CE 19 0769

DECLARATION OF PERFORMANCE No WKFC/21

1. Unique identification code of the product-type: **WKFC**

2. Intended use/es: **Screws for use in timber constructions**

3. Manufacturer:
   Klimas Sp. z o.o.
   ul. Wincentego Witosa 135/137
   Kuźnica Kiedrzyńska 42-233 Mykanów

4. Authorised representative: **not applicable**

5. System/s of AVCP: **system 3**

6. European Assessment Document: **EAD 130118-00-0603 10/2016**
   European Technical Assessment: **ETA-18/0817 17/01/2019**
   Technical Assessment Body: **DEUTSCHES INSTITUT FÜR BAUTECHNIK**
   Notified body/ies: **0769**

7. Declared performance/s:

Essential characteristic			Performance				
Dimensions	ø	[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^2]		12	11		
Characteristic head pull-through parameter	$f_{head,k}$	[N/mm^2]		9,4	9,4		
Characteristic tensile strength	$f_{tens,k}$	[kN]		25	36		
Characteristic yield strength	$f_{y,k}$	[N/mm^2]		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 ø6/ ø8/ ø10)	24/32/40	36/48/60	36/48/60	15/20/25	36/48/60	15/20/25	24/30/40
Edge surface (for ø6/ ø8/ ø10)	60/80/100	72/96/120	42/56/70	24/32/40	36/48/60	18/24/30	
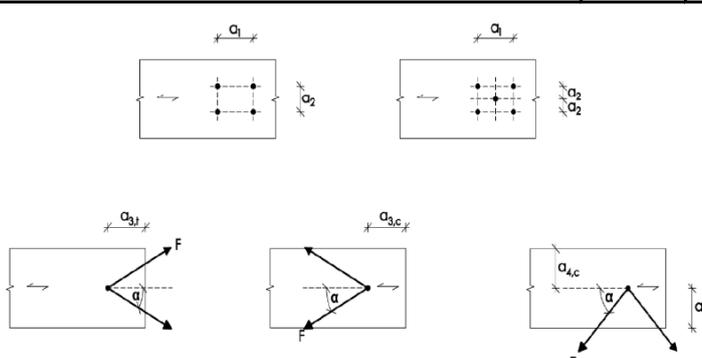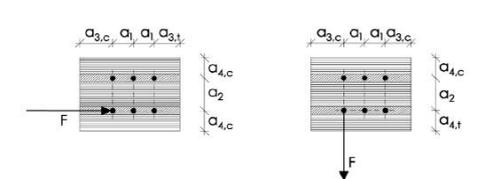
Figure A.2.2   Definition of spacing, end and edge distances in the edge surface of the cross laminated timber. For screws in the edge surface, a_1 and a_3 are parallel to the CLT plane face, a_2 and a_4 perpendicular to CLT plane face.

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

Slip modulus	K$_{ser}$	[N/mm]	25 x l$_{ef}$ x d
Reaction to fire			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:

Kierownik działu technicznego

Adam Szczepanowski
- 415 -

Kuźnica Kiedrzyńska
29-07-2021
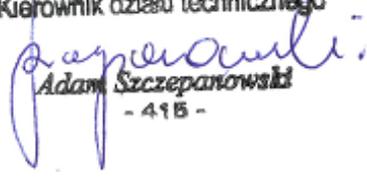
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The screws are used for connections in load bearing timber structures between wood-based members or between those members and steel members:

- 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.