CE
West Fraser Europe Ltd Station Road Cowie Stirling Scotland FK7 7BQ
DoP ref: **NP6StrebordDoPv9**
EN13986:2004 +A1:2015
2812
04
E1
P6
38mm T&G
Structural use in dry conditions

Essential characteristics	**Performance**
	Thickness(mm)
	38mm T&G at 600mm Centres
[1]Characteristic Strength (N/mm²) - **Bending** f_m	11.7
- **Compression** f_c	11.9
- **Tension** f_t	7.8
- **Panel Shear** f_v	6.0
- **Planar shear** f_r	1.7
[1]Mean Stiffness (MOE) (N/mm²) - **Tension** E_t	1800
- **Compression** E_c	1800
- **Bending** E_m	3100
- **Panel Shear** G_v	900
Punching Shear Characteristic strength under point load $F_{max,k}$ (kN) *(for floors and roofs)*	12.93
Punching Shear Mean stiffness under point load, R_{mean} (N/mm) *(for floors and roofs)*	1980
Racking resistance *(for walls)* **Characteristic Strength $F_{Rd,max,k}$ (N)**	NPD
Racking resistance *(for walls)* **Mean Stiffness R_{mean} (N/mm)**	NPD
Soft Body Impact resistance **Floor/roofs** **Walls.**	Impact Class 1, Pass, Floor
Embedment Strength f_h (N/mm2)	NPD

		Minimum thickness	Class (excluding floorings)[g]	Class (Flooring)[h]
[2]Reaction to fire **(see notes to table for field of application details and associated documentation references)** -	**Without an air gap behind the panel [abef]**	9	D-s2,d0	C_{fl},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	C_{fl},s1
	With an open air gap behind the panel [def]	18	D-s2,d0	C_{fl},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/m3 or at least class D-s2, d2 products with minimum density 400 kg/m3. 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/m3. 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/m3. 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			

Essential characteristics	**Performance**				
Water vapour permeability μ	NPD				
Release of formaldehyde	E1				
Release (content) of pentachlorophenol (PCP)	≤5ppm				
Airborne sound insulation (surface mass) R (dB)	NPD				
[3]Sound absorption Frequency range 250Hz to 500Hz **(α)**	0.1				
[3]Sound absorption Frequency range 1000Hz to 2000Hz **(α)**	0.25				
Thermal conductivity λ (W/m.K)	NPD				
Air Permeability V_0 (m3/h)	NPD				
Durability					
Internal bond (N/mm²)	0.30				
Swelling in thickness (%)	14				
[4]Mechanical (creep k_{def}) **Service class 1**	1.5				
Mechanical (duration of load k_{mod})	**Action Mode**				
	Permanent	**Long Term**	**Medium Term**	**Short Term**	**Instantaneous**
Service Class 1	**0.30**	**0.45**	**0.65**	**0.85**	**1.1**
Biological	**Use classes 1 & 2**				

NOTES TO TABLE

1 Taken from EN 12369-1:2001

2 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 three of EN 13986:2004+A1:2015 for wood-based panels installed according to CEN/TR 12872

3 Taken from Table 10 of EN 13986:2004+A1:2015

4 Taken from Eurocode 5 EN 1995-1-1 2004+A2:2014