



# Declaration of Performance

DoP



**VORMANN**  
SCHARNIERE · BESCHLÄGE

DoP Nr: DoP – 013

1. **Type of product:** Connector plate
2. **Trade Name:** August Vormann Connector plate
3. **Intended use:** Timber structures - Connectors , EN 14545
4. **Manufacturer:** August Vormann GmbH Co. KG  
Heilenbecker Straße 191 – 205  
DE-58256 Ennepetal
5. **Authorised representative:** not applicable
6. **System of constancy of performance:** 2+
7. **Harmonised standard:** EN 14545:2008
8. **Notified Body:** BM TRADA Certification Limited, NB-Nr. 1224 has made the first inspection of the factory, the factory production control and also the continuing surveillance, assessment and evaluation under system 2+ and issued: certificate of conformity of the factory production control 1224-CPD-0174
9. **Declared performance:**

Essential characteristics	Performance	EN Norm
Steel	S235GD + Z275 NAC/MAC/MBC	EN 10143:2006 & EN 10346:2009
Thickness	1.0 mm	EN 14545:2008
Characteristic plate anchorage capacity/ solid wood and sawn timber characteristic density of $\rho_k = 350 \text{ kg/m}^3$	$f_{a,0,0} = 2,96 \text{ N/mm}^2$ $f_{a,90,90} = 1,52 \text{ N/mm}^2$ $k_1 = -0,0072$ $k_2 = 0,0015$ $\alpha_0 = 59,80^\circ$	
Characteristic plate capacity of tension, compression and shear	$f_{t,0} = 171 \text{ N/mm}$ ; $f_{t,90} = 184 \text{ N/mm}$ $f_{c,0} = 94 \text{ N/mm}$ ; $f_{c,90} = 106 \text{ N/mm}$ $f_{v,0} = 86 \text{ N/mm}$ ; $f_{v,90} = 57 \text{ N/mm}$ $\gamma_0 = -7,6^\circ$ ; $k_v = 1,45$	
Slip modulus at a mean timber density of $\rho_m = 420 \text{ kg/m}^3$	$k_{ser, \text{ mean}} = 13,2 \text{ N/mm}^2$	
Nail root ductility	Passed	
Minimum wood thickness	35 mm	
Durability, corrosion protection	Z275 pre-galvanized	
Service class	2	EN 1995-1-1

This Declaration of Performance is available at [www.vormann.com](http://www.vormann.com)

10. The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 7. This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.

Signed for and on behalf of the manufacturer by:

  
**Thomas Vormann**  
Managing Director

Elsterwerda, 27th July 2015