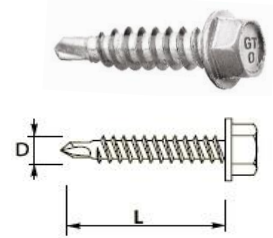


GTR 02

SELF-DRILLING SCREWS WITHOUT WASHER
FOR OVERLAP JOINTS (STITCH)



PRODUCT DESCRIPTION

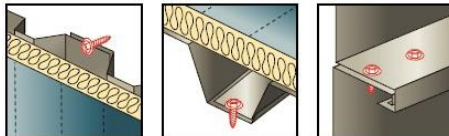
Self-drilling, self-tapping screws made of surface-hardened carbon steel, with a reduced drilling point, fine thread and a hex head, without a washer.

Additional corrosion protection: gRey.coat coating.


APPLICATION

Designed for fastening overlap joints of thin corrugated construction steel sheets and sandwich panels (roof tiles).

Possibility of use in environments with corrosivity category C1, C2, C3, C4 according to PN-EN ISO 12944-2: 2001



LENGTH OF SCREWS

Fastener type		Dimensions D x L [mm]	Maximum drilling capacity [mm]	Maximum thickness MTmax of the fixture element [mm]
			DC	MTmax
GTR 02	N/A	4,8 x 20	2 x 1,00	10,00

The working length of the fastener 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 ¹⁾ [mm]		0,50	0,55	0,63	0,75	0,88	1,00	Wood class \geq C24	
$M_{t,nom}$		3Nm							
Attachment thickness ²⁾ [mm]	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	
	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	

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

²⁾ 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
	0,55	1,05	1,05	1,05	1,05	1,05
	0,63	1,05	1,05	1,42	1,42	1,42
	0,75	1,05	1,05	1,42	2,02	2,02
	0,88	1,05	1,05	1,42	2,02	2,21
	1,00	1,05	1,05	1,42	2,02	2,21

Component I: S280GD, S320GD or S350GD – EN 10326

Component II: S280GD, S320GD or S350GD – EN 10326.

To define a design load should divide the value of the characteristic load by a 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
	0,55	0,55	0,55	0,73	0,86	1,04
	0,63	0,55	0,55	0,73	0,86	1,04
	0,75	0,55	0,55	0,73	0,86	1,04
	0,88	0,55	0,55	0,73	0,86	1,04
	1,00	0,55	0,55	0,73	0,86	1,04

Component I: S280GD, S320GD or S350GD – EN 10326

Component II: S280GD, S320GD or S350GD – EN 10326.

To define a design load should divide the value of the characteristic load by a safety factor $\gamma_m = 1,33$.

OTHER FEATURES

SUBSTRATE MATERIAL:	<i>PROFILED METAL SHEET</i>
THE SIZE OF HEXAGONAL HEAD:	<i>8 mm</i>
MINIMUM THICKNESS OF CONNECTED STEEL SHEETS:	<i>2 x 0,50 mm</i>
MAXIMUM DRILLING CAPACITY:	<i>2 x 1,00 mm</i>
ADDITIONAL CORROSION PROTECTION:	<i>gRey.coat</i>
CORROSIVITY CATEGORY:	<i>C4</i>
TECHNICAL OPINION:	<i>02248/16/Z00NZM</i>
PAINTING POSSIBILITY:	<i>YES</i>
MINIMUM THICKNESS OF POWDER PAINTING:	<i>50 μm</i>
TIGHTENING TORQUE:	<i>3 Nm</i>
RECOMMENDED SPEED OF THE TOOL WITHOUT LOAD:	<i>1800 rpm</i>



ETA



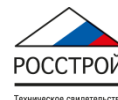
DWU/DoP



DKWU



ZKP



TC



POCC



SZU