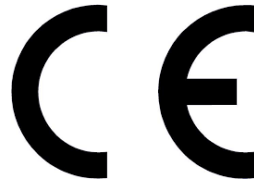


## DECLARATION of PERFORMANCE

No 01/MPT02/0371/2021



1. *Unique identification code of the product-type:* **MPT02**
2. *Intended use:* **MPT 02 self-drilling screws are intended to be used for fastening steel sheeting to steel supporting structures.**
3. *Name, registered trade name or registered trade mark and contact address of the manufacturer:* **Marcopol Sp. z o.o. Producer of Bolts str. Oliwska 100, 80-209 Chwaszczyno Poland**
4. *System or systems of assessment and verification of constancy of performance of the construction product:* **System "2+" of assessment**
5. *European Technical Assessment:* **ETA 18/0371 issued 11.04.2022**  
*Technical Assessment Body:* **Technický a zkušební ústav stavební Praha, s.p.**  
*Notified Body:* **Number: 1020 - Technický a zkušební ústav stavební Praha, s.p.**
6. *Declared performance:*

	Essential characteristics	Performance	Technical specification
<b>3.1 BWR 1: Mechanical resistance and stability</b>			
3.1.1	Characteristic Shear Resistance of the Connection	see Table 1 and 2 below	ETA 18/0371
3.1.2	Characteristic Tension Resistance of the Connection	see Table 1 and 2 below	ETA 18/0371
3.1.3	Design Resistance in case of combined Tension and Shear Forces (interaction)	No Performance Assessed	ETA 18/0371
3.1.4	Check of Deformation Capacity in case of constraining forces due to temperature	No Performance Assessed	ETA 18/0371
3.1.5	Durability		
	Ceramic coating Ruspert Silver	according to individual Producer documentation	ETA 18/0371
<b>3.2 BWR 2: Safety in case of fire</b>			
3.2.1	Reaction to fire	The performance of the product is class A1	EN 13501-1

**Table 1: Characteristic Tension Resistance  $N_{R,k}$  and Shear Resistance  $V_{R,k}$  [kN]**

	<p><u>Materials</u></p> <p>Fastener: carbon steel – SAE1022 quenched, tempered and galvanized (Ruspert Silver 500h)</p> <p>Washer: -</p> <p>Component I: S280GD, S320GD or S350GD – EN 10346</p> <p>Component II: S280GD, S320GD or S350GD – EN 10346</p>
	<p>Drilling capacity: <math>\Sigma t_i \leq 2 \times 1,25 \text{ mm}</math></p>
	<p><u>Timber substructures:</u> no performance determined</p>

$t_{N,II}$ [mm]	0,50	0,55	0,63	0,75	0,88	1,00	1,13	1,25	Wood class $\geq$ C24			
$M_{t,nom}$	3 Nm								—	—		
$V_{R,k}$ [kN] for $t_{N,I}$ [mm]	0,40	0,48	0,48	0,48	0,54	0,54	0,54	0,54	0,54	—	—	*bearing resistance of component I **bearing resistance of component II
	0,50	0,48	0,48	0,48	0,72	0,72	0,72	0,72	0,72	—	—	
	0,55	0,48	0,48	0,48	0,72	0,72	0,72	0,72	0,72	—	—	
	0,63	0,48	0,48	0,48	0,72	0,72	0,72	0,72	0,72	—	—	
	0,75	0,48	0,48	0,48	0,72	0,72	0,72	0,72	0,72	—	—	
	0,88	0,48	0,48	0,48	0,72	0,72	0,72	0,72	0,72	—	—	
	1,00	0,48	0,48	0,48	0,72	0,72	0,72	0,72	0,72	—	—	
	1,13	0,48	0,48	0,48	0,72	0,72	0,72	0,72	0,72	—	—	
	1,25	0,48	0,48	0,48	—	—	—	—	—	—	—	
	1,50	—	—	—	—	—	—	—	—	—	—	
	1,75	—	—	—	—	—	—	—	—	—	—	
	2,00	—	—	—	—	—	—	—	—	—	—	
$N_{R,k}$ [kN] for $t_{N,I}$ [mm]	0,40	0,48	0,48	0,48	0,54	0,54	0,54	0,54	0,54	—	—	*bearing resistance of component II **bearing resistance of component I
	0,50	0,48	0,48	0,48	0,72	0,72	0,72	0,72	0,72	—	—	
	0,55	0,48	0,48	0,48	0,72	0,72	0,72	0,72	0,72	—	—	
	0,63	0,48	0,48	0,48	0,72	0,72	0,72	0,72	0,72	—	—	
	0,75	0,48	0,48	0,48	0,72	0,72	0,72	0,72	0,72	—	—	
	0,88	0,48	0,48	0,48	0,72	0,72	0,72	0,72	0,72	—	—	
	1,00	0,48	0,48	0,48	0,72	0,72	0,72	0,72	0,72	—	—	
	1,13	0,48	0,48	0,48	0,72	0,72	0,72	0,72	0,72	—	—	
	1,25	0,48	0,48	0,48	—	—	—	—	—	—	—	
	1,50	—	—	—	—	—	—	—	—	—	—	
	1,75	—	—	—	—	—	—	—	—	—	—	
	2,00	—	—	—	—	—	—	—	—	—	—	

If both components I and II are made of S320GD the values  $V_{R,k}$  may be increased by 8,3%

If both components I and II are made of S350GD the values  $V_{R,k}$  may be increased by 16,6%

**MPT02 fastening screws for metal members and sheeting**

MPT02 4,8 × L  
with hexagon head

**Table 1**

**Table 2: Characteristic Tension Resistance  $N_{R,k}$  and Shear Resistance  $V_{R,k}$  [kN]**

	<p><u>Materials</u></p> <p>Fastener: carbon steel – SAE1022 quenched, tempered and galvanized (Ruspert Silver 500h)</p> <p>Washer: EPDM sealing ring with metal top made of aluminum</p> <p>Component I: S280GD, S320GD or S350GD – EN 10346 Component II: S280GD, S320GD or S350GD – EN 10346</p>
	<p>Drilling capacity: <math>\Sigma t_i \leq 2 \times 1,25 \text{ mm}</math></p>
	<p><u>Timber substructures</u></p> <p>no performance determined</p>

$t_{N,II}$ [mm]	0,50	0,55	0,63	0,75	0,88	1,00	1,13	1,25	Wood class $\geq$ C24				
$M_{t,nom}$	3 Nm									—	—		
$V_{R,k}$ [kN] for $t_{N,I}$ [mm]	0,40	0,48	0,48	0,48	0,72	0,72	0,72	0,72	0,72	—	—	*bearing resistance of component I **bearing resistance of component II	
	0,50	0,48	0,48	0,48	0,72	0,72	0,72	0,72	0,72	—	—		
	0,55	0,48	0,48	0,48	0,72	0,72	0,72	0,72	0,72	—	—		
	0,63	0,48	0,48	0,48	0,72	0,72	0,72	0,72	0,72	—	—		
	0,75	0,48	0,48	0,48	0,72	0,72	0,72	0,72	0,72	—	—		
	0,88	0,48	0,48	0,48	0,72	0,72	0,72	0,72	0,72	—	—		
	1,00	0,48	0,48	0,48	0,72	0,72	0,72	0,72	0,72	—	—		
	1,13	0,48	0,48	0,48	0,72	0,72	0,72	0,72	0,72	—	—		
	1,25	0,48	0,48	0,48	—	—	—	—	—	—	—		
	1,50	—	—	—	—	—	—	—	—	—	—		
	1,75	—	—	—	—	—	—	—	—	—	—		
	2,00	—	—	—	—	—	—	—	—	—	—		
$N_{R,k}$ [kN] for $t_{N,I}$ [mm]	0,40	0,48	0,48	0,48	0,72	0,72	0,72	0,72	0,72	—	—		*bearing resistance of component II **bearing resistance of component I
	0,50	0,48	0,48	0,48	0,72	0,72	0,72	0,72	0,72	—	—		
	0,55	0,48	0,48	0,48	0,72	0,72	0,72	0,72	0,72	—	—		
	0,63	0,48	0,48	0,48	0,72	0,72	0,72	0,72	0,72	—	—		
	0,75	0,48	0,48	0,48	0,72	0,72	0,72	0,72	0,72	—	—		
	0,88	0,48	0,48	0,48	0,72	0,72	0,72	0,72	0,72	—	—		
	1,00	0,48	0,48	0,48	0,72	0,72	0,72	0,72	0,72	—	—		
	1,13	0,48	0,48	0,48	0,72	0,72	0,72	0,72	0,72	—	—		
	1,25	0,48	0,48	0,48	—	—	—	—	—	—	—		
	1,50	—	—	—	—	—	—	—	—	—	—		
	1,75	—	—	—	—	—	—	—	—	—	—		
	2,00	—	—	—	—	—	—	—	—	—	—		

If both components I and II are made of S320GD the values  $V_{R,k}$  may be increased by 8,3%

If both components I and II are made of S350GD the values  $V_{R,k}$  may be increased by 16,6%

**MPT02 fastening screws for metal members and sheeting**

MPT02 4,8 × L +A14  
with hexagon head and sealing washer  $\geq \text{Ø}14 \text{ mm}$   
with metal top made of aluminum

**Table 2**

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 under the sole responsibility of the manufacturer identified in point 3.

Chwaszczyno, 15.11.2021

Signed by:

R&D Director

Janusz Kabała

Dyrektor Działu Rozwoju  
Produktów



*Janusz Kabała*  
Janusz Kabała