CE					
West Fraser Europe Ltd					
Station Road					
Cowie					
Stirling					
Scotland					
FK7 7BQ					
DoP ref: NL.MDF.HDoPv8					
EN13986:2004 +A1:2015					
04					
E1					
L.MDF.H					
>9mm to 38mm					
Non-Structural use in Humid conditions					

Essential characteristics	Performance					
		Thickness (mm)				
	>9 to 12	>12 to 19	>19 to 30	>30 to 45		
<sup>1</sup> Water vapour permeability µ	NPD	NPD	NPD	NPD		
Release of formaldehyde	E1	E1	E1	E1		
Release (content) of pentachlorophenol (PCP)	≤5ppm	≤5ppm	≤5ppm	≤5ppm		
<sup>2</sup> Airborne sound insulation (surface mass) R (dB)	NPD	NPD	NPD	NPD		
<sup>3</sup> Sound absorption Frequency range 250Hz to 500Hz ( $\alpha$ )	0.1	0.1	0.1	0.1		
<sup>3</sup> Sound absorption Frequency range 1000Hz to 2000Hz ( $\alpha$ )	0.2	0.2	0.2	0.2		
<sup>4</sup> Thermal conductivity λ (W/m.k)	NPD	NPD	NPD	NPD		
Air Permeability V <sub>0</sub> (m3/h)	NPD	NPD	NPD	NPD		
	Durability					
Internal bond (N/mm <sup>2</sup> )	0.45	0.45	0.45	0.40		
Swelling in thickness (%)	16	13	12	11		
Internal bond after cyclic test (N/mm <sup>2</sup> )	0.25	0.20	0.15	0.10		
Swelling in thickness after cyclic test (%)	16	15	15	15		
Biological		Use classes 1 & 2				

		Minimum thickness	Class (excluding floorings) <sup>g</sup>	Class (Flooring) <sup>h</sup>	
	Without an air gap behind the panel <sup>abef</sup>	9	D-s2,d0	D <sub>fl</sub> ,s1	
<sup>5</sup> Reaction to fire (see notes to table for field of application details and associated documentation references)	With a closed or open air gap ≤ 22mm behind the panel <sup>cef</sup>	9	D-s2,d2	-	
	Closed air gap behind the panel def	15	D-s2,d0	D <sub>fl</sub> ,s1	
	With an open air gap behind the panel <sup>def</sup>	18	D-s2,d0	D <sub>fl</sub> ,s1	
	Any end use <sup>ef</sup>	3	E	Efi	
	kg/m <sup>3</sup> . 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 <sup>3</sup> . 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 <sup>3</sup> . e Veneered, phenol- and melamine-faced panels are included for class excl. floorings. fA vapour barrier with a thickness up to 0,4 mm and a mass up to 200 g/m <sup>2</sup> 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				
1 Taken from Table 9 of EN 13986:200 2 Calculated according to clause 5.10 3 Taken from Table 10 of EN 13986:20 4 Taken from Table 11 of EN 13986:20 5 reaction to fire classes from Table 1	04+A1 of EN 13986:2004+A1 004+A1 004+A1	S TO TABLE 2003/43/EC of January 2	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