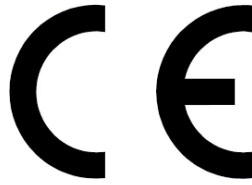


DECLARATION of PERFORMANCE

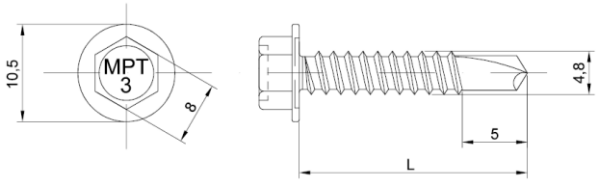
No 02/MPT3/0371/2022



1. *Unique identification code of the product-type:* **MPT 3**
2. *Intended use:* **MPT 3 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 |
|---|---|--|-------------------------|
| 3.1 BWR 1: Mechanical resistance and stability | | | |
| 3.1.1 | Characteristic Shear Resistance of the Connection | see Table 1 ÷ 4 below | ETA 18/0371 |
| 3.1.2 | Characteristic Tension Resistance of the Connection | see Table 1 ÷ 4 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 |
| | Ceramic coating Ruspert Silver | according to individual Producer documentation | 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 (Ruspert Silver) Washer: - Component I: S280GD, S320GD or S350GD – EN 10346 Component II: S280GD, S320GD or S350GD – EN 10346 S235 – EN 10025-1 |
| | Drilling capacity: $\Sigma(t_{N2} + t_{II}) \leq 4,50$ mm |
| | Timber substructures no performance determined |

| $t_{N,II}$ [mm] | 2,00 | 2,50 | 3,00 | 4,00 | 5,00 | 6,00 | 7,00 | 8,00 | Wood class \geq C24 | | | |
|-----------------------------------|--|--|--|--|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--|
| $M_{t,nom}$ | 3 Nm | | | | | | | | — | — | | |
| $V_{R,k}$ [kN] for $t_{N,I}$ [mm] | 0,75 0,88 1,00 1,13 1,25 1,50 1,75 2,00 | 1,64 1,80 1,96 1,96 1,96 1,96 — — | 1,64 1,80 1,96 1,96 1,96 1,96 — — | 1,64 1,80 1,96 1,96 1,96 1,96 — — | — — — — — — — — | — — — — — — — — | — — — — — — — — | — — — — — — — — | — — — — — — — — | — — — — — — — — | — — — — — — — — | *bearing resistance of component I **bearing resistance of component II |
| $N_{R,k}$ [kN] for $t_{N,I}$ [mm] | 0,75 0,88 1,00 1,13 1,25 1,50 1,75 2,00 | 1,21 1,43 1,91 1,91 2,03 2,03 — — | 1,21 1,43 1,91 1,91 2,03 2,03 — — | 1,21 1,43 1,91 1,91 2,03 2,03 — — | — — — — — — — — | — — — — — — — — | — — — — — — — — | — — — — — — — — | — — — — — — — — | — — — — — — — — | — — — — — — — — | *bearing resistance of component II **bearing resistance of component I |

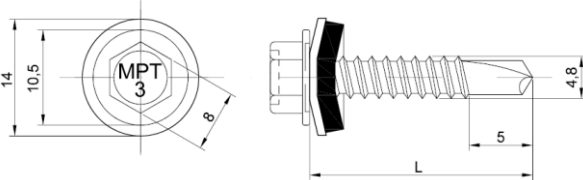
If both components I and II are made of S320GD the values $V_{R,k}$ may be increased by 8,3%
 If both components I and II are made of S350GD the values $V_{R,k}$ may be increased by 16,6%

MPT 3 fastening screws for metal members and sheeting

MPT 3 4,8 × L
 with hexagon head

Table 1

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

| | |
|---|---|
|  | Materials Fastener: carbon steel – SAE1022 quenched, tempered and galvanized (Ruspert Silver) Washer: EPDM sealing ring with metal top made of coated carbon steel Component I: S280GD, S320GD or S350GD – EN 10346 Component II: S280GD, S320GD or S350GD – EN 10346 S235 – EN 10025-1 |
| | Drilling capacity: $\Sigma(t_{N2} + t_{II}) \leq 4,50$ mm |
| | Timber substructures no performance determined |

| $t_{N,II}$ [mm] | 2,00 | 2,50 | 3,00 | 4,00 | 5,00 | 6,00 | 7,00 | 8,00 | Wood class \geq C24 | | | |
|-----------------------------------|--|--|--|--|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--|
| $M_{t,nom}$ | 3 Nm | | | | | | | | — | — | | |
| $V_{R,k}$ [kN] for $t_{N,I}$ [mm] | 0,75 0,88 1,00 1,13 1,25 1,50 1,75 2,00 | 1,64 1,80 1,96 1,96 1,96 1,96 — — | 1,64 1,80 1,96 1,96 1,96 1,96 — — | 1,64 1,80 1,96 1,96 1,96 1,96 — — | — — — — — — — — | — — — — — — — — | — — — — — — — — | — — — — — — — — | — — — — — — — — | — — — — — — — — | — — — — — — — — | *bearing resistance of component I **bearing resistance of component II |
| $N_{R,k}$ [kN] for $t_{N,I}$ [mm] | 0,75 0,88 1,00 1,13 1,25 1,50 1,75 2,00 | 3,03 3,03 3,03 3,03 3,03 3,03 — — | 3,03 3,03 3,03 3,03 3,03 3,03 — — | 3,30 4,00 4,13 4,13 4,13 4,13 — — | — — — — — — — — | — — — — — — — — | — — — — — — — — | — — — — — — — — | — — — — — — — — | — — — — — — — — | — — — — — — — — | *bearing resistance of component II **bearing resistance of component I |

 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%

MPT 3 fastening screws for metal members and sheeting

MPT 3 4,8 × L + S14
 with hexagon head and sealing washer $\geq \varnothing 14$ mm
 with metal top made of coated carbon steel

Table 2

Table 3: Characteristic Tension Resistance $N_{R,k}$ and Shear Resistance $V_{R,k}$ [kN]

| | |
|--|--|
| | Materials Fastener: carbon steel – SAE1022 quenched, tempered and galvanized (Ruspert Silver) Washer: EPDM sealing ring with metal top made of stainless steel Component I: S280GD, S320GD or S350GD – EN 10346 Component II: S280GD, S320GD or S350GD – EN 10346 S235 – EN 10025-1 |
| | Drilling capacity: $\Sigma(t_{N2} + t_{II}) \leq 4,50$ mm |
| | Timber substructures no performance determined |

| $t_{N,II}$ [mm] | 2,00 | 2,50 | 3,00 | 4,00 | 5,00 | 6,00 | 7,00 | 8,00 | Wood class \geq C24 | | |
|-----------------------------------|--|--|--|--|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|---|
| $M_{t,nom}$ | 3 Nm | | | | | | | | — | — | |
| $V_{R,k}$ [kN] for $t_{N,I}$ [mm] | 0,75 0,88 1,00 1,13 1,25 1,50 1,75 2,00 | 1,64 1,80 1,96 1,96 1,96 1,96 — — | 1,64 1,80 1,96 1,96 1,96 1,96 — — | 1,64 1,80 1,96 1,96 1,96 1,96 — — | — — — — — — — — | — — — — — — — — | — — — — — — — — | — — — — — — — — | — — — — — — — — | — — — — — — — — | *bearing resistance of component I ***bearing resistance of component II |
| $N_{R,k}$ [kN] for $t_{N,I}$ [mm] | 0,75 0,88 1,00 1,13 1,25 1,50 1,75 2,00 | 3,03 3,03 3,03 3,03 3,03 3,03 — — | 3,03 3,03 3,03 3,03 3,03 3,03 — — | 3,30 4,00 4,13 4,13 4,13 4,13 — — | — — — — — — — — | — — — — — — — — | — — — — — — — — | — — — — — — — — | — — — — — — — — | — — — — — — — — | *bearing resistance of component II ***bearing resistance of component I |

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%

MPT 3 fastening screws for metal members and sheeting

MPT 3 4,8 × L + I14
 with hexagon head and sealing washer $\geq \varnothing 14$ mm
 with metal top made of stainless steel

Table 3

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.

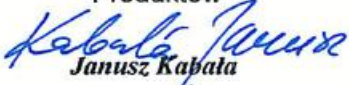
Chwaszczyno, 14.01.2022

Signed by:

R&D Director

Janusz Kabała

Dyrektor Działu Rozwoju
Produktów



Janusz Kabała
Janusz Kabała