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

EN 1992-1-2 GL NA:2025

National Annex to
Eurocode 2: Design of concrete structures –
Part 1-2: General rules – Structural fire design

Foreword

This Greenlandic National Annex (GL NA) is based on DS/EN 1992-1-2 DK NA:2011.

Scope

The Annex is adapted to national, geographical and climatic conditions as well as national legislation and specifies how EN 1992-1-2 + AC:2013 and its amendment DS/EN 1992-1-2:2004/A1:2019 are to be applied in Greenland.

The Annex provides Greenlandic national choices and complementary information. For any complementary information, it is specified whether it is normative or informative. Normative information comprises requirements to be followed.

The numbering in the Annex refers to the numbering in EN 1992-1-2 + AC:2013, EN 1992-1-2:2004/A1:2019 or DS/EN 1992-1-2 DK NA:2011.

Overview of Greenlandic national choices and complementary information

DS/EN 1992-1-2 DK NA:2011 applies with the following deviations and additions:

Clause	Subject	Change
DK NA	References in DK NA	National choice
2.3(1)P	Design values of mechanical material properties	National choice
2.3(2)P	Design values of thermal material properties	National choice
2.4.2(3) NOTES 1-3	Calculation of members – Reduction factor for load combinations	National choice
Annex B	Simplified calculation methods – Method B1	Complementary information Normative

National choices

References in DK NA
References in DS/EN 1992-1-2 DK NA:2011 to other Danish National Annexes are replaced by references to corresponding Greenlandic National Annexes. Where these do not exist, the Danish National Annexes apply.

2.3(1)P Design values of mechanical material properties
The partial factor for the mechanical material properties of concrete and reinforcing and prestressing steel under fire conditions is $\gamma_{M,fi} = 1,0$.

2.3(2)P Design values of thermal material properties
The partial factor for the thermal material properties of concrete and reinforcing and prestressing steel under fire conditions is $\gamma_{M,fi} = 1,0$.

2.4.2(3) Calculation of members – Reduction factor for load combinations
NOTE 1 is replaced by:

NOTE 1: An example of the relationship between the reduction factor, η_{fi}, and the load factor, $Q_{k,1}/G_k$, is given in EN 1990 GL NA, A1.3.1(8).

NOTE 2 is replaced by:

NOTE 2: Where the ratio between the characteristic values of variable and permanent loads, Q_k/G_k, is $\geq 0,75$, a simplified value of $\eta_{fi} = 0,70$ may be applied, except for areas with imposed loads corresponding to Category E in accordance with EN 1991-1-1:2007, where $\eta_{fi} = 0,75$. For $Q_k/G_k < 0,75$, η_{fi} is determined according to Expressions (2.5a) and (2.5b) or EN 1990 GL NA, Figure A1.3.1 GL NA.

Complementary information, Normative

Annex B: Simplified calculation methods

Method B1 may be used for standard fire exposure with the same limitations as specified for Method B2 regarding spalling and yield strength.
When using Method B1, the calculations shall be based on the yield strength of the reinforcement, i.e. 0,2 % proof strength. For the reinforcement, the 2,0 % stress may only be used if it can be documented that the strain in the steel exceeds 2,0 %.

NOTE: Method B1 cannot be used for parametric fire exposure, i.e. part b) of EN 1992-1-2+AC:2013, Table B1 on fire load is not used.