



Ineqarnermut, Attaveqaasersuutinut Isorliunerusunullu Naalakkersuisoqarfik
Ministry of Housing, Infrastructure and Outlying Districts

EN 1993-3-1 GL NA:2025

National Annex to

**Eurocode 3: Design of steel structures –
Part 3-1: Towers, masts and chimneys – Towers and masts**

Foreword

This Greenlandic National Annex (GL NA) is based on DS/EN 1993-3-1 DK NA:2019

Scope

The Annex is adapted to national, geographical and climatic conditions as well as national legislation and specifies how EN 1993-3-1:2007 and its 2009 corrigenda are to be applied in Greenland.

The Annex provides Greenlandic national choices.

The numbering in the Annex refers to the numbering in EN 1993-3-1:2007 or DS/EN 1993-3-1 DK NA:2019.



Overview of possible Greenlandic national choices and complementary information

DS/EN 1993-3-1 DK NA:2019 is applicable with the following national choices and complementary information:

Clause	Subject	Change
DK NA	References in DK NA	National choice
6.1(1)	Ultimate limit states – General Application of control class	National choice
C.2(1)	Ice loads Determination of ice classes	National choice
C.6(1)	Combinations of ice and wind Load combination factors	National choice



National choices

References in DK NA

References in DS/EN 1993-3-1 DK NA:2019 to other Danish National Annexes are replaced by references to corresponding Greenlandic National Annexes. Where these do not exist, the Danish National Annexes apply.

6.1(1) Ultimate limit states – General

For structures covered by the Danish Building Regulations 2024, chap. 1.3, section 6 and 7, the extended control class cannot be applied, and γ_3 is taken as 1,00.

For the manufacturing of components with attestation level AVCP 1+, 1 and 2+ and with certification for the scope of inspection at least corresponding to provisions in DS/EN 1990 DK NA:2024, Annex F DK NA (7) and (8), γ_3 may be taken as 0,95.

C.2(1) Ice loads

The ice class for glaze (ICG) and the ice class for rime (ICR) are determined for the specific location.

NOTE: Ice classes for the specific location may be determined on the basis of:

- current practice and experience; or
- modelling based on meteorological data in accordance with DS/ISO 12494:2017; or
- measurements collected over many years.

For standard towers and masts with heights up to 50 m, at locations up to 500 m above sea level, a rime ice layer with a thickness of 30 mm and a density of 700 kg/m^3 may be assumed. This ice load includes ice loads from ice glaze.

C.6(1) Combinations of ice and wind

For wind, ψ_0 is specified in DS/EN 1990 DK NA

For ice loads, $\psi_0 = 0,5$.

NOTE: ψ_0 for ice load corresponds to ψ_{ICE} .