

Technical Data Sheet

November 2020
Version 5.0



Raw Thin HDF Unsanded

Application and uses

Packaging, Door industry, Furniture industry, Lacquering, Laminating, Mounting, Finish foil, Sandwich panel lines and any special.

Characteristics

Two faces of our RAW BOARD: THIN HDF are unsanded, homogeneous, closed and smooth.

If the order refers one or more variant about the next special requirements, we can offer all qualities below with CARB Phase 2 & US. EPA TSCA Title VI or GPCO (what is mean German Prohibition of Chemical Ordinance [GermanVerbsotV; 01.01.2020]); combination with FSC Controlled Wood and FSC Mix Credit or PEFC certificates and/or difference GSoC in acc. to IOS-MAT standards.

STANDARD (STD), PLUS and Moisture Resistant (MR) qualities can be sanded or lacquered with our lacquering line. The standard lacquered quality that we propose is with "PLUS" base board.



Sign	Characteristics	Control Standards	Unit	Thickness range (mm)			
				2,0 – 2,5	> 2,5 – 4,0	> 4,0 – 6,0	> 6,0 – 8,0
t	Thickness tolerance	EN 324-1	mm	± 0,2			
lwt	Length/Width tolerance	EN 324-1	mm/m	± 2,0 (max.: ± 5,0)			
Sqt	Squareness tolerance	EN 324-2	mm/m	± 2,0			
St	Straightness	EN 324-2	mm/m	max.: 1,5			
D	Density	EN 323	kg/m ³	860 (STANDARD) Articles: 20195		850 (STD)	
				890 (PLUS) Articles: 20258 / 20268 / 20239		880 (PLUS)	
				900 (MR) Articles: 20308 / 20174 / 21976		890 (MR)	
Dt	Density tolerance	EN 323	%	± 8			
Mc	Moisture content	EN 322	w/w %	4,0 – 11,0			
TSW	Thickness Swelling – 24h	EN 317	w/w %	≤ 45 (STD)			
				≤ 45 (PLUS)	≤ 35 (PLUS)	≤ 30 (PLUS)	≤ 25 (PLUS)
				≤ 22 (MR)		≤ 18 (MR)	≤ 16 (MR)
BS	Bending strength	EN 310	N/mm ²	≥ 27 (STD)			
				≥ 40 (PLUS)		≥ 37 (PLUS)	
				≥ 45 (MR)		≥ 40 (MR)	
MOE	Modulus of elasticity	EN 310	N/mm ²	≥ 2700 (STD)			
				≥ 3300 (PLUS)	≥ 3500 (PLUS)	≥ 4000 (PLUS)	
				≥ 3800 (PLUS)	≥ 4000 (PLUS)	≥ 4400 (PLUS)	
IB	Internal Bond	EN 319	N/mm ²	≥ 0,7 (STD)			
				≥ 1,0 (PLUS)	≥ 1,2 (PLUS)	≥ 1,1 (PLUS)	≥ 0,9 (PLUS)
				≥ 1,2 (MR)	≥ 1,4 (MR)	≥ 1,2 (MR)	≥ 1,1 (MR)
SS	Surface soundness	EN 311	N/mm ²	≥ 0,8 (STD, PLUS)			
				≥ 1,0 (MR)	≥ 0,9 (MR)		
Sta	Surface (Toluene) adsorption	EN 382-1	mm	150-250 (STD)			
				150-300 (PLUS, MR)		150-250 (PLUS, MR)	
Sc	Sand (grit) content	ISO 3340	w/w %	max.: 0,05			
HCHO	Formaldehyde content and emission (Please see the difference GSoC)						
PV	Perforator value	EN 12460-5	mg/100g	≤ 8,0 (E1) Articles: All			
				≤ QCL (CARB Ph. 2 / EPA TSCA Title VI - § 770.10 or IOS-MAT-0003) Articles: 20268 / 21976			
GA	Gas analysis	EN 12460-3	mg/m ² h	≤ QCL (IOS-MAT-0003, IOS-MAT-0181) Articles: 20268 / 21976			
				≤ QCL (GPCO) Articles: 20239 / 20174			
CTE	Chamber test 1	EN 717-1	ppm	≤ 0,10 (E1) Articles: All			
				≤ 0,05 (GPCO, IOS-MAT-0181) Articles: 20239 / 20174 / 20268 / 21976			
CTG	Chamber test 2	EN 16516	ppm	≤ 0,10 (GPCO, IOS-MAT-0181) Articles: 20239 / 20174 / 20268 / 21976			
				≤ 0,13 (CARB Phase 2/ EPA TSCA Title VI - § 770.10) ≤ 0,08 (IOS-MAT-0003) Articles: 20268 / 21976			
CTA	Chamber test 3	ASTM E 1333 ASTM D 6007	ppm	≤ 0,13 (CARB Phase 2/ EPA TSCA Title VI - § 770.10) ≤ 0,08 (IOS-MAT-0003) Articles: 20268 / 21976			

Recommendations

HDF produced by Kronospan should be stored in an area dry, temperate, ventilated and protected from the weather. If the storage is in an area with a high content of humidity or at low temperatures or very high, the stabilization of the board before its use is recommended (temperature and humidity of the workshop). If finish foil process is used, we recommend heating the board before the application of the adhesive and the paper. The edges of the full-size board must be sawed (clean cut). For specific applications, it is preferable to carry out preliminary tests. Only the top side of our HDF board is guaranteed.