

Manufacturer: ETANCO (FRANCE)

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Product name:

DRILLNOX WOOD TH8 A4 (316L) Ø 6.3 x L

Application:

Fastening of sheets to wood purlins.

Description:

Self-drilling bi-metal screw Ø 6.3 mm

Hex head , 6 sections of 8 mm collar

Natural finish or EPOXY powder painted stove hardened

Pitch 1.81 mm.

Can be fitted with VULCA stainless steel washer Ø14 or

16 mm.

Drilling capacity (CP):

1 to 3 x 0.75 mm into steel sheet

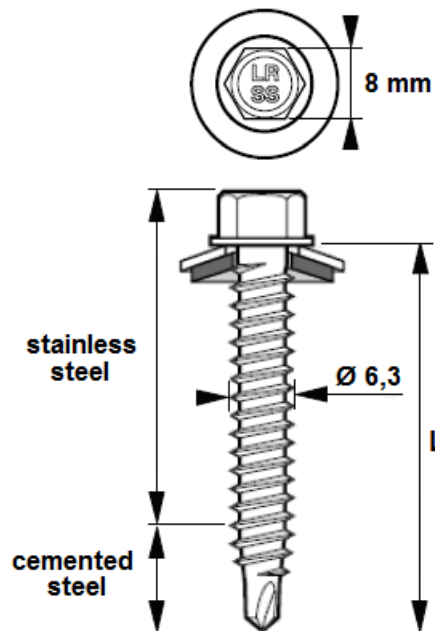
Material:

Screw body: Austenitic stainless steel A4 AISI 316L -

1.4404 - X2CrNiMo17-12-2

Drill point and first threads: Cemented steel

Washer: Stainless steel A2 + vulcanized EPDM, 2 mm thickness, 70 Shore A



Not contractual position marking

Material, coating and test of corrosion resistance:

- **A4:** Austenitic stainless steel A4 AISI 316 L

Corrosion resistance level determined by Kesternich test (sulphur dioxide corrosion with general dampness condensation) in compliance with NF EN 3231 (2 1)

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

Salt spray test in compliance with NF ISO 9227 (March 2007):

No trace of red rust after 1,000 hours.

Surface-coated steel drill tip:

Resistance to corrosion of drill tip and steel-coated first threads: 200 hours SSTR (Salt Spray Resistance Test)

Painting of heads and washers:

Powder painted without TGIC – Gloss-free 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 1,000 hours
Humidity resistance	ISO 6270 - pass 1,000 hours
Kesternich resistance	ISO 3231 - pass 25 cycles
Chemical resistance	Resistance to most acids, alkalis and oils at normal temperatures. Can be affected by chlorinated solvents.

Drilling Performance:

- Conditions: a) Test material: Structural steel S355 JR
 b) Test screwdriver: 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

* Under load: 1800 rotations/min

Drilling Capacity, diameter, length in mm and packaging:

Drilling capacity	Ø x Length	CS Build up max	Hex head TH	Packaging
1 to 3 x 0.75	6.3 x 38	4.25/wood	8	100 units
1 to 3 x 0.75	6.3 x 38 + VSS 14	2.25/wood	8	100 units
1 to 3 x 0.75	6.3 x 38 + VSS 16	2.25/wood	8	100 units
1 to 3 x 0.75	6.3 x 60	10/wood	8	100 units
1 to 3 x 0.75	6.3 x 60 + VSS 14	8/wood	8	100 units
1 to 3 x 0.75	6.3 x 60 + VSS 16	8/wood	8	100 units

Drilling capacity	Ø x Length	CS Build up max	Hex head TH	Packaging
1.25 maxi	6.3 x 38	19	8	100
1.25 maxi	6.3 x 38 + VSS 14	17	8	100
1.25 maxi	6.3 x 38 + VSS 16	17	8	100
1.25 maxi	6.3 x 60	41	8	100
1.25 maxi	6.3 x 60 + VSS 14	39	8	100
1.25 maxi	6.3 x 60 + VSS 16	39	8	100

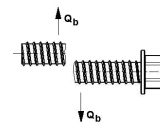
Tensile test (value in daN):

$\bar{x} = 1\ 076\ daN$



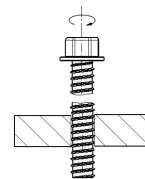
Shear test value – 0.6 x Rm (value in daN):

$\bar{x} = 645\ daN$



Breaking torque (value in Nm):

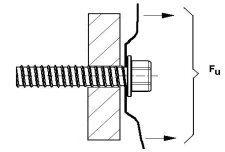
$\bar{x} = 14\ Nm$



Pull over test value (Pk in daN) of top sheet - In compliance with NF P 30-314.

Top sheet (Steel S320)	Pine wood support 450 Kg/m3	Total anchoring
Screw length	38 mm	60 mm
0.75	235 daN	486 daN
2 x 0.75	235 daN	486 daN
3 x 0.75	235 daN	486 daN

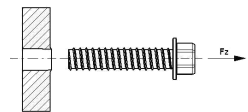
the values do not include safety coefficients



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

Pine wood support 450 Kg/m3	
Screw length: 38 mm	Screw length: 60 mm
Total anchoring	Total anchoring
235 daN	449 daN

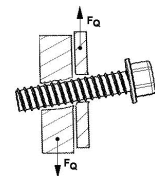
the values do not include safety coefficients



Shear load test value (Pk in daN) – In compliance with NF P 30-316

Sheet thickness (mm)		daN
Top sheet (Steel S320)	Pine wood support 450 Kg/m3	
0.75	Total anchoring	-
2 x 0.75	Total anchoring	-
3 x 0.75	Total anchoring	-

the values do not include safety coefficients



Compliance:

French professional regulations related to cladding

Recommended setting tools:

Screwing toll FEIN SCS 6.3 -19X power 400 W mini with torque limiter and depth control
Screw Tip: socket with 8 mm imprint hex head hollow

Marking - Labelling:

DRILLNOX WOOD TH8 / A4 - Ø 6,3 x L + article number
DRILLNOX WOOD TH8 / A4 - Ø 6,3 x L + VSS 14 + article number
DRILLNOX WOOD TH8 / A4 - Ø 6,3 x L + VSS 16 + article number

Quality control:

ISO 9001: 2015