

# Declaration of Performance

No. DOP-01-C2-01 / Page 1 of 6

## C2 Strong-Fix Premium Screws



Material - Carbon Steel (C1022)

Head Type - Double Countersunk

Screw Diameter (mm) - 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: E-30-20534-14 to E-30-20538-14

Test Report Number: No. 30-10239/1 to No. 30-10239/5

Factory Process Control (FPC) has been established by the factory and independently audited by TUV Rheinland UK in accordance with ISO9001.

This declaration of conformity 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  
2014

2014

Name

Position

Signature

Location &amp; Date

Test Year

# Declaration of Performance

## C2 Strong-Fix Premium Screw Double Countersunk Head - Ø3.5mm

### Material & Geometry

Material	Carbon Steel (C1022)
Screw diameter (mm)	3.5
Head diameter (mm)	6.60
Inner thread diameter (mm)	2.15

### Mechanical Strength & Stiffness

Characteristic yield moment $M_{y,k}$ at 18° [Nmm] (thread section) in acc. to EN 409	2468
Characteristic withdrawal parameter (loading across the fibre) $f_{ax,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1382 with density of wood $\rho_k = 400\text{kg/m}^3$	18.10
Characteristic withdrawal parameter (loading along the fibre) $f_{ax,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1382 with density of wood $\rho_k = 400\text{kg/m}^3$	14.02
Characteristic head pull-through parameter $f_{tens,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1383 with density of wood $\rho_k = 400\text{kg/m}^3$	23.31
Characteristic tensile capacity $f_{tens,k}$ [kN] in acc. to EN 1383	4.73
Characteristic torsional ratio in acc. to EN 15737 with density of wood $\rho_k = 450\text{kg/m}^3$	3.28

### Durability

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

# Declaration of Performance

## C2 Strong-Fix Premium Screw Double Countersunk Head - Ø4.0mm

### Material & Geometry

Material	Carbon Steel (C1022)
Screw diameter (mm)	4.0
Head diameter (mm)	7.70
Inner thread diameter (mm)	2.35

### Mechanical Strength & Stiffness

Characteristic yield moment $M_{y,k}$ at 17° [Nmm] (thread section) in acc. to EN 409	3401
Characteristic withdrawal parameter (loading across the fibre) $f_{ax,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1382 with density of wood $\rho_k = 400\text{kg/m}^3$	17.90
Characteristic withdrawal parameter (loading along the fibre) $f_{ax,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1382 with density of wood $\rho_k = 400\text{kg/m}^3$	13.09
Characteristic head pull-through parameter $f_{tens,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1383 with density of wood $\rho_k = 400\text{kg/m}^3$	20.28
Characteristic tensile capacity $f_{tens,k}$ [kN] in acc. to EN 1383	6.35
Characteristic torsional ratio in acc. to EN 15737 with density of wood $\rho_k = 450\text{kg/m}^3$	4.11

### Durability

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

# Declaration of Performance

## C2 Strong-Fix Premium Screw Double Countersunk Head - Ø4.5mm

### Material & Geometry

Material	Carbon Steel (C1022)
Screw diameter (mm)	4.5
Head diameter (mm)	8.70
Inner thread diameter (mm)	2.60

### Mechanical Strength & Stiffness

Characteristic yield moment $M_{y,k}$ at 15° [Nmm] (thread section) in acc. to EN 409	4212
Characteristic withdrawal parameter (loading across the fibre) $f_{ax,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1382 with density of wood $\rho_k = 400\text{kg/m}^3$	19.32
Characteristic withdrawal parameter (loading along the fibre) $f_{ax,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1382 with density of wood $\rho_k = 400\text{kg/m}^3$	13.41
Characteristic head pull-through parameter $f_{tens,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1383 with density of wood $\rho_k = 400\text{kg/m}^3$	19.82
Characteristic tensile capacity $f_{tens,k}$ [kN] in acc. to EN 1383	7.44
Characteristic torsional ratio in acc. to EN 15737 with density of wood $\rho_k = 450\text{kg/m}^3$	3.59

### Durability

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

# Declaration of Performance

## C2 Strong-Fix Premium Screw Double Countersunk Head - Ø5.0mm

### Material & Geometry

Material	Carbon Steel (C1022)
Screw diameter (mm)	5.0
Head diameter (mm)	9.70
Inner thread diameter (mm)	2.95

### Mechanical Strength & Stiffness

Characteristic yield moment $M_{y,k}$ at 14° [Nmm] (thread section) in acc. to EN 409	6220
Characteristic yield moment $M_{y,k}$ at 14° [Nmm] (smooth section) in acc. to EN 409	9715
Characteristic withdrawal parameter (loading across the fibre) $f_{ax,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1382 with density of wood $\rho_k = 400\text{kg/m}^3$	18.65
Characteristic withdrawal parameter (loading along the fibre) $f_{ax,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1382 with density of wood $\rho_k = 400\text{kg/m}^3$	13.54
Characteristic head pull-through parameter $f_{tens,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1383 with density of wood $\rho_k = 400\text{kg/m}^3$	20.63
Characteristic tensile capacity $f_{tens,k}$ [kN] in acc. to EN 1383	8.66
Characteristic torsional ratio in acc. to EN 15737 with density of wood $\rho_k = 450\text{kg/m}^3$	3.65

### Durability

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

# Declaration of Performance

## C2 Strong-Fix Premium Screw Double Countersunk Head - Ø6.0mm

### Material & Geometry

Material	Carbon Steel (C1022)
Screw diameter (mm)	6.0
Head diameter (mm)	11.65
Inner thread diameter (mm)	3.65

### Mechanical Strength & Stiffness

Characteristic yield moment $M_{y,k}$ at 12° [Nmm] (thread section) in acc. to EN 409	12394
Characteristic yield moment $M_{y,k}$ at 12° [Nmm] (smooth section) in acc. to EN 409	18693
Characteristic withdrawal parameter (loading across the fibre) $f_{ax,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1382 with density of wood $\rho_k = 400\text{kg/m}^3$	17.89
Characteristic withdrawal parameter (loading along the fibre) $f_{ax,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1382 with density of wood $\rho_k = 400\text{kg/m}^3$	14.10
Characteristic head pull-through parameter $f_{tens,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1383 with density of wood $\rho_k = 400\text{kg/m}^3$	24.13
Characteristic tensile capacity $f_{tens,k}$ [kN] in acc. to EN 1383	14.20
Characteristic torsional ratio in acc. to EN 15737 with density of wood $\rho_k = 450\text{kg/m}^3$	6.66

### Durability

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