

DECLARATION of PERFORMANCE

No 01/MPT16SP/0354/2020



1. *Unique identification code of the product-type:* **MPT16 SP**
2. *Intended use:* **MPT16 SP self-drilling screws are intended to be used for fastening sandwich panel 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 19/0354 issued 27.01.2020**
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
3.1 BWR 1: Mechanical resistance and stability			
3.1.1.	Characteristic Shear Resistance of the Connection $V_{R,k}$	see Table 1 below	ETA 19/0354
3.1.2.	Characteristic Tension Resistance of the Connection $N_{R,k}$	see Table 1 below	ETA 19/0354
3.1.3.	Durability		
	Ceramic coating Ruspert SILVER 1000h	Dedicated to environment corrosion class C4-H, C5-M according to individual Producer's guidelines	EN ISO 12944-1:2018 EN ISO 12944-2:2018 Clasification no 06045/20/R58NZM/01
3.2 BWR 2: Safety in case of fire			
3.2.1.	Reaction to fire	The performance of the product is class A1	EN 13501-1

<u>Materials</u>									
Fastener:	carbon steel – SAE1022 quenched, tempered and galvanized and additionally protected by ceramic coating Ruspert Silver 1000h								
Washer:	EPDM sealing ring with metal top made of aluminum								
Component I:	S280GD, S320GD or S350GD – EN 10346								
Component II:	S235 – EN 10025-1								
Drilling capacity:		$\Sigma(t_{N2} + t_{II}) \leq 16$ mm							
Timber substructures		no performance determined							
Component II: t_{II} in [mm]		8.00	10.00	11.00	12.00	13.00	14.00	15.00	
Component I: t_{N1} or t_{N2} in [mm]	$V_{R,k}$ [kN]	0.40	0.82	0.82	0.82	0.82	0.82	0.82	0.82
		0.50	1.29	1.29	1.29	1.29	1.29	1.29	1.29
		0.55	1.29	1.29	1.29	1.29	1.29	1.29	1.29
		0.63	1.69	1.69	1.69	1.69	1.69	1.69	1.69
		0.75	2.01	2.01	2.01	2.01	2.01	2.01	2.01
		0.88	2.01	2.01	2.01	2.01	2.01	2.01	2.01
		1.00	2.01	2.01	2.01	2.01	2.01	2.01	2.01
	$N_{R,k}$ [kN]	0.40	2.23	2.23	2.23	2.23	2.23	2.23	2.23
		0.50	3.23	3.23	3.23	3.23	3.23	3.23	3.23
		0.55	3.23	3.23	3.23	3.23	3.23	3.23	3.23
		0.63	4.12	4.12	4.12	4.12	4.12	4.12	4.12
		0.75	4.73	4.73	4.73	4.73	4.73	4.73	4.73
		0.88	4.73	4.73	4.73	4.73	4.73	4.73	4.73
		1.00	4.73	4.73	4.73	4.73	4.73	4.73	4.73
max. head displacement u depending on the sandwich panel thickness in [mm]	30	0.7	0.7	0.7	0.7	0.7	0.7	0.7	
	40	0.9	0.9	0.9	0.9	0.9	0.9	0.9	
	50	1.2	1.2	1.2	1.2	1.2	1.2	1.2	
	60	1.4	1.4	1.4	1.4	1.4	1.4	1.4	
	70	1.6	1.6	1.6	1.6	1.6	1.6	1.6	
	80	1.8	1.8	1.8	1.8	1.8	1.8	1.8	
	90	2.1	2.1	2.1	2.1	2.1	2.1	2.1	
	100	2.3	2.3	2.3	2.3	2.3	2.3	2.3	
	120	2.8	2.8	2.8	2.8	2.8	2.8	2.8	
>140	3.2	3.2	3.2	3.2	3.2	3.2	3.2		
MPT16 SP Fastening screws for sandwich panels with aluminum washer A \emptyset(19, 22, 29)mm									
Table 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 under the sole responsibility of the manufacturer identified in point 3.

Chwaszczyno, 15.05.2020

Signed by:

R&D Director

Janusz Kabała

