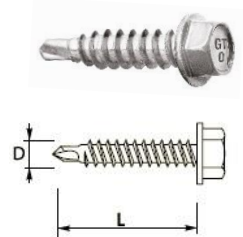


## GT 02

SCREWS WITHOUT WASHER  
FOR OVERLAP JOINTS (STAPLE)



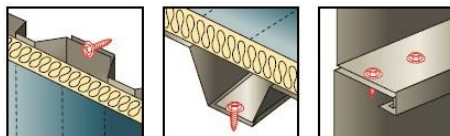
### PRODUCT DESCRIPTION

Self-drilling, self-tapping screws made of surface-hardened carbon steel, electroplated, with a reduced drilling point, fine thread and a hex head, without a washer.


### APPLICATION

Designed for fastening overlap joints of thin corrugated construction steel sheets and sandwich panels (roof tiles). Protected with paint coating - polyester thickness of not less than 50 µm, intended for use in environments with corrosivity class C1, C2 and C3 according to PN-EN ISO 12944-2: 2001 standard.

Galvanized without paint coating intended for use in environments with corrosivity class C1, C2.



### LENGTH OF SCREWS

Fastener type		Dimensions D x L [mm]	Maximum drill capacity [mm]	Maximum thickness of fixed elements [mm]
			DC	MTmax
GT 02	NA	4,8 x 20	2 x 1,00	10,00

*The working length of the connector is calculated from the maximum thickness of the DC substrate*

## NATIONAL TECHNICAL ASSESSMENT ITB-KOT-2018/0680

### CHARACTERISTIC LOAD BEARING CAPACITY FOR SHEAR AND PULL-OUT RESISTANCE IN A STEEL BASE

Substrate thickness <sup>1)</sup> [mm]		0,50	0,55	0,63	0,75	0,88	1,00	Wood class $\geq$ C24	
$M_{t,nom}$		3Nm							
Attachment thickness <sup>2)</sup> [mm]	Characteristic load bearing capacity SHEAR [kN]	0,50	1,05	1,05	1,05	1,05	1,05	1,05	/
		0,55	1,05	1,05	1,05	1,05	1,05	1,05	
		0,63	1,05	1,05	1,42	1,42	1,42	1,42	
		0,75	1,05	1,05	1,42	2,02	2,02	2,02	
		0,88	1,05	1,05	1,42	2,02	2,21	2,21	
		1,00	1,05	1,05	1,42	2,02	2,21	2,53	
	Characteristic load bearing capacity FOR PULL OUT [kN]	0,50	0,55	0,55	0,73	0,86	1,04	1,59	
		0,55	0,55	0,55	0,73	0,86	1,04	1,59	
		0,63	0,55	0,55	0,73	0,86	1,04	1,59	
		0,75	0,55	0,55	0,73	0,86	1,04	1,59	
		0,88	0,55	0,55	0,73	0,86	1,04	1,59	
		1,00	0,55	0,55	0,73	0,86	1,04	1,59	

<sup>1)</sup> steel grade S280GD, S320GD or S350GD according to PN-EN 10346:2015

<sup>2)</sup> steel grade S280GD, S320GD or S350GD according to PN-EN 10346:2015

If both elements I and II are made of steel grade S320GD, values  $V_{R,k}$  can be increased by 8,3%

If both elements I and II are made of steel grade S350GD, values  $V_{R,k}$  can be increased by 16,6%

## EUROPEAN TECHNICAL APPROVAL ETA-12/0580

### CHARACTERISTIC LOAD BEARING CAPACITY OF SHEAR RESISTANCE

tN,II* [mm]		0,50	0,55	0,63	0,75	0,88	1,00
VR,k [kN] for tN,I* [mm]	0,50	1,05	1,05	1,05	1,05	1,05	1,05
	0,55	1,05	1,05	1,05	1,05	1,05	1,05
	0,63	1,05	1,05	1,42	1,42	1,42	1,42
	0,75	1,05	1,05	1,42	2,02	2,02	2,02
	0,88	1,05	1,05	1,42	2,02	2,21	2,21
	1,00	1,05	1,05	1,42	2,02	2,21	2,53

Element I - sheet steel class S280GD; S320GD; Standard S350GD according to EN 10346.

Element II - sheet steel class S280GD; S320GD; Standard S350GD according to EN 10346.

To determine the structural carrying capacity of the characteristic safety factor  $\gamma_m = 1.33$ .

### CHARACTERISTIC LOAD BEARING CAPACITY OF PULL-OUT RESISTANCE IN A STEEL BASE

tN,II* [mm]		0,50	0,55	0,63	0,75	0,88	1,00
NR,k [kN] for tN,I* [mm]	0,50	0,55	0,55	0,73	0,86	1,04	1,59
	0,55	0,55	0,55	0,73	0,86	1,04	1,59
	0,63	0,55	0,55	0,73	0,86	1,04	1,59
	0,75	0,55	0,55	0,73	0,86	1,04	1,59
	0,88	0,55	0,55	0,73	0,86	1,04	1,59
	1,00	0,55	0,55	0,73	0,86	1,04	1,59

Element I - sheet steel class S280GD; S320GD; Standard S350GD according to EN 10346.

Element II - sheet steel class S280GD; S320GD; Standard S350GD according to EN 10346.

To determine the structural carrying capacity of the characteristic safety factor  $\gamma_m = 1.33$ .

## OTHER FEATURES

BASE MATERIAL:	TRAPEZOIDAL METAL SHEET
SIZE OF HEX HEAD:	8 mm
MINIMUM THICKNESS OF STEEL BASE:	2 x 0,50 mm
MAXIMUM CAPACITY OF DRILLING:	2 x 1,00 mm
THICKNESS OF ZINC COATING:	12 µm
CORROSIVE ENVIRONMENT:	PAINTED - C3 UNPAINTED - C2
OPINION ON ANTI-CORROSIVE PROTECTION:	02248/16/Z00NZM
POSSIBILITY OF PAINTING:	YES
PAINT COATING THICKNESS:	50 µm
TIGHTENING TORQUE:	3 Nm
RECOMMENDED ROTARY SPEED (IDLE):	1800 rpm

