Duration of load effects on solid wood; Methods and models.

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Abstract: Test methods for studying the effect of long-term loading on the load carrying capacity of structural wood are discussed. The impact of sampling procedures on the outcome of test results is investigated and is exemplified. It is concluded from this investigation that the sampling method has a significant impact on the test results. A large number of mathematical models for estimation of the effect of load duration are also presented and brief out line of theoretical background for five categories of models are given. No attempt is made to compare the models in order to nominate the best model. Effort is, however, made to illustrate the futileness of calibrating models against one type of tests when the model is redundant to the test type.