

# DS/EN 13782 DK NA:2014

## National Annex to **Temporary structures – Tents - Safety**

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### Foreword

This National Annex (NA) is the first Danish NA to EN 13782. This NA enters into force on 2014-10-15 and shall be applied as from 2015-02-01.

This National Annex addresses the clauses of DS/EN 13782:2005 where national choices or provision of complementary information are necessary. The national choices specified apply to temporary tents installed in Denmark conforming to clause 1, Scope, in DS/EN 13782. The national choices may be in the form of nationally applicable values, selected methods or addition of complementary information or special requirements for tents in accordance with DS/EN 13782.

This National Annex identifies clauses where a choice has to be made due to the fact that the provisions in DS/EN 13782 deviate from the applicable safety aspects, values, methods or equivalent that are specified in Eurocodes and the associated Danish National Annexes.

This National Annex includes the special rules which are necessary to ensure that safety, load bearing capacity and operation of the temporary tents conform to the principles laid down in DS/EN 1990 and the DS/EN 1991-series of standards. Furthermore, account has been taken of *the Technical Regulations for gathering tents, marquees, sales booths and camping areas which are not covered by the camping regulations (Tekniske forskrifter for forsamlingsstelte, selskabshuse, salgsområder og campingområder, der ikke er omfattet af campingreglementet)* published by the Danish Emergency Management Agency.

## National choices

Clause	Subject	National choice
2	Normative references	Addition:  DS/EN 1990 <i>Eurocode 0: Basis of structural design</i> DS/EN 1991-1-6 <i>Eurocode 1: Actions on structures - Part 1-6: General actions - Actions during execution</i> DS/EN 1993-1-1 <i>Eurocode 3: Design of steel structures — Part 1-1: General rules and rules for buildings</i> And the Danish National Annexes to the Eurocodes specified.
4	General requirements	The general basis of structural design is DS/EN 1990 and the associated Danish National Annex.  In cases where the determination of permanent actions and prestress is subject to uncertainty, the rules given in DS/EN 1990, clause 4.1.2, are used so that the upper and lower 5% quantiles for the actions are determined and the most unfavourable action is applied, cf. the combinations of actions in DS/EN 1990, section 6.
6.4.1	Imposed loads	Characteristic values of imposed loads and rhythmic loads caused by movement of people are determined using DS/EN 1991-1-1 and the associated Danish National Annex.
6.4.2	Wind actions	Characteristic values of wind actions are determined using DS/EN 1991-1-4 and DS/EN 1991-1-6 and associated Danish National Annexes, including any amendments.
6.4.3	Snow loads	Characteristic values of snow loads are determined using DS/EN 1991-1-3 and the associated Danish National Annex.
6.6	Load combinations	Combinations of actions and partial factors in DS/EN 1990, Annex A1, and the associated Danish National Annex for building structures are applied.
7.1	Partial factors for steel	Partial factors according to DS/EN 1993-1-1 DK NA, clause 6.1(1), are applied.

7.2	Verification against overturning, sliding and lifting	Adequate safety against overturning, sliding and lifting is verified using the combinations of actions EQU and UPL in DS/EN 1990, Annex A1, and the associated Danish National Annex for building structures, Table A1.2(A).
7.4.3	Cladding forces on the structure due to wind	<p>The simplified load specifications in lines 6 to 9 of the paragraph are not applied. Instead, the characteristic values of wind actions are applied using DS/EN 1991-1-4 and the associated Danish National Annex.</p> <p>NOTE - The verification of adequate resistance of the tent canvas shall include the stresses acting perpendicular to the radial generator close to the edge of the tent canvas.</p>
7.5.1 7.5.2	Non-linear deformation	In cases where non-linear deformations result in favourable effects of actions, DS/EN 1990, 6.3.2(4) is applied.
7.6.1	Characteristic values determined by testing	Characteristic values established by tests are determined using DS/EN 1990, Annex D, and the associated Danish National Annex.
8	Ground anchorages	<p>The geotechnical documentation shall be prepared and checked in accordance with DS/EN 1997-1, clause 2.8).</p> <p>The methods specified in EN 13782, clause 8, cannot be used for determination of the load bearing capacity in sand, "Dense cohesion less soils", as the calculated values may be non conservative – in particular for sand with a very low content of clay.</p>
15	Use and operation	Requirements given in the <i>Technical Regulations for gathering tents, marquees, sales booths and camping areas which are not covered by the camping regulations (Tekniske forskrifter for forsamlingsstelte, selskabshuse, salgsområder og campingområder, der ikke er omfattet af campingreglementet)</i> (BEK 9761 of 18/10/2005) shall be fulfilled.
Annex B	Aerodynamic coefficients for round shape tents	Not applicable.
Annex C C.1	Access to and egress from enclosures, shows and others	Requirements given in the <i>Technical Regulations for gathering tents, marquees, sales booths and camping areas which are not covered by the camping regulations (Tekniske forskrifter for forsamlingsstelte, selskabshuse, salgsområder og campingområder, der ikke er omfattet af campingreglementet)</i> (BEK 9761 of 18/10/2005) shall be fulfilled.

Annex D	Use and operation	Requirements given in the <i>Technical Regulations for gathering tents, marquees, sales booths and camping areas which are not covered by the camping regulations (Tekniske forskrifter for forsamlingsstelte, selskabshuse, salgsområder og campingområder, der ikke er omfattet af campingreglementet)</i> (BEK 9761 of 18/10/2005) shall be fulfilled.
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## Complementary information

Reference is made to the complementary information given in *Guidance on certification schemes and management of construction projects for portable tents and structures: Tents, grandstands, stages, etc.* (*Vejledning om certificeringsordning og byggesagsbehandling for transportable telte og konstruktioner: Telte, tribuner, scener mm.*) published by the Danish Energy Agency.