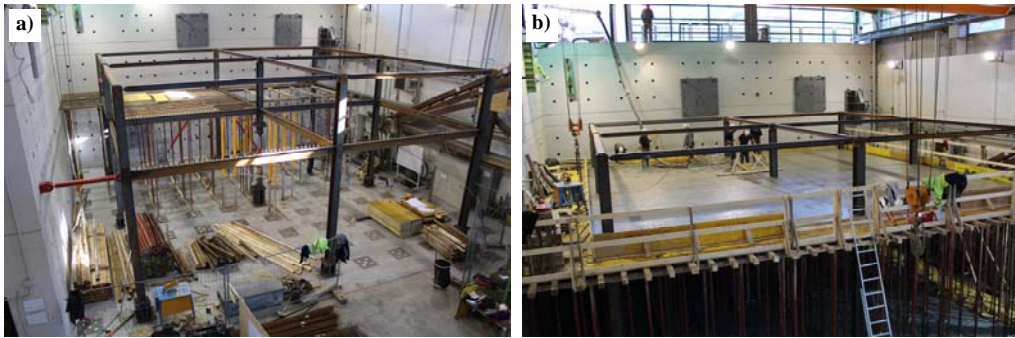


Fig. 6. a) The steel skeleton; b) The casting of the slab.

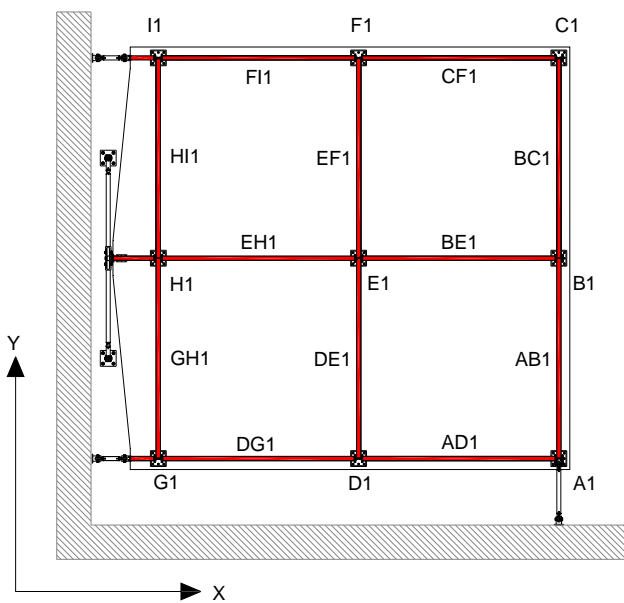


Fig. 7. Layout in plan of the steel frame.

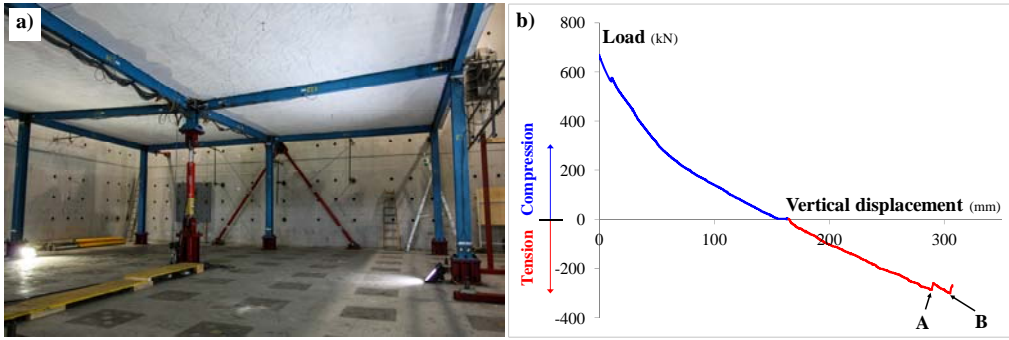


Fig. 8. a) Specimen at the end of the test; b) Load-displacement curve of the central column.

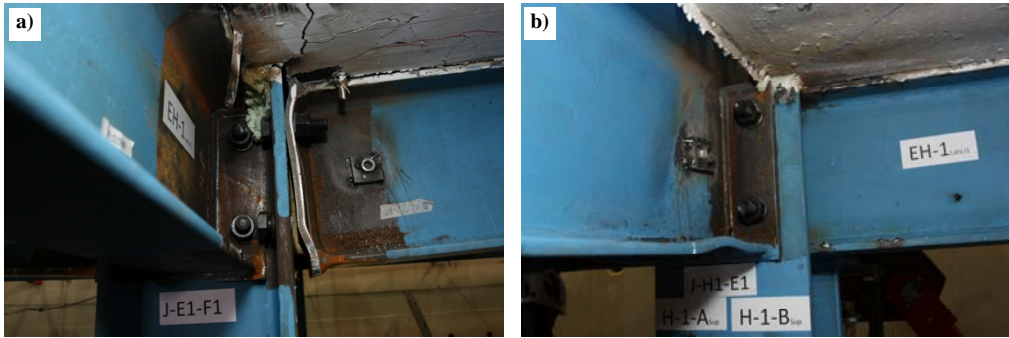


Fig. 9. Joint deformation at the end of the test: a) the central joint; b) the joint at the column H1.