

# RISTEK

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## DECLARATION OF PERFORMANCE DoP

No: 13 / 2018-12-21

- 1 Product type**  
Splice joint plate
- 2 Product identification**  
LL13Jatkos
- 3 Intended Use**  
Punched metal plate fasteners for structural timber products
- 4 Manufacturer**  
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- 5 Authorized representative**
  - OÜ Teemu-E, Peterbulimnt 71, EE 11415 Tallinn Estonia, e-mail: teemu@teemu.ee
  - UAB Metalistas LT, Šermukšnių g. 19, LT-35113Panevėžys Lietuva, e-mail: brone.tomkeviciene@metalistas.lt
- 6 Attestation of Conformity System**  
AVCP Class 2+
- 7 Technical specification -hEN**  
Initial assessment of FCP  
Certificate of factory production control (FPC)  
Harmonized Standard  
0809 VTT Expert Services Oy  
0809 – CPR – 1134  
EN 14545: 2008
- 8 Technical specification –ETA**  
N/A
- 9 Declared performance**  
See table on page 2
- 10 The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 9. This declaration is issued under the sole responsibility of the manufacturer identified in point 4.

**Signed for and behalf of the manufacturer by:Ristek Oy**



Kimmo Köntti, Managing director

Villähde 21.12.2018

## 9 Declared performance

Essential characters	Performance	Harmonised technical specification
Steel	HX420LAD+Z275-M-A	EN 10346: 2009
Yield strength (min)	420 MPa	EN 14545: 2008
Ultimate elongation $A_{80}$	17 %	
Durability, corrosion protection	Hot-dip zinc coating Z275-M-A	
Thickness	1,3 mm	
Characteristic plate anchorage capacity for solid timber C30 Characteristic density $\rho_k=380\text{kg/m}^3$ Thickness $\geq 39$ mm	Nail plate width 96 mm: $f_{a,0,0,k} = 2,54 \text{ N/mm}^2$ $f_{a,90,90,k} = 1,38 \text{ N/mm}^2$ Nail plate width 120 mm: $f_{a,0,0,k} = 2,11 \text{ N/mm}^2$ $f_{a,90,90,k} = 1,15 \text{ N/mm}^2$ Nail plate width 144 mm: $f_{a,0,0,k} = 2,26 \text{ N/mm}^2$ $f_{a,90,90,k} = 1,23 \text{ N/mm}^2$ Nail plate width 180 mm: $f_{a,0,0,k} = 2,28 \text{ N/mm}^2$ $f_{a,90,90,k} = 1,24 \text{ N/mm}^2$	EN 14545: 2008 VTT-S-02231-15
Characteristic plate anchorage capacity for Kerto-S-LVL Characteristic density $\rho_k = 480\text{kg/m}^3$ Thickness $\geq 39$ mm	Nail plate width 96 mm: $f_{a,0,0,k} = 2,73 \text{ N/mm}^2$ $f_{a,90,90,k} = 1,42 \text{ N/mm}^2$ Nail plate width 120 mm: $f_{a,0,0,k} = 2,27 \text{ N/mm}^2$ $f_{a,90,90,k} = 1,18 \text{ N/mm}^2$ Nail plate width 144 mm: $f_{a,0,0,k} = 2,43 \text{ N/mm}^2$ $f_{a,90,90,k} = 1,26 \text{ N/mm}^2$ Nail plate width 180 mm: $f_{a,0,0,k} = 2,45 \text{ N/mm}^2$ $f_{a,90,90,k} = 1,27 \text{ N/mm}^2$	
Characteristic plate tension, compression and shear capacity	Nail plate width 96 mm: $f_{t,0,k} = 339 \text{ N/mm}$ $f_{c,0,k} = 156 \text{ N/mm}$ $f_{v,90,k} = 116 \text{ N/mm}$ Nail plate width 120 mm: $f_{t,0,k} = 374 \text{ N/mm}$ $f_{c,0,k} = 136 \text{ N/mm}$ $f_{v,90,k} = 116 \text{ N/mm}$ Nail plate width 144 mm: $f_{t,0,k} = 361 \text{ N/mm}$ $f_{c,0,k} = 136 \text{ N/mm}$ $f_{v,90,k} = 116 \text{ N/mm}$ Nail plate width 180 mm: $f_{t,0,k} = 361 \text{ N/mm}$ $f_{c,0,k} = 136 \text{ N/mm}$ $f_{v,90,k} = 116 \text{ N/mm}$	
Instantaneous rotational stiffness for solid timber and glued laminated timber (corresponding EN 14545:2008 slip modulus $k_{ser}$ , with timber density $\rho_m = 430\text{kg/m}^3$ )	$K_{F,ser} = 5,8 \text{ N/mm}^3$	
Corresponding value for Kerto-S-LVL (EN 14374)	$K_{F,ser} = 6,1 \text{ N/mm}^3$	
Nail root ductility	Passed	
Service Class	1 and 2	EN 1995-1-1