

DIN EN 1992-1-2:2010-12 (E)

Eurocode_2: Design of concrete structures_ - Part_1-2: General rules_ - Structural fire design (includes Corrigendum AC:2008)

Contents List

- 1 General
 - 1.1 Scope
 - 1.1.1 Scope of Eurocode 2
 - 1.1.2 Scope of Part 1-2 of Eurocode 2
 - 1.2 Normative references
 - 1.3 Assumptions
 - 1.4 Distinctions between principles and application rules
 - 1.5 Definitions
 - 1.6 Symbols
 - 1.6.1 Supplementary symbols to EN 1992-1-1
 - 1.6.2 Supplementary subscripts to EN 1992-1-1
- 2 Basis of design
 - 2.1 Requirements
 - 2.1.1 General
 - 2.1.2 Nominal fire exposure
 - 2.1.3 Parametric fire exposure
 - 2.2 Actions
 - 2.3 Design values of material properties
 - 2.4 Verification methods
 - 2.4.1 General
 - 2.4.2 Member analysis
 - 2.4.3 Analysis of part of the structure
 - 2.4.4 Global structural analysis
- 3 Material properties
 - 3.1 General
 - 3.2 Strength and deformation properties at elevated temperatures
 - 3.2.1 General
 - 3.2.2 Concrete
 - 3.2.2.1 Concrete under compression
 - 3.2.2.2 Tensile strength
 - 3.2.3 Reinforcing steel
 - 3.2.4 Prestressing steel
 - 3.3 Thermal and physical properties of concrete with siliceous and calcareous aggregates
 - 3.3.1 Thermal elongation
 - 3.3.2 Specific heat
 - 3.3.3 Thermal conductivity
 - 3.4 Thermal elongation of reinforcing and prestressing steel
- 4 Design procedures
 - 4.1 General
 - 4.2 Simplified calculation method
 - 4.2.1 General
 - 4.2.2 Temperature profiles
 - 4.2.3 Reduced cross-section
 - 4.2.4 Strength reduction
 - 4.2.4.1 General

- 4.2.4.2 Concrete
 - 4.2.4.3 Steel
 - 4.3 Advanced calculation methods
 - 4.3.1 General
 - 4.3.2 Thermal response
 - 4.3.3 Mechanical response
 - 4.3.4 Validation of advanced calculation models
 - 4.4 Shear, torsion and anchorage
 - 4.5 Spalling
 - 4.5.1 Explosive spalling
 - 4.5.2 Falling off of concrete
 - 4.6 Joints
 - 4.7 Protective layers
- 5 Tabulated data
 - 5.1 Scope
 - 5.2 General design rules
 - 5.3 Columns
 - 5.3.1 General
 - 5.3.2  Method A 
 - 5.3.3  Method B 
 - 5.4 Walls
 - 5.4.1  Non load bearing compartmentation walls 
 - 5.4.2 Load-bearing solid walls
 - 5.4.3 Fire walls
 - 5.5 Tensile members
 - 5.6 Beams
 - 5.6.1 General
 - 5.6.2 Simply supported beams
 - 5.6.3 Continuous beams
 - 5.6.4 Beams exposed on all sides
 - 5.7 Slabs
 - 5.7.1 General
 - 5.7.2 Simply supported solid slabs
 - 5.7.3 Continuous solid slabs
 - 5.7.4 Flat slabs
 - 5.7.5 Ribbed slabs
- 6 High strength concrete (HSC)
 - 6.1 General
 - 6.2 Spalling
 - 6.3 Thermal properties
 - 6.4 Structural design
 - 6.4.1 Calculation of load-carrying capacity
 - 6.4.2 Simplified calculation method
 - 6.4.2.1 Columns and walls
 - 6.4.2.2 Beams and slabs
 - 6.4.3 Tabulated data