



INSTYTUT TECHNIKI BUDOWLANEJ
PL 00-611 WARSZAWA
ul. Filtrowa 1
tel.: (+48 22) 825-04-71
(+48 22) 579-62-94
eta@itb.pl
www.itb.pl



Member of



www.eota.eu

European Technical Assessment

**ETA-23/0192
of 27/03/2023**

General Part

Technical Assessment Body issuing the European Technical Assessment

Instytut Techniki Budowlanej

Trade name of the construction product

CHEVILLE A FRAPPER FIXH

Product family to which the construction product belongs

Nailed-in plastic anchors for fixing of external thermal insulation composite systems with rendering and prefabricated units for external wall insulation in concrete and masonry

Manufacturer

SOGEDESCA
10 Rue General Plessier
69002 Lyon
France

Manufacturing plant

Plant A

This European Technical Assessment contains

11 pages including 3 Annexes which form an integral part of this Assessment

This European Technical Assessment is issued in accordance with regulation (EU) No 305/2011, on the basis of

European Assessment Document EAD 330196-01-0604 "Plastic anchors made of virgin or non-virgin material for fixing of external thermal insulation composite systems with rendering"

This European Technical Assessment is issued by the Technical Assessment Body in its official language. Translations of this European Technical Assessment in other languages shall fully correspond to the original issued document and shall be identified as such.

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

Specific Part

1 Technical description of the product

The CHEVILLE A FRAPPER FIXH nailed-in plastic anchors consists of a plastic expansion sleeve with a collar and a steel nail as an expansion pin. The anchor sleeve is made of polyamide PA 6 (virgin material). The nail is made of galvanized steel.

The collar is made in three versions (countersunk, flat and rounded).

The plastic anchor sleeve is expanded by hammering in a nail, which press the sleeve against the wall of the drilled hole.

The illustration and the description of the product are given in Annex A.

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

The performances given in clause 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 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 Technical 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 Performance of the product

3.1.1 Safety and accessibility in use (BWR 4)

Essential characteristic	Performance
Characteristic resistance	Annex C1
Displacements	Annex C1
Edge distances and spacings	Annex B2

3.1.2 Energy economy and heat retention (BWR 6)

No performance assessed.

3.2 Methods used for the assessment

The assessment has been made in accordance with EAD 330196-01-0604.

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

According to the Decision 97/463/EC of the European Commission the system 2+ of assessment and verification of constancy of performance (see Annex V to regulation (EU) No 305/2011) applies.

5 Technical details necessary for the implementation of the AVCP system, as provided in the applicable European Assessment Document (EAD)

Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited in Instytut Techniki Budowlanej.

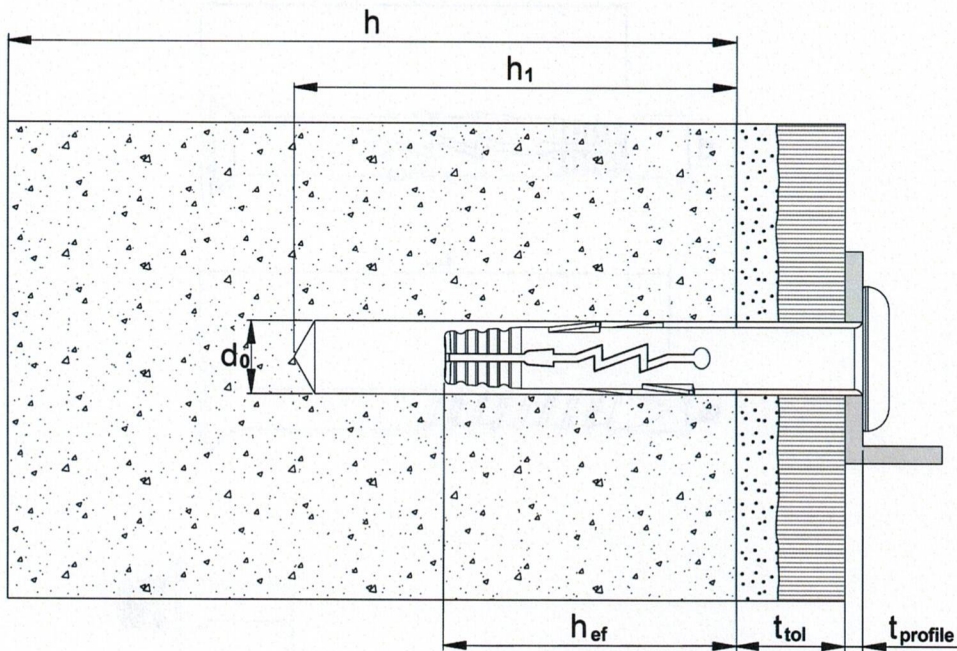
For the type testing the results of the tests performed as part of the assessment for the European Technical Assessment shall be used unless there are changes in the production line

or plant. In such cases the necessary type testing has to be agreed between Instytut Techniki Budowlanej and the notified body.

Issued in Warsaw on 27/03/2023 by Instytut Techniki Budowlanej



Anna Panek, MSc
Deputy Director of ITB



Intended Use

Multiple fixing of profiles for external thermal insulation composite systems (ETICS) according to EAD 0400836-00-0404 or prefabricated units for external wall insulation (Veture Kits) according to EAD 040914-00-0404, in concrete and masonry

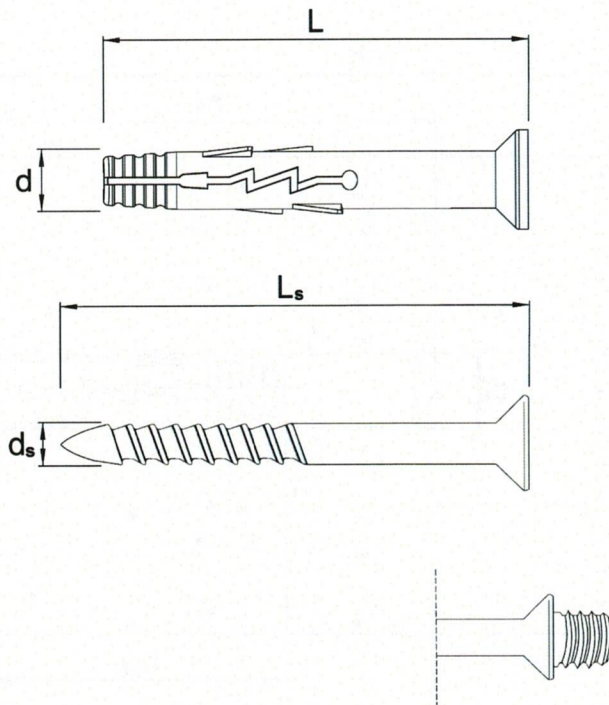
Legend

- h_{ef} = effective anchorage depth
- h_1 = depth of drill hole in base material
- h = thickness of base material
- t_{tol} = thickness of equalizing and/or non-load-bearing layer
- $t_{profile}$ = thickness of profile
- t_{fix} = thickness of fixture ($t_{tol} + t_{profile}$)

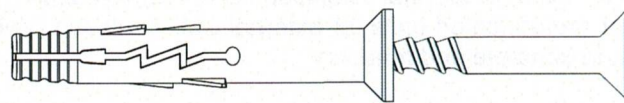
CHEVILLE A FRAPPER FIXH

Product description
Installation conditions

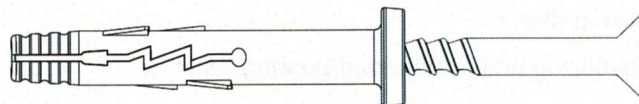
Annex A1
of European
Technical Assessment
ETA-23/0192



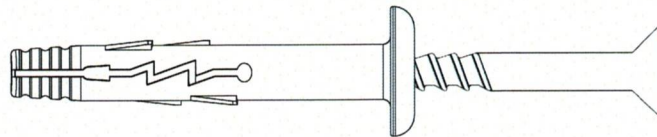
CHEVILLE A FRAPPER FIXH expansion pin



Sleeve with countersunk collar



Sleeve with flat collar



Sleeve with rounded collar

CHEVILLE A FRAPPER FIXH

Product description
Types of expansion pins and expansion sleeves

Annex A2
of European
Technical Assessment
ETA-23/0192

Table A3: Dimensions

Anchor index			Anchor sleeve		Expansion nail		t _{fix}
countersunk	flat	rounded	L	d	L _s	d _s	-
			mm	mm	mm	mm	mm
TJ5-27SV	TJ5-27V	TJ5-27B	27	5	32	3,5	2
TJ5-37SV	TJ5-37V	TJ5-37B	37	5	42	3,5	12
TJ5-47SV	TJ5-47V	TJ5-47B	47	5	52	3,5	22
TJ6-32SV	TJ6-32V	TJ6-32B	32	6	37	3,8	5
TJ6-40SV	TJ6-40V	TJ6-40B	40	6	45	3,8	13
TJ6-55SV	TJ6-55V	TJ6-55B	55	6	60	3,8	28
TJ6-67SV	TJ6-67V	TJ6-67B	67	6	72	3,8	40
TJ6-80SV	TJ6-80V	TJ6-80B	80	6	85	3,8	53
TJ8-45SV	TJ8-45V	TJ8-45B	45	8	50	4,8	10
TJ8-60SV	TJ8-60V	TJ8-60B	60	8	65	4,8	25
TJ8-75SV	TJ8-75V	TJ8-75B	75	8	80	4,8	40
TJ8-100SV	TJ8-100V	TJ8-100B	100	8	105	4,8	65
TJ8-120SV	TJ8-120V	TJ8-120B	120	8	125	4,8	85
TJ8-135SV	TJ8-135V	TJ8-135b	135	8	140	4,8	100

Marking on the sleeve: "TJDX"

where:

"D" – represents diameter of the sleeve

"X" – represents length of the sleeve

For example: TJ845

CHEVILLE A FRAPPER FIXH

Product description
Dimensions and marking

Annex A3
of European
Technical Assessment
ETA-23/0192

Table A4: Materials

Designation	Material
Anchor sleeve	Polyamide (PA 6), grey, virgin material
Expansion pin made of steel	Carbon steel ($f_{y,k} \geq 190$ MPa, $f_{u,k} \geq 320$ MPa) galvanized ≥ 5 μm according to EN ISO 4042 or Stainless steel 1.4307 (AISI 304) acc. to EN 10088 ($f_{y,k} \geq 210$ MPa, $f_{u,k} \geq 500$ MPa)

CHEVILLE A FRAPPER FIXH

Product description
Materials

Annex A4
of European
Technical Assessment
ETA-23/0192

Specification of intended use

Anchorage subject to:

- Wind suction loads.
 Note: The anchor shall not be used for the transmission of dead loads of the external thermal insulation composite system (ETICS) or prefabricated units for external wall insulation (Veture Kits).

Base materials:

- Normal weight concrete (base material group A), according to Annex C1.
- Solid masonry (base material group B), according to Annex C1.
- For other base materials of the use categories A and B, 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).

Design:

- The anchorages are designed under the responsibility of an engineer experienced in anchorages and masonry work with the partial safety factors $\gamma_M = 2,0$ and $\gamma_F = 1,5$, if there are no other national regulations.
- Verifiable calculation notes and drawings with anchor positions are prepared taking into account of the loads to be anchored.
- Fasteners are only to be used for multiple fixings of profiles for external thermal insulation composite system (ETICS) according to EAD 040083-00-0404 or prefabricated units for external wall insulation (Veture Kits) according to EAD 040914-00-0404.

Installation:

- Drill method according to Annex C1.
- Anchor installation shall be carried out by appropriately qualified personnel and under the supervision of the person responsible for technical matters of the site.
- Installation shall be executed in temperature from 0°C to +40°C.
- Exposure to UV due to solar radiation of the anchor not protected by rendering by the mortar shall not exceed 6 weeks.

CHEVILLE A FRAPPER FIXH	Annex B1 of European Technical Assessment ETA-23/0192
Intended use Specifications	

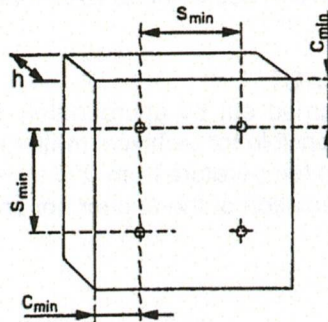
Table B1: Installation characteristics

Anchor type		Ø5	Ø6	Ø8
Nominal diameter	d_{nom} [mm]	5,0	6,0	8,0
Nominal diameter of drill bit	d_o [mm]	5,0	6,0	8,0
Cutting diameter of drill bit	d_{cut} [mm]	$\leq 5,40$	$\leq 6,40$	$\leq 8,45$
Depth of drill hole	h_1 [mm]	≥ 35	≥ 37	≥ 45
Effective anchorage depth	h_{ef} [mm]	25	27	35

Table B2: Minimum thickness of base material, edge distance and anchor spacing

Anchor type		CHEVILLE A FRAPPER FIXH
Minimum thickness of base material	h_{min} [mm]	100
Minimum spacing	s_{min} [mm]	100
Minimum edge distance	c_{min} [mm]	100

Diagram of spacing





CHEVILLE A FRAPPER FIXH

Intended use
Installation characteristics, minimum thickness of base material, edge distance and spacing

Annex B2
of European
Technical Assessment
ETA-23/0192

Table C1: Characteristic resistance to tension loads N_{Rk} in concrete and masonry for single anchor

Base material	Reference standard	Bulk density [kg/dm ³]	Compressive strength [N/mm ²]	Drilling method	N_{Rk} [kN]		
					Ø5	Ø6	Ø8
Concrete C12/15	EN 206-1	–	–	hammer drilling	0,45	0,80	0,85
Concrete C16/20 to C50/60	EN 206-1	–	–		0,65	1,1	1,2
Solid clay brick 	EN 771-1	≥ 2,0	≥ 20,0	hammer drilling	0,50	1,3	1,4
Solid calcium silicate brick (e.g. KS NF 20-2.0) 	EN 771-2	≥ 2,0	≥ 20,0	hammer drilling	0,65	1,2	1,1
Partial safety factor $\gamma_M^{1)}$							2,0

¹⁾ in absence of national regulations

Table C2: Displacements behavior

Base material	$\frac{N_{Rk}}{3}$ [kN]			δ (for $\frac{N_{Rk}}{3}$) [mm]		
	Ø5	Ø6	Ø8	Ø5	Ø6	Ø8
Concrete C12/15	0,15	0,27	0,28	0,27	0,34	0,41
Concrete C16/20 to C50/60	0,22	0,37	0,40	0,29	0,43	0,52
Solid clay brick	0,17	0,43	0,47	0,35	0,56	0,62
Solid calcium silicate brick	0,15	0,27	0,28	0,31	0,41	0,55

CHEVILLE A FRAPPER FIXH

Performances
Characteristic resistance and displacements

Annex C1
of European
Technical Assessment
ETA-23/0192

