



**NATIONAL DECLARATION OF PERFORMANCE NO:
KDWU-15/8150 FCS**

Version: V-1.2018 EN

1. Name and trade name of construction product:

Steel fasteners GTI-S, GTI-W and GTI(Z)-W for fixing fibrous-cement boards

2. Type of the construction product:

GTI-S 6,3xL, GTI-W 6,4xL, GTI(Z)-W 6,5xL

3. Intended uses or uses:

Fasteners GTI-S 6,3x90, GTI-W 6,4x110 i GTI(Z)-W 6,5x100 should be used to fix fibrous-cement boards with wavelengths 30mm, and fasteners GTI-S 6,3x110, GTI-W 6,4x130 and GTI(Z)-W 6,5x120 – fibrous-fiber boards with wavelength 51mm

- GTI-S drilling and tapping screws are designed for fixing Cembrit fibrous-cement boards, according to PN-EN 494 + A3: 2009 standard, for steel structures with a thickness of 2.0mm ÷ 8.0mm.
- GTI-W and GTI (Z) -W drilling fasteners are designed for fixing Cembrit fibrous-cement boards according to PN-EN 494 + A3: 2009 standard for wooden substrates.

Because of the aggressiveness of the corrosive environment:

- GTI-S and GTI-W should be used in environments with a corrosivity category C1 ÷ C4 in long life and C5-M in medium life, according to PN-EN ISO 12944-2: 2001,
- GTI (Z) -W fasteners made of corrosion resistant grade 1.4401 should be used in environments with corrosive atmospheres C1 ÷ C4 in long life and C5-M in long life, according to PN-EN ISO 12944-1: 2001 and PN-EN ISO 12944-2: 2001; At the same time, connectors should not be used in Category C5 environments where there are additional special exposures, ie. In the direct impact zone of the sea breeze,
- GTI (Z) -W couplings made of corrosion resistant steel 1.4529. 1.4565 or 1.4547 should be used in environments with corrosive atmospheres C1 ÷ C4 in long life and C5-M in long life, according to PN-EN ISO 12944-1: 2001 and PNEN ISO12944-2: 2001.

4. Name and address of the manufacturer and place of manufacture of the product:

Etanco Sp. z o. o., Al. Jana Pawła II 1, 81-345 Gdynia,

Address of production plant : ul. Olsztyńska 30 , 11-130 Orneta

5. Name and address of the authorized representative, if established:

N/A

6. National system used for assessment and verification of constancy of performance:

System 2+

7. National technical specification:

7a. Polish Product standard : **N/A**

Name of accredited certification body, accreditation number and national certificate number or name of accredited laboratory / laboratory and accreditation number: **N/A**

7b. National technical assessment : **AT-15-8150/2014 (Aneks nr 1)**

Technical Assessment Unit / National Technical Assessment Unit : **Instytut Techniki Budowlanej w Warszawie nr 1488**

Name of accredited certification body and certificate number:

Zakład Certyfikacji ITB Warszawa AC 020

Certyfikat Zakładowej Kontroli Produkcji nr: ITB-0227/Z

8. Declared performance properties

Essential characteristics of the construction product for the intended use or uses	Declared usable features	Comments
Characteristic resistance of fasteners: - pull-out $N_{R,k}$ [kN], - shear $V_{R,k}$ [kN],	According to point 3.2 of approval And tables 1÷3	AT-15-8150/2014
Protective coating / Corrosion protection	According to point 2 of approval	AT-15-8150/2014

Table 1

Characteristic and design loads of GTI-S fasteners for pull-out from steel substrates¹

GTI-S			
Fastener Type	Thickness of substrate ¹	Characteristic bearing capacity N_{Rk}	Design resistance N_{Rd}
	[mm]	[kN]	[kN]
GTI-S 6,3	2,0	6,51	3,53
GTI-S 6,3	4,0	15,05	8,17

¹ sheet steel of the grade S280GD according to norm PN-EN 10346:2011

Table 2

Characteristic and design resistance of GTI-S and GTI (Z) -W fasteners for pull-out from a wooden substrate¹

GTI-S and GTI(Z)-W			
Fastener Type	Thickness of substrate ¹	Characteristic bearing capacity N_{Rk}	Design resistance N_{Rd}
	[mm]	[kN]	[kN]
GTI-W 6,4	30	3,03	1,00
GTI-W 6,4	40	3,83	1,27
GTI(Z)-W 6,5	26	2,29	0,74
GTI(Z)-W 6,5	30	3,03	1,00
GTI(Z)-W 6,5	40	4,56	1,48
GTI(Z)-W 6,5	52	6,53	2,12

¹ constructions wood class C24 according to norm PN-EN 338:2011

Table 3

Characteristic and calculated loads of GTI-S, GTI-W and GTI (Z) -W fasteners for eccentric shear

GTI-S, GTI-W and GTI(Z)-W			
Fastener Type	Arm of force action	Characteristic bearing capacity $V_{Rk,s}$	Design resistance $V_{sd,s}$
	[mm]	[kN]	[kN]
GTI-S 6,3x90	35	1,18	0,95
	45	0,93	0,75
	65	0,66	0,53
GTI-S 6,3x110	55	0,77	0,62
	65	0,66	0,53
	85	0,51	0,41
GTI-W 6,4x110	35	0,82	0,66
	45	0,65	0,53
	50	0,59	0,48
GTI-W 6,4x130	55	0,54	0,44
GTI(Z)-W 6,5x100	65	0,46	0,37
GTI(Z)-W 6,5x120	70	0,43	0,35

9. The performance properties of the product specified above are in accordance with all the declared performance characteristics listed in paragraph 8. This national declaration of performance is issued in accordance with the Act of 16 April 2004 on construction products, under the sole responsibility of the manufacturer..

Place and date of issue

Orneta 02.01.2018

On behalf of the manufacturer signed
(Name and position)

Product Manager:
Aleksander Stępa
Product Manager
Etanco Sp. z o.o.