



Norbord NV
Eikelaarstraat 33
3600 Genk
Belgium

DoP ref: **NGOSB2DoPv4**

EN 13986:2004 +A1:2015

1161

08

E1

OSB/2 (EN300) 6mm to 32mm

Sterling OSB2 zero

Structural use in dry conditions

Essential characteristics	Performance									
	Thickness range									
	6 to 10		>10 to <18		18 to 25		>25 to 32		>32 to 40	
	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	NPD	NPD
- Compression	15.9	12.9	15.4	12.7	14.8	12.4	NPD	NPD	NPD	NPD
- Tension	9.9	7.2	9.4	7.0	9.0	6.8	NPD	NPD	NPD	NPD
- Panel Shear	6.8		6.8		6.8		NPD		NPD	
- Planar shear	1.0		1.0		1.0		NPD		PD	
Mean Stiffness (MOE) (N/mm²)										
- Tension	3800	3000	3800	3000	3800	3000	NPD	NPD	NPD	NPD
- Compression	3800	3000	3800	3000	3800	3000	NPD	NPD	NPD	NPD
- Bending	4930	1980	4930	1980	4930	1980	NPD	NPD	NPD	NPD
- Panel Shear	1080		1080		1080		NPD		NPD	
- Planar Shear	50		50		50		NPD		NPD	
Characteristic strength under point load F_{max,k} (kN) (for floors and roofs)	NPD		NPD		NPD		NPD		NPD	
Mean stiffness under point load, R (N/mm²) (for floors and roofs)	NPD		NPD		NPD		NPD		NPD	
Characteristic serviceability strength under point load F_{Ser,k} (kN) (for floors and roofs)	NPD		NPD		NPD		NPD		NPD	
Soft Body Impact resistance Floor/roofs Walls	NPD		NPD		NPD		NPD		NPD	
Racking resistance (for walls)	NPD		NPD		NPD		NPD		NPD	
Embedment strength ⁽¹⁾	NPD		NPD		NPD		NPD		NPD	
Reaction to fire (excluding floorings)	D-s2,d0 ⁽²⁾ D-s2,d2 ⁽³⁾ E ⁽⁴⁾		D-s2,d0 ⁽²⁾ E ⁽⁴⁾		D-s2,d0 ⁽²⁾ E ⁽⁴⁾		D-s2,d0 ⁽²⁾ E ⁽⁴⁾		D-s2,d0 ⁽²⁾ E ⁽⁴⁾	
Reaction to fire (floorings)	Dfl-s1 ⁽²⁾		Dfl-s1 ⁽²⁾		Dfl-s1 ⁽²⁾		Dfl-s1 ⁽²⁾		Dfl-s1 ⁽²⁾	

	Efl ⁽⁴⁾	Efl ⁽⁴⁾	Efl ⁽⁴⁾	Efl ⁽⁴⁾	Efl ⁽⁴⁾
Water vapour permeability μ	NPD	NPD	NPD	NPD	NPD
Release of formaldehyde	E1	E1	E1	E1	E1
Release (content) of pentachlorophenol (PCP)	$\leq 5\text{ppm}$	$\leq 5\text{ppm}$	$\leq 5\text{ppm}$	$\leq 5\text{ppm}$	$\leq 5\text{ppm}$
Airborne sound insulation (surface mass) (R)	NPD	NPD	NPD	NPD	NPD
Sound absorption Frequency range 250Hz to 500Hz (α)	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
Thermal conductivity λ	0.13	0.13	0.13	0.13	0.13
Durability					
Internal bond (N/mm²)	0.34	0.32	0.30	0.29	0.26
Swelling in thickness (%)	20	20	20	20	20
Mechanical (Creep k_{def}) Service class 1	2.25	2.25	2.25	NPD	NPD
Mechanical (Duration of load k_{mod})	Action Mode				
	Permanent	Long Term	Medium Term	Short Term	Instantaneous
Service class 1	0.3	0.45	0.65	0.85	1.1
Biological	Use class 1				

(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)