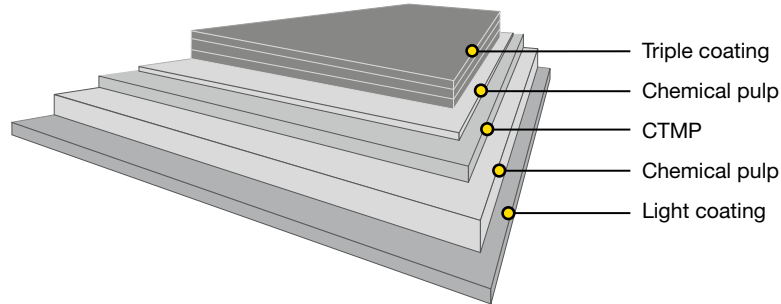


Fully coated CTMP board with light coated reverse

Performa White is a coated GC1 board with a three-layer fibre construction and CTMP (chemi-thermomechanical pulp) in the middle layer. It is triple-pigment-coated on the top side, with one layer of coating on the reverse side. Performa White is also available hard-sized (HS).



Issued: 01.2018
Cancels: 02.2014

Technical specification

Property/ Unit	Tolerance												Standards
Grammage, g/m ²	±4%	200	220	240	260	280	300	315	325	350	370	400	ISO 536
Thickness, µm	±5%	295	325	360	400	440	475	505	535	585	625	675	ISO 534
Bending resistance L&W 15° MD, mN	-15%	154	196	264	353	445	535	608	690	800	900	1080	ISO 2493
Bending resistance L&W 15° CD, mN	-15%	70	90	117	160	202	243	276	290	370	410	500	
Bending moment Taber 15° MD, mNm	-15%	7.4	9.5	12.8	17.0	21.5	25.8	29.3	33.3	38.6	43.5	52.2	
Bending moment Taber 15° CD, mNm	-15%	3.4	4.3	5.8	7.7	9.8	11.7	13.3	14.0	17.9	19.8	24.2	
Bending stiffness DIN 5° MD, mNm	-15%	13.1	17.4	22.8	33.7	43.0	51.3	59.1	66.8	78.7	91.7	109.8	
Bending stiffness DIN 5° CD, mNm	-15%	6.1	7.8	10.0	14.3	18.3	22.4	25.9	30.9	35.9	42.7	51.5	
Moisture, %	±1, ±1.5 *	7.2	7.4	8.0	8.1	8.3	8.6	8.7	8.7	8.9	9.1	9.3	ISO 287
ISO Brightness C/2°, %, Top	min. 87	90	90	90	90	90	90	90	90	90	90	90	ISO 2470-1
ISO Brightness C/2°, %, Reverse	min. 85	88	88	88	88	88	88	88	88	88	88	88	
Brightness D65/10°, %, Top		97	97	97	97	97	97	97	97	97	97	97	ISO 2470-2
CIE Whiteness D65/10°, Top		120	120	120	120	120	120	120	120	120	120	120	ISO 11475
CIE Whiteness D65/10°, Reverse		114	114	114	114	114	114	114	114	114	114	114	
L*, Top		95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	ISO 5631-2
a*, Top		1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	
b*, Top		-7.2	-7.2	-7.2	-7.2	-7.2	-7.2	-7.2	-7.2	-7.2	-7.2	-7.2	
Surface Smoothness, PPS 10, µm, Top	max. 1.7	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. 8.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	
Gloss 75°, %		45	45	45	45	45	45	45	45	45	45	45	ISO 8254-1
Scott Bond, J/m ²	min. 100	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	
Cobb 60, g/m ² , Top	max. 60	30	30	30	30	30	30	30	30	30	30	30	ISO 535
Cobb 60, g/m ² , Reverse	max. 60	30	30	30	30	30	30	30	30	30	30	30	
Robinson chocolate test		max 0.5 for one year storage in reels/pallets											EN1230-2

*) For 325 – 400 g/m²
**) For Hardsized

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°.



Performa White™

Fully coated CTMP board with light coated reverse

Certificates

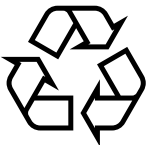
Quality management ISO 9001
 Environmental management ISO 14001
 Product safety FSC 22000
 Health and safety OHSAS 18001
 Energy management ISO 50001
 EU Ecolabel registration SE/011/006, the ecological criteria for Copying and Graphic Paper 2011/333/EY, L149/12, 8.6.2011



FSC and PEFC certified board available upon request.

The EU Ecolabel confirms that the board fulfils the European Commission's ecological criteria for copying and graphic paper and is therefore only available for graphical end uses.

EU Ecolabel available upon request on graphical end uses.



Paperboard is recyclable

Key characteristics and main end uses

Performa White is an aesthetically appealing board that combines performance with a beautiful white appearance. This board is ideal for chocolate, confectionery and cosmetic packaging, as well as for graphical end uses, including the most demanding finishing effects. Thanks to the triple-coated top side, Performa White gives a very good print result, and the reverse side is also suitable for full-colour printing. The high brightness and whiteness contribute to optimal visual appearance.

Printing and finishing techniques

The product can be used with different printing techniques such as offset, flexo, rotogravure and digital printing. In digital printing, the product is suitable for several different sheet- or web-fed presses. Inkjet, dry or liquid toner technology can be used, although in some cases, pretreatment of the substrate might be required. The latest certification status can be verified on the press manufacturer's website or with local Stora Enso representatives. It is important to check the limitations of the equipment, particularly because of the exceptional difference in the thickness and stiffness of board compared with paper in the same grammages. When running thicker substrates, the press manufacturer's recommendations should be referred to for optimal grain direction. Essentially all of the same finishing processes apply to both digitally printed and offset printed work. Since a wide variety of digital printing equipment is available in the market, it is important that a new commercial print job is always preceded by a trial run, including all required printing and converting process phases.

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 105/2013 and PTS-DF 103/2011 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.

