

# EN 1996-2 DK NA:2021

National Annex to

**Eurocode 6: Design of masonry structures –** 

Part 2: Design considerations, selection of materials and execution of masonry

# **Foreword**

This National Annex is a revision of DS/EN 1996-2 DK NA:2007 and replaces the 2007 version as from 1 January 2021.

The changes in this version of DK NA have been made in:

Clause 2.3.4.2(2) Horizontal distance between vertical movement joints.

Clause 3.5.3.1(1) Pointing

Non-contradictory, complementary guidelines (DS/INF 167) are under revision and a new edition is expected to be published at the beginning of 2021.

This NA lays down the conditions for the implemention in Denmark of EN 1996-2 for construction works in conformity with the Danish Building Regulations. Other parties, for whom the Danish Building Regulations are not applicable, can put this NA into effect by referring hereto.

This NA includes:

- an overview of possible national choices and clauses containing complementary information;
- national choices;
- (non-contradictory) complementary information which may assist the user of the Eurocode.

This NA applies to construction works covered by section 16(1) of the Danish Building Regulations as well as to construction works covered by sections 24 to 27 of the Danish Building Regulations.



# National choices and an overview of all clauses where national choices are allowed

The list below identifies the clauses where national choices are possible and the applicable/not applicable informative annexes.

Furthermore, this National Annex refers to (non-contradictory) complementary information that may be of assistance to the user of the Eurocode.

Clause	Subject	National choice <sup>1)</sup>	Complementar y information <sup>2)</sup>
1.1(2)P	Basic rules for the selection of materials and execution of masonry		Unchanged
2.3.1(1)	Detailing of masonry		Unchanged
2.3.4.2(2)	Horizontal distance between vertical movement joints	National choice	
3.4(3)	Deviations of the constructed masonry from its intended position		Unchanged
3.5.3.1(1)	Pointing	National choice	
Annex A	Classification of micro conditions of exposure of completed masonry	Applicable	
Annex B	Acceptable specifications of masonry units and mortar concerning durability for various exposure conditions	Applicable	
Annex C	Selection of material and corrosion protection specifications for ancillary components according to exposure class	Not applicable	

1)

Unchanged: Recommendations in the Eurocode to be followed.

National choice: A national choice has been made.

Applicable: The Annex is applicable. Not applicable: The Annex is not applicable.

No further information: The Eurocode allows further information. No further information is given.

2)

Complementary information: (Non-contradictory) complementary information on how to use the Eurocode.

Complementary guidelines on selection of materials and corrosion protection specifications for ancillary components according to exposure class can be found in DS/INF 167, Supplementary guidelines for masonry in connection with the use of Eurocode 6.



#### **National choices**

### 2.3.4.2(2) Horizontal distance between vertical movement joints

The table is conservative according to Danish experience. Instead the following guidelines can be used.

The guidelines apply to unreinforced clay masonry on foundation with bitumen felts as dpc.

(2) The distance between movement joints depends on the type of unit or block, the mortar strength, the geometry of the wall and its restraints of movement. The design should take into account significant cross-sectional variations, e.g. large openings or variations in the wall height. Where the distance between the movement joints is not determined by calculation, it should be taken as 10-20 m for masonry units with a relatively low tensile strength and 15-30 m for masonry units with a high tensile strength. The smaller distances should be used for strong mortars.

As an alternative to a movement joint at a masonry corner, the first vertical tie row may be placed at a suitable distance from the corner. The distance to the vertical tie row from the corner can be determined from the movements of the corner and the stiffness of the ties and their anchorage. Masonry extensions should consider differential movements between new and old masonry and slip planes between masonry and foundation, brackets not maintaining the masonry in the horizontal direction and any bed joint reinforcement.

## 3.5.3.1(1) Pointing

The value of d<sub>p</sub> is 15 mm for a wall thickness of at least 100 mm (d<sub>p</sub> is at least the joint thickness).