Kerto® LVL

UK DECLARATION OF CONFORMITY

NO. MW/LVL/316-001/UKCA/UKDOC

UK CA

1. PRODUCT-TYPE:
Kerto LVL Kate
Structural Laminated Veneer Lumber, with crosswise veneers (LVL-C)

NOMINAL THICKNESS	NUMBER OF VENEERS	LONG GRAINED	CROSS GRAINED	LAY-UP
15 mm	5	3	2	|—|—|
18 mm	6	4	2	|—| |—|

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)

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7. DECLARED PERFORMANCES

ESSENTIAL CHARACTERISTICS	SYMBOL	PERFORMANCE	
		KERTO LVL Kate THICKNESS 15 mm	KERTO LVL Kate THICKNESS 18 mm
Modulus of elasticity and shear modulus		**N/mm² or kg/m³**	**N/mm² or kg/m³**
Modulus of elasticity, mean values			
Parallel to grain, along	$E_{0,mean}$ [1]	9800	9200
Parallel to grain, across	$E_{m,90,flat,mean}$	2600	3500
Perpendicular to grain, edgewise	$E_{c,90,edge,mean}$ [3]	NPD	NPD
Perpendicular to grain, flatwise	$E_{c,90,flat,mean}$	NPD	NPD
Modulus of elasticity, fifth percentile value			
Parallel to grain, along	$E_{0,k}$ [2]	8200	7700
Parallel to grain, across	$E_{m,90,flat,k}$	2100	2900
Perpendicular to grain, edgewise	$E_{c,90,edge,k}$ [4]	NPD	NPD
Perpendicular to grain, flatwise	$E_{c,90,flat,k}$	NPD	NPD
Shear modulus, mean values			
Edgewise	$G_{0,edge,mean}$	600	600
Flatwise, parallel to grain	$G_{0,flat,mean}$	51	71
Flatwise, perpendicular to grain	$G_{90,flat,mean}$	28	24
Shear modulus, fifth percentile value			
Edgewise	$G_{0,edge,k}$	400	400
Flatwise, parallel to grain	$G_{0,flat,k}$	42	59
Flatwise, perpendicular to grain	$G_{90,flat,k}$	20	17
Strength, fifth percentile values			
Bending strength			
Edgewise (depth 300mm)	$f_{m,0,edge,k}$	0	0
Size effect parameter	s	NPD	NPD
Flatwise, parallel to grain	$f_{m,0,flat,k}$	30.0	28.0
Flatwise, perpendicular to grain	$f_{m,90,flat,k}$	13.0	15.0
Compression strength			
Parallel to grain	$f_{c,0,k}$	0	0
Perpendicular to grain, edgewise	$f_{c,90,edge,k}$	NPD	NPD
Perpendicular to grain, flatwise	$f_{c,90,flat,k}$	2.2	2.2
Tension strength			
Parallel to grain (length 3000mm)	$f_{t,0,k}$	0	0
Perpendicular to grain, edgewise	$f_{t,90,edge,k}$	NPD	NPD
Perpendicular to grain, flatwise	$f_{t,90,flat,k}$	NPD	NPD
Shear strength			
Edgewise	$f_{v,0,edge,k}$	4.5	4.5
Flatwise, parallel to grain	$f_{v,0,flat,k}$	1.3	1.3
Flatwise, perpendicular to grain	$f_{v,90,flat,k}$	0.6	0.6
Density			
Density, mean value	ρ_{mean}	510	510
Density, fifth percentile value	ρ_k	480	480

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

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

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

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

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

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ESSENTIAL CHARACTERISTICS	PERFORMANCE			
Bonding quality	requirement fulfilled			
Reaction to fire	**End use condition** [1]	**Minimum thickness (mm)**	**Class (excluding floorings)**	**Class (floorings)**
	- without an air gap behind the panel - mounted directly against class A1 or A2-s1, d0 products with minimum density 10kg/m^3 or at least class D-s2, d2 products with minimum density 400 kg/m^3 - a substrate of cellulose insulation material of at least class E may be included if mounted directly against the panel, but not for floorings	15	D-s2, d0	D_{fl}-s1
	- with a closed or an open air gap not more than 22mm behind the panel - the reverse face of the cavity shall be at least class A2-s1, d0 products with minimum density 10 kg/m^3	15	D-s2, d2	-
	- with a closed air gap behind the panel - the reverse face of the cavity shall be at least class D-s2, d2 products with minimum density 400 kg/m^3	15	D-s2, d1	D_{fl}-s1
	- with a closed air gap behind the panel - the reverse face of the cavity shall be at least class D-s2, d2 products with minimum density 400 kg/m^3	18	D-s2, d0	D_{fl}-s1
	- any	15	E	E_{fl}
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).

[1] A vapour barrier with a thickness up to 0,4 mm and a mass up to 200 g/m^2 can be mounted in between the panel and a substrate if there are no air gaps in between.

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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