



Puricelli Kitchen & Bath Collection

**USER MANUAL  
&  
TECHNICAL DATA**



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# 0 GENERAL INFORMATION

The Puricelli K&B collection is produced on modern industrial plants, in accordance with applicable standards and state-of-the-art technology. The production facilities meet the requirements of ISO 14001:200. We strive to minimize the environmental impact of production, packaging, and shipping. Each individual panel is technically and visually inspected during the manufacturing process and before shipping.

If you have any doubts about the instructions in this brochure, please contact our technical department or your local representative. All information or products contained in this user manual must be reviewed and tested by the user to determine their suitability for the specific use or application. Site conditions and circumstances must be taken into account. We reserve the right to change specifications at any time and without prior notice. The information in this brochure corresponds to the current state of the art at the time of printing.

Our products are continuously evolving and improving. Technical changes for product enhancement are also made without prior notice. Maintaining the highest technical and ethical standards is our daily goal as we continuously work to preserve vital resources for the future.

The Puricelli K&B collection is manufactured without phenolic resin, making a significant contribution to environmental protection in both production and waste recycling.



# 1 CHARACTERISTICS

1.1 The Puricelli K&B collection is generally designed for indoor use (under certain conditions and specific restrictions, outdoor use may be possible upon request). The panels consist of multi-colored kraft paper layers in the core and decorative paper layers on the surface, impregnated with thermosetting resins and pressed irreversibly in multi-daylight presses under high pressure and temperature.

For many years, Puricelli Compact panels have not used phenolic resins (exception fire class B-s1 d0), making a significant contribution to environmental protection in production, processing, use, and disposal.



1.2 Residual pieces and sections can be shredded and used as filler in concrete mixtures for foundations or disposed of in landfills according to local regulations.

Certified incineration plants burn Puricelli HPL laminates at 700°C within 4 minutes, producing carbon dioxide, nitrogen oxides, and water vapor. The resulting ash can be disposed of in landfills, ensuring energy recovery in accordance with Section 8 of the Circular Economy Law.



# 2 COLLECTION

## 2.1 DECORS

> 30 UNI-, WOOD-, STONE- & Fantasy-Decors

Check out the current collection ->>



## 2.2 SIZES AND THICKNESSES

PRODUCT	thickness [mm]	size [mm]
HPL	0,7	3050*1300
Back Wall	4	4200*1300
Countertop	12	4200*1300, 4200*1620

## 2.3 SURFACES

Standard

AK	OAK
AR	ARDESIA
GL	GALAXY
LA	LAVA
MN	MOON
NK	NIKE
SN	SAND

Antifingerprint

GH	GHOST
MM	MOREMATT



# 3 TRANSPORT, STORAGE, HANDLING



3.1 During transport and storage, the general processing recommendations for Compact panels according to EN 438-7 must be observed. The panels are packaged horizontally on pallets in protective film and secured with at least 4 steel straps. For loading and unloading the pallets, we recommend a forklift with a minimum capacity of 3 tons and fork lengths ranging from 1350 to 1900 mm, depending on the panel size. In terms of transport regulations, Puricelli Compact panels are not classified as hazardous substances; labeling and special precautions are not required.

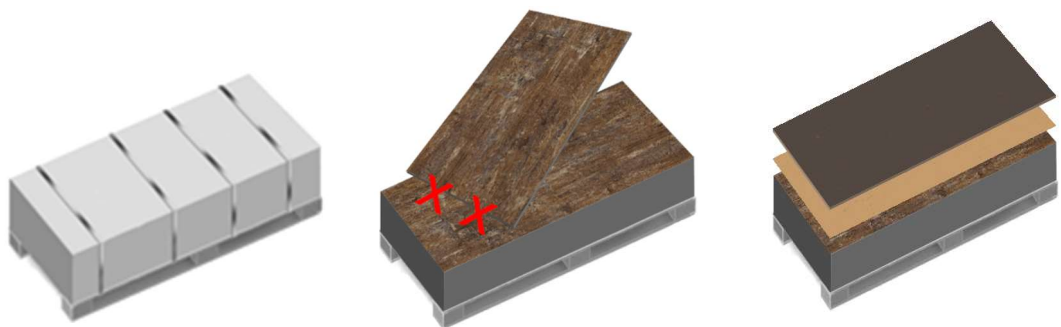
3.2 Storage of the panels must be done horizontally indoors on pallets. After removing individual panels, the pallet must be covered again.

Ensure adequate ventilation to avoid standing moisture under the packaging film.

Optimal storage is achieved at 50-60% relative humidity and a temperature range of 18 to 25°C.



3.3 When handling the panels, the steel straps must be removed from the pallet. For large formats, we recommend suction lifters (otherwise up to 6 people are needed) to safely move a panel. Lift the panels upwards to avoid scratching the surface. Do not drag the panels over edges or slide them over each other. To cover an open pallet, we recommend using a heavy-duty plywood, OSB, or chipboard on a cardboard layer to prevent deformations during long-term storage.



# 4 CUTTING



4.1 For sawing, we recommend carbide-tipped saw blades or, for longer lifespan, diamond-tipped tools.

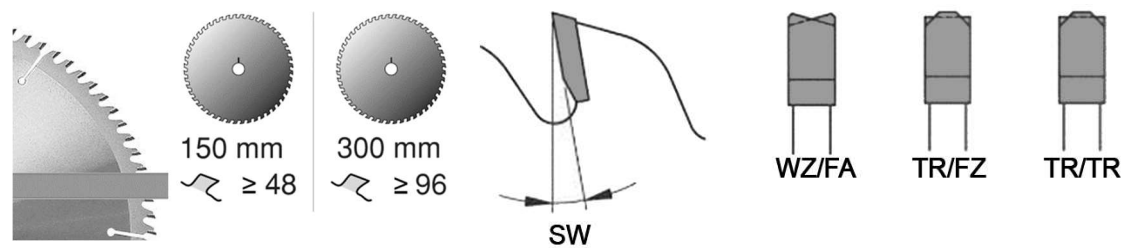
The following tooth forms have proven successful:

Hand and table saws	alternate teeth beveld (WZ/FA) trapezoidal/flat tooth (FZ/TR)
CNC-saws	Trapezoidal tooth (TR/TR) with scoring unit or diamond-tipped saw blades with scoring unit

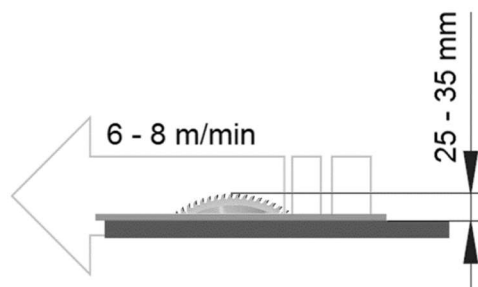
A high rotational speed results in excellent cutting quality, and the feed rate should be adjusted accordingly (insufficient feed may cause burn marks on the edges), but it shortens the lifespan of the saw blades.

The feed speed depends on the thickness and should be around 6-8 m/min.

Trim cuts of at least 1 cm should be made on the longitudinal and transverse sides.



4.2 Saw blade projection: approx. 25 - 35 mm, the larger the projection of the saw blade over the top of the board, the better the upper or worse the lower cutting edge.





### 4.3 HAND CIRCULAR SAWS WITH GUIDE RAIL

Hand circular saws should only be used with a guide rail. To avoid burn marks on the edges, ensure a uniform feed rate. Post-processing of the edges is recommended.

Deburr the cut edges with a file, sandpaper, or hand router.



### 4.4 CALCULATION OF ROTATIONAL SPEED AND FEED RATE

$n$ [ $\text{min}^{-1}$ ]	rotation speed	4000 – 8000 $\text{min}^{-1}$
$v_f$ [ $\text{m}/\text{min}$ ]	feed rate	6 – 8 $\text{m}/\text{min}$
$v_c$ [ $\text{m}/\text{s}$ ]	cutting speed	50 – 80 $\text{m}/\text{s}$
$D$ [ $\text{m}$ ]	tool diameter	160 – >450 $\text{mm}$
$z$ [1]	number of teeth	~50 – ~140
$f_z$ [ $\text{mm}/1$ ]	feed per teeth	0,02 – 0,07 $\text{mm}$

$$n = \frac{60 * v_c}{\pi * D}$$

$$v_f = \frac{f_z * n * z}{1000}$$



# 5 PROCESSING



K&B worktops are high-quality compact panels and can be processed with precision. Edge milling, cutouts for hobs or sinks are carried out just as precisely as holes for fixing the panels to the base cabinets.

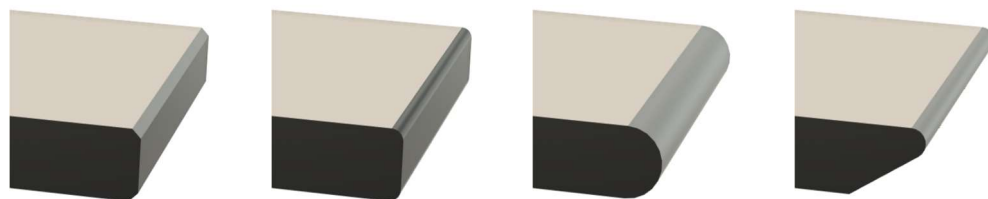
## 5.1 MILLING TOOLS

For milling, we recommend carbide-tipped indexable insert cutters or diamond-tipped milling tools for longer lifespan.



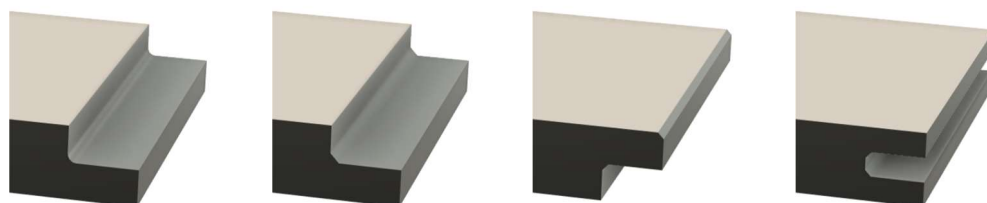
## 5.2 EDGE FORMS

Avoid sharp edges  $\leq 90^\circ$ .



## 5.3 VARIOUS MILLING FORMS

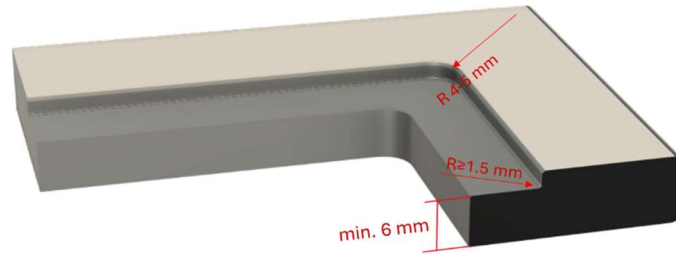
Milling for sinks and cooktops flush-mounted, sink undermount, and various connections.



- avoid sharp edges  $\leq 90^\circ$
- material residual thickness 6 mm
- radii and chamfers on inner edges  $\geq 1.5$  mm

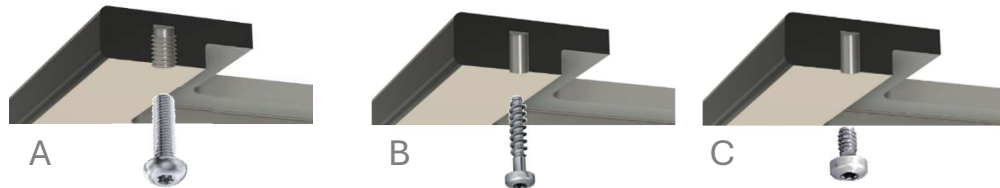
## 5.4 CUTOUTS, HOLES

Milling for sinks and cooktops, sink undermount, and various connections.



- avoid sharp edges  $\leq 90^\circ$
- material residual thickness 6 mm
- radii and chamfers on inner edges  $\geq 1.5$  mm
- radii on surface area  $\geq 4$  mm

Fastening holes for worktops on base cabinets, brackets for undermount sinks, cooktops, etc.



A  
M6 Countersunk head  
M6x25, T30

B  
EJOT Delta PT WN5452  
60x25/22-DS, T30

C  
EJOT Duro PT  
6x9,5, T30

Worktops on base cabinets, with 19 mm decorative chipboard.

Variant A metric thread in the worktop, for metric screws

Variant B countersunk holes  $\varnothing 5$  mm, chamfered, for thread-forming screws

For fastening worktops to steel or aluminum substructures

Variant C angle thickness 2 mm

- Counterbore depth 10 mm (for panel thickness 12 mm)
- Minimum screw-in depth 7 mm  $\rightarrow$  max. 9 mm
- Hole diameter substructure 7.5 mm

**!!! ATTENTION !!!**

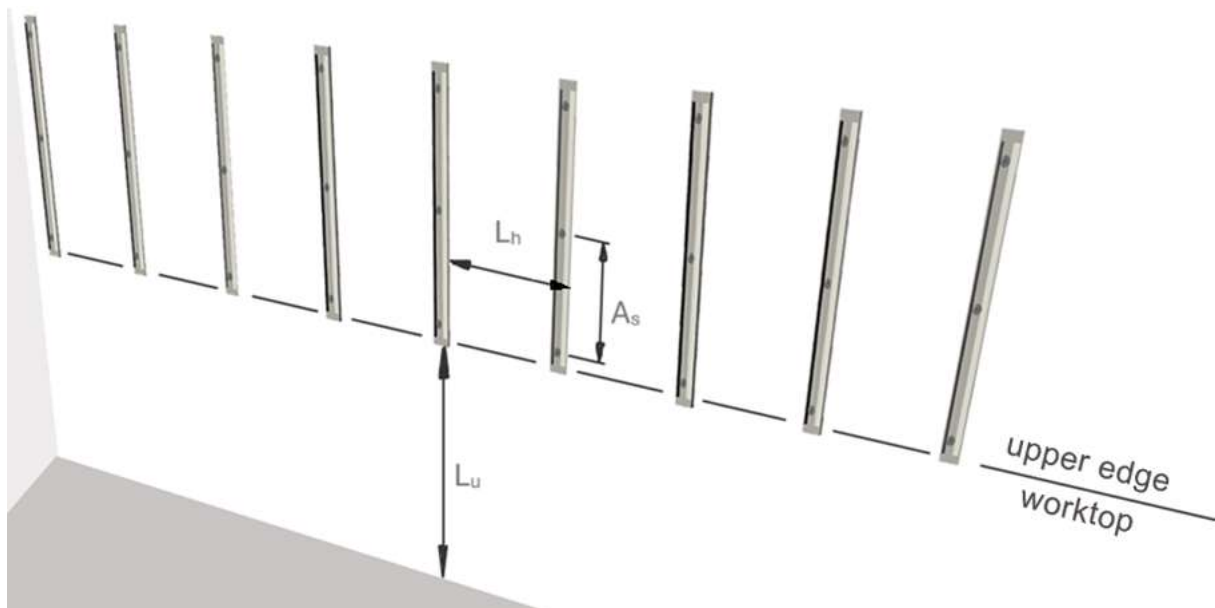
**Screwing in too deep can cause the panel surface to chip off, resulting in irreparable damage.**

# 6 ASSEMBLY

## 6.1 SUBSTRUCTURE FOR BACK WALL

The substructure of the back wall must be installed vertically to allow for ventilation. It can be made of plywood strips, aluminum profiles, countertop sections, or other suitable materials.

- The upper edge of the countertop must be marked horizontally before starting assembly.
- Undercut of the substructure  $L_u$  is 3 cm below the marking “upper edge worktop” (ensures ventilation distance even for base cabinets)
- Distance between strips  $L_h \leq 300$  mm
- Minimum cross-section of strips 12\*40 mm
- Screw spacing  $A_s \leq 300$  mm  
Choose screws and dowels according to the type of wall (e.g., concrete, brick, lightweight concrete, drywall, ...)
- Wall distance of the panels  $\geq 15$  mm  
corresponds to 12 mm strips + 3 mm adhesive application



For screwing the strips into brick or concrete, the following screws are suitable.

Screws A2, head  $\varnothing$  12 mm, 4,8\*60 mm  
Universal nylon dowel  $\varnothing$  8\*50 mm

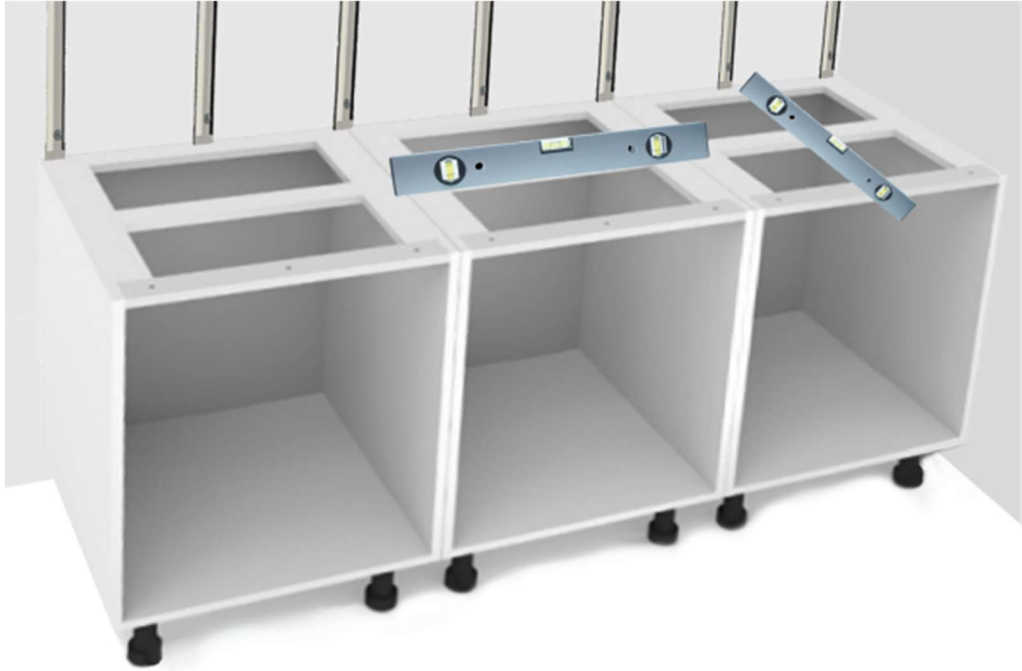


Other flat head screws with max. head height of 3 mm also can be used.

## 6.2 INSTALLING BASE CABINETS

The distance of the base cabinets from the wall is determined by the strips of the substructure. See 6.1 distance  $L_u$

The contact surfaces of the base cabinets must be levelled in the longitudinal and transverse directions with the adjustable feet.



## 6.3 CONNECTING MULTIPLE COUNTERTOPS

Due to different expansion rates, countertops should be processed in a direction-bound manner.

For countertop widths up to 90 cm, we recommend a force-locking connection with two countertop connectors and 3 tongue and groove connections (or wooden slats) per meter for a flush work surface.

The edges in the area of the countertop connection should be slightly chamfered to avoid breakouts.



## 6.4 INSTALLING COUNTERTOP

The connection of the countertop with the base cabinets can be done by screwing (see also 5.4) or gluing.

Please note that due to the material, slight expansions between base cabinets and countertop must be compensated for.

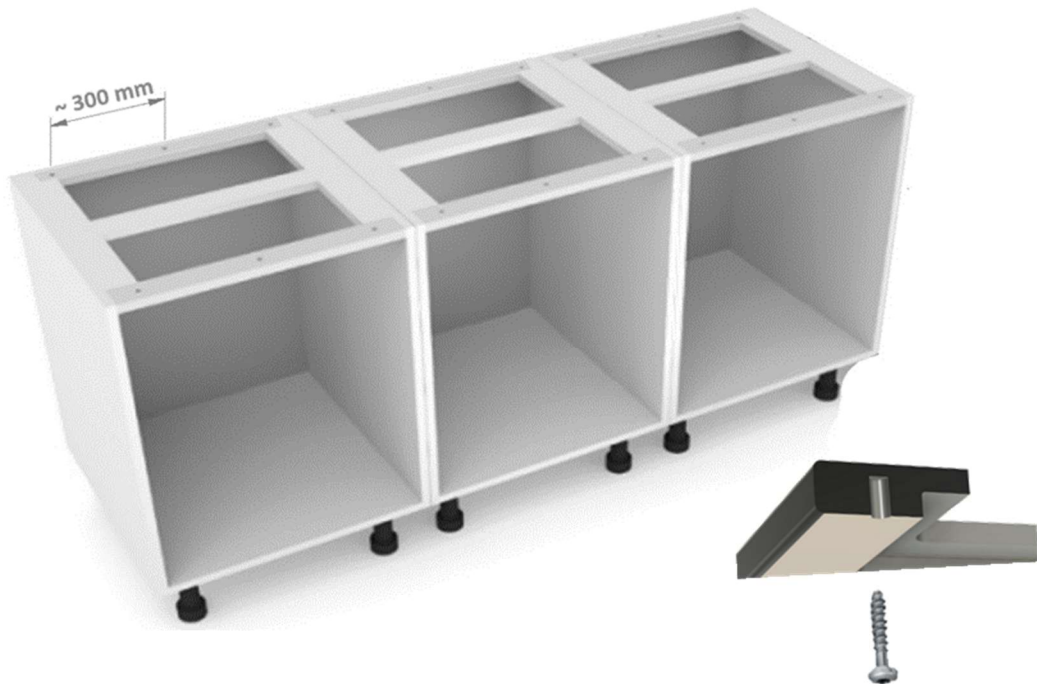


The protective film must be removed from both sides before installation.

### 6.4.1 SCREWING COUNTERTOP

The screw spacing in the longitudinal direction should not exceed 300 mm. For worktop widths up to 650 mm, two rows of screws should be provided approximately 5 cm from the front and back edges.

Above that, the panels should also be screw-fastened in the center. To compensate for expansions, all screws should only be tightened by hand.



### 6.4.2 GLUING COUNTERTOP

We recommend bonding with 1K-PUR or MS polymer adhesive systems. Silicone adhesives are not suitable as silicone tends to detach from the surface of the laminate panels after some time.

For countertops up to 1250 mm in width, 3 adhesive beads should be applied at a distance of approximately 5 cm from the front and back edges, as well as in the center.

It is essential to follow the processing guidelines of the adhesive system manufacturer.

Your dealer will be happy to assist you in choosing the right adhesive system.

## 6.5 ASSEMBLY BACKWALL ADHESION

Since the back wall is usually glued in place, we recommend bonding it with 1K-PUR (one-component polyurethane) or MS polymer adhesive systems. Silicone adhesives are not suitable as silicone tends to detach from melamine surfaces over time.

Before bonding the back wall to the countertop (or between multiple back walls or corner installations), 2 mm spacers should be inserted, which can be removed after the adhesive system has set. The joints can then be filled with silicone.

It is essential to follow the processing guidelines of the adhesive system manufacturer.

Your dealer will be happy to assist you in choosing the right adhesive system.



The protective film must be removed from both sides before assembly.

# 7 CLEANING

Melamine is an extremely resistant surface, almost all common stains can be removed with simple methods.

**Under no circumstances should abrasive cleaners, corrosive agents, sandpaper, razor blades, etc. be used, as they mechanically damage the surface.**

## 7.1 FOOD STAINS

**Standard cleaning** should be done with warm water (up to approx. 70°C), sponge or cloth. Additionally, water can be mixed with household amounts of soap or dishwashing detergent. Dried-on liquids with a high sugar content may require a longer exposure time (leave a damp sponge or cloth on the affected area for a few minutes).

## 7.2 COSMETICS, OILS, GLUES, ETC. STAINS

If standard cleaning is not successful, organic solvents such as alcohol, turpentine, or paint thinner (acetone, hydrocarbons C6-C7, n-alkanes, iso-alkanes, cyclic compounds, n-hexane ≤5%) can be used.

## 7.3 PENCILS, COLORED PENCILS, BOARD MARKERS

To remove pencil marks, use a soft eraser without abrasive dust or corundum.

Board markers can be removed with a dry cloth or melamine sponge. Shadow images from board markers are best removed with liquid cleaners specifically for board markers, and disinfectants have also proven effective.

## 7.4 LIMESCALE DEPOSITS

To remove limescale deposits, e.g., on faucets, place a paper towel soaked in household vinegar or a sponge cloth on the affected area and let the vinegar work for about 10 minutes. Depending on the severity of the limescale deposits, they can be wiped away or removed with a hand brush. If deposits are still visible, repeat the process.

If the surface is affected and dull due to long-term limescale deposits, the gloss level can be refreshed with polishing chalk or a melamine sponge.

## 7.4 CLEANING IN HOSPITAL SETTINGS (BACTERIA, VIRUSES, ETC.)

All cleaning agents approved for hospital use based on alcohol can be used according to the manufacturer's guidelines.



# 8 DATA SHEETS



## PURICOMPACT MATERIAL PROPERTIES DATA SHEET

PURICOMPACT is a high pressure decorative laminates (HPL), having thickness 2 mm or greater, according to EN 438-1:2016, EN 438-2:2016 and EN 438-4:2016. The core is composed of layers of kraft paper impregnated with thermosetting resins. The decorative surface in both sides is made of paper impregnated with aminoplastic thermosetting resins. All the layers are bonded together by a high pressure and high temperature process to obtain a high density homogeneous non-porous material. PURICOMPACT is available in standard CGS type and flame retardant CGF type according to EN 438-4:2016.

PROPERTIES	TEST METHOD	PROPERTY OR ATTRIBUTE	CGS - CGF		UNIT
			VALUES		
<b>GENERAL PROPERTIES</b>					
Surface quality	EN 438-2:2016 Par. 4	Spots, dirt and similar surface defects Fibers, hair and scratches	≤ 1 ≤ 10		mm <sup>2</sup> /m <sup>2</sup> mm/m <sup>2</sup>
Dimensional tolerances	EN 438-2:2016 Par. 5	Thickness <sup>(1)</sup>	± 0,20 ± 0,30 ± 0,40 ± 0,50 ± 0,60	2,0 ≤ t < 3,0 3,0 ≤ t < 5,0 5,0 ≤ t < 8,0 8,0 ≤ t < 12,0 12,0 ≤ t < 16,0	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 ≤ 5,0 ≤ 3,0	2,0 ≤ t < 6,0 6,0 ≤ t < 10,0 t ≥ 10,0	mm/m
<b>PHYSICAL PROPERTIES</b>					
Resistance to immersion in boiling water	EN 438-2:2016 Par. 12	Mass increase	≤ 5 ≤ 2	2,0 ≤ t < 5,0 t ≥ 5,0	%
		Thickness increase	≤ 6 ≤ 2	2,0 ≤ t < 5,0 t ≥ 5,0	%
		Surface appearance	≥ 3 ≥ 4	gloss finish other finishes	Rating
		Edge appearance	≥ 3		Rating
Dimensional stability at elevated temperatures	EN 438-2:2016 Par. 17	Cumulative dimensional change	≤ 0,4 ≤ 0,3	2,0 ≤ t < 5,0 t ≥ 5,0	Longitudinal % <sup>(2)</sup>
			≤ 0,8 ≤ 0,6	2,0 ≤ t < 5,0 t ≥ 5,0	Transversal % <sup>(2)</sup>
Resistance to impact by large diameter ball	EN 438-2:2016 Par. 21	Drop height Indent diameter	≥ 1400 ≥ 1800 ≤ 10	2,0 ≤ t < 6,0 t ≥ 6,0	mm
Resistance to crazing	EN 438-2:2016 Par. 24	Appearance	≥ 4		Rating
Density	EN ISO 1183	Density	≥ 1,35		g/cm <sup>3</sup>
Flexural modulus	EN ISO 178	Stress	≥ 9000		MPa
Flexural strength	EN ISO 178	Stress	≥ 80		Mpa
<b>SURFACE PROPERTIES</b>					
Resistance to surface wear	EN 438-2:2016 Par. 10	Initial point	≥ 50		Revolutions
Resistance to water vapour	EN 438-2:2016 Par. 14	Appearance	≥ 3 ≥ 4	gloss finish other finishes	Rating
Resistance to dry heat (160°C)	EN 438-2:2016 Par. 16	Appearance	≥ 3 ≥ 4	gloss finish other finishes	Rating
Resistance to wet heat (100°C)	EN 438-2:2016 Par. 18	Appearance	≥ 3 ≥ 4	gloss finish other finishes	Rating
Resistance to scratching	EN 438-2:2016 Par. 25	Force	≥ 2 ≥ 3	for smooth finishes for textured finishes	Rating
Resistance to staining	EN 438-2:2016 Par. 26	Appearance	5 ≥ 4	groups 1 & 2 group 3	Rating
Light Fastness (Xenon-arc)	EN 438-2:2016 Par. 27	Contrast	≥ 4		Grey scale rating

FIRE PERFORMANCES				
Reaction to fire <sup>(2)</sup>	EN 13501	Classification - CGS wood frame Classification - CGF metal frame	D-s2,d0 B-s1,d0	class
FOOD & HYGIENE PROPERTIES				
Contact with food - overall migration	EN 1186	Acetic acid 3 % Ethanol 50 % Ethanol 95 % Isooctane	≤ 10 ≤ 10 ≤ 10 ≤ 10	mg/dm <sup>2</sup>
ENVIRONMENTAL PROPERTIES				
Formaldehyde emission	EN 13986	Formaldehyde emission rating	E1	Rating
Volatile organic chemical emission	AFNOR NF EN ISO 16000-9	Classification	A+	Rating
		TVOC emission	≤ 0,2	mg/m <sup>3</sup>
Phenol Free <sup>(4)</sup>	AFNOR NF EN ISO 16000-9	Phenol emission	< 0,002	mg/m <sup>3</sup>

### Notes:

- (1) t: Nominal thickness [mm]  
 (2) Longitudinal: parallel to the fiber direction (usually also the sanding direction). Transverse: perpendicular to the fiber direction.  
 (3) Please contact Puricelli Technik for further details on the conducted fire protection tests and the existing certificates.  
 (4) Phenol is not used as a raw material in the production of PURICOMPACT. 0.002 mg/m<sup>3</sup> is the detection limit (DL) of the test.

### Note on PURICOMPACT panels with adhesive protective film:

The protective films are designed for temporary surface protection during transport and handling, against dirt, scratches, and tool marks (e.g. strap tensioners during loading); they are not designed to protect against rough mechanical impact, corrosion, moisture, or chemicals. The laminates covered with the protective film should be stored in a clean, dry place (40 to 60% relative humidity) at room temperature (20 to 25 °C), avoiding weather influences and UV radiation. In any case, the protective film must be removed by Puricelli within four months from the shipping date. Puricelli cannot be held responsible for defects in the laminates covered with the protective film or for the consequences of non-recommended applications.



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 web site: www.laboratoriolapi.it

## ATTESTAZIONE DI GAMMA / RANGE ASSESSMENT - N. 1906-1907/23/FR

**METODO DI PROVA:**

Test method

ISO 16000-9:2006

ISO 16000-6:2021

**DENOMINAZIONE DELLA PROVA:**

Description of the standard

Indoor air - Part 9: Determination of the emission of volatile organic compounds from building products and furnishing.

**TITOLO DEL METODO:**

Method title

Decreto francese / Arrêté 2011 – 321

Relativo all'etichettamento di prodotti da costruzione o rivestimenti di pareti o pavimenti e di pitture e vernici per l'emissione di composti organici volatili. *Relatif à l'étiquetage des produits de construction ou de revêtement de mur ou de sol et des peintures et vernis sur leurs émissions de polluants volatils.*

**RICHIEDENTE:**

Sponsor

PURICELLI S.r.l.

Via Nuova Valassina, 3 - 23845 COSTA MASNAGA (LC)

**DENOMINAZIONE DEI MATERIALI:**

Denomination of the materials

PURILAM (0.7 mm) – PURICOMPACT (14.0 mm)

**GAMMA SPESSORI DEI CAMPIONI:**

Thickness range of the samples

0.7÷14 mm

**DESCRIZIONE DEL MATERIALE:**

Description of the material

Pannelli di laminato HPL.

Panels of HPL laminate.



Questo documento fa riferimento ai Rapporti di Prova no. 1906.2IS0331/23 e no. 1907.2IS0331/23 emessi da questo Laboratorio.  
*This certificate refers to the Test Reports no. 1906.2IS0331/23 and no. 1907.2IS0331/23, issued by this Laboratory.*

<b>Prodotto / Product</b>	<b>Laminato HPL / HPL Laminate</b>
<b>Parametro / Parameter</b>	<b>Emissione di VOC in gamma di spessore / VOC emission for a thickness range</b>

### VALUTAZIONE / JUDGEMENT

Sulla base dei risultati di prova sopra riportati il materiale in oggetto risulta in **CLASSE A+** rispetto alle richieste del **Decreto francese / Arrêté 2011 – 321** per la gamma di spessori da 0.7 mm a 14.0 mm (estremi inclusi). In aggiunta a quanto sopra riportato, si nota che per la suddetta gamma di spessori il prodotto non dà luogo ad emissioni misurabili di fenolo. La presente Attestazione è basata sulla dichiarazione da parte del Richiedente circa l'identità chimica dei prodotti sottoposti a prova, per i quali l'unica differenza risiede nella variazione di spessore e nella denominazione commerciale del prodotto a spessore 0.7 mm.

*On the basis of the above results the sample in object result in **CLASS A+** with respect to the requests of **Decreto francese / Arrêté 2011 – 321**. for the thicknesses range from 0.7 to 14.0 mm (extremes included). As a supplement to what reported above, it is noticed that for the above thickness range the product does not yield measurable emissions of phenol. This Attestation is based on the declaration by the Sponsor about the chemical equality between the products tested, for which the only difference is the variation of thickness and in the commercial denomination of the product with thickness 0.7 mm*



Prato, 10/11/2023

Il Responsabile Certificazione  
 The Certification Manager

Il Direttore del Laboratorio  
 The Director of the Laboratory

Valid until: 09/11/2026

David Borsini

Luca Ermini

Questo documento deve essere letto congiuntamente ai Rapporti di Prova, per la descrizione del prodotto e per ogni altra notizia di dettaglio. Questo documento non costituisce approvazione di tipo né certificazione di prodotto né tantomeno dichiarazione di conformità, che spetta esclusivamente al Produttore / Sponsor.

*This document has to be read in conjunction with the Test Reports, for the description of the product and for every other detail. This document does not represent type approval or certification of the product neither declaration of compliance, that is exclusively under the responsibility of the Manufacturer or Sponsor.*

Il Laboratorio non è stato coinvolto nel campionamento dalla produzione / The Laboratory has not been involved in the sampling from the production.

Il presente documento non può essere riprodotto in forma parziale senza l'autorizzazione scritta di LAPI S.p.A.

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