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Authorised and notified according to Article 29 of the Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011

European Technical Assessment ETA-23/0483 of 2026/01/07

I General Part

Technical Assessment Body issuing the ETA and designated according to Article 29 of the Regulation (EU) No 305/2011: ETA-Danmark A/S	
Trade name of the construction product:	RECA dimos anchor HB-T 37
Product family to which the above construction product belongs:	Distance fixing system
Manufacturer:	RECA NORM GmbH Am Wasserturm 4 DE-74635 Kupferzell Tel + 49 7944 61-0 Internet: www.recanorm.de
Manufacturing plant:	RECA plant no.4
This European Technical Assessment contains:	19 pages including 14 annexes which form an integral part of the document
This European Technical Assessment is issued in accordance with Regulation (EU) No 305/2011, on the basis of:	EAD 331985-00-0604 – Distance fixing system
This version replaces:	The ETA with the same number issued on 2023-09-05

Translations of this European Technical Assessment in other languages shall fully correspond to the original issued document and should be identified as such.

II SPECIFIC PART OF THE EUROPEAN TECHNICAL ASSESSMENT

1 Technical description of product

RECA dimos anchor HB-T 37 is a post-installed anchor system placed into predrilled holes in masonry and anchored by bonding.

RECA dimos anchor HB-T 37 distance mounting system consist of a cylindrical load-bearing glass fiber reinforced polyamide element with a mesh and is used together with the injection mortar. The RECA dimos anchor HB-T 37 is placed into a pre-drilled hole perpendicular to the surface (maximum deviation 5°) in masonry, and anchored by bonding the plastic anchoring element to the wall of the drilled hole by means of mortar.

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 intended use is fixings through an ETICS into the loadbearing wall of heavy-duty fixtures such as awnings, French balconies, canopies, satellite dishes, etc.
The system is used for distance installations in the following insulated base materials:

- Perforated or hollow bricks
  (use category c)

The system is also used for installations in the following non-insulated base materials:

- Perforated or hollow bricks
  (use category c)

Reference to base material group in EAD 330284-00-0604

Anchorages subject to: Static or quasi-static loads.
Temperature range:

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

The minimum and the maximum installation temperature are specified by the manufacturer within the above range.

Use categories in respect of use:
Category d/d: Use in dry masonry
Category w/w: Use in wet masonry.

This ETA applies only where masonry members in which the distance mounting systems are embedded are subject to static or quasi static actions in tension, shear or combined tension and shear or bending. The distance mounting system is intended to be used in areas with no and very low seismicity as defined in EN 1998-1, Clause 3.2.1.

In case of a product use in ETICS, it must be ensured that no ETICS influence the installation.

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 provisions made in this European Technical Assessment are based on an assumed intended working life of the anchor of 50 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 (BWR 4):
Resistance to failure under tension loading.
Resistance to failure under shear loading and minimum edge distance and spacing.
Resistance to pull-out under tension loading.
Displacements under short term and long-term loading.

The above essential characteristics are detailed in Annex C.

Durability
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.

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 331985-00-0604 – Distance mounting system.

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

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+.

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

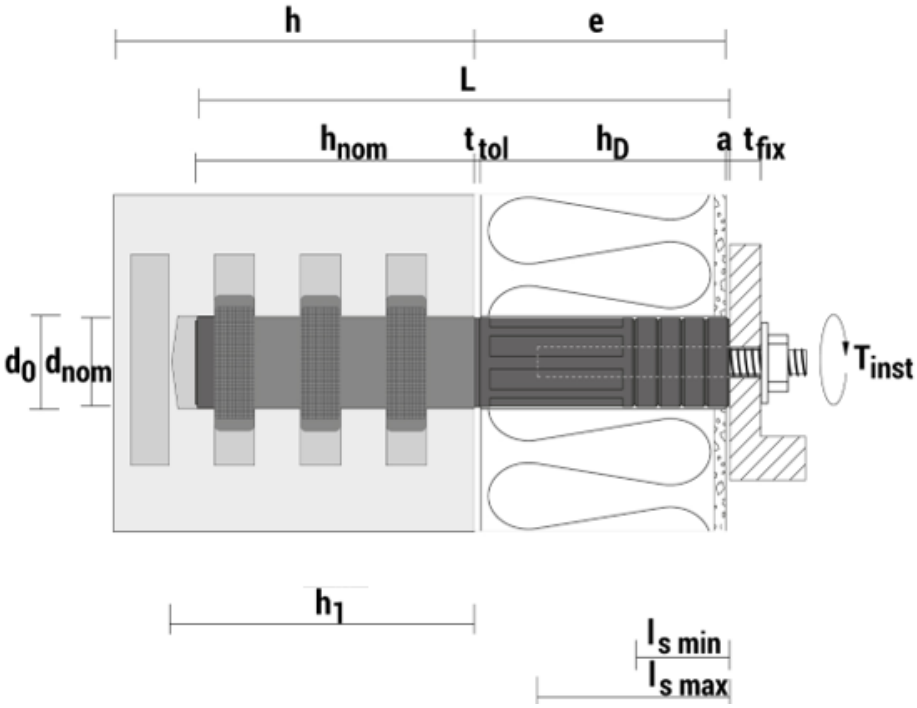
Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited at ETA-Danmark prior to CE marking.

Issued in Copenhagen on 2026-01-07 by

Thomas Bruun

Managing Director, ETA Danmark

Installed conditions in hollow bricks

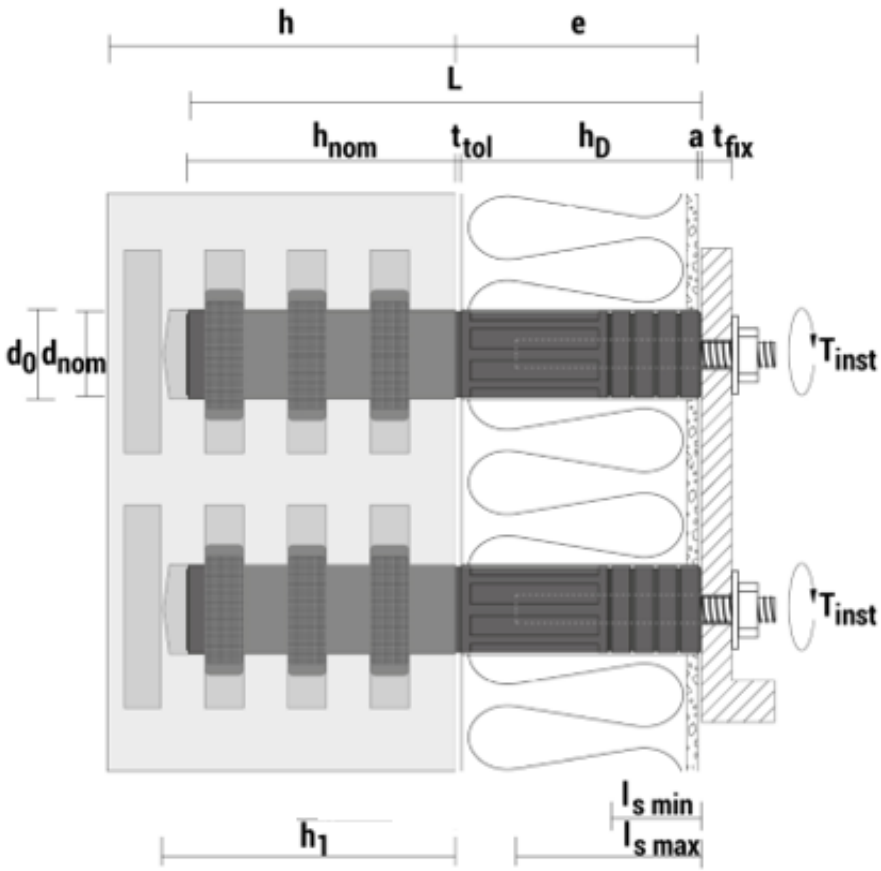


single fixing with insulation

h_{nom}	=	overall plastic anchor embedment	d_o	=	drill hole diameter
a	=	1-2 mm protrusion to the plaster surface	$l_{s\,min}$	=	min. screw insertion depth
h_1	=	depth of drilled hole to deepest point	$l_{s\,max}$	=	max. screw insertion depth
h_{min}	=	minimum thickness of member	t_{fix}	=	thickness of fixture
h_D	=	thickness of insulation (ETICS)	s_{min}	=	min. spacing
L	=	anchor length	T_{inst}	=	setting torque moment
t_{tol}	=	thickness plaster or unevenness	e	=	$h_D + t_{tol}$

RECA dimos anchor HB-T 37	Annex A1
Product description Installed conditions	

Installed conditions in hollow bricks

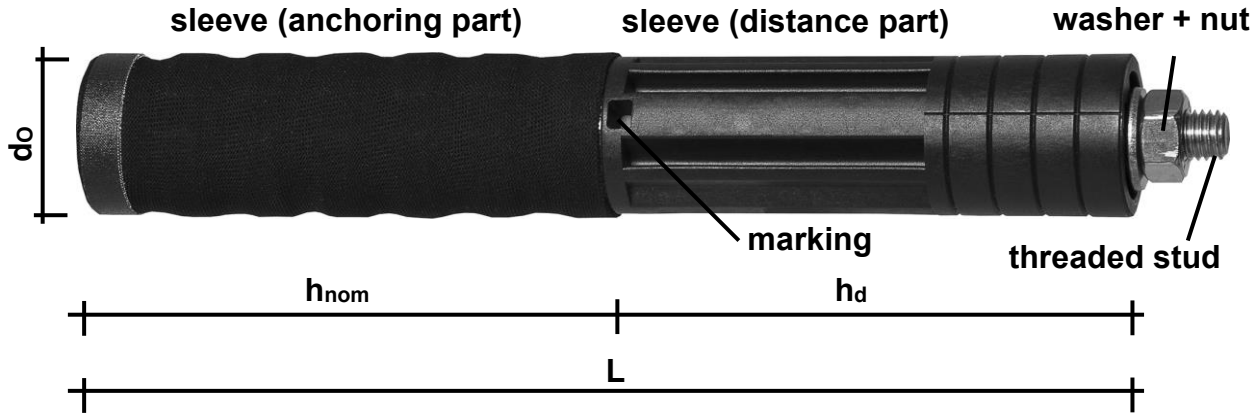


Double fixing with insulation

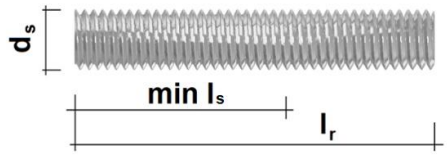
h_{nom}	=	overall plastic anchor embedment	d_o	=	drill hole diameter
a	=	1-2 mm protrusion to the plaster surface	$l_{s\ min}$	=	min. screw insertion depth
h_1	=	depth of drilled hole to deepest point	$l_{s\ max}$	=	max. screw insertion depth
h_{min}	=	minimum thickness of member	t_{fix}	=	thickness of fixture
h_D	=	thickness of insulation (ETICS)	s_{min}	=	min. spacing
L	=	anchor length	T_{inst}	=	setting torque moment
t_{tol}	=	thickness plaster or unevenness	e	=	$h_D + t_{tol}$

RECA dimos anchor HB-T 37	Annex A2
Product description Installed conditions	

dimos anchor HB-T 37/120 - 200

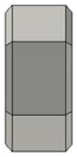


Threaded stud for dimos anchor HB-T 37 and washer and nut



Threaded stud M12 (or M12 screw)

washer for M12



nut for M12

Marking:	Brand	Type	thickness of insulation (h_d)
Example:	**RECA marking**	**dimos anchor HB-T 37**	**/ 160**

Table A4.1: Dimensions [mm]

HB-T 37 anchor sleeve							
	L	**Ø d_{nom}**	**$h_{D\ min}$**	**$h_{D\ max}$**	**h_{nom}**	**$l_{s\ min}$**	**$l_{s\ max}$**
HB-T 37/120	245	37	80	120	125	35	80
HB-T 37/160	285	37	120	160	125	35	80
HB-T 37/200	325	37	160	200	125	35	80

Metal part (threaded stud)			
	l_r	Ø d_s	$l_{s\ min}$
for HB-T 37	≥70	12	≥35

Table A4.2: Material

Designation	Material
HB-T 37 anchor sleeve all lengths	Polyamid PA 6 with glasfibre
Anchor rod M12 A4 or metric screw M12 A4	Stainless steel A4 according to EN 10088-3:2014, material 1.4401 or 1.4571 property class 70
Threaded stud M12 or metric screw M12	Steel or hot dipped, galvanized f_{yk} ≥ 400 N/mm² and f_{uk} ≥ 500 N/mm² property class 5.8 screw
Hexagon nut M12 A4	Stainless steel A4 according to EN 10088-3:2014, material 1.4401 or 1.4571 Property class 70, DIN 934 (EN ISO 4032)
Hexagon nut M12	Steel or hot dipped, galvanized material 1.4401 or 1.4571 Property class ≥ 6, DIN 934 (EN ISO 4032)
Washer A4	Stainless steel A4, DIN 125
Washer	Steel or hot dipped, galvanized, DIN 125
Injection mortar	VMU plus / VMU plus polar

Specification of intended use

Anchorages subject to:

- Static and quasi-static actions in tension, shear or combined tension and shear load or bending. The anchor shall not be used for the transmission of dead loads of the thermal insulation composite system.

Base material:

- Hollow brick masonry (base material group c) according to Annex C2
- Mortar strength class of the masonry ≥ M2,5 according to EN 998-2:2010
- Autoclaved aerated concrete uncracked (base material group d)

Temperature Range for use:

- a: -40°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 to be designed under the responsibility of an engineer experienced in anchorages and masonry work with the applicable safety factors.
- Verifiable calculation notes and drawings shall be prepared taking account of the loads to be anchored, the nature and strength of the base materials and the dimensions of the anchorage members as well as of the relevant tolerances. The position of the anchor is indicated on the design drawings.

Installation:

- Hole drilling by the drill methods according to Annex C2 for base material group c.
- Anchor installation carried out by appropriately qualified personnel and under the supervision of the person responsible for technical matters of the site.
- Temperature of the plug at installation from 0°C to + 40°C.
- Exposure to UV due to solar radiation of the anchor not protected ≤ 6 weeks.

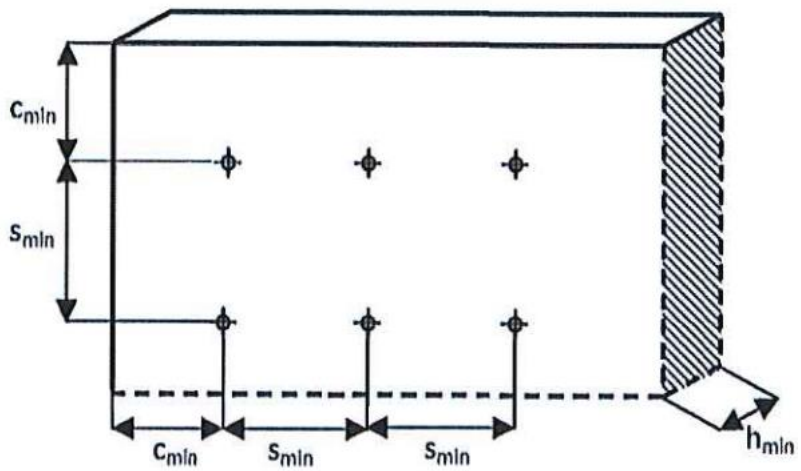
Table B2.1: Installation parameters

Anchor type			**HB-T 37**
Overall embedment depth of the anchoring part of the sleeve in the base material	$h_{nom} \geq$	[mm]	125*
Drill hole diameter	d_0	[mm]	39-40
Depth of drill hole to the deepest point	$h_1 \geq$	[mm]	135
Diameter of clearence hole in the fixture	$d_f \geq$	[mm]	13
Screw in depth of the threaded stud M12	l_s	[mm]	35 - 80
Maximum installation moment	$T_{inst} \leq$	[Nm]	20

*h_{nom} can be reduced by 10 mm if necessary.

Table B2.2: Minimum thickness of member, edge distance and anchor spacing

HB-T 37	Minimum thickness of member h_{min} [mm]	Minimum edge distance c_{min} [mm]	Minimum spacing s_{min} [mm]
Base material			
Hollow clay brick **HB 6-0,65 - 10DF**	300	125	77
Hollow clay brick **HB 12-1.0 - 12DF**	240	125	77



RECA dimos anchor HB-T 37

Product description
Installation parameters, edge distance, anchor spacing

Annex B2

Table B3: Geometry of bricks

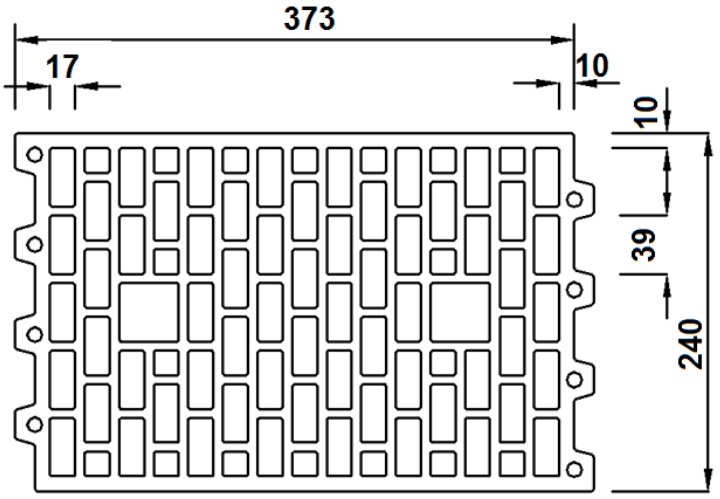


Fig. 1 HB 12 – 1.0 12 DF (hollow brick)

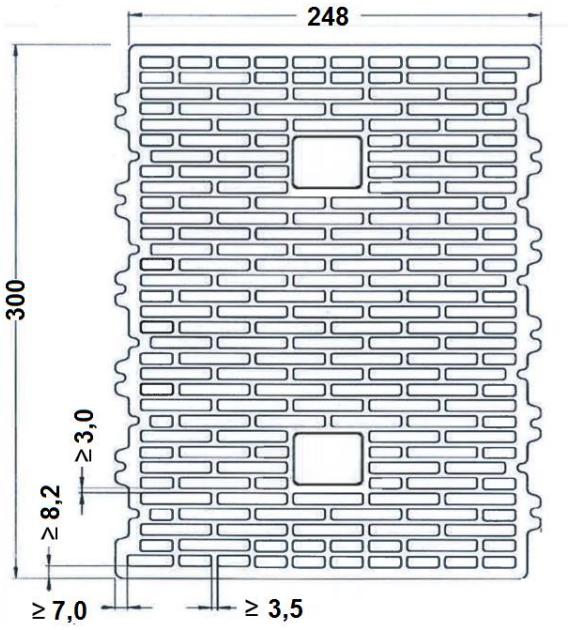
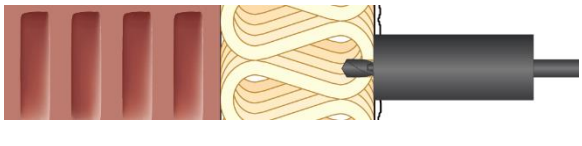


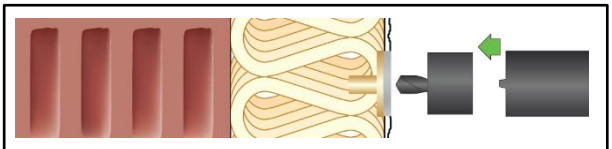
Fig. 2 HB 6 – 0,65 (T10) 10 DF (hollow brick)

RECA dimos anchor HB-T 37	Annex B3
Intended use Geometry of bricks	

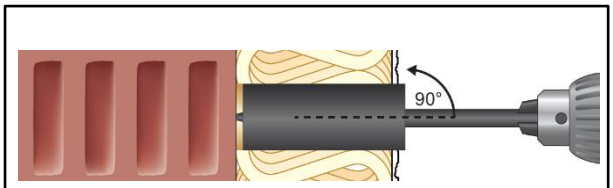
Installation instruction in hollow brick (1-4)
dimos anchor HB-T 37/120 - 200



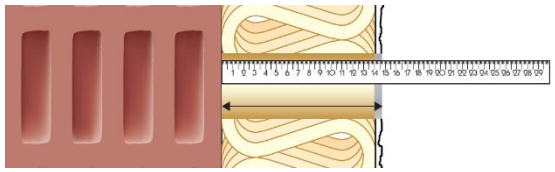
1.Using a drill bit ø 39-40 mm, drill through the insulation until you reach the masonry. This process involves several installation steps. Recommended: 1000-1500 rpm. First, drill through the plaster by means of a drilling aid.



2. The drilling aid is only required to drill the first 10 mm. Therefore, remove the drilling aid…

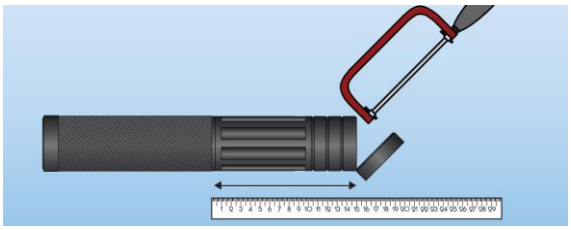


3. ...and continue drilling until you reach the masonry. Try to keep the drill as level as possible! Remove any insulation residues in the drill bit from behind by means of a folding ruler or a screwdriver etc.



4. When you reach the masonry, stop and measure the insulation thickness, including plaster. Add at least 1 mm, eventually more if you have to accommodate the height of several plugs.

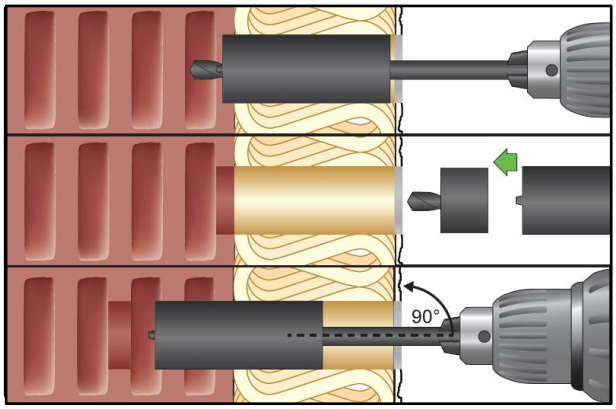
Please note: RECA dimos anchor HB-T 37
can in any case be installed 10 mm deeper or less deep, in order to accommodate surface irregularities or plaster layers.



5. If necessary, cut down the front part of RECA dimos anchor HB-T 37 by a maximum of 40 mm by means of a hacksaw or similar. Each marking ring equals 10 mm.

Attention: do not cut the membrane!

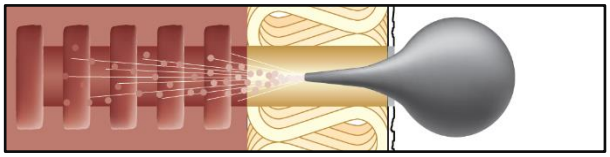
Installation instruction in hollow brick (1-4)
dimos anchor HB-T 37/120 - 200



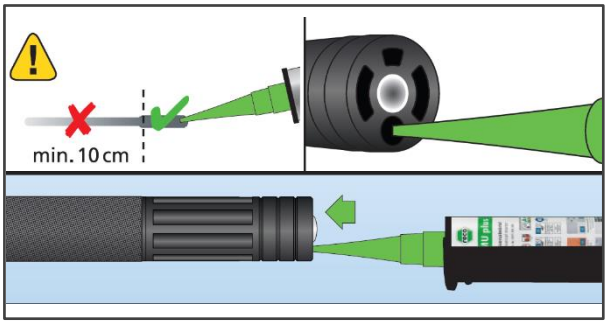
6. Reuse the drilling aid to drill the first 10 mm into the masonry.
Then, remove again the drilling aid and continue drilling to a depth of at least 130 mm.

Recommended: 1000-1500 rpm.

Please note: Usually, drilling residues such as stone fragments easily fall out of the drill bit.
Otherwise, remove them by means of a screwdriver or similar.



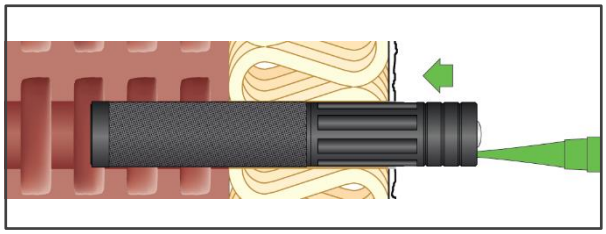
7. Clean the drill hole.



8. Screw the mixing nozzle onto the cartridge, then fit the cartridge into an appropriate applicator gun and dispense the first 10 cm of the resin.

After that, firmly attach RECA dimos anchor HB-T 37 on the mixing nozzle, as shown in the figure on the left.

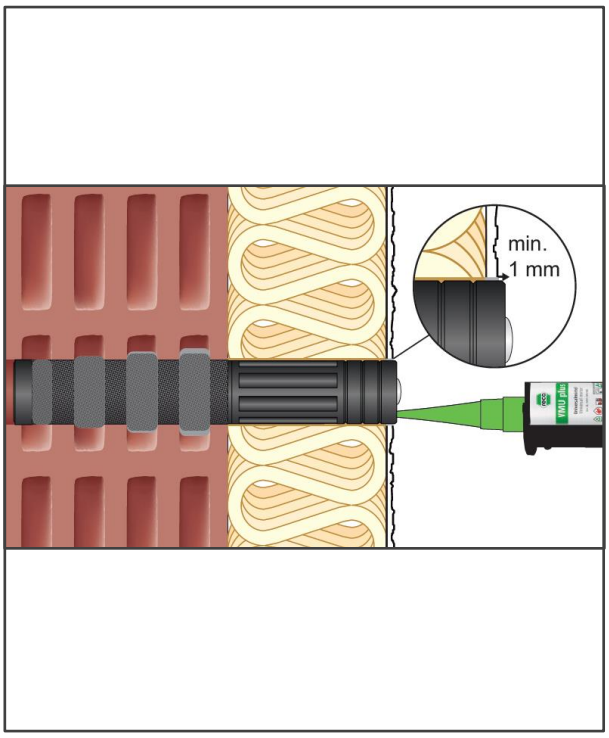
Please note: the cartridge temperature should be ≥ +10°C!



9. Carefully insert the attached RECA dimos anchor HB-T 37 into the clean drill hole.

Please note: RECA dimos anchor HB-T 37 should be able to be easily inserted into the drill hole, without getting stuck.

Installation instruction in hollow brick (1-4)
dimos anchor HB-T 37/120 - 200

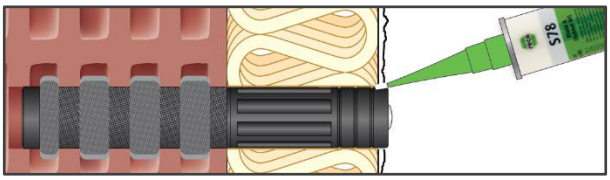


10. Fill RECA dimos anchor HB-T 37 with injection system. One cartridge 300/330 ml is sufficient for 2 RECA dimos anchor HB-T 37, that means 25-30 strokes per RECA dimos anchor HB-T 37.

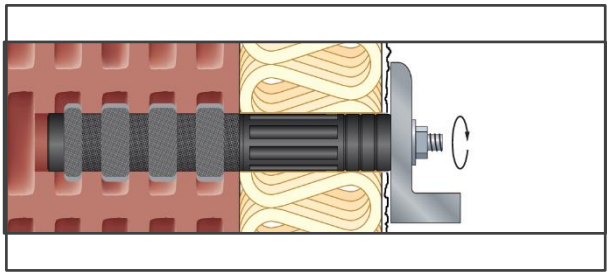
Please note:

- At the beginning of the filling process, you can adjust the final setting depth
- Adjust approx. 1 mm projecting to the plaster
- At the end of the filling process, injecting gets much more difficult so that you can clearly feel when the filling process is completed
- Depending on the masonry, the pressure might get so high that you can use less than half a cartridge - then stop
- When removing the mixing nozzle, there is normally some excess resin. So if necessary, use an appropriate pad

11. Respect the curing time as indicated on the cartridge label.



12. Fill the annular gap with sealant, e.g. S 78 bonds and seals white



13. Remove the thread protection plug.
After that, you can attach the mounting part (max. T_{inst} = 20 Nm).

Please note: the threaded stud should be screwed into RECA dimos anchor HB-T 37 to a depth of at least 35 mm.

RECA dimos anchor HB-T 37	Annex B6
Intended use Installation instruction in hollow brick	

Table C1.1: Characteristic tension and shear load resistance of the threaded stud

Threaded stud Ø 12 mm			stainless steel
Charact. tension load resistance	$N_{Rk,s}$	[kN]	59
Partial safety factor[1)]	γ_{Ms}		1,87
Characteristic shear load resistance	$V_{Rk,s}$	[kN]	30
Partial safety factor[1)]	γ_{Ms}		1,56

Table C1.2 : Characteristic tension load resistance N_{Rk} [kN] in hollow masonry (base material group "c") for single anchor

HB-T 37 Base material	Bulk density class ρ [kg/dm³]	Minimum compres-sive Strength f_b [N/mm²]	Minimum DF or minimum size **(L x W x H)** [mm]	figure/ geometry	drill method R= rotary	Characteristic resistance $N_{Rk,p}$ [kN] ϑ = 24/40 °C
Hollow clay brick **HB 12** EN 771-1:2011+A1:2015	1,0	12	12 DF (373*240*249)	Annex B3 figure 1	R only	**6,00**
Hollow clay brick **HB 6** EN 771-1:2011+A1:2015	0,65	6	10 DF (240*300*249)	Annex B3 figure 2	R only	**3,00**
Partial safety factor bricks[1)]					γ_{Mm}	**2,5**

Table C1.3 : Characteristic tension load resistance N_{Rk} [kN] in hollow masonry (base material group "c") for double anchor (min spacing = 77 mm)

HB-T 37 Base material	Bulk density class ρ [kg/dm³]	Minimum compres-sive Strength f_b [N/mm²]	Minimum DF or minimum size **(L x W x H)** [mm]	figure/ geometry	drill method R= rotary	Characteristic Resistance[2)] $N_{Rk,p}$ [kN] ϑ = 24/40 °C
Hollow clay brick **HB 12** EN 771-1:2011+A1:2015	1,0	12	12 DF (373*240*249)	Annex B3 figure 1	R only	**5,50**
Hollow clay brick **HB 6** EN 771-1:2011+A1:2015	0,65	6	10 DF (240*300*249)	Annex B3 figure 2	R only	**1,50**
Partial safety factor bricks[1)]					γ_{M}	**2,5**

[1)] In absence of other national regulations
[2)] Value is for one anchor pair

Table C2.1: Characteristic shear load resistance in HB 12 for different insulation thicknesses

HB-T 37	Insulation thickness [2]		h_D = 0 mm	h_D = 120 mm	h_D = 160 mm	h_D = 200 mm
Single anchor						
Characteristic shear load resistance [3]	V_{Rk1}	[kN]	3,00	1,20	1,20	0,90
Partial safety factor [1]	γ_M		2,5	2,5	2,5	2,5
Double anchor (s_{min} = 77 mm)						
Characteristic shear load resistance	V_{Rk2}	[kN]	4,50	1,80	1,50	1,20
Partial safety factor [1]	γ_M		2,5	2,5	2,5	2,5

[1] In absence of other national regulations
[2] Intermediate values by linear interpolation
[3] shear load at the outer end of the dimos anchor HB-T 37

Table C2.2: Characteristic shear load resistance in HB 6 for different insulation thicknesses

dimos anchor HB-T 37	Insulation thickness [2]		h_D = 0 mm	h_D = 120 mm	h_D = 160 mm	h_D = 200 mm
Single anchor						
Characteristic shear load resistance [3]	V_{Rk1}	[kN]	1,50	0,90	0,90	0,60
Partial safety factor [1]	γ_M		2,5	2,5	2,5	2,5
Double anchor (s_{min} = 77 mm)						
Characteristic shear load resistance	V_{Rk2}	[kN]	0,60	0,40	0,40	0,30
Partial safety factor [1]	γ_M		2,5	2,5	2,5	2,5

Table C2.3: Characteristic pressure load resistance $F_{u,s/p,5\%}$ = max. char. buckling loads under combined shear load V and pressure load, deviation 0 – 15 mm

HB-T 37				
Cantilever size	Permanent displacement in direction of the shear load	Shear load V	Max. pressure load * $F_{u,s/p,5\%}$ = max. buckling loads	δ_m due to pressure load
[mm]	[mm]	[kN]	kN	[mm]
200	0	-	25,7	-
200	5	0,42	17,8	9,50
200	10	0,83	13,1	5,81
200	15	1,25	13,4	6,34

*The brick failure load must be considered.

Table C3.1: Displacements under tension load

HB-T 37	Tension load	displacement	displacement
	N	δ_{NO}	$\delta_{N\infty}$
Base material	[kN]	[mm]	[mm]
Hollow brick HB 12			
Single anchor	1,7	0,6	1,3
Double anchor	1,6	0,4	0,9
Hollow brick HB 6			
Single anchor	0,9	0,6	1,2
Double anchor	0,4	0,2	0,4

Table C3.2: Displacements under shear load for single anchor

HB-T 37		Shear load	displacement	displacement
		V	δ_{VO}	$\delta_{V\infty}$
Base material		[kN]	[mm]	[mm]
HB 12	Insulation thickness h_D			
Single anchor	0	0,9	0,2	0,3
	120	0,3	2,0	4,1
	160	0,3	2,1	4,3
	200	0,3	3,4	6,7
HB 6	Insulation thickness h_D			
Single anchor	0	0,4	0,0	0,1
	120	0,3	1,3	2,6
	160	0,3	1,7	3,5
	200	0,2	2,0	4,0

Table C4.1: Displacements under shear load for double anchor*

HB-T 37		Shear load	displacement	displacement
		V [1)]	δ_{NO}	$\delta_{N\infty}$
Base material		[kN]	[mm]	[mm]
HB 12	Insulation thickness h_D			
Double anchor	0	1,3	0,6	1,2
	120	0,5	1,6	3,2
	160	0,4	0,7	1,4
	200	0,3	1,4	2,9
HB 6	Insulation thickness h_D			
Double anchor	0	0,2	0,1	0,2
	120	0,1	0,2	0,3
	160	0,1	0,2	0,3
	200	0,1	0,3	0,5

* with spacing min. 77 mm