

DRILLNOX 6 TH8 – STAINLESS STEEL A4 – Ø 5.5 x L



PRODUCT DEFINITION

- Self-drilling screw Ø 5.5 mm bi-metal.
- Hexagonal head of 8 mm.
- Ø 10.5 mm flange.
- A4 stainless steel.
- Natural or painted head.
- 1.81 mm pitch.
- Drill point.
- Can be mounted with a VULCA washer.

APPLICATION

- Roofing: Fixing of steel sheet on the bottom on a metal frame (with VULCA stainless steel Ø19 washer).
- Hot aluminium Roofing with standing seam: Fixing of the edge legs (fixed point) with a parallel or cross grid on a metal frame.
- Single-skin cladding: Fixing of steel and aluminium sheets on a metal frame.
- Very aggressive environment (off the seafront).
- Drilling capacity (CP): 2 to 6 mm of steel.

MATERIAL & COATING

Material:

- Screw body: Austenitic stainless steel A4 – 1.4404 - AISI 316L.
- Drill point and first threads: Treated carbon steel.
- VULCA washer: A2 (VI) stainless steel + EPDM (Ethylene Propylene Diene Monomer).

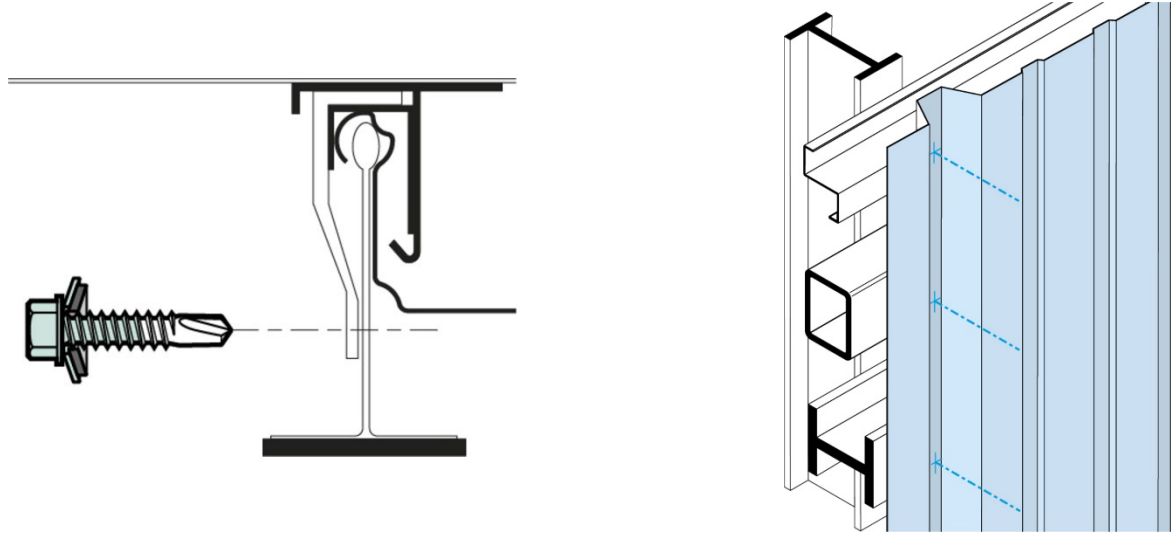
Painting:

- Epoxy, polyester or polyurethane paint (wide range of colours available).
- Painting thickness according to TDS No. 4453.
- The colour coating only gives an aesthetic character. It does not prejudice nominal mechanical strengths. In the event of degradation of the coating, this product retains its performance and does not deviate from the main function for which it is intended.

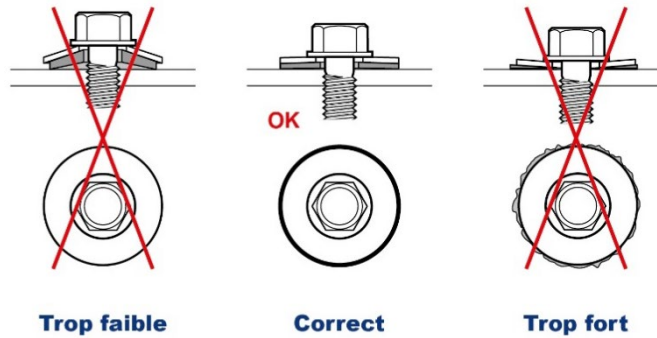
Corrosion resistance:

- Screw Body:
 - By Kesternich test according to NF EN ISO 22479: Resist to 30 cycles without the appearance of red rust.
 - By salt spray test according to NF EN ISO 9227: No trace of red rust after 1000 hours.
- Drill point and 1st threads with surface coating:
 - By salt spray test according to NF EN ISO 9227: No trace of red rust after 200 hours.

INSTALLATION



- The assembly is carried out using a FEIN ASCM 18-4 QM AS screwdriver with torque limiter and depth gauge with an 8 mm hexagonal socket.



Unauthorized machines:

- Nutrunners, impact wrenches, impact screwdrivers are not suitable for assembly work and are strictly forbidden to use.

Recommended tools:

- FEIN ASCM 18-4 QM AS battery-powered screwdriver set + 2 batteries and 1 charger (code: 321 688).
- Depth stop for FEIN ASCM 18-4 QM AS (code: 321 686).
- 8 mm Lg 65 mm hexagonal socket (code: 323 500).

Related Products:

- DRILLNOX 3T INOX A2 TH8 Ø4,8xL (Refer to TDS no. 4001).
- DRILLNOX 3 INOX A4 TH8 Ø6,3xL (Refer to TDS no. 4005).
- DRILLNOX 3,5 INOX A4 TH8 Ø5,5xL (Refer to TDS no. 4006).
- DRILLNOX 6 INOX A2 TH8 Ø5,5xL (Refer to TDS no. 4584).
- DRILLNOX 12 INOX A4 TH8 Ø5,5xL (Refer to TDS no. 4011).
- DRILLNOX SPIRAL 18 INOX A4 TH8 Ø5,5xL (Refer to TDS no. 4167).

PERFORMANCE

Mechanical properties of the EPDM of the VULCA washer:

- **Hardness:** 58 ± 5 SHORE A.

Drilling time:

- **Materials tested:** S355 JR structural steel.
- **Tools used:** FEIN ASCM 18-4 QM AS screwdriver with torque limiter and depth gauge.

Drilling test	Unit	Ø 5.5
Drilling Time	dry/mm	< 2
Rotational speed	RPM	2000 ¹
Axial load	dan	20

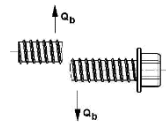
¹ Actual under load: 1800 rpm

Characteristic resistances:

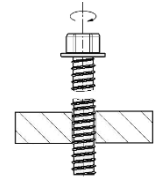
- Tensile Strength: $\bar{x} = 784 \text{ daN}$



- Characteristic shear strength - 0.6 x Rm: $\bar{x} = 470 \text{ daN}$



- Characteristic torsional strength: $\bar{x} = 7.5 \text{ Nm}$

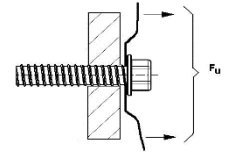


- Pull-out resistance (Pk) according to the NF P 30-314 standard:

Top Plate Steel	Steel support sheet	Pk to daN
S320 - 0.75 mm	S320 - 2 mm	271
	S280 - 2.5 mm	377
	S235 - 3 mm	452
	S235 - 4 mm	731 ²
	S235 - 6 mm	731 ²

² Unbuttoning

The values indicated do not include safety factors

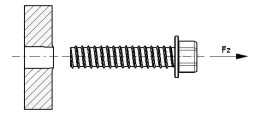


- Pull-out resistance (Pk) according to the NF P 30-310 standard:

Thickness of the support Steel	Pk to daN
S320 - 2 mm	271
S320 - 2.5 mm	377
S235 - 3 mm	452
S235 - 4 mm	788
S235 - 6 mm	1083 ³

³ Breaking the Fastener

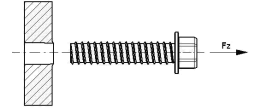
The values indicated do not include safety factors



- Pull-out resistance (Pk) according to the NF P 30-310 standard:

Thickness of the aluminium support	Pk to daN
6063 T66 - 2 mm	204
6063 T66 - 2.5 mm	328
6063 T66 - 3 mm	362
6060 T5 - 4 mm	499

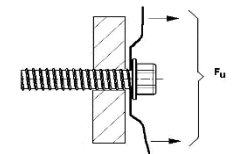
The values indicated do not include safety factors



- Pull-out strengths (NR,k) according to EAD 330046-01-0602:

Top Plate Steel	Steel support sheet	NR,k to daN
S280 to S320 - 0.75 mm	S280 to S320 - 2 mm	227
	S280 to S320 - 2.5 mm	303
	S280 to S320 - 3 mm	340
	S280 to S320 - 4 mm	340
	S280 to S320 - 5 mm	340

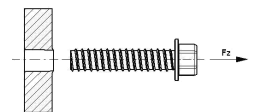
The values indicated do not include safety factors



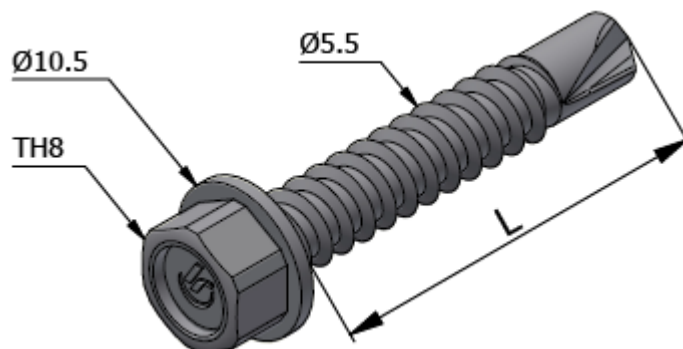
- Pull-out strengths (NR,k,II) according to EAD 330046-01-0602:

Thickness of the support Steel	NR,k,II to daN
S280 to S320 - 2 mm	227
S280 to S320 - 2.5 mm	331
S280 to S320 - 3 mm	434
S280 to S320 - 4 mm	570
S280 to S320 - 5 mm	616

The values indicated do not include safety factors



DIMENSIONS & CODES



Ø x L (mm)	CP (mm)	CS mini (mm)	CA maxi (mm)	Hex Head	VULCA washer	Cond.	Code Natural	Code Painted
5.5 x 26	2 to 6	-	8	8	-	100	372 353*	-
5.5 x 26 + VI 16	2 to 6	-	6	8	16	100	372 352	373 450
5.5 x 26 + VI 19	2 to 6	-	5	8	19	100	372 355	372 356
5.5 x 32	2 to 6	-	14	8	-	100	372 347*	372 308*
5.5 x 32 + VI 14	2 to 6	-	12	8	14	100	372 331*	372 350*
5.5 x 32 + VI 16	2 to 6	-	12	8	16	100	372 348	373 454
5.5 x 32 + VI 19	2 to 6	-	11	8	19	100	372 349	372 351

* Product not CE marked.

Ø: Nominal diameter - L: Length - CS_{mini}: Minimum clamping capacity - CA_{maxi}: Maximum assembly capacity - CP: Drilling capacity - Cond.: Packaging

CONFORMITY

- European Technical Assessment No. 10/0181 issued by the DIBT according to the European Assessment Document 330046-01-0602.
- European Technical Assessment No. 25/0616 issued by ETA-DANMARK according to European Assessment Document 330046-01-0602.
- NF DTU 40.35: Ribbed plate roofing from coated steel sheets.
- RAGE Professional Recommendations: Protected Steel and Stainless-Steel Cladding.
- The characteristic resistances are the result of tests carried out by the LR ETANCO laboratory.
- Reaction to fire: A1 according to NF EN 13501-1 (only for the screw).

MARKING & LABELLING

- On packaging, natural screw: DRILLNOX 6 TH8 A4 - Ø 5.5 x L + CODE.
- On packaging, Painted screws: DRILLNOX 6 TH8 A4 - Ø 5.5 x L + COLOUR + CODE.
- On packaging, natural screw with washer: DRILLNOX 6 TH8 A4 - Ø 5.5 x L + VI Ø + CODE.
- On packaging, Painted screw with washer: DRILLNOX 6 TH8 A4 - Ø 5.5 x L + VI Ø + COLOUR + CODE.

QUALITY CONTROL

- ISO 9001 certified quality management system according to certificate in force.

NOTE

The information contained in this document is given in good faith and for general information purposes only. They reflect the state of our knowledge at the time of writing. As the possibilities of use of our products are numerous, and may be beyond our control, we cannot be held liable in any way in the event of misuse of our products. The information provided can only be considered as a suggestion for use without taking into account existing patents or national or local legal or regulatory requirements. The buyer is required to check whether the possession or use of our products is subject to special rules on its territory, in particular in terms of public affairs, health and safety of workers and consumers. It also assumes the sole responsibility of providing information and advice to the end user. Failure to comply with these regulations, regulations and duties cannot give rise to any liability under any circumstances.