

DECLARATION of PERFORMANCE

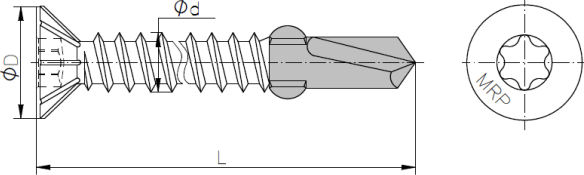
No 01/BSX/0371/2021



1. *Unique identification code of the product-type:* **BSX**
2. *Intended use:* **BSX self-drilling screws are intended to be used for fastening wooden 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 11.04.2021**
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	See Table 1 below	ETA 18/0371
3.1.2	Characteristic Tension Resistance of the Connection	See Table 1 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		
	Zinc coating min. 5 mikron	Category C1	ETA 18/0371
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

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

	Materials Fastener: stainless steel – SAE304 quenched, tempered and galvanized (Ruspert Silver 500h) Washer: - Component I: S280GD, S320GD or S350GD – EN 10346 Component II: S235 – EN 10025-1																																						
	Drilling capacity: $\Sigma t_i \leq 6,00$ mm																																						
	Timber substructures no performance determined																																						
<table border="1"> <thead> <tr> <th>$t_{N,II}$ [mm]</th> <th>3,00</th> <th>4,00</th> <th>5,00</th> <th>6,00</th> <th colspan="3">Wood class \geq C24</th> </tr> </thead> <tbody> <tr> <td>$M_{t,nom}$</td> <td colspan="4">6 Nm</td> <td>—</td> <td>—</td> <td></td> </tr> <tr> <td>$V_{R,k}$ [kN] for $t_{N,I}$ [mm]</td> <td>—</td> <td>1,21</td> <td>1,21</td> <td>1,21</td> <td>—</td> <td>—</td> <td>*bearing resistance of component I **bearing resistance of component II</td> </tr> <tr> <td>$N_{R,k}$ [kN] for $t_{N,I}$ [mm]</td> <td>—</td> <td>2,13</td> <td>2,13</td> <td>2,13</td> <td>—</td> <td>—</td> <td>*bearing resistance of component II **bearing resistance of component I</td> </tr> </tbody> </table>	$t_{N,II}$ [mm]	3,00	4,00	5,00	6,00	Wood class \geq C24			$M_{t,nom}$	6 Nm				—	—		$V_{R,k}$ [kN] for $t_{N,I}$ [mm]	—	1,21	1,21	1,21	—	—	*bearing resistance of component I **bearing resistance of component II	$N_{R,k}$ [kN] for $t_{N,I}$ [mm]	—	2,13	2,13	2,13	—	—	*bearing resistance of component II **bearing resistance of component I							
$t_{N,II}$ [mm]	3,00	4,00	5,00	6,00	Wood class \geq C24																																		
$M_{t,nom}$	6 Nm				—	—																																	
$V_{R,k}$ [kN] for $t_{N,I}$ [mm]	—	1,21	1,21	1,21	—	—	*bearing resistance of component I **bearing resistance of component II																																
$N_{R,k}$ [kN] for $t_{N,I}$ [mm]	—	2,13	2,13	2,13	—	—	*bearing resistance of component II **bearing resistance of component I																																
BSZ fastening screws for metal members and sheeting						Table 1																																	
BSZ 4,8 × L with countersunk head																																							

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, 08.11.2021

Signed by:

R&D Director

Janusz Kabała

Dyrektor Działu Rozwoju
Produktów



Janusz Kabała