

norm**NEN-EN 1996-1-2/NB**

Eurocode 6: Design of masonry structures
– Part 1-2: General rules – Structural fire
design

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Normative

Introduction

This National Annex specifies the options and the values of the Nationally Determined Parameters for application of the standard and this National Annex in the Netherlands.

Clauses which allow for such national choice are listed in the standard itself and (eventual) amendments.

Further this National Annex gives complementary clauses which are non-conflicting with the standard itself. These clauses include normative as well as informative text.

This National Annex also determines the status (normative or informative) of annexes to the standard for practical use in the Netherlands.

This National Annex shall be used in conjunction with the standard itself.

Further, if at a later stage amendments or correction notices to the standard have been issued which contain further clauses (or existing clauses are amended) with NDP's, the current National Annex will then be amended to cover also these additional clauses.

The verbal form "shall"

— The verbal form "shall" in any NOTE in the standard shall remain to be read as "shall" in case such NOTE refers to an informative Annex in the standard and the same Annex has been given the status "Normative" in this National Annex.

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The verbal form "should"

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The verbal form "may"

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2.2 Actions

- (2) No values for the emissivity ε_m of a masonry surface are provided.

2.3 Design values of material properties

- (2)P The value of $\gamma_{M,fi}$ shall be taken as 1,0 for thermal properties.
The value of $\gamma_{M,fi}$ shall be taken as 1,0 for mechanical properties.

2.4.2 Member analysis

- (3) The value of η_{fi} shall be calculated in accordance with 2.4.2.

3.3.3.1 Thermal elongation

- (1) The value of the thermal elongation shall be determined from tests or from a database.

3.3.3.2 Specific heat capacity

- (1) The value of the specific heat capacity c_a shall be determined from tests or from a database.

3.3.3.3 Thermal conductivity

- (1) The value of the thermal conductivity λ_a shall be determined from tests or from a database.

4.5 Assessment by tabulated data

- (3) The value of $\gamma_{G,io}$ shall be taken as 2,4.

Annex A Guidance on selection of fire resistance periods

Annex A shall be read as informative.

Annex B Tabulated fire resistance of masonry walls

Annex B shall be read as normative.

The following tables are drafted:

— N.B.1.1 – N.B.1.3	Clay masonry
— N.B.2.1 – N.B.2.3	Calcium silicate masonry
— N.B.3.1 – N.B.3.3	Dense and lightweight aggregate concrete masonry
— N.B.4.1 – N.B.4.3	Autoclaved aerated concrete masonry

For manufactured stone masonry no tabulated data are provided.

N.B.1 Clay masonry

Clay units conforming to EN 771-1

Dimensions are nominal dimensions (deviations up to 2 mm are acceptable).

Table N.B.1.1 — Clay Masonry Minimum thickness of separating non-loadbearing walls (Criterion EI) for fire resistance classifications

Row number	Material properties: gross dry density ρ kg/m ³	Minimum wall thickness (mm) t_F for fire resistance classification EI for time (minutes) $t_{fi,d}$				
		30	60	90	120	180
1.	$\rho \geq 1\ 250$					
1.1		60	80	100	115	175
1.2		(60)	(70)	(90)	(100)	(140)
2.	$850 \leq \rho \leq 1\ 250$					
2.1		80	100	120	140	nvg
2.2		(70)	(90)	(100)	(115)	
2.	$500 \leq \rho \leq 850$					
2.1		100	120	140	nvg	nvg
2.2		(100)	(120)	(140)		

Table N.B.1.2 — Clay masonry minimum thickness of separating loadbearing single-leaf walls (Criteria REI) for fire resistance classifications

Row number	Material properties: gross density ρ kg/m ³	Minimum wall thickness (mm) t_F for fire resistance classification REI for time (minutes) $t_{fi,d}$				
		30	60	90	120	180
1.	$\rho \geq 1\ 250$					
1.1	$\alpha \leq 1,0$	90	90	100	140	200
1.2		(90)	(90)	(90)	(120)	(175)
1.3	$\alpha \leq 0,6$	90	90	100	120	200
1.4		(90)	(90)	(90)	(115)	(175)
2.	$850 \leq \rho \leq 1\ 250$					
2.1	$\alpha \leq 1,0$	100	120	130	175	240
2.2		(90)	(115)	(120)	(140)	(175)
2.3	$\alpha \leq 0,6$	90	120	130	140	200
2.4		(90)	(115)	(100)	(140)	(175)
3.	$500 \leq \rho \leq 850$					
3.1	$\alpha \leq 1,0$	175	240	300	nvg	nvg
3.2		(150)	(240)	(290)		
3.3	$\alpha \leq 0,6$	175	240	300	nvg	nvg
3.4		(150)	(240)	(290)		

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