

DECLARATION of PERFORMANCE

No 01/MPTC-SP/0354/2020



1. *Unique identification code of the product-type:* **MPTC SP**
2. *Intended use:* **MPTC SP self-drilling screws are intended to be used for fastening sandwich panel to wood 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

Materials

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: timber wood C24

Timber substructures

For timber substructures performance determined with $M_{y,Rk} = 9,28 \text{ Nm}$ $f_{ak,k} = 14,369 \text{ N/mm}^2$ for $l_{ef} \geq 20 \text{ mm}$

Component II: wood class \geq C24 l_{ef} in [mm]		Thickness of sandwich panel d or D in the fixing point								
		20.00	30.00	40.00	50.00	60.00	70.00	80.00	≥ 90.00	
Component I: t_{N1} or t_{N2} in [mm]	$V_{R,k}$ [kN]	0.40	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0,77
		0.50	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1,19
		0.55	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1,19
		0.63	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1,61
		0.75	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1,84
		0.88	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1,84
		1.00	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1,84
	$N_{R,k}$ [kN]	0.40	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1,84
		0.50	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1,84
		0.55	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1,84
		0.63	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1,84
		0.75	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1,84
		0.88	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1,84
		1.00	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1,84
max. head displacement u depending on the sandwich panel thickness in [mm]		0.7	0.9	1.2	1.4	1.6	1.8	2.1	2.3	

MPTC SP Fastening screws for sandwich panels with aluminum washer A $\phi(19, 22, 290)$ mm

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

Dyrektor Działu Rozwoju
 Produktów



Janusz Kabała