

# SVENSK STANDARD

## SS-EN 1991-1-4:2005/AC:2009

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### **Eurokod 1: Laster på bärverk – Del 1-4: Allmänna laster – Vindlast**

### **Eurocode 1: Actions on structures – Part 1-4: General actions – Wind actions**

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Europastandarden EN 1991-1-4:2005/AC:2009 gäller som svensk standard. Detta dokument innehåller den officiella engelska versionen av EN 1991-1-4:2005/AC:2009.

The European Standard EN 1991-1-4:2005/AC:2009 has the status of a Swedish Standard. This document contains the official English version of EN 1991-1-4:2005/AC:2009.

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 1991-1-4:2005/AC**

July 2009

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ICS 91.010.30

English version

Eurocode 1: Actions on structures - Part 1-4: General actions - Wind actions

Eurocode 1 : Actions sur les structures -  
Partie 1-4 : Actions générales - Actions du  
vent

Eurocode 1: Einwirkungen auf Tragwerke -  
Teil 1-4: Allgemeine Einwirkungen -  
Windlasten

This corrigendum becomes effective on 29 July 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**

## 1) Modifications to "National annex for EN 1991-1-4"

Page 7, delete the following:

"1.1 (11) Note 1".

Page 8, replace:

"8.4.2 (1) Notes 1 and 2"

with:

"8.4.2 (1)".

## 2) Modifications to 1.1

Page 9, replace paragraph "(2)" with the following one:

"(2) This Part is applicable to:

- Buildings and civil engineering works with heights up to 200 m, see also (11).
- Bridges having no span greater than 200 m, provided that they satisfy the criteria for dynamic response, see (12) and 8.2."

Pages 9 and 10, replace paragraph "(11)":

"(11) This part does not give guidance on the following aspects:

- wind actions on lattice towers with non-parallel chords
- wind actions on guyed masts and guyed chimneys
- torsional vibrations, e.g. tall buildings with a central core
- bridge deck vibrations from transverse wind turbulence
- cable supported bridges
- vibrations where more than the fundamental mode needs to be considered

NOTE 1 The National Annex may provide guidance on these aspects as non contradictory complementary information.

NOTE 2 For wind actions on guyed masts, guyed chimneys and lattice towers with non-parallel chords, see EN 1993-3-1, Annex A.

NOTE 3 For wind actions on lighting columns, see EN 40."

with:

"(11) Guyed masts and lattice towers are treated in EN 1993-3-1 and lighting columns in EN 40.

(12) This part does not give guidance on the following aspects:

- torsional vibrations, e.g. tall buildings with a central core
- bridge deck vibrations from transverse wind turbulence
- wind actions on cable supported bridges
- vibrations where more than the fundamental mode needs to be considered.”.

### 3) Modifications to 1.7

Pages 11 and 12, paragraph “(2)”, “Latin upper case letters”, between the lines dedicated to “K” and “K<sub>iv</sub>”, add the following line:

“K<sub>a</sub> aerodynamic damping parameter”.

Page 12, paragraph “(2)”, “Latin lower case letters”, between the lines dedicated to “c<sub>p</sub>” and “c<sub>prob</sub>”, add the following lines:

“c<sub>pe</sub> external pressure coefficient

c<sub>pi</sub> internal pressure coefficient

c<sub>p,net</sub> net pressure coefficient”.

Page 13, paragraph “(2)”, “Latin lower case letters”, between the lines dedicated to “k” and “k<sub>p</sub>”, add the following lines:

“k<sub>t</sub> turbulence factor”.

Page 14, paragraph “(2)”, “Greek lower case letters”, definition of “δ<sub>a</sub>”, replace “aerodynamic logarithmic decrement of damping” with “logarithmic decrement of aerodynamic damping”.

Page 14, paragraph “(2)”, “Greek lower case letters”, definition of “δ<sub>s</sub>”, replace “structural logarithmic decrement of damping” with “logarithmic decrement of structural damping”.

### 4) Modification to “Section 2”

Page 16, paragraph “(2)”, replace the “NOTE”:

“NOTE See also EN 1991-1-3, EN 1991-2 and ISO FDIS12494”

with the following:

“NOTE See also EN 1991-1-3, EN 1991-2 and ISO 12494”.

### 5) Modification to 6.3.2

Page 30, paragraph “(1)”, 3rd line, replace “5.2” with “5.3”.

## 6) Modification to 7.2.8

Page 50, paragraph "(1)", "Figure 7.11", replace the three lines between the figure itself and its title:

"for  $0 < h/d < 0,5$ ,  $c_{pe,10}$  is obtained by linear interpolation

for  $0,2 \leq f/d \leq 0,3$  and  $h/d \geq 0,5$ , two values of  $c_{pe,10}$  have to be considered

the diagram is not applicable for flat roofs"

with:

"For Zone A:

- for  $0 < h/d < 0,5$ , the coefficient  $c_{pe,10}$  is obtained by linear interpolation
- for  $0,2 \leq f/d \leq 0,3$  and  $h/d \geq 0,5$ , two values of  $c_{pe,10}$  have to be considered
- the diagram is not applicable for flat roofs".

## 7) Modification to 7.3

Page 56, paragraph "(8)", "Table 7.6", 5th row "[Roof angle  $\alpha = ]10^\circ$ ", 4th column "Zone A", 3rd line in the cell (corresponding to "Minimum  $\varphi = 1$ "), replace "- 2,1" with "- 1,6".

## 8) Modifications to 7.8

Page 68, paragraph "(1)", "Table 7.11", replace the table with the following one: