



West Fraser Europe Ltd
 Station Road
 Cowie
 Stirling
 Scotland
 FK7 7BQ

DoP ref: **NP3DoPv8**

EN13986:2004 +A1:2015

04

E1

P3

6mm to 38mm

Non-Structural use in Humid conditions

Essential characteristics	Performance				
	Thickness (mm)				
	>6to13	>13to20	>20to25	>25to32	>32to40
¹ Water vapour permeability μ	NPD	NPD	NPD	NPD	NPD
Release of formaldehyde	E1	E1	E1	E1	E1
Release (content) of pentachlorophenol (PCP)	≤5ppm	≤5ppm	≤5ppm	≤5ppm	≤5ppm
² Airborne sound insulation (surface mass) R (dB)	NPD	NPD	NPD	NPD	NPD
³ Sound absorption Frequency range 250Hz to 500Hz (α)	0.1	0.1	0.1	0.1	0.1
³ Sound absorption Frequency range 1000Hz to 2000Hz (α)	0.25	0.25	0.25	0.25	0.25
⁴ Thermal conductivity λ (W/m.K)	NPD	NPD	NPD	NPD	NPD
Air Permeability V_0 (m ³ /h)	NPD	NPD	NPD	NPD	NPD
Durability					
Internal bond (N/mm ²)	0.45	0.45	0.40	0.35	0.30
Swelling in thickness (%)	17	14	13	13	12
Internal bond after cyclic test (N/mm ²)	0.15	0.13	0.12	0.10	0.09
Swelling in thickness after cyclic test (%)	14	13	12	12	11
Biological	Use classes 1 & 2				

⁵ Reaction to fire (see notes to table for field of application details and associated documentation references)		Minimum thickness	Class (excluding floorings) ^g	Class (Flooring) ^h
	Without an air gap behind the panel ^{abef}	9	D-s2,d0	D _{fi} ,s1
	With a closed or open air gap ≤ 22mm behind the panel ^{cef}	9	D-s2,d2	-
	Closed air gap behind the panel ^{def}	15	D-s2,d0	D _{fi} ,s1
	With an open air gap behind the panel ^{def}	18	D-s2,d0	D _{fi} ,s1
	Any end use ^{ef}	3	E	E _{fl}
a Mounted without an air gap 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 . b A substrate of cellulose insulation material of at least class E may be included if mounted directly against the wood-based panel, but not for floorings. c Mounted with an air gap behind. The reverse face of the cavity shall be at least class A2-s1, d0 products with minimum density 10 kg/m ³ . d Mounted with an air gap behind. The reverse face of the cavity shall be at least class D-s2, d2 products with minimum density 400 kg/m ³ . e Veneered, phenol- and melamine-faced panels are included for class excl. floorings. f 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 wood-based panel and a substrate if there are no air gaps in between. g Class Provided for in Table 1 of the Annex to decision 2000/147/EC h Class Provided for in Table 2 of the Annex to decision 2000/147/EC				
NOTES TO TABLE				
1 Taken from Table 9 of EN 13986:2004+A1 2 Calculated according to clause 5.10 of EN 13986:2004+A1 3 Taken from Table 10 of EN 13986:2004+A1 4 Taken from Table 11 of EN 13986:2004+A1 5 reaction to fire classes from Table 1 of Commission Decision 2003/43/EC of January 2003 (OJEU L13 of 18.1.2003) corrected by Corrigendum (OJEU L33 of 8.2.2003) and amended by Commission decision 2007/348/EC of May 2007 (OJEU L131 of 23-05-2007); also reproduced in Table 8 of EN 13986:2004+A1:2015 for wood-based panels installed according to CEN/TR 12872				