SPECIFICATION TEXT						
PRODUCT	Durelis StormBlock	DATE	11/06/2015			
CE CLASS	P5	EN STANDARD	EN 312			

DESCRIPTION

Moisture-repellent, vapour permeable structural construction board with high air-tightness

Durelis StormBlock is a construction board belonging to product class P5 (standard reference EN 312): panels for load-bearing applications for use in humid conditions and in hazard classes of biological attack 1 and 2 of EN 335-3. These panels are therefore in the same area of application as OSB/3 (EN 300), multiplex (EN 636-2).

In timber-frame constructions and low-energy and passive house buildings, Durelis StormBlock can be used as a reinforcing exterior wall, as part of a façade or as a partition wall. When used as a façade element, Durelis StormBlock must be protected with a rain screen.

Durelis StormBlock is an MUF bonded chipboard with a TopFinish surface. This TopFinish surface provides very high air-tightness ($< 0.0025 \text{ m}^3/\text{ m}^2/\text{h/Pa}$ at 50 Pa; 15 mm). It is important always to seal all joints and gaps with suitable air-tight tape. The composition of construction board limits linear expansion and swelling to a minimum in high air humidity conditions.

On delivery and as much as possible during and after installation, the panels should be well protected against any direct contact with water. They must be stacked flat on a pallet or sufficient number of cross beams. Panels are not stored vertically unless ground contact can be avoided. The panels will expand/contract under the influence of variable humidity conditions so room to expand must always be provided. Use suitable tools for sawing, milling and drilling. Nails or screws must not be inserted within a minimum 8 mm of the edge of the panel.

STANDARD DIMENSIONS

Standard dimension: 2,800 x 1,196 x 12 mm (H x W x D)

Various thicknesses and lengths/widths for compressing and finishing can be discussed. Contact our agent about this or send an email to info.panels@unilin.com.



TECHNICAL SPECIFICATIONS

	Reference	Value					
Declaration of performance (DOP)	DOPDurelisStormBlockv1						
Product type		Reinforcing construction board					
CE class		P5					
Reference standard	EN 312	Wood-based panel material					
AVCP class:		2+					
Certificate number		1161-CPR-0146					
		Thickness class (mm)					
Panel material	EN13986	10	12	13	15	18	
Density (kg/m³)	EN323	740	720	720	720	720	
Bending strength (N/mm²)	EN312, table 7	18	18	18	16	16	
Bending stiffness (N/mm²)	EN312, table 7	2550	2550	2550	2400	2400	
Internal bond (N/mm²)	EN312, table 7	0.45	0.45	0.45	0.45	0.45	
Swelling after 24h (%)	EN312, table 7	13	11	11	10	10	
Moisture resistance option 1: internal bond (N/mm²)	EN312, table 8	0.25	0.25	0.25	0.22	0.22	
Moisture resistance option 1: thickness swelling (%)	EN312, table 8	12	12	12	12	12	
Formaldehyde class	EN13986, table B1	E1	E1	E1	E1	E1	
Formaldehyde content (mg/100g)	EN120	≤ 8	≤ 8	≤ 8	≤ 8	≤ 8	
Reaction to fire	EN13501-1	Е	D-s2,d0	D-s2,d0	D-s2,d0	D-s2,d0	
Water vapour permeability μ (wet)	EN12986, table 9	16	16	16	16	16	
Water vapour permeability μ (dry)	EN12986, table 9	50	50	50	50	50	
Moisture content (%)	EN322	6-10	6-10	6-10	6-10	6-10	
Airborne sound insulation (dB)	EN13986, chp 5.10	NPD	NPD	NPD	NPD	NPD	
Sound absorption (α)	EN13986, table 10	0.10/0.25	0.10/0.25	0.10/0.25	0.10/0.25	0.10/0.25	
Thermal conductivity λ (W/m.K)	EN13986, table 11	0.14	0.14	0.14	0.14	0.14	
Strength - tension f _t (N/mm²)	EN12369-1	9.4	9.4	9.4	8.5	8.5	
Strength - compression f _c (N/mm²)	EN12369-1	12.7	12.7	12.7	11.8	11.8	
Strength - bending f _m (N/mm²)	EN12369-1	15.0	15.0	15.0	13.3	13.3	
Strength - panel shear f _y (N/mm²)	EN12369-1	7.0	7.0	7.0	6.5	6.5	
Strength - planar shear f _r (N/mm²)	EN12369-1	1.9	1.9	1.9	1.7	1.7	
Stiffness - tension E _t (N/mm²)	EN12369-1	2000	2000	2000	1900	1900	
Stiffness - compression E _c (N/mm²)	EN12369-1	2000	2000	2000	1900	1900	
Stiffness – bending E _m (N/mm²)	EN12369-1	3500	3500	3500	3300	3300	
Stiffness - panel shear G _v (N/mm²)	EN12369-1	960	960	960	930	930	
Impact resistance (class)	EN12871	NPD	NPD	NPD	NPD	NPD	
Linear expansion δl _{30.85} (mm/m)	EN318	< 3	< 3	< 3	< 3	< 3	
Mechanical durability (kmod;kdef)		EN1995-1-1	EN1995-1-1	EN1995-1-1	EN1995-1-1	EN1995-1-1	
Biological durability (class)	EN335	Class 1 & 2	Class 1 & 2	Class 1 & 2	Class 1 & 2	Class 1 & 2	
Pentachlorophenol (PCP) content (ppm)	EN13986, chp 5.18	< 5	< 5	< 5	< 5	< 5	

