



SLOVENSKI STANDARD
SIST EN 1991-1-3:2004/A1:2015
01-november-2015

Evrokod 1: Vplivi na konstrukcije - 1-3. del: Splošni vplivi - Obtežba snega

Eurocode 1 - Actions on structures - Part 1-3: General actions - Snow loads

Eurocode 1 - Einwirkungen auf Tragwerke - Teil 1-3: Allgemeine Einwirkungen, Schneelasten

Eurocode 1 - Actions sur les structures - Partie 1-3: Actions générales - Charges de neige

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Ta slovenski standard je istoveten z: **EN 1991-1-3:2003/A1:2015**

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91.010.30 Tehnični vidiki Technical aspects

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 1991-1-3:2003/A1

September 2015

ICS 91.010.30

English Version

Eurocode 1 - Actions on structures - Part 1-3: General actions - Snow loads

Eurocode 1 - Actions sur les structures - Partie 1-3 :
Actions générales - Charges de neige

Eurocode 1 - Einwirkungen auf Tragwerke - Teil 1-3:
Allgemeine Einwirkungen, Schneelasten

This amendment A1 modifies the European Standard EN 1991-1-3:2003; it was approved by CEN on 17 July 2015.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This amendment exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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EUROPÄISCHES KOMITEE FÜR NORMUNG

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European foreword

This document (EN 1991-1-3:2003/A1:2015) has been prepared by Technical Committee CEN/TC 250 “Structural Eurocodes”, the secretariat of which is held by BSI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by September 2016, and conflicting national standards shall be withdrawn at the latest by September 2016.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

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EN 1991-1-3:2003/A1:2015 (E)**1 Modifications to the Foreword**

Replace the 5th paragraph:

"Annexes A and B are normative. Annexes C, D and E are informative."

with the following one:

"Annex A is normative. Annexes B, C, D and E are informative."

In the final part "National Annex for EN 1991-1-3", in the final list, in the 3rd line of the numbering of subclauses, just after "3.3(1)," add "3.3(2),".

In the final part "National Annex for EN 1991-1-3", in the final list, in the 5th line of the numbering of subclauses, just after "5.2(8)" add "5.3.1(1), Note to Table 5.2, 5.3.2(2)".

In the final part "National Annex for EN 1991-1-3", in the final list, in the 5th line of the numbering of subclauses, after "5.3.4(3),", add "5.3.4(4),".

2 Modification to 1.2, Normative references

Delete the NOTE and the following reference:

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NOTE: The following European Standards, which are published or in preparation, are cited in normative clauses

EN 1991-2 Eurocode 1: Actions on structures
Part 2: Traffic loads on bridges".
<https://standards.iteh.ai/catalog/standards/sist/9d4982fd-21b9-4863-999b-04e098d31c2f/sist-en-1991-1-3-2004-a1-2015>

3 Modifications to 3.3, Exceptional conditions

Paragraph 3.3(2), replace:

".....

- b) the accidental design situation should be used for snow load cases determined using 5.2(3)P c) and Annex B.

NOTE: See Annex A case B2."

with:

".....

- b) the accidental design situation should be used for snow load cases determined using 5.2(3)P c) and appropriate load arrangements and snow load shape coefficients for exceptional snow drifts.

NOTE 1: See Annex A case B2.

NOTE 2: The National Annex may specify the load arrangements to be used for exceptional snow drifts, also making reference to the informative Annex B, where its use is allowed (see also 5.3 and 6.2)."

Paragraph 3.3(3), replace:

"c) the accidental design situation should be used for the snow load cases determined using 5.2(3)P c) and Annex B."

with

"

c) the accidental design situation should be used for the snow load cases determined using 5.2(3)P c) and appropriate load arrangements and snow load shape coefficients for exceptional snow drifts."

At the end of paragraph 3.3(3), add:

"NOTE 3: The National Annex may specify the load arrangements to be used for exceptional snow drifts, also making reference to the informative Annex B, where its use is allowed (see also 5.3 and 6.2)."

4 Modifications to 4.3, Treatment of exceptional snow loads on the ground

Note to paragraph 4.3(1), replace:

"NOTE: The coefficient C_{esl} may be set by the National Annex. The recommended value for C_{esl} is 2,0 (see also 2(3))"

with:

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"NOTE: The coefficient C_{esl} and locations of its application may be set by the National Annex. The recommended value for C_{esl} is 2,0 (see also 2(3))".

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5 Modifications to 5.2 Load arrangements

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Paragraph 5.2(2), replace:

"(2) The load arrangements should be determined using 5.3; and Annex B, where specified in accordance with 3.3.

NOTE: The National Annex may specify the use of Annex B for the roof shapes described in 5.3.4, 5.3.6 and 6.2, and will normally apply to specific locations where all the snow usually melts and clears between the individual weather systems and where moderate to high wind speeds occur during the individual weather system."

with:

"(2) The load arrangements should be determined using 5.3, and appropriate provisions where specified in accordance with 3.3 exceptional snow drifts are likely to occur.

NOTE: The National Annex may specify the load arrangements for exceptional snow drifts or the use of Annex B for the roof shapes described in 5.3.4, 5.3.6 and 6.2, which will normally apply to specific locations where all the snow usually melts and clears between the individual weather systems and where moderate to high wind speeds occur during the individual weather system."

Paragraph 5.2(3)P, replace:

"c) for the accidental design situations where exceptional snow drift is the accidental action and where Annex B applies..."

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with:

"c) for the accidental design situations where exceptional snow drift is the accidental action...".

Paragraph 5.2(3)P, replace:

"where:

μ_i is the snow load shape coefficient (see Section 5.3 and Annex B)....."

with:

"where:

μ_i is the snow load shape coefficient (see Section 5.3).....".

6 Modifications to 5.3.1, General

Paragraph 5.3.1(1), replace:

"(1) 5.3 gives roof shape coefficients for undrifted and drifted snow load arrangements for all types of roofs identified in this standard, with the exception of the consideration of exceptional snow drifts defined in Annex B, where its use is allowed."

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With:

"(1) 5.3 gives roof shape coefficients for undrifted and drifted snow load arrangements for all types of roofs identified in this standard, with the exception of the consideration of exceptional snow drifts.

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NOTE: Where exceptional snow drifts are likely to occur (see 3.3 and 5.2) the National Annex may specify the load arrangements for exceptional snow drifts or the use of Annex B."

At the end of 5.3.1(3), replace "in Figure 5.1." with "in Table 5.2.

At the end of 5.3.1(3), add the following Table 5.2 and note:

"

Table 5.2 Snow load shape coefficients

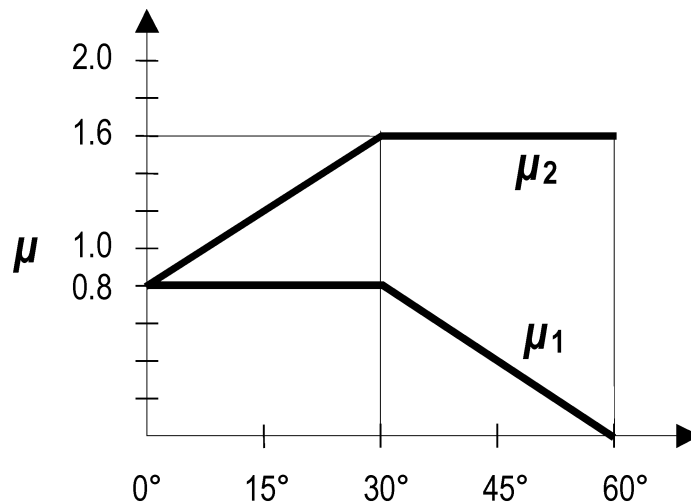
Angle of pitch of roof α	$0^\circ \leq \alpha \leq 30^\circ$	$30^\circ < \alpha < 60^\circ$	$\alpha \geq 60^\circ$
$\mu_1(\alpha)$	$\mu_1(0^\circ) \geq 0,8$	$\mu_1(0^\circ) \frac{(60^\circ - \alpha)}{30^\circ}$	0,0
$\mu_2(\alpha)$	0,8	$0,8 \frac{(60^\circ - \alpha)}{30^\circ}$	0,0
$\mu_3(\alpha)$	$0,8 + 0,8 \alpha/30$	1,6	--

NOTE: The National Annex may specify the value of $\mu_1(0^\circ)$. The recommended value is $\mu_1(0^\circ) = 0,8$."

7 Modifications to 5.3.2, Monopitch roofs

Paragraph 5.3.2(1), replace:

"(1) The snow load shape coefficient μ_1 that should be used for monopitch roofs is given in Table 5.2 and shown in Figure 5.1 and Figure 5.2.



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Figure 5.1: Snow load shape coefficients".

with:

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"(1) The snow load shape coefficient $\mu_1(\alpha)$ that should be used for monopitch roofs is given in Table 5.2 and the relative load arrangement is shown in Figure 5.1."

After Paragraph 5.3.2(2), delete:

"Table 5.2: Snow load shape coefficients

Angle of pitch of roof α	$0^\circ \leq \alpha \leq 30^\circ$	$30^\circ < \alpha < 60^\circ$	$\alpha \geq 60^\circ$
μ_1	0,8	$0,8(60 - \alpha)/30$	0,0
μ_2	$0,8 + 0,8 \alpha/30$	1,6	--

In Paragraph 5.3.2(3), replace:

"(3) The load arrangement of Figure 5.2 should be used for both the undrifted and drifted load arrangements."

with:

"(3) The load arrangement of Figure 5.1 should be used for both the undrifted and drifted load arrangements, unless specified for the drifted load arrangement for local/specific conditions.

NOTE: Based on local or specific conditions the National Annex may specify an alternative drifting load arrangement."