

# PRESTANDEDEKLARATION

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DoP-200335-HL [SV]

**Lättbetongskruv HL-C försänkt huvud, Corrseal****Lättbetongskruv HL-W, Corrseal****AVSEDD ANVÄNDNING**

Enskilda ankare eller ankargrupper för bärande användning under statiska eller kvasi-statiska laster i massiva block av autoklaverad lättbetong (AAC) eller massiva block av lättklinkerbetong (LAC), under förutsättning att underlaget uppfyller minst den storlek och tryckhållfasthet som anges i ETA-20/0335 (version 2026-02-05), baserad på EAD 330424-00-0604 (december 2017).

**TILLVERKARE**

ESSVE AB, P.O. Box 7091, 164 07 Kista, Sweden

engineering@essve.com

**SYSTEM FÖR BEDÖMNING OCH FORTLÖPANDE KONTROLL AV PRESTANDA**

1

**ANMÅLT ORGAN**

ETA-DANMARK A/S (TAB), 1488 (FPC),

# PRESTANDEDEKLARATION

DoP-200335-HL [SV]

## Lättbetongskruv HL-C försänkt huvud, Corrseal

### Geometri

Diameter	Längd	Huvuddiameter	Gänglängd
8 mm	180 mm	12 mm	100 mm
8 mm	200 mm	12 mm	100 mm
8 mm	240 mm	12 mm	100 mm
8 mm	310 mm	12 mm	100 mm

## Lättbetongskruv HL-C försänkt huvud, Corrseal

### Angiven prestanda

Väsentliga egenskaper	Prestanda	Harmoniserad teknisk specifikation
<b>Diameter</b>	<b>8 mm</b>	
Karakteristisk bärförmåga i alla lastriktningar	$N_{Rk}, V_{Rk}$ [kN]	ETA-20/0335 Annex C2 – Annex C5
Motstånd mot stålrott vid skjulast med hävarm	$M_{Rk,s}$ [Nm]	ETA-20/0335 Annex C1
Minsta kantavstånd och inbördes avstånd	$c_{min}, s_{min}$ [mm]	ETA-20/0335 Annex B2
Karakteristiskt kantavstånd och inbördes avstånd	$c_{cr}, s_{cr}$ [mm]	ETA-20/0335 Annex B2, C3, C5
Minsta tjocklek hos element av lättbetong (AAC) eller lättklinkerbetong (LAC)	$h_{min}$ [mm]	ETA-20/0335 Annex B2
Försjutning hos skruvankare vid bruksgränstillstånd	$\delta_{gr}, \delta_{so}$ [mm]	ETA-20/0335 Annex C3, Annex C5, Annex C7
Reaktion vid brand	Class A1	ETA-20/0335
Beständighet mot korrosion	ETA-20/0335 Annex B1	ETA-20/0335 Annex B1

## Lättbetongskruv HL-C försänkt huvud, Corrseal

### Produkttypens unika identifikationskod

Artikelnr.	GTIN	Beskrivning
105315	7317761043195	LÄTTBETONGSKRUV HL-C FÖRSÄNKT HUVUD CORRSEAL 8X180 50ST
105317	7317761043201	LÄTTBETONGSKRUV HL-C FÖRSÄNKT HUVUD CORRSEAL 8X200 50ST
105320	7317761045090	LÄTTBETONGSKRUV HL-C FÖRSÄNKT HUVUD CORRSEAL 8X240 50ST
105322	7317761975809	LÄTTBETONGSKRUV HL-C FÖRSÄNKT HUVUD CORRSEAL 8X310 50ST

## Lättbetongskruv HL-W, Corrseal

### Geometri

Diameter	Längd	Huvuddiameter	Gänglängd
10,5 mm	185 mm	21,5 mm	160 mm
10,5 mm	210 mm	21,5 mm	160 mm

## Lättbetongskruv HL-W, Corrseal

### Angiven prestanda

Väsentliga egenskaper	Prestanda	Harmoniserad teknisk specifikation
<b>Diameter</b>	<b>10,5 mm</b>	
Karakteristisk bärförmåga i alla lastriktningar	$N_{Rk}, V_{Rk}$ [kN]	ETA-20/0335 Annex C2 – Annex C7
Motstånd mot stålrott vid skjuvlast med hävarm	$M_{Rk,s}$ [Nm]	ETA-20/0335 Annex C1
Minsta kantavstånd och inbördes avstånd	$c_{min}, s_{min}$ [mm]	ETA-20/0335 Annex B2
Karakteristiskt kantavstånd och inbördes avstånd	$c_{cr}, s_{cr}$ [mm]	ETA-20/0335 Annex B2, C3, C5, C7
Minsta tjocklek hos element av lättbetong (AAC) eller lättklinkerbetong (LAC)	$h_{min}$ [mm]	ETA-20/0335 Annex B2
Förskjutning hos skruvankare vid bruksgränstillstånd	$\delta_{Dr}, \delta_{\infty}$ [mm]	ETA-20/0335 Annex C3, Annex C5, Annex C7
Reaktion vid brand	Class A1	ETA-20/0335
Beständighet mot korrosion	ETA-20/0335 Annex B1	ETA-20/0335 Annex B1

## Lättbetongskruv HL-W, Corrseal

### Produkttypens unika identifikationskod

Artikelnr.	GTIN	Beskrivning
105323	7317761046714	LÄTTBETONGSKRUV HL-W WAFER HUVUD CORRSEAL 10X185 30ST
9105323	7317761050551	LÄTTBETONGSKRUV HL-W WAFER HUVUD CORRSEAL 10X185 300ST
105324	7317761046813	LÄTTBETONGSKRUV HL-W WAFER HUVUD CORRSEAL 10X210 30ST
9105324	7317761049067	LÄTTBETONGSKRUV HL-W WAFER HUVUD CORRSEAL 10X210 300ST

## PRESTANDADECLARATION

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DoP-200335-HL [SV]

Prestandan för ovanstående produkt överensstämmer med den angivna prestandan. Denna prestandadeklaration har utfärdats i enlighet med förordning (EU) nr 305/2011 på eget ansvar av den tillverkare som anges ovan.

Undertecknat för tillverkaren av:



Viktor Bukowski, Product manager, concrete & mass timber fasteners  
Kista 2026-06-05



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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

MEMBER OF EOTA



## European Technical Assessment ETA-20/0335 of 2026/02/05

### 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:**

Lightweight concrete screw HL

**Product family to which the above construction product belongs:**

Screw anchor for autoclaved aerated concrete and lightweight aggregate concrete

**Manufacturer:**

ESSVE AB  
P.O. Box 7091  
SE-16440 Kista  
Tel. +46 (0)8 623 61 00  
Internet [www.essve.se](http://www.essve.se)

**Manufacturing plant:**

ESSVE manufacturing plants

**This European Technical Assessment contains:**

18 pages including 13 annexes which form an integral part of the document

**This European Technical Assessment is issued in accordance with Article 95(4) of Regulation (EU) 2024/3110, on the basis of:**

EAD 330424-00-0604; Screw anchor for autoclaved aerated concrete and lightweight aggregate concrete

**This version replaces:**

The ETA with the same number issued on 2025-04-04

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Communication of this European Technical Assessment, including transmission by electronic means, shall be in full (except the confidential Annexes referred to above). However, partial reproduction may be made, with the written consent of the issuing Technical Assessment Body. Any partial reproduction has to be identified as such.

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

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

ESSVE Lightweight concrete screw HL is a lightweight concrete screw made of galvanized steel. The anchor is screwed directly into the base material without pre-drilling.

An illustration of the product is given in Annex A.

The characteristic material values, dimensions and tolerances of the anchors not indicated in Annexes shall correspond to the respective values laid down in the technical documentation of this European Technical Assessment.

The anchors are intended to be used with embedment depth given in Annex B, Table B1. The intended use specifications of the product are detailed in the Annex B1.

### **2 Specification of the intended use(s) 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 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**

##### **Mechanical resistance and stability (BWR 1):**

The essential characteristics are detailed in the Annex from C1 to C7.

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

The screws are made from steel classified as **Euroclass A1** in accordance with the provisions of Commission Delegated Regulation 2016/364 and EC decision 96/603/EC, amended by EC Decision 2000/605/EC

#### **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 Works Requirements 1 has been made in accordance with EAD 330424-00-0604; Screw anchor for autoclaved aerated concrete and lightweight aggregate concrete.

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

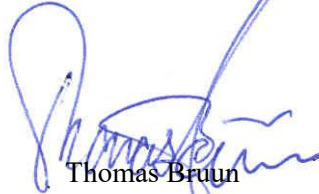
##### **4.1 AVCP system**

According to the decision 96/582/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 1.

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

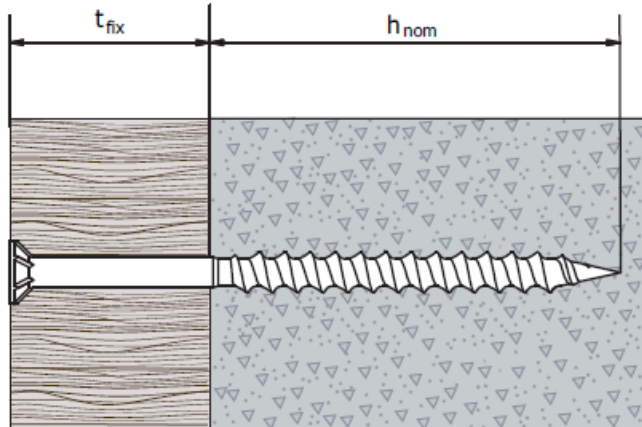
Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited at ETA-Danmark prior to CE marking

Issued in Copenhagen on 2026-02-05 by

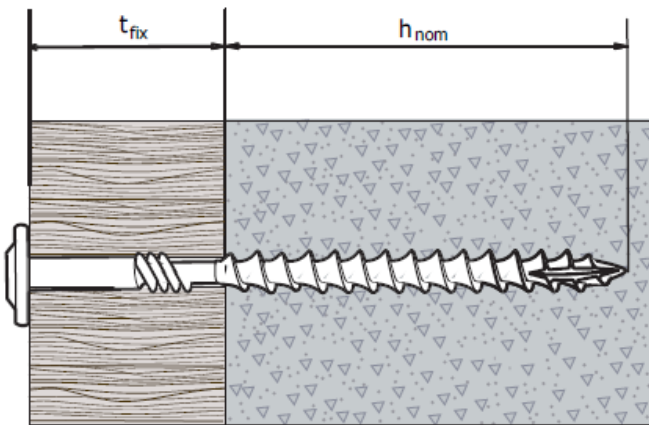


Thomas Bruun  
Managing Director, ETA-Danmark

**Lightweight concrete screw HL after installation**



**HL-C**



**HL-W**

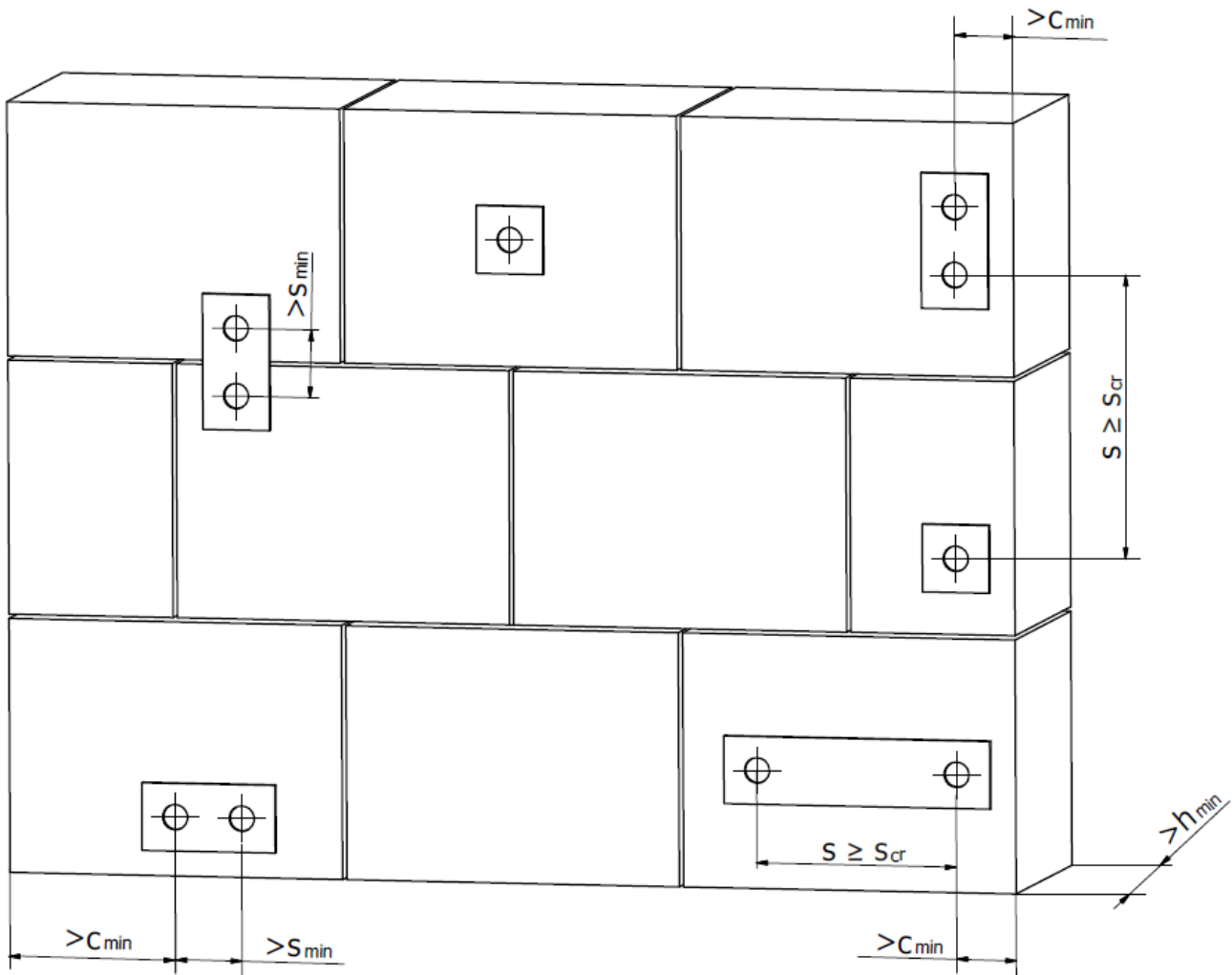
$h_{nom}$  = Nominal embedment depth  
 $t_{fix}$  = Fixture thickness

**Lightweight concrete screw HL**

**Product description**  
 Installed condition

**Annex A1**  
 of European  
 Technical Assessment  
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**Lightweight concrete screw HL after installation**




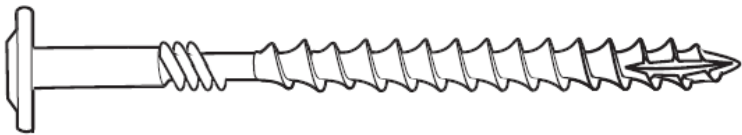
- $h_{min}$  = Minimum thickness of member
- $S_{min}$  = Minimum spacing
- $S_{cr}$  = Spacing for ensuring transmission of the characteristic resistance of a single fastener
- $C_{min}$  = Minimum edge distance

**Lightweight concrete screw HL**

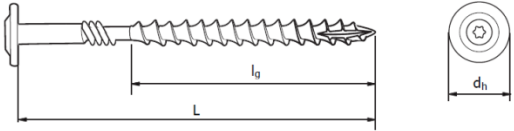
**Product description**  
Installed condition

**Annex A2**  
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**Table A1: Materials and Types**

Material		
Hardened carbon steel – zinc plated. Steel grade SAE 1022		
Type	Size	Design
HL-C	8	
HL-W	10	

**Table A2: Anchor dimensions and head marking**

Anchor size and type			HL-C 8	HL-W 10	Head Marking
Nominal diameter	$d_{nom}$	[mm]	8	10	
Length	L	[mm]	140-400	165-400	
Diameter of head	$d_h$	[mm]	12	21,5	
Thread length	$L_g$	[mm]	100	160	

**Lightweight concrete screw HL**

**Product description**  
Materials, types and dimensions

**Annex A2**  
of European  
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**Specifications of intended use**

**Anchorage subjected to:**

- Static, quasi static load.

**Base materials:**

- Solid autoclaved aerated concrete AAC 2,5 to AAC 4 according to EN 771-4:2011+A1:2015.
- Solid lightweight aggregate concrete LAC 5 according to EN 771-3:2011+A1:2015.
- The characteristic resistance of the anchor is also valid for solid AAC / LAC bricks of larger sizes and/or higher compressive strength than those given in this ETA.
- Job-site tests in tension on solid base material members (EN 771-3 or EN 771-4) are permitted when done in accordance with EOTA Technical Report TR 051, where  $N_{Rk1} = 0,5 N_1 \leq N_{Rk,ETA}$ , with  $N_1$  = mean value of the five smallest measured values at the ultimate load

**Use conditions (Environmental conditions):**

- The anchor may be used in structures subject to dry internal conditions.
- Base temperature range in service condition -40°C to +80°C.

**Design:**

- Anchorages are designed under the responsibility of an engineer experienced in anchorages and concrete work.
- Anchorages under static and quasi-static actions can be designed in accordance with EOTA TR 054, Edition April 2016.
- Verifiable calculation notes and drawings are prepared taking into account of the load to be anchored. The position of the anchor is indicated on the design drawings.

**Installation:**

- Anchor installation carried out by appropriately qualified personnel and under the supervision of the person responsible for technical matters on the site.
- Anchor installation in accordance with the manufacturer’s specifications and drawings using the appropriate tools.
- Installation in joints is not allowed.
- Verify before installing the anchor to ensure that the strength class of the base material in which the anchor is to be placed is in the range given and is not lower than that of the base material to which the characteristic loads apply for.
- Anchor installation ensuring the specified nominal embedment depth  $h_{nom}$ .
- Keeping of the edge distance and spacing to the specified values without minus tolerances.

<b>Lightweight concrete screw HL</b>	<b>Annex B1</b> of European Technical Assessment ETA-20/0335
<b>Intended use</b> Specifications	

**Table B1:** Installation data

Lightweight concrete screw HL			Anchor size and type	
			HL-C 8	HL-W 10
Nominal embedment depth	$h_{nom}$	[mm]	100	160
Effective anchorage depth	$h_{ef}$	[mm]	86	150
Thickness of the fixture	$t_{fix}$	[mm]	40-300	5-240
Screw recess	/	/	TX30	TX40

**Table B2:** Minimum thickness of member, spacing and edge distance in AAC

Lightweight concrete screw HL			Anchor size and type	
			HL-C 8	HL-W 10
Minimum thickness of member	$h_{min}$	[mm]	150	200
<b>Single anchor and anchor group</b>				
Minimum spacing	$s_{min}$	[mm]	80	100
Characteristic spacing	$s_{cr}$	[mm]	3 $h_{ef}$	
Minimum edge distance	$c_{min}$	[mm]	80	100

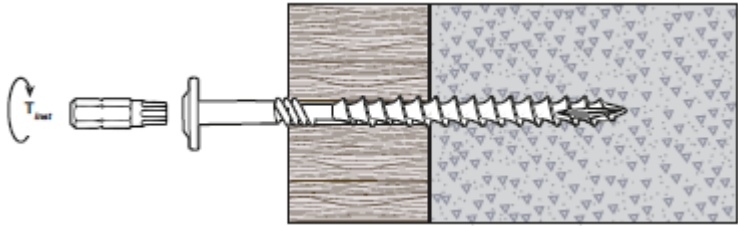
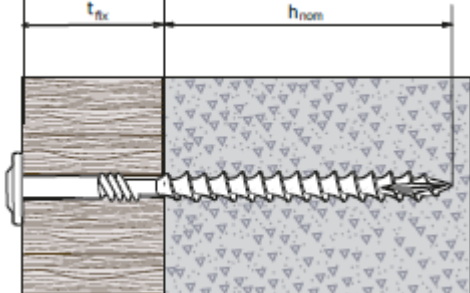
**Table B3:** Minimum thickness of member, spacing and edge distance in LAC

Lightweight concrete screw HL			Anchor size and type	
			HL-W 10	
Minimum thickness of member	$h_{min}$	[mm]	190	
<b>Single anchor and anchor group</b>				
Minimum spacing	$s_{min}$	[mm]	100	
Characteristic spacing	$s_{cr}$	[mm]	3 $h_{ef}$	
Minimum edge distance	$c_{min}$	[mm]	100	

Lightweight concrete screw HL

Intended use  
Installation dataAnnex B2  
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**Installation instructions**




<p>1.</p>		<p>The lightweight concrete screw HL should be installed directly into the base material without pre-drilling. If the fixture material is made of timber it should not be pre-drilled either.</p> <p>Anchor should be installed in the base material with a rotary screwdriver power tool without impact setting.</p>
<p>2.</p>		<p>The installation is complete once the screw head is flush with the fixture surface.</p> <p>Note! If the screw is over-torqued at this point it risks damaging the base material in such a way that the load capacity of the anchor is lost. Use a low speed gear to minimize the risk of over-tightening the anchor.</p>

**Lightweight concrete screw HL**

**Intended use**  
Installation instructions

**Annex B3**  
of European  
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**Table C1:** Base materials

Base material	Picture	Dimensions L×W×H [mm]	Minimum compressive strength $f_b$ [MPa]	Bulk density class [kg/m <sup>3</sup> ]
Autoclaved aerated concrete AAC 2,5 acc. to EN 771-4		150×200×600	2,5	375 ± 25
		200×200×600		
Autoclaved aerated concrete AAC 4 acc. to EN 771-4		150×200×600	4,0	575 ± 25
		200×200×600		
Lightweight aggregate concrete LAC 5 acc.to EN 771-3		190×190×590	5,0	850 ± 85


**Table C2:** Characteristic bending resistance

Lightweight concrete screw HL			Anchor size and type	
			HL-C 8	HL-W 10
Characteristic bending resistance	$M_{Rk,s}$	[Nm]	25	40
Partial safety factor	$\gamma_{Ms}^{1)}$		1,5	1,5

<sup>1)</sup> In absence of other national regulations

<b>Lightweight concrete screw HL</b>	<b>Annex C1</b> of European Technical Assessment ETA-20/0335
<b>Performance</b> Base material, characteristic bending resistance of the screw	

**Base material type: Autoclaved aerated concrete AAC 2,5****Table C3:** Description of the brick

Brick Type	Autoclaved aerated concrete AAC 2,5		
Bulk density	$\rho$ [kg/m <sup>3</sup> ]	375	
Compressive strength	$f_b \geq$ [N/mm <sup>2</sup> ]	2,5	
Code	EN 771-4		
Producer	e.g. Ytong Xella		
Brick dimensions	[mm]	150 × 200 × 600 200 × 200 × 600	

**Table C4:** Installation parameters

Lightweight concrete screw HL			HL-C 8	HL-W 10
Embedment depth	$h_{nom}$	[mm]	100	160
Effective anchorage depth	$h_{ef}$	[mm]	86	150
Minimum edge distance	$c_{min}$	[mm]	80	100
Characteristic spacing	$s_{cr}$	[mm]	3 $h_{ef}$	
Minimum spacing	$s_{min}$	[mm]	80	100
Installation method			without impact	

**Table C5:** Characteristic resistance in tension of single anchor -  $N_{Rk}$ 

Lightweight concrete screw HL			HL-C 8	HL-W 10
Embedment depth	$h_{nom}$	[mm]	100	160
Autoclaved aerated concrete AAC 2,5	$N_{Rk}$	[kN]	0,9	2,0
Partial safety factor	$\gamma_M$	[-]	2,0 <sup>1)</sup>	

<sup>1)</sup> In absence of other national regulations**Table C6:** Characteristic resistance in shear of single anchor -  $V_{Rk}$ 

Lightweight concrete screw HL			HL-C 8	HL-W 10
Embedment depth	$h_{nom}$	[mm]	100	160
Autoclaved aerated concrete AAC 2,5	$V_{Rk}$	[kN]	1,5	3,0
Partial safety factor	$\gamma_M$	[-]	2,0 <sup>1)</sup>	

<sup>1)</sup> In absence of other national regulations**Lightweight concrete screw HL**

**Performance Autoclaved aerated concrete AAC 2,5**  
Description of a brick, installation parameters, characteristic resistances

**Annex C2**  
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**Base material type: Autoclaved aerated concrete AAC 2,5****Table C7:** Characteristic resistance in tension of group with two anchors -  $N_{Rk}^g$ 

Configuration		with $c \geq$ [mm]	with $s \geq$ [mm]	Lightweight concrete screw HL			
				HL-C 8		HL-W 10	
				$\alpha_{g,N}$ [°]	$N_{Rk}^g$ [kN]	$\alpha_{g,N}$ [°]	$N_{Rk}^g$ [kN]
II: anchors placed parallel to horizontal joint		$c_{min}$	$s_{min}$	2,0	1,8	1,75	3,5
⊥: anchors placed perpendicular to horizontal joint							

**Table C8:** Characteristic resistance in shear of group with two anchors -  $V_{Rk}^g$ 

Configuration		with $c \geq$ [mm]	with $s \geq$ [mm]	Lightweight concrete screw HL			
				HL-C 8		HL-W 10	
				$\alpha_{g,V}$ [°]	$V_{Rk}^g$ [kN]	$\alpha_{g,V}$ [°]	$V_{Rk}^g$ [kN]
II: anchors placed parallel to horizontal joint		$c_{min}$	$s_{min}$	2,0	3,0	2,0	6,0
⊥: anchors placed perpendicular to horizontal joint							

**Table C9:** Displacements


Lightweight concrete screw HL	$h_{nom}$ [mm]	Tension load			Shear load		
		N [kN]	$\delta_{N0}$ [mm]	$\delta_{N\infty}$ [mm]	V [kN]	$\delta_{V0}$ [mm]	$\delta_{V\infty}$ [mm]
HL-C 8	100	0,32	0,002	0,159	0,54	1,787	1,681
HL-W 10	160	0,71	0,018	0,159	1,07	2,543	3,815

Lightweight concrete screw HL

Performance Autoclaved aerated concrete AAC 2,5  
Characteristic resistances, displacements

Annex C3  
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**Base material type: Autoclaved aerated concrete AAC 4****Table C10:** Description of the brick

Brick Type	Autoclaved aerated concrete AAC 4		
Bulk density	$\rho$ [kg/m <sup>3</sup> ]	575	
Compressive strength	$f_b \geq$ [N/mm <sup>2</sup> ]	4	
Code	EN 771-4		
Producer	e.g. Ytong Xella		
Brick dimensions	[mm]	150 × 200 × 600 200 × 200 × 600	

**Table C11:** Installation parameters

Lightweight concrete screw HL			HL-C 8	HL-W 10
Embedment depth	$h_{nom}$	[mm]	100	160
Effective anchorage depth	$h_{ef}$	[mm]	86	150
Minimum edge distance	$c_{min}$	[mm]	80	100
Characteristic spacing	$s_{cr}$	[mm]	3 $h_{ef}$	
Minimum spacing	$s_{min}$	[mm]	80	100
Installation method			without impact	

**Table C12:** Characteristic resistance in tension of single anchor –  $N_{Rk}$ 

Lightweight concrete screw HL			HL-C 8	HL-W 10
Embedment depth	$h_{nom}$	[mm]	100	160
Autoclaved aerated concrete AAC 4	$N_{Rk}$	[kN]	2,0	3,0
Partial safety factor	$\gamma_M$	[-]	2,0 <sup>1)</sup>	

<sup>1)</sup> In absence of other national regulations

**Table C13:** Characteristic resistance in shear of single anchor –  $V_{Rk}$ 

Lightweight concrete screw HL			HL-C 8	HL-W 10
Embedment depth	$h_{nom}$	[mm]	100	160
Autoclaved aerated concrete AAC 4	$V_{Rk}$	[kN]	2,0	3,5
Partial safety factor	$\gamma_M$	[-]	2,0 <sup>1)</sup>	

<sup>1)</sup> In absence of other national regulations

**Lightweight concrete screw HL**

**Performance Autoclaved aerated concrete AAC 4**  
Description of a brick, installation parameters, characteristic resistances

**Annex C4**  
of European  
Technical Assessment  
ETA-20/0335

**Base material type: Autoclaved aerated concrete AAC 4**

**Table C14:** Characteristic resistance in tension of group with two anchors –  $N_{Rk}^g$

Configuration		with $c \geq$ [mm]	with $s \geq$ [mm]	Lightweight concrete screw HL			
				HL-C 8		HL-W 10	
				$\alpha_{g,N}$ [/]	$N_{Rk}^g$ [kN]	$\alpha_{g,N}$ [/]	$N_{Rk}^g$ [kN]
II: anchors placed parallel to horizontal joint		$c_{min}$	$s_{min}$	2,0	4,0	1,75	5,25
⊥: anchors placed perpendicular to horizontal joint							

**Table C15:** Characteristic resistance in shear of group with two anchors –  $V_{Rk}^g$

Configuration		with $c \geq$ [mm]	with $s \geq$ [mm]	Lightweight concrete screw HL			
				HL-C 8		HL-W 10	
				$\alpha_{g,V}$ [/]	$V_{Rk}^g$ [kN]	$\alpha_{g,V}$ [/]	$V_{Rk}^g$ [kN]
II: anchors placed parallel to horizontal joint		$c_{min}$	$s_{min}$	2,0	4,0	2,0	7,0
⊥: anchors placed perpendicular to horizontal joint							

**Table C16:** Displacements


Lightweight concrete screw HL	$h_{nom}$ [mm]	Tension load			Shear load		
		N [kN]	$\delta_{N0}$ [mm]	$\delta_{N\infty}$ [mm]	V [kN]	$\delta_{V0}$ [mm]	$\delta_{V\infty}$ [mm]
	HL-C 8	100	0,71	0,259	0,259	0,71	0,820
HL-W 10	160	1,07	0,128	0,159	1,25	2,403	3,605

**Lightweight concrete screw HL**

**Performance Autoclaved aerated concrete AAC 4**  
Characteristic resistances, displacements

**Annex C5**  
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**Base material type: Lightweight aggregate concrete LAC 5****Table C17:** Description of the brick

Brick Type	Lightweight aggregate concrete LAC 5		
Bulk density	$\rho$ [kg/m <sup>3</sup> ]	850	
Compressive strength	$f_b \geq$ [N/mm <sup>2</sup> ]	5	
Code	EN 771-3		
Producer	e.g. Finja		
Brick dimensions	[mm]	190 × 190 × 590	

**Table C18:** Installation parameters

Lightweight concrete screw HL			HL-W 10
Embedment depth	$h_{nom}$	[mm]	160
Effective anchorage depth	$h_{ef}$	[mm]	150
Minimum edge distance	$c_{min}$	[mm]	100
Characteristic spacing	$s_{cr}$	[mm]	3 $h_{ef}$
Minimum spacing	$s_{min}$	[mm]	100
Installation method			without impact

**Table C19:** Characteristic resistance in tension of single anchor -  $N_{Rk}$ 

Lightweight concrete screw HL			HL-W 10
Embedment depth	$h_{nom}$	[mm]	160
Lightweight aggregate concrete LAC 5	$N_{Rk}$	[kN]	5,0
Partial safety factor	$\gamma_M$	[-]	2,5 <sup>1)</sup>

<sup>1)</sup> In absence of other national regulations

**Table C20:** Characteristic resistance in shear of single anchor -  $V_{Rk}$ 

Lightweight concrete screw HL			HL-W 10
Embedment depth	$h_{nom}$	[mm]	160
Lightweight aggregate concrete LAC 5	$V_{Rk}$	[kN]	4,5
Partial safety factor	$\gamma_M$	[-]	2,5 <sup>1)</sup>

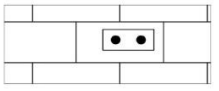
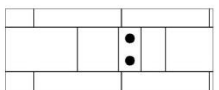
<sup>1)</sup> In absence of other national regulations

**Lightweight concrete screw HL**

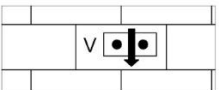
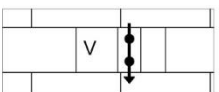
**Performance Autoclaved aerated concrete LAC 5**  
Description of a brick, installation parameters, characteristic resistances

**Annex C6**  
of European  
Technical Assessment  
ETA-20/0335

**Base material type: Lightweight aggregate concrete LAC 5****Table C21:** Characteristic resistance in tension of group with two anchors -  $N_{Rk}^g$ 

Configuration		with $c \geq$ [mm]	with $s \geq$ [mm]	Lightweight concrete screw HL	
				HL-W 10	
				$\alpha_{g,N}$ [°]	$N_{Rk}^g$ [kN]
II: anchors placed parallel to horizontal joint		$c_{min}$	$s_{min}$	1,6	8,0
⊥: anchors placed perpendicular to horizontal joint					

**Table C22:** Characteristic resistance in shear of group with two anchors -  $V_{Rk}^g$ 

Configuration		with $c \geq$ [mm]	with $s \geq$ [mm]	Lightweight concrete screw HL	
				HL-W 10	
				$\alpha_{g,V}$ [°]	$V_{Rk}^g$ [kN]
II: anchors placed parallel to horizontal joint		$c_{min}$	$s_{min}$	1,95	8,78
⊥: anchors placed perpendicular to horizontal joint					

**Table C23:** Displacements

Lightweight concrete screw HL	$h_{nom}$ [mm]	Tension load			Shear load		
		N [kN]	$\delta_{N0}$ [mm]	$\delta_{N\infty}$ [mm]	V [kN]	$\delta_{V0}$ [mm]	$\delta_{V\infty}$ [mm]
HL-W 10	160	1,43	0,325	0,325	1,28	2,268	3,402

Lightweight concrete screw HL

Performance Autoclaved aerated concrete LAC 5  
Characteristic resistances, displacementsAnnex C7  
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