

Manufacturer: ETANCO (FRANCE)

Parc les Erables – Bât 1 – 66 route de Sartrouville – BP 49 – 78231 LE PECQ Cedex

Tel.: +33 (0)1 34 80 52 00 – Fax: +33 (0)1 30 71 01 89

Product name:

CAPINOX STOP 2.5 PI DF 2C TH8 Ø5.5xL

Application:

Vertical or horizontal cladding Double skin Tray Attachment siding, intermediate frames Z or Omega on steel trays with interposition of rigid or semi-rigid insulation.

Description:

Double thread self-drilling screw, Ø 5,5 mm – Pitch = 1.81 mm – Tip drill.

Hexagonal head of 8 mm crimped A2 stainless steel sheet natural or painted. Collar of Ø13 mm.

Assembled with stainless steel VULCA washer Ø16 mm.

Special screw spacer to prevent compression of the insulation on the lips of trays. The shoulder knurled clamping capacity limits to 40, 60 or 80 mm depending on the model. - Ø 7.9 mm higher asymmetric at 2.54 Net: prevents deformation of the outer skin of siding and takes the compressive forces due to wind.

The pilot tip is specifically designed for the assembly of a plurality of thin metal sheets and allows the hole all plate holder before the engagement of the thread.

Drilling capacity (CP):

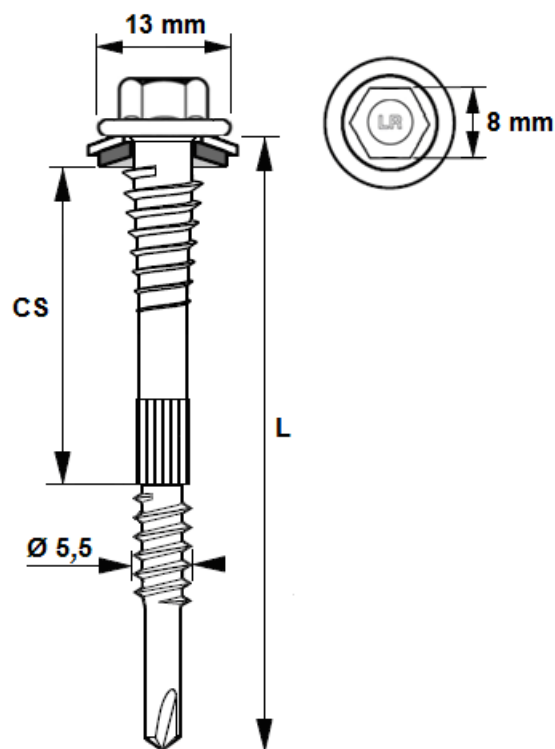
0.63 to 4x0.75 or 2.5 mm steel.

Material:

Screw body: Treated steel 20MB5 - SAE 1020 - JIS

SWRCH22A. Surface hardness HV0.5 : 550 < HV < 750

Washer: Austenitic stainless steel A2 + vulcanized EPDM, 2 mm thickness, 70 Shore A.



Material, coating and test of corrosion resistance:

- **2C:** SUPRACOAT 2C coated treated steel 12 to 20 µm (Body of screw)

Corrosion resistance level determined by Kesternich test (Sulphur dioxide corrosion with general dampness condensation) according to NF EN 3231 (2 l):

Resisted to 15 cycles before the appearance of red rust

Salt spray test according to NF ISO 9227 (March 2007):

No trace of red rust after 500 hours

- **A2:** Austenitic stainless steel A2 AISI 304 (Crimped head)

Corrosion resistance level determined by Kesternich test (Sulphur dioxide corrosion with general dampness condensation) according to NF EN 3231 (2 l):

Resisted to more than 30 cycles before the appearance of red rust

Salt spray test according to NF ISO 9227 (March 2007):

No trace of red rust after 1000 hours

Choice of reference screws used to depend on the external environment

	Outside Atmosphere								
	Unpolluted rural	Urban and industrial		navy				mixed	particular
		normal	stern	10 km to 20km	3 km to 10 km	Seaside <3 km	Sea front		
S-TET STOP FASTOP / COLORSTOP protected steel 15 cycles Kesternich	■	■	X	○	X	X	X	X	○
CAPINOX STOP Boddy: protected steel 15 cycles Kesternich – Head crimped: stainless steel A2 sheet	■	■	○	■	■	○	X	○	○
S-TET STOP BI-METAL Stainless steel austenitic A4	■	■	○	■	■	■	○	○	○

- Adapted
- X Not adapted
- Definitive choice after consultation and agreement of the manufacturer of fixation(binding)

Painting of heads and washers:

Powder painted without TGIC – without Gloss polyester Epoxy

The following tests were carried out on 1 mm zinc plated steel test panels and a nominal coating thickness of 60 µm.

Test	ISO / ASTM Requirement
Cross adhesion	ISO 2409 - class 0
Impact resistance	ASTM D 2794 - pass 20 inch/lbs
Flexibility	ISO 1519 - pass 4 mm
Cupping test	ISO 1520 - pass 6 mm
Scratch resistance	N / A
Hot salt spray resistance	ISO 9227 - pass 1000 hours
Humidity resistance	ISO 6270 - pass 1000 hours
Kesternich resistance	ISO 3231 - pass 25 cycles
Chemical resistance	Resistance to most acids, alkalis and oils at normal temperatures. May be affected by chlorinated solvents.

Drilling time Performance:

- Conditions: a) Test material : Structural steel S355 JR
b) Tools used : Drilling test with SCS Fein 6.3-19X power 400 W mini with torque limiter and depth control

Drilling test	Unit	Ø 4.8	Ø 5.5	Ø 6.3 & 6.5
Drilling time	s/mm	< 2	< 2	< 2
Speed rotate	rpm	2000 *	2000 *	2000 *
Axial load	daN	16	20	27

* Real under load: 1800 rotations/min

Drilling Capacity, diameter, length (in mm) and packaging:

Drilling capacity CP	Ø x Length	Capacity of maxi tightening CS	Hexagonal head	Packaging
4 x 0.75 ou 2.5	5.5 x 70 + VI 16	40	8	100
4 x 0.75 ou 2.5	5.5 x 90 + VI 16	60	8	100
4 x 0.75 ou 2.5	5.5 x 110 + VI 16	80	8	100

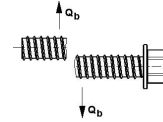
Tensile test (value in daN):

$\bar{x} = 1176 \text{ daN}$



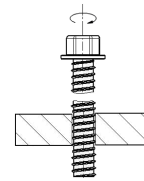
Shear test value – 0.6 x Rm (value in daN):

$\bar{x} = 705 \text{ daN}$



Breaking torque (in Nm):

$\bar{x} = 10 \text{ Nm}$



Choice of screw for insulation

Thickness of insulating material	Top depth Depth of tray	Thickness of spacer	Length of screw
110	70	40	70
130	90	40	70
130	70	60	90
140	100	40	70
150	90	60	90
160	100	60	90
150	70	80	110
170	90	80	110
180	100	80	110
190	150	40	70
210	150	60	90
230	150	80	110

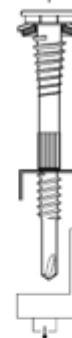
Test values of compressive strength of the abutment on the plate lips (Pk daN)

Steel thickness (mm) - Steel S320	
2 x 0.75 mm	2 x 0.88 mm
237	378
The values do not include safety factors	



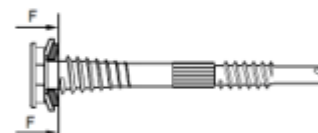
Pull out test values (Pk in daN) – According to with NF P 30-310

Steel thickness (mm) - Steel S320		
2 x 0.75 mm	2 x 0.88 mm	2 x 1 mm
480	510	536
The values do not include safety factors		



Test values of compressive strength of the thread under head (Pk daN)

Steel thickness (mm) - Steel S320		
0.63 mm	0.75 mm	1.5 mm
99	234	376
The values do not include safety factors		



Test values of resistance unbuttoning (Pk daN)

Steel thickness (mm) - Steel S320	
0.63 mm	
416	
The values do not include safety factors	



Conformity:

French professional regulations related to cladding
 Thermal Requirement Rules
 Technical Board of insulation and siding manufacturers

Recommended tools:

Screwing toll FEIN SCS 6.3 -19X power 400 W mini with torque limiter and depth control
 Screw Tip : socket S-TET- GRIPP

Marking - Labeling:

CAPINOX STOP 2.5 PI DF 2C – Ø5.5xL + VI16 + CODE

Quality control:

ISO 9001: 2015