

DECLARATION OF PERFORMANCE

NO. MW/LVL/316-001/CPR/DOP



1. PRODUCT-TYPE:

Kerto-Kate
Structural Laminated Veneer Lumber

2. INTENDED USES:

Buildings and bridges

3. MANUFACTURER:

Metsäliitto Cooperative
Metsä Wood
P.O.Box 24
FI-08101 Lohja, Finland
Tel. +358 10 4656 499
www.metsawood.com

5. SYSTEM OF ASSESSMENT AND VERIFICATION OF CONSTANCY OF PERFORMANCE:

AVCP System 1

6a. HARMONISED STANDARD:

EN 14374:2004

Notified body:

Eurofins Expert Services Oy, Notified product certification body No. 0809

Certificate of constancy of performance:

0809 – CPR – 1002

7. DECLARED PERFORMANCES

ESSENTIAL CHARACTERISTICS	SYMBOL	PERFORMANCE	
		KERTO-KATE THICKNESS 15 mm	KERTO-KATE THICKNESS 18 mm
Modulus of elasticity and shear modulus		N/mm² or kg/m³	N/mm² or kg/m³
<u>Modulus of elasticity, mean values</u>			
Parallel to grain, along	$E_{0,mean}$	9800	9200
Parallel to grain, across	$E_{90,mean}$	2600	3500
Perpendicular to grain, edgewise	$E_{90,edge,mean}$	NPD	NPD
Perpendicular to grain, flatwise	$E_{90,flat,mean}$	NPD	NPD
<u>Modulus of elasticity, fifth percentile value</u>			
Parallel to grain, along	$E_{0,k}$	8200	7700
Parallel to grain, across	$E_{90,k}$	2100	2900
Perpendicular to grain, edgewise	$E_{90,edge,k}$	NPD	NPD
Perpendicular to grain, flatwise	$E_{90,flat,k}$	NPD	NPD
<u>Shear modulus, mean values</u>			
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
<u>Shear modulus, fifth percentile value</u>			
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			
<u>Bending strength</u>			
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
<u>Compression strength</u>			
Parallel to grain	$f_{c,0,k}$	0	0
Perpendicular to grain, edgewise	$f_{c,90,edge,k}$	NPD	NPD
Perpendicular to grain, flatwise (spruce)	$f_{c,90,flat,k}$	2.2	2.2
Perpendicular to grain, flatwise (pine)	$f_{c,90,flat,k}$	3.3	3.3
<u>Tension strength</u>			
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
<u>Shear strength</u>			
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).

ESSENTIAL CHARACTERISTICS	PERFORMANCE			
Bonding quality	requirement fulfilled			
Reaction to fire	End use condition ¹	Minimum thickness (mm)	Class (excluding floorings)	Class (floorings)
	<ul style="list-style-type: none"> - without an air gap behind the panel - mounted directly against class A1 or A2-s1, d0 products with minimum density 10kg/m³ or at least class D-s2, d2 products with minimum density 400 kg/m³ - 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
	<ul style="list-style-type: none"> - 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/m³ 	15	D-s2, d2	-
	<ul style="list-style-type: none"> - 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/m³ 	15	D-s2, d1	D _{fl} -s1
	<ul style="list-style-type: none"> - 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/m³ 	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)			

¹ A vapour barrier with a thickness up to 0,4 mm and a mass up to 200 g/m² can be mounted in between the panel and a substrate if there are no air gaps in between.

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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:

At Espoo on 19.12.2019

Henrik Söderström
SVP, Supply Chain Management
Metsä Wood



Juha Kasslin
VP, Product Management
Metsä Wood

