TELJESÍTMÉNY-NYILATKOZAT

DoP Nr. KEW - 2323-CPR-0031 **- hu**

1. A termék egyértelmű neve, kódja: Szigetelésrögzítő dübel műanyag szöggel DSH K

2. Típus-, gyártási -, szériaszám, vagy más jelölés a termék egyértelmű azonosítására a 11. cikk 4. bekezdése szerint:

   ETA-09/0184 melléklet A2
   Gyártási szám: lásd csomagolás

3. Az építési termék gyártó által megadott felhasználása(i) a műszaki specifikáció alapján

Terméktípus	Műanyagdübel beüthető műanyag szöggel vakolt külső hőszigetelő rendszerek rögzítésére.
A felhasználás helye	ETA-14/0129 melléklet B1
Felhasználási kategór	ETA-14/0129 melléklet B1
Terhelés	ETA-14/0129 melléklet B1
Anyaga	ETA-14/0129 melléklet A2
Hőmérséklet-tartomány	--

4. A gyártó neve, bejegyzett kereskedelmi neve és címe a 11. cikk 5. bekezdése alapján:

   KEW Kunststofferzeugnisse GmbH Wilthen
   Dresdener Straße 19
   02681 Wilthen
   Germany

5. Az esetleges meghatalmazott neve a 12. cikk 2. bekezdése alapján:

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6. Az építési termék teljesítményének vizsgálatára és értékelésére alkalmazott rendszer(ek) a V melléklet szerint:

   Rendszer 2+

7. A teljesítmény-nyilatkozathoz használt harmonizált szabvány:

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8.

A teljesímény-nyilatkozat alapjául szolgáló tanúsítvány kibocsájtója:

Cseh Állami Építésügyi Intézet, Prága

Tanúsítvány:

ETA-14/0129 -től 01.06.2015

A vizsgálati eljárás alapja:

ETAG 014 változat 2011

A tanúsítványt kiadó szerv 2323-CPR-0031 a Rendszer 2+
szerint feladatként határozta meg:

i) A gyártó üzem és az üzemi gyártásellenőrzés megismerése;
ii) Folyamatos ellenőrzés, az üzemi gyártásellenőrzés véleményezése, minősítése.

és az alábbit adta ki: 2323-CPR-0031

9. Tanúsított teljesítmény:

Fontos ismertetőjegyek	Mérési módszer	Teljesítmény	Harmonizált műszaki specifikáció
		Műanyag	
Jellemző kihúzó értékek	ETAG 014mint EAD	ETA-14/0129 melléklet C1	ETAG 014mint EAD
Minimális tengely- és peremtávolságok	ETAG 014mint EAD	ETA-14/0129 melléklet B4	
Elmozdulás a használat során	ETAG 014mint EAD	ETA-14/0129 melléklet C1	
Hőáteresztési koefficiens	ETAG 014mint EAD	ETA-14/0129 melléklet C2	
Tányérmerevség	ETAG 014mint EAD	ETA-14/0129 melléklet C2	

Ha a 37. vagy 38. cikk szerint a vizsgálathoz különleges műszaki specifikációt használtak, követelmények, amelyeknek a termék megfelel:

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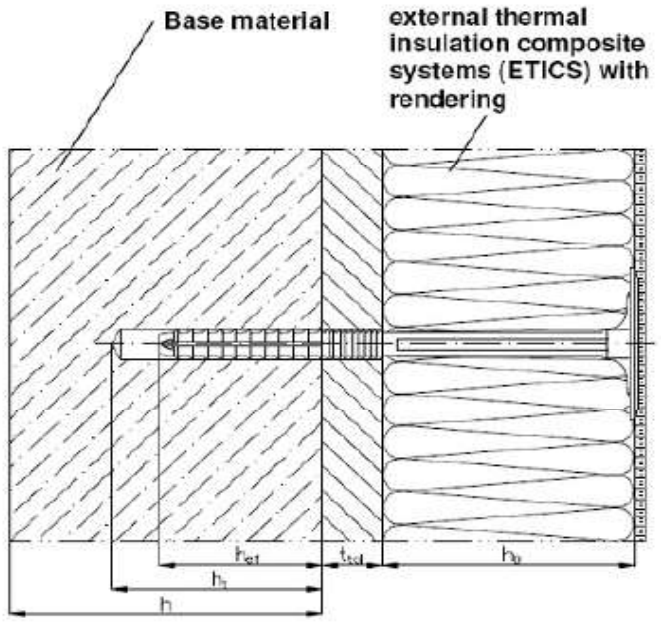
10. A termék teljesítménye az 1. és 2. pont szerint megfelel a 9. pontban leírtaknak. Ezen a teljesítmény-nyilatkozat kiadásáért egyedül a 4. pontban megadott gyártó felelős. A gyártó nevében aláírja:

André Gedan
(Kereskedelmi – és marketing igazgató)
Wilthen, 13.06.2019

KEW DSH 10 K, KEW DSH 10 KS

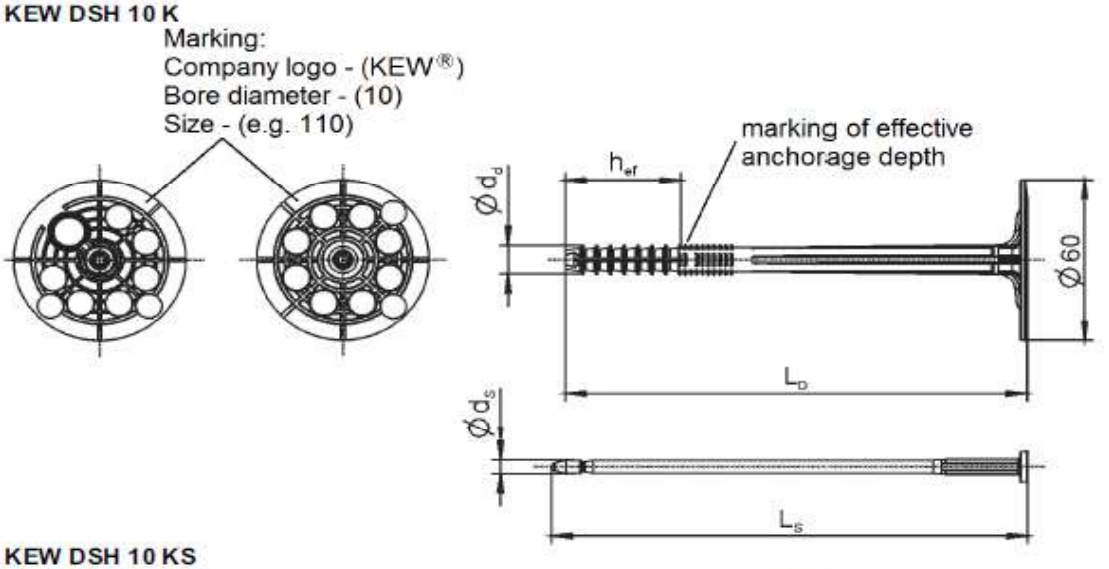


h_{ef} - effective embedment depth
h_{nom} - overall embedment depth in the base material
h_1 - depth of drill hole in base material
h - thickness of base material
t_{tol} - thickness of equalizing layer
h_D - thickness of insulation material

KEW DSH 10 K, KEW DSH 10 KS	Annex A 1
Product description Installed conditions	

Anchor sleeve and expansion nail

KEW DSH 10 K



KEW DSH 10 KS

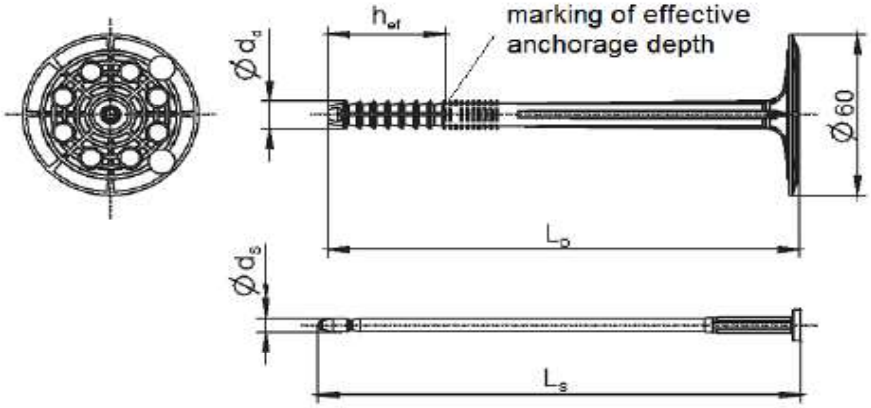


Table A1: Dimensions

Anchor type	Anchor sleeve			Expansion nail	
	$Ød_d$ [mm]	h_{ef} [mm]	L_a [mm]	L_n [mm]	Ød [mm]
KEW DSH 10 K KEW DSH 10 KS	10	40	70 - 310	75 - 315	5

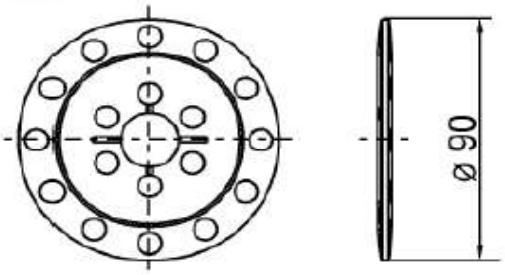
$L_{a\,min}$ = 70 mm, $L_{a\,max}$ = 310 mm, $h_{cl} = L_a - t_{tol} - h_{ef}$

Table A2: Materials of anchors KEW DSH 10 K, KEW DSH 10 KS

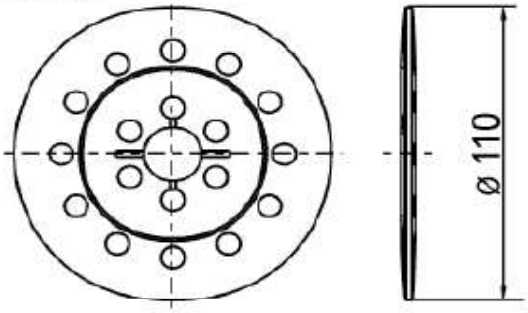
Designation	Color	Material
Anchor sleeve	natural	polypropylene
Expansion nail	black	polyamide glass fiber enforced
Insulation disc KEW DSB 90/110/140	natural	PA 6, PP

KEW DSH 10 K, KEW DSH 10 KS	**Annex A 2**
Product description Dimensions Materials	

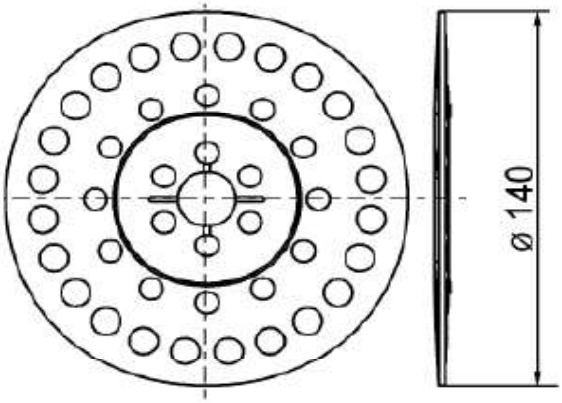
KEW DSB 90



KEW DSB 110



KEW DSB 140



KEW **DSB 90, DSB 110, DSB 140**	**Annex A 3**
Additional plate in combination with KEW DSH 10 K, KEW DSH 10 KS	

Specifications of intended use

Anchorages subject to:

- Multiple fixing for the anchorage of bonded thermal insulation composite systems (ETICS).

Base materials

- Reinforced or unreinforced normal weight concrete (Use category A), according to Annex B3.
- Solid brick (Use category B), according to Annex B3.
- Calcium silicate solid units (Use category B), according to Annex B3.
- Perforated brick (Use category C), according to Annex B3.
- Vertically perforated clay bricks according to ÖNORM B 6124 (Use category C), according to Annex B3.
- Lightweight aggregate concrete hollow blocks LAC (Hbl) (Use category D), according to Annex B3.
- Autoclaved aerated concrete AAC 4 (Use category E), according to Annex B3.
- The characteristic tension resistance of the anchor may be determined by means of job site pull-out tests carried out on the material actually used, if a characteristic resistance of the base material does not exist (for example masonry made of other solid masonry units or made of perforated clay bricks).

Use conditions

- 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. The dead loads have to be transmitted by the bonding of the thermal insulation composite system.

Use categories:

- A, B, C, D and E.

Design:

- The design of anchorages is carried out in compliance with ETAG 014"Guideline for European Technical Assessment of Plastic Anchors for Fixing of External Thermal Insulation Composite Systems with Rendering" under the responsibility of an engineer experienced in anchorages.
- Verifiable calculation notes and drawings shall be prepared taking account of the loads to be anchored, the nature and strength of the base materials, the thickness of insulation and the dimensions of the anchorage as well as of the relevant tolerances.
- Proof of direct local application of load on the base material shall be delivered. The anchor shall only be used for the transmission of wind suction loads. All other loads such as dead load and restraints shall be transmitted by the adhesion of the relevant external thermal insulation composite system

KEW DSH 10 K, KEW DSH 10 KS	Annex B 1
Intended use Specifications	

Installation:

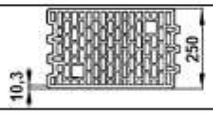
The fitness for use of the anchor can only be assumed if the following conditions of installation are met:

- Anchor installation carried out by appropriately qualified personnel under the supervision of the person responsible for technical matters on site.
- Use of the anchor only as supplied by the manufacturer without exchanging any component of the anchor.
- Anchor installation in accordance with the manufacturer's specifications and drawings using the tools.
- Checks before placing the anchor, to ensure that the characteristic values of the base material in which the anchor is to be placed, is identical with the values, which the characteristic loads apply for.
- Observation of the drill method (Drill holes in masonry made of perforated clay bricks, vertically perforated clay bricks, lightweight aggregate concrete hollow blocks (LAC) and autoclaved aerated concrete may only be drilled using the rotary drill. Other drilling methods may also be used if job-site tests according to Annex B 5 evaluate the influence of hammer or impact drilling.)
- Placing drill holes without damaging the reinforcement
- Temperature during installation of the anchor ≥ 0°C.
- Exposure to UV due to solar radiation of the anchor not protected by rendering 6 weeks.

KEW DSH 10 K, KEW DSH 10 KS	Annex B 2
Intended use Instalation	

Types of base materials

Table B1: Base materials

Base material	Use category	Bulk density class [kg/dm³]	Min. compressive strength ß [N/mm²]	General remarks	Drilling method
Concrete C12/15 according to EN 206-1	A				Hammer drilling
Concrete C16/20 – C50/60 according to EN 206-1	A				Hammer drilling
Solid clay bricks according to EN 771-1	B	≥1,7	20	Vertically perforation up to 15%	Hammer drilling
Calcium silicate solid units according to EN 771-2	B	≥ 1,8	12		Hammer drilling
Perforated clay bricks according to EN 771-1	C	≥ 0,7	12		Only rotary drilling
Vertically perforated clay bricks according to ÖNORM B 6124	C	≥ 0,9	10		Only rotary drilling
Lightweight aggregate concrete hollow blocks LAC (Hbl) according to EN 1520	D	≥ 1,2	4		Only rotary drilling
Autoclaved aerated concrete AAC 4 according to EN 771-4	E	≥ 0,4	4		Only rotary drilling

KEW DSH 10 K, KEW DSH 10 KS	Annex B 3
Intended use Base materials	

Installation

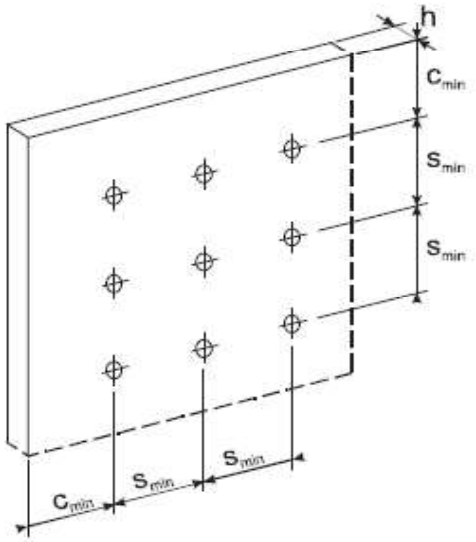
Table B2: Installation characteristics

Anchor type	Nominal diameter of drill bit d_o [mm]	Cutting diameter of drill bit $d_{cut,max}$ ≤[mm]	Cutting diameter of drill bit $d_{cut,min}$ ≥[mm]	Depth of drill hole h_1≥ [mm]	Overall embedment depth h_{ef}[mm]
KEW DSH 10 K KEW DSH 10 KS	10	10,45	10,0	50	40

Table B3: Minimum thickness of base material, edge distance and anchor spacing

Anchor type	Minimum thickness of base material h [mm]	Minimum spacing s_{min} [mm]	Minimum edge distance c_{min} [mm]
KEW DSH 10 K KEW DSH 10 KS	100	100	100

Scheme of distance and spacing.



KEW DSH 10 K, KEW DSH 10 KS	
Intended use Installation characteristics Edge and axial distances	**Annex B 4**

Job site tests

The characteristic tension resistance of the anchor may be determined by means of job site pull-out tests carried out on the material actually used, if a characteristic resistance of the base material does not exist (for example masonry made of other solid masonry units or made of perforated clay bricks).

The characteristic resistance of the anchor shall be determined by carrying out at least 15 centric tension load pull-out tests on site. These tests are also possible under the same conditions in a laboratory.

Execution and evaluation of the tests as well as the issue of the test report and the determination of the characteristic resistance should be under the responsibility of approved testing laboratories or the supervision of the person responsible for the execution of the works on site.

Number and position of the anchors to be tested shall be adapted to the relevant special conditions of the site and, for example, to be increased in the case of hidden and larger areas, such that reliable information about the characteristic resistance of the anchor in the base material in question can be derived. The tests shall take into account the most unfavourable conditions of the practical execution.

Assembly

The anchor to be tested shall be installed (e.g. preparation of drill hole drilling tool to be used, drill bit) and the spacing and the edge distances shall be in the same way as planned for the fixing of the external thermal insulation composite system.

Depending on the drilling tool and according to ISO 5468, hard metal hammer-drill bits or hard metal percussion drill bits, respectively, shall be used. The cutting diameter shall be at the upper tolerance limit.

Execution test

The test rig used for the pull-out test shall provide a continuous slow increase of the load, controlled by calibrated load cell. The load shall be applied perpendicularly to the surface of the base material and shall be transmitted to the anchor via an hinge. The reaction force shall be transmitted into the base material at a distance of at least 150 mm from the anchor. The load shall be increased continuously in a way, that the ultimate load is reached after about 1 minute. The load is measured when the ultimate load (N_1) is achieved.

Test report

The test report shall include all information necessary to assess the resistance of the tested anchor. It shall be included in the construction dossier.

The minimum data required are:

- Construction site, owner of building; date and location of the tests, air temperature; type of member (ETICS) to be fixed
- Masonry (type of brick, strength class, all dimensions of bricks, mortar group); visual assessment of masonry (flush joints, joint clearance, regularity)
- Plastic sleeve and special expansion nail, value of the cutting diameter of hard metal hammer-drill bits, measured before and after drilling
- Test rig; results of tests including the indication of value N_1
- Tests carried out or supervised by; signature.

Evaluation of test results

The characteristic resistance N_{Rk1} is derived from the measured values N_1 as follows

$N_{Rk1} = 0{,}6 \cdot N_1 \leq 1{,}5$ kN

N_1 = the mean value of the five smallest measured values at ultimate load

KEW DSH 10 K, KEW DSH 10 KS	Annex B 5
Intended use Job site tests	

Table C1: Characteristic resistance to tension loads for single anchor

Base material	Use category	Bulk density class [kg/dm³]	Min. compressive strength ß [N/mm²]	KEW DSH 10 K KEW DSH 10 KS [kN]
Concrete C 12/15 according to EN 206-1	A			0,4
Concrete C 16/20 –C50/60 according to EN 206-1	A			0,6
Solid clay bricks according to EN 771-1	B	≥1,7	20	0,9
Calcium silicate solid units according to EN 771-2	B	≥ 1,8	12	0,6
Perforated clay bricks according to EN 771-1	C	≥ 0,7	12	0,5
Vertically perforated clay bricks according to ÖNORM B6124	C	≥ 0,9	15	0,5
Lightweight aggregate concrete hollow blocks LAC (Hbl) according to EN 1520	D	≥ 1,2	4	0,5
Autoclaved aerated concrete AAC 4 according to EN 771-4	E	≥ 0,4	4	0,6
Partial safety factor	γ_M=	2,0*		

* in the absence of other national regulations

Table C2: Displacement of anchors KEW DSH 10 K, KEW DSH 10 KS under tension loads

Base material	Tension load N_{Sk} [kN]	Displacement $\Delta\delta_N$ [mm]
Concrete C12/15 according to EN 206-1	0,13	1,0
Concrete C16/20 – C50/60 according to EN 206-1	0,20	1,0
Solid clay bricks according to EN 771-1	0,3	1,09
Calcium silicate solid units according to EN 771-2	0,2	1,09
Lightweight aggregate concrete hollow blocks LAC (Hbl) according to EN 1520	0,16	0,63
Perforated clay bricks according to EN 771-1	0,16	0,67
Vertically perforated clay bricks according to ÖNORM B 6124	0,16	0,64
Autoclaved aerated concrete AAC 4 according to EN 771-4	0,2	0,76

KEW DSH 10 K, KEW DSH 10 KS	**Annex C 1**
Performances Characteristic tension load Displacement under tension load	

Table C3: Point thermal transmittance

Anchor type	Insulation thickness h_D [mm]	Point thermal transmittance χ [W/K]
KEW DSH 10 K KEW DSH 10 KS	30 - 270	0

The thermal bridge effect of the anchor is smaller than 0,0005 W/K and can therefore be neglected in the calculation.

Table C4: Plate stiffness

Anchor type	Diameter of the anchor plate [mm]	Load resistance of the anchor plate [kN]	Plate stiffness [kN/mm]
KEW DSH 10 K	60	1,7	0,4
KEW DSH 10 KS	60	2,9	1,0

KEW DSH 10 K, KEW DSH 10 KS	Annex C 2
Performances Point thermal transmittance Plate stiffness	