



# Declaration of Performance

No. 012CPR2016-08-29

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|---|--|
| 1. Product-type:                        | Nail plates, ACF 1   |
| 2. Identification:                      | ACF nail plates dimensions 36x100 to 288x400 (mm)  |
| 3. Intended use:                        | Two-dimensional nail plates (nail plates for wood to wood connections)                     |
| 4. Manufacturer:                        | Arras Construction Furniture OÜ<br>Veerme 23<br>11625, Tallinn<br>Estonia                  |
| 5. System of assessment of performance: | System 2+  |
| 6. Harmonized standard:                 | EN 14545   |
| Testing report:                         | No: 010-032930   |
| 7. Notified body:                       | Inspecta Estonia OÜ<br>Identification No: 1336<br>Teaduspargi 8, 12618<br>Tallinn, Estonia |
| Factory Production Control (FPC):       | 1336-CPR-0157  |

## 8. Declared performances

Essential characteristics	Performance	European Technical Assessment
<b>Material</b>	S350GD+ZN	EN 10346:2009
<b>Mechanical resistance and stability</b>		
Characteristic plate anchorage capacity	$f_{a,\alpha 0,0} = 3,86 \text{ MPa}$ $k_1 = 0,0046$ $f_{a,\alpha 90,90} = 1,56 \text{ Mpa}$ $k_2 = -0,0950$ $\alpha 0 = 60,9^\circ$	TZUS report No: 010-032930
Characteristic plate tension, compression and shear capacity	$f_{t,0} = 249,2 \text{ N/mm}$ $f_{t,90} = 185,7 \text{ N/mm}$ $f_{c,0} = 230,7 \text{ N/mm}$ $f_{c,90} = 187,7 \text{ N/mm}$ $f_{v,0} = 113,2 \text{ N/mm}$ $f_{v,90} = 101,9 \text{ N/mm}$ $\gamma_0 = 0^\circ$ $k_v = 0$	TZUS report No: 010-032930
Slip modulus with mean timber density $\rho_k=410\text{kg/m}^3$	$k_{ser} = 3,95 \text{ N/mm}^3$	TZUS report No: 010-032930
Nail root ductility	Passed	TZUS report No: 010-032930
<b>Dimensions and tolerances</b>		
Thickness	1,3mm (min: 0,9; max: 3,0mm)	EN 10143:2006
Length	36-288mm	-
Width	100-400mm	-
Length, width	-1mm / +2mm; -1% / +2%	EN 14545:2008
Thickness	+/- 1%	EN 14545:2008
<b>Corrosion protection</b>	Hot-dip zinc coating Z275	EN 14545:2008
<b>Durability</b>	Service class 2	EN 1995-1-1

9. The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 8.

This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.

Signed on behalf of the manufacturer by:

Authorized by: **Lauri Kivi**  
Position: **Quality Manager**

Signature:



Date: **09.09.2019 (Tallinn)**