



DECLARATION OF PERFORMANCE

No. 2016-004

1. Unique identification code of the product type: WT, WTB, WTZ, WTZB
2. Intended use/es: universal/construction wood screws, screws for structural wood products
3. Manufacturer: ARVEX GROBELNY Sp. z o.o.
ul. Makuszyńskiego 4, 30-969 Krakow, POLAND.....
4. Authorised representative:
5. System/s of AVCP: system 3
- 6a. Harmonised standard: PN-EN 14592+A1:2012 - „Timber structures – Dowel-type fasteners – Requirements”, 2012.....
Notified Body/ies: 1488, certificate of accreditation AB 023, Zakład Elementów Konstrukcji Budowlanych i Budownictwa na Terenach Górniczych, Laboratorium Łączników i Wyrobów Budowlanych (LOK) Instytutu Techniki Budowlanej, Poland.
1015, certificate of accreditation 292/2016, Strojirenský Zkušební Ústav, s.p., Czech Republic.
- 6b. European Assessment Document:
- European Technical Assessment:
- Technical Assessment Body:
- Notified Body/ies:
7. Declared performance:

Essential characteristics	Product type and size*	Performance	Harmonised technical specification
	screws for wood		
Material	WT/WTB 3.0/xx, 3.5/xx, 4.0/xx, 4.5/xx, 5.0/xx	Carbon steel C1022/C10B21	According to SAE/AISI
	WT/WTB/WTZ/WTZB 6.0/xx, 8.0/xx, 10.0/xx	Carbon steel C10B21	
Geometric dimensions – tolerances	WT/WTB 3.0/xx	Length – L ₁ [mm]: +0,5mm, -1,0mm Diameter – d ₁ [mm]: +0,1mm, -0,15mm Head diameter – d ₂ [mm]: +0,2mm, -0,4mm	PN-EN 14592+A1:2012
	WT/WTB 3.5/xx	Length – L ₁ [mm]: ± 1,5mm Diameter – d ₁ [mm]: +0,15mm, -0,2mm Head diameter – d ₂ [mm]: +0,2mm, -0,6mm	
	WT/WTB 4.0/xx	Length – L ₁ [mm]: ± 2,0mm Diameter – d ₁ [mm]: +0,15mm, -0,25mm Head diameter – d ₂ [mm]: +0,2mm, -0,6mm	
	WT/WTB 4.5/xx		
	WT/WTB 5.0/xx	Length – L ₁ [mm]: ± 2,0mm Diameter – d ₁ [mm]: +0,1mm, -0,3mm Head diameter – d ₂ [mm]: +0,2mm, -0,6mm	
	WT/WTB/WTZ/WTZB 6.0/xx	Length – L ₁ [mm]: -2,5% Head diameter – d ₂ [mm]: -5,0%	
	WT/WTB/WTZ/WTZB 8.0/xx		
	WT/WTB/WTZ/WTZB 10.0/xx		
	WT/WTB/WTZ/WTZB 6.0/xx		
	WT/WTB/WTZ/WTZB 8.0/xx	Diameter – d ₁ [mm]: 7,8mm-8,0mm	
WT/WTB/WTZ/WTZB 10.0/xx	Diameter – d ₁ [mm]: 9,7mm-10,0mm		
Characteristic yield moment – M _{y,k}	WT/WTB 3.0/xx	1800 [Nmm]	PN-EN 14592+A1:2012
	WT/WTB 3.5/xx	2255 [Nmm]	
	WT/WTB 4.0/xx	3785 [Nmm]	
	WT/WTB 4.5/xx	5017 [Nmm]	
	WT/WTB 5.0/xx	8088 [Nmm]	
	WT/WTB/WTZ/WTZB 6.0/xx	14488 [Nmm]	
	WT/WTB/WTZ/WTZB 8.0/xx	31299 [Nmm]	
	WT/WTB/WTZ/WTZB 10.0/xx	56660 [Nmm]	

Characteristic withdrawal parameter for loading across the fibre – $f_{ax,k}$ [for characteristic density of wood $\rho_k = 350 \text{ kg/m}^3$]	WT/WTB 3.0/xx	16,99 [N/mm ²]	PN-EN 14592+A1:2012
Characteristic withdrawal parameter for loading across the fibre – $f_{ax,k}$ [for characteristic density of wood $\rho_k = 370 \text{ kg/m}^3$]	WT/WTB 3.5/xx	18,09 [N/mm ²]	
	WT/WTB 4.0/xx	18,79 [N/mm ²]	
	WT/WTB 4.5/xx	17,80 [N/mm ²]	
	WT/WTB 5.0/xx	19,70 [N/mm ²]	
	WT/WTB/WTZ/WTZB 6.0/xx	10,47 [N/mm ²]	
	WT/WTB/WTZ/WTZB 8.0/xx	11,99 [N/mm ²]	
WT/WTB/WTZ/WTZB 10.0/xx	13,37 [N/mm ²]		
Characteristic withdrawal parameter for loading along the fibre – $f_{ax,k}$ [for characteristic density of wood $\rho_k = 350 \text{ kg/m}^3$]	WT/WTB 3.0/xx	11,14 [N/mm ²]	PN-EN 14592+A1:2012
Characteristic withdrawal parameter for loading along the fibre – $f_{ax,k}$ [for characteristic density of wood $\rho_k = 370 \text{ kg/m}^3$]	WT/WTB 3.5/xx	12,07 [N/mm ²]	
	WT/WTB 4.0/xx	11,49 [N/mm ²]	
	WT/WTB 4.5/xx	11,42 [N/mm ²]	
	WT/WTB 5.0/xx	13,31 [N/mm ²]	
	WT/WTB/WTZ/WTZB 6.0/xx	7,21 [N/mm ²]	
	WT/WTB/WTZ/WTZB 8.0/xx	7,76 [N/mm ²]	
WT/WTB/WTZ/WTZB 10.0/xx	7,98 [N/mm ²]		
Characteristic head pull-through parameter – $f_{head,k}$ [for characteristic density of wood $\rho_k = 380 \text{ kg/m}^3$]	WT/WTB 3.0/xx	24,67 [N/mm ²]	PN-EN 14592+A1:2012
Characteristic head pull-through parameter – $f_{head,k}$ [for characteristic density of wood $\rho_k = 400 \text{ kg/m}^3$]	WT/WTB 3.5/xx	24,46 [N/mm ²]	
	WT/WTB 4.0/xx	22,66 [N/mm ²]	
	WT/WTB 4.5/xx	21,66 [N/mm ²]	
Characteristic head pull-through parameter – $f_{head,k}$ [for characteristic density of wood $\rho_k = 350 \text{ kg/m}^3$]	WT/WTB 5.0/xx	21,81 [N/mm ²]	
	WT/WTB 6.0/xx	17,91 [N/mm ²]	
	WT/WTB 8.0/xx	18,17 [N/mm ²]	
	WT/WTB 10.0/xx	19,05 [N/mm ²]	
WTZ/WTZB 6.0/xx	19,74 [N/mm ²]		
WTZ/WTZB 8.0/xx	21,32 [N/mm ²]		
WTZ/WTZB 10.0/xx	21,89 [N/mm ²]		
Characteristic tensile capacity – $f_{tens,k}$	WT/WTB 3.0/xx	3,91 [kN]	PN-EN 14592+A1:2012
	WT/WTB 3.5/xx	4,34 [kN]	
	WT/WTB 4.0/xx	6,25 [kN]	
	WT/WTB 4.5/xx	7,65 [kN]	
	WT/WTB 5.0/xx	10,25 [kN]	
	WT/WTB/WTZ/WTZB 6.0/xx	11,76 [kN]	
	WT/WTB/WTZ/WTZB 8.0/xx	23,20 [kN]	
	WT/WTB/WTZ/WTZB 10.0/xx	35,79 [kN]	

Characteristic torsional ratio ($f_{tor,k} / R_{tor,k}$) [for characteristic density of wood $\rho_k = 450 \text{ kg/m}^3$]	WT/WTB 3.0/xx	3,11	PN-EN 14592+A1:2012
	WT/WTB 3.5/xx	3,38	
	WT/WTB 4.0/xx	2,25	
	WT/WTB 4.5/xx	2,45	
	WT/WTB 5.0/xx	2,89	
	WT/WTB/WTZ/WTZB 6.0/xx	2,18	
	WT/WTB/WTZ/WTZB 8.0/xx	2,88	
	WT/WTB/WTZ/WTZB 10.0/xx	2,34	

*xx – applies to any length of the specified diameter of the screw.

8. Appropriate Technical Documentation and/or Specific Technical Documentation: *Test report No. LOK00-01605/14/Z00OSK issued on 2nd December 2014 by Zakład Elementów Konstrukcji Budowlanych i Budownictwa na Terenach Górniczych, Laboratorium Łączników i Wyrobów Budowlanych (LOK) Instytutu Techniki Budowlanej and certificates to the reports on assessment of the performance of construction products No.: E-30-20260-16, E-30-20263-16, E-30-20265-16, E-30-20269-16 issued on 31st May 2016 and E-30-20413-16 issued on 10th August 2016 by Strojirenský Zkušební Ústav, s.p., Czech Republic.*

The performance of the product identified above is in conformity with the set of declared performance/s. This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011, under the sole responsibility of the manufacturer identified above.

Signed for and on behalf of the manufacturer by:

Jerzy Grobelny.....

in Krakow on 1st September 2016.....
 [place] [date of issue]

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[signature]
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