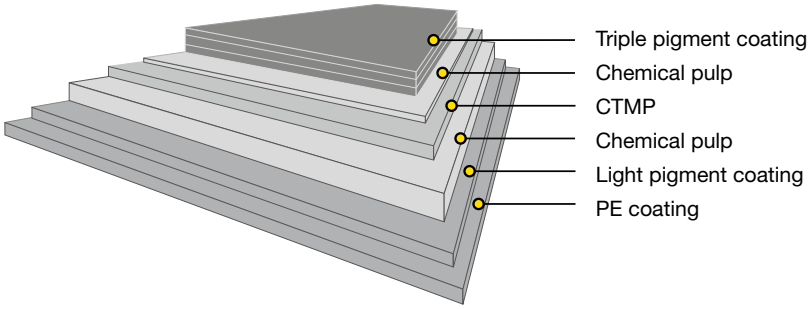
Performa Brilliance™ PE

Fully coated CTMP board with light coated reverse

Performa Brilliance PE is a polyethylene coated GC1 board with a three layer fibre construction and with CTMP (chemi-thermomechanical pulp) in the middle layer. It is triple-pigment-coated on the top side and the reverse white side is coated with transparent PE. Performa Brilliance PE is also available hard-sized (HS).



Issued: 12.2023
Cancels: 02.2023

Technical specification

Property / Unit	Tolerance	180+15	200+15	215+15	230+15	245+15	260+15	280+15	300+15	320+15	345+15	370+15	395+15	Standard
Polymer coated board:														
Grammage, g/m²		195	215	230	245	260	275	295	315	335	360	385	410	ISO 536
PE reverse, g/m²		15	15	15	15	15	15	15	15	15	15	15	15	Mill method
Thickness, µm		270	320	345	375	405	430	470	510	550	600	640**	695**	ISO 534
Baseboard:														
Grammage, g/m²	±4%	180	200	215	230	245	260	280	300	320	345	370	395	ISO 536
Thickness, µm	±5%	255	305	330	360	390	415	455	495	535	585	625**	680**	ISO 534
Bending resistance L&W 15° MD, mN	-15%	108	147	186	224	286	343	430	515	618	765	908**	1070**	ISO 2493
Bending resistance L&W 15° CD, mN	-15%	53	72	91	110	140	167	210	250	303	375	445**	525**	
Bending moment Taber 15° MD, mNm	-15%	5.2	7.1	9.0	10.8	13.8	16.6	20.8	24.9	29.8	36.9	43.9**	51.7**	
Bending moment Taber 15° CD, mNm	-15%	2.6	3.5	4.4	5.3	6.8	8.1	10.1	12.1	14.6	18.1	21.5**	25.4**	
Bending stiffness DIN 5° MD, mNm	-15%	8.2	12.0	15.9	19.6	25.7	31.3	39.9	48.3	58.4	72.9	87.2**	104.2**	
Bending stiffness DIN 5° CD, mNm	-15%	4.4	6.2	8.0	9.9	12.8	15.4	19.6	20.1	28.6	35.6	43.2**	50.4**	
Moisture, %	±1	6.2	6.8	7.2	7.8	8.0	8.1	8.3	8.6	8.7	8.8	9.1	9.1	ISO 287
ISO Brightness C/2°, %, Top	min. 89	92	92	92	92	92	92	92	92	92	92	92	92	ISO 2470-1
ISO Brightness C/2°, %, Reverse	min. 87	90	90	90	90	90	90	90	90	90	90	90	90	
Brightness D65/10°, %, Top		98	98	98	98	98	98	98	98	98	98	98	98	ISO 2470-2
CIE Whiteness D65/10°, Top		122	122	122	122	122	122	122	122	122	122	122	122	ISO 11475
CIE Whiteness D65/10°, Reverse		120	120	120	120	120	120	120	120	120	120	120	120	
L*, Top		95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	ISO 5631-2
a*, Top		1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	
b*, Top		-7.5	-7.5	-7.5	-7.5	-7.5	-7.5	-7.5	-7.5	-7.5	-7.5	-7.5	-7.5	
Surface Smoothness, PPS 10, µm, Top	max. 1.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	ISO 8791-4
Surface Smoothness, PPS 10, µm, Reverse	max. 8.2	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
Gloss 75°, %		40	40	40	40	40	40	40	40	40	40	40	40	ISO 8254-1
Scott Bond, J/m²	min. 110	145	145	145	145	145	145	145	145	145	145	145	145	TAPPI 569
Edge wicking*, g/mm.m	max. 1.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Cobb 60, g/m², Top	max. 60	30	30	30	30	30	30	30	30	30	30	30	30	ISO 535

*) For hardsized
**) The values are preliminary

All properties according to Fors Mill measurements from board machine production.
Laboratory test climate 23°C/50% RH (According to ISO 187).
Tolerances based upon 95% confidence limits, apply to delivered reel/pallet average.
Bending moment Taber 15° and Bending resistance L&W 15° are binding, Bending stiffness DIN 5° are indicative.
Bending moment Taber 15° calculated from Bending resistance L&W 15°.

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Certificates

Quality management ISO 9001
Environmental management ISO 14001
Product safety FSSC 22000
Occupational health and safety ISO 45001
Energy management ISO 50001

FSC and PEFC certified board available upon request.

Paperboard can be recycled

Key characteristics and main enduses

Performa Brilliance PE provides excellent value, runnability and performance in applications that require protection against humidity. The key characteristics of Performa Brilliance include high brightness, excellent smoothness and great visual appearance. The board offers the most superior whiteness in the FBB market on both top and reverse side. This board is ideal for frozen and chilled food end uses. The quality and versatility of Performa Brilliance makes it attractive for premium brands and thanks to the triple coated top side Performa Brilliance gives an excellent print result.

Printing and finishing techniques

The product can be used with different printing techniques such as offset, flexo and rotogravure. The product works very well with different finishing techniques, such as embossing, hot foil stamping and others. It is suitable for laser coding and ink jet marking. Certificates according to PTS-DF 105/2019 and PTS-DF 103/2022 are available upon request.

Storage recommendations

For optimal printing results, the moisture proof wrapping should not be removed until the board has reached the temperature of the press room.

Pallet/Reel Weight (kg)	Difference in temperature between board and press room (press room temp. approx. 20°C)		
	10°C	20°C	30°C
400 kg	2 days	2 days	3 days
800 kg	2 days	3 days	4 days
1200 kg	2 days	4 days	5 days

The product properties, according to the specifications, are guaranteed for 12 months after the production date. In order to ensure product safety, the product must be well wrapped and stored in its original cover indoors, sheltered from rain and snow. The recommended storage conditions are 50–55% relative humidity and 20–23°C.

For the Corona treatment, we recommend using the board within 12 months of the production date; after this period, the treatment level should be tested before printing or gluing.