Date: 06/10/2022
v2

Declaration of Performance

Annular Ringshank Nails

CE

Material - Stainless Steel A2 (304)

Head Type - Flat

Nail Diameter (mm) - 2.00, 2.36, 2.65, 3.35, 3.75, 4.50

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: CPR-J-01812-20, CPR-J-01813-20, E-30-20559-16, E-30-20560-16, CPR-J-01816-20, E-30-20561-16
Test Report Number: No. 30-15137/1/JP, 30-15137/2/JP, 30-10875/1, 30-10875/2, 30-15137/5/JP, 30-10875/3

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.

Simon Midwood	Managing Director		TIMCO House 2016	2016
Name	Position	Signature	Location & Date	Test Year

Declaration of Performance

Annular Ringshank Nails

Flat Head - Ø2.00mm

Material & Geometry

Material	Stainless Steel A2 (304)
Diameter (mm)	2.00
Head area (mm^2)	16.25
Point length (mm)	3.45

Mechanical Strength & Stiffness

Characteristic yield moment $M_{y,k}$ at 45° [Nmm] in acc. to EN 409	1049
Characteristic withdrawal parameter (loading across the fibre) $f_{ax,k}$ [N/mm^2] in acc. to EN 1382 with density of wood $\rho_k = 350 kg/m^3$	11.71
Characteristic withdrawal parameter (loading along the fibre) $f_{ax,k}$ [N/mm^2] in acc. to EN 1382 with density of wood $\rho_k = 350 kg/m^3$	6.65
Characteristic head pull-through parameter $f_{tens,k}$ [N/mm^2] in acc. to EN 1383 with density of wood $\rho_k = 350 kg/m^3$	30.90
Characteristic tensile capacity $f_{tens,k}$ [kN] in acc. to EN 1383	1.83

Durability

Coating (Finish)	N/A
Corrosion protection	Service Class 3 acc. to EN 1995-1-1

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Annular Ringshank Nails

Flat Head - Ø2.36mm

Material & Geometry

Material	Stainless Steel A2 (304)
Diameter (mm)	2.36
Head area (mm^2)	22.14
Point length (mm)	3.24

Mechanical Strength & Stiffness

Characteristic yield moment $M_{y,k}$ at 45° [Nmm] in acc. to EN 409	1941
Characteristic withdrawal parameter (loading across the fibre) $f_{ax,k}$ [N/mm^2] in acc. to EN 1382 with density of wood $\rho_k = 350 kg/m^3$	11.19
Characteristic withdrawal parameter (loading along the fibre) $f_{ax,k}$ [N/mm^2] in acc. to EN 1382 with density of wood $\rho_k = 350 kg/m^3$	6.43
Characteristic head pull-through parameter $f_{tens,k}$ [N/mm^2] in acc. to EN 1383 with density of wood $\rho_k = 350 kg/m^3$	31.51
Characteristic tensile capacity $f_{tens,k}$ [kN] in acc. to EN 1383	3.28

Durability

Coating (Finish)	N/A
Corrosion protection	Service Class 3 acc. to EN 1995-1-1

Declaration of Performance

Annular Ringshank Nails

Flat Head - Ø2.65mm

Material & Geometry

Material	Stainless Steel A2 (304)
Diameter (mm)	2.65
Head area (mm^2)	27.11
Point length (mm)	3.65

Mechanical Strength & Stiffness

Characteristic yield moment $M_{y,k}$ at 45° [Nmm] in acc. to EN 409	2893
Characteristic withdrawal parameter (loading across the fibre) $f_{ax,k}$ [N/mm^2] in acc. to EN 1382 with density of wood $\rho_k = 350 kg/m^3$	11.17
Characteristic withdrawal parameter (loading along the fibre) $f_{ax,k}$ [N/mm^2] in acc. to EN 1382 with density of wood $\rho_k = 350 kg/m^3$	5.80
Characteristic head pull-through parameter $f_{tens,k}$ [N/mm^2] in acc. to EN 1383 with density of wood $\rho_k = 350 kg/m^3$	24.05
Characteristic tensile capacity $f_{tens,k}$ [kN] in acc. to EN 1383	3.95

Durability

Coating (Finish)	N/A
Corrosion protection	Service Class 3 acc. to EN 1995-1-1

Declaration of Performance

Annular Ringshank Nails

Flat Head - Ø3.35mm

Material & Geometry

Material	Stainless Steel A2 (304)
Diameter (mm)	3.35
Head area (mm^2)	42.15
Point length (mm)	5.10

Mechanical Strength & Stiffness

Characteristic yield moment $M_{y,k}$ at 45° [Nmm] in acc. to EN 409	6137
Characteristic withdrawal parameter (loading across the fibre) $f_{ax,k}$ [N/mm^2] in acc. to EN 1382 with density of wood $\rho_k = 350 kg/m^3$	10.63
Characteristic withdrawal parameter (loading along the fibre) $f_{ax,k}$ [N/mm^2] in acc. to EN 1382 with density of wood $\rho_k = 350 kg/m^3$	5.70
Characteristic head pull-through parameter $f_{tens,k}$ [N/mm^2] in acc. to EN 1383 with density of wood $\rho_k = 350 kg/m^3$	24.30
Characteristic tensile capacity $f_{tens,k}$ [kN] in acc. to EN 1383	6.24

Durability

Coating (Finish)	N/A
Corrosion protection	Service Class 3 acc. to EN 1995-1-1

Declaration of Performance

Annular Ringshank Nails

Flat Head - Ø3.75mm

Material & Geometry

Material	Stainless Steel A2 (304)
Diameter (mm)	3.75
Head area (mm^2)	44.29
Point length (mm)	6.18

Mechanical Strength & Stiffness

Characteristic yield moment $M_{y,k}$ at 45° [Nmm] in acc. to EN 409	8293
Characteristic withdrawal parameter (loading across the fibre) $f_{ax,k}$ [N/mm^2] in acc. to EN 1382 with density of wood $\rho_k = 350 kg/m^3$	11.86
Characteristic withdrawal parameter (loading along the fibre) $f_{ax,k}$ [N/mm^2] in acc. to EN 1382 with density of wood $\rho_k = 350 kg/m^3$	5.88
Characteristic head pull-through parameter $f_{tens,k}$ [N/mm^2] in acc. to EN 1383 with density of wood $\rho_k = 350 kg/m^3$	31.26
Characteristic tensile capacity $f_{tens,k}$ [kN] in acc. to EN 1383	7.70

Durability

Coating (Finish)	N/A
Corrosion protection	Service Class 3 acc. to EN 1995-1-1

Annular Ringshank Nails

Flat Head - Ø4.50mm

Material & Geometry

Material	Stainless Steel A2 (304)
Diameter (mm)	3.75
Head area (mm²)	67.58
Point length (mm)	7.10

Mechanical Strength & Stiffness

Characteristic yield moment $M_{y,k}$ at 45° [Nmm] (ring section) in acc. to EN 409	14252
Characteristic yield moment $M_{y,k}$ at 45° [Nmm] (smooth section) in acc. to EN 409	14180
Characteristic withdrawal parameter (loading across the fibre) $f_{ax,k}$ [N/mm²] in acc. to EN 1382 with density of wood $\rho_k = 350 kg/m^3$	8.67
Characteristic withdrawal parameter (loading along the fibre) $f_{ax,k}$ [N/mm²] in acc. to EN 1382 with density of wood $\rho_k = 350 kg/m^3$	4.83
Characteristic head pull-through parameter $f_{tens,k}$ [N/mm²] in acc. to EN 1383 with density of wood $\rho_k = 350 kg/m^3$	25.20
Characteristic tensile capacity $f_{tens,k}$ [kN] in acc. to EN 1383	10.65

Durability

Coating (Finish)	N/A
Corrosion protection	Service Class 3 acc. to EN 1995-1-1