

**Approval body for construction products  
and types of construction**

**Bautechnisches Prüfamt**

An institution established by the Federal and  
Laender Governments



## European Technical Assessment

**ETA-16/0854  
of 4 January 2018**

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

ejotherm S and ejotherm N

Product family  
to which the construction product belongs

Screwed-in plastic anchor and nailed-in plastic anchor for  
fixing of external thermal insulation composite systems  
with rendering in concrete and masonry

Manufacturer

EJOT Baubefestigungen GmbH  
In der Stockwiese 35  
57334 Bad Laasphe  
DEUTSCHLAND

Manufacturing plant

EJOT 1, 2, 3, 4  
EJOT 1, 2, 3, 4

This European Technical Assessment  
contains

25 pages including 3 annexes which form an integral part  
of this assessment

This European Technical Assessment is  
issued in accordance with Regulation (EU)  
No 305/2011, on the basis of

EAD 330196-01-0604

This version replaces

ETA-16/0854 issued on 10 March 2017

**European Technical Assessment**

**ETA-16/0854**

English translation prepared by DIBt

**Page 2 of 25 | 4 January 2018**

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## Specific Part

### 1 Technical description of the product

The screwed-in anchor ejotherm S consists of an anchor sleeve with an enlarged shaft, spreading zone subsequently, an insulation plate made of virgin polyethylene (plate type A) or virgin polyamide (plate type B) and an accompanying specific screw of galvanised steel or stainless steel. The head of screw type A has an overmoulding of polyamide. The serrated expanding part of the anchor sleeve is slotted.

The nailed-in anchor ejotherm N consists of an anchor sleeve with an enlarged shaft, spreading zone subsequently, an insulation plate made of virgin polyethylene (plate type A) or virgin polyamide (plate type B) and an accompanying specific nail of galvanised steel with an overmoulding of polyamide. The serrated expanding part of the anchor sleeve is slotted.

The anchors ejotherm S and ejotherm N may in addition be combined with the anchor plates SBL 140 plus and VT 90. The anchor ejotherm S may in addition be combined with the anchor plate VT 2G.

An illustration and the description of the product are 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 2
Displacements	See Annex C 2

#### 3.2 Energy economy and heat retention (BWR 6)

Essential characteristic	Performance
Point thermal transmittance	See Annex C 2

**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+

**5 Technical details necessary for the implementation of the AVCP system, as provided for in the applicable EAD**

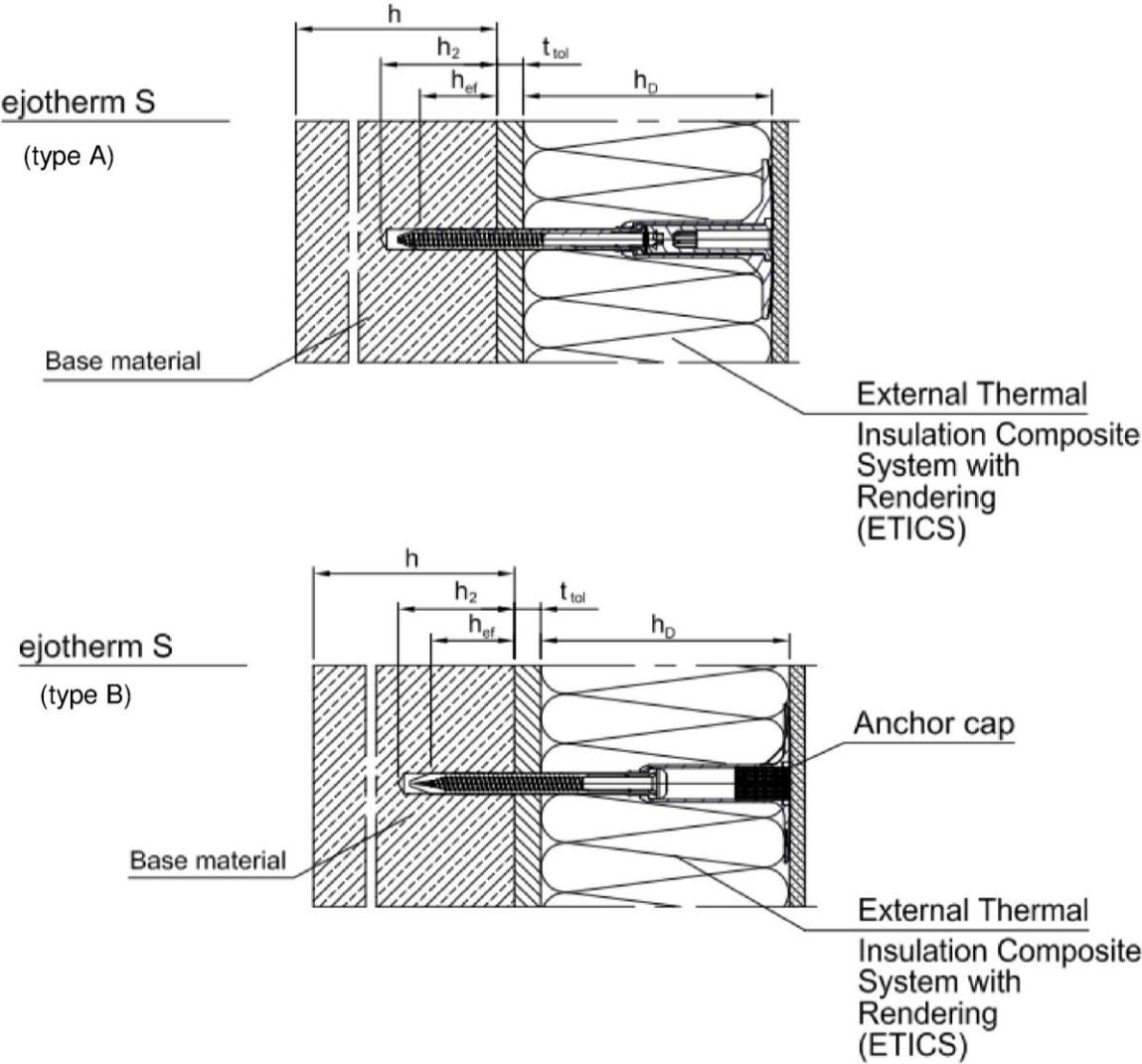
Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited with Deutsches Institut für Bautechnik.

Issued in Berlin on 4 January 2018 by Deutsches Institut für Bautechnik

BD Dipl.-Ing. Andreas Kummerow  
Head of Department

*beglaubigt:*  
Ziegler

**ejotherm S (type A+B), mounting flushed at the surface**



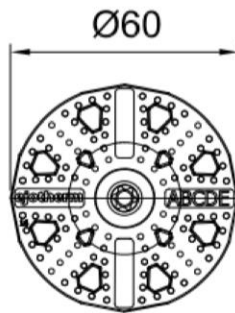
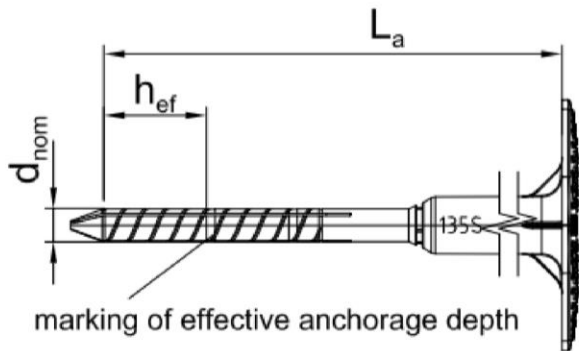
**Intended use**

- Anchorage of ETICS in concrete and masonry
- Anchorage of ETICS in autoclaved aerated concrete and lightweight aggregate concrete

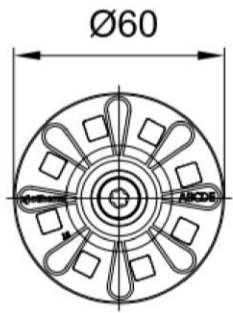
Legend:  $h_D$  = thickness of insulation material  
 $h_{ef}$  = effective anchorage depth  
 $h$  = thickness of member (wall)  
 $h_2$  = depth of drilled hole to deepest point  
 $t_{tol}$  = thickness of equalizing layer or non-load-bearing coating

<b>ejotherm S and ejotherm N</b>	<b>Annex A 1</b>
<b>Product description</b> Installed condition ejotherm S (type A+B), flushed at the surface	

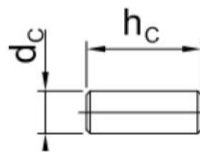
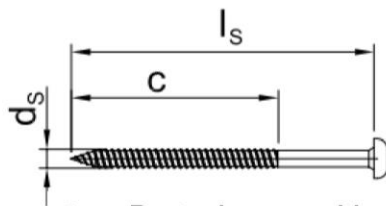
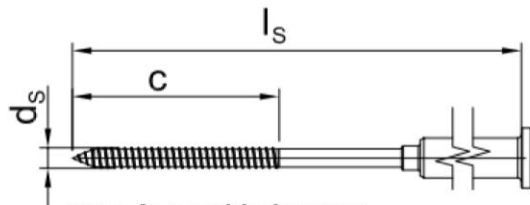
**ejotherm S (type A+B) / use categories A,B,C,D, / mounting flushed at the surface**



type A: anchor plate



type B: anchor plate



Marking:  
Identifying mark (z.B. EJOT)  
Anchor type (ejotherm S)  
Length of anchor (e.g. 135)  
Use category (A,B,C,D, E)

**Table A 1: Dimensions**

Anchor Type	Anchor Sleeve			Specific screw			EPS cap	
	d <sub>nom</sub> [mm]	h <sub>ef</sub> [mm]	min L <sub>a</sub> max L <sub>a</sub> [mm]	d <sub>s</sub> [mm]	c [mm]	min l <sub>s</sub> max l <sub>s</sub> [mm]	h <sub>c</sub>	d <sub>c</sub>
ejotherm S	8	25	115 295	5,5	60	115 295 (type A)	23	12,5
						88 188 (type B)		

Determination of maximum thickness of insulation h<sub>D</sub> [mm] ejotherm S (type A+B):

$$\begin{aligned} h_D &= L_a - t_{tol} - h_{ef} & (L_a = \text{e.g. } 215; t_{tol} = 10) \\ \text{e.g. } h_D &= 215 - 10 - 25 & h_{Dmax} = 180 \end{aligned}$$

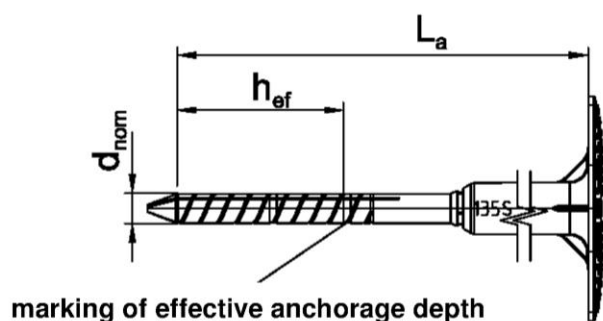
**ejotherm S and ejotherm N**

**Product description**

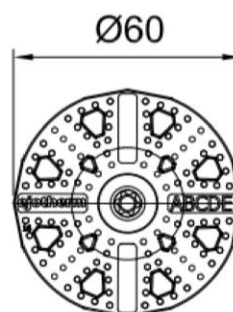
ejotherm S - marking and dimensions, use categories: A,B,C,D  
mounting flushed at the surface

**Annex A 2**

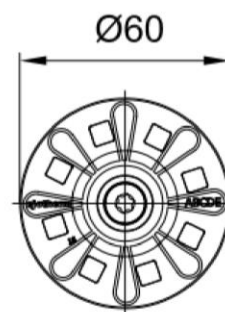
**ejotherm S (type A+B) / use category E / mounting flushed at the surface**



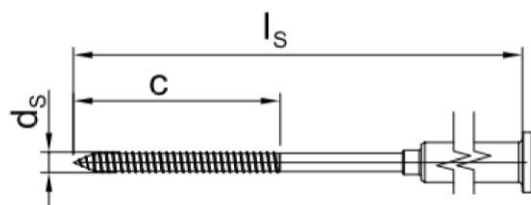
marking of effective anchorage depth



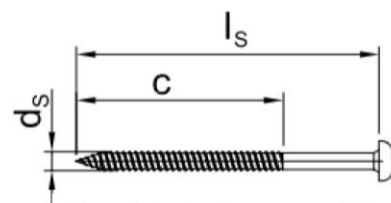
type A: anchor plate



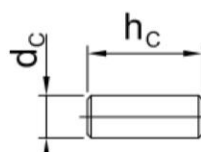
type B: anchor plate



type A: moulded screw



type B: steel screw with anchor cap



Anchor cap

Marking:  
Identifying mark (z.B. EJOT)  
Anchor type (ejotherm S)  
Length of anchor (e.g. 135)  
Use category (A,B,C,D, E)

**Table A 2: Dimensions**

Anchor Type	Anchor Sleeve			Specific screw			EPS cap	
	$d_{nom}$ [mm]	$h_{ef}$ [mm]	min $L_a$ max $L_a$ [mm]	$d_s$ [mm]	$c$ [mm]	min $l_s$ max $l_s$ [mm]	$h_c$	$d_c$
ejotherm S	8	45	115 295	5,5	60	115 295 (type A)	23	12,5
						88 188 (type B)		

Determination of maximum thickness of insulation  $h_D$  [mm] ejotherm S (type A+B):

$$h_D = L_a - t_{tol} - h_{ef} \quad (L_a = \text{e.g. } 215; t_{tol} = 10)$$

$$\text{e.g. } h_D = 215 - 10 - 45 = 160 \quad h_{Dmax} = 160$$

**ejotherm S and ejotherm N**

**Product description**

ejotherm S - marking and dimensions, use category: E, mounting flushed at the surface

**Annex A 3**



The image contains two technical cross-section diagrams of ejothem S components, labeled (type A) and (type B). Both diagrams show a central heating element (a coil of wires) embedded within a base material. The base material is shown with a hatched pattern. To the right of the base material is an insulation cover, also with a hatched pattern. The diagrams are labeled with various dimensions:  $h$  (total height),  $h_1$  (height of the base material),  $h_{ef}$  (effective height),  $t_{tol}$  (tolerance),  $h_D$  (height of the insulation cover), and  $h_R$  (height of the rendering). The diagrams are labeled 'ejothem S (type A)' and 'ejothem S (type B)' on the left. On the right, there are labels for 'Insulation cover' and 'External Thermal Insulation Composite System with Rendering (ETICS)'.

- Anchorage of ETICS in concrete and masonry
- Anchorage of ETICS in autoclaved aerated concrete and lightweight aggregate concrete

Legend:

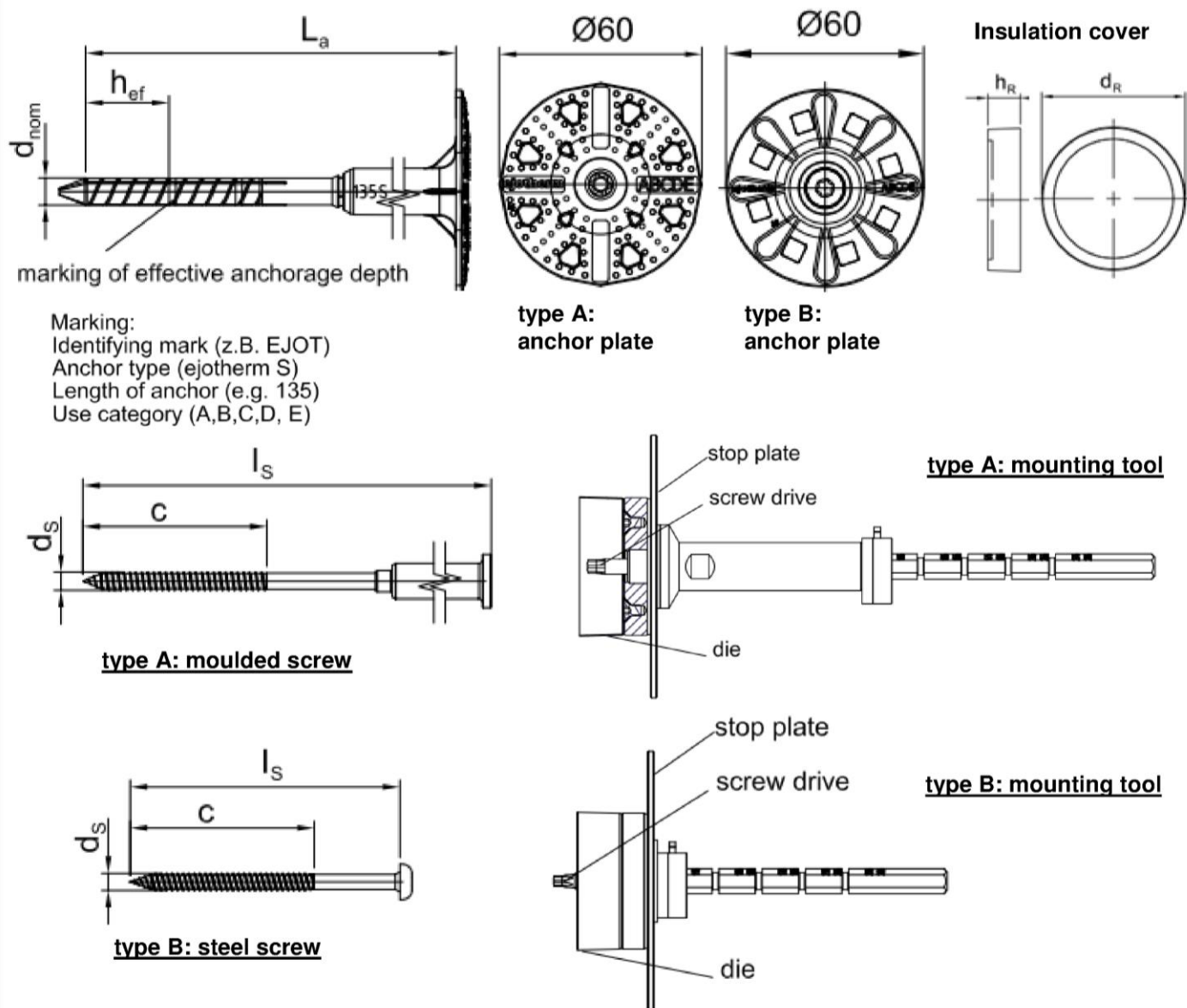
- $h_D$  = thickness of insulation material
- $h_{ef}$  = effective anchorage depth
- $h$  = thickness of member (wall)
- $h_1$  = depth of drilled hole to deepest point
- $h_R$  = thickness of insulation cover
- $t_{tol}$  = thickness of equalizing layer or non-load-bearing coating

Installed condition ejotherm S (type A+B), countersunk into insulation

## Annex A 4



**ejotherm S (type A + B) / use categories A, B, C, D / countersunk into insulation**



**Table A 3: Dimensions**

Anchor Type	Anchor Sleeve			Specific screw			Insulation cover	
	$d_{nom}$ [mm]	$h_{ef}$ [mm]	min $L_a$ - max $L_a$ [mm]	$d_s$ [mm]	$c$ [mm]	min $l_s$ - max $l_s$ [mm]	$h_R$	$d_R$
ejotherm S	8	25	115 - 295	5,5	60	type A: 115 - 295	15	65
						type B: 88 - 188		

Determination of maximum thickness of insulation  $h_D$  [mm] ejotherm S:

$$h_D = L_a - t_{tol} - h_{ef} \quad (L_a = \text{e.g. } 215; t_{tol} = 10)$$

$$\text{e.g. } h_D = 215 - 10 - 25$$

$$h_{Dmax} = 180$$

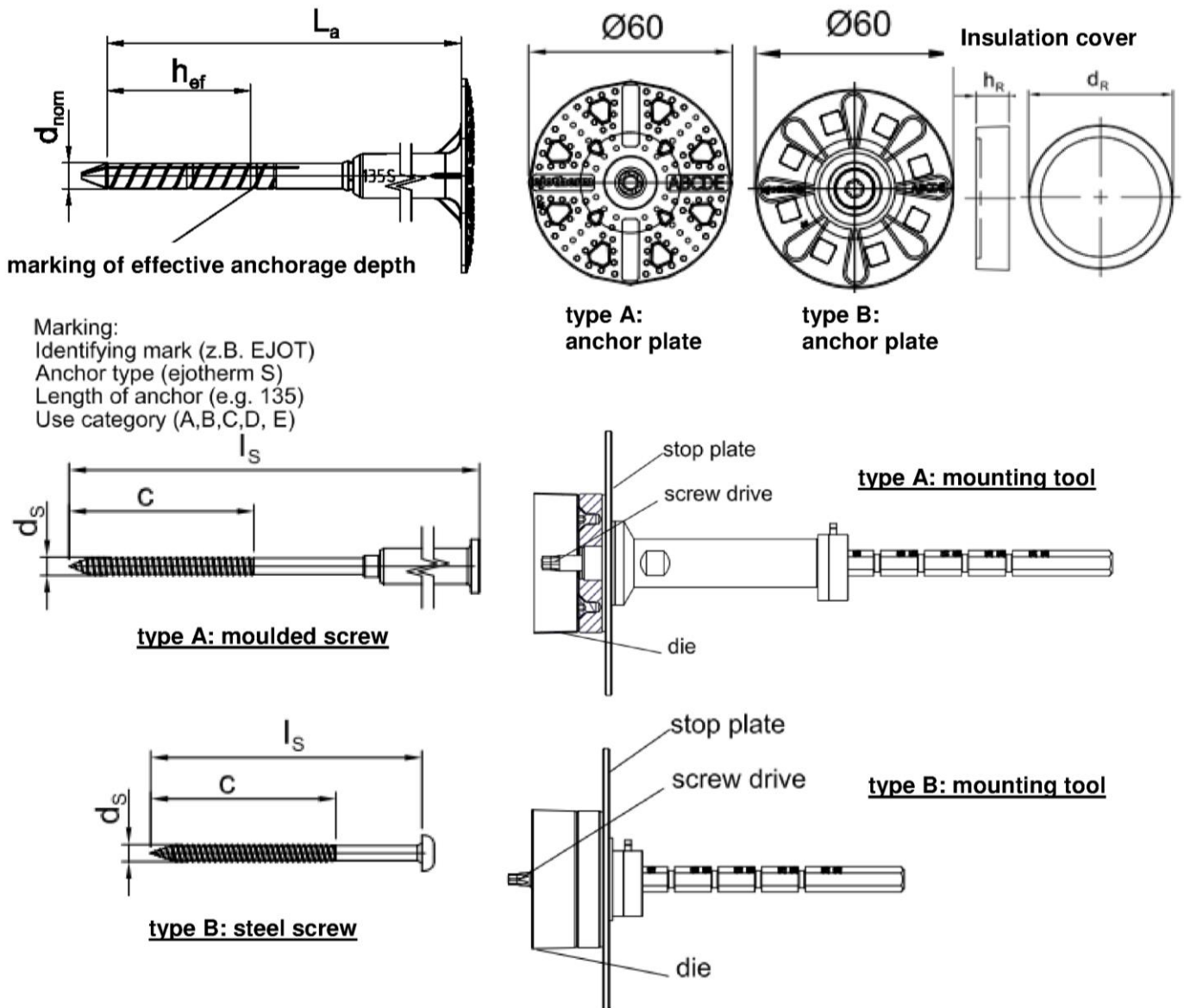
**ejotherm S and ejotherm N**

**Product description**

ejotherm S - marking and dimensions, mounting tool, use categories: A,B,C,D  
countersunk into insulation

**Annex A 5**

**ejotherm S (type A + B) / use category E / countersunk into insulation**



**Table A 4: Dimensions**

Anchor Type	Anchor Sleeve			Specific screw			Insulation cover	
	$d_{nom}$ [mm]	$h_{ef}$ [mm]	min $L_a$ - max $L_a$ [mm]	$d_s$ [mm]	$c$ [mm]	min $l_s$ - max $l_s$ [mm]	$h_R$	$d_R$
ejotherm S	8	45	115 - 295	5,5	60	type A: 115 - 295	15	65
						type B: 88 - 188		

Determination of maximum thickness of insulation  $h_D$  [mm] ejotherm S:

$$h_D = L_a - t_{tol} - h_{ef} \quad (L_a = \text{e.g. } 215; t_{tol} = 10)$$

$$\text{e.g. } h_D = 215 - 10 - 45 = 160 \quad h_{Dmax} = 160$$

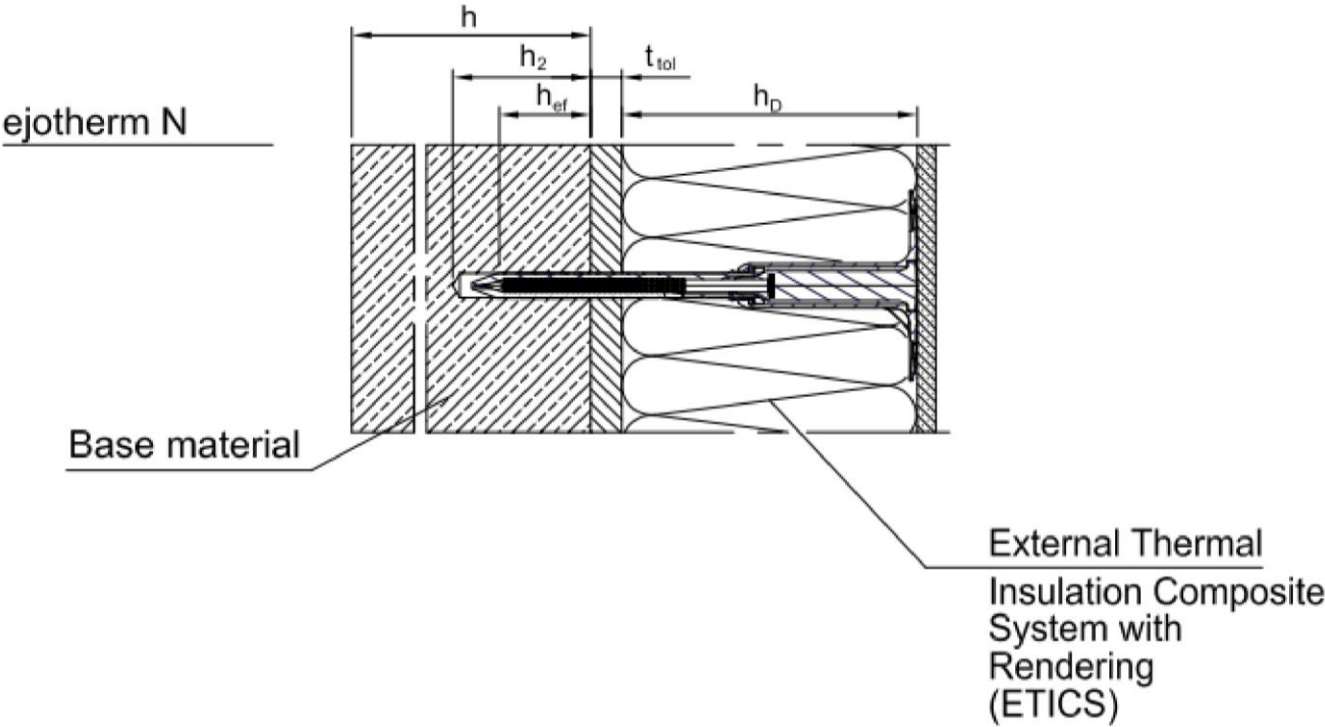
**ejotherm S and ejotherm N**

**Product description**

ejotherm S - marking and dimensions, mounting tool, use category: E  
countersunk into insulation

**Annex A 6**

**ejotherm N (type A+B), mounting flushed at the surface**



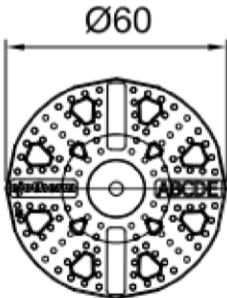
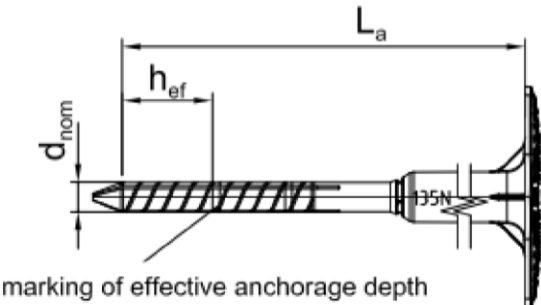
**Intended use**

- Anchorage of ETICS in concrete and masonry
- Anchorage of ETICS in autoclaved aerated concrete and lightweight aggregate concrete

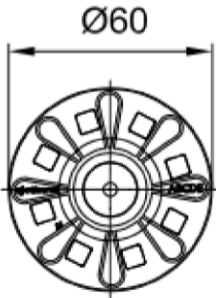
Legend:  $h_D$  = thickness of insulation material  
 $h_{ef}$  = effective anchorage depth  
 $h$  = thickness of member (wall)  
 $h_2$  = depth of drilled hole to deepest point  
 $t_{tol}$  = thickness of equalizing layer or non-load-bearing coating

<b>ejotherm S and ejotherm N</b>	<b>Annex A 7</b>
<b>Product description</b> Installed condition ejotherm N, flushed at the surface	

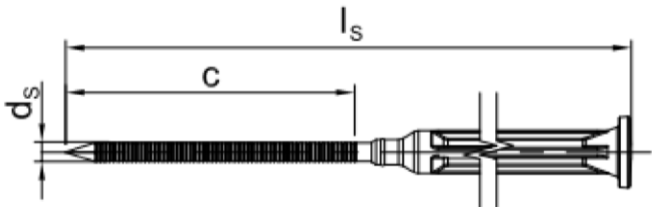
**ejotherm N (type A + B) / use categories A,B,C,D / mounting flushed at the surface**



**type A: anchor plate**



**Type B : anchor plate**



**Specific nail**

Marking:  
Identifying mark (z.B. EJOT)  
Anchor type (ejotherm N)  
Length of anchor (e.g. 135)  
Use category (A,B,C,D, E)

**Table A 5: Dimensions**

Anchor Type	Anchor sleeve			Specific nail		
	$d_{nom}$	$h_{ef}$	$min L_a$ $max L_a$	$d_n$	$c$	$min l_n$ $max l_n$
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
ejotherm N (type A+B)	8	25	95 295	4,13	60	95 295

Determination of maximum thickness of insulation  $h_D$  [mm] ejotherm N:

e.g.  $h_D = L_a - t_{tol} - h_{ef}$  ( $L_a = \text{e.g. } 215; t_{tol} = 10$ )  
 $h_D = 215 - 10 - 25$   
 $h_{Dmax} = 180$

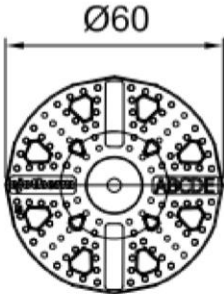
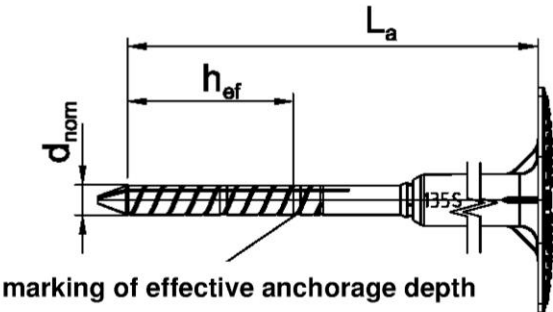
**ejotherm S and ejotherm N**

**Product description**

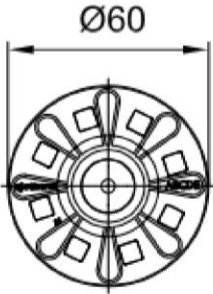
ejotherm N - marking and dimensions, use category: A,B,C,D  
mounting flushed at the surface

**Annex A 8**

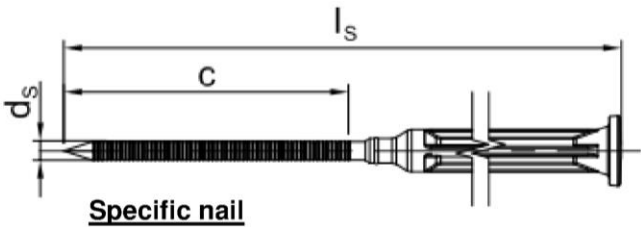
**ejotherm N (type A+B) / use category E / mounting flushed at the surface**



**type A: anchor plate**



**Type B: anchor plate**



Marking:  
Identifying mark (z.B. EJOT)  
Anchor type (ejotherm N)  
Length of anchor (e.g. 135)  
Use category (A,B,C,D, E)

**Table A 6: Dimensions**

Anchor Type	Anchor Sleeve			Specific nail		
	$d_{nom}$	$h_{ef}$	$\min L_a$ $\max L_a$	$d_n$	$c$	$\min l_n$ $\max l_n$
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
ejotherm N (type A+B)	8	45	95 295	4,13	60	95 295

Determination of maximum thickness of insulation  $h_D$  [mm] for ejotherm N:

e.g.  $h_D = L_a - t_{tol} - h_{ef}$  ( $L_a = \text{e.g. } 215; t_{tol} = 10$ )  
 $h_D = 215 - 10 - 45$   
 $h_{Dmax} = 160$

**ejotherm S and ejotherm N**

**Product description**

ejotherm N - marking and dimensions, use category: E, mounting flushed at the surface

**Annex A 9**



**Table A7: Materials ejotherm S and ejotherm N**

Anchor sleeve	virgin Polyethylene, PE-HD colours: nature, yellow, orange, red, blue, grey, green
Anchor plate (type A)	virgin Polyethylene, PE-HD colours: nature, yellow, orange, red, blue, grey, green
Anchor plate (type B)	virgin Polyamid, PA GF 50 colours: nature, yellow, orange, red, blue, grey, green
Plastic moulding of the screw for ejotherm S (for anchor plate type A)	Polyamide, PA GF 50 colours: nature, black
Plastic moulding of the nail for ejotherm N (for anchor plate type A+B)	Polyamide, PA GF 50 colours: nature, black
Insulation cover (for anchor plate type A+B)	Polystyrene EPS 20
	Mineral-Wool HD
anchor cap for ejotherm S (type B)	Polystyrene EPS 30
Specific screw for ejotherm S	Steel 5.8, electro galvanized $\geq 5 \mu\text{m}$ according to EN ISO 4042:1999, blue passivated
	Stainless steel, according to ISO 3506 material number 1.4401 or 1.4571 material number 1.4301 or 1.4567
Specific nail for ejotherm N	Steel, electro galvanized $\geq 5 \mu\text{m}$ according to EN ISO 4042:1999, blue passivated, $f_{yk} \geq 670 \text{ N/mm}^2$

**ejotherm S and ejotherm N**

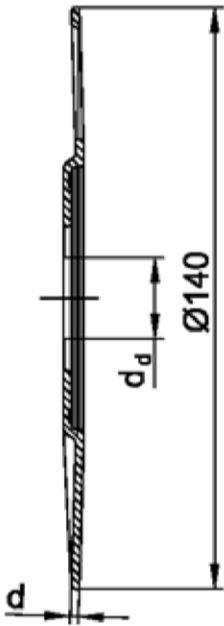
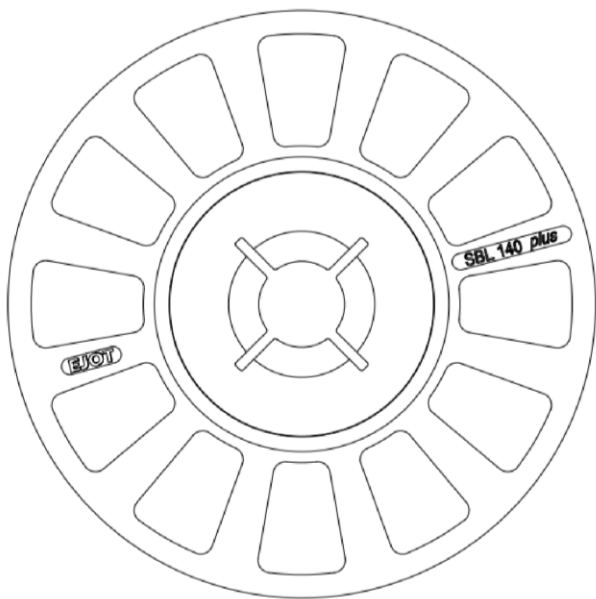
**Product description**

Materials of ejotherm S and ejotherm N

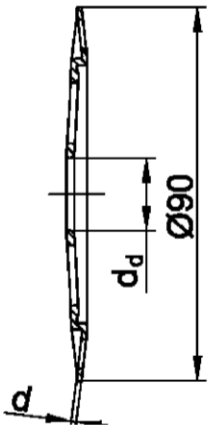
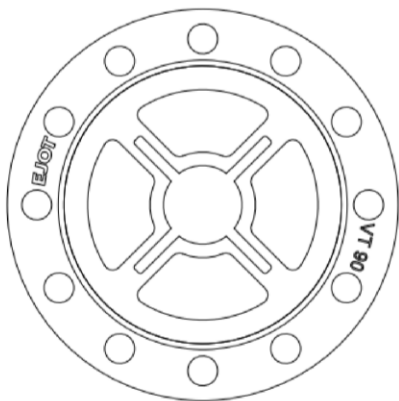
**Annex A 10**



**ejotherm S and ejotherm N**



SBL 140 plus	
colour	nature
d <sub>d</sub> [mm]	20,0
d [mm]	2,0
Material	1) 2)



VT 90	
colour	nature
d <sub>d</sub> [mm]	18,5
d [mm]	1,2
Material	1) 2)

- 1) Polyamide, PA 6  
2) Polyamide, PA GF 50

**ejotherm S and ejotherm N**

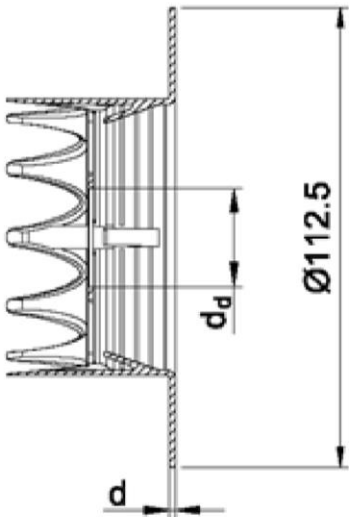
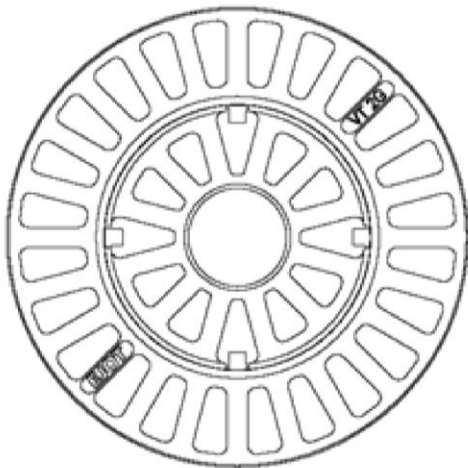
**Product description**

Slip on plates with ejotherm S and ejotherm N

**Annex A 11**

**ejotherm S (type A+B)**

**VT 2G**



VT 2G	
colour	nature
d <sub>d</sub> [mm]	29,0
d [mm]	1,5
Material	<sup>1)</sup>

<sup>1)</sup> Polyamide, PA GF 50

**ejotherm S and ejotherm N**

**Product description**  
Slip on plates with ejotherm S

**Annex A 12**

## 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 thermal insulation composite system.

### 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 the characteristic resistance of the anchor may be determined by job site tests according 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 anchor is indicated on the design drawings.
- Fasteners are only to be used for multiple fixings of thermal insulation composite systems

### Installation:

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

ejotherm S and ejotherm N

Intended use  
Specifications

Annex B 1

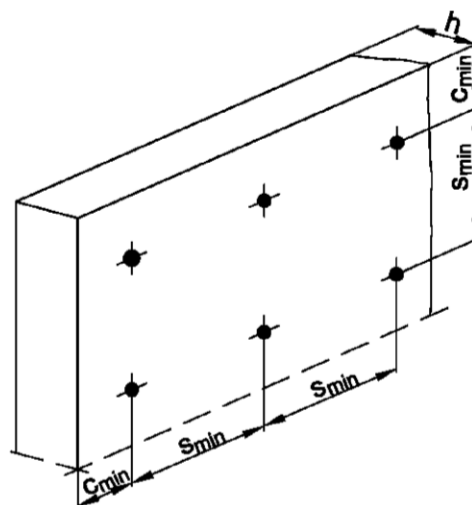
**Table B1: Installation parameters**

Anchor type		ejotherm N		ejotherm S	
		A B C D	E	A B C D	E
Drill hole diameter	$d_0$ [mm] =	8	8	8	8
Cutting diameter of drill bit	$d_{cut}$ [mm] ≤	8,45	8,45	8,45	8,45
Depth of drill hole to deepest point					
- deep mounting	$h_1$ [mm]			50	70
- mounting on the surface	$h_1$ [mm]	35	55	35	55
Effective anchorage depth	$h_{ef}$ [mm] ≥	25	45	25	45

**Table B2: Anchor distances and dimensions of members**

Anchor type		ejotherm S / ejotherm N
Minimum allowable spacing	$s_{min} \geq$ [mm]	100
Minimum allowable edge distance	$c_{min} \geq$ [mm]	100
Minimum thickness of member		
- deep mounting	$h \geq$ [mm]	100
		40 (only skins of concrete)
- mounting on the surface	$h \geq$ [mm]	100
		40 (only skins of concrete)

Scheme of distance and spacing



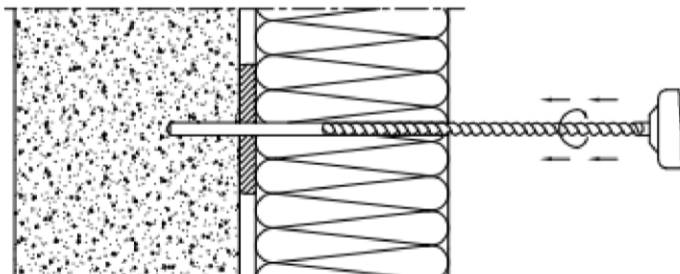
**ejotherm S and ejotherm N**

**Intended use**

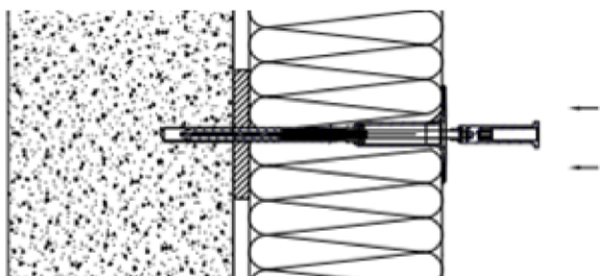
Installations parameters,  
Edge distances and spacing

**Annex B 2**

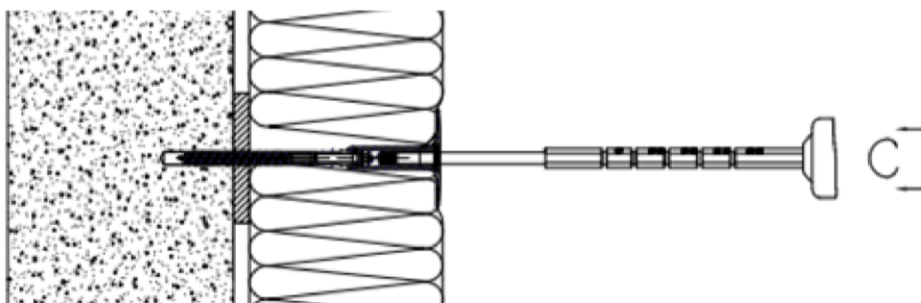
# Installation instructions: ejotherm S (type A) / flushed at the surface



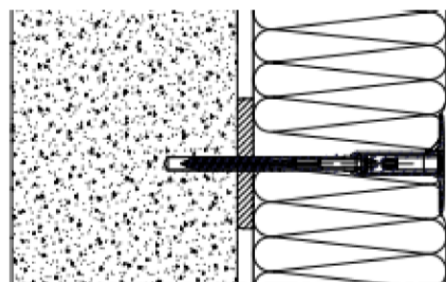
Drill the hole perpendicular to the substrate surface.  
Clean the drill hole 3x.



Place the anchor into the drill hole. The bottom side of the plate must be flush with the ETICS.



Drill the specific screw into the anchor.



Installed condition of ejotherm S.

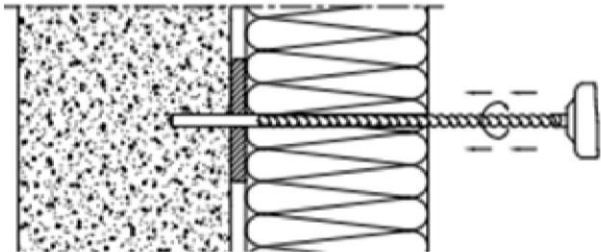
**ejotherm S and ejotherm N**

## **Intended use**

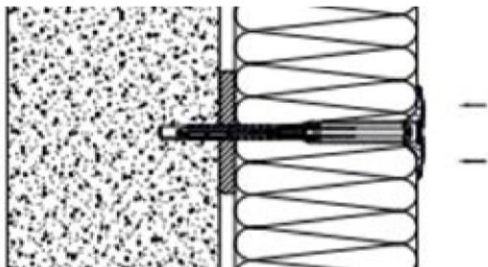
Installation instructions ejotherm S (type A), flushed at the surface

**Annex B 3**

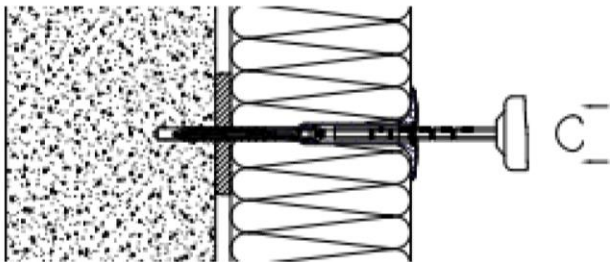
**Installation instructions: ejotherm S (type B) / flushed at the surface**



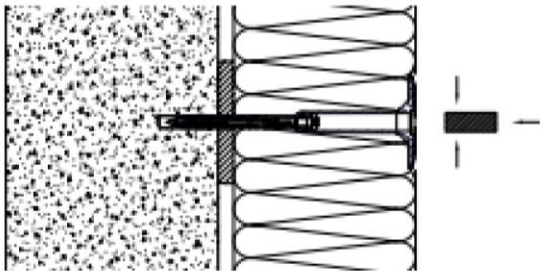
Drill the hole perpendicular to the substrate surface.  
Clean the drill hole 3x.



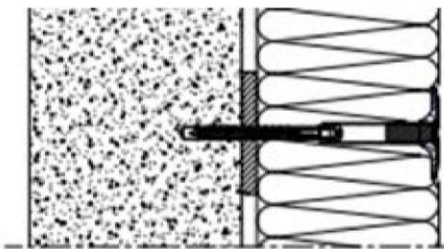
Place the anchor into the drill hole. The bottom side of the plate must be flush with the ETICS.



Drill the specific screw into the anchor.



Put the EPS-cap into the anchor



Installed condition of  
ejotherm S.

**ejotherm S and ejotherm N**

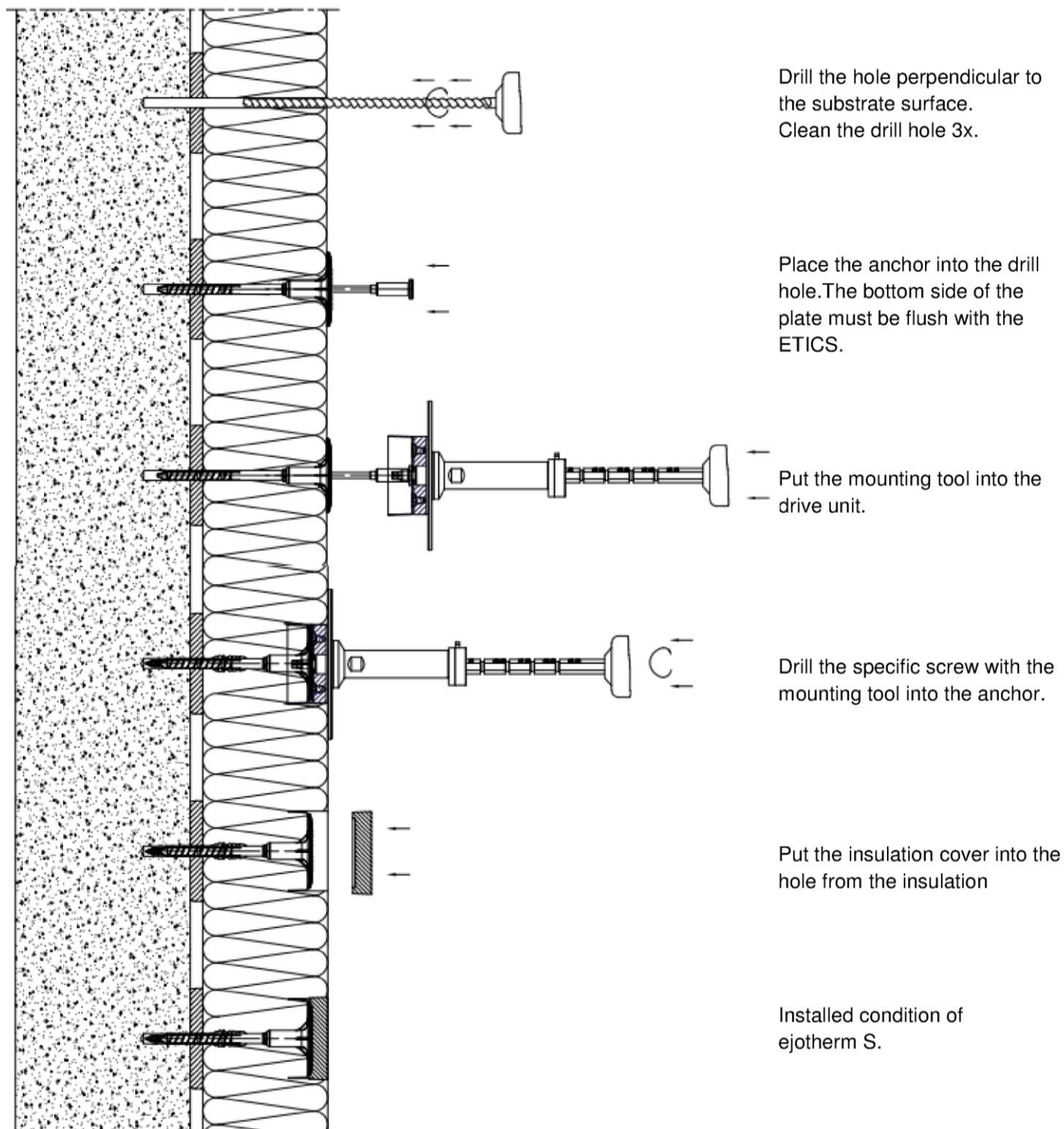
**Intended use**

Installation instructions ejotherm S (type B), flushed at the surface

**Annex B 4**



**Installation instructions: ejotherm S (type A) / countersunk into insulation**



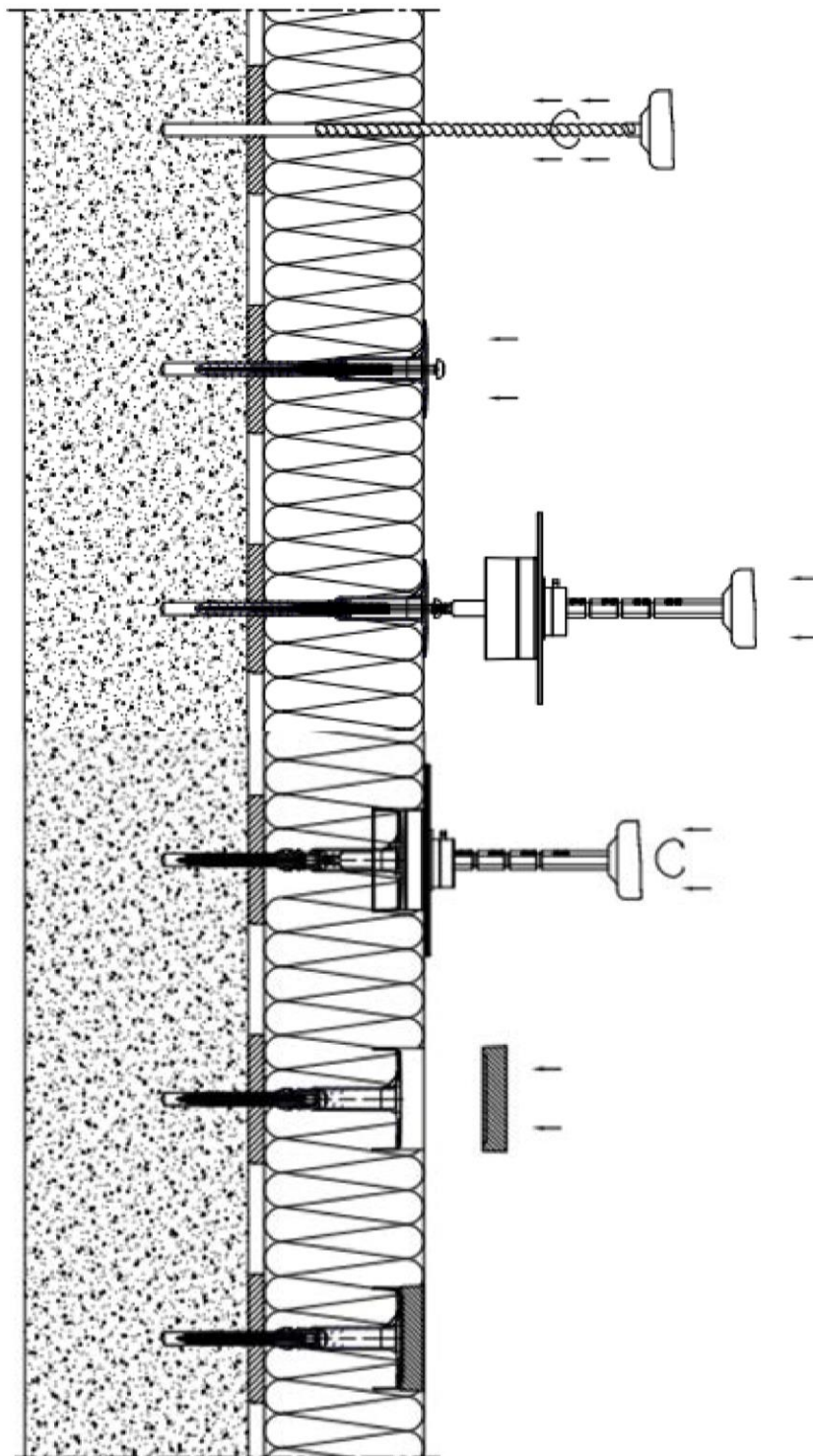
**ejotherm S and ejotherm N**

**Intended use**

Installation instructions ejotherm S (type A), countersunk into insulation

**Annex B 5**

**Installation instructions: ejotherm S (type B) / countersunk into insulation**



Drill the hole perpendicular to the substrate surface.  
Clean the drill hole 3x.

Place the anchor into the drill hole. The bottom side of the plate must be flush with the ETICS.

Put the mounting tool into the drive unit.

Drill the specific screw with the mounting tool into the anchor.

Put the insulation cover into the hole from the insulation

Installed condition of ejotherm S.

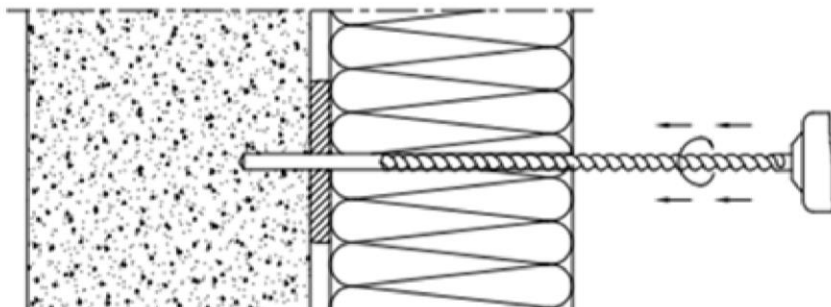
**ejotherm S and ejotherm N**

**Intended use**

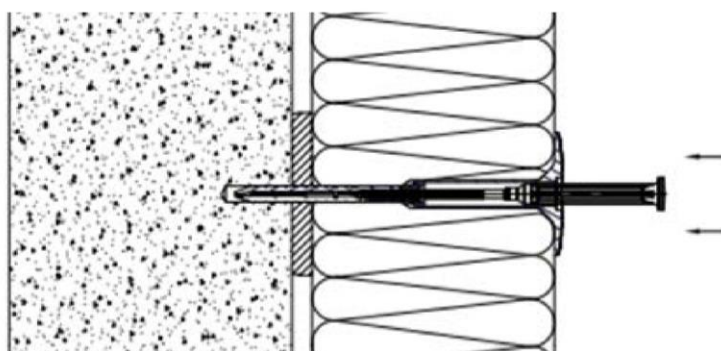
Installation instructions ejotherm S (type B), countersunk into insulation

**Annex B 6**

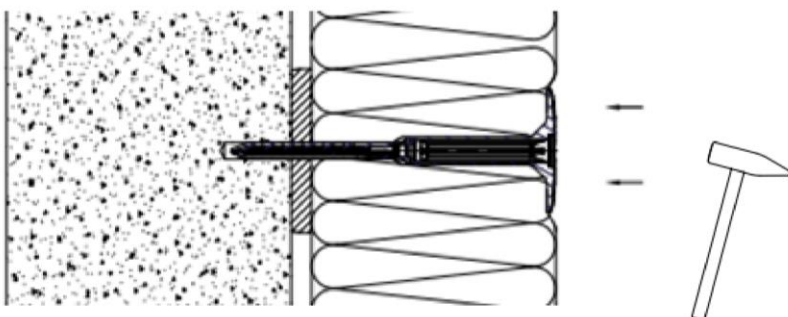
**Installation instructions: ejotherm N (type A+B) / mounting flushed at the surface**



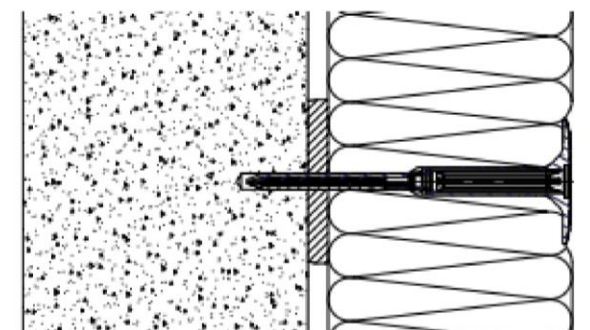
Drill the hole perpendicular to the substrate surface.  
Clean the drill hole 3x.



Place the anchor into the drill hole.  
The bottom side of the plate must be flush with the ETICS.



Drive in the specific nail with the hammer into the sleeve



Installed condition of  
ejotherm N.

**ejotherm S and ejotherm N**

**Intended use**

Installation instructions ejotherm N (typeA+B), flushed at the surface

**Annex B 7**



**Table C1: Characteristic resistance to tension loads  $N_{Rk}$  in concrete and masonry for a single anchor in kN**

Anchor type					ejotharm N	ejotharm S
Base materials	Bulk density $\rho$ [kg/dm <sup>3</sup> ]	minimum compressive strength $f_b$ [N/mm <sup>2</sup> ]	General remarks	Drill method	$N_{Rk}$ [kN]	$N_{Rk}$ [kN]
Concrete C12/15 EN 206-1:2000				hammer	0,75	0,9
Concrete C20/25 – C50/60 EN 206-1:2000				hammer	1,2	1,5
Concrete C20/25 – C50/60 Thin members EN 206-1:2000 (thin members)			Thickness of the skin 100 mm > h ≥ 40 mm	hammer	1,2	1,5
Clay bricks, Mz e.g. according to EN 771-1:2011	≥ 1,8	36	Vertically perforation up to 15 %.	hammer	1,5	1,5
Sand-lime solid bricks, KS e.g. according to EN 771-2:2011	≥ 1,8	16	Vertically perforation up to 15 %.	hammer	1,5	1,5
Vertically perforated clay bricks, HLz e.g. according to EN 771-1:2011	≥ 1,4	16	Vertically perforation ≥ 15 % and ≤ 50 %. outer web thickness ≥ 14 mm	rotary	0,9 <sup>1)</sup>	1,5 <sup>1)</sup>
Sand-lime perforated bricks, KSL e.g. according to EN 771-2:2011	≥ 1,4	12	Vertically perforation ≥ 15 %. outer web thickness ≥ 20 mm	rotary	0,9 <sup>2)</sup>	1,5 <sup>2)</sup>
Lightweight concrete hollow blocks, Hbl e.g. according to EN 771-3:2011	≥ 0,9	4	Vertically perforation ≥ 15 %. outer web thickness ≥ 30 mm	rotary	0,6 <sup>3)</sup>	1,2 <sup>3)</sup>
Lightweight aggregate concrete LAC 8 – LAC 25 e.g. according to EN 771-3:2011	≥ 1,2	8		hammer	0,6	0,75
Autoclaved aerated concrete AAC4 – AAC 7 e.g. according to EN 771-4:2011	≥ 0,55	4		rotary	0,75	0,75

<sup>1)</sup> The value applies only for outer web thickness ≥ 14 mm; otherwise the characteristic resistance shall be determined by job site pull-out tests.

<sup>2)</sup> The value applies only for outer web thickness ≥ 20 mm; otherwise the characteristic resistance shall be determined by job site pull-out tests.

<sup>3)</sup> The value applies only for outer web thickness ≥ 30 mm; otherwise the characteristic resistance shall be determined by job site pull-out tests.

**ejotharm S and ejotharm N**

**Performances**  
Characteristic resistance

**Annex C 1**

**Table C2: Point thermal transmittance according EOTA Technical Report TR 025:2016-05**

anchor type	insulation thickness $h_D$ [mm]	point thermal transmittance $\chi$ [W/K]
ejotherm N (type A+B)	60 – 260	0,001
ejotherm S (type A+B), countersunk	80 – 260	0,001
ejotherm S (type A+B), flushed	80 – 260	0,002

**Table C3: Plate stiffness according 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]
ejotherm N / ejotherm S (type A)	60	1,1	0,7
ejotherm N / ejotherm S (type B)	60	2,7	0,8

**Table C4: Displacements**

Base materials	Bulk density $\rho$ [kg/dm <sup>3</sup> ]	Min. compressive strength $f_b$ [N/mm <sup>2</sup> ]	Tension Load N [kN] ejotherm N / S	Displacements $\delta_{(N)}$ [mm]	
				ejotherm N	ejotherm S
Concrete C20/25 – C50/60 (EN 206-1:2000)			0,4 / 0,5	0,4	0,4
Clay bricks, Mz (EN 771-1:2011)	$\geq 1,8$	36	0,5 / 0,5	0,3	0,3
Sand-lime solid bricks, KS (EN 771-2:2011)	$\geq 1,8$	16	0,5 / 0,5	0,4	0,4
Vertically perforated clay bricks, HLz (EN 771-1:2011)	$\geq 1,4$	16	0,3 / 0,5	0,2	0,4
Sand-lime perforated bricks, KSL (EN 771-2:2011)	$\geq 1,4$	12	0,3 / 0,5	0,3	0,3
Lightweight concrete hollow blocks, Hbl (EN 771-3:2011)	$\geq 0,9$	4	0,2 / 0,4	0,2	0,2
Lightweight aggregate concrete, LAC 8 – LAC 25 (EN 771-3:2011)	$\geq 1,2$	8	0,2 / 0,25	0,2	0,2
Autoclaved aerated concrete, AAC 4 – AAC 7 (EN 771-4:2011)	$\geq 0,55$	4	0,25 / 0,25	0,3	0,3

**ejotherm S and ejotherm N**

**Performances**

Point thermal transmittance, plate stiffness and displacements for ejotherm N / ejotherm S

**Annex C 2**