“Corrugated aluminum sheets”

Title: **Certification of aluminium corrugated/trapezoidal panels**
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Duration: April – June 2018

Summary

Experimental investigations have been carried out on three types of aluminum panels, of three different thickness and two alloys, according to EN 1999-1-4. Tests of six point bending according to paragraph A.2.3 and intermediate support according to paragraph A.2.4 . The experimental program includes 24 tests. It was followed by appropriate analyses and issue of carrying capacity Tables/diagrams.

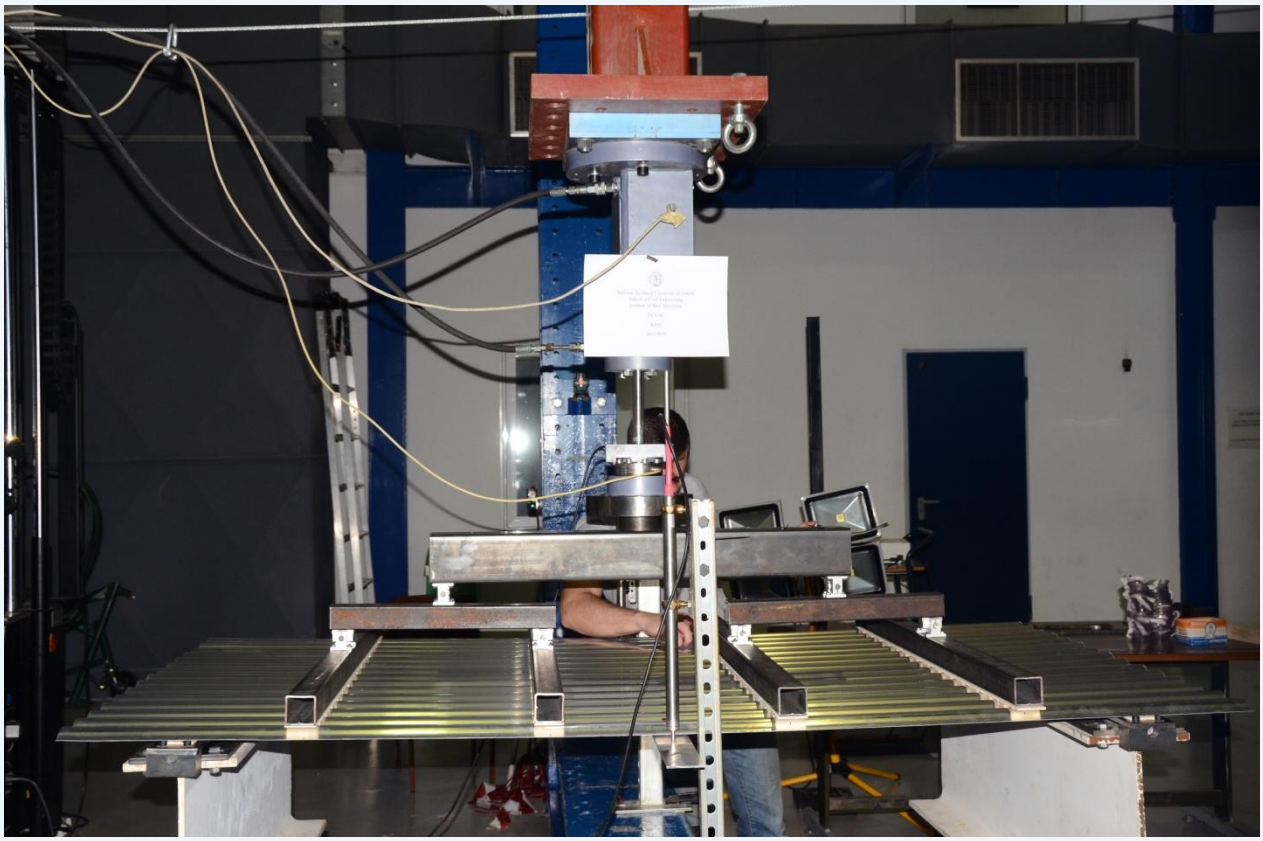
Publications

Research Report EMK – TR 042018: **Certification of corrugated aluminum sheets**

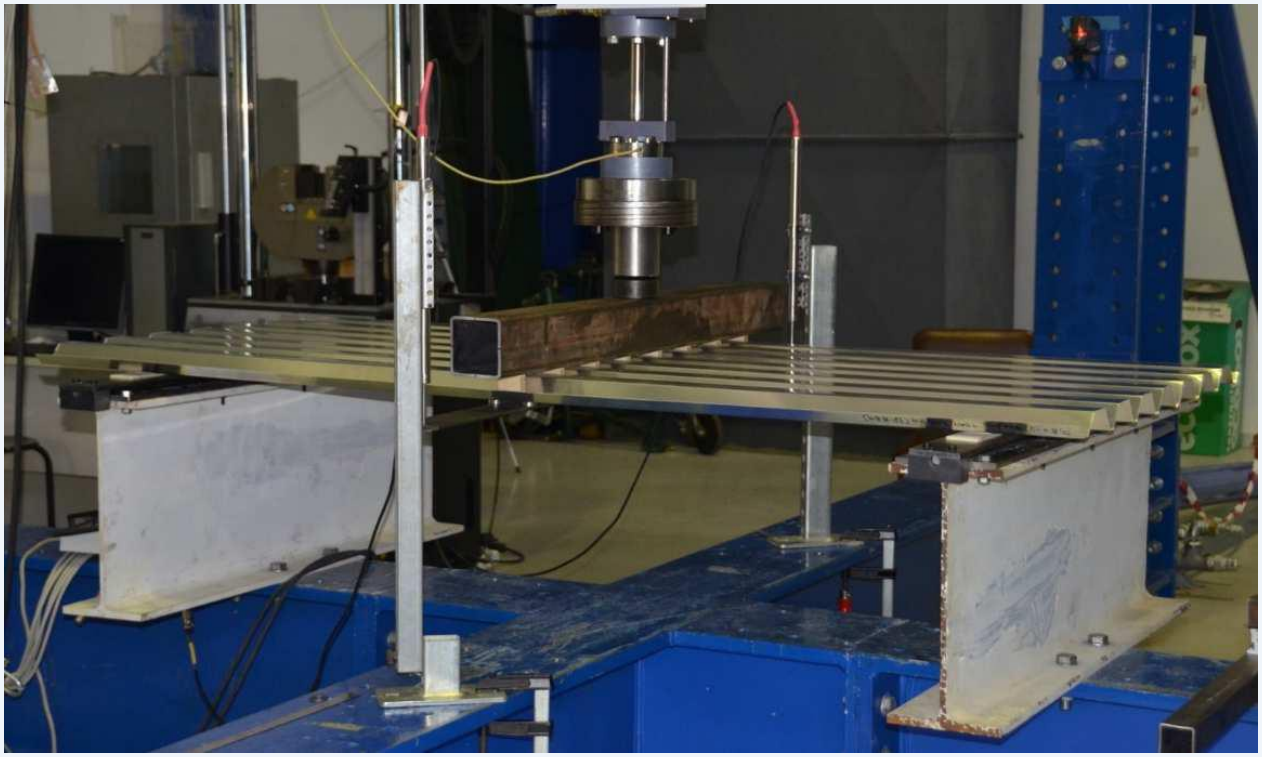
Experimental investigations

- Perform 18 tensile tests on the INSTRON machine.
- Static load tests according to EN 1999-1-4 paragraph A.2.3
- Static load tests according to EN 1999-1-4 paragraph A.2.4

Experimental aluminum tensile test



Experimental six point bending test



Experimental test with intermediate support

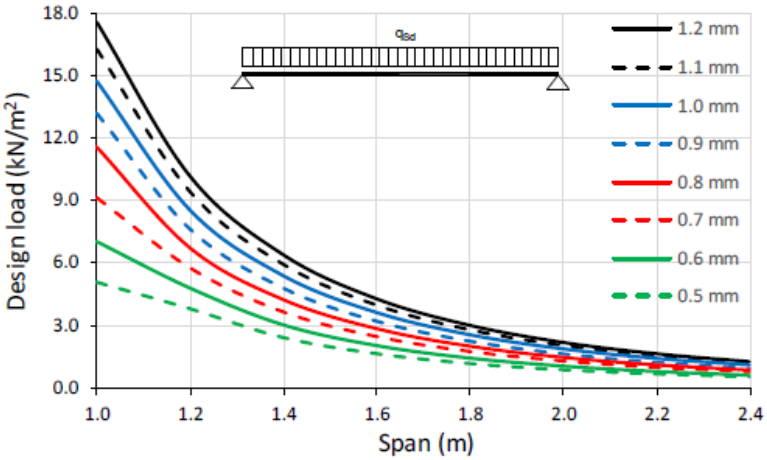


Fig. 1 Design gravity loads for L/150 limit deflection – single span

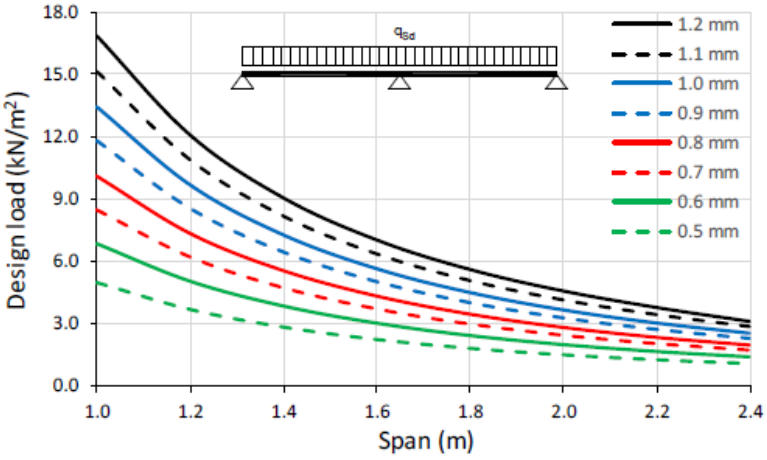


Fig. 2 Design gravity loads for L/150 limit deflection – double span

Carrying capacity diagrams