

SVENSK STANDARD

SS-EN 1990/A1:2005/AC:2010



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Eurokod – Grundläggande dimensioneringsregler för bärverk

Eurocode – Basis of structural design

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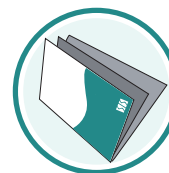
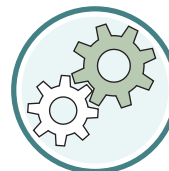
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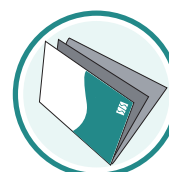
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The European Standard EN 1990:2002/A1:2005/AC:2010 has the status of a Swedish Standard. This document contains the official English version of EN 1990:2002/A1:2005/AC:2010.

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Standarden är framtagen av kommittén för Eurokoder, SIS/TK 203.

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

EN 1990:2002/A1:2005/AC

NORME EUROPÉENNE

EUROPÄISCHE NORM

April 2010

ICS 91.010.30

English version

Eurocode - Basis of structural design

Eurocodes structuraux - Eurocodes: Bases
de calcul des structures

Eurocode: Grundlagen der
Tragwerksplanung

This corrigendum becomes effective on 21 April 2010 for incorporation in the three official language versions of the EN.



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

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Notice

The present corrigendum contains the modifications from the former corrigendum EN 1990:2002/A1:2005/AC:2008.

1) Modification to the very beginning of the amendment

Very beginning of EN 1990:2002/A1:2005, just after the Foreword and before Annex A2, add the following pages containing the new modifications going from Modifications 1) [for Modifications to "Background of the Eurocode programme"] until Modifications 17) [for Modifications to A1.4.1]:

1) Modifications to "Background of the Eurocode programme"

2nd paragraph, 3rd line, replace "national rules" with "national provisions".

4th paragraph, 7th and 8th lines, replace "Council Directives 93/37/EEC, 92/50/EEC and 89/440/EEC" with "Council Directives 2004/17/EC and 2004/18/EC".

2) Modifications to "Status and field of application of Eurocodes"

2nd paragraph, 5th and 6th lines, after "product standards", add "and ETAGs".

3rd paragraph, 2nd line, replace "component" with "parts of works and structural construction".

3) Modifications to "Links between Eurocodes and harmonised technical specifications (ENs and ETAs) for products"

2nd line, replace "technical rules" with "technical provisions".

3rd line, replace "refer to" with "use the".

4) Modifications to "National annex for EN 1990"

2nd paragraph, replace:

"National choice is allowed in EN 1990 through :"

with:

"National choice is allowed in EN 1990 Annex A1 through;".

After A.1.4.2(2), add:

"National choice is allowed in EN 1990 Annex A2 through:

General clauses

Clause	Item
A2.1 (1) NOTE 3	Use of Table 2.1 : Design working life
A2.2.1(2) NOTE 1	Combinations involving actions which are outside the scope of EN 1991
A2.2.6(1) NOTE 1	Values of ψ factors
A2.3.1(1)	Alteration of design values of actions for ultimate limit states
A2.3.1(5)	Choice of Approach 1, 2 or 3
A2.3.1(7)	Definition of forces due to ice pressure
A2.3.1(8)	Values of η factors for prestressing actions where not specified in the relevant design Eurocodes
A2.3.1 Table A2.4(A) NOTES 1 and 2	Values of γ factors
A2.3.1 Table A2.4(B)	- NOTE 1 : choice between 6.10 and 6.10a/b - NOTE 2 : Values of γ and ξ factors - NOTE 4 : Values of γ_{sd}

A2.3.1 Table A2.4(C)	Values of γ factors
A2.3.2(1)	Design values in Table A2.5 for accidental designs situations, design values of accompanying variable actions and seismic design situations
A2.3.2 Table A2.5 NOTE	Design values of actions
A2.4.1(1) NOTE 1 (Table A2.6) NOTE 2	Alternative γ values for traffic actions for the serviceability limit state Infrequent combination of actions
A2.4.1(2)	Serviceability requirements and criteria for the calculation of deformations

Clauses specific for road bridges

Clause	Item
A2.2.2 (1)	Reference to the infrequent combination of actions
A2.2.2(3)	Combination rules for special vehicles
A2.2.2(4)	Combination rules for snow loads and traffic loads
A2.2.2(6)	Combination rules for wind and thermal actions
A2.2.6(1) NOTE 2	Values of $\psi_{1,infq}$ factors
A2.2.6(1) NOTE 3	Values of water forces

Clauses specific for footbridges

Clause	Item
A2.2.3(2)	Combination rules for wind and thermal actions
A2.2.3(3)	Combination rules for snow loads and traffic loads
A2.2.3(4)	Combination rules for footbridges protected from bad weather
A2.4.3.2(1)	Comfort criteria for footbridges

Clauses specific for railway bridges

Clause	Item
A2.2.4(1)	Combination rules for snow loading on railway bridges
A2.2.4(4)	Maximum wind speed compatible with rail traffic
A2.4.4.1(1) NOTE 3	Deformation and vibration requirements for temporary railway bridges
A2.4.4.2.1(4)P	Peak values of deck acceleration for railway bridges and associated frequency range
A2.4.4.2.2 – Table A2.7 NOTE	Limiting values of deck twist for railway bridges

A2.4.4.2.2(3)P	Limiting values of the total deck twist for railway bridges
A2.4.4.2.3(1)	Vertical deformation of ballasted and non ballasted railway bridges
A2.4.4.2.3(2)	Limitations on the rotations of non-ballasted bridge deck ends for railway bridges
A2.4.4.2.3(3)	Additional limits of angular rotations at the end of decks
A2.4.4.2.4(2) – Table A2.8 NOTE 3	Values of α_i and r_i factors
A2.4.4.2.4(3)	Minimum lateral frequency for railway bridges
A2.4.4.3.2(6)	Requirements for passenger comfort for temporary bridges

"

5) Modification to 1.3

Article (2), 3rd dash, replace this list entry with the following one:

"

- adequate supervision and quality control is provided during design and during execution of the work, i.e., factories, plants, and on site;

"

6) Modification to 1.5.3.17

Add the following NOTE:

“NOTE For the frequent value of multi-component traffic actions see load groups in EN 1991-2.”.

7) Modification to 1.5.6.10

Title, delete “(first or second order)”.

8) Modification to 1.6

Replace the content of the entire subclause with:

“For the purposes of this European Standard, the following symbols apply.

NOTE The notation used is based on ISO 3898:1987.

Latin upper case letters

A	Accidental action
A_d	Design value of an accidental action
A_{Ed}	Design value of seismic action $A_{Ed} = \gamma_I A_{Ek}$
A_{Ek}	Characteristic value of seismic action
C_d	Nominal value, or a function of certain design properties of materials
E	Effect of actions
E_d	Design value of effect of actions
$E_{d,dst}$	Design value of effect of destabilising actions

$E_{d,stab}$	Design value of effect of stabilising actions
F	Action
F_d	Design value of an action
F_k	Characteristic value of an action
F_{rep}	Representative value of an action
F_w	Wind force (general symbol)
F_{wk}	Characteristic value of the wind force
F_w^*	Wind force compatible with road traffic
F_w^{**}	Wind force compatible with railway traffic
G	Permanent action
G_d	Design value of a permanent action
$G_{d,inf}$	Lower design value of a permanent action
$G_{d,sup}$	Upper design value of a permanent action
G_k	Characteristic value of a permanent action
$G_{k,j}$	Characteristic value of permanent action j
$G_{k,j,sup}/$	Upper/lower characteristic value of permanent action j
$G_{k,j,inf}$	
G_{set}	Permanent action due to uneven settlements
P	Relevant representative value of a prestressing action (see EN 1992 to EN 1996 and EN 1998 to EN 1999)
P_d	Design value of a prestressing action
P_k	Characteristic value of a prestressing action
P_m	Mean value of a prestressing action
Q	Variable action
Q_d	Design value of a variable action
Q_k	Characteristic value of a single variable action
$Q_{k,1}$	Characteristic value of the leading variable action 1
$Q_{k,i}$	Characteristic value of the accompanying variable action i
Q_{Sn}	Characteristic value of snow load
R	Resistance
R_d	Design value of the resistance
R_k	Characteristic value of the resistance
T	Thermal climatic action (general symbol)
T_k	Characteristic value of the thermal climatic action
X	Material property
X_d	Design value of a material property
X_k	Characteristic value of a material property

Latin lower case letters

a_d	Design values of geometrical data
a_k	Characteristic values of geometrical data
a_{nom}	Nominal value of geometrical data
d_{set}	Difference in settlement of an individual foundation or part of a foundation compared to a reference level
u	Horizontal displacement of a structure or structural member