December 2019

DIN EN 1996-1-1/NA

ICS 91.010.30; 91.080.30

Supersedes
DIN EN 1996-1-1/NA:2012-05,
DIN EN 1996-1-1/NA/A1:2014-03
and
DIN EN 1996-1-1/NA/A2:2015-01

National Annex –
Nationally determined parameters –
Eurocode 6: Design of masonry structures – Part 1-1: General rules for reinforced and unreinforced masonry structures,
English translation of DIN EN 1996-1-1/NA:2019-12

Nationaler Anhang –
National festgelegte Parameter –
Eurocode 6: Bemessung und Konstruktion von Mauerwerksbauten – Teil 1-1: Allgemeine Regeln für bewehrtes und unbewehrtes Mauerwerk,
Englische Übersetzung von DIN EN 1996-1-1/NA:2019-12

Annexe Nationale –
Paramètres déterminés au plan national –
Eurocode 6: Calcul des ouvrages en maçonnerie – Partie 1-1: Règles communes pour ouvrages en maçonnerie armée et non armée,
Traduction anglaise de DIN EN 1996-1-1/NA:2019-12

Document comprises 66 pages

Translation by DIN-Sprachendienst.

In case of doubt, the German-language original shall be considered authoritative.

02.20 3127126

A comma is used as the decimal marker.

Contents

Page

Foreword

This document has been prepared by Working Committee NA 005-06-01 AA "Masonry structures" of *DIN-Normenausschuss Bauwesen* (DIN Standards Committee Building and Civil Engineering).

This document is the National Annex to DIN EN 1996-1-1:2013-02, *Eurocode 6: Design of masonry structures — Part 1-1: General rules for reinforced and unreinforced masonry structu*res.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. DIN shall not be held responsible for identifying any or all such patent rights.

European Standard EN 1996-1-1:2005 allows national safety parameters, referred to as Nationally Determined Parameters (NDPs), to be specified for a number of points. The NDPs cover alternative verification methods, the provision of individual values and the selection of classes from designated classification systems. The relevant parts of the text are identified in the European Standard by references to the possibility of national choice and are listed in NA 2.1.

In addition, this National Annex includes non-contradictory complementary information (NCI) for the application of DIN EN 1996-1-1:2013-02.

National subclauses have the letters "NA" placed in front of the number.

Reference is made in this National Annex to European Technical Approvals and German national technical approvals. These are referred to hereinafter as "approvals".

This National Annex is an integral part of DIN EN 1996-1-1:2013-02.

Amendments

This document differs from DIN EN 1996-1-1/NA:2012-05, DIN EN 1996-1-1/NA/A1:2014-03 and DIN EN 1996-1-1/NA/A2:2015-01 as follows:

a) NCI re 1.2, 3.1.1, 3.1.2, 3.2.1, 3.2.2, 5.5.1.2, 8.4 and Annex NA.M (normative) has been modified*;

b) NDP re 3.2.2(1), 3.6.1.2(1) and 3.7.4(2) has been modified.

Previous editions

DIN 4156: 1943-05
DIN 1053: 1937x-02, 1952-12, 1962-11
DIN 1053-1: 1974-11, 1990-02, 1996-11
DIN 1053-2: 1984-07, 1996-11
DIN 1053-3: 1990-02
DIN 1053-100: 2004-08, 2006-08, 2007-09
DIN EN 1996-1-1/NA: 2012-01, 2012-05
DIN EN 1996-1-1/NA/A1: 2014-03
DIN EN 1996-1-1/NA/A2: 2015-01

---

* Translator's note: Annex NA.M has been deleted.

NA 1 Scope

This National Annex contains national provisions relating to the design of buildings and civil engineering works constructed of unreinforced and reinforced masonry where the reinforcement is added to provide ductility and strength or increase durability. These national provisions are to be taken into account when applying DIN EN 1996-1-1:2013-02 in Germany

This National Annex is only valid in conjunction with DIN EN 1996-1-1:2013-02.

NA 2 National provisions for the application of DIN EN 1996-1-1:2013-02

NA 2.1 General

EN 1996-1-1:2005 refers to the option of choosing Nationally Determined Parameters (NDPs) at the following places in the text:

— 2.4.3 (1)P Ultimate limit states;

— 2.4.4 (1) Serviceability limit states;

— 3.2.2 (1) Specification of masonry mortar;

— 3.6.1.2 (1) Characteristic compressive strength of masonry other than shell bedded masonry;

— 3.6.2 (3), (4) and (6) Characteristic shear strength of masonry;

— 3.6.3* (3) Characteristic flexural strength of masonry;

— 3.7.2 (2) Modulus of elasticity;

— 3.7.4 (2) Creep, moisture expansion or shrinkage and thermal expansion;

— 4.3.3 (3) and (4) Reinforcing steel;

— 5.5.1.3 (3) Effective thickness of masonry walls;

— 6.1.2.2 (2) Slenderness λ_c;

— 8.1.2 (2) Minimum thickness of wall;

— 8.5.2.2 (2) Cavity and veneer walls;

— 8.5.2.3 (2) Double-leaf walls;

— 8.6.2 (1) Vertical chases and recesses;

— 8.6.3 (1) Horizontal and inclined chases.

In addition, this National Annex includes non-contradictory complementary information (NCI) for the application of DIN EN 1996-1-1:2013-02. This information is preceded by the letters “NCI”.

---

* Translator’s note: 3.6.4 (3) is meant here.

NA 2.2 National provisions

In the following, the clauses are numbered as in or supplement DIN EN 1996-1-1:2013-02.

Re 1 "General"

NCI re 1.2 "Normative references"

NA DIN 488 (all parts), *Reinforcing steels*

NA DIN 18015-3, *Electrical installations in residential buildings — Part 3: Wiring and disposition of electrical equipment*

NA DIN 18533 (all parts), *Waterproofing of elements in contact with soil*

NA DIN 18533-1, *Waterproofing of elements in contact with soil — Part 1: Requirements and principles for design and execution*

NA DIN 18533-2, *Waterproofing of elements in contact with soil — Part 2: Waterproofing with waterproofing materials in sheet form*

NA DIN 18533-3, *Waterproofing of elements in contact with soil — Part 3: Waterproofing with liquid-applied waterproofing materials*

NA DIN 18550-1, *Design, preparation and application of external rendering and internal plastering — Part 1: Supplementary provisions for DIN EN 13914-1:2016-09 for external rendering*

NA DIN 18580:2019-06, *Site-made masonry mortars*

NA DIN 20000-401, *Application of building products in structures — Part 401: Rules for the application of clay masonry units according to DIN EN 771-1:2015-11*

NA DIN 20000-402, *Application of building products in structures — Part 402: Rules for the application of calcium silicate masonry units according to DIN EN 771-2:2015-11*

NA DIN 20000-403, *Application of building products in structures — Part 403: Rules for the application of aggregate concrete masonry units according to DIN EN 771-3:2015-11*

NA DIN 20000-404, *Application of building products in structures — Part 404: Rules for the application of autoclaved aerated concrete masonry units according to DIN EN 771-4:2015-11*

NA DIN 20000-412:2019-06, *Application of building products in structures — Part 412: Rules for the application of masonry mortar according to DIN EN 998-2:2017-02*

NA DIN SPEC 20000-202, *Application of building products in structures — Part 202: Adaption standard for flexible sheets for waterproofing according to European standards for the use as waterproofing of elements in contact with soil, of indoor applications and of tanks and pools*

NA DIN EN 998-2, *Specification for mortar for masonry — Part 2*: *Masonry mortar*

NA DIN EN 1991-1-4/NA, *National Annex — Nationally determined parameters — Eurocode 1: Actions on structures — Part 1-4: General actions — Wind actions*

NA DIN EN 1996-2/NA:2012-01, *National Annex — Nationally determined parameters — Eurocode 6: Design of masonry structures — Part 2: Design considerations, selection of materials and execution of masonry*