

Buildings

Load Testing

Load testing of building components or elements is a popular means of demonstrating a structure's capabilities when a simple analysis is not practical. Typical situations that arise include :-

- structural strength unknown and analysis impractical
- change of use involving an increase in loading.
- bomb or fire damage
- materials defect (for example cube failures)
- suspect performance such as excessive creep deflection

Any of a variety of loading techniques can be utilised according to the weight required, the condition of the building and logistical limitations. Water and kentledge are the most popular methods.

Monitoring of deflections is undertaken either electronically or using dial gauges, other qualities may also be measured such as crack widths, strains and temperature.



Part of a 150 tonne load test



Kentledge on precast concrete planks