

DECLARATION of PERFORMANCE
according to Annex III of the regulation (EU) Nr. 305/2011 (construction product regulation)
09-014-11/0192-2020-05

- 1.) Unique identification code of the product-type:
EJOT H4 eco
- 2.) Type, batch or serial number or any other element allowing identification of the construction product as required pursuant to Article 11(4):
type and lot number are displayed on the packaging
- 3.) Intended use or uses of the construction product, in accordance with the applicable harmonized technical specification, as foreseen by the manufacturer:
Nailed-in plastic anchor for fixing of external thermal insulation composite systems with rendering in concrete and masonry, using category: A,B,C,D,E
Anchor length: 135 - 355 mm
- 4.) Name, registered trade name or registered trade mark and contact address of the manufacturer as required pursuant to Article 11(5):
EJOT Baubefestigungen GmbH, In der Stockwiese 35, 57334 Bad Laasphe
- 5.) Where applicable, name and contact address of the authorised representative whose mandate covers the tasks specified in Article 12(2) :
not relevant
- 6.) System or systems of assessment and verification of constancy of performance of the construction product as set out in Annex V:
System 2+
- 7.) In case of the declaration of performance concerning a construction product covered by a harmonized standard:
not relevant
- 8.) In the case of the declaration of performance concerning a construction product for which a European Technical Assessment has been issued, this has:
Deutsches Institut für Bautechnik (DIBt) granted a European technical approval ETA-11/0192 based on EAD 330196-01-0604. The MPA Universität Stuttgart -Otto-Graf-Institut-, NB 0672 has carried out the initial test of the construction product according to System 2+.

9.) Declared performance:

Essential characteristics	Performance	Harmonized technical specification
Characteristic tension resistance N_{Rk}	see ETA-11/0192 annex C1, table C1	EAD-330196-01-0604
Displacement	see ETA-11/0192 annex C3, table C7	EAD-330196-01-0604
Point thermal transmittance	see ETA-11/0192 annex C3, table C5	EOTA TR 25
Plate stiffness	see ETA-11/0192 annex C3, table C6	EOTA TR 26
minimum allowable spacing and minimum allowable edge distance	see ETA-11/0192 paragraph B2 , table B2	EAD-330196-01-0604

10.) The performance of the product identified in point 1 and 2 is in conformity with the declared performance in point 9. This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.

Signed for and on behalf of the manufacturer by:

Dr. Frank Dratschmidt / management
 (name and function)

Bad Laasphe, den 01.06.2020
 (place and date of issue)


 (signature)

Table C1: Characteristic resistance to tension loads N_{Rk} in concrete and masonry for a single anchor in kN						EJOT H1 eco	EJOT H4 eco
Anchor type					N_{Rk}	N_{Rk}	
Base materials	Bulk density ρ [kg/dm ³]	minimum compressive strength f_b [N/mm ²]	General remarks	Drill method	[kN]	[kN]	
Concrete C12/15 EN 206-1:2000				hammer	0,90	0,50	
Concrete C25/25 – C50/60 EN 206-1:2000				hammer	0,90	0,75	
Clay bricks, Mz e.g. according to EN 771-1:2011	$\geq 1,8$	12	Vertically perforation up to 15 %	hammer	0,90	0,75	
Sand-lime solid bricks, KS e.g. according to EN 771-2:2011	$\geq 1,8$	12	Vertically perforation up to 15 %	hammer	0,90	0,75	
Vertically perforated clay bricks, HLz e.g. according to EN 771-1:2011	$\geq 1,2$	20	Vertically perforation more than 15 % and less than 50 %	rotary	0,75 ¹⁾	-	
Vertically perforated clay bricks, Hlz e.g. according to EN 771-1:2011	$\geq 0,9$	12	Vertically perforation more than 15 % and less than 50 %	rotary	0,60 ²⁾	0,50 ²⁾	
Sand-lime perforated bricks, KSL e.g. according to EN 771-2:2011	$\geq 1,4$	12	Vertically perforation more than 15 % and less than 50 %	rotary	0,9 ³⁾	0,75 ³⁾	
Lightweight aggregate concrete, LAC 4 – LAC 25 e.g. according to EN 1520:2011 / EN 771-3:2011	$\geq 1,2$	4		hammer	0,9	1,2	
Autoclaved aerated concrete, AAC 4 – AAC 7 e.g. according to EN 771-4:2011	$\geq 0,6$	4		rotary	0,5	0,5	
EJOT H1 eco and H4 eco					Annex C 1		
Performances Characteristic resistance							

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

²⁾ The value applies only for outer web thickness ≥ 11 mm; otherwise the characteristic resistance shall be determined by job site pull-out tests.

³⁾ The value applies only for outer web thickness ≥ 20 mm; otherwise the characteristic resistance shall be determined by job site pull-out tests.

EJOT H4 eco

Table C5: Point thermal transmittance according EOTA Technical Report TR 025:2016-05

anchor type	insulation thickness h_D [mm]	point thermal transmittance χ [W/K]
EJOT H4 eco	60 – 260	0,001

Table C6: 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]
EJOT H4 eco	60	1,4	0,60

Table C7: Displacements EJOT H4 eco

Base materials	Bulk density ρ [kg/dm ³]	Minimum Compressive strength f_b [N/mm ²]	Tension load N [kN]	Displacements $\delta(N)$ [kN/mm]
Concrete C12/15 – C50/60 (EN 206-1:2000)			0,3	0,6
Clay bricks, Mz (EN 771-1:2011)	≥ 1,8	12	0,25	0,4
Sand-lime solid bricks, KS (EN 771-2:2011)	≥ 1,8	12	0,25	0,4
Vertically perforated clay bricks, HLz (EN 771-1:2011)	≥ 0,9	12	0,15	0,6
Sand-lime perforated bricks, KSL (EN 771-2:2011)	≥ 1,4	12	0,25	0,4
Lightweight aggregate concrete, LAC 4 – LAC 25 (EN 1520:2011 / EN 771 3:2011)	≥ 1,2	4	0,4	1,3
Autoclaved aerated concrete, AAC 4 – AAC 7 (EN 771-4:2011)	≥ 0,6	4	0,17	0,6

EJOT H1 eco and EJOT H4 eco

Performances

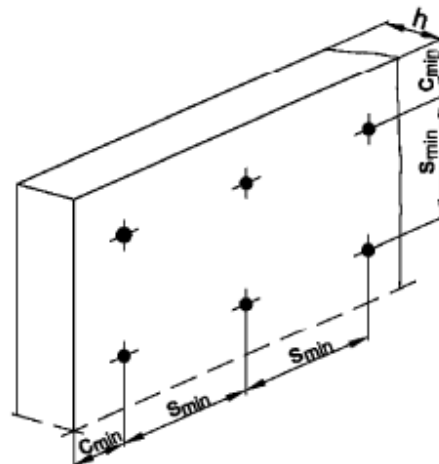
Point thermal transmittance, plate stiffness, displacements for EJOT H4 eco

Annex C 3

Anchor type		EJOT H1 eco		EJOT H4 eco	
		A B C	D and E	A B C	D and 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 drilled hole to deepest point	h_1 [mm] ≥	35	55	35	75
Effective anchorage depth	h_{ef} [mm] ≥	25	45	25	65

Anchor type		EJOT H1 eco / EJOT H4 eco
Minimum allowable spacing	$s_{min} \geq$ [mm]	100
Minimum allowable edge distance	$c_{min} \geq$ [mm]	100
Minimum thickness of member	$h \geq$ [mm]	100

Scheme of distance and spacing



EJOT H1 eco and EJOT H4 eco

Intended use
Installations parameters,
Edge distances and spacing

Annex B 2