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

EN 1991-1-5 GL NA:2026

National Annex to
Eurocode 1: Actions on structures –
Part 1-5: General actions – Thermal actions

Foreword

This Greenlandic National Annex (GL NA) replaces EN 1991-1-5 GL NA:2025.

This Annex is based on DS/EN 1991-1-5 DK NA:2012.

Scope

This Annex is adapted to geographical and climatic conditions as well as national legislation and specifies how EN 1991-1-5:2007 including corrigenda 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 1991-1-5:2007 or DS/EN 1991-1-5 DK NA:2012.

Overview of Greenlandic national choices and complementary information

Clause	Subject	Change
5.3(2)	Determination of temperature profiles	
– Table 5.1 (T_1, T_2)	Indicative temperatures of inner environment, T_{in}	National choice
– Table 5.2 (T_3, T_4, T_5)	Indicative temperatures, T_{out}, for buildings above the ground level	National choice
– Table 5.3 (T_6, T_7, T_8, T_9)	Indicative temperatures, T_{out}, for underground parts of buildings	National choice
6.1.1(1)	Bridge deck types	Not relevant for building structures
6.1.2(2)	Consideration of thermal actions	Not relevant for building structures
6.1.3.1(4)	Uniform temperature component, General	Not relevant for building structures
6.1.3.2(1)P	Uniform temperature component, Shade air temperature	Not relevant for building structures
6.1.3.3(3)	Uniform temperature component, Range of uniform bridge temperature component	Not relevant for building structures
6.1.4(3)	Temperature difference components	Not relevant for building structures
6.1.4.1(1)	Temperature difference components, Vertical linear component (Approach 1)	Not relevant for building structures
6.1.4.2(1)	Temperature difference components, Vertical temperature components with non-linear effects (Approach 2)	Not relevant for building structures
6.1.4.3(1)	Temperature difference components, Horizontal components	Not relevant for building structures
6.1.4.4(1)	Temperature difference components within walls of concrete box girders	Not relevant for building structures
6.1.5(1)	Simultaneity of uniform and temperature difference components	Not relevant for building structures
6.1.6(1)	Differences in the uniform temperature component between different structural elements	Not relevant for building structures

Clause	Subject	Change
6.2.1(1)P	Consideration of thermal actions	Not relevant for building structures
6.2.2(1)	Temperature differences – between opposite outer faces of concrete piers	Not relevant for building structures
6.2.2(2)	Temperature differences – between inner and outer faces of walls	Not relevant for building structures
7.2.1(1)P	Shade air temperature	National choice
7.5(3)	Values of temperature components (indicative values) – Linear temperature difference component between the inner and outer faces of concrete pipelines	The recommended value is applicable where more specific data are not available.
7.5(4)	Values of temperature components (indicative values) – Temperature difference component round the circumference of concrete pipelines	The recommended value is applicable where more specific data are not available.
7.6	Simultaneity of temperature components	Complementary information
Annex A A.1(1)	Isotherms of national minimum and maximum shade air temperatures – General Note 1: Choice of characteristic minimum and maximum shade air temperatures Note 2: Adjustment for height above sea level	 National choice National choice
Annex A A.1(3)	Isotherms of national minimum and maximum shade air temperatures – General Choice of initial temperature, T_0	 National choice
Annex A A.2(2)	Maximum and minimum shade air temperature values with an annual probability of being exceeded, p, other than 0,02	National choice
Annex B Tables B.1, B.2, and B.3	Temperature differences for various surfacing depths	Not relevant for building structures
Annex C	Coefficients of linear expansion	Applicable
Annex D	Temperature profiles in buildings and other construction works	Applicable

National choices

5.3(2) Determination of temperature profiles, Table 5.1
(T_1, T_2)
The recommended values are applicable if local data are not available.

5.3(2) Determination of temperature profiles, Table 5.2
(T_3, T_4, T_5)
The recommended values are applicable if local data are not available.
Complementary information: T_{max} and T_{min} are given in Annex A, A.1(1)

5.3(2) Determination of temperature profiles, Table 5.3
(T_6, T_7, T_8, T_9)
The recommended values are applicable if local data are not available.

A.1(1) Isotherms of national minimum and maximum shade air temperatures – General
NOTE 1: Choice of characteristic minimum and maximum shade air temperatures
Values of Table A.1(1) GL NA should be applied for characteristic minimum and maximum shade air temperature values.

Table A.1(1) GL NA
Characteristic minimum and maximum shade air temperature values.

Place	T_{max} [°C]	T_{min} [°C]
Aasiaat	20	-41
Ilulissat	24	-45
Ittoqqortoormiit	21	-45
Kangerlussuaq	24	-50
Maniitsoq	23	-35
Nanortalik	20	-23
Narsaq	25	-24
Nuuk	27	-28
Paamiut	23	-30
Qaanaaq	22	-42
Qaqortoq	23	-29
Qasigiannguit	18	-35

Place	T_{max} [°C]	T_{min} [°C]
Qeqertarsuaq	22	-42
Sisimiut	26	-35
Tasiilaq	20	-44
Upernavik	22	-37
Uummannaq	20	-41

A.1(1) Isotherms of national minimum and maximum shade air temperatures – General Note 2: Adjustment for height above sea level
Adjustment for height above sea level is not required.

A.1(3) Isotherms of national minimum and maximum shade air temperatures – General Choice of initial temperature, T_0
The recommended value is applicable if more specific data are not available.

A.2(2) Maximum and minimum shade air temperature values with an annual probability of being exceeded, p, other than 0,02
The recommended values of coefficients k_1, k_2, k_3 and k_4 are not to be used.
For temporary structures, a return period of 2 years may be used, and the characteristic temperatures in Table xx may be multiplied by a factor 0,8.

Complementary information
Normative

7.6 Simultaneity of temperature components

If wind is the predominant action, the most onerous outdoor temperature of the range (T_{min}+10° C) to (T_{max} - 10° C) should be used according to Table A.1(1) GL NA.

If snow is the predominant action, the most onerous outdoor temperature of the range (T_{min} +5° C), according to Table A.1(1) GL NA, is taken as +5° C.