

ENGLISH SUMMARY

Ranta-Maunus, Alpo - Korttesmaa, Markku ANALYSIS METHOD FOR CREEP
OF TIMBER BEAMS

Engineering methods are presented for the analysis of creep in wood due to varying moisture content. The methods are applied to the analysis of drying stresses in timber, and to the analysis of creep in structural members.

As a result, the maximum value of drying stress is calculated, and the dependence on drying rate and materials parameters is illustrated. For the creep and the duration of load effect of structural members, some examples are analyzed, and a simplified approach has been developed to be used in the renewal of timber codes.

Leskelä, Matti, FLEXURAL BEHAVIOUR OF COMPOSITE BEAMS

The first design code for composite structures of steel and concrete, TRY/BY26, was published in 1988 and therefore better visions of use can be expected in the future. The code for composite beams does not include the exact calculation formulas for stresses and strains and therefore the key points of the flexural behaviour are considered, together with the estimation of the longitudinal shear effects on the connection surfaces. When constructing the concept of the composite flexural stiffness, the idea of the composite stiffness coefficient is introduced in a general case of a n-membered section. A numerical example is given to show the use of the derived equations in the most common case of two sectional parts.