Ydeevnedeklaration: Spaandex EN 312 P5

1. Material	EN 312 P5 particleboards		
2. Material identification	Spaandex EN 312 P5		
3. Intended use	Loadbearing boards for humid conditions		
4. Producer	Kronospan ApS Novopan Træindustri Fabriksvej 2, Pindstrup, DK-8550 Ryomgård		
5. Autorised representative	Ikke relevant		
6. System	AVCP 2+		
7. Notified body	Dancert A/S Gregersensvej 4, DK-2630 Taastrup		
8. Declared performance	**Essential characteristics**		
Thickness	>10 to 13 mm	>13 to 20 mm	>20 to 25 mm
Characteristic strength (N/mm²)(1) Bending f_m	15,0	13,3	11.7
Tension f_t	9,4	8,5	7,4
Compression f_c	12,7	11,8	10,3
Panel Shear f_v	7,0	6,5	5.9
Planar shear f_r	1,9	1,7	1.5
Mean stiffness (MOE) (N/mm²)(1) Tension E_t	2000	1900	1800
Compression E_c	2000	1900	1800
Bending E_m	3500	3300	3000
Panel Shear G_v	960	930	860
Punching Shear Characteristic strength under point load $F_{max,}$ k (kN) *(for floors and roofs)*	NPD		
Punching Shear Mean stiffness under point load, R_{mean} (N/mm) *(for floors and roofs)*	NPD		
Racking resistance (*for walls*), Characteristic Strength $F_{Rd,max,k}$ (N),	NPD		
Racking resistance (*for walls*), Mean Stiffness R_{mean} (N/mm)	NPD		
Impact resistance (soft body), (Impact Class I or II (floors & roofs) or III for walls)	NPD		
Embedment strength f_h (N/mm²)	NPD		
Water vapour permeability μ(2)	NPD		
Release of formaldehyde	E1		
Release (content) of pentachlorophenol (PCP)	≤ 5 ppm		
Airborne sound insulation (surface mass) R (dB)(3)	NPD		
Sound absorption factor, Frequency range 250Hz to 500Hz (α)(4)	0.1		
Sound absorption factor, Frequency range 1000Hz to 2000Hz (α)(4)	0.25		
Thermal conductivity(density) λ (W/mK)(5)	NPD		
Air permeability V_0 (m³/h)	NPD		
Durability	>10 to 13 mm	>13 to 20 mm	>20 to 25 mm
Bending strength (N/mm²)	18	16	14
Modulus of elesticity	2550	2400	2150
Internal bond (N/mm²)	0.45	0,45	0,40
Swelling in thickness (%)	11	10	10
Moisture resistance	0.25	0,22	0,2
Internal bond after cyclic test (N/mm²)			
Moisture resistance, Swelling in thickness after cyclic test (%)	12	12	11
Moisture resistance, Internal bond after boil test (N/mm²)	NPD		
Mechanical (creep factor k_{def}) service class 1(6)	2.25	2.25	2.25
Mechanical (creep factor k_{def}) service class 2(6)	3	3	3

Teknisk
Datablad

[version1, 09/2025]

kronospan
NOVOPAN TRÆINDUSTRI
KRONOSPAN ApS Pindstrup
8550 Ryomgaard · T +45 8974 7400
sales@kronospan-dk.dk · www.kronospan-dk.dk

Ydeevnedeklaration: Spaandex EN 312 P5

Reaction to fire[7]	**Minimum thickness**	**Class (excluding floorings)**[g]	**Class (Flooring)**[h]
Without an air gap behind the panel[abef]	9	D-s2,d0	D_{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	D_{fl},s1
With an open air gap behind the panel[def]	18	D-s2,d0	D_{fl},s1
Any end use[ef]	3	E	E_{fl}
(see notes to table for field of application details and associated documentation references)	a Mounted without an air gap directly against class A1 or A2-s1, d0 products with minimum density 10 kg/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 woodbased 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/m² can be mounted in between the woodbased 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		

Mechanical (duration of load factor k_{mod})[6]	**Action mode**				
	Perma-nent	Long Term	Medium Term	Short Term	Instantaneous
Service class 1[6]	0.3	0.45	0.65	0.85	1.1
Service class 2[6]	0.2	0.3	0.45	0.6	0.8
Biological	**Use classes 1 & 2**				

NOTES TO TABLE

[1] Taken from EN 12369-1:2001
[2] Taken from Table 9 of EN 13986:2004+A1
[3] Calculated according to clause 5.10 of EN 13986:2004+A1
[4] Taken from Table 10 of EN 13986:2004+A1
[5] Taken from Table 11 of EN 13986:2004+A1
[6] Taken from Eurocode 5 EN 1995-1-1 2004+A2:2014
[7] 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 8 of EN 13986:2004+A1:2015 for wood-based panels installed according to CEN/TR 12872 8. Declaration is combination of product types and thicknesses.

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

Henrik Skovbo, QHSER-manager

Pindstrup d. 24-03-2024

kronospan NOVOPAN TRÆINDUSTRI
KRONOSPAN ApS Pindstrup
8550 Ryomgaard · T +45 8974 7400
sales@kronospan-dk.dk · www.kronospan-dk.dk