



## DECLARACIÓN DE PRESTACIONES

### DoP 0298

para fischer TermoZ CS II 8 / fischer TermoZ CS II 8 DT 110 V (Fijación de plástico para la fijación de sistemas compuestos de aislamiento térmico exterior con revoque) ES

- |  |  |
|--|--|
| 1. <u>Código de identificación única del producto tipo:</u>  | <b>DoP 0298</b>  |
| 2. <u>Usos previstos:</u>  | <b>Anclaje de plástico atornillado para la fijación de sistemas compuestos de aislamiento térmico exterior con revoque en hormigón y mampostería, véase el apéndice, especialmente los anexos B1-B3.</b> |
| 3. <u>Fabricante:</u>  | <b>fischerwerke GmbH &amp; Co. KG, Klaus-Fischer-Str. 1, 72178 Waldachtal, Alemania</b>  |
| 4. <u>Representante autorizado:</u>  | <b>-</b>   |
| 5. <u>Sistemas de evaluación y verificación de la constancia de las prestaciones (EVCP):</u>   | <b>2+</b>  |
| 6. <u>Documento de evaluación europeo:</u><br>Evaluación técnica europea:<br>Organismo de evaluación técnica:<br>Organismos notificados: | <b>EAD 330196-01-0604<br/>ETA-14/0372; 2022-05-08<br/>ETA-Danmark A/S<br/>2873 TU Darmstadt</b>  |
| 7. <u>Prestaciones declaradas:</u><br><b>Seguridad en uso (BWR 4)</b>  |  |
| <b>Capacidad de carga característica:</b>  | <b>Resistencia característica bajo carga de tensión: Anexos C1-C2<br/>Distancia mínima al borde: Anexo B2<br/>Espacio mínimo: Anexo B2</b>   |
| <b>Desplazamientos:</b>  | <b>Carga de tensión con factor parcial: Anexo C4<br/>Desplazamientos: Anexo C4</b>   |
| <b>Rigidez de la placa:</b>  | <b>Diámetro de la placa de anclaje: Anexo C3<br/>Resistencia a la carga de la placa de anclaje: Anexo C3<br/>Rigidez de la placa: Anexo C3</b>   |
| <b>Economía de energía y retención de calor (BWR 6)</b>  |  |
| <b>Transmitancia térmica:</b>  | <b>Transmitancia térmica puntual de un anclaje: Anexo C3<br/>Espesor de la capa aislante del ETICS: Anexo C3</b>   |
| 8. <u>Documentación técnica adecuada o documentación técnica específica:</u>   | <b>-</b>   |

Las prestaciones del producto identificado anteriormente son conformes con el conjunto de prestaciones declaradas. La presente declaración de prestaciones se emite, de conformidad con el Reglamento (UE) no 305/2011, bajo la sola responsabilidad del fabricante arriba identificado.

Firmado por y en nombre del fabricante por:

Dr.-Ing. Oliver Geibig, Director General Unidades de Negocio e Ingeniería  
Tumlingen, 2022-05-16

Jürgen Grün, Director General de Química y Calidad

Esta DdR se ha preparado en distintos idiomas. En caso de que haya alguna controversia sobre la interpretación prevalecerá siempre la versión inglesa.

El Apéndice incluye información voluntaria y complementaria en idioma inglés que excede los requisitos legales (de idioma neutral).

## **II SPECIFIC PART OF THE EUROPEAN TECHNICAL ASSESSMENT**

### **1 Technical description of product**

The screwed-in anchors fischer TermoZ CS II 8 and fischer TermoZ CS II 8 DT 110 V are used for fixing of external thermal insulation composite systems (ETICS). The fischer TermoZ CS II 8 consists of an anchor sleeve made of polypropylene with a diameter of 8 mm and an insulation plate made of glass-fiber reinforced polyamide with a diameter of 60 mm. The fischer TermoZ CS II 8 DT 110 V consists of an anchor sleeve made of polypropylene with a diameter of 8 mm and an insulation plate made of glass-fiber reinforced polyamide with a diameter of 110 mm. The color of the anchor sleeve is grey. The special compound screw is made of galvanised steel and glass-fiber reinforced polyamide. The anchor is expanded by screwing the screw into the sleeve. It is possible to install the anchor flush or countersunk mounted to the surface of the insulation.

The product description is given in Annex A.

### **2 Specification of the intended use in accordance with the applicable European Assessment Document (hereinafter EAD)**

The performances given in Section 3 are only valid if the anchor is used in compliance with the specifications and conditions given in Annex B1 to B3.

The provisions made in this European Technical Assessment are based on an assumed intended working life of the anchor of 25 years.

The indications given on the working life cannot be interpreted as a guarantee given by the producer or Assessment Body, 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 Characteristics of product**

**Safety in case of fire (BWR 2):**

No Performance Assessed.

**Safety in use (BWR4):**

The essential characteristics are detailed in Annex B2 and Annex C1 to C4.

**Energy economy and heat retention (BWR6):**

The essential characteristics are detailed in the Annex C3.

Other Basic Requirements are not relevant.

**General aspects**

The verification of durability is part of testing of the essential characteristics. Durability is only ensured if the specifications of intended use according to Annex B are taken into account.

#### **3.2 Methods of assessment**

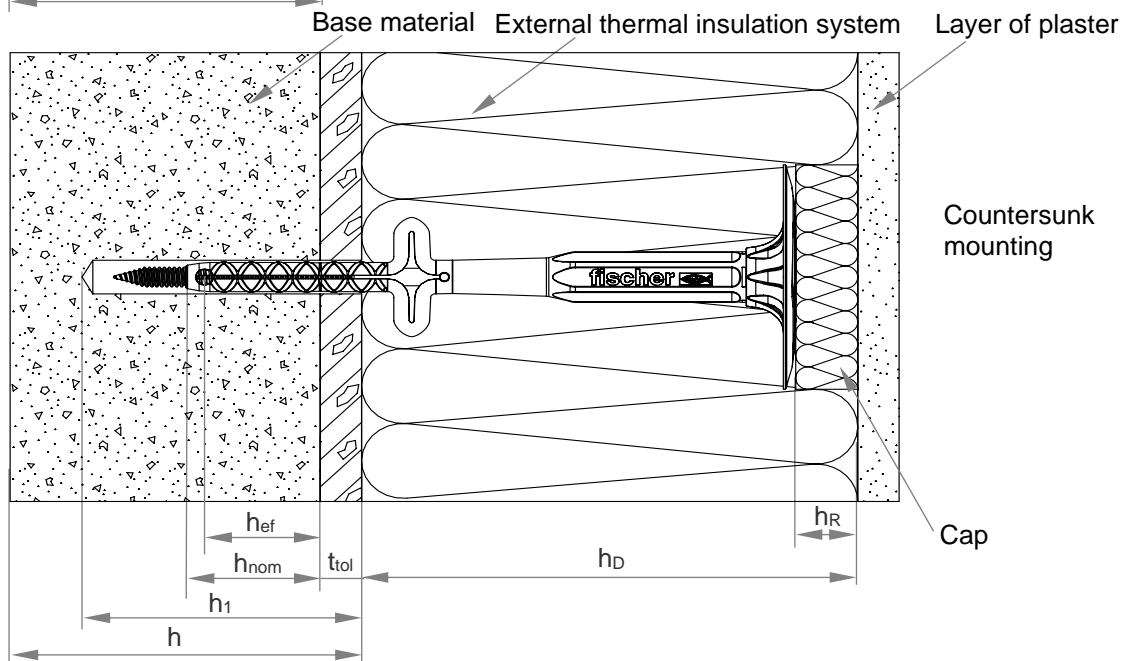
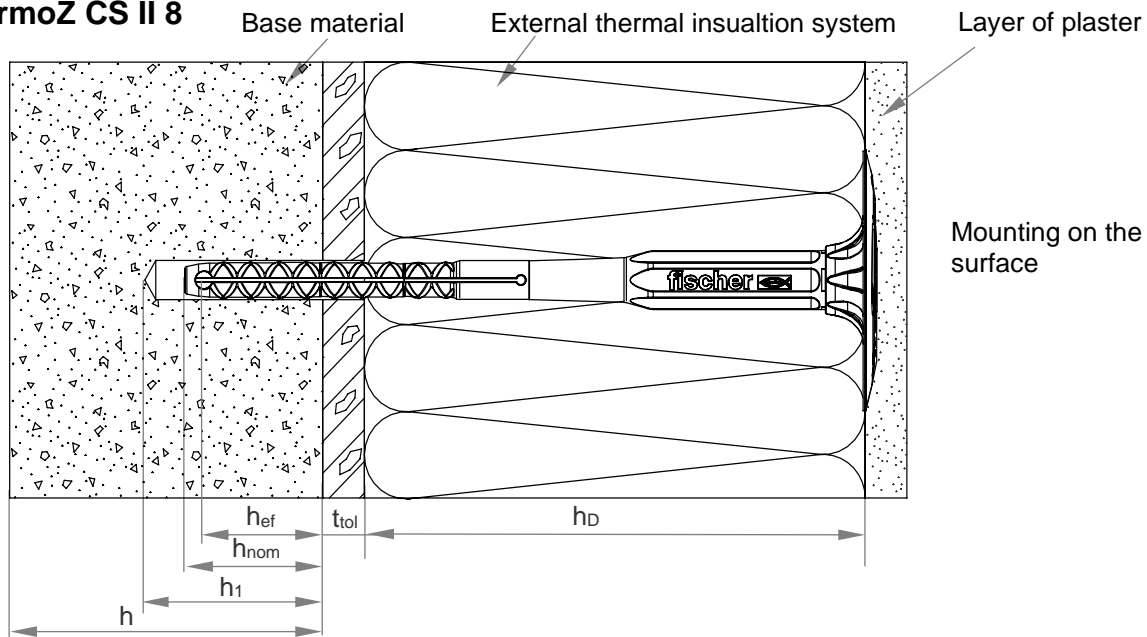
The assessment of fitness of the anchor for the intended use in relation to the requirements for mechanical resistance and stability and safety in use in the sense of the Basic Requirements 4 has been made in accordance with the EAD 330196-01-0604 Plastic anchors made of virgin or non-virgin material for fixing of external thermal insulation composite systems with rendering.

## **4 Assessment and verification of constancy of performance (AVCP)**

### **4.1 AVCP system**

According to the decision 97/463/EC of the European Commission, the system(s) of assessment and verification of constancy of performance (see Annex V to Regulation (EU) No 305/2011) is 2+.

# TermoZ CS II 8



### Legend

- $h_{nom}$  = Overall plastic anchor embedment depth in the base material
- $h_{ef}$  = Effective anchorage 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 equalising layer and / or non-load-bearing coating
- $h_R$  = Thickness of cap

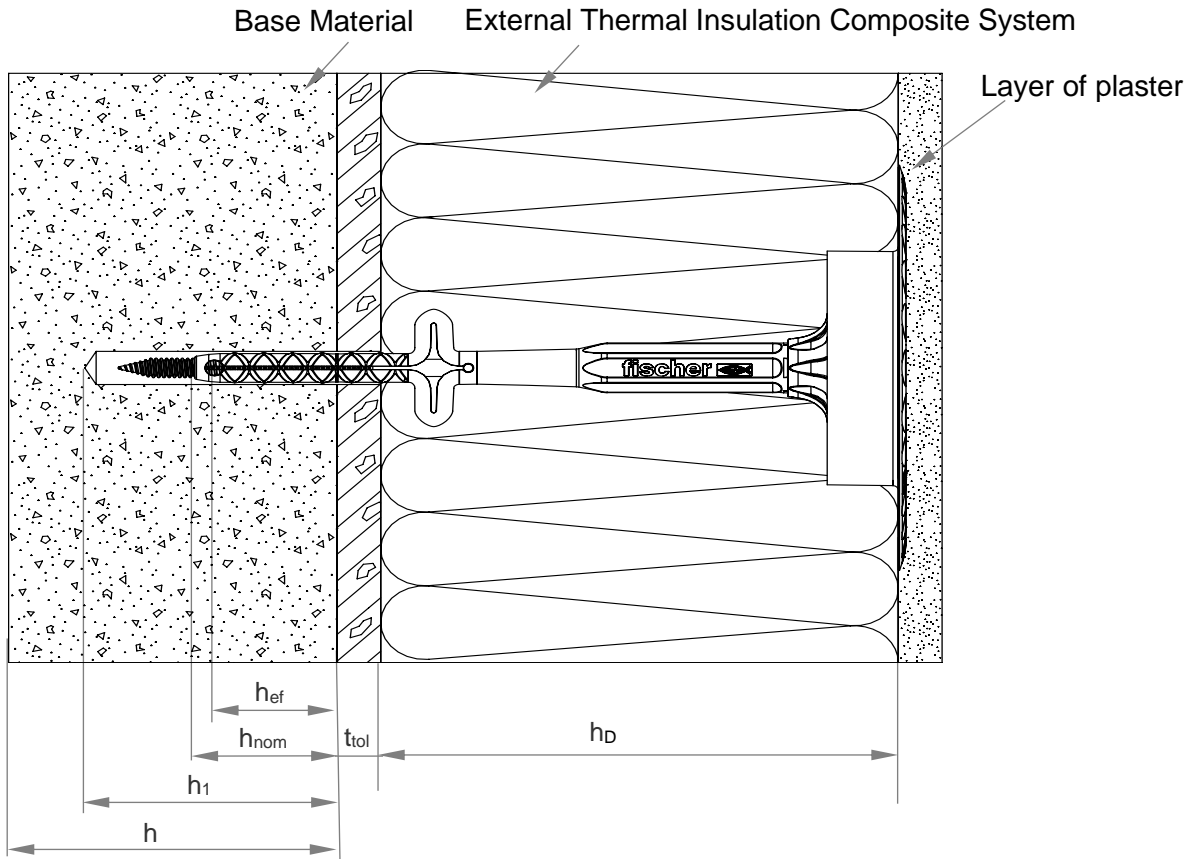
Figures not to scale

**fischer TermoZ CS II 8 and fischer TermoZ CS II 8 DT 110 V**

**Product description**  
Installed anchor TermoZ CS II 8

**Annex A1**

# TermoZ CS II 8 DT 110 V



## Legend

- $h_{nom}$  = Overall plastic anchor embedment depth in the base material
- $h_{ef}$  = Effective anchorage 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 equalising layer and / or non-load-bearing coating

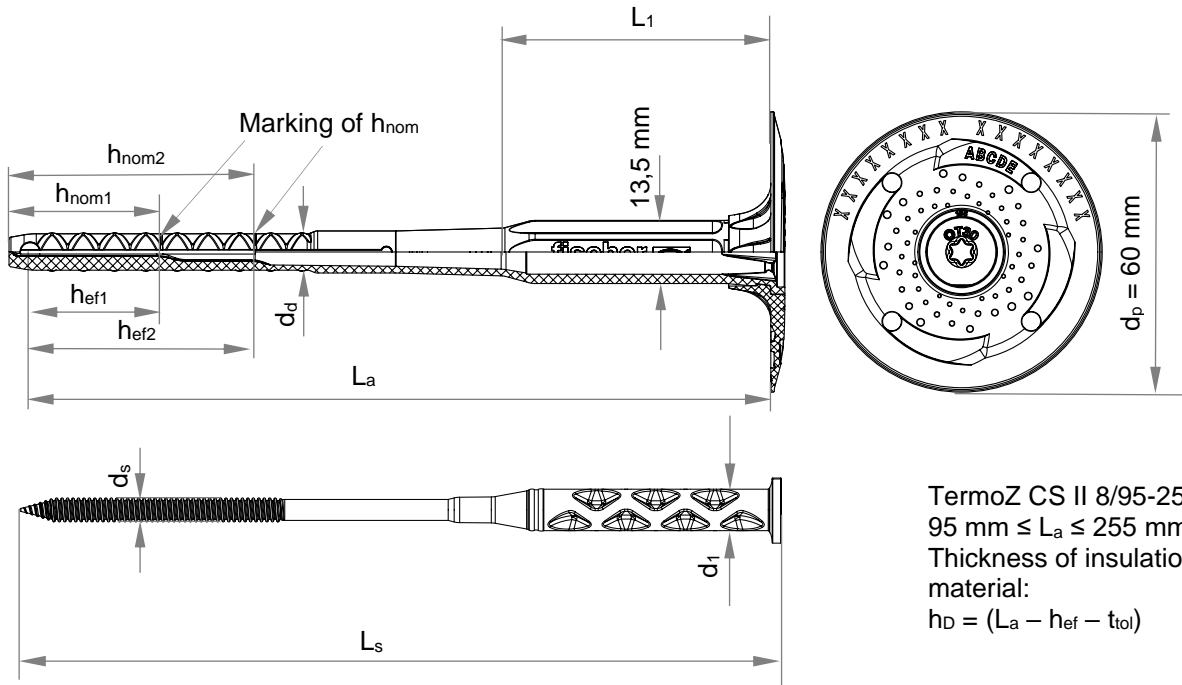
Figure not to scale

fischer TermoZ CS II 8 and fischer TermoZ CS II 8 DT 110 V

**Product description**  
 Installed anchor TermoZ CS II 8 DT 110 V

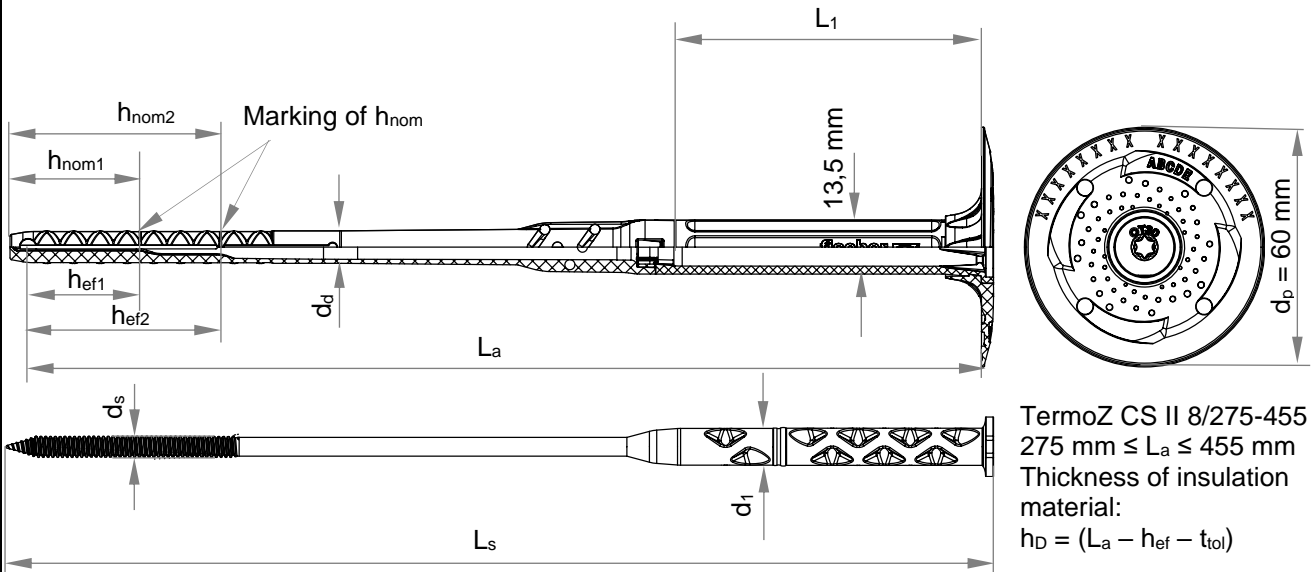
**Annex A2**

**Anchor sleeve / Specific screw for TermoZ CS II 8/95-255**



TermoZ CS II 8/95-255  
 $95 \text{ mm} \leq L_a \leq 255 \text{ mm}$   
 Thickness of insulation material:  
 $h_D = (L_a - h_{ef} - t_{tol})$

**Anchor sleeve / Specific screw for TermoZ CS II 8/275-455**



TermoZ CS II 8/275-455  
 $275 \text{ mm} \leq L_a \leq 455 \text{ mm}$   
 Thickness of insulation material:  
 $h_D = (L_a - h_{ef} - t_{tol})$

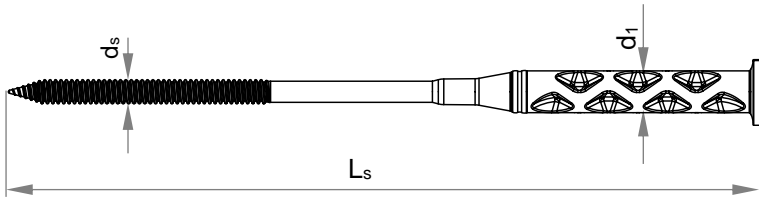
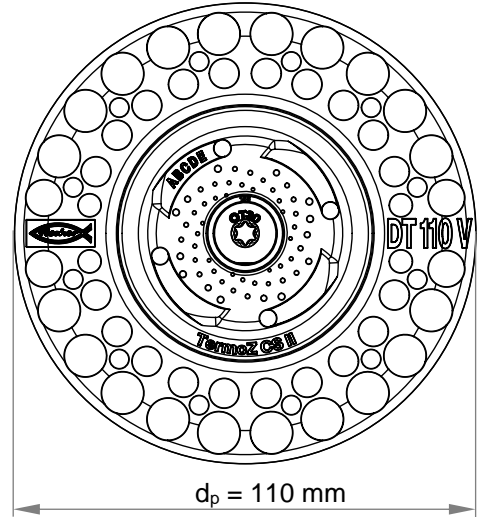
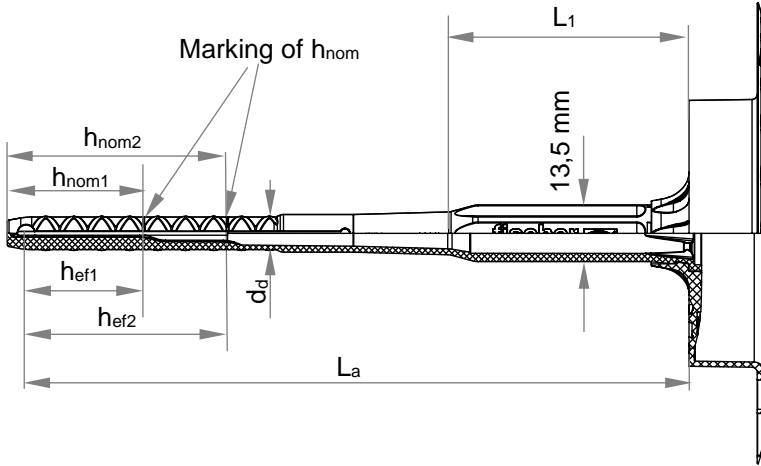
Figures not to scale

**fischer TermoZ CS II 8 and fischer TermoZ CS II 8 DT 110 V**

**Product description**  
 Dimensions TermoZ CS II 8

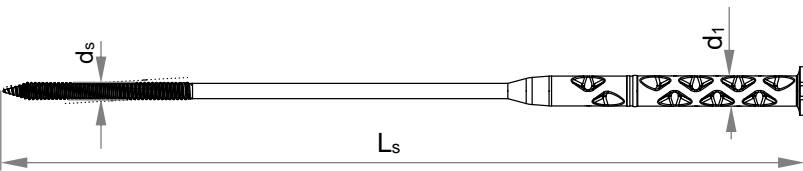
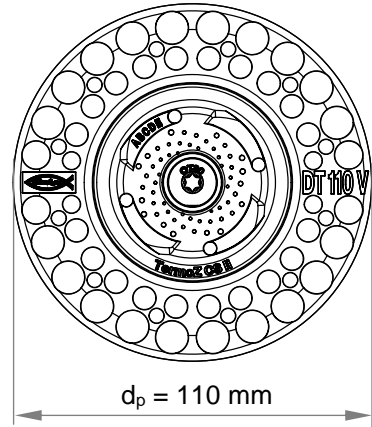
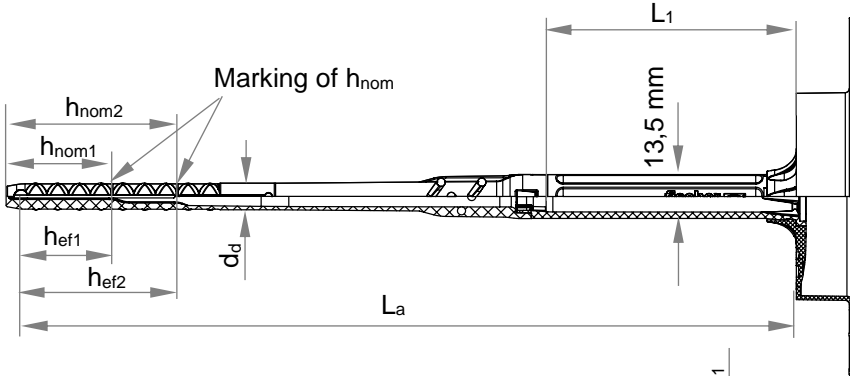
**Annex A3**

**TermoZ CS II 8/115-255 DT 110 V**



TermoZ CS II 8/115-255 DT 110 V:  
 $115 \text{ mm} \leq L_a \leq 255 \text{ mm}$   
 Thickness of insulation material:  
 $h_D = (L_a - h_{ef} - t_{tol})$

**TermoZ CS II 8/275-455 DT 110 V**



TermoZ CS II 8/275-455 DT 110 V:  
 $275 \text{ mm} \leq L_a \leq 455 \text{ mm}$   
 Thickness of insulation material:  
 $h_D = (L_a - h_{ef} - t_{tol})$

Figures not to scale

**fischer TermoZ CS II 8 and fischer TermoZ CS II 8 DT 110 V**

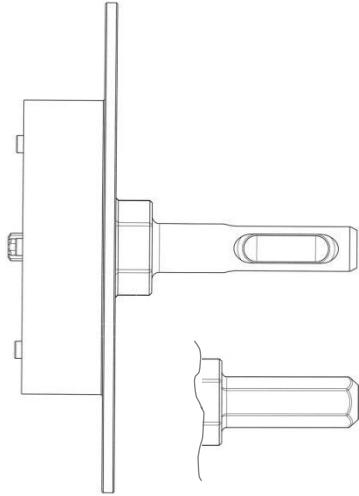
**Product description**  
 Dimensions TermoZ CS II 8 DT 110 V

**Annex A4**

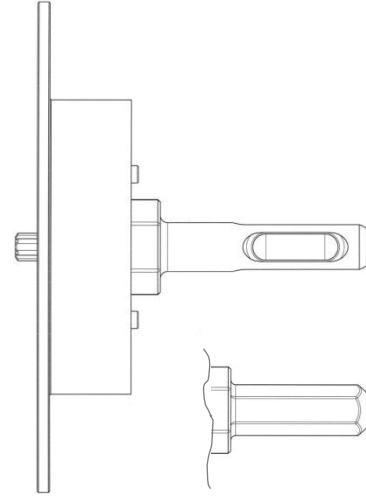


**Setting tool with SDS adapter or hexagonal adapter available**

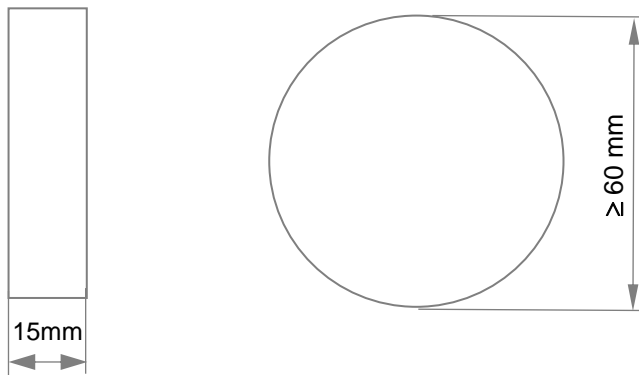
Countersunk setting of anchor TermoZ CS II 8  
and setting of TermoZ CS II 8 DT 110 V  
**Note:** not possible for TermoZ CS II 8/95



Optional: plain surface setting  
**Note:** not possible for  
TermoZ CS II 8 DT 110 V



**Cap**






Figures not to scale

**fischer TermoZ CS II 8 and fischer TermoZ CS II 8 DT 110 V**

**Product description**  
Setting tool and dimensions of cap

**Annex A5**

**Table A6.1: Marking of plates**

|                | Designation  |
|----------------|--|
| Name of anchor | <b>TermoZ CS II 8</b>  |
| Example        | TermoZ CS II ABCDE,  (optional), CE  (optional), Ø 8 (optional)<br>xxxxx additional marks possible |
| Name of anchor | <b>TermoZ CS II 8 DT 110 V</b>   |
| Example        | TermoZ CS II ABCDE  DT 110 V  |

**Table A6.2: Dimensions of TermoZ CS II 8**

| Anchor type            | Anchor sleeve  |                  |                 | Shaft          |                | Specific screw |                     |                |
|------------------------|----------------|------------------|-----------------|----------------|----------------|----------------|---------------------|----------------|
|                        | d <sub>d</sub> | h <sub>nom</sub> | h <sub>ef</sub> | L <sub>a</sub> | L <sub>1</sub> | d <sub>s</sub> | l <sub>s</sub>      | d <sub>1</sub> |
| TermoZ CS II 8/95-115  | 8              | 32,5             | 25              | 95-115         | 42             | 5,4            | L <sub>a</sub> + 10 | 9,5            |
| TermoZ CS II 8/135-255 |                | 32,5             | 25              | 135-255        | 52             |                |                     |                |
|                        |                | 52,5             | 45              |                |                |                |                     |                |
| TermoZ CS II 8/275-295 |                | 32,5             | 25              | 275-295        | 76             |                |                     |                |
|                        |                | 52,5             | 45              |                |                |                |                     |                |
| TermoZ CS II 8/315-375 |                | 32,5             | 25              | 315-375        | 156            |                |                     |                |
|                        |                | 52,5             | 45              |                |                |                |                     |                |
| TermoZ CS II 8/395-455 |                | 32,5             | 25              | 395-455        | 236            |                |                     |                |
|                        |                | 52,5             | 45              |                |                |                |                     |                |

**Table A6.3: Dimensions of TermoZ CS II 8 DT 110 V**

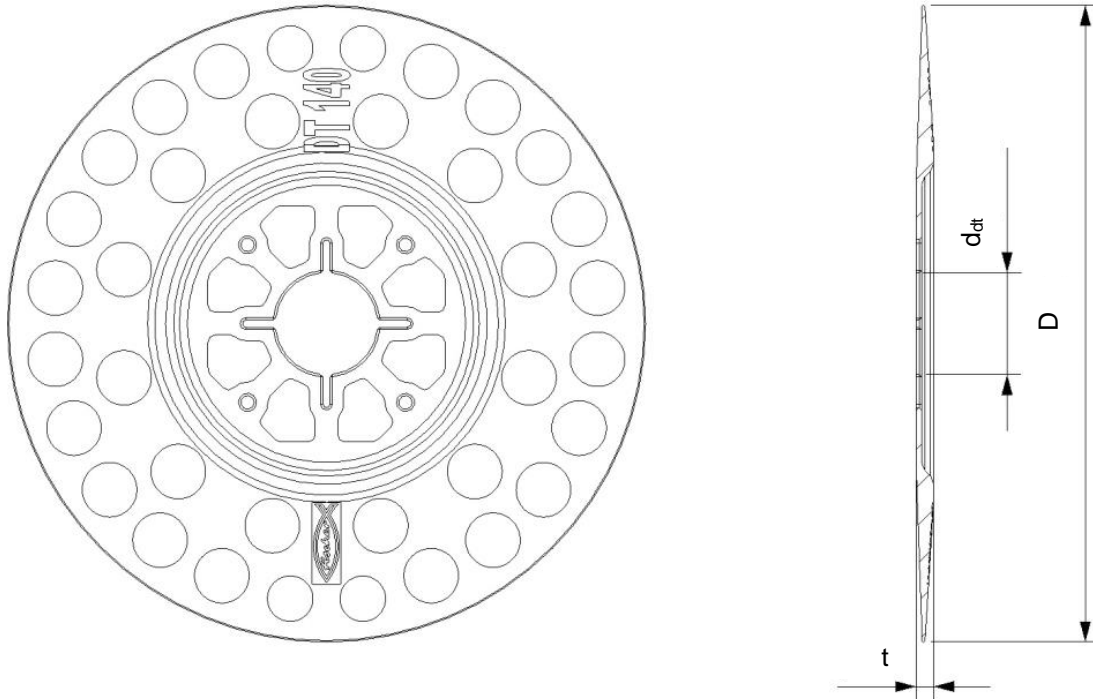
| Anchor type                     | Anchor sleeve  |                  |                 | Shaft          |                | Specific screw |                     |                |
|---------------------------------|----------------|------------------|-----------------|----------------|----------------|----------------|---------------------|----------------|
|                                 | d <sub>d</sub> | h <sub>nom</sub> | h <sub>ef</sub> | L <sub>a</sub> | L <sub>1</sub> | d <sub>s</sub> | l <sub>s</sub>      | d <sub>1</sub> |
| TermoZ CS II 8/115 DT 110 V     | 8              | 32,5             | 25              | 95-115         | 42             | 5,4            | L <sub>a</sub> + 10 | 9,5            |
| TermoZ CS II 8/135-255 DT110 V  |                | 32,5             | 25              | 135-255        | 52             |                |                     |                |
|                                 |                | 52,5             | 45              |                |                |                |                     |                |
| TermoZ CS II 8/275-295 DT 110 V |                | 32,5             | 25              | 275-295        | 76             |                |                     |                |
|                                 |                | 52,5             | 45              |                |                |                |                     |                |
| TermoZ CS II 8/315-375 DT 110 V |                | 32,5             | 25              | 315-375        | 156            |                |                     |                |
|                                 |                | 52,5             | 45              |                |                |                |                     |                |
| TermoZ CS II 8/395-455 DT 110 V |                | 32,5             | 25              | 395-455        | 236            |                |                     |                |
|                                 |                | 52,5             | 45              |                |                |                |                     |                |

All dimensions in [mm]

**fischer TermoZ CS II 8 and fischer TermoZ CS II 8 DT 110 V**
**Product description**  
 Marking of plates  
 Dimensions of anchors
**Annex A6**

| <b>Table A7.1: Materials</b>  |   |
|---|---|
| <b>Designation</b>  | <b>Material</b>   |
| Anchor sleeve / shaft   | PP, colour: grey  |
| Specific compound screw<br>TermoZ CS II 8 / TermoZ CS II 8 DT 110 V | PA 6 GF with galvanised steel Zn5/Ag or Zn5/An as per EN ISO 4042:2018      |
| Cap   | Soft wood fibre; polystyrene; mineral wool                                  |
| Anchor plate / Slip-on plate  | PA 6 GF, colour: grey, blue, green, orange, red, yellow, black, mocca-latte |

**Drawing of the slip-on plate (e.g. DT 140)**



**Table A7.2: Slip-on plates, diameters**

| <b>Slip-on plate</b>    | <b>D<br/>[mm]</b> | <b>d<sub>dt</sub><br/>[mm]</b> | <b>t<br/>[mm]</b> |
|-------------------------|-------------------|--------------------------------|-------------------|
| DT 90 / DT 110 / DT 140 | 90 / 110 / 140    | 22,5                           | 3,9               |

Figures not to scale

**fischer TermoZ CS II 8 and fischer TermoZ CS II 8 DT 110 V**

**Product description**  
Materials and dimensions of slip-on plates

**Annex A7**

## 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 without fibres  $\geq$  C12/15 (base material group "A") as per EN 206:2013+A1:2016, see Annex C1.
- Solid masonry (base material group "B"), as per EN 771-1:2011+A1:2015, EN 771-2:2011+A1:2015, EN 771-3:2011+A1:2015, see Annex C1.
- Hollow or perforated masonry (base material group "C"), as per EN 771-1:2011+A1:2015, EN 771-2:2011+A1:2015 or EN 771-3:2011+A1:2015, see Annex C1 and C2.
- Lightweight aggregate concrete (base material group "D"), as per EN 1520:2011 / EN 771-3:2011+A1:2015, see Annex C2.
- Autoclaved aerated concrete (base material group "E"), as per EN 771-4:2011+A1:2015, see Annex C2.
- For other comparable materials of the base material groups "A", "B", "C", "D" and "E" the characteristic resistance of the anchor may be determined by job site tests according to EOTA Technical Report TR 051 Edition April 2018.

### Temperature Range:

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

### Design:

- The anchorages are designed under the responsibility of an engineer experienced in anchorages and masonry work with the partial safety factors  $\gamma_M = 2,0$  und  $\gamma_F = 1,5$  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 thermal insulation composite systems.

### Installation:

- Drilling method see Annex C1 and C2.
- Anchor installation carried out by appropriately qualified personnel and under the supervision of the person responsible for technical matters on the site.
- Installation temperature of the anchor from 0 °C to + 40 °C.
- Exposure to UV due to solar radiation of the anchor not protected by rendering  $\leq$  6 weeks.

**fischer TermoZ CS II 8 and fischer TermoZ CS II 8 DT 110 V**

**Intended use**  
Specifications

**Annex B1**

**Table B2.1: Installation parameters for base material groups “A” concrete, “B” solid bricks, “C” hollow or perforated bricks, “D” lightweight aggregate concrete and “E” autoclaved aerated concrete**

| Anchor type   |                     | TermoZ CS II 8/95-455<br>TermoZ CS II 8/115-455 DT 110 V |                           |
|---|---------------------|--|---------------------------|
|   |                     | flush  | countersunk <sup>1)</sup> |
| Nominal drill hole diameter                                 | $d_0 =$ [mm]        | 8  | 8                         |
| Cutting diameter of drill bit                               | $d_{cut} \leq$ [mm] | 8,45   | 8,45                      |
| Depth of drill hole to deepest point                        | $h_1 \geq$ [mm]     | 40   | 55                        |
| Overall plastic anchor embedment depth in the base material | $h_{nom} \geq$ [mm] | 32,5   | 32,5                      |
| Effective anchorage depth in the base material              | $h_{ef} \geq$ [mm]  | 25   | 25                        |

<sup>1)</sup> Not possible for TermoZ CS II 8/95.

**Table B2.2: Installation parameters alternative option for base material group “E” for higher loads**

| Anchor type   |                     | TermoZ CS II 8/135-455<br>TermoZ CS II 8/135-455 DT 110 V |             |
|---|---------------------|---|-------------|
|   |                     | flush   | countersunk |
| Nominal drill hole diameter                                 | $d_0 =$ [mm]        | 8   | 8           |
| Cutting diameter of drill bit                               | $d_{cut} \leq$ [mm] | 8,45  | 8,45        |
| Depth of drill hole to deepest point                        | $h_1 \geq$ [mm]     | 60  | 75          |
| Overall plastic anchor embedment depth in the base material | $h_{nom} \geq$ [mm] | 52,5  | 52,5        |
| Effective anchorage depth in the base material              | $h_{ef} \geq$ [mm]  | 45  | 45          |

**Table B2.3: Minimum thickness of member, edge distance and spacing in all regulated base material groups**

| Anchor type                 |                  | TermoZ CS II 8/95-455<br>TermoZ CS II 8/115-455 DT 110 V |
|-----------------------------|------------------|--|
| Minimum thickness of member | $h_{min} =$ [mm] | 100  |
| Minimum spacing             | $s_{min} =$ [mm] | 100  |
| Minimum edge distance       | $c_{min} =$ [mm] | 100  |

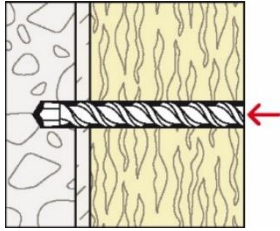
**Scheme of distances and spacing**  
for base material groups “A”, concrete, group “B” solid bricks, group “C” hollow or perforated masonry, group “d” lightweight aggregate concrete, group “E” autoclaved aerated concrete

Figure not to scale

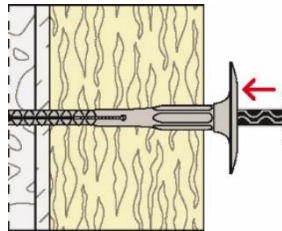
|  |                 |
|--|-----------------|
| <b>fischer TermoZ CS II 8 and fischer TermoZ CS II 8 DT 110 V</b>  | <b>Annex B2</b> |
| <b>Intended use</b><br>Installation parameters depending on the base material groups<br>Minimum thickness of member, edge distances and spacings |                 |

## Installation instruction

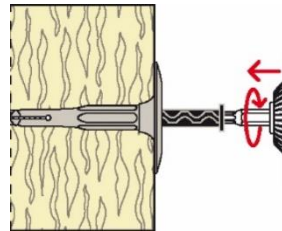
### Standard setting of TermoZ CS II 8 (plain surface setting) without setting tool



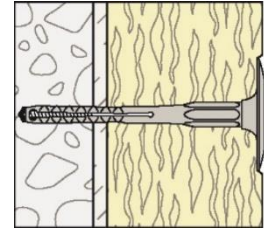
1. Drill hole by corresponding drilling method



2. Insert anchor manually

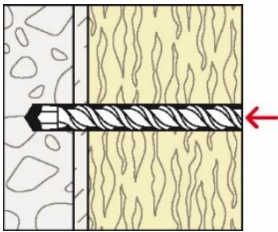


3. Set anchor by machine

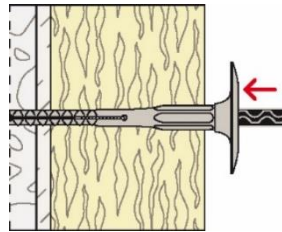


4. Correctly installed anchor

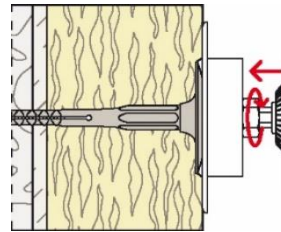
### Setting of TermoZ CS II 8 (plain surface setting) by setting tool



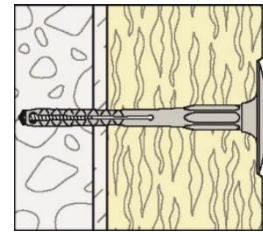
1. Drill hole by corresponding drilling method



2. Insert anchor manually

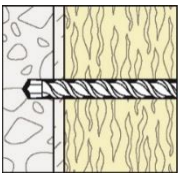


3. Set anchor by setting tool with the machine

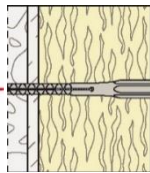


4. Correctly installed anchor

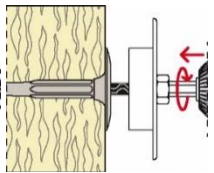
### Setting of TermoZ CS II 8 (countersunk setting) by setting tool



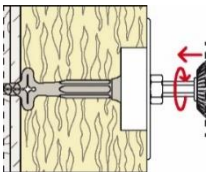
1. Drill hole by corresponding drilling method



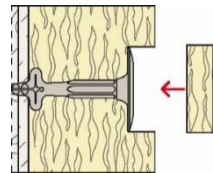
2. Insert anchor manually



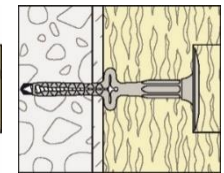
3. Put on setting tool



4. Set anchor by setting tool with the machine

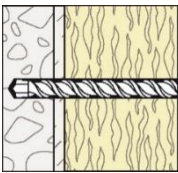


5. Put on cap

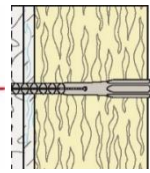


6. Correctly installed anchor

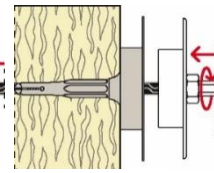
### Setting of TermoZ CS II 8 DT 110 V by setting tool



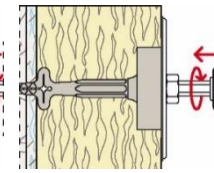
1. Drill hole by corresponding drilling method



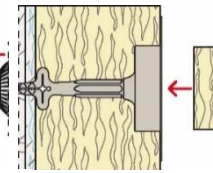
2. Insert anchor manually



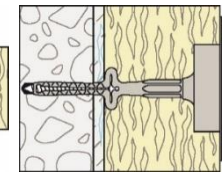
3. Put on setting tool



4. Set anchor by setting tool with the machine



5. Put on cap



6. Correctly installed anchor

fischer TermoZ CS II 8 and fischer TermoZ CS II 8 DT 110 V

Intended use  
Installation instruction

Annex B3

**Table C1.1: Characteristic resistance to tension loads  $N_{Rk}$  for single anchor  
TermoZ CS II and TermoZ CS II 8 DT 110 V**

| Base material   | Group           | Bulk density<br>$\rho$<br>[kg/dm <sup>3</sup> ] | Mean compressive strength / minimum compressive strength single brick acc. to EN 771 [N/mm <sup>2</sup> ] | Remarks                      | Drilling method <sup>1)</sup> | Char. resistance to tension loads<br><br>$N_{Rk}$<br>[kN] |
|---|-----------------|---|---|------------------------------|-------------------------------|---|
| Concrete<br>≥ C12/15 to ≤ C50/60<br>EN 206:2013+A1:2016                   | A               | -   | -   | -                            | H                             | <b>1,50</b>   |
| Weather resistant concrete shell ≥ C20/25<br>EN 206:2013+A1:2016          | A               | -   | -   | Thickness<br>$h \geq 40$ mm. | H                             | <b>1,50</b>   |
| Solid clay brick, Mz,<br>as per<br>EN 771-1:2011+A1:2015                  | B <sup>2)</sup> | ≥ 1,8   | ≥ 25/20   | -                            | H                             | <b>1,50</b>   |
| Calcium silicate solid brick, KS,<br>as per<br>EN 771-2:2011+A1:2015      | B <sup>2)</sup> | ≥ 1,4   | ≥ 15/12<br>≥ 25/20  | -                            | H                             | <b>1,50</b>   |
| Solid lightweight concrete block, Vbl,<br>as per<br>EN 771-3:2011+A1:2015 | B <sup>2)</sup> | ≥ 1,4   | ≥ 10/8  | -                            | H                             | <b>1,20</b>   |
| Solid concrete block, Vbn,<br>as per<br>EN 771-3:2011+A1:2015             | B <sup>2)</sup> | ≥ 2,0   | ≥ 15/12<br>≥ 25/20  | -                            | H                             | <b>1,50</b>   |

<sup>1)</sup> H = Hammer drilling, R = Rotary drilling.

<sup>2)</sup> Vertically perforation ≤ 15%; cross section reduced by perforation vertically to the resting area.

**fischer TermoZ CS II 8 and fischer TermoZ CS II 8 DT 110 V**

**Performances**  
Characteristic resistance to tension loads

**Annex C1**

| <b>Table C2.1: Characteristic resistance to tension loads <math>N_{Rk}</math> for single anchor<br/>TermoZ CS II 8 and TermoZ CS II 8 DT 110 V</b> |                 |   |  |                                 |                                     |   |
|--|-----------------|---|--|---------------------------------|-------------------------------------|---|
| <b>Base material</b>   | <b>Group</b>    | <b>Bulk density</b><br><br>$\rho$<br><b>[kg/dm<sup>3</sup>]</b> | <b>Mean compressive strength / minimum compressive strength single brick acc. to EN 771 [N/mm<sup>2</sup>]</b> | <b>Remarks</b>                  | <b>Drilling method<sup>1)</sup></b> | <b>Char. resistance to tension loads</b><br><br><b><math>N_{Rk}</math> [kN]</b> |
| Vertically perforated clay brick, Hlz, as per EN 771-1:2011+A1:2015  | C <sup>3)</sup> | ≥ 0,9   | ≥ 15/12  | Exterior web thickness ≥ 12 mm. | R                                   | <b>1,00</b>   |
|  |                 |   | ≥ 15/12  |                                 | H                                   | <b>0,65</b>   |
|  |                 | ≥ 1,6   | ≥ 60/48  |                                 | R                                   | <b>1,50</b>   |
|  |                 |   | ≥ 60/48  |                                 | H                                   | <b>1,50</b>   |
| Hollow calcium silicate brick, KSL, as per EN 771-2:2011+A1:2015   | C <sup>3)</sup> | ≥ 1,4   | ≥ 15/12  | Exterior web thickness ≥ 23 mm. | H                                   | <b>1,50</b>   |
| Hollow brick lightweight concrete, Hbl, as per EN 771-3:2011+A1:2015   | C <sup>3)</sup> | ≥ 0,9   | ≥ 5/4  | Exterior web thickness ≥ 16 mm. | H                                   | <b>0,50</b>   |
| Hollow brick concrete, Hbn, as per EN 771-3: 2011+A1:2015  | C <sup>3)</sup> | ≥ 1,2   | ≥ 5/4  | Exterior web thickness ≥ 38 mm. | H                                   | <b>0,75</b>   |
|  |                 |   | ≥ 7,5/6  |                                 |                                     | <b>1,10</b>   |
|  |                 |   | ≥ 10/8   |                                 |                                     | <b>1,50</b>   |
|  |                 |   | ≥ 12,5/10  |                                 |                                     | <b>1,50</b>   |
| Lightweight aggregate concrete, LAC, as per EN 1520:2011 EN 771-3:2011+A1:2015   | D               | ≥ 0,9   | ≥ 5/4  | -                               | H                                   | <b>0,95</b>   |
|  |                 |   | ≥ 7,5/6  |                                 |                                     | <b>1,50</b>   |
| Autoclaved aerated concrete blocks, AAC, as per EN 771-4: 2011+A1:2015 $h_{nom} = 32,5$ mm   | E               | ≥ 0,50  | ≥ 5/4  | -                               | R                                   | <b>0,65</b>   |
| Autoclaved aerated concrete blocks, AAC, as per EN 771-4: 2011+A1:2015 $h_{nom} = 52,5$ mm <sup>2)</sup>   | E               |   |  |                                 |                                     | <b>1,10</b>   |
| <b>fischer TermoZ CS II 8 and fischer TermoZ CS II 8 DT 110 V</b>  |                 |   |  |                                 | <b>Annex C2</b>                     |   |
| <b>Performances</b><br>Characteristic resistance to tension loads  |                 |   |  |                                 |                                     |   |

<sup>1)</sup> H = Hammer drilling, R = Rotary drilling.

<sup>2)</sup> Not possible for TermoZ CS II 8/95 and TermoZ CS II 8/115 and TermoZ CS II 8/115 DT 110 V.

<sup>3)</sup> Vertically perforation > 15 % and ≤ 50 %, cross section reduced by perforation vertically to the resting area.



**Table C3.1: Plate stiffness acc. to EOTA Technical Report TR 026:2016-05**

| Anchor type             | Max. size of the anchor plate $d_p$ [mm] | Load resistance of the anchor plate [kN] | Plate stiffness $c$ [kN/mm] |
|-------------------------|--|--|-----------------------------|
| TermoZ CS II 8          | 60                                       | 2,61                                     | 1,29                        |
| TermoZ CS II 8 DT 110 V | 110                                      | 2,61                                     | 1,29                        |

**Table C3.2: Point thermal transmittance acc. to EOTA Technical Report TR 025:2016-05**

| TermoZ CS II 8 and TermoZ CS II 8 DT 110 V | $h_{nom}$ [mm]      | Thickness of insulation material $h_D$ [mm] | Point thermal transmittance $\chi$ [W/K] |       |       |       |       |
|--|---------------------|---|--|-------|-------|-------|-------|
|  |                     |   | Base material groups                     |       |       |       |       |
|  |                     |   | A  | B     | C     | D     | E     |
| Flush mounted                              | 32,5                | 60  | 0,002                                    | 0,001 |       | 0,000 |       |
|  |                     | 80  | 0,002                                    |       | 0,001 |       |       |
|  |                     | 100 - 120                                   | 0,001                                    |       |       |       |       |
|  |                     | 140 - 200                                   | 0,002                                    |       | 0,001 |       |       |
|  |                     | 220 - 260                                   | 0,002                                    |       |       | 0,001 |       |
|  |                     | 280 - 300                                   | 0,001                                    |       |       | 0,000 |       |
|  |                     | 320 - 340                                   | 0,001                                    |       |       |       |       |
|  |                     | 360 - 400                                   | 0,000                                    |       |       |       |       |
|  | 52,5                | 420   | 0,001                                    | 0,000 |       |       |       |
|  |                     | 100 - 120                                   | -  |       |       | 0,001 |       |
|  |                     | 140 - 240                                   | -  |       |       | 0,001 |       |
|  |                     | 320   | -  |       |       | 0,001 |       |
|  | Countersunk mounted | 32,5  | 400                                      | -     |       |       | 0,000 |
|  |                     |   | 80 - 200                                 | 0,001 |       |       |       |
|  |                     |   | 220                                      | 0,002 |       |       | 0,001 |
|  |                     |   | 240                                      | 0,002 | 0,001 |       |       |
| 260  |                     |   | 0,002                                    |       | 0,001 |       |       |
| 280  |                     |   | 0,001                                    | 0,000 |       |       |       |
| 300  |                     |   | 0,001                                    |       | 0,000 |       |       |
| 320 - 340                                  |                     | 0,001                                       |  |       | 0,000 |       |       |
| 360-420                                    |                     | 0,000                                       |  |       |       |       |       |
| 52,5                                       |                     | 100 - 120                                   | -  |       |       | 0,000 |       |
|  | 140 - 240           | -   |  |       | 0,001 |       |       |
|  | 320                 | -   |  |       | 0,000 |       |       |
|  | 400                 | -   |  |       | 0,000 |       |       |

**fischer TermoZ CS II 8 and fischer TermoZ CS II 8 DT 110 V**

**Performances**  
Plate stiffness and point thermal transmittance

**Annex C3**

**Table C4.1: Displacements of the TermoZ CS II 8 and TermoZ CS II 8 DT 110 V**

| Base material  |  | Mean compressive strength / minimum compressive strength single brick acc. to EN 771 [N/mm <sup>2</sup> ] | Tension load<br><br>N <sub>Rd</sub> [kN] | Displacements<br><br>Δ(δ <sub>N</sub> ) [mm] |
|--|--|---|--|--|
| Concrete ≥ C12/15 ≤ C50/60;<br>EN 206:2013+A1:2016   |  | -   | 0,50                                     | < 0,3  |
| Weather resistant concrete shell ≥ C20/25;<br>EN 206:2013+A1:2016  |  | -   | 0,50                                     | < 0,3  |
| Clay brick, Mz,<br>as per EN 771-1:2011+A1:2015  |  | ≥ 25/20   | 0,50                                     | < 0,5  |
| Calcium silicate solid brick, KS,<br>as per EN 771-2:2011+A1:2015  |  | ≥ 15/12   | 0,50                                     | < 0,3  |
|  |  | ≥ 25/20   | 0,50                                     |  |
| Solid lightweight concrete block, Vbl,<br>as per EN 771-3:2011+A1:2015                                   |  | ≥ 10/8  | 0,43                                     | < 0,4  |
| Solid concrete block, Vbn,<br>as per EN 771-3:2011+A1:2015   |  | ≥ 15/12   | 0,50                                     | < 0,3  |
|  |  | ≥ 25/20   | 0,50                                     |  |
| Vertically perforated clay brick, Hlz,<br>as per EN 771-1:2011+A1:2015                                   | rotary drilling                          | ≥ 15/12   | 0,33                                     | < 0,5  |
|  | hammer drilling                          |   | 0,22                                     | < 0,3  |
|  | rotary drilling                          | ≥ 60/48   | 0,50                                     | < 0,4  |
|  | hammer drilling                          |   | 0,50                                     |  |
| Hollow calcium silicate brick, KSL,<br>as per EN 771-2:2011+A1:2015                                      |  | ≥ 15/12   | 0,50                                     | < 0,4  |
| Hollow brick lightweight concrete, Hbl,<br>as per EN 771-3:2011+A1:2015                                  |  | ≥ 5/4   | 0,17                                     | < 0,2  |
| Hollow brick concrete, Hbn,<br>as per EN 771-3:2011+A1:2015  |  | ≥ 5/4   | 0,25                                     | < 0,2  |
|  |  | ≥ 7,5/6   | 0,37                                     | < 0,3  |
|  |  | ≥ 10/8  | 0,50                                     | < 0,4  |
|  |  | ≥ 12,5/10   | 0,50                                     | < 0,4  |
| Lightweight Aggregate Concrete, ≥ LAC<br>as per EN 1520:2011 / EN 771-3:2011+A1:2015                     |  | ≥ 5/4   | 0,32                                     | < 0,5  |
|  |  | ≥ 7,5/6   | 0,50                                     | < 0,5  |
| Autoclaved aerated concrete blocks, AAC,<br>as per EN 771-4:2011+A1:2015                                 | h <sub>nom</sub> = 32,5 mm               | ≥ 5/4   | 0,22                                     | < 0,2  |
|  | h <sub>nom</sub> = 52,5 mm <sup>1)</sup> |   | 0,37                                     |  |
| <sup>1)</sup> Not possible for TermoZ CS II 8/95 and TermoZ CS II 8/115 and TermoZ CS II 8/115 DT 110 V. |  |   |  |  |
| <b>fischer TermoZ CS II 8 and fischer TermoZ CS II 8 DT 110 V</b>  |  |   | <b>Annex C4</b>                          |  |
| <b>Performances</b><br>Displacements   |  |   |  |  |