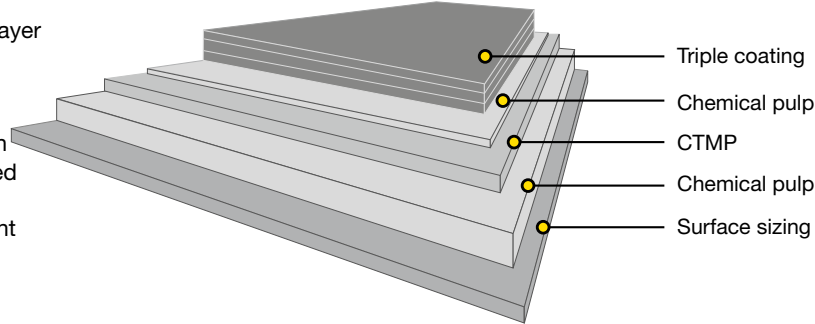


Performa Light CarbonZero™

Fully coated CTMP board with white uncoated reverse, FiberLight Tec™

Performa Light CarbonZero is a coated GC2 board with a three-layer fiber construction and CTMP (chemi-thermomechanical pulp) in the middle layer, produced with patented FiberLight Tec™ production technology. It is triple-pigment-coated on the top side and has a white uncoated reverse side. Performa Light CarbonZero is also available hard-sized (HS).



Issued: 10.2021
Cancels: 10.2020

Technical specification

Property / Unit	Tolerance									Standards
Grammage, g/m ²	±4%	220*	240	250	260	275	285	305*	320*	ISO 536
Thickness, µm	±5%	345	400	420	435	465	485	515	545	ISO 534
Bending resistance L&W 15° MD, mN	-15%	264	344	398	439	522	584	715	826	ISO 2493
Bending resistance L&W 15° CD, mN	-15%	120	156	181	200	237	266	325	376	
Bending moment Taber 15° MD, mNm	-15%	12.8	16.6	19.2	21.2	25.2	28.2	34.5	39.9	
Bending moment Taber 15° CD, mNm	-15%	5.8	7.5	8.7	9.7	11.4	12.8	15.7	18.2	
Bending stiffness DIN 5° MD, mNm	-15%	23.3	30.8	35.8	39.6	47.4	53.2	65.5	75.9	
Bending stiffness DIN 5° CD, mNm	-15%	11.0	14.5	16.9	18.8	22.4	25.2	30.9	35.9	
Moisture, %	±1	7.2	7.9	8.0	8.1	8.2	8.3	8.5	8.7	ISO 287
ISO Brightness C/2°, %, Top	min. 88.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	ISO 2470-1
ISO Brightness C/2°, %, Reverse		84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	
Brightness D65/10°, %, Top		98	98	98	98	98	98	98	98	ISO 2470-2
CIE Whiteness D65/10°, Top		122	122	122	122	122	122	122	122	ISO 11475
CIE Whiteness D65/10°, Reverse		100	100	100	100	100	100	100	100	
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	ISO 8791-4
Gloss 75°, %		40	40	40	40	40	40	40	40	ISO 8254-1
Scott Bond, J/m ²	min. 110	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	
Cobb 60, g/m ² , Top	max. 60	30	30	30	30	30	30	30	30	ISO 535
Cobb 60, g/m ² , Reverse		50	50	50	50	50	50	50	50	
Robinson chocolate test		< 1 for one year storage in reels/pallets								EN1230-2

*) Preliminary values
**) 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 moment Taber 15° calculated from Bending resistance L&W 15°.



Performa Light CarbonZero™

Fully coated CTMP board with white uncoated reverse, FiberLight Tec™

Certificates

Quality management ISO 9001
Environmental management ISO 14001
Product safety FSSC 22000
Occupational health and safety ISO 45001
Energy management ISO 50001
EU Ecolabel standard contract FI/011/002, fulfil the ecological criteria for Graphic Paper, (EU) 2019/70, L15/27 (17.1.2019).



FSC and PEFC certified board available upon request.



EU Ecolabel: FI/011/002

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 enduses

Performa Light CarbonZero is produced with patented FiberLight Tec™ including microfibrillated cellulose in the structure.

The key characteristics of Performa Light CarbonZero include high bulk and stiffness, high brightness, excellent smoothness and great visual appearance. The board offers a superior whiteness on both the top and reverse side. Thanks to a triple-coated top side, Performa Light gives an excellent print result. Performa Light CarbonZero is ideal for folding cartons for chocolate and confectionary, cosmetics and beauty care, healthcare and other premium packaging. The superior quality of Performa Light CarbonZero makes it attractive for premium brands. It can also be used for graphical applications such as book covers, cards and calendars.

Performa Light CarbonZero is a carbon neutral cartonboard material that enables our customers to reduce climate impact and achieve their climate-related sustainability targets.

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. Certificate according to PTS-DF 105/2013 is 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.