



Summary

Evaluation of calculation principles for residual strength of concrete in the course of the amendment of EN 1992-1-2

Assured knowledge about the residual strength of concrete after fire stress is necessary for the description of the material behaviour during the cooling phase and thus for the consideration of natural fires, in particular for the evaluation of the residual load-bearing capacity after a fire. The current version of EN 1992-1-2 (EC 2-1-2) does not contain any information on the residual strength of concretes after the cooling phase.

Extensive investigations on concrete cylinders for the determination of residual compressive strength after fire stressing have been carried out within the scope of the “Sonderforschungsbereich (SFB) 148” at the iBMB. Together with international research results on this topic, Thienel and others have summarized them.

The report presents the results of this and other research projects as well as international literature for standardization and formulates recommendations for regulations in the revised version of EC 2-1-2 for practical application.