

Declaration of Performance

No. LE-017

1. Unique identification code of the product type

RETINOX® 2 plus Chipboard screw Countersunk head (stainless steel A2)
RETINOX® 2 Chipboard screw Countersunk head (stainless steel A2)
RETINOX® 2 plus Chipboard screw Pan head (stainless steel A2)
RETINOX® 2 Chipboard screw Pan head (stainless steel A2)
RETINOX® 2 Chipboard screw Raised Countersunk head (stainless steel A2)

Article number see Annex 1

2. Intended use

Self-tapping screws for use in timber structures

3. Manufacturer (corresponding Art. 11, pas. 5)

REISSER-Schraubentechnik GmbH
Fritz-Müller-Str. 10
74653 Ingelfingen-Criesbach
Deutschland

4. Not relevant

System of assessment and verification of constancy of performance of the construction product as set out in Annex 2 (in accordance with 97/176/EC)

5. **System 3**

6.a. Notified body

ZAVOD ZA GRADBENISTVO SLOVENIJE
Dimiceva ulica 12
1000 Ljubljana Slovenija
Notified Body No. 1404

Harmonized norm

EN 14592:2008+A1:2012

Test Report

No. P 1177/13-630-1

7. BWR1

Mechanical resistance and stability

Characteristic yield moment $M_{y,k}$ [Nm]

Thread major diameter 3,0 mm =	0,90 Nm
Thread major diameter 3,5 mm =	1,55 Nm
Thread major diameter 4,0 mm =	2,02 Nm
Thread major diameter 4,5 mm =	2,76 Nm
Thread major diameter 5,0 mm =	3,72 Nm
Thread major diameter 6,0 mm =	6,14 Nm
Thread major diameter 8,0 mm =	13,83 Nm

Declaration of Performance No. LE-017

Bending angle ($45/d^{0,7}+10$)

Thread major diameter 3,0 mm =	$45/d^{0,7}+10$
Thread major diameter 3,5 mm =	$45/d^{0,7}+10$
Thread major diameter 4,0 mm =	$45/d^{0,7}+10$
Thread major diameter 4,5 mm =	$45/d^{0,7}+10$
Thread major diameter 5,0 mm =	$45/d^{0,7}+10$
Thread major diameter 6,0 mm =	$45/d^{0,7}+10$
Thread major diameter 8,0 mm =	$45/d^{0,7}+10$

Characteristic withdrawal parameter $f_{ax,k}$ [N/mm²]

Thread major diameter 3,0 mm =	23,47 N/mm ²
Thread major diameter 3,5 mm =	14,96 N/mm ²
Thread major diameter 4,0 mm =	19,43 N/mm ²
Thread major diameter 4,5 mm =	18,65 N/mm ²
Thread major diameter 5,0 mm =	21,00 N/mm ²
Thread major diameter 6,0 mm =	16,38 N/mm ²
Thread major diameter 8,0 mm =	12,66 N/mm ²

Characteristic tensile strength $f_{tens,k}$ [kN]

Thread major diameter 3,0 mm =	2,25 kN
Thread major diameter 3,5 mm =	3,02 kN
Thread major diameter 4,0 mm =	3,66 kN
Thread major diameter 4,5 mm =	4,29 kN
Thread major diameter 5,0 mm =	4,72 kN
Thread major diameter 6,0 mm =	7,42 kN
Thread major diameter 8,0 mm =	13,33 kN

Characteristic head pull-through parameter $f_{head,k}$ [N/mm²]

Raised head - Thread major diameter 3,0 mm =	16,52 N/mm ²
Raised head - Thread major diameter 3,5 mm =	19,73 N/mm ²
Raised head - Thread major diameter 4,0 mm =	17,02 N/mm ²
Raised head - Thread major diameter 4,5 mm =	16,44 N/mm ²
Raised head - Thread major diameter 5,0 mm =	12,46 N/mm ²

Characteristic head pull-through parameter $f_{head,k}$ [N/mm²]

Pan head - Thread major diameter 3,0 mm =	19,40 N/mm ²
Pan head - Thread major diameter 3,5 mm =	28,42 N/mm ²
Pan head - Thread major diameter 4,0 mm =	25,50 N/mm ²
Pan head - Thread major diameter 4,5 mm =	31,37 N/mm ²
Pan head - Thread major diameter 5,0 mm =	23,24 N/mm ²
Pan head - Thread major diameter 6,0 mm =	20,42 N/mm ²

Characteristic head pull-through parameter $f_{head,k}$ [N/mm²]

Countersunk head - Thread major diameter 3,0 mm =	16,52 N/mm ²
Countersunk head - Thread major diameter 3,5 mm =	19,73 N/mm ²
Countersunk head - Thread major diameter 4,0 mm =	17,02 N/mm ²
Countersunk head - Thread major diameter 4,5 mm =	16,44 N/mm ²
Countersunk head - Thread major diameter 5,0 mm =	12,46 N/mm ²
Countersunk head - Thread major diameter 6,0 mm =	16,37 N/mm ²
Countersunk head - Thread major diameter 8,0 mm =	20,39 N/mm ²

Declaration of Performance No. LE-017

Characteristic torsional ratio $f_{tor,k}/R_{tor,k}$
density of wood 450kg/m³

Thread major diameter 3,0 mm =	3,78
Thread major diameter 3,5 mm =	3,95
Thread major diameter 4,0 mm =	2,84
Thread major diameter 4,5 mm =	2,47
Thread major diameter 5,0 mm =	2,50
Thread major diameter 6,0 mm =	2,59
Thread major diameter 8,0 mm =	3,55

BWR 2

Reaction to fire

Class A1, acc. EN 13501-1:2007+A1:2009

BWR 3-7

Safety and barrier-free while usage

NPD

The performance of the in Annex 1 named products is in conformity with the declared performance and complied with the regulation (EU) Nr. 305/2011

Signed for and on behalf of the manufacturer by:

Criesbach, February 16, 2022

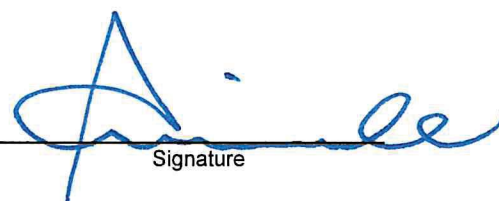
Place/Date

Alexander Kimmerle

Name

CEO

Position



Signature

Manfred Heber

Name

Product Management

Position



Signature

This Declaration of Performance is issued in accordance with Annex III of the Regulation (EU) No. 305/2011 of the European Parliament and of the Council of 9 March 2011 laying down harmonised conditions for the marketing and of construction products and repealing Council Directive 89/106/EEC.

Declaration of Performance

No. LE-017

Annex 1

Type, batch or serial number allowing identification of the construction product

RETINOX® 2 plus Chipboard screw Countersunk head (stainless steel A2)

article number		diameter	length
009250	V _ _ - 030016 _ _ -	3,0 mm	16 mm
009250	V _ _ - 030020 _ _ -	3,0 mm	20 mm
009250	V _ _ - 030025 _ _ -	3,0 mm	25 mm
009250	V _ _ - 030030 _ _ -	3,0 mm	30 mm
009250	V _ _ - 035016 _ _ -	3,5 mm	16 mm
009250	V _ _ - 035020 _ _ -	3,5 mm	20 mm
009250	V _ _ - 035025 _ _ -	3,5 mm	25 mm
009250	V _ _ - 035030 _ _ -	3,5 mm	30 mm
009250	V _ _ - 035035 _ _ -	3,5 mm	35 mm
009250	V _ _ - 035040 _ _ -	3,5 mm	40 mm
009250	V _ _ - 040020 _ _ -	4,0 mm	20 mm
009250	V _ _ - 040025 _ _ -	4,0 mm	25 mm
009250	V _ _ - 040030 _ _ -	4,0 mm	30 mm
009250	V _ _ - 040035 _ _ -	4,0 mm	35 mm
009250	V _ _ - 040040 _ _ -	4,0 mm	40 mm
009250	V _ _ - 040045 _ _ -	4,0 mm	45 mm
009250	V _ _ - 040050 _ _ -	4,0 mm	50 mm
009250	V _ _ - 045025 _ _ -	4,5 mm	25 mm
009250	V _ _ - 045030 _ _ -	4,5 mm	30 mm
009250	V _ _ - 045035 _ _ -	4,5 mm	35 mm
009250	V _ _ - 045040 _ _ -	4,5 mm	40 mm
009250	V _ _ - 045045 _ _ -	4,5 mm	45 mm
009250	V _ _ - 045050 _ _ -	4,5 mm	50 mm
009250	V _ _ - 050025 _ _ -	5,0 mm	25 mm
009250	V _ _ - 050030 _ _ -	5,0 mm	30 mm
009250	V _ _ - 050035 _ _ -	5,0 mm	35 mm
009250	V _ _ - 050040 _ _ -	5,0 mm	40 mm
009250	V _ _ - 050045 _ _ -	5,0 mm	45 mm
009250	V _ _ - 050050 _ _ -	5,0 mm	50 mm
009250	V _ _ - 050060 _ _ -	5,0 mm	60 mm
009250	V _ _ - 050070 _ _ -	5,0 mm	70 mm
009250	V _ _ - 060040 _ _ -	6,0 mm	40 mm
009250	V _ _ - 060050 _ _ -	6,0 mm	50 mm
009250	V _ _ - 060060 _ _ -	6,0 mm	60 mm
009250	V _ _ - 060070 _ _ -	6,0 mm	70 mm
009251	V _ _ - 030025 _ _ -	3,0 mm	25 mm
009251	V _ _ - 030030 _ _ -	3,0 mm	30 mm
009251	V _ _ - 030035 _ _ -	3,0 mm	35 mm
009251	V _ _ - 030040 _ _ -	3,0 mm	40 mm
009251	V _ _ - 035030 _ _ -	3,5 mm	30 mm
009251	V _ _ - 035035 _ _ -	3,5 mm	35 mm
009251	V _ _ - 035040 _ _ -	3,5 mm	40 mm
009251	V _ _ - 040030 _ _ -	4,0 mm	30 mm
009251	V _ _ - 040035 _ _ -	4,0 mm	35 mm
009251	V _ _ - 040040 _ _ -	4,0 mm	40 mm
009251	V _ _ - 040045 _ _ -	4,0 mm	45 mm
009251	V _ _ - 040050 _ _ -	4,0 mm	50 mm
009251	V _ _ - 040060 _ _ -	4,0 mm	60 mm
009251	V _ _ - 040070 _ _ -	4,0 mm	70 mm
009251	V _ _ - 045035 _ _ -	4,5 mm	35 mm
009251	V _ _ - 045040 _ _ -	4,5 mm	40 mm
009251	V _ _ - 045045 _ _ -	4,5 mm	45 mm
009251	V _ _ - 045050 _ _ -	4,5 mm	50 mm
009251	V _ _ - 045060 _ _ -	4,5 mm	60 mm

Declaration of Performance No. LE-017

Annex 1

009251	V	-	045070	-	4,5 mm	70 mm
009251	V	-	045080	-	4,5 mm	80 mm
009251	V	-	050040	-	5,0 mm	40 mm
009251	V	-	050045	-	5,0 mm	45 mm
009251	V	-	050050	-	5,0 mm	50 mm
009251	V	-	050060	-	5,0 mm	60 mm
009251	V	-	050070	-	5,0 mm	70 mm
009251	V	-	050080	-	5,0 mm	80 mm
009251	V	-	050090	-	5,0 mm	90 mm
009251	V	-	050100	-	5,0 mm	100 mm
009251	V	-	050120	-	5,0 mm	120 mm
009251	V	-	060060	-	6,0 mm	60 mm
009251	V	-	060070	-	6,0 mm	70 mm
009251	V	-	060080	-	6,0 mm	80 mm
009251	V	-	060090	-	6,0 mm	90 mm
009251	V	-	060100	-	6,0 mm	100 mm
009251	V	-	060120	-	6,0 mm	120 mm
009251	V	-	060130	-	6,0 mm	130 mm
009251	V	-	060140	-	6,0 mm	140 mm
009251	V	-	060150	-	6,0 mm	150 mm
009251	V	-	060160	-	6,0 mm	160 mm
009251	V	-	080100	-	8,0 mm	100 mm
009251	V	-	080120	-	8,0 mm	120 mm
009251	V	-	080140	-	8,0 mm	140 mm
009251	V	-	080160	-	8,0 mm	160 mm
009251	V	-	080180	-	8,0 mm	180 mm
009251	V	-	080200	-	8,0 mm	200 mm
009251	V	-	080220	-	8,0 mm	220 mm
009251	V	-	080240	-	8,0 mm	240 mm

RETINOX® 2 Chipboard screw Countersunk head (stainless steel A2)

article number		diameter	length
009200	V - 030016	3,0 mm	16 mm
009200	V - 030020	3,0 mm	20 mm
009200	V - 030025	3,0 mm	25 mm
009200	V - 035016	3,5 mm	16 mm
009200	V - 035020	3,5 mm	20 mm
009200	V - 035025	3,5 mm	25 mm
009200	V - 040020	4,0 mm	20 mm
009200	V - 040025	4,0 mm	25 mm
009200	V - 045025	4,5 mm	25 mm
009200	V - 045030	4,5 mm	30 mm
009200	V - 050025	5,0 mm	25 mm
009200	V - 050030	5,0 mm	30 mm
009200	V - 050035	5,0 mm	35 mm
009200	V - 050090	5,0 mm	90 mm
009200	V - 060035	6,0 mm	35 mm
009200	V - 060040	6,0 mm	40 mm
009200	V - 060045	6,0 mm	45 mm
009200	V - 060050	6,0 mm	50 mm
009221	V - 030025	3,0 mm	25 mm
009221	V - 030030	3,0 mm	30 mm
009221	V - 035030	3,5 mm	30 mm
009221	V - 035035	3,5 mm	35 mm
009221	V - 035040	3,5 mm	40 mm
009221	V - 040030	4,0 mm	30 mm
009221	V - 040035	4,0 mm	35 mm
009221	V - 040040	4,0 mm	40 mm
009221	V - 040045	4,0 mm	45 mm

Declaration of Performance No. LE-017

Annex 1

009221	V	-	040050	-	4,0 mm	50 mm
009221	V	-	040060	-	4,0 mm	60 mm
009221	V	-	040070	-	4,0 mm	70 mm
009221	V	-	045035	-	4,5 mm	35 mm
009221	V	-	045040	-	4,5 mm	40 mm
009221	V	-	045045	-	4,5 mm	45 mm
009221	V	-	045050	-	4,5 mm	50 mm
009221	V	-	045060	-	4,5 mm	60 mm
009221	V	-	050040	-	5,0 mm	40 mm
009221	V	-	050045	-	5,0 mm	45 mm
009221	V	-	050050	-	5,0 mm	50 mm
009221	V	-	050060	-	5,0 mm	60 mm
009221	V	-	050070	-	5,0 mm	70 mm
009221	V	-	050080	-	5,0 mm	80 mm
009221	V	-	050090	-	5,0 mm	90 mm
009221	V	-	050100	-	5,0 mm	100 mm
009221	V	-	050120	-	5,0 mm	120 mm
009221	V	-	060060	-	6,0 mm	60 mm
009221	V	-	060070	-	6,0 mm	70 mm
009221	V	-	060080	-	6,0 mm	80 mm
009221	V	-	060090	-	6,0 mm	90 mm
009221	V	-	060100	-	6,0 mm	100 mm
009221	V	-	060120	-	6,0 mm	120 mm

RETINOX® 2 plus Chipboard screw Pan head (stainless steel A2)

article number				diameter	length
009253	V	-	030020	3,0 mm	20 mm
009253	V	-	035016	3,5 mm	16 mm
009253	V	-	035020	3,5 mm	20 mm
009253	V	-	035025	3,5 mm	25 mm
009253	V	-	035030	3,5 mm	30 mm
009253	V	-	040016	4,0 mm	16 mm
009253	V	-	040020	4,0 mm	20 mm
009253	V	-	040025	4,0 mm	25 mm
009253	V	-	040030	4,0 mm	30 mm
009253	V	-	040035	4,0 mm	35 mm
009253	V	-	040040	4,0 mm	40 mm
009253	V	-	045020	4,5 mm	20 mm
009253	V	-	045025	4,5 mm	25 mm
009253	V	-	045035	4,5 mm	35 mm
009253	V	-	045040	4,5 mm	40 mm
009253	V	-	045050	4,5 mm	50 mm
009253	V	-	050020	5,0 mm	20 mm
009253	V	-	050025	5,0 mm	25 mm
009253	V	-	050030	5,0 mm	30 mm
009253	V	-	050035	5,0 mm	35 mm
009253	V	-	050040	5,0 mm	40 mm
009253	V	-	060040	6,0 mm	40 mm
009253	V	-	060050	6,0 mm	50 mm
009254	V	-	050050	5,0 mm	50 mm
009254	V	-	050060	5,0 mm	60 mm
009254	V	-	050070	5,0 mm	70 mm

RETINOX® 2 Chipboard screw Pan head (stainless steel A2)

article number				diameter	length
009203	V	-	030016	3,0 mm	16 mm
009203	V	-	035016	3,5 mm	16 mm
009203	V	-	035020	3,5 mm	20 mm

Declaration of Performance No. LE-017

Annex 1

009203	V	-	035025	-	3,5 mm	25 mm
009203	V	-	035030	-	3,5 mm	30 mm
009203	V	-	040020	-	4,0 mm	20 mm
009203	V	-	040025	-	4,0 mm	25 mm
009203	V	-	040030	-	4,0 mm	30 mm
009203	V	-	040035	-	4,0 mm	35 mm
009203	V	-	040040	-	4,0 mm	40 mm
009203	V	-	040050	-	4,0 mm	50 mm
009203	V	-	045030	-	4,5 mm	30 mm
009203	V	-	045040	-	4,5 mm	40 mm
009203	V	-	045050	-	4,5 mm	50 mm
009203	V	-	045060	-	4,5 mm	60 mm
009203	V	-	050020	-	5,0 mm	20 mm
009203	V	-	050025	-	5,0 mm	25 mm
009203	V	-	050030	-	5,0 mm	30 mm
009203	V	-	050040	-	5,0 mm	40 mm
009204	V	-	040050	-	4,0 mm	50 mm
009204	V	-	045050	-	4,5 mm	50 mm
009204	V	-	045060	-	4,5 mm	60 mm
009204	V	-	050050	-	5,0 mm	50 mm
009204	V	-	050060	-	5,0 mm	60 mm
009204	V	-	050070	-	5,0 mm	70 mm

RETINOX® 2 Chipboard screw Raised Countersunk head (stainless steel A2)

article number				diameter	length
009201	V	-	030016	3,0 mm	16 mm
009201	V	-	030020	3,0 mm	20 mm
009201	V	-	030025	3,0 mm	25 mm
009201	V	-	035016	3,5 mm	16 mm
009201	V	-	035020	3,5 mm	20 mm
009201	V	-	035025	3,5 mm	25 mm
009201	V	-	040020	4,0 mm	20 mm
009201	V	-	040025	4,0 mm	25 mm
009201	V	-	045030	4,5 mm	30 mm
009202	V	-	030030	3,0 mm	30 mm
009202	V	-	035030	3,5 mm	30 mm
009202	V	-	035035	3,5 mm	35 mm
009202	V	-	035040	3,5 mm	40 mm
009202	V	-	040030	4,0 mm	30 mm
009202	V	-	040035	4,0 mm	35 mm
009202	V	-	040040	4,0 mm	40 mm
009202	V	-	040045	4,0 mm	45 mm
009202	V	-	040050	4,0 mm	50 mm
009202	V	-	040060	4,0 mm	60 mm
009202	V	-	040070	4,0 mm	70 mm
009202	V	-	045040	4,5 mm	40 mm
009202	V	-	045045	4,5 mm	45 mm
009202	V	-	045050	4,5 mm	50 mm
009202	V	-	045060	4,5 mm	60 mm
009202	V	-	050050	5,0 mm	50 mm
009202	V	-	050060	5,0 mm	60 mm
009202	V	-	050070	5,0 mm	70 mm
009202	V	-	050080	5,0 mm	80 mm