

DECLARATION of PERFORMANCE

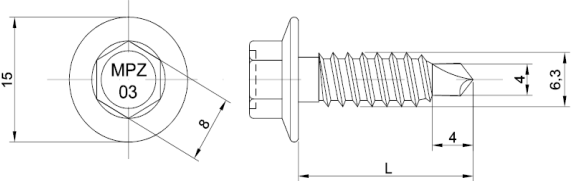
No 02/MPZ03-IW/0371/2022



1. *Unique identification code of the product-type:* **MPZ 03 IW**
2. *Intended use:* **MPZ 03 IW 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 11.04.2021**
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.12 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: carbon steel – SAE1022 quenched, tempered and galvanized ($\geq 12 \mu\text{m}$) Washer: - Component I: S280GD, S320GD or S350GD – EN 10346 Component II: S280GD, S320GD or S350GD – EN 10346 |
| | Drilling capacity: $\Sigma(t_{N2} + t_{II}) \leq 3,00 \text{ mm}$ |
| | Timber substructures no performance determined |

| $t_{N,II}$ [mm] | 0,75 | 0,88 | 1,00 | 1,13 | 1,25 | 1,50 | 2,00 | 3,00 | Wood class \geq C24 | | | |
|-----------------------------------|------|------|------|------|------|------|------|------|-----------------------|---|---|--|
| $M_{t,nom}$ | 7 Nm | | | | | | | | | — | — | |
| $V_{R,k}$ [kN] for $t_{N,I}$ [mm] | 0,75 | 1,39 | 1,39 | 1,39 | 1,39 | 1,39 | 1,39 | — | — | — | — | *bearing resistance of component I **bearing resistance of component II |
| | 0,88 | 2,30 | 2,30 | 2,30 | 2,30 | 2,30 | 2,30 | — | — | — | — | |
| | 1,00 | 2,56 | 2,56 | 2,56 | 2,56 | 2,56 | 2,56 | — | — | — | — | |
| | 1,13 | 2,56 | 2,56 | 2,56 | 2,56 | 2,56 | 2,56 | — | — | — | — | |
| | 1,25 | 2,70 | 2,70 | 2,70 | 2,70 | 2,70 | 2,70 | — | — | — | — | |
| | 1,50 | 2,77 | 2,77 | 2,77 | 2,77 | 2,77 | 2,77 | — | — | — | — | |
| | 1,75 | — | — | — | — | — | — | — | — | — | — | |
| | 2,00 | — | — | — | — | — | — | — | — | — | — | |
| $N_{R,k}$ [kN] for $t_{N,I}$ [mm] | 0,75 | 0,47 | 0,47 | 0,47 | 0,47 | 0,47 | 0,47 | — | — | — | — | *bearing resistance of component II **bearing resistance of component I |
| | 0,88 | 0,63 | 0,63 | 0,63 | 0,63 | 0,63 | 0,63 | — | — | — | — | |
| | 1,00 | 0,90 | 0,90 | 0,90 | 0,90 | 0,90 | 0,90 | — | — | — | — | |
| | 1,13 | 0,90 | 0,90 | 0,90 | 0,90 | 0,90 | 0,90 | — | — | — | — | |
| | 1,25 | 1,20 | 1,20 | 1,20 | 1,20 | 1,20 | 1,20 | — | — | — | — | |
| | 1,50 | 1,36 | 1,36 | 1,36 | 1,36 | 1,36 | 1,36 | — | — | — | — | |
| | 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%

MPZ 03 IW fastening screws for metal members and sheeting

MPZ 03 IW 6,3 × L
 with hexagon washer head

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, 14.01.2022

Signed by:

R&D Director

Janusz Kabała

Dyrektor Działu Rozwoju
Produktów



Janusz Kabała
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