SVENSK STANDARD
SS-EN 1995-1-2:2004/AC:2010

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Eurokod 5: Dimensionering av träkonstruktioner – Del 1-2: Allmänt – Brandteknisk dimensionering

Eurocode 5: Design of timber structures – Part 1-2: General – Structural fire design

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Europastandarden EN 1995-1-2:2004/AC:2009 gäller som svensk standard. Detta dokument innehåller den officiella engelska versionen av EN 1995-1-2:2004/AC:2009.

The European Standard EN 1995-1-2:2004/AC:2009 has the status of a Swedish Standard. This document contains the official English version of EN 1995-1-2:2004/AC:2009.

Upplysningar om sakinnehållet i standarden lämnas av SIS, Swedish Standards Institute, telefon 08-555 520 00. Standarder kan beställas hos SIS Förlag AB som även lämnar allmänna upplysningar om svensk och utländsk standard.

Information about the content of the standard is available from the Swedish Standards Institute (SIS), telephone +46 8 555 520 00. Standards may be ordered from SIS Förlag AB, who can also provide general information about Swedish and foreign standards.

Standarden är framtagen av kommittén för Bärande träkonstruktioner, SIS/TK 182/AG 4.

Har du synpunkter på innehållet i den här standarden, vill du delta i ett kommande revideringsarbete eller vara med och ta fram andra standarder inom området? Gå in på www.sis.se - där hittar du mer information.

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 1995-1-2:2004/AC

March 2009

ICS 91.010.30; 13.220.50; 91.080.20

English version

Eurocode 5: Design of timber structures - Part 1-2: General - Structural fire design

Eurocode 5: Conception et Calcul des structures en bois - Part 1-2: Généralités - Calcul des structures au feu

Eurocode 5: Bemessung und Konstruktion von Holzbauten - Teil 1-2: Allgemeine Regeln - Tragwerksbemessung für den Brandfall

This corrigendum becomes effective on 11 March 2009 for incorporation in the three official language versions of the EN.

EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: Avenue Marnix 17, B-1000 Brussels

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Ref. No.:EN 1995-1-2:2004/AC:2009 E

1.2 Normative references

Paragraph (1)P, delete:

"

EN 520	Gypsum plasterboards - Specifications - Test methods

"

and replace with:

"

EN 520	Gypsum plasterboards – Definitions, requirements and test methods

"

2.4.2 Member analysis

Paragraph (3), delete:

"

ψ_{fi} is the combination factor for frequent values of variable actions in the fire situation, given either by $\psi_{1,1}$ or $\psi_{2,1}$, see EN 1991-1-2:2002;

"

and replace with:

"

ψ_{fi} is the combination factor for frequent values of variable actions in the fire situation, given either by $\psi_{1,1}$ or $\psi_{2,1}$, see EN 1991-1-1;

"

3.4.2 Surfaces unprotected throughout the time of fire exposure

Paragraph (5), delete:

"

For surfaces of timber, unprotected throughout the time of fire exposure, design charring rates β_0 and β_n are given in table 3.1.

"

and replace with:

"

For surfaces of timber and wood-based materials, unprotected throughout the time of fire exposure, design charring rates β_0 and β_n are given in table 3.1.

"

5.2 Analysis of load-bearing function

Paragraph (1), delete:

"

(1) Non-separating load-bearing constructions shall be designed for fire exposure on both sides at the same time.

"

and replace with:

"
(1)P Non-separating load-bearing constructions shall be designed for fire exposure on both sides at the same time.
"

6.2.2.1 Unprotected connections

Paragraph (1), modify to read as follows:

"(1) The rules for bolts and dowels are valid where the thickness of the side plate is equal or greater than t_1, in mm:".

Paragraph (3), modify to read as follows:

"
The design fire resistance of the unprotected connection loaded by the design effect of actions in the fire situation, see 2.4.1, should be taken as:

$$t_{d,fi} = -\frac{1}{k} \ln \frac{\eta_{fi}\, \eta_0\, k_{mod}\, \gamma_{M,fi}}{\gamma_M\, k_{fi}} \qquad (6.7)$$

where:

k is a parameter given in table 6.3;

η_{fi} is the reduction factor for the design load in the fire situation, see 2.4.2 (2);

η_0 is the degree of utilisation at normal temperature;

k_{mod} is the modification factor from EN 1995-1-1, subclause 3.1.3;

γ_M is the partial factor for the connection, see EN 1995-1-1, subclause 2.4.1;

k_{fi} is a value according to 2.3 (4);

$\gamma_{M,fi}$ is the partial safety factor for timber in fire, see 2.3(1).
"

A2 Charring rates and charring depths

Equation (A.6), modify to read as follows:

"

$$d_{char} = \begin{cases} \beta_{par} t & \text{for } t \le t_0 \quad \text{(a)} \\ \beta_{par} \left(1{,}5t - \frac{t^2}{4t_0} - \frac{t_0}{4} \right) & \text{for } t_0 < t \le 3t_0 \quad \text{(b)} \\ 2\beta_{par} t_0 & \text{for } 3t_0 < t \le 5t_0 \quad \text{(c)} \end{cases} \qquad (A.6)$$

"

B2 Thermal properties

Paragraph (1), delete:

"
(1) For standard fire exposure, values of thermal conductivity, specific heat and the ratio of density of softwood may be taken as given in figures B1 to B3 and tables B1 and B2.
"

and replace with:

"
For standard fire exposure, values of thermal conductivity, specific heat and the ratio of density to dry density of softwood may be taken as given in figures B1 to B3 and tables B1 and B2.
"

Delete Table B2 and replace with:

"

Table B2 – Specific heat capacity and ratio of density to dry density of softwood for service class 1

Temperature °C	**Specific heat capacity** kJ kg^{-1} K^{-1}	**Ratio of density to dry density**[a]
20	1,53	1 + ω
99	1,77	1 + ω
99	13,60	1 + ω
120	13,50	1,00
120	2,12	1,00
200	2,00	1,00
250	1,62	0,93
300	0,71	0,76
350	0,85	0,52
400	1,00	0,38
600	1,40	0,28
800	1,65	0,26
1200	1,65	0
[a] ω is the moisture content		

"

D2 Charring rates

Modify to read as follows:

"
(1) 3.4.3.2(1), (2), (4) and (5) apply.
"

E1 General

Paragraph (1), modify to read as follows:

"The fixing of the panel on the side of the assembly not exposed to fire should be secured into unburnt timber."

E2.1 General

Paragraph (1), delete:

"
The relevant number of layers should be determined from table E1 and figure E2.
"

and replace with:

"
The relevant number of layers should be determined from table E1 and figure E1.
"