

## Declaration of Performance No. DOP-03-GLN-01-S2011 / Page 1 of 7

### **Round Wire Nails**

Material - Carbon Steel Head Type - Flat Nail Diameter (mm) - 2.65, 3.35, 3.75, 4.50, 5.60, 6.00 CE

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: E30-20417-16, E-30-20419-16 to E-30-20421-16, E-30-20424-16, E-30-20425-16 Test Report Number: No. 30-10775/3, 30-10775/5 to 30-10775/7, 30-10775/10, 30-10775/11

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.





Cert No: E-30-20417-16 Test Report No: 30-10775/3

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### **Round Wire Nails**

Flat Head - Ø2.65mm

#### **Material & Geometry**

Material	Carbon Steel
Screw diameter (mm)	2.65
Head area (mm²)	27.93
Point length (mm)	3.61

#### **Mechanical Strength & Stiffness**

Characteristic yield moment My.k at 45° [Nmm] in acc. to EN 409	2862
Characteristic withdrawal parameter (loading across the fibre) $f_{ax,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1382 with density of wood $\rho_k$ = 350kg/m <sup>3</sup>	3.31
Characteristic withdrawal parameter (loading along the fibre) $f_{ax,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1382 with density of wood $\rho_k$ = 350kg/m <sup>3</sup>	1.92
Characteristic head pull-through parameter $f_{tens,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1383 with density of wood $\rho_k$ = 400kg/m <sup>3</sup>	27.17
Characteristic tensile capacity ftens,k [kN] in acc. to EN 1383	2.57

Coating (Finish)	Galvanised coating
Corrosion protection	Service Class 2 acc. to EN 1995-1-1



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## **Annular Ringshank Nails**

Flat Head - Ø3.35mm

#### Material & Geometry

Material	Carbon Steel
Screw diameter (mm)	3.35
Head area (mm²)	45.91
Point length (mm)	5.04

#### Mechanical Strength & Stiffness

Characteristic yield moment My k at 45° [Nmm] in acc. to EN 409	5873
Characteristic withdrawal parameter (loading across the fibre) $f_{ax,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1382 with density of wood $\rho_k$ = 350kg/m <sup>3</sup>	3.43
Characteristic withdrawal parameter (loading along the fibre) $f_{ax,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1382 with density of wood $\rho_k$ = 350kg/m <sup>3</sup>	2.27
Characteristic head pull-through parameter $f_{tens,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1383 with density of wood $\rho_k$ = 380kg/m <sup>3</sup>	25.14
Characteristic tensile capacity ftens,k [kN] in acc. to EN 1383	3.73

Coating (Finish)	Galvanised coating
Corrosion protection	Service Class 2 acc. to EN 1995-1-1



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## **Annular Ringshank Nails**

Flat Head - Ø3.75mm

#### Material & Geometry

Material	Carbon Steel
Screw diameter (mm)	3.75
Head area (mm²)	53.39
Point length (mm)	5.09

#### Mechanical Strength & Stiffness

Characteristic yield moment My.k at 45° [Nmm] in acc. to EN 409	7020
Characteristic withdrawal parameter (loading across the fibre) $f_{ax,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1382 with density of wood $\rho_k$ = 350kg/m <sup>3</sup>	3.60
Characteristic withdrawal parameter (loading along the fibre) $f_{ax,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1382 with density of wood $\rho_k$ = 350kg/m <sup>3</sup>	2.06
Characteristic head pull-through parameter $f_{\text{tens},k}$ [N/mm <sup>2</sup> ] in acc. to EN 1383 with density of wood $\rho_k$ = 400kg/m <sup>3</sup>	24.91
Characteristic tensile capacity ftens,k [kN] in acc. to EN 1383	6.89

Coating (Finish)	Galvanised coating
Corrosion protection	Service Class 2 acc. to EN 1995-1-1



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## **Annular Ringshank Nails**

Flat Head - Ø4.50mm

#### Material & Geometry

Material	Carbon Steel
Screw diameter (mm)	4.50
Head area (mm²)	66.36
Point length (mm)	7.84

#### Mechanical Strength & Stiffness

Characteristic yield moment My.k at 45° [Nmm] in acc. to EN 409	12982
Characteristic withdrawal parameter (loading across the fibre) $f_{ax,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1382 with density of wood $\rho_k$ = 350kg/m <sup>3</sup>	3.52
Characteristic withdrawal parameter (loading along the fibre) $f_{ax,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1382 with density of wood $\rho_k$ = 350kg/m <sup>3</sup>	2.44
Characteristic head pull-through parameter $f_{tens,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1383 with density of wood $\rho_k$ = 380kg/m <sup>3</sup>	23.64
Characteristic tensile capacity ftens,k [kN] in acc. to EN 1383	9.31

Coating (Finish)	Galvanised coating
Corrosion protection	Service Class 2 acc. to EN 1995-1-1



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## **Annular Ringshank Nails**

Flat Head - Ø5.60mm

#### Material & Geometry

Material	Carbon Steel
Screw diameter (mm)	5.60
Head area (mm²)	101.57
Point length (mm)	7.32

#### Mechanical Strength & Stiffness

Characteristic yield moment My.k at 45° [Nmm] in acc. to EN 409	29555
Characteristic withdrawal parameter (loading across the fibre) $f_{ax,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1382 with density of wood $\rho_k$ = 350kg/m <sup>3</sup>	3.62
Characteristic withdrawal parameter (loading along the fibre) $f_{ax,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1382 with density of wood $\rho_k$ = 350kg/m <sup>3</sup>	2.07
Characteristic head pull-through parameter $f_{\text{tens,k}}$ [N/mm <sup>2</sup> ] in acc. to EN 1383 with density of wood $\rho_k$ = 380kg/m <sup>3</sup>	20.51
Characteristic tensile capacity ftens,k [kN] in acc. to EN 1383	11.86

Coating (Finish)	Galvanised coating
Corrosion protection	Service Class 2 acc. to EN 1995-1-1



Cert No: E-30-20425-16 Test Report No: 30-10775/11

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### **Annular Ringshank Nails**

Flat Head - Ø6.00mm

#### Material & Geometry

Material	Carbon Steel
Screw diameter (mm)	6.00
Head area (mm²)	111.59
Point length (mm)	7.61

#### Mechanical Strength & Stiffness

Characteristic yield moment My.k at 45° [Nmm] in acc. to EN 409	31570
<b>Characteristic withdrawal parameter (loading across the fibre)</b> $f_{ax,k}$ <b>[N/mm<sup>2</sup>]</b> in acc. to EN 1382 with density of wood $\rho_k$ = 350kg/m <sup>3</sup>	3.36
Characteristic withdrawal parameter (loading along the fibre) $f_{ax,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1382 with density of wood $\rho_k$ = 350kg/m <sup>3</sup>	2.16
Characteristic head pull-through parameter $f_{tens,k}$ [N/mm <sup>2</sup> ] in acc. to EN 1383 with density of wood $\rho_k$ = 380kg/m <sup>3</sup>	22.31
Characteristic tensile capacity ftens,k [kN] in acc. to EN 1383	17.84

Coating (Finish)	Galvanised coating
Corrosion protection	Service Class 2 acc. to EN 1995-1-1