

# HDF Brun

# TECHNICAL SHEET

<b>HDF Standard 830±20 kg/m<sup>3</sup></b> (EN 16516 / IOSMAT181)				Data aktualizacji / update: 07.06.2021		
Zastosowanie/purpose: płyta nienośna, do zastosowania wewnętrznego w warunkach suchych, do wyposażenia wnętrz Non-load bearing boards, for indoor use in dry conditions, interior fittings.				Grubość / Thickness mm		
				≤ 2,5	>2,5-4	>4
* Wymagania techniczne / Product Specific Value	<b>Parametry Specific Value</b>	<b>Norma/ Standard</b>	<b>Jednostki/ Unit</b>	<b>Wymagania requirements</b>		
	Rozrywanie Internal Bond	EN 319	[N/mm <sup>2</sup> ]	≥0,65		
	Zginanie Bending Strength	EN 310	[N/mm <sup>2</sup> ]	≥23	≥25	
	Moduł sprężystości Bending E-Module	EN 310	[N/mm <sup>2</sup> ]	-		≥2700
	Formaldehyd Formaldehyde	ASTM D6007 EN 16516 EN 717-1	[ppm]	** dostępne asortymenty/available assortments: TSCA-CARB, IOS-MAT 0003, German ChemVerbotsV, IOS-MAT 0181		
	Wilgotność Moisture Content	EN 322	[%]	3-9		
	Tolerancja długości /szerokości Length/width tolerance	EN 324-1	[mm/m]	±2 max 5mm		
	Prostoliniowość krawędzi Straightness tolerance	EN 324-2	[mm/m]	≤1,5		
	Prostokątność Squareness tolerance	EN 324-2	[mm/m]	≤2,0		
	Tolerancja grubości Thickness	EN 324-1	[mm]	±0,2		
* Wymagania techniczne nie ulegają zmianie przy produkcji płyt FSC / PEFC / The technical requirements do not change for the production of FSC/PEFC board.						
** Spełnienie wymagań dotyczących emisji formaldehydu w zależności od typu płyty na zamówieniu klienta, po uzgodnieniu z Działem Sprzedaży / Compliance with formaldehyde emission requirements is depending on the type of board on the customer's order, after agreeing with the Sales Department.						

źródło / source: Kronospan-MDF Board-Technical Requirements, EN 622-5, EN 622-1



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## FIBRACOLOUR NEGRO E-Z

TECHNICAL DATA-AVERAGE VALUES			Rev: 04/29/2020							
PROPERTIES	TEST METHOD	UNITS	THICKNESSES mm							
			2-2.5	>2.5-4	>4-6	>6-9	>9-12	>12-19	>19-30	>30-44
DENSITY (*)	EN 323	kg/m <sup>3</sup>	890/850	850/825	820/800	790/750	750/740	740/710	710/700	690/670
INTERNAL BOND	EN 319	N/mm <sup>2</sup>	0.65	0.65	0.65	0.60	0.55	0.55	0.50	
BENDING STRENGTH	EN 310	N/mm <sup>2</sup>	23	23	23	23	22	20	18	17
MODULUS OF ELASTICITY	EN 310	N/mm <sup>2</sup>	---	---	2700	2700	2500	2200	2100	1900
THICKNESS SWELLING 24 H	EN 317	%	45	35	30	17	15	12	10	8
DIMENSIONAL MOVEMENT LENGTH/WIDTH	EN 318	%	0,4	0,4	0,4	0,4	0,4	0,4	0,3	0,3
DIMENSIONAL MOVEMENT TICKNESS	EN 318	%	10	10	10	6	6	6	5	5
SURFACE SOUNDNESS	EN 311	N/mm <sup>2</sup>	1,2	1,2	1,2	1,2	1,2	1,2	1,2	1,2
SURFACE ABSORPTION (TWO FACES)	EN 382-1	mm	>150	>150	>150	>150	>150	>150	>150	>150
MOISTURE CONTENT	EN 322	%	7 +/- 3	7 +/- 3	7 +/- 3	7 +/- 3	7 +/- 3	7 +/- 3	7 +/- 3	7 +/- 3
GRIT CONTENT	ISO 3340	% Weight	≤ 0.05	≤ 0.05	≤ 0.05	≤ 0.05	≤ 0.05	≤ 0.05	≤ 0.05	≤ 0.05
FORMALDEHYDE EMISSION	EN 717-1	ppm	≤ 0.05	≤ 0.05	≤ 0.05	≤ 0.05	≤ 0.05	≤ 0.05	≤ 0.05	≤ 0.05
REACTION TO FIRE TABLA 8 EN EN 13986:2006+A1:2015	EN 13501-1	Class	E	E	E	E	D-s2,d0 (**)	D-s2,d0 (***)	D-s2,d0	D-s2,d0
REACTION TO FIRE TABLA 8 EN 13986:2004+A1:2015 I	EN 13501-1	Class	Efl	Efl	Efl	Efl	Dfl-s1	Dfl-s1	Dfl-s1	Dfl-s1
SOUND ABSORPTION COEFFICIENT (A) (250 A 500 HZ)	EN 13984:2004+A1:2015	α	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
SOUND ABSORPTION COEFFICIENT (A) (1000 A 2000 HZ)	EN 13984:2004+A1:2015	α	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
THERMAL CONDUCTIVITY	EN 13984:2004+A1:2015	W/(m·K)	0.16	0.16	0.15	0.13	0.13	0.12	0.12	0.12
AIRBORNE SOUND INSULATION (SURFACE MASS) (R)	EN 13986:2004+A1:2015	db	NPD	NPD	NPD	23	25	27	29	32
WATER VAPOUR PERMEABILITY DRY CUP	EN 13986:2004+A1:2015	μ	33	31	30	28	27	25	24	24
WATER VAPOUR PERMEABILITY WET CUP	EN 13986:2004+A1:2015	μ	22	21	20	18	17	16	15	14
BIOLOGICAL DURABILITY USE	EN 335	Class of use	1	1	1	1	1	1	1	1
CONTENT OF PENTACHLOROPHENOL (PCP)	EN 13986:2004+A1:2015	ppm	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5

## TOLERANCE ON NOMINAL DIMENSIONS

PROPERTIES	TEST METHOD	UNITS	THICKNESSES mm							
			2-2.5	>2.5-4	>4-6	>6-9	>9-12	>12-19	>19-30	>30-44
THICKNESS	EN 324-1	mm	+/- 0,15	+/- 0,15	+/- 0,15	+/- 0,20	+/- 0,20	+/- 0,20	+/- 0,30	+/- 0,30
LENGTH/WIDTH	EN-324-1	mm	+/-2 mm/m, max 5mm	+/-2 mm/m, max 5mm	+/-2 mm/m, max 5mm	+/-2 mm/m, max 5mm	+/-2 mm/m, max 5mm	+/-2 mm/m, max 5mm	+/-2 mm/m, max 5mm	+/-2 mm/m, max 5mm
SQUARENESS	EN 324-2	mm/m	+/- 2,0	+/- 2,0	+/- 2,0	+/- 2,0	+/- 2,0	+/- 2,0	+/- 2,0	+/- 2,0
EDGE STRAIGHTNESS	EN-324-2	mm/m	+/- 1,5	+/- 1,5	+/- 1,5	+/- 1,5	+/- 1,5	+/- 1,5	+/- 1,5	+/- 1,5

## COLOUR

PROPERTIES	TEST METHOD	UNITS	THICKNESSES mm
LIGHTNESS ON FACES ( L* )	CIE 1976 (CIELAB)	--	L * < 35
MAGENTA-GREEN COORDINATE ON FACES ( A* )	CIE 1976 (CIELAB)	--	0 ≤ a ≤ 1
YELLOW-BLUE COORDINATE ON FACES ( B* )	CIE 1976 (CIELAB)	--	0 ≤ b ≤ 4
DETERMINATION OF LIGHT FASTNESS	ISO 2809. EN ISO 11341	Blue Scale	>6

(\*) VALUES TO BE CONSIDERED AS A ROUGH GUIDE ONLY.

(\*\*) Mounted without an air gap behind the FIBRACOLOUR NEGRO E-Z. Mounted with a closed air gap not more than 22 mm behind the FIBRACOLOUR NEGRO E-Z classification D-s2,d2. Classification E for any other more restrictive condition. Commission Decision 2007/348/EC.

(\*\*\*) Mounted without an air gap behind the FIBRACOLOUR NEGRO E-Z, or with a closed air gap behind the FIBRACOLOUR NEGRO E-Z for thicknesses equal or greater than 15mm or with an open air gap behind the FIBRACOLOUR NEGRO E-Z for thicknesses equal or greater than 18 mm. Mounted with a

closed air gap not more than 22 mm behind the FIBRACOLOUR NEGRO E-Z classification D-s2,d2 in thicknesses between >12 and 18 mm. Commission Decision 2007/348/EC.

These physical-mechanical values improve/comply with those established by EN 622-5:2009 European Standard, Table 3. Requirements for boards for use in dry conditions (type MDF).

FIBRACOLOUR NEGRO E-Z is a low formaldehyde emission product E05 (<0.05 ppm EN 717-1) and meets Class E1 requirements as defined in EN 622-1 European Standard.

FIBRACOLOUR NEGRO E-Z is CARB Phase 2 and US EPA TSCA Title VI certified (Formaldehyde emission < 0.11 ppm ASTM E 1333).

Non dangerous product. Adequate ergonomic techniques and IPEs must be used when handling. Dust generated in cutting, sanding, drawmilling and other processes must be extracted from the working environment with the usual procedures in the wood industry as industrial vacuum systems and IPEs use must be observed according to law.

