

ENGLISH SUMMARY

Koskisto, Osmo, STRUCTURAL RELIABILITY THEORY

In this article the structural reliability theory for both structural component and for structural system is presented. This study is concentrated on Level II reliability methods because of their relative simplicity. In current state the structural system reliability theory is mainly developed for series structural systems.

Salonen, Eero-Matti, ON THE DERIVATION OF WEAK FORMS

The derivation of weak forms used in connection with the finite element method is considered with the help of two simple example problems. Certain terms, usually left out in the process of integration by parts are taken into account. This means that some alterations must be made also in the conventional starting point equations. The manner of derivation described is recommended for use because it may help in understanding the properties of the finite element method.