

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

Declaration of Performance

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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 ²] in acc. to EN 1382 with density of wood ρ_k = 350kg/m ³ | 3.31 |
| Characteristic withdrawal parameter (loading along the fibre) $f_{ax,k}$ [N/mm ²] in acc. to EN 1382 with density of wood ρ_k = 350kg/m ³ | 1.92 |
| Characteristic head pull-through parameter $f_{tens,k}$ [N/mm ²] in acc. to EN 1383 with density of wood ρ_k = 400kg/m ³ | 27.17 |
| Characteristic tensile capacity ftens,k [kN] in acc. to EN 1383 | 2.57 |

| Coating (Finish) | Without coating (Bright) |
|----------------------|-------------------------------------|
| Corrosion protection | Service Class 1 acc. to EN 1995-1-1 |



Cert No: E-30-20419-16 Test Report No: 30-10775/5

Declaration of Performance

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

| Coating (Finish) | Without coating (Bright) |
|----------------------|-------------------------------------|
| Corrosion protection | Service Class 1 acc. to EN 1995-1-1 |



Cert No: E-30-20420-16 Test Report No: 30-10775/6

Declaration of Performance

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Round Wire 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 ²] in acc. to EN 1382 with density of wood ρ_k = 350kg/m ³ | 3.60 |
| Characteristic withdrawal parameter (loading along the fibre) $f_{ax,k}$ [N/mm ²] in acc. to EN 1382 with density of wood ρ_k = 350kg/m ³ | 2.06 |
| Characteristic head pull-through parameter $f_{tens,k}$ [N/mm ²] in acc. to EN 1383 with density of wood ρ_k = 400kg/m ³ | 24.91 |
| Characteristic tensile capacity ftens,k [kN] in acc. to EN 1383 | 6.89 |

| Coating (Finish) | Without coating (Bright) |
|----------------------|-------------------------------------|
| Corrosion protection | Service Class 1 acc. to EN 1995-1-1 |



Cert No: E-30-20421-16 Test Report No: 30-10775/7

Declaration of Performance

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Round Wire 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 ²] in acc. to EN 1382 with density of wood ρ_k = 350kg/m ³ | 3.52 |
| Characteristic withdrawal parameter (loading along the fibre) $f_{ax,k}$ [N/mm ²] in acc. to EN 1382 with density of wood ρ_k = 350kg/m ³ | 2.44 |
| Characteristic head pull-through parameter $f_{tens,k}$ [N/mm ²] in acc. to EN 1383 with density of wood ρ_k = 380kg/m ³ | 23.64 |
| Characteristic tensile capacity ftens,k [kN] in acc. to EN 1383 | 9.31 |

| Coating (Finish) | Without coating (Bright) |
|----------------------|-------------------------------------|
| Corrosion protection | Service Class 1 acc. to EN 1995-1-1 |



Cert No: E-30-20424-16 Test Report No: 30-10775/10

Declaration of Performance

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Round Wire 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 ²] in acc. to EN 1382 with density of wood ρ_k = 350kg/m ³ | 3.62 |
| Characteristic withdrawal parameter (loading along the fibre) $f_{ax,k}$ [N/mm ²] in acc. to EN 1382 with density of wood ρ_k = 350kg/m ³ | 2.07 |
| Characteristic head pull-through parameter $f_{\text{tens,k}}$ [N/mm ²] in acc. to EN 1383 with density of wood ρ_k = 380kg/m ³ | 20.51 |
| Characteristic tensile capacity ftens,k [kN] in acc. to EN 1383 | 11.86 |

| Coating (Finish) | Without coating (Bright) |
|----------------------|-------------------------------------|
| Corrosion protection | Service Class 1 acc. to EN 1995-1-1 |



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

Declaration of Performance

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Round Wire 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 |
|--|-------|
| Characteristic withdrawal parameter (loading across the fibre) $f_{ax,k}$ [N/mm ²] in acc. to EN 1382 with density of wood ρ_k = 350kg/m ³ | 3.36 |
| Characteristic withdrawal parameter (loading along the fibre) $f_{ax,k}$ [N/mm ²] in acc. to EN 1382 with density of wood ρ_k = 350kg/m ³ | 2.16 |
| Characteristic head pull-through parameter $f_{tens,k}$ [N/mm ²] in acc. to EN 1383 with density of wood ρ_k = 380kg/m ³ | 22.31 |
| Characteristic tensile capacity ftens,k [kN] in acc. to EN 1383 | 17.84 |

| Coating (Finish) | Without coating (Bright) |
|----------------------|-------------------------------------|
| Corrosion protection | Service Class 1 acc. to EN 1995-1-1 |