

DECLARATION OF PERFORMANCE

Reference number NGOSB3DoPv4

Norbord NV
Eikelaarstraat 33
3600 Genk
Belgium

Unique Identification code of the product type*	Intended Use	Systems of AVCP	Notified Body	Harmonised standard
Sterling OSB3 zero OSB/3 (EN300) 6mm to 32mm*	Internal use as structural components in humid conditions	2+	1161	EN13986:2004 +A1:2015

*The unique identification code of the product type is a combination of the technical class and the individual product's nominal thickness

Declared performance (covering a range of product-types OSB/3 6mm to 32mm*)

Essential characteristics	Performance														
	6 to 10		>10 to <18		18 to 25		>25 to 32		15 T&G 600/400/300mm		18 T&G 600mm		22 T&G 600mm		
	0	90	0	90	0	90	0	90	0 - 90		0- 90		0-90		
Characteristic Strength (N/mm²)															
- Bending	18.0	9.0	16.4	8.2	14.8	7.4	NPD	NPD	16.4	8.2	14.8	7.4	14.8	7.4	
- Compression	15.9	12.9	15.4	12.7	14.8	12.4	NPD	NPD	15.4	12.7	14.8	12.4	14.8	12.4	
- Tension	9.9	7.2	9.4	7.0	9.0	6.8	NPD	NPD	9.4	7.0	9.0	6.8	9.0	6.8	
- Panel Shear	6.8		6.8		6.8		NPD		6.8		6.8		6.8		
- Planar shear	1.0		1.0		1.0		NPD		1.0		1.0		1.0		
Mean Stiffness (MOE) (N/mm²)															
- Tension	3800	3000	3800	3000	3800	3000	NPD	NPD	3800	3000	3800	3000	3800	3000	
- Compression	3800	3000	3800	3000	3800	3000	NPD	NPD	3800	3000	3800	3000	3800	3000	
- Bending	4930	1980	4930	1980	4930	1980	NPD	NPD	4930	1980	4930	1980	4930	1980	
- Panel Shear	1080		1080		1080		NPD		1080		1080		1080		
- PlanarShear	50		50		50		NPD		50		50		50		
Characteristic strength under point load F_{max,k} (kN) <i>(for floors and roofs)</i>	NPD		NPD		NPD		NPD		1.68/1.85/1.78		2.25		3.04		
Mean stiffness under point load, R (N/mm²) <i>(for floors and roofs)</i>	NPD		NPD		NPD		NPD		190/333/514		269		445		
Characteristic serviceability strength under point load F_{ser,k} (kN) <i>(for floors and roofs)</i>	NPD		NPD		NPD		NPD		1.67/1.71/1.78		2.20		2.81		
Racking resistance <i>(for walls)</i>	NPD		NPD		NPD		NPD		NPD		NPD		NPD		
Soft Body Impact resistance Floors/Roofs Walls	NPD		NPD		NPD		NPD		Pass Floor		Pass Floor		Pass Floor		
Embedment strenght ⁽¹⁾	NPD		NPD		NPD		NPD		NPD		NPD		NPD		
Reaction to fire	D-s2,d0 ⁽²⁾		D-s2,d0 ⁽²⁾		D-s2,d0 ⁽²⁾		D-s2,d0 ⁽²⁾		D-s2,d0 ⁽²⁾		D-s2,d0 ⁽²⁾		D-s2,d0 ⁽²⁾		

(excluding floorings)	D-s2,d2 ⁽³⁾ E ⁽⁴⁾	E ⁽⁴⁾	E ⁽⁴⁾	E ⁽⁴⁾	E ⁽⁴⁾	E ⁽⁴⁾	E ⁽⁴⁾
Reaction to fire (floorings)	Dfl-s1 ⁽²⁾ Efl ⁽⁴⁾	Dfl-s1 ⁽²⁾ Efl ⁽⁴⁾	Dfl-s1 ⁽²⁾ Efl ⁽⁴⁾	Dfl-s1 ⁽²⁾ Efl ⁽⁴⁾	Dfl-s1 ⁽²⁾ Efl ⁽⁴⁾	Dfl-s1 ⁽²⁾ Efl ⁽⁴⁾	Dfl-s1 ⁽²⁾ Efl ⁽⁴⁾
Water vapour permeability μ	NPD	NPD	NPD	NPD	NPD	NPD	NPD
Release of formaldehyde	E1	E1	E1	E1	E1	E1	E1
Release (content) of pentachlorophenol (PCP)	≤ 5 ppm	≤ 5 ppm	≤ 5 ppm	≤ 5 ppm	≤ 5 ppm	≤ 5 ppm	≤ 5 ppm
Airborne sound insulation (surface mass) (R)	NPD	NPD	NPD	NPD	NPD	NPD	NPD
Sound absorption Frequency range 250Hz to 500Hz (α)	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Sound absorption Frequency range 1000Hz to 2000Hz (α)	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Thermal conductivity λ	0.13	0.13	0.13	0.13	0.13	0.13	0.13
Durability							
Internal bond (N/mm ²)	0.34	0.32	0.30	0.29	0.32	0.32	0.30
Swelling in thickness (%)	15	15	15	15	15	15	15
Moisture resistance Internal bond after boil test (%)	NPD	NPD	NPD	NPD	NPD	NPD	NPD
Internal bond after cyclic test (N/mm ²)	NPD	NPD	NPD	NPD	NPD	NPD	NPD
Bending strength after cyclic test – major axis (N/mm ²)	9	8	7	6	8	8	7
Mechanical (Creep k_{def}) Service class 1	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Mechanical (Creep k_{def}) Service class 2	2.25	2.25	2.25	2.25	2.25	2.25	2.25
Mechanical (Duration of load k_{mod})	Action Mode						
	Permanent	Long Term	Medium Term	Short Term	Instantaneous		
Service class 1	0.4	0.5	0.7	0.9	1.1		
Service class 2	0.3	0.4	0.55	0.7	0.9		
Biological	Use classes 1 & 2						

(1) Embedment strength can be calculated according to EN 1995-1-1, taking the OSB panel thickness and the diameter of the used fastener in account.

(2) Minimum thickness 18mm – with an open air gap behind the OSB. (End use of condition)

Minimum thickness 15mm – with a closed air gap behind the OSB. (End use of condition)

Minimum thickness 9mm – without an air gap behind the OSB. (End use of condition)

(3) Minimum thickness 9mm – with a closed or an open air gap not more than 22mm behind the OSB. (End use of condition)

(4) Minimum thickness 3mm – Any (End use of condition)

The performance of the product identified is in conformity with the declared performance.

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:

Sterkmans Peter

Quality Supervisor



Genk, Belgium

13/08/2017