

Declaration of Performance

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Solo Woodscrews



Material - Carbon Steel (C1022)

Head Type - Double Countersunk

Screw Diameter (mm) - 3.0, 3.5, 4.0, 4.5, 5.0, 6.0

We hereby declare these designated products have performed initial type testing under system 3, Annex V of the regulation (EU) no. 305/2011 (Construction Products Regulation), with the reference to the harmonised European standard (hEN) BS EN 14592:2008+A1:2012 (Timber structures - Dowel type fasteners - Requirements) for screws intended for the use in "load bearing timber structures" and produced the calculation/test reports as attached;

The initial type testing has been carried out by independent notified body;
Strojirensky Zkusebni Ustav, NB # 1015, Hudcova 424/56B, 621 00 Brno-Medlánky, Czechia

Certificate Number: CPR-J-01855-21 to CPR-J-01860-21

Test Report Number: No. 30-15701/1/JP to No. 30-150701/6/JP

Factory Process Control (FPC) has been established by the factory.

This declaration is valid until there is a significant change in the product and declared characteristics.
ie. raw material or change in production process.

This declaration is the responsibility of the importer ; T.I.Midwood & Co. Ltd.

Simon Midwood

Managing Director

TIMCO House
2022

2021

Name

Position

Signature

Location & Date

Test Year

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Solo Woodscrews

Double Countersunk Head - Ø3.0mm

Material & Geometry

Material	Carbon Steel (C1022)
Screw diameter (mm)	3.0
Head diameter (mm)	5.64
Inner thread diameter (mm)	1.96

Mechanical Strength & Stiffness

Characteristic yield moment $M_{y,k}$ at 20° [Nmm] (thread section) in acc. to EN 409	1190
Characteristic withdrawal parameter (loading across the fibre) $f_{ax,k}$ [N/mm ²] in acc. to EN 1382 with density of wood $\rho_k = 350\text{kg/m}^3$	17.36
Characteristic withdrawal parameter (loading along the fibre) $f_{ax,k}$ [N/mm ²] in acc. to EN 1382 with density of wood $\rho_k = 350\text{kg/m}^3$	13.33
Characteristic head pull-through parameter $f_{tens,k}$ [N/mm ²] in acc. to EN 1383 with density of wood $\rho_k = 350\text{kg/m}^3$	28.13
Characteristic tensile capacity $f_{tens,k}$ [kN] in acc. to EN 1383	3.28
Characteristic torsional ratio in acc. to EN 15737 with density of wood $\rho_k = 450\text{kg/m}^3$	3.399

Durability

Coating (Finish)	Zinc or Yellow coating
Corrosion protection	Service Class 1 acc. to EN 1995-1-1

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Solo Woodscrews

Double Countersunk Head - Ø3.5mm

Material & Geometry

Material	Carbon Steel (C1022)
Screw diameter (mm)	3.5
Head diameter (mm)	6.65
Inner thread diameter (mm)	2.21

Mechanical Strength & Stiffness

Characteristic yield moment $M_{y,k}$ at 18° [Nmm] (thread section) in acc. to EN 409	2520
Characteristic withdrawal parameter (loading across the fibre) $f_{ax,k}$ [N/mm ²] in acc. to EN 1382 with density of wood $\rho_k = 350\text{kg/m}^3$	16.98
Characteristic withdrawal parameter (loading along the fibre) $f_{ax,k}$ [N/mm ²] in acc. to EN 1382 with density of wood $\rho_k = 350\text{kg/m}^3$	13.08
Characteristic head pull-through parameter $f_{tens,k}$ [N/mm ²] in acc. to EN 1383 with density of wood $\rho_k = 350\text{kg/m}^3$	27.45
Characteristic tensile capacity $f_{tens,k}$ [kN] in acc. to EN 1383	4.57
Characteristic torsional ratio in acc. to EN 15737 with density of wood $\rho_k = 450\text{kg/m}^3$	3.39

Durability

Coating (Finish)	Zinc or Yellow coating
Corrosion protection	Service Class 1 acc. to EN 1995-1-1

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Solo Woodscrews

Double Countersunk Head - Ø4.0mm

Material & Geometry

Material	Carbon Steel (C1022)
Screw diameter (mm)	4.0
Head diameter (mm)	7.71
Inner thread diameter (mm)	2.42

Mechanical Strength & Stiffness

Characteristic yield moment $M_{y,k}$ at 17° [Nmm] (thread section) in acc. to EN 409	3473
Characteristic withdrawal parameter (loading across the fibre) $f_{ax,k}$ [N/mm ²] in acc. to EN 1382 with density of wood $\rho_k = 350\text{kg/m}^3$	16.44
Characteristic withdrawal parameter (loading along the fibre) $f_{ax,k}$ [N/mm ²] in acc. to EN 1382 with density of wood $\rho_k = 350\text{kg/m}^3$	13.02
Characteristic head pull-through parameter $f_{tens,k}$ [N/mm ²] in acc. to EN 1383 with density of wood $\rho_k = 350\text{kg/m}^3$	25.91
Characteristic tensile capacity $f_{tens,k}$ [kN] in acc. to EN 1383	5.74
Characteristic torsional ratio in acc. to EN 15737 with density of wood $\rho_k = 450\text{kg/m}^3$	1.94

Durability

Coating (Finish)	Zinc or Yellow coating
Corrosion protection	Service Class 1 acc. to EN 1995-1-1

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Solo Woodscrews

Double Countersunk Head - Ø4.5mm

Material & Geometry

Material	Carbon Steel (C1022)
Screw diameter (mm)	4.5
Head diameter (mm)	8.61
Inner thread diameter (mm)	2.72

Mechanical Strength & Stiffness

Characteristic yield moment $M_{y,k}$ at 15° [Nmm] (thread section) in acc. to EN 409	4704
Characteristic withdrawal parameter (loading across the fibre) $f_{ax,k}$ [N/mm ²] in acc. to EN 1382 with density of wood $\rho_k = 350\text{kg/m}^3$	16.20
Characteristic withdrawal parameter (loading along the fibre) $f_{ax,k}$ [N/mm ²] in acc. to EN 1382 with density of wood $\rho_k = 350\text{kg/m}^3$	12.57
Characteristic head pull-through parameter $f_{tens,k}$ [N/mm ²] in acc. to EN 1383 with density of wood $\rho_k = 350\text{kg/m}^3$	24.24
Characteristic tensile capacity $f_{tens,k}$ [kN] in acc. to EN 1383	6.61
Characteristic torsional ratio in acc. to EN 15737 with density of wood $\rho_k = 450\text{kg/m}^3$	1.79

Durability

Coating (Finish)	Zinc or Yellow coating
Corrosion protection	Service Class 1 acc. to EN 1995-1-1

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Solo Woodscrews

Double Countersunk Head - Ø5.0mm

Material & Geometry

Material	Carbon Steel (C1022)
Screw diameter (mm)	5.0
Head diameter (mm)	9.54
Inner thread diameter (mm)	3.01

Mechanical Strength & Stiffness

Characteristic yield moment $M_{y,k}$ at 14° [Nmm] (thread section) in acc. to EN 409	7147
Characteristic withdrawal parameter (loading across the fibre) $f_{ax,k}$ [N/mm ²] in acc. to EN 1382 with density of wood $\rho_k = 350\text{kg/m}^3$	16.31
Characteristic withdrawal parameter (loading along the fibre) $f_{ax,k}$ [N/mm ²] in acc. to EN 1382 with density of wood $\rho_k = 350\text{kg/m}^3$	12.62
Characteristic head pull-through parameter $f_{tens,k}$ [N/mm ²] in acc. to EN 1383 with density of wood $\rho_k = 350\text{kg/m}^3$	22.94
Characteristic tensile capacity $f_{tens,k}$ [kN] in acc. to EN 1383	9.33
Characteristic torsional ratio in acc. to EN 15737 with density of wood $\rho_k = 450\text{kg/m}^3$	1.79

Durability

Coating (Finish)	Zinc or Yellow coating
Corrosion protection	Service Class 1 acc. to EN 1995-1-1

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Solo Woodscrews

Double Countersunk Head - Ø6.0mm

Material & Geometry

Material	Carbon Steel (C1022)
Screw diameter (mm)	6.0
Head diameter (mm)	11.62
Inner thread diameter (mm)	3.68

Mechanical Strength & Stiffness

Characteristic yield moment (Thread) $M_{y,k}$ at 12° [Nmm] in acc. to EN 409	10053
Characteristic yield moment (Smooth) $M_{y,k}$ at 12° [Nmm] in acc. to EN 409	17501
Characteristic withdrawal parameter (loading across the fibre) $f_{ax,k}$ [N/mm ²] in acc. to EN 1382 with density of wood $\rho_k = 350\text{kg/m}^3$	15.80
Characteristic withdrawal parameter (loading along the fibre) $f_{ax,k}$ [N/mm ²] in acc. to EN 1382 with density of wood $\rho_k = 350\text{kg/m}^3$	12.63
Characteristic head pull-through parameter $f_{tens,k}$ [N/mm ²] in acc. to EN 1383 with density of wood $\rho_k = 350\text{kg/m}^3$	21.47
Characteristic tensile capacity $f_{tens,k}$ [kN] in acc. to EN 1383	12.25
Characteristic torsional ratio in acc. to EN 15737 with density of wood $\rho_k = 450\text{kg/m}^3$	1.56

Durability

Coating (Finish)	Zinc or Yellow coating
Corrosion protection	Service Class 1 acc. to EN 1995-1-1