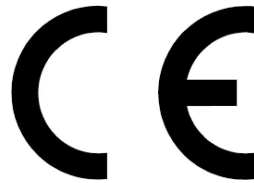


DECLARATION of PERFORMANCE

NR 01/GW-KWA 3.8/E-30-20365-17/2017



1. *Unique identification code of the product-type:*
Square twisting nails type GW-KWA
2. *Intended use:*
GW-KWA Ø3,8 square twisting nails are intended for structural connections of load-bearing wooden elements.
3. *Name, registered trade name or registered trade mark and contact address of the manufacturer:*
Marcopol Sp. z o.o. Producent Śrub, street Oliwska 100, 80-209 Chwaszczyno
4. *System or systems of assessment and verification of constancy of performance of the construction product:*
System "3" of assessment
5. *Declaration of performance concerning by a harmonized standard:*
EN 14592:2008 + A1:2012 Tab. ZA.1,
Name and identification number of the notified body:
Strojirenský zkušební ústav, s.p. Brno, Czech Republic, No. 1015
6. *Declared performance:*

Essential characteristic	Performance od product acc. E-30-20365-17		Harmonised specification
	Perpendicular to the grain	Paraller to the grain	
Characteristic yield moment $M_{y,k}$ [Nmm]	12 114		PN EN 14592:2008 + A1:2012 Tab. ZA.1
Characteristic withdrawal parameter $f_{ax,k}$ [N/mm ²] – for characteristic density of wood 350 kg/m ³	2,92	2,18	
	Characteristic head pull- through parameter $f_{head,k}$ [N/mm ²] – for density of wood 350 kg/m ³		
Characteristic tensile capacity $f_{tens,k}$ [kN]	8,38		
Zinc coating thickness:	min. 5 µm (service class 1)		PN-EN 1995-1-1

7. **The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 6.**
This declaration of performance is issued according to CPR 305/2011 under the sole responsibility of the manufacturer identified in point 4.

Chwaszczyno, 15.09.2017

Signed by:

R&D Director

Janusz Kabała

Dyrektor Działu Rozwoju
Produktów

Janusz Kabała
Janusz Kabała