Deutsches Institut für Bautechnik

Public-law institution jointly founded by the federal states and the Federation

European Technical Assessment Body for construction products

Member of EOTA
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European Technical Assessment ETA-09/0313 of 15 June 2026

English translation prepared by DIBt - Original version in German language

General Part

Technical Assessment Body issuing the European Technical Assessment:	Deutsches Institut für Bautechnik
Trade name of the construction product	SMK Nail anchor MND 6
Product family to which the construction product belongs	Fasteners for use in concrete for redundant non-structural systems
Manufacturer	SMK- Meister GmbH & Co. KG Lombacher Straße 53 72293 Glatten GERMANY
Manufacturing plant	SMK- Meister GmbH & Co. KG Lombacher Straße 53 72293 Glatten
This European Technical Assessment contains	8 pages including 3 annexes which form an integral part of this assessment
This European Technical Assessment is issued in accordance with Article 95(4) of Regulation (EU) 2024/3110, on the basis of	EAD 330747-00-0601
This version replaces	ETA-09/0313 issued on 5 September 2017

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Specific Part

1 Technical description of the product

The SMK Nail anchor MND 6 of size 6x45, 6x50 and 6x72 is an anchor made of zinc-plated steel or stainless steel which is placed into a predrilled cylindrical drill hole and anchored by load-controlled expansion.

The product description is given in Annex A.

2 Specification of the intended use in accordance with the applicable European Assessment Document

The performances given in Section 3 are only valid if the anchor is used in compliance with the specifications and conditions given in Annex B.

The verifications and assessment methods on which this European Technical Assessment is based lead to the assumption of a working life of the anchor of at least 50 years. The indications given on the working life cannot be interpreted as a guarantee given by the producer, but are to be regarded only as a means for choosing the right products in relation to the expected economically reasonable working life of the works.

3 Performance of the product and references to the methods used for its assessment

3.1 Safety in case of fire (BWR 2)

Essential characteristic	Performance
Reaction to fire	Class A1
Resistance to fire	See Annex C1

3.2 Safety in use (BWR 4)

Essential characteristic	Performance
Characteristic resistance for all load directions and modes of failure for simplified design	See Annex C1
Durability	See Annex B1

4 Assessment and verification of constancy of performance (AVCP) system applied, with reference to its legal base

In accordance with European Assessment Document EAD No. 330747-00-0601, the applicable European legal act is: [97/161/EC].

The system to be applied is: 2+

5 Technical details necessary for the implementation of the AVCP system, as provided for in the applicable European Assessment Document

Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited at Deutsches Institut für Bautechnik.

Issued in Berlin on 15 June 2026 by Deutsches Institut für Bautechnik

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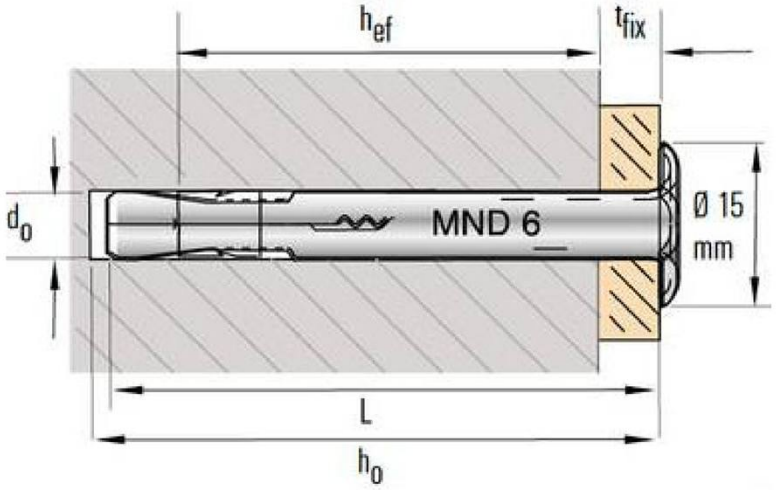
Head of Section

beglaubigt:
Tempel

Deutsches Institut für Bautechnik DIBt

Installed condition for MND 6



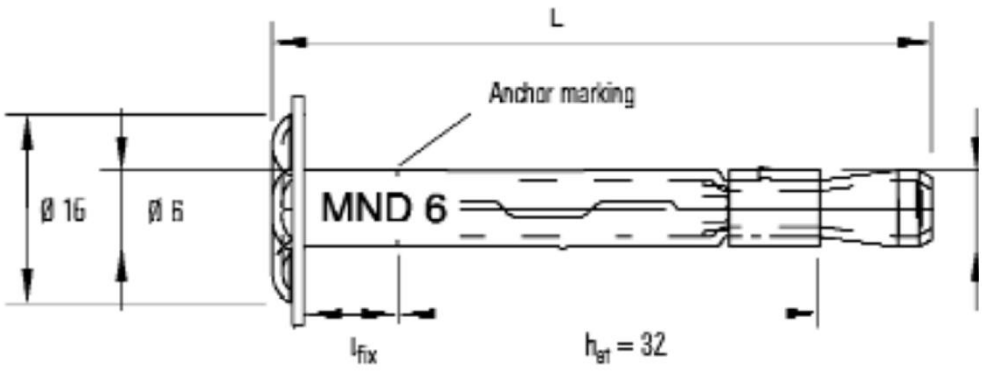


Table A1: Anchor dimension, marking and material

Nail Anchor MND 6			**MND 6 x 45**	**MND 6 x 50**	**MND 6 x 72**
Marking / embossing			MND 6/5	MND 6/10	MND 6/32
Anchor length	L	[mm]	45	50	72
Material steel galvanized			H340LAD Z100 / HX420LAD Z100		
Material stainless steel			Steel grade 1.4301		
			Steel grade 1.4404 / 1.4571		
			Steel grade 1.4529		

SMK Nail Anchor MND 6	**Annex A1**
Product description Installed condition, anchor types, dimensions and materials	

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Specifications of intended use

Anchorages subject to:

- Static and quasi-static loads
- Only for redundant non-structural systems (multiple use) according to EN 1992-4:2018,
- Fire exposure

Base materials:

- Compacted reinforced and unreinforced normal weight concrete without fibres according to EN 206:2013
- Strength classes C20/25 to C50/60 according to EN 206:2013
- Cracked and uncracked concrete

Use conditions (environmental conditions):

- Structures subject to dry internal conditions (anchors of all steel grades galvanized and stainless),
- for all other conditions corresponding to corrosion resistance classes CRC according to EN 1993-1-4:2006 + A1:2015:
  - Stainless steel according to Annex A1, anchor of steel grade 1.4301: CRC II
  - Stainless steel according to Annex A1, anchor of steel grade 1.4404, 1.4571: CRC III
  - High corrosion resistant steel according to Annex A1, anchor of steel grade 1.4529: CRC V

Design:

- The anchorages are to be designed under the responsibility of an engineer experienced in anchorages and concrete work.
- Verifiable calculation notes and drawings shall be prepared taking account of the loads to be anchored, the nature and strength of the base materials and the dimensions of the anchorage members as well as of the relevant tolerances. The position of the anchor shall be indicated on the design drawings (e. g. position of the anchor relative to reinforcement or to supports, etc.).
- Anchorages under static or quasi-static actions are designed in accordance with EN 1992-4:2018 and EOTA Technical Report TR 055, Edition February 2018.

Installation:

- Hole drilling by hammer drilling,
- Anchor installation has to be carried out by appropriately qualified personnel and under the supervision of the person responsible for technical matters of the site,
- the anchor may only be set once.

SMK Nail Anchor MND 6	**Annex B1**
Intended use Specifications	

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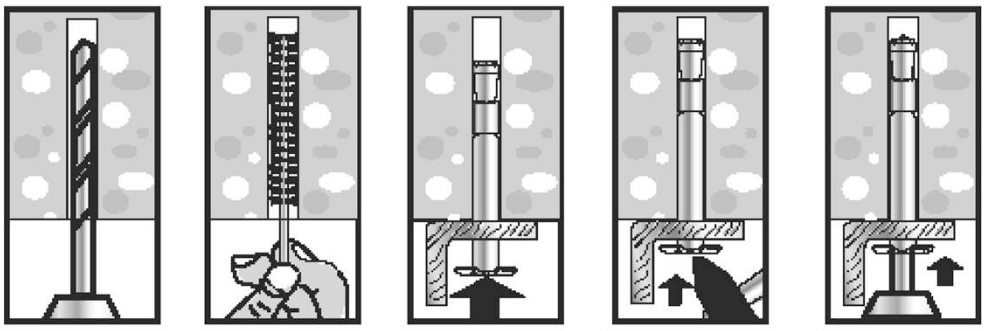
Table B1: Installation parameters

Nail Anchor MND 6				**MND 6 x 45**	**MND 6 x 50**	**MND 6 x 72**
Nominal drill hole diameter		d_o	[mm]	6	6	6
Drill hole depth		$h_o \geq$	[mm]	48 - t_{fix}	53 - t_{fix}	75 - t_{fix}
Effective anchorage depth		$h_{ef} \geq$	[mm]	32	32	32
Minimum thickness of concrete member	for t_{fix} > 20mm	h_{min}	[mm]	-	-	80
	for $t_{fix} \leq$ 20mm			80	80	100
Maximum thickness of fixture		max t_{fix}	[mm]	5	10	32
Diameter of clearance hole in the fixture		$d_f \leq$	[mm]	7,5		

Installation instructions:



drilling of hole | cleaning of drill hole | setting anchor through fixture | driving in with a hammer | or driving in with a setting tool

SMK Nail Anchor MND 6	**Annex B2**
Intended use Installation parameters, edge distance and spacing Installation instructions	

Table C1: Characteristic values of resistance for all failure modes and in all load directions without lever arm (design method C)

Nail anchor MND 6			**MND 6 x 45 MND 6 x 50 MND 6 x 72**	
All load directions			**Steel galvanized**	**Stainless steel 1.4301, 1.4404, 1.4571, 1.4529**
Characteristic resistance in concrete C20/25 to C50/60	F_{Rk}	[kN]	3,0	4,0
Partial safety factor	γ_M	[-]	1,5	2,25
Spacing	s_{cr}	[mm]	200	
Edge distance	c_{cr}	[mm]	100	

Table C2: Characteristic values under fire exposure in concrete C20/25 to C50/60

Fire resistance class	**Nail Anchor MND 6**			**Steel galvanized**	**Stainless steel 1.4404, 1.4571, 1.4529**
R30	Characteristic resistance	$F_{Rk,fi}$	[kN]	0,35	1,0
R60				0,25	1,0
R90				0,15	0,6
R120				0,1	0,3
R30 - R120	Spacing	$s_{cr,fi}$	[mm]	200	
	Edge distance [1)]	$c_{cr,fi}$	[mm]	100	

[1)] The edge distance shall be $\geq$ 300 mm if there is a fire to more than one side of the concrete member

SMK Nail Anchor MND 6	**Annex C1**
Performances Characteristic resistances	