

# Declaration of Performance

No. DOP-01-VEL-01 / Page 1 of 8

## Velocity Premium Multi-Use Screws



Material - Carbon Steel (C1022)

Head Type - Double Countersunk

Screw Diameter (mm) - 3.0, 3.5, 4.0, 4.5, 5.0, 6.0, 8.0

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: J-30-20271-12 to J-30-20277-12

Test Report Number: No. 30-9695/1 to No. 30-9695/12

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

## Velocity Premium Multi-Use Screws Double Countersunk Head - Ø3.0mm

### Material & Geometry

Material	Carbon Steel (C1022)
Screw diameter (mm)	3.0
Head diameter (mm)	5.80
Inner thread diameter (mm)	2.15

### Mechanical Strength & Stiffness

Characteristic yield moment $M_{y,k}$ at 20° [Nmm] (thread section) in acc. to EN 409	1585
Characteristic withdrawal parameter (loading across the fibre) $f_{ax,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1382 with density of wood $\rho_k = 415\text{kg/m}^3$	19.06
Characteristic withdrawal parameter (loading along the fibre) $f_{ax,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1382 with density of wood $\rho_k = 415\text{kg/m}^3$	14.29
Characteristic head pull-through parameter $f_{tens,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1383 with density of wood $\rho_k = 440\text{kg/m}^3$	24.83
Characteristic tensile capacity $f_{tens,k}$ [kN] in acc. to EN 1383	3.39
Characteristic torsional ratio in acc. to EN 15737 with density of wood $\rho_k = 450\text{kg/m}^3$	4.24

### Durability

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

# Declaration of Performance

## Velocity Premium Multi-Use Screws Double Countersunk Head - Ø3.5mm

### Material & Geometry

Material	Carbon Steel (C1022)
Screw diameter (mm)	3.5
Head diameter (mm)	6.70
Inner thread diameter (mm)	2.50

### Mechanical Strength & Stiffness

Characteristic yield moment $M_{y,k}$ at 18° [Nmm] (thread section) in acc. to EN 409	2453
Characteristic withdrawal parameter (loading across the fibre) $f_{ax,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1382 with density of wood $\rho_k = 415\text{kg/m}^3$	18.75
Characteristic withdrawal parameter (loading along the fibre) $f_{ax,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1382 with density of wood $\rho_k = 415\text{kg/m}^3$	10.63
Characteristic head pull-through parameter $f_{tens,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1383 with density of wood $\rho_k = 485\text{kg/m}^3$	22.81
Characteristic tensile capacity $f_{tens,k}$ [kN] in acc. to EN 1383	4.52
Characteristic torsional ratio in acc. to EN 15737 with density of wood $\rho_k = 450\text{kg/m}^3$	4.57

### Durability

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

# Declaration of Performance

## Velocity Premium Multi-Use Screws 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)	2.80

### Mechanical Strength & Stiffness

Characteristic yield moment $M_{y,k}$ at 17° [Nmm] (thread section) in acc. to EN 409	3316
Characteristic yield moment $M_{y,k}$ at 17° [Nmm] (smooth section) in acc. to EN 409	4197
Characteristic withdrawal parameter (loading across the fibre) $f_{ax,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1382 with density of wood $\rho_k = 415\text{kg/m}^3$	19.15
Characteristic withdrawal parameter (loading along the fibre) $f_{ax,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1382 with density of wood $\rho_k = 415\text{kg/m}^3$	12.98
Characteristic head pull-through parameter $f_{tens,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1383 with density of wood $\rho_k = 440\text{kg/m}^3$	21.00
Characteristic tensile capacity $f_{tens,k}$ [kN] in acc. to EN 1383	6.12
Characteristic torsional ratio in acc. to EN 15737 with density of wood $\rho_k = 450\text{kg/m}^3$	3.16

### Durability

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

# Declaration of Performance

## Velocity Premium Multi-Use Screws Double Countersunk Head - Ø4.5mm

### Material & Geometry

Material	Carbon Steel (C1022)
Screw diameter (mm)	4.5
Head diameter (mm)	8.50
Inner thread diameter (mm)	3.10

### Mechanical Strength & Stiffness

Characteristic yield moment $M_{y,k}$ at 15° [Nmm] (thread section) in acc. to EN 409	5123
Characteristic yield moment $M_{y,k}$ at 15° [Nmm] (smooth section) in acc. to EN 409	7119
Characteristic withdrawal parameter (loading across the fibre) $f_{ax,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1382 with density of wood $\rho_k = 415\text{kg/m}^3$	21.42
Characteristic withdrawal parameter (loading along the fibre) $f_{ax,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1382 with density of wood $\rho_k = 415\text{kg/m}^3$	13.56
Characteristic head pull-through parameter $f_{tens,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1383 with density of wood $\rho_k = 485\text{kg/m}^3$	23.81
Characteristic tensile capacity $f_{tens,k}$ [kN] in acc. to EN 1383	6.81
Characteristic torsional ratio in acc. to EN 15737 with density of wood $\rho_k = 450\text{kg/m}^3$	3.35

### Durability

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

# Declaration of Performance

## Velocity Premium Multi-Use Screws Double Countersunk Head - Ø5.0mm

### Material & Geometry

Material	Carbon Steel (C1022)
Screw diameter (mm)	5.0
Head diameter (mm)	9.50
Inner thread diameter (mm)	3.50

### Mechanical Strength & Stiffness

Characteristic yield moment $M_{y,k}$ at 14° [Nmm] (thread section) in acc. to EN 409	7005
Characteristic yield moment $M_{y,k}$ at 14° [Nmm] (smooth section) in acc. to EN 409	9705
Characteristic withdrawal parameter (loading across the fibre) $f_{ax,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1382 with density of wood $\rho_k = 425\text{kg/m}^3$	17.87
Characteristic withdrawal parameter (loading along the fibre) $f_{ax,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1382 with density of wood $\rho_k = 425\text{kg/m}^3$	12.94
Characteristic head pull-through parameter $f_{tens,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1383 with density of wood $\rho_k = 495\text{kg/m}^3$	24.31
Characteristic tensile capacity $f_{tens,k}$ [kN] in acc. to EN 1383	8.33
Characteristic torsional ratio in acc. to EN 15737 with density of wood $\rho_k = 450\text{kg/m}^3$	3.82

### Durability

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

# Declaration of Performance

## Velocity Premium Multi-Use Screws Double Countersunk Head - Ø6.0mm

### Material & Geometry

Material	Carbon Steel (C1022)
Screw diameter (mm)	6.0
Head diameter (mm)	11.40
Inner thread diameter (mm)	4.20

### Mechanical Strength & Stiffness

Characteristic yield moment $M_{y,k}$ at 12° [Nmm] (thread section) in acc. to EN 409	12448
Characteristic withdrawal parameter (loading across the fibre) $f_{ax,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1382 with density of wood $\rho_k = 425\text{kg/m}^3$	15.49
Characteristic withdrawal parameter (loading along the fibre) $f_{ax,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1382 with density of wood $\rho_k = 425\text{kg/m}^3$	10.64
Characteristic head pull-through parameter $f_{tens,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1383 with density of wood $\rho_k = 470\text{kg/m}^3$	22.17
Characteristic tensile capacity $f_{tens,k}$ [kN] in acc. to EN 1383	11.52
Characteristic torsional ratio in acc. to EN 15737 with density of wood $\rho_k = 450\text{kg/m}^3$	3.00

### Durability

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

# Declaration of Performance

## Velocity Premium Multi-Use Screws Double Countersunk Head - Ø8.0mm

### Material & Geometry

Material	Carbon Steel (C1022)
Screw diameter (mm)	8.0
Head diameter (mm)	14.8
Inner thread diameter (mm)	5.3

### Mechanical Strength & Stiffness

Characteristic yield moment $M_{y,k}$ at 12° [Nmm] (thread section) in acc. to EN 409	20921
Characteristic yield moment $M_{y,k}$ at 12° [Nmm] (smooth section) in acc. to EN 409	32753
Characteristic withdrawal parameter (loading across the fibre) $f_{ax,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1382 with density of wood $\rho_k = 450\text{kg/m}^3$	20.24
Characteristic withdrawal parameter (loading along the fibre) $f_{ax,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1382 with density of wood $\rho_k = 450\text{kg/m}^3$	14.15
Characteristic head pull-through parameter $f_{tens,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1383 with density of wood $\rho_k = 510\text{kg/m}^3$	29.61
Characteristic tensile capacity $f_{tens,k}$ [kN] in acc. to EN 1383	18.45
Characteristic torsional ratio in acc. to EN 15737 with density of wood $\rho_k = 450\text{kg/m}^3$	2.08

### Durability

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