Kerto® LVL

UK DECLARATION OF CONFORMITY

NO. MW/LVL/314-001/UKCA/UKDOC

UK CA

1. PRODUCT-TYPE:
Kerto LVL T-stud
Structural Laminated Veneer Lumber, only parallel veneers (LVL-P)

2. INTENDED USES:
Buildings and bridges

3. MANUFACTURER:
Metsäliitto Cooperative
Metsä Wood
P.O.Box 24
FI-08101 Lohja, Finland
Tel. +358 10 4605
metsagroup.com/metsawood/

5. SYSTEM OF ASSESSMENT AND VERIFICATION OF CONSTANCY OF PERFORMANCE:
AVCP System 1

6a. DESIGNATED STANDARD:
EN 14374:2004

Approved body:
CATG Ltd, No. 1245

Certificate of constancy of performance:
1245-CPR-8002 (Lohja LVL mill)
1245-CPR-8003 (Punkaharju LVL mill)

Metsä

7. DECLARED PERFORMANCES

ESSENTIAL CHARACTERISTICS	SYMBOL	PERFORMANCE KERTO LVL T-stud LVL 32 P THICKNESS 27 - 75 mm
Modulus of elasticity and shear modulus		**N/mm² or kg/m³**
Modulus of elasticity, mean values		
Parallel to grain, along	$E_{0,mean}$ [2]	9600
Parallel to grain, across	$E_{m,90,flat,mean}$	NPD
Perpendicular to grain, edgewise	$E_{c,90,edge,mean}$ [4]	NPD
Perpendicular to grain, flatwise	$E_{c,90,flat,mean}$	NPD
Modulus of elasticity, fifth percentile value		
Parallel to grain, along	$E_{0,k}$ [3]	8000
Parallel to grain, across	$E_{m,90,flat,k}$	NPD
Perpendicular to grain, edgewise	$E_{c,90,edge,k}$ [5]	NPD
Perpendicular to grain, flatwise	$E_{c,90,flat,k}$	NPD
Shear modulus, mean values		
Edgewise	$G_{0,edge,mean}$	500
Flatwise, parallel to grain	$G_{0,flat,mean}$	320
Flatwise, perpendicular to grain	$G_{90,flat,mean}$	NPD
Shear modulus, fifth percentile value		
Edgewise	$G_{0,edge,k}$	330
Flatwise, parallel to grain	$G_{0,flat,k}$	240
Flatwise, perpendicular to grain	$G_{90,flat,k}$	NPD
Strength, fifth percentile values		
Bending strength		
Edgewise (depth 300mm)	$f_{m,0,edge,k}$	27.0
Size effect parameter	s	0.15
Flatwise, parallel to grain	$f_{m,0,flat,k}$	32.0
Flatwise, perpendicular to grain	$f_{m,90,flat,k}$	NPD
Compression strength		
Parallel to grain	$f_{c,0,k}$	26.0 [1]
Perpendicular to grain, edgewise	$f_{c,90,edge,k}$	4.0
Perpendicular to grain, flatwise	$f_{c,90,flat,k}$	0.8
Tension strength		
Parallel to grain (length 3000mm)	$f_{t,0,k}$	22.0
Perpendicular to grain, edgewise	$f_{t,90,edge,k}$	NPD
Perpendicular to grain, flatwise	$f_{t,90,flat,k}$	NPD
Shear strength		
Edgewise	$f_{v,0,edge,k}$	3.6
Flatwise, parallel to grain	$f_{v,0,flat,k}$	2.0
Flatwise, perpendicular to grain	$f_{v,90,flat,k}$	NPD
Density		
Density, mean value	ρ_{mean}	440
Density, fifth percentile value	ρ_k	410

The material values in this DoP are to be used for structural calculations with EN 1995 (Eurocode 5).

[1] In service class 2 the value 26.0 N/mm² is recommended to be divided by 1.2

[2] Covering $E_{m,0,edge,mean}$, $E_{m,0,flat,mean}$, $E_{t,0,mean}$, and $E_{c,0,mean}$

[3] Covering $E_{m,0,edge,k}$, $E_{m,0,flat,k}$, $E_{t,0,k}$, and $E_{c,0,k}$

[4] Covering $E_{t,90,edge,mean}$

[5] Covering $E_{t,90,edge,k}$

ESSENTIAL CHARACTERISTICS	PERFORMANCE			
Bonding quality	requirement fulfilled			
Reaction to fire	**End use condition**	**Minimum thickness (mm)**	**Class (excluding floorings)**	**Class (floorings)**
	- any substrate or air gap behind the product	27	D-s2, d0	D_{fl}-s1
	- with or without an air gap between the product and a substrate of class A1 or A2-s1,d0, thickness of at least 6 mm and density of at least 800 kg/m^3 - fixed mechanically to wooden or metallic frames	27	D-s1, d0	-
Release of formaldehyde	E1			
Natural durability against biological attack (EN 350-2)	Class 5 (includes sapwood)			

The material values in this DoP are to be used for structural calculations with EN 1995 (Eurocode 5).

The performance of the product identified above is in conformity with the set of declared performance/s. This UK declaration of conformity is issued, in accordance with Regulation 305/2011/EU as it has effect in the United Kingdom, under the sole responsibility of the manufacturer identified above.

Signed for and on behalf of the manufacturer by:

At Espoo on 10.7.2023

Sakari Kainumaa
Director, Product Management
Metsä Wood

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Juha Kasslin
SVP, Supply Chain Management
Metsä Wood

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Metsä