

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



### PRODUCT DEFINITION

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

### APPLICATION

- Single-skin cladding: Fixing of steel and aluminium sheets on a metal frame.
- Horizontal double-skin cladding: Fixing of the steel and aluminium sheets to the ZED or OMEGA intermediate 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).

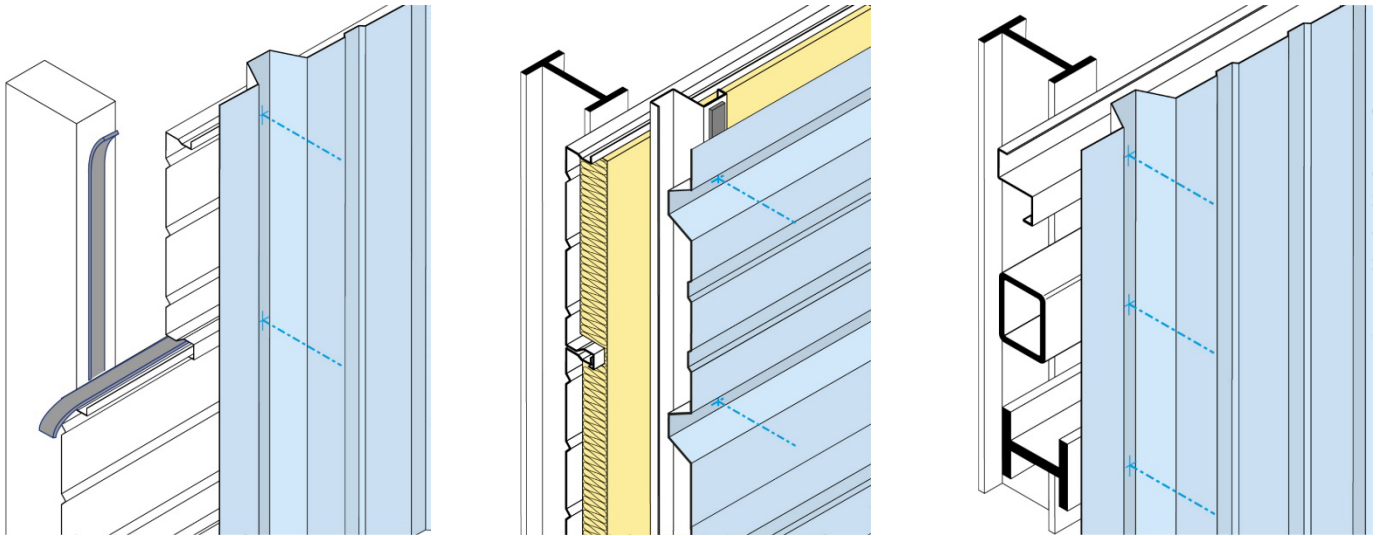
#### Painting:

- Epoxy, polyester or polyurethane paint (wide range of colours available).
- Painting thickness according to TDS n°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.

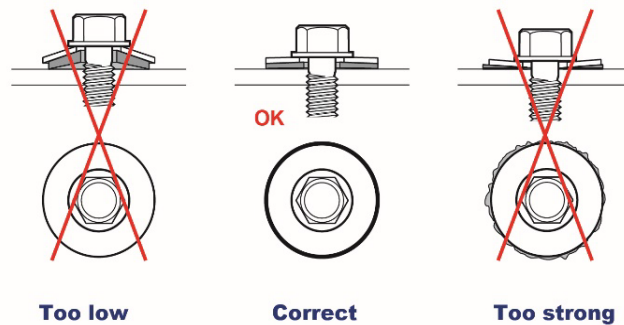
#### Corrosion resistance:

- Screw Body:
  - By Kesternich test according to NF EN ISO 22479:  
Resist more 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 pilot drill point is specially designed for fastening several thin sheets and drilling all sheets before the thread is engaged in the support.
- 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 3.5 PI TH8 A2 Ø5.5xL (refer to TDS n°4585).
- DRILLNOX 3.5 PI TH8 A4 Ø5.5xL (refer to TDS n°4007).

## 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 <sup>1</sup>
Axial load	daN	20

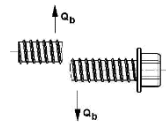
<sup>1</sup> Actual under load: 1800 rpm

Characteristic resistances:

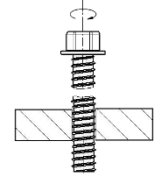
- Characteristic Tensile Strength:  $\bar{x} = 680 \text{ daN}$



- Characteristic shear strength - 0.6 x Rm:  $\bar{x} = 408 \text{ daN}$

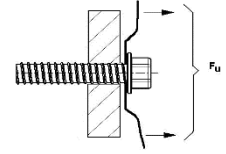


- Characteristic torsional strength:  $\bar{x} = 7.5 \text{ Nm}$



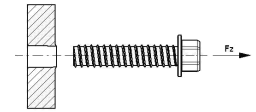
- Pull-out resistance (Pk) according to the NF P 30-314 standard:

Top Plate Steel	Steel support sheet	Pk to daN
S320 - 0.75 mm	S320 - 2 mm	271
	S320 - 2.5 mm	377
	S235 - 3 mm	452
	S235 - 4 mm	731 <sup>2</sup>
	S235 - 6 mm	731 <sup>2</sup>
<sup>2</sup> Unbuttoning The values indicated do not include safety factors		

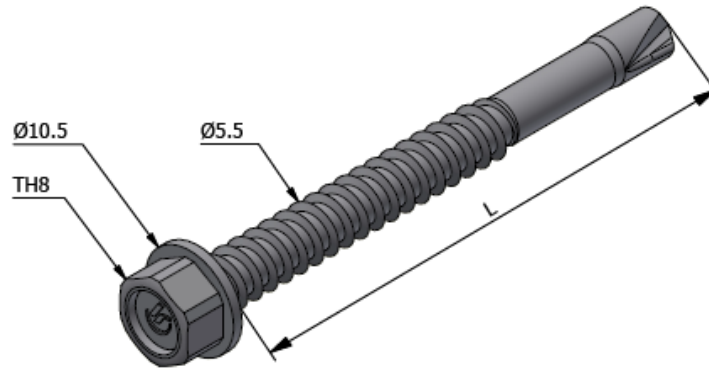


- Pull-out resistance (Pk) according to the NF P 30-310 standard:

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 <sup>3</sup>
<sup>3</sup> Breaking the Fastener 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 56	2 to 6	-	27	8	-	100	372 387	-
5.5 x 56 + VI 16	2 to 6	-	25	8	16	100	372 389	372 391

Ø : Nominal diameter – L : Length – CS<sub>mini</sub>: Minimum clamping capacity – CA<sub>maxi</sub> : Maximum assembly capacity – CP : Drilling capacity – Cond. : Packaging

## CONFORMITY

- Compliant with RAGE Professional Recommendations: Protected Steel and Stainless-Steel Cladding.
- Seafront: Conditions of direct attack by seawater, the choice of fastening material must be confirmed by LR ETANCO or be according to the selection guide of the fastener installation reference (DTU, RAGE/PACTE professional recommendations, etc.).
- The characteristic Pk 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 PI TH8 A4 – Ø 5.5 x L + CODE.
- On packaging, painted screws: DRILLNOX 6 PI TH8 A4 – Ø 5.5 x L + COLOUR + CODE.
- On packaging, natural screw with washer: DRILLNOX 6 PI TH8 A4 – Ø 5.5 x L + VI Ø + CODE.
- On packaging, painted screw with washer: DRILLNOX 6 PI TH8 A4 – Ø 5.5 x L + VI Ø + COLOUR + CODE.

## QUALITY CONTROL

- ISO 9001 certified quality management system according to current certificate.

## NOTE

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