

# Declaration of Performance

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## Coach Screws



Material - Carbon Steel

Head Type - Hex

Screw Diameter (mm) - 6.0, 8.0, 10.0, 12.0

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-30-20414-13 to E-30-20417-13

Test Report Number: No. 30-9915/1 to 30-9915/4

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  
2013

2013

Name

Position

Signature

Location &amp; Date

Test Year

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## Coach Screws

Hex Head - Ø6.0mm

### Material & Geometry

Material	Carbon Steel
Screw diameter (mm)	6.0
Head diameter (mm)	11.11
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	9665
Characteristic yield moment $M_{y,k}$ at 12° [Nmm] (smooth section) in acc. to EN 409	16717
Characteristic withdrawal parameter (loading across the fibre) $f_{ax,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1382 with density of wood $\rho_k = 450\text{kg/m}^3$	16.64
Characteristic withdrawal parameter (loading along the fibre) $f_{ax,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1382 with density of wood $\rho_k = 450\text{kg/m}^3$	10.45
Characteristic head pull-through parameter $f_{tens,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1383 with density of wood $\rho_k = 450\text{kg/m}^3$	24.27
Characteristic tensile capacity $f_{tens,k}$ [kN] in acc. to EN 1383	9.92
Characteristic torsional ratio in acc. to EN 15737 with density of wood $\rho_k = 450\text{kg/m}^3$ (the holes were pre-drilled)	1.87

### Durability

Coating (Finish)	Zinc plated and passivated
Corrosion protection	Service Class 2 acc. to EN 1995-1-1

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## Coach Screws

Hex Head - Ø8.0mm

### Material & Geometry

Material	Carbon Steel
Screw diameter (mm)	8.0
Head diameter (mm)	14.45
Inner thread diameter (mm)	5.60

### Mechanical Strength & Stiffness

Characteristic yield moment $M_{y,k}$ at 10° [Nmm] (thread section) in acc. to EN 409	21452
Characteristic yield moment $M_{y,k}$ at 10° [Nmm] (smooth section) in acc. to EN 409	37491
Characteristic withdrawal parameter (loading across the fibre) $f_{ax,k}$ [N/mm²] in acc. to EN 1382 with density of wood $\rho_k = 450\text{kg/m}^3$	13.91
Characteristic withdrawal parameter (loading along the fibre) $f_{ax,k}$ [N/mm²] in acc. to EN 1382 with density of wood $\rho_k = 450\text{kg/m}^3$	8.52
Characteristic head pull-through parameter $f_{tens,k}$ [N/mm²] in acc. to EN 1383 with density of wood $\rho_k = 450\text{kg/m}^3$	22.20
Characteristic tensile capacity $f_{tens,k}$ [kN] in acc. to EN 1383	16.21
Characteristic torsional ratio in acc. to EN 15737 with density of wood $\rho_k = 450\text{kg/m}^3$ (the holes were pre-drilled)	1.50

### Durability

Coating (Finish)	Zinc plated and passivated
Corrosion protection	Service Class 2 acc. to EN 1995-1-1

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## Coach Screws

Hex Head - Ø10.0mm

### Material & Geometry

Material	Carbon Steel
Screw diameter (mm)	10.0
Head diameter (mm)	19.30
Inner thread diameter (mm)	7.00

### Mechanical Strength & Stiffness

Characteristic yield moment $M_{y,k}$ at 9° [Nmm] (thread section) in acc. to EN 409	39197
Characteristic yield moment $M_{y,k}$ at 9° [Nmm] (smooth section) in acc. to EN 409	81359
Characteristic withdrawal parameter (loading across the fibre) $f_{ax,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1382 with density of wood $\rho_k = 450\text{kg/m}^3$	12.47
Characteristic withdrawal parameter (loading along the fibre) $f_{ax,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1382 with density of wood $\rho_k = 450\text{kg/m}^3$	10.04
Characteristic head pull-through parameter $f_{tens,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1383 with density of wood $\rho_k = 450\text{kg/m}^3$	22.13
Characteristic tensile capacity $f_{tens,k}$ [kN] in acc. to EN 1383	26.45
Characteristic torsional ratio in acc. to EN 15737 with density of wood $\rho_k = 450\text{kg/m}^3$ (the holes were pre-drilled)	2.18

### Durability

Coating (Finish)	Zinc plated and passivated
Corrosion protection	Service Class 2 acc. to EN 1995-1-1

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## Coach Screws

Hex Head - Ø12.0mm

### Material & Geometry

Material	Carbon Steel
Screw diameter (mm)	12.0
Head diameter (mm)	21.49
Inner thread diameter (mm)	9.00

### Mechanical Strength & Stiffness

Characteristic yield moment $M_{y,k}$ at 8° [Nmm] (thread section) in acc. to EN 409	477191
Characteristic yield moment $M_{y,k}$ at 8° [Nmm] (smooth section) in acc. to EN 409	122637
Characteristic withdrawal parameter (loading across the fibre) $f_{ax,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1382 with density of wood $\rho_k = 450\text{kg/m}^3$	12.24
Characteristic withdrawal parameter (loading along the fibre) $f_{ax,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1382 with density of wood $\rho_k = 450\text{kg/m}^3$	9.81
Characteristic head pull-through parameter $f_{tens,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1383 with density of wood $\rho_k = 450\text{kg/m}^3$	21.12
Characteristic tensile capacity $f_{tens,k}$ [kN] in acc. to EN 1383	40.37
Characteristic torsional ratio in acc. to EN 15737 with density of wood $\rho_k = 450\text{kg/m}^3$ (the holes were pre-drilled)	2.11

### Durability

Coating (Finish)	Zinc plated and passivated
Corrosion protection	Service Class 2 acc. to EN 1995-1-1