

DECLARAȚIA DE PERFORMANȚĂ

DoP 0256

pentru fischer FIF - PN (Ancore din plastic pentru utilizare în beton și zidărie)

RO

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|---|---|---|----------|----------------------------------|----------|-------------------------------|----------|--|----------|------------|----------|--------------------|----------|---------------------------------|----------|----------------------|----------|--|----------|--------------------------------------|----------|
| 1. <u>Cod unic de identificare al produsului-tip:</u> | DoP 0256 | | | | | | | | | | | | | | | | | | | | |
| 2. <u>Utilizare (utilizări) preconizată (preconizate):</u> | Ancoră din plastic montată prin bătaie pentru fixarea sistemelor compozite de izolație termică exterioară (ETICS) cu tencuială în beton și zidărie, consultați suplimentul, în special anexele B1- B3. | | | | | | | | | | | | | | | | | | | | |
| 3. <u>Fabricant:</u> | fischerwerke GmbH & Co. KG, Klaus-Fischer-Str. 1, 72178 Waldachtal, Germany | | | | | | | | | | | | | | | | | | | | |
| 4. <u>Reprezentant autorizat:</u> | — | | | | | | | | | | | | | | | | | | | | |
| 5. <u>Sistemul (sistemele) de evaluare și de verificare a constantei performanței:</u> | 2+ | | | | | | | | | | | | | | | | | | | | |
| 6. <u>Documentul de evaluare european:</u>
Evaluarea tehnică europeană:
Organismul de evaluare tehnică:
Organism (organisme) notificat(e): | EAD 330196-01-0604
ETA-18/0253; 2018-05-29
DIBt- Deutsches Institut für Bautechnik
2873 TU Darmstadt | | | | | | | | | | | | | | | | | | | | |
| 7. <u>Performanța (performanțe) declarată (declarate):</u>
Siguranță în utilizare (BWR 4)
Capacitate portantă caracteristică:

Deplasări:

Rigiditatea rozetei:

Economie de energie și retenție de căldură (BWR 6)
Conductivitatea termică: | <table border="0"><tr><td>Rezistența caracteristică la întindere:</td><td>Anexa C1</td></tr><tr><td>Distanța minimă față de margine:</td><td>Anexa B2</td></tr><tr><td>Distanța minimă între ancore:</td><td>Anexa B2</td></tr><tr><td>Sarcina de întindere cu factor de siguranță parțial:</td><td>Anexa C1</td></tr><tr><td>Deplasări:</td><td>Anexa C1</td></tr><tr><td>Diametrul rozetei:</td><td>Anexa C1</td></tr><tr><td>Capacitatea portantă a rozetei:</td><td>Anexa C1</td></tr><tr><td>Rigiditatea rozetei:</td><td>Anexa C1</td></tr><tr><td>Conductivitatea termică punctuală a unei ancore:</td><td>Anexa C1</td></tr><tr><td>Grosimea stratului de termoizolație:</td><td>Anexa C1</td></tr></table> | Rezistența caracteristică la întindere: | Anexa C1 | Distanța minimă față de margine: | Anexa B2 | Distanța minimă între ancore: | Anexa B2 | Sarcina de întindere cu factor de siguranță parțial: | Anexa C1 | Deplasări: | Anexa C1 | Diametrul rozetei: | Anexa C1 | Capacitatea portantă a rozetei: | Anexa C1 | Rigiditatea rozetei: | Anexa C1 | Conductivitatea termică punctuală a unei ancore: | Anexa C1 | Grosimea stratului de termoizolație: | Anexa C1 |
| Rezistența caracteristică la întindere: | Anexa C1 | | | | | | | | | | | | | | | | | | | | |
| Distanța minimă față de margine: | Anexa B2 | | | | | | | | | | | | | | | | | | | | |
| Distanța minimă între ancore: | Anexa B2 | | | | | | | | | | | | | | | | | | | | |
| Sarcina de întindere cu factor de siguranță parțial: | Anexa C1 | | | | | | | | | | | | | | | | | | | | |
| Deplasări: | Anexa C1 | | | | | | | | | | | | | | | | | | | | |
| Diametrul rozetei: | Anexa C1 | | | | | | | | | | | | | | | | | | | | |
| Capacitatea portantă a rozetei: | Anexa C1 | | | | | | | | | | | | | | | | | | | | |
| Rigiditatea rozetei: | Anexa C1 | | | | | | | | | | | | | | | | | | | | |
| Conductivitatea termică punctuală a unei ancore: | Anexa C1 | | | | | | | | | | | | | | | | | | | | |
| Grosimea stratului de termoizolație: | Anexa C1 | | | | | | | | | | | | | | | | | | | | |
| 8. <u>Documentație tehnică adecvată și/sau documentație tehnică specifică:</u> | — | | | | | | | | | | | | | | | | | | | | |

Performanța produsului identificat mai sus este în conformitate cu setul de performanțe declarate. Această declarație de performanță este eliberată în conformitate cu Regulamentul (UE) nr. 305/2011, pe răspunderea exclusivă a fabricantului identificat mai sus.

Semnată pentru și în numele fabricantului de către:



Dr. Oliver Geibig, Director Executiv Departament Business & Inginerie
Tumlingen, 2021-01-15



Jürgen Grün, Director Executiv Departament Chimic & Calitate

Această declarație de performanță a fost întocmită în mai multe limbi. În cazul unei divergențe de interpretare, versiunea în limba engleză prevalează întotdeauna.

Suplimentul include informații voluntare și complementare în limba engleză, în afara cerințelor legale (specificate neutru din punct de vedere al limbii).

Specific Part

1 Technical description of the product

The fischer FIF - PN consists of a plastic sleeve made of polypropylene (virgin material), a plate and an accompanying specific nail made of glass fibre reinforced polyamide (virgin material).

The anchor may in addition be combined with the slip-on-plate DT 90, DT 110 and DT 140.

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 verification 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 25 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 and accessibility in use (BWR 4)

Essential characteristic	Performance
Characteristic tension resistance	See Annex C 1
Edge distances and spacing	See Annex B 2
Plate stiffness	See Annex C 1
Displacements	See Annex C 1

3.2 Energy economy and heat retention (BWR 6)

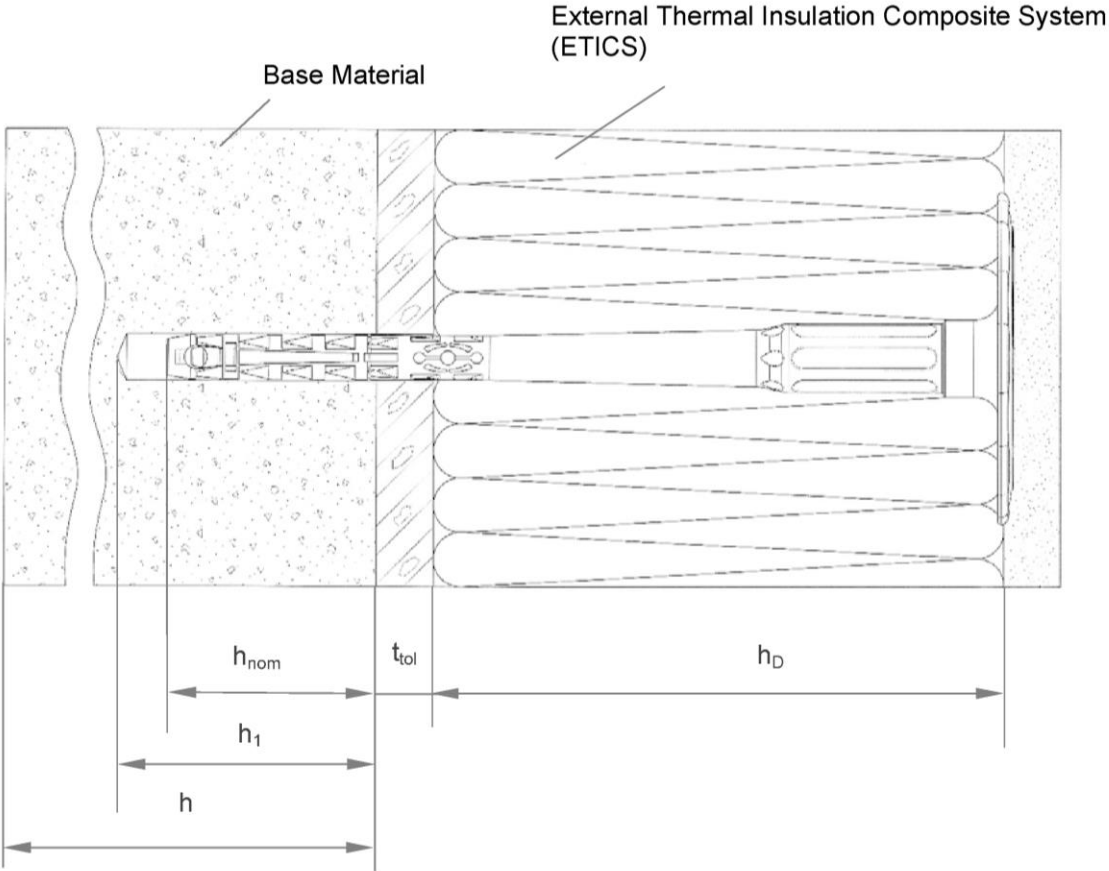
Essential characteristic	Performance
Point thermal transmittance	See Annex C 1

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

In accordance with EAD No. 330196-01-0604, the applicable European legal act is: [97/463/EC].

The system to be applied is: 2+

Installed anchor: FIF-PN



Legend

- h_{nom} = Overall plastic anchor embedment depth in the base material
- h_1 = Depth of drilled hole to deepest point
- h = Thickness of member (wall)
- h_D = Thickness of insulation material
- t_{tol} = Thickness of equalizing layer or non-load bearing coating

Figures not to scale

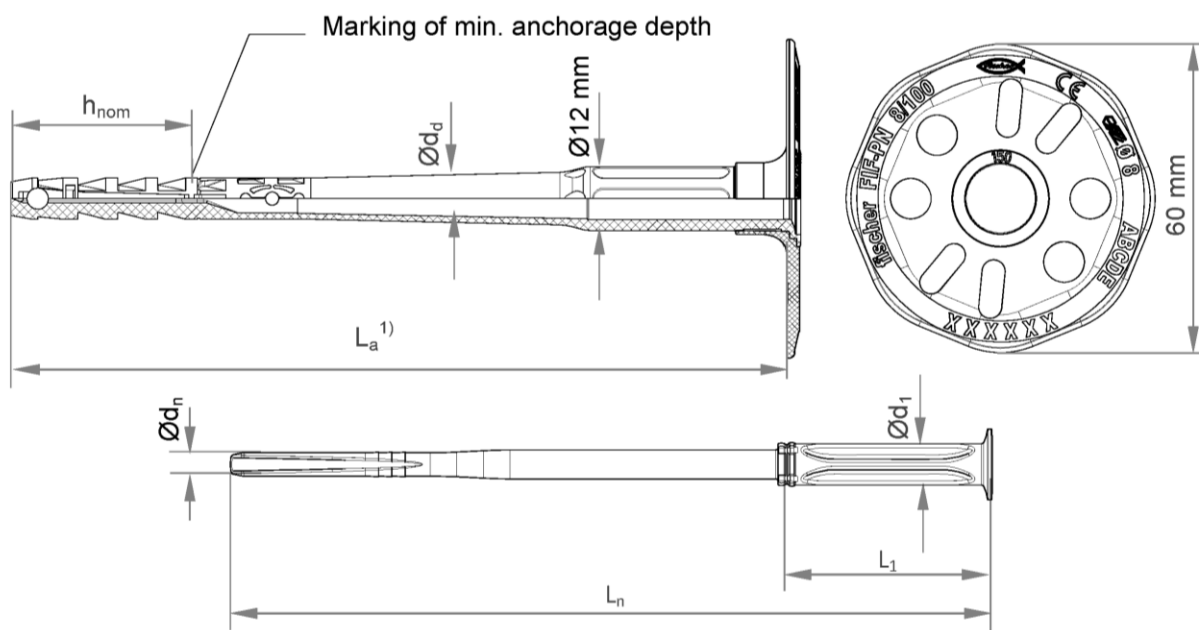
fischer FIF-PN

Product description
Installed anchor

Annex A 1

Appendix 2 / 8

Single parts : FIF-PN



- 1) Various length of the anchors are possible:
 $L_a = L_n$ (length of accompanying specific nail) + 5 mm

Determination of maximum thickness of insulation: $h_D = L_a - h_{nom} - t_{tol}$

e.g. FIF-PN 8x150:

$L_a = 148$ mm, $h_{nom} = 35$ mm, $t_{tol} = 10$ mm

$h_D = 148 - 35 - 10 \approx 100$ mm

Table A2.1: Marking

Anchor Type	FIF-PN
Anchor plate diameter	Ø 60 mm
Works symbol	 or  or blank
Size of anchor	Ø 8 mm
Length of anchor	L_a
Example	fischer (optional) FIF-PN  or  or blank CE (optional)  Ø 8 (optional) ABCDE (optional) XXXXX= additional marking possible

Figures not to scale

fischer FIF-PN

Product description
Anchor type and Marking

Annex A 2

Appendix 3 / 8

Table A3.1: Dimensions							
Anchor Type	Anchor Sleeve				Accompanying specific nail		
	$\varnothing d_d$	h_{nom}	$L_{a,min}$	$L_{a,max}$	$\varnothing d_n$	L_1	$\varnothing d_1$
	[mm]						
FIF-PN	8	35	110	230	4,4	40	8

Table A3.2: Materials	
Designation	Material
Anchor sleeve	PP (virgin material), colour: grey
Anchor plate	PA6 (virgin material) GF; colour: grey
Special nail	PA6 GF (virgin material), colour: nature

Drawing of the slip-on plate

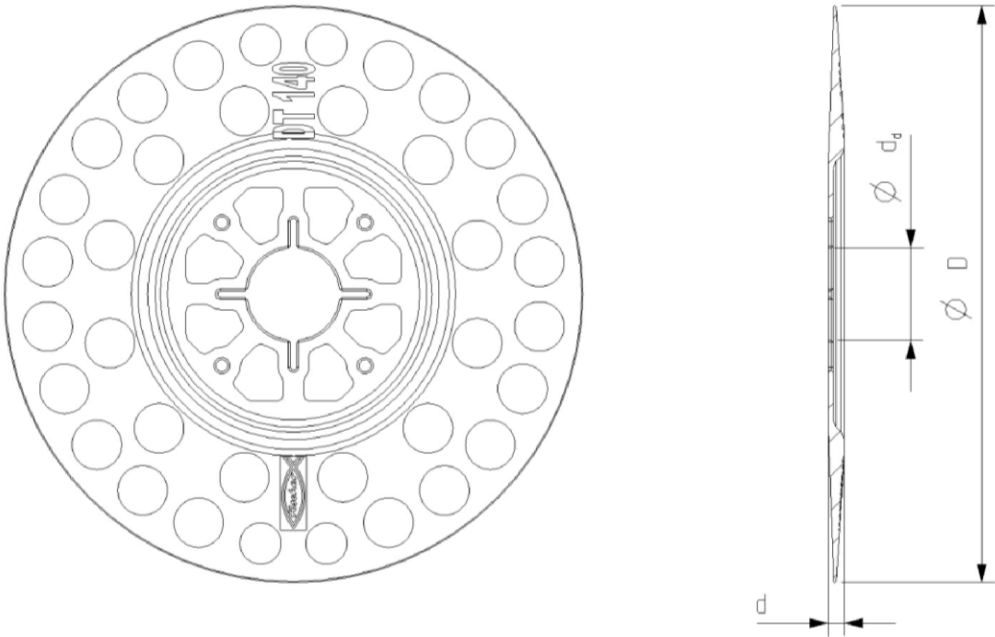


Table A3.3: Slip-on plate, diameters and material				
Slip-on plate	$\varnothing D$	$\varnothing d_d$	d	Material
		[mm]		
DT 90 / 110 / 140	90 / 110 / 140	22,5	3,9	PA6 GF

		Figures not to scale
fischer FIF-PN	Annex A 3 Appendix 4 / 8	
Product description Dimensions, Material, Slip-on plate combined with FIF-PN		

Specifications of intended use

Anchorage subject to:

- The anchor may only be used for transmission of wind suction loads and shall not be used for the transmission of dead loads of the external thermal insulation composite system (ETICS).

Base materials:

- Normal weight concrete (use category A), according to Annex C1.
- Solid masonry (use category B), according to Annex C1.
- Hollow or perforated masonry (use category C), according to Annex C1.
- Lightweight aggregate concrete (use category D), according to Annex C1.
- Autoclaved aerated concrete (use category E), according to Annex C1.
- For other base materials of the use categories A, B, C, D or E, characteristic resistance of the anchor may be determined by job site tests acc. to EOTA Technical Report TR 051 Edition December 2016.

Temperature Range:

- 0°C to +40°C (max. short term temperature +40°C and max. long term temperature +24°C).

Design:

- The anchorages are designed under the responsibility of an engineer experienced in anchorages and masonry work with the partial safety factors $\gamma_M = 2,0$ and $\gamma_F = 1,5$, if there are no other national regulations.
- Verifiable calculation notes and drawings are prepared taking account of the loads to be anchored. The position of the anchors is indicated on the design drawings.
- Fasteners are only to be used for multiple fixings of ETICS.

Installation:

- Drill method according to Annex C1.
- Anchor installation carried out by appropriately qualified personnel and under the supervision of the person responsible for technical matters on the site.
- Installation temperature from 0°C to +40°C
- Exposure to UV due to solar radiation of the anchor not protected by rendering ≤ 6 weeks.

fischer FIF-PN

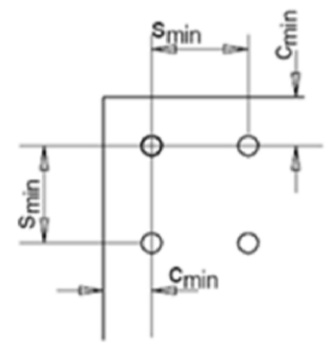
Intended use
Specification

Annex B 1

Appendix 5 / 8

Table B2.1: Installation parameters			
Anchor type			FIF-PN
Drill hole diameter	d_0	=	8
Cutting diameter of drill bit	d_{cut}	≤	8,45
Depth of drill hole to deepest point	h_1	≥	45 / 65 ¹⁾
Overall plastic anchor embedment depth in the base material	h_{nom}	≥	35 / 55 ¹⁾
¹⁾ only for use cat. "D" and "E"			
Table B2.2: Minimum thickness, distance and spacing			
Anchor type			FIF-PN
Minimum thickness of member	h_{min}		100
Minimum spacing	s_{min}	=	100
Minimum edge distance	c_{min}	[mm]	100

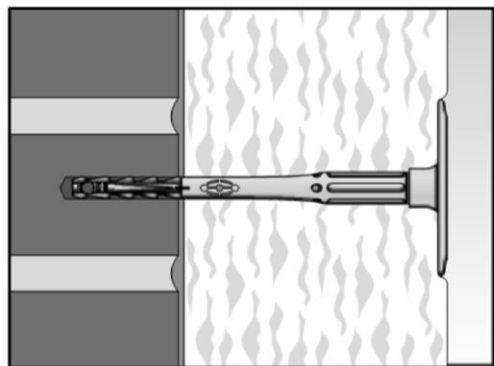
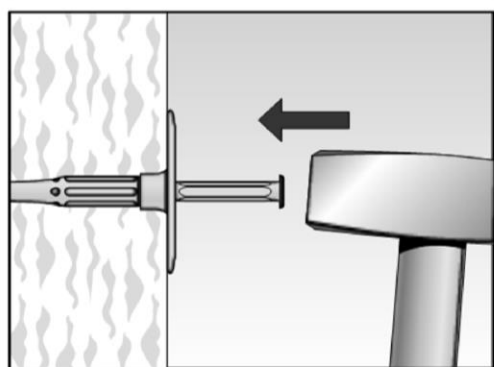
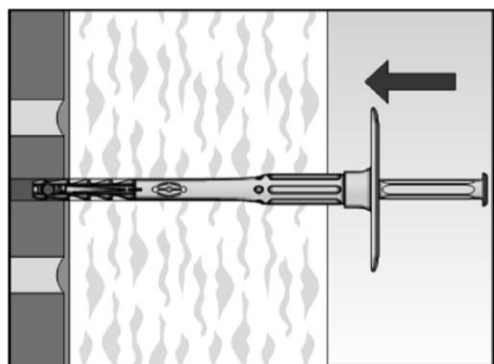
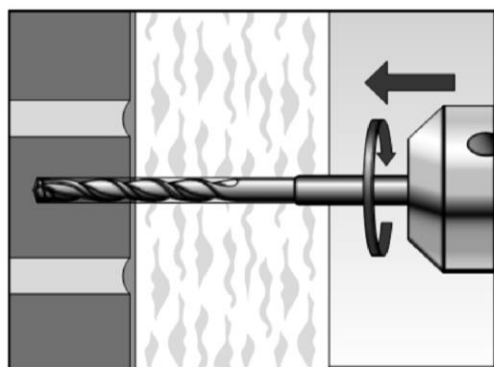
Scheme of distance and spacing



Figures not to scale

fischer FIF-PN	Annex B 2 Appendix 6 / 8
Intended use Installation parameters, minimum thickness, distances and spacings	

Installation instructions:



1. Drill the bore hole by the parameters acc. to Table B2.1 and the corresponding drilling method acc. to Annex C1.

2. Insert anchor manually.

3. Set anchor by hammer blows.

4. Correctly installed anchor.

Figures not to scale

fischer FIF-PN

Intended use
Installation instruction

Annex B 3

Appendix 7 / 8

Table C1.1: Characteristic tension resistance N_{RK} for a single anchor

Base material	Use cat.	Bulk density ρ [kg/dm ³]	Min. compressive strength f_b [N/mm ²]	Remarks	Drill ¹⁾ method	Characteristic resistance N_{RK} [kN]
Normal weight concrete $\geq$ C12/15 – C50/60 acc. to EN 206:2013	A				H	0,5
Clay bricks Mz , acc. to EN 771-1:2011	B	$\geq 2,0$	12	Cross section reduced up to 15% by perforation vertically to the resting area	H	0,5
Vertically perforated clay bricks e.g. acc. to EN 771-1:2011, Hlz	C	$\geq 1,0$	12	Cross section between 15% and 50% by perforation vertically to the resting area. Exterior web thickness ≥ 12 mm	R	0,4
Lightweight Aggregate Concrete $\geq$ LAC acc. to EN 1520:2011	D	$\geq 0,8$	6	Minimum thickness of brick or exterior web $t \geq 50$ mm	H	0,3
Autoclaved aerated concrete blocks, e.g. AAC acc. to EN 771-4 $h_{nom} = 35$ mm	E	$\geq 0,50$	4	DIN V 4165-100	R	0,3

¹⁾ H = Hammer drilling R = Rotary drilling

Table C1.2: Point thermal transmittance acc. to EOTA Technical Report TR 025: 2016-05

Anchor type	Thickness of insulation material h_D [mm]	Point thermal transmittance χ [W/K]
FIF-PN	60 - 180	0,000

Table C1.3: Plate stiffness acc. to EOTA Technical Report TR 026: 2016-05

Anchor type	Diameter of the anchor plate [mm]	Load resistance of the anchor plate [kN]	Plate stiffness [kN/mm]
FIF-PN	60	1,63	0,63

Table C1.4: Displacements of the FIF-PN

Base material	Tension load F [kN]	Displacement s δ [mm]
Concrete C12/15 – C50/60 (EN 206-1:2000)	0,15	< 0,2
Clay bricks, Mz 12 (EN 771-1:2011)	0,15	< 0,2
Vertically perforated Clay brick, Hlz 12 (EN 771-1:2011)	0,13	< 0,4
Lightweight Aggregate Concrete $\geq$ LAC 6 DIN EN 1520	0,10	< 0,2
Autoclaved aerated concrete blocks, AAC 4 (EN 771-4) $h_{nom} = 35$ mm	0,10	< 0,2

fischer FIF-PN	Annex C 1 Appendix 8 / 8
Performance Characteristic tension resistance, point thermal transmittance, plate stiffness, displacements	