

## 5/16

### Ministry of the Environment Decree

#### concerning national choices for actions on structures exposed to fire, when applying standard SFS-EN 1991-1-2

By decision of the Ministry of the Environment, the following is laid down under section 117b of the Land Use and Building Act (132/1999), as it stands in Act 958/2012:

#### Section 1

##### *Scope*

This Decree is applied in the selection of actions on structures exposed to fire and is used in conjunction with the latest version of standard SFS-EN 1991-1-2.

#### Section 2

##### *Temperature analysis*

Instead of the method in Annex F, the National Building Code of Finland concerning fire safety in buildings shall be applied to the equivalent time of fire exposure.

#### Section 3

##### *Thermal loads to be used in temperature analysis*

When a building is designed and constructed in compliance with the fire classes and numerical values given in the regulations and guidelines of the National Building Code of Finland concerning fire safety in buildings, a temperature-time curve of a standard fire in accordance with clause 3.2.1(1) of the standard shall be used. When a building is designed and constructed based on design fire scenarios covering the likely situations in the building, natural fire models or other nominal temperature-time curves may be used.

#### Section 4

##### *Combination rules for actions*

The representative value of the variable action shall be taken as the quasi-permanent value  $\psi_{2,1} Q_1$  during fire exposure, in accordance with clause 4.3.1(2) of the standard. The frequent value  $\psi_{1,1} Q_1$  shall be used however for snow, ice and wind loads, in compliance with the national choices set out in standard SFS-EN 1990.

Section 5

*Annex E — Fire load densities*

Only E.4 **Rate of heat release  $Q$**  of Annex E may be applied.  
Section 6

*Annex F — Equivalent time of fire exposure*

Annex F is not applied.

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This Decree enters into force on 1 January 2017.

This Decree shall apply to projects initiated after the Decree enters into force.

This Decree repeals the National Annex to standard SFS-EN 1991-1-2 concerning the application of Eurocodes in building construction, issued by the Ministry of the Environment on 5 November 2010.

In Helsinki on 7 November 2016

The Minister of Agriculture and the Environment Kimmo Tiilikainen

Senior Engineer Jukka Bergman