

PURICOMPACT | PF

MATERIAL PROPERTIES DATA SHEET

PURICOMPACT PF is a decorative high pressure laminates (HPL) suitable for thermoforming process. The core is composed of kraft paper layers, impregnated with thermosetting resins and layers of polymeric material. The panels have same decor both sides, made of impregnated paper with aminoplastic thermosetting resins. All layers are bonded by high pressure and high temperature process to obtain a high density homogeneous non-porous material. PURICOMPACT PF is suitable for indoor applications.

PROPERTIES	TEST METHOD	PROPERTY OR ATTRIBUTE	VALUES	UNIT
GENERAL PROPERTIES				
Surface quality	EN 438-2:2016 Par. 4	Spots, dirt and similar surface defects Fibers, hair and scratches	≤ 1 ≤ 10	mm ² /m ² mm/m ²
Dimensional tolerances	EN 438-2:2016 Par. 5	Thickness ⁽¹⁾	± 0,50 4,0 ≤ t < 8,0 ± 0,60 8,0 ≤ t < 12,0 ± 0,7 12,0 ≤ t < 14,0	mm
	EN 438-2:2016 Par. 6	Length and width	+ 10 / - 0	mm
	EN 438-2:2016 Par. 7	Straightness of edges	≤ 1,5	mm/m
	EN 438-2:2016 Par. 8	Squareness	≤ 1,5	mm/m
	EN 438-2:2016 Par. 9	Flatness (measured on full-size sheet)	≤ 8,0 4,0 ≤ t < 6,0 ≤ 5,0 6,0 ≤ t < 10,0 ≤ 3,0 t ≥ 10,0	mm/m
PHYSICAL PROPERTIES				
Resistance to impact by large diameter ball	EN 438-2:2016 Par. 21	Drop height Indent diameter	≥ 1400 4,0 ≤ t < 6,0 ≥ 1800 t ≥ 6,0 ≤ 10	mm
Maximum temperature of application	-	-	≤ 80	°C
Density	EN ISO 1183	Density	≥ 1,35	g/cm ³
Flexural modulus	EN ISO 178	Stress	≥ 9000	MPa
Flexural strength	EN ISO 178	Stress	≥ 80	Mpa
SURFACE PROPERTIES				
Resistance to surface wear	EN 438-2:2016 Par. 10	Initial point	≥ 50 vertical applications ≥ 150 horizontal applications	Revolutions
Resistance to scratching	EN 438-2:2016 Par. 25	Force	≥ 2 for smooth finishes ≥ 3 for textured finishes	Rating
Resistance to staining	EN 438-2:2016 Par. 26	Appearance	5 groups 1 & 2 ≥ 4 group 3	Rating
Light Fastness (Xenon-arc)	EN 438-2:2016 Par. 27	Contrast	≥ 4	Grey scale rating
FOOD & HYGIENE PROPERTIES				
Contact with food - overall migration	EN 1186	Acetic acid 3 % Ethanol 50 % Ethanol 95 % Isooctane	≤ 10 ≤ 10 ≤ 10 ≤ 10	mg/dm ²

Notes

(1) t: nominal thickness [mm]

Notes to PURICOMPACT PF process parameters

PURICOMPACT PF panels are generally thermoformable on male and female moulds. Forming on vacuum presses has to be tested by customer and is not generally confirmed.

We recommend cutting the panel to a stretched oversize of 5-10 cm before heating up. To heat up the panel to be thermoformed, use a single layer heating press (veneer press) with a temperature between 145 °C and 160 °C max. Set pressure of heating press to 0,2 N/mm² max. Heating time can vary and has to be set up according to panel thickness (E.g. for 8 mm panel thickness we recommend a heating time of approx. 3,5 minutes at a temperature of approx. 145°C).

It can be assumed that PURICOMPACT PF is ready to be formed when it reaches an internal temperature between 120 °C and 125 °C in all its thickness. Higher temperatures for prolonged times are not necessary and may cause surface defects.

When panel is taken from heating to forming press, look for shortest possible time to prevent panel from cooling down. Move the panel in a wave to ensure that all sliding sheets open so that it counteracts unwanted breakage when the forming press closes. Minimum pressure in the forming press 0,2 N/mm².

In order to obtain uniformity and constancy of cooling time, we recommend using moulds with cooling system. Cooling time with cooled mould should be between 7 to 15 minutes. Open press when compact-forming element has a temperature less than 40°C.

Process parameters must be evaluated according to plants. Before machining it is advisable to carry out preliminary tests. Puricelli is not responsible for the conformity of the product to the specifications of the Customer after machining.