



**TRADEX Group**  
wires in motion

# DECLARATION OF PERFORMANCE

*Loose nails*

*Grooved shank – Hot Dip Galvanized*



**Document No:** CE\_DOP\_NLS\_GHD\_01

for structural timber products

**The manufacturer declares for**

**Loose nails in Grooved shank from 2,1 diameter to 4,8 mm:**

**Finishing information:**

Hot Dip Galvanized – Z350

for Service Class 1, 2, 3 – according to EN 1995 – 1 – 1

**Nail Dimensions:**

Diameter: from 2,1 to 4,8 mm

Length: from 40 to 150 mm

**Properties of the material used:**

- non alloy wire rod in accordance with EN 10016-1 to 4

- tensile strength in accordance with EN 10218-1, min. 700 N/mm<sup>2</sup>

Any and all of the nails covered by this Declaration of Performance are identical to the nails that the ITTs were originally issued for. Neither the geometrical specification, raw wire or production process have undergone any changes that would affect the relevant properties of the nail according to 14592:2008+A1:2012, e.g. characteristic withdrawal parameter  $f_{ax,k}$ , head pull-through parameter  $f_{head,k}$ , characteristic yield moment  $M_{y,k}$  or corrosion protection as declared in the first place.

a) That the product has been manufactured in accordance with EN 14592:2008+A1:2012 “Timber Structures – Dowel-type fasteners – Requirements”.

b) Initial Type Testing has been performed to identify and confirm essential characteristic values in accordance with table ZA.1 in EN 14592. Those characteristic values are indicated together with the CE mark on product labels and in the table here below.

c) Initial Type Testing was performed by VHT notified body 1503

ITT Report No: PB-641-12-gr-2.1hd-130626-La

ITT Report No: PB-641-12-gr-2.3hd-130328-La

ITT Report No: PB-641-12-gr-2.6hd-130627-La

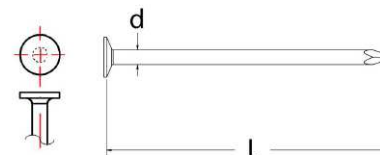
ITT Report No: PB-641-12-gr-3.0hd-130307-La

ITT Report No: PB-641-12-gr-3.4hd-130307-La

ITT Report No: PB-641-12-gr-4.0hd-130328-La

ITT Report No: PB-641-12-gr-4.8hd-130627-La

d) Assessment and verification of constancy of performance is in compliance with System 3.



ARTICLE	NOMINAL DIAMETER d (mm)	NOMINAL LENGTH L (mm)	HEAD AREA A <sub>h</sub> (mm <sup>2</sup> )	Withdrawal Parameter f <sub>ax,k</sub> (N/mm <sup>2</sup> ) *	Head Pull Trough Parameter f <sub>head,k</sub> (N/mm <sup>2</sup> ) *	Yield Moment M <sub>y,k</sub> (Nmm)
NLS21/50GHD	2,1	50	18,1	EN 1995 – 1 – 1	EN 1995 – 1 – 1	EN 1995 – 1 – 1
NLS23/55GHD	2,3	55	23,8	2,45	8,58	2016
NLS23/60GHD	2,3	60	23,8	2,45	8,58	3311
NLS26/65GHD	2,6	65	28,3	2,45	8,58	3311
NLS30/75GHD	3,0	75	37,4	2,45	8,58	4688
NLS30/90GHD	3,0	90	37,4	2,45	8,58	7541
NLS34/95GHD	3,4	95	47,8	2,45	8,58	7541
NLS34/100GHD	3,4	100	47,8	2,45	8,58	9754
NLS40/125GHD	4,0	125	75,4	2,45	8,58	9754
NLS48/150GHD	4,8	150	86,6	2,45	8,58	11468
						16876

\*calculated in wood with a characteristic density of 350 kg/m<sup>3</sup>

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