

## DECLARATION OF PERFORMANCE No WKFS/21

- |  |   |
|--|---|
| 1. Unique identification code of the product-type: | <b>WKFS</b>   |
| 2. Intended use/es:                                | <b>Screws for use in timber constructions</b>   |
| 3. Manufacturer:                                   | <b>Klimas Sp. z o.o.<br/>ul. Wincentego Witosa 135/137<br/>Kućnica Kiedrzyńska 42-233 Mykanów</b> |
| 4. Authorised representative:                      | <b>not applicable</b>   |
| 5. System/s of AVCP:                               | <b>system 3</b>   |
| 6. European Assessment Document:                   | <b>EAD 130118-00-0603 10/2016</b>   |
| European Technical Assessment:                     | <b>ETA-18/0817 17/01/2019</b>   |
| Technical Assessment Body:                         | <b>DEUTSCHES INSTITUT FÜR BAUTECHNIK</b>  |
| Notified body/ies:                                 | <b>0769</b>   |
| 7. Declared performance/s:                         |   |

Essential characteristic	Performance							
Dimensions	$\varnothing$	[mm]		8	10			
Characteristic yield moment	$M_{y,k}$	[Nm]		25	43			
Bending angle	max.	[°]		30	29			
Characteristic withdrawal parameter	$f_{ax,k}$	[N/mm <sup>2</sup> ]		12	11			
Characteristic head pull-through parameter	$f_{head,k}$	[N/mm <sup>2</sup> ]		9,4	9,4			
Characteristic tensile strength	$f_{tens,k}$	[kN]		25	36			
Characteristic yield strength	$f_{y,k}$	[N/mm <sup>2</sup> ]		1000	1000			
Characteristic torsional strength	$f_{tor,k}$	[Nm]		27	45			
Insertion moment	$R_{tor,k}$	[Nm]		ok	ok			
Spacing, end and edge distances of the screws and minimum thickness of the wood based material								
distance and thickness [mm]	$a_1$	$a_{3,t}$	$a_{3,c}$	$a_2$	$a_{4,t}$	$a_{4,c}$	$T_{min.}$	
Plane surface (for $\varnothing 6$ / $\varnothing 8$ / $\varnothing 10$ )	24/32/40	36/48/60	36/48/60	15/20/25	36/48/60	15/20/25	24/30/40	
Edge surface (for $\varnothing 6$ / $\varnothing 8$ / $\varnothing 10$ )	60/80/100	72/96/120	42/56/70	24/32/40	36/48/60	18/24/30		

Figure A.2.1 Definition of spacing, end and edge distances in the plane surface of the cross laminated timber:

Figure A.2.2 Definition of spacing, end and edge distances in the edge surface of the cross laminated timber. For screws in the edge surface,  $a_1$  and  $a_3$  are parallel to the CLT plane face,  $a_2$  and  $a_4$  perpendicular to CLT plane face.

<b>Slip modulus</b>	Kser	[N/mm]	25 x l <sub>ef</sub> x d
<b>Reaction to fire</b>	Class A1		

8. Appropriate Technical Documentation and/or Specific Technical Documentation:

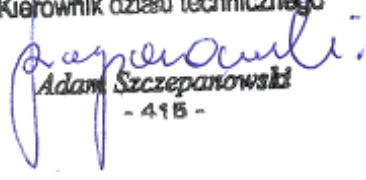
**not applicable**

*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:

Kuźnica Kiedrzyńska  
29-07-2021

[place]  
[date of issue]

Kierownik działu technicznego  
  
Adam Szczepanowski  
- 415 -

[name]  
[signature]

The screws are used for connections in load bearing timber structures between wood-based members or between those members and steel members:

- Solid timber (softwood) according to EN 14081-1;
- Glued laminated timber (softwood) according to EN 14080;
- Laminated veneer lumber LVL made of softwood according to EN 14374, arrangement of the screws only perpendicular to the plane of the veneers;
- Cross-laminated timber made from softwood according to European Technical Assessments.

The screws may be used for connecting the following wood-based panels to the timber members mentioned above:

- Plywood according to EN 636 and EN 13986;
- Oriented Strand Board, OSB according to EN 300 and EN 13986;
- Particleboard according to EN 312 and EN 13986;
- Fibreboards according to EN 622-2, EN 622-3 and EN 13986;
- Cement-bonded particle boards according to EN 634-2 and EN 13986;
- Solid-wood panels according to EN 13353 and EN 13986.

Wood-based panels are only be arranged on the side of the screw head. KLIMAS screws with an outer thread diameter of at least 6 mm can be used for the fixing of thermal insulation material on top of rafters or on wood-based members in vertical facades.

WKFC and WKFS screws are used for compression and tension reinforcing of timber structures perpendicular to the grain.