General tolerances	Unit	Requirements		
Board moisture /EN 322/	[%]	5-13		
Tolerance on the mean density /EN 323/	[%]	±10.0		
Thickness tolerance /EN 324/ sanded boards	[mm]	±0.3		
Length and width tolerance /EN 324/	[mm]	±5.0		
Edge straightness tolerance /EN 324/	[mm/m]	±1.5		
Squareness /EN 324/	[mm/m]	±2.0		
Thermal conductivity /EN 12524/	[W/mK]	0.12		
Water vapour diffusion resistance factor /EN 12524/	[μ]	μ damp 15; μ dry 50		
Fire protection /EN 13986/		D-s2, d0 (thickness ≥ 9mm; density ≥ 600kg/m³) E (thickness < 9mm; density < 600kg/m³)		
Formaldehyde content /EN 120/	[mg/100g]	E1*, E1 EPF-S**		
General tolerances	**Unit**	**Thickness ranges**		
		< 15 mm	15 - 20 mm	> 20 mm
Thickness in relation to nominal dimension /EN 14323/	[mm]	±0.3 for abrasion category 1 and 2 ±0.5/-0.3 for abrasion category 3A, 3B and shiny surfaces		
Length and width - usual trade dimensions /EN 14323/ - cut to size boards	[mm]	±5		
	[mm]	±2.5		
Warpage /EN 14323/	[mm/m]	-	≤2	
Edge splinters - usual trade dimensions /EN 14323/ - cut to size boards	[mm]	≤10		
	[mm]	≤3		
Surface properties	**Unit**	**Value**		
Surface defects /EN 14323/ Points	[mm²/m²]	≤2		
Length defects	[mm/m]	≤20		
Resistance to scratching /EN 14323/	[N]	≥1.5		
Resistance to stains /EN 14323/	[Level]	≥3		
Susceptibility to cracking /EN 14323/	[Level]	≥3		
Abrasion resistance /EN 14323/ *Depending on the configuration of the layer construction, different levels can be achieved.*	[revolutions]	Class	IP	WP
		1	≤50	≤150
		2	≥50	≥150
		3A	≥150	≥350
		3B	≥250	≥650

Name	Value	Unit
Gross density /EN 197-1/	660	kg/m³
Bending strength (longitudinal) /DIN EN 310/	7 - 20	N/mm²
E-module (longitudinal) /DIN EN 310/	1200 - 3150	N/mm²
Grammage Eurodekor with 17.6 mm	11.6	kg/m²
Material dampness at delivery	5 - 13	%
Tensile strength rectangular	+-2.0 [mm/m]	N/mm²
Thermal conductivity /EN 12524/	12	W/(mK)
Water vapour diffusion resistance factor /EN 12524/	moist 15; dry 50	-
Formaldehyde content: Varies depending on the product /EN 120/, /CARB/, /JIS A 5908/	E1[1],EPF-S[2], CARB[3], F**** (4)	
Deviation of density from average /EN 323/	±10.0	%
Thickness tolerance sanded boards /EN 323/	±0.3	[mm]
Length and width tolerance /EN 324/	±5.0	[mm]
Straightness of edges tolerance /EN 324/	±1.5	[mm]
Squareness /EN 324/	±2.0	[mm]
Fire safety EURODEKOR® /EN 13986/	D-s2, d0	
Fire safety EURODEKOR® Flammex E1 P2 B/B1/M1 /EN 13986/	B-s1, d0	

[1]) **E1** formaldehyde class has a limit value of 8 mg and a moving half-year average of 6.5 mg HCHO/100g according to test method /EN 120/.
[2]) **E1 EPF-S** chipboard with reduced formaldehyde release has a limit value of 4.0 mg HCHO/100g according to /EN 120/.

[3]) **CARB** chipboard certified to /California Air Resources Board (**CARB**) regulation CCR-17-93120.2(a) – Phase 2/
4) **F****** chipboard complies with formaldehyde class F**** according to the Japanese standard /JIS A 5908:2003/.

2.4 Placing on the market / Application rules

Placing on the market in the EU/EFTA is governed by /EU regulation 305/2011/ dated 9 March 2011. The products require a Declaration of Performance taking consideration of the /EN 13986:2005-03/ standard, Wood-based panels for use in construction – Characteristics, evaluation of conformity and marking; German and English versions /EN 13986:2005/, and CE marking.

The /EN 312:2010-12, Particleboards – Specifications/; German version /EN 312:2010/ and /EN 14322:2004-06, Wood-based panels – Melamine-faced boards for interior uses; Definitions, requirements and classification/; German version /EN 14322:2004/ also apply.

The respective national guidelines apply for use of the products.

2.5 Delivery status

Standard format [mm]: 5610 x 2070 & 2800 x 2070
Thickness range [mm]: 8 bis 40

2.6 Base materials / Ancillary materials

Primary products:
Raw chipboard with thicknesses between 2.5 and 40 mm and an average density of 660 kg/m³ comprising (specified as mass %age per 1 m³ of production):
- approx. 84-86% wood mass
The production of chipboard only uses fresh wood from thinning measures as well as sawmill leftovers, primarily spruce and pine wood. Up to 30% of the raw material is recycled wood which can be used as material.
- approx. 4-7% water
- approx. 8-10% UF glue
Comprising urea formaldehyde resin; the aminoplastic adhesive hardens fully during the pressing process through polycondensation.
- <1% paraffin wax emulsion: A paraffin wax emulsion is added to the formulation during gluing for the purpose of hydrophobicity (improving resistance to moisture).

For the coating:
-Decorative paper with a grammage of 60-120 g/m²
- Melamine formaldehyde resin: aminoplastic resin for impregnation of decorative paper for lamination; in the press, the resin hardens fully into a hard and hard-wearing surface.

2.7 Manufacture

Manufacturing the raw boards (EUROSPAN®):
1. Wood processing
- Log wood chipping
- Chip processing
- Waste wood processing
2. Drying the chips to approx. 2-3% residual moisture content
3. Sorting the chips