

EC DECLARATION OF PERFORMANCE

No. 202210163

According to

Construction Products Regulation : (EU) No. 305/2011

PANTHER T&H INDUSTRY CO., LTD.
Floor 11-4, No.186, 2 Sec. Dong Shin Road, Taichung Taiwan
TEL: +886-4-24731513
FAX: +886-4-24726831

Declare under our sole responsibility that the product:

Product: Chipboard screws

Intended use: For timber structure load.

Order number: PI-202210163/ O-N2202913

Product identification and the initial-type findings: Refer to Annex I (Page 2)

To which this declaration relates is in conformity with

System 3 of (EU) No. 305/2011 and EN 14592:2008+A1:2012

and are tested by

STROJÍRENSKÝ ZKUŠEBNÍ ÚSTAV, s. p. (Notified Body No. 1015)

The reference test report no.:

$\phi 2.5\text{mm}$ / No. 30-10054/1 $\phi 3.0\text{mm}$ / No. 30-10054/2 $\phi 3.5\text{mm}$ / No. 30-10054/3
 $\phi 4.0\text{mm}$ / No. 30-10054/4 $\phi 4.5\text{mm}$ / No. 30-10054/5 $\phi 5.0\text{mm}$ / No. 30-10054/6
 $\phi 6.0\text{mm}$ / No. 30-10054/7 $\phi 8.0\text{mm}$ / No. 30-10054/8 $\phi 10.0\text{mm}$ / No. 30-10054/9

Essential characteristics	Performance	Harmonised technical specification
Mechanical resistance and stability	Reference to Annex 1	EN 14592:2008+A1:2012
Safety in case of fire	A1	EN 13501-1:2007+A1:2009
Hygiene, health and the environment	NPD	-
Safety and accessibility in use	NPD	-
Protection against noise	NPD	-
Energy economy and heat retention	NPD	-
Sustainable use of natural resources	NPD	-



Date: 2023/04/20

Position: Q.C. MANAGER

Signature: Thomas Chen

ANNEX I Product identification and the initial-type testing findings

Table 1:

Product	Length	Characteristic yield moment $M_{y,k} [Nmm]$		characteristic withdrawal parameter $f_{ax,k} [N/mm^2]$		Characteristic head pull-through parameter $f_{head,k} [N/mm^2]$	Characteristic tensile capacity $f_{tens,k} [kN]$	Characteristic torsional ratio
				Loading across the fibre	Loading along the fibre			
Screw ϕ 2.5 mm	10-40 mm	1 470		16,71	13,27	See Table 2	2,80	3,04
Screw ϕ 3.0 mm	12-50 mm	2 583		17,00	11,09		3,69	2,82
Screw ϕ 3.5 mm	14-60 mm	2 736		17,40	12,05		5,37	2,39
Screw ϕ 4.0 mm	16-80 mm	4 252		17,13	14,31		6,38	2,85
Screw ϕ 4.5 mm	18-90 mm	5 692		17,51	13,76		7,93	3,02
Screw ϕ 5.0 mm	20-150 mm	7 718		17,32	12,12		9,41	3,34
Screw ϕ 6.0 mm	24-300 mm	12 773		17,73	11,59		14,67	3,23
Screw ϕ 8.0 mm	32-600 mm	30 672		15,11	11,98		24,80	3,26
Screw ϕ 10.0 mm	40-600 mm	Thread section	Smooth section	14,73	10,23		32,56	3,66
		42 574	74 386					
Material	Carbon Steel SAE1018/SAE1022							
Corrosion resistance	Zinc plated / yellow zinc plated (service class 1 acc. to EN 1995-1-1)							

Table 2:

Characteristic head pull-through parameter $f_{head,k} [N/mm^2]$			
Head Type	Double Flat	pan	Oval
Screw ϕ 2.5 mm	25,29	29,29	24,74
Screw ϕ 3.0 mm	24,23	28,04	24,36
Screw ϕ 3.5 mm	24,14	29,77	23,79
Screw ϕ 4.0 mm	22,07	27,46	22,57
Screw ϕ 4.5 mm	22,73	25,98	23,10
Screw ϕ 5.0 mm	21,23	26,54	20,58
Screw ϕ 6.0 mm	23,66	27,75	23,44
Screw ϕ 8.0 mm	22,70	~	~
Screw ϕ 10.0 mm	22,02	~	~