

# POLYREY HPL® Signature - High Pressure Laminate

## PRODUCT DATA SHEET

### 1. MATERIAL DESCRIPTION AND COMPOSITION

POLYREY HPL® Signature are decorative high-pressure laminates (HPL) based on EN 438-3.

POLYREY HPL® Signature panels consist of layers of fibrous cellulose (usually papers) impregnated with thermosetting resins. The process, defined as the simultaneous application of heat ( $\geq 120$  °C) and high specific pressure ( $\geq 5$  MPa), enables the flowing and subsequent curing of the thermoset resins to obtain a homogeneous and non-porous material (density  $\geq 1.35$  g/cm<sup>3</sup>) with the required surface finish.

Basically, more than 60% of the POLYREY HPL® Signature consists of paper and the remaining 30 to approximately 40% consist of cured phenol-formaldehyde resin for core layers and melamine-formaldehyde resin for the decorative top layer.

In contrast to standard POLYREY HPL® panels with rotogravure paper, these panels are manufactured with digitally printed papers. The images/motifs are printed in high resolution (300dpi) for high quality rendering.

POLYREY HPL® Signature uses a special process to integrate a printed image between the kraft core and the protective overlay. There are different technical properties due to this specific composition. They need to be considered for final application and processing.

POLYREY HPL® Signature is available in a variety of dimensions, thicknesses, and textures. The core is a phenolic brown standard core for HPL type HGS. If a fire retardant HPL (type HGF) is required, the brown laminate core may be treated with a halogen-free additive.

This product data sheet covers the product POLYREY HPL® Signature (S) and POLYREY HPL® Signature flame-retardant (F).

POLYREY HPL® Signature benefits from antibacterial treatment (Silver borophosphate glass), complementary to cleaning and disinfection protocols. Antibacterial property contributes to surface hygiene by reducing microbial contamination.



- 1 Overlay, melamine resin impregnated
- 2 digitally printed paper (image/motif)
- 3 Core paper (kraft paper), phenolic resin impregnated

## 2. FORMATS

Full details of the availability of decors in different formats are available on our website [www.polyrey.com](http://www.polyrey.com) or in our infoGuide brochure.

## 3. AREAS OF APPLICATION

Table 1: Classification system and typical applications (source EN 438-3)

PERFORMANCE CATEGORY	FINISHES	NUMERICAL CLASSIFICATION INDEX NUMBERS			EQUIVALENT ALPHABETICAL CLASSIFICATION	EXAMPLES OF TYPICAL APPLICATIONS <sup>1</sup>
		Wear resistance (Revolutions)	Impact resistance (N)	Scratch resistance (Rating <sup>2</sup> )		
High resistance to wear	60 / EXM / SLK / BRI / ARB / TXL / GRM	3 (≥150)	3 (≥ 20)	3  (all finishes ≥ 3 except BRI ≥2)	HGS (horizontal general-purpose standard)  HGF (horizontal general-purpose flame-retardant)	worktops and front elements for kitchen and office
High resistance to impact						restaurant- and hotel desks
High resistance to scratching						doors and wall cladding in public spaces  Interior wall cladding and ceilings  claddings for public transport (buses)

POLYREY HPL® Signature are intended for interior use, for horizontal and vertical applications, in dry and limited wet areas of 18 to 25 °C and 40 to 65 % relative humidity, i.e. wall covering, partition, door, tabletop, countertop, kitchen front, kitchen worktop, splashback, sliding door etc. In addition, it can also be used in combination with a suitable substrate for private bathroom (individual housing, hotel, hospital room) and collective washroom with limited humidity (18 to 25°C and 40 to 65 % relative humidity) i.e. sanitary facilities in office, retail, education, or public housing.

For horizontal applications (i.e. worktops, vanity worktops, tabletops etc.) involving contact with water, ensure that standing water is not allowed to remain on the surface for long periods of time. It is therefore recommended that standing water be wiped away. For horizontal & vertical applications (i.e. splashbacks, kitchen furniture's, wall claddings etc.) it must be ensured that the respective components are not subjected to direct exposure to steam.

Applications in areas with increased moisture exposure, such as whirlpools, hammams, steam baths, sanitary and shower facilities in stadiums, swimming pools, or campsites must be avoided.

<sup>1</sup> The examples indicate typical applications of POLYREY HPL® Signature. The application of POLYREY HPL® Signature depends on several factors (e.g., temperature, relative humidity, change in climatic conditions, fasteners, fire behavior requirements, etc.).

Therefore, the suitability of POLYREY HPL® Signature for the respective application must be checked in advance.

<sup>2</sup> ≥ 90 % continuous double circle of scratch marks clearly visible, Rating 5 - > 6 N, Rating 4 - 6 N, Rating 3 - 4 N, Rating 2 - 2 N, Rating 1 - 1 N

## 4. TECHNICAL DATA

### 4.1 TECHNICAL PROPERTIES ACCORDING TO EN 438-3

Table 2: Technical properties according to EN 438-3

PROPERTY	TEST METHOD EN 438-2: 2016	UNIT	HGS-HGF
<b>Physical properties, dimensions and tolerances</b>			
Density	EN ISO 1183-1	g/cm <sup>3</sup>	≥ 1,35
Thickness	EN 438-2-5	mm 0,5 ≤ t ≤ 1,0 1,0 < t < 2,0	± 0,10 ± 0,15
Length and width	EN 438-2-6	mm	+ 10 / - 0
Edge straightness	EN 438-2-7	mm/m	≤ 1,5
Edge squareness	EN 438-2-8	mm/m	≤ 1,5
Edge quality	EN 438-2-4		Visual defects (e.g., moisture marks, lack of gloss, corner damage, etc.) can be present on all four edges of the laminate, providing the defect-free length and width are at least the nominal size minus 20 mm
Flatness	EN 438-2-9	mm/m	≤ 60
Dimensional stability at elevated temperature	EN 438-2-17	t < 2 mm Longitudinal % Transverse %	≤ 0,55 ≤ 1,05
<b>Mechanical properties</b>			
Resistance to immersion in boiling water	EN 438-2-12	Surface rating <sup>3</sup>	≥ 1 <sup>4</sup>
Resistance to impact by small-diameter ball	EN 438-2-20	Spring force N	≥ 20
Resistance to impact by large-diameter ball (optional)	EN 438-2-21	Drop height mm Indent diameter mm	≥ 800 ≤ 10
Resistance to cracking under stress	EN 438-2-23	Rating <sup>5</sup>	≥ 4
<b>Surface properties</b>			
Dirts, spots, etc. Fibers, hairs, scratches	EN 438-2-4	mm <sup>2</sup> /m <sup>2</sup> mm/m <sup>2</sup>	≤ 1,0 ≤ 10
Resistance to surface wear	EN 438-2-10	Revolutions Initial Point (IP)	≥ 150
Resistance to water vapour	EN 438-2-14	Rating <sup>3</sup>	≥ 1 <sup>6</sup>

<sup>3</sup> Rating 5 - no visible change; Rating 4 - slight change of gloss and/or colour, only visible at certain viewing angles; Rating 3 - moderate change of gloss and/or colour; Rating 2 - marked change of gloss and/or colour or surface blistering; Rating 1 - Surface layers delamination.

<sup>4</sup> Properties with values below 3 do not meet the minimum requirements of EN 438. In extreme moisture conditions, bubbles can form on the surface. Please note the recommendations for use and cleaning.

<sup>5</sup> Rating 5 - No evidence of cracking; Rating 4 - Hairline cracks only visible under ×6 magnification; Rating 3 - Cracks visible with normal vision from the edge of the hole, but not extending to either edge of the specimen; Rating 2 - A crack visible with normal vision from the edge of the hole, extending to one edge of the specimen such that the specimen is not broken into two pieces; Rating 1 - Specimen broken into two pieces.

<sup>6</sup> Properties with values below 4 do not meet the minimum requirements of EN 438. In extreme moisture conditions, bubbles can appear on the surface. Please note the recommendations for use and cleaning.

PROPERTY	TEST METHOD EN 438-2: 2016	UNIT	HGS-HGF
Resistance to dry heat (160 °C)	EN 438-2-16	Rating <sup>3</sup> Gloss finish Other finishes	≥ 3 ≥ 4
Resistance to wet heat (100 °C)	EN 438-2-18	Rating <sup>3</sup> Gloss finish Other finishes	≥ 3 ≥ 4
Resistance to scratching	EN 438-2-25	Rating <sup>2</sup> gloss finish Other finishes	≥ 2 ≥ 3
Resistance to staining	EN 438-2-26	Rating <sup>3</sup> Groups 1 & 2 Group 3	5 ≥ 4
Light fastness (xenon arc)	EN 438-2-27	Grey scale rating	4 - 5
<b>Postforming properties for laminate</b>			
Postformability	EN 438-2-31 or EN 438-2-32	Radius (mm) Longitudinal (L) Traverse (T)	Not postformable
Minimum bend radius (convex and concave)	-	mm	200
<b>Fire behaviour</b>			
Fire behaviour <sup>7</sup> (CWFT <sup>8</sup> ) HGS  (Building Construction)	EN 13501-1	Building material class	D-s2, d0
Fire behaviour <sup>7</sup>  HGF  (Building Construction)	EN 13501-1	Building material class	C-s2, d0
Calorific value	EN ISO 1716	MJ/kg	18-20

HGS: H (Horizontal grade), G (General purpose), S (Standard grade)  
HGF: H (Horizontal grade), G (General purpose), F (Flame retardant grade)

Additional information regarding product quality (standard/ flame-retardant) and application (horizontal/vertical) is also available on our website [www.polyrey.com](http://www.polyrey.com).

<sup>7</sup> Consider details (e.g., Classification report, Official Journal of the European Union); e.g., validity in combination with substrate, adhesive system

<sup>8</sup> CWFT-Certified without further testing - see Official Journal European Union

## 4.2 ADDITIONAL TECHNICAL PROPERTIES AND SAFETY INFORMATION

Table 3: Additional technical properties

PROPERTY	DESCRIPTION
<b>Physical and chemical properties</b>	
Physical state	Solid
Solubility	Insoluble in water, oil, methanol, diethyl ether, n-octanol, acetone
Boiling point	None
Evaporation rate	None
Melting point	POLYREY HPL® Signature does not melt
Calorific value	18-20 MJ/kg
Heavy metals	POLYREY HPL® Signature panels contain no toxic compounds based on antimony, barium, cadmium, chromium III, chromium VI, lead, mercury, selenium
Bisphenol A (BPA)	POLYREY HPL® Signature contains no components
Asbestos	POLYREY HPL® Signature contains no components
Pentachlorophenol (PCP)	POLYREY HPL® Signature contains no components
RoHS	POLYREY HPL® Signature meets the requirements of EU guidelines 2011/65, 2015/863 RoHS (Restriction of Hazardous Substances). POLYREY HPL® Signature Premium contains none of the following restricted substances: lead, mercury, cadmium, chromium, polybrominated biphenyls (PBB), polybrominated diphenyl ether (PBDE), pentabromodiphenyl ether (PentaBDE), octabromodiphenyl ether (OctaBDE), Bis (2-ethylhexyl)phthalate (DEHP), butyl benzyl phthalate (BBP), dibutyl phthalate (DBP), diisobutyl phthalate (DIBP)
BPR - Biocidal Product Regulation	POLYREY HPL® Signature complies with Biocidal Regulation EU No. 528/2012
Safety data sheet	POLYREY HPL® Signature panels are not hazardous substances within the meaning of the Chemicals Act / no special labeling or safety data sheet is required.
<b>Stability and reactivity information</b>	
Stability	POLYREY HPL® Signature panels are stable and durable; it is neither reactive nor corrosive
Hazardous/dangerous reactions	None
Incompatibility	Strong acids or alkaline solutions may damage the surface
<b>Fire and explosion protection data</b>	
Ignition temperature	approx. 400 °C
Flashpoint	None
Thermal decomposition	Possible above 250 °C. Toxic gases (e.g. carbon monoxide, ammonia) may arise depending on the fire conditions (temperature, oxygen content, etc.)
Flammability	POLYREY HPL® Signature panels are classified as non-flammable. It only burns in real fires in which open flames are present.
Extinguishing agent	Class A
Explosion hazards	Dust class ST-1
Explosion limits	Maximum dust concentration 60 mg/m <sup>3</sup>
Electrostatic behaviour	It minimizes the generation of charges due to contact separation or friction with another material. It does not need to be grounded. The surface resistance is between 10 <sup>9</sup> -10 <sup>12</sup> Ohm and the chargeability is V < 2 kV according to EN 61340-4-1, making POLYREY HPL® Signature an antistatic material.

## 5. CERTIFICATIONS AND TESTS

Table 4: Certifications and test reports

PROPERTY	TEST METHOD	UNIT	HGS-HGF
Fire behaviour <sup>7</sup> HGS (Building Construction)	EN 13501-1	Building material class	D-s2, d0 (CWFT <sup>8</sup> )
Fire behaviour <sup>7</sup> HGF (Building Construction)	EN 13501-1	Building material class	B-s2, d0 (wood-based substrate: FR chipboard)
Fire behaviour <sup>7</sup> HGS (Transportation/ motor vehicle)	ECE R 118 annex 6, 7 & 8		HGS 0,8 mm - ≤1,2mm Pass
Formaldehyde Emission	EN 16516	Classification	E1 (≤ 0.1 ppm)
Emission VOC (Volatile organic compounds)	ISO 16000-9	Emission class according to French regulation (Décret no 2011-321)	A (scenario wall)
	UL 2818	Labeling	A+ (scenario door) Greenguard Gold
Declaration of harmlessness food safe	EN 1186 / 13130 / CEN/TS 14234	Contact with food	Approved
Environmental product declaration (EPD/FDES) <sup>9</sup>	ISO 14025 / EN 15804	Available	Yes
Antibacterial effect	JIS Z 2801/ISO 22196	Reduction in %	99.9
PEFC <sup>10</sup>		Certification	Upon request
FSC <sup>11</sup>		Certification	Upon request

<sup>9</sup> Environmental product declaration on INIES, IBU and Ecoplatform data basis

<sup>10</sup> Please specify with your order / PEFC - Licence number: PEFC/10-34-97

<sup>11</sup> Please specify with your order / FSC® - Licence number: FSC® C068151

## 6. TRANSPORT AND STORAGE

POLYREY HPL® Signature panels must be transported and stored flat, horizontal, with full-surface contact and on a sufficiently large pallet.

POLYREY HPL® Signature panels are not dangerous goods as defined by transport regulations, therefore labeling is not required.

Panels must be stored in a closed storage area under normal indoor conditions (10-30 °C and 40-65 % relative humidity), and protected against moisture and mechanical damage, with suitable protection. The protection placed on top of the pallet must be maintained whenever panels are removed from the stack. If the panels are stored for a long period of time, ensure flat storage, and place a panel on top to weigh on the laminates, otherwise the panels may warp or deform. In case of vertical storage, we recommend an inclined position at 80° with full-surface support and a counter bearing on the floor to prevent slipping.

If the protective film, which is to ensure a temporary protection during transport, storage and handling, remains on the surface during processing, the processor is responsible for carrying out a preliminary machinability test. This does not dispense the customer in any way from a prior incoming goods inspection. The shelf life of the protective film is a maximum of 6 months after the date of delivery.

## 7. HANDLING AND MACHINING

Before starting, please inspect the product for damage and defects between panels prior to cutting or installation (including color and texture) and ensure that the production direction is considered. The product direction has an influence on the dimensional change as well as on mechanical strength and can have an influence on the appearance due to the reflection of light.

The production process used for POLYREY HPL® Signature products may result in minor colour differences between production, production batches and samples.

Due to the product-specific differences in production technologies (e.g., Polyrey HPL® Signature, Reysipur® Signature, Polyprey® Signature etc.), even identical image/motif, structure or core board combinations can result in slight optical and tactile deviations across different product groups and formats.

The usual safety regulations regarding dust removal and fire protection must be observed when processing POLYREY HPL® Signature panels. Due to possible sharp edges, protective gloves should always be worn when handling POLYREY HPL® Signature panels. Contact with dust does not cause any issues; nevertheless, there are a limited number of people who may have an allergic reaction to processing dust of all kinds (and therefore also to HPL dust).

POLYREY HPL® Signature panels are wood/cellulose-based products, so the dimensions constantly adapt to the climatic environmental conditions. The product can be easily processed with woodworking machines. It is advisable to carry out a test processing in advance. For a suitable tool recommendation of your individual machining please contact the tool manufacturer directly.

POLYREY HPL® Signature panels are not postformable.

When cutting POLYREY REYSIPUR Signature panels, it has to be considered that each panel is unique. There are various ways to place an image or motif on the panel:

- single image/motif on a panel
- several images/motifs placed on one panel
- one image/motif split over several panels

## 7.1 FORMAT, TOLERANCES, BLEED AREA

It should be considered that the usable format does not correspond to the panel format. This results from the nominal panel size minus 40 mm in width and length (in some in individual cases the reduction may be larger).

In addition, manufacturing tolerances of  $\pm 5$  mm in length and  $\pm 3$  mm in width can lead to variations in the usable format. Furthermore, the panels may have a squareness tolerance of up to 1,5 mm/m. Therefore, the printed image/motif may not be parallel to the edges of the panel and centred on the inside.

The print files of the image/motive contain a bleed area of 20 millimetres on each side. This additional print area provides the fabricators with sufficient space when cutting and makes it easier to adjust the panels precisely. The bleed area is a duplicated area of the actual decor and ensures a clean cutting and easy installation of the panels. The effective width of the bleed can vary by up to  $\pm 5$  millimetres.



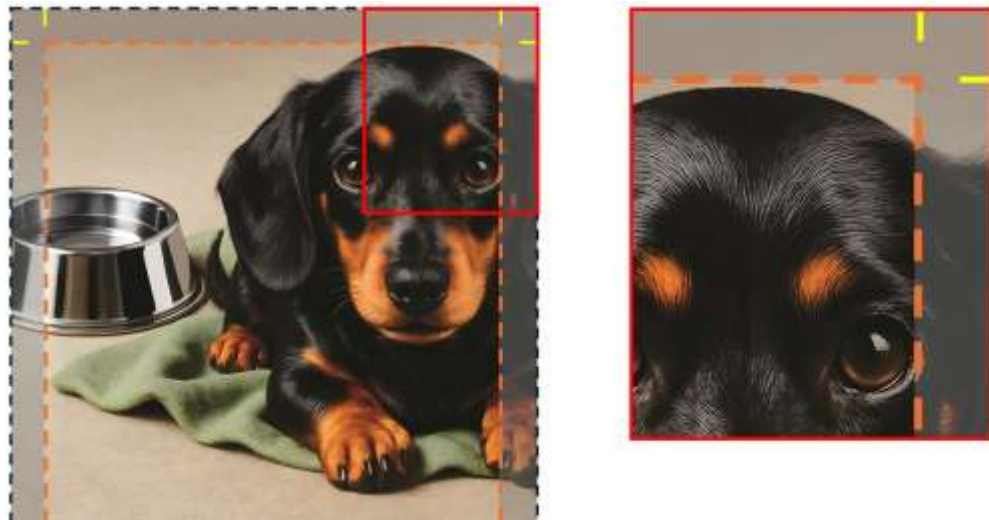
## 7.2 CUTTING AND JOINTING PANELS WITH FRESCO

POLYREY REYSIPUR Signature panels offer a wide range of applications.

In this context, particular attention should be paid to the possibility that an image or motif can be reproduced across several panels, so that the image or motif extends across the entire width of the application without interruption. Regarding the cutting and joining of panels (particularly for images/motifs spanning several panels) following information must be observed:

For Panels where an image/motive can be reproduced across several panels, it is particularly important that the individual panels can be precisely aligned with each other to achieve a harmonious overall appearance. For this reason, the corresponding print files contain a bleed area of 20 millimetres on each side. This additional print area provides the fabricators with sufficient space when cutting and makes it easier to adjust the panels precisely. The bleed area is a duplicated area of the actual decor and is necessary to ensure a clean and visually appealing connection between two panels. The effective width of the bleed can vary by up to  $\pm 5$  millimetres.

Cutting marks can be added to print files. The cutting marks are placed in the bleed area and outside of the actual image in all 4 corners. These provide the fabricator with a rough indication for cutting.



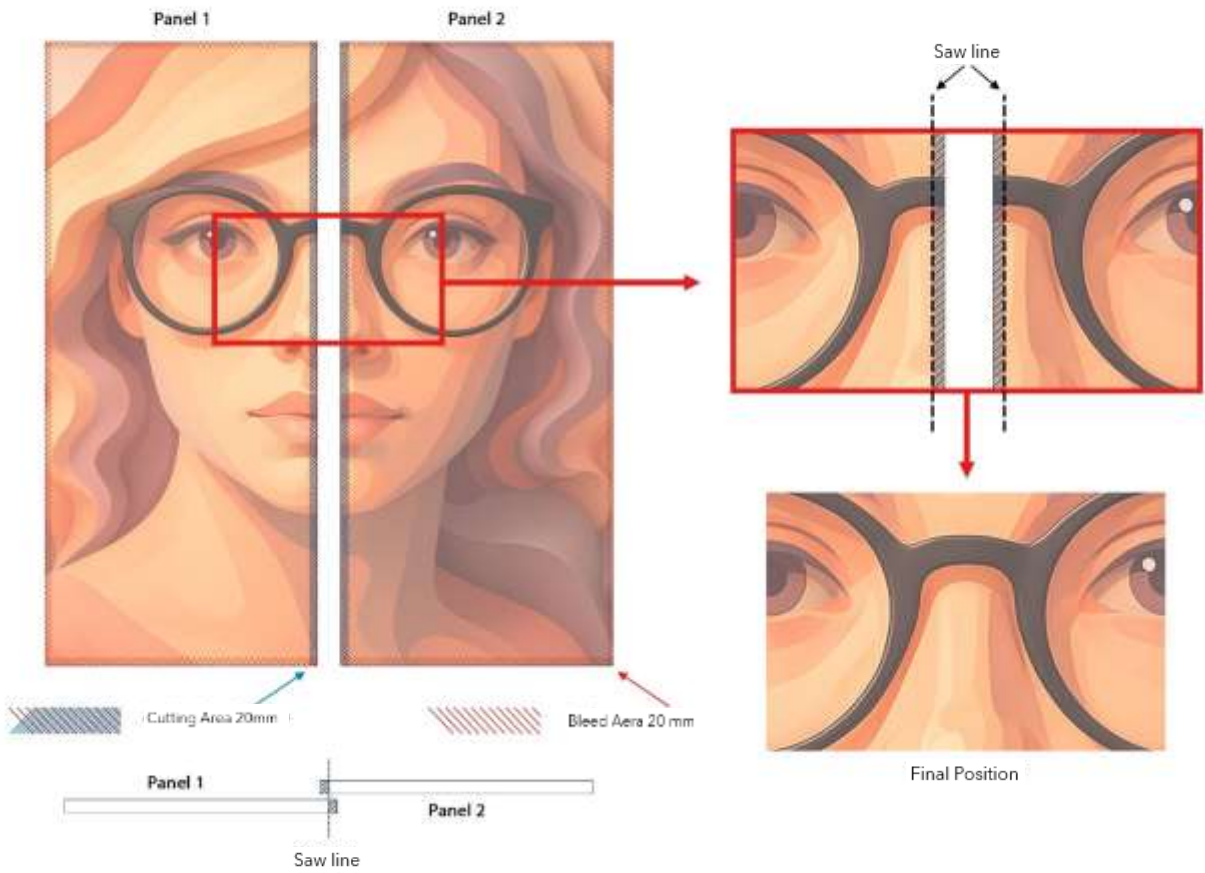
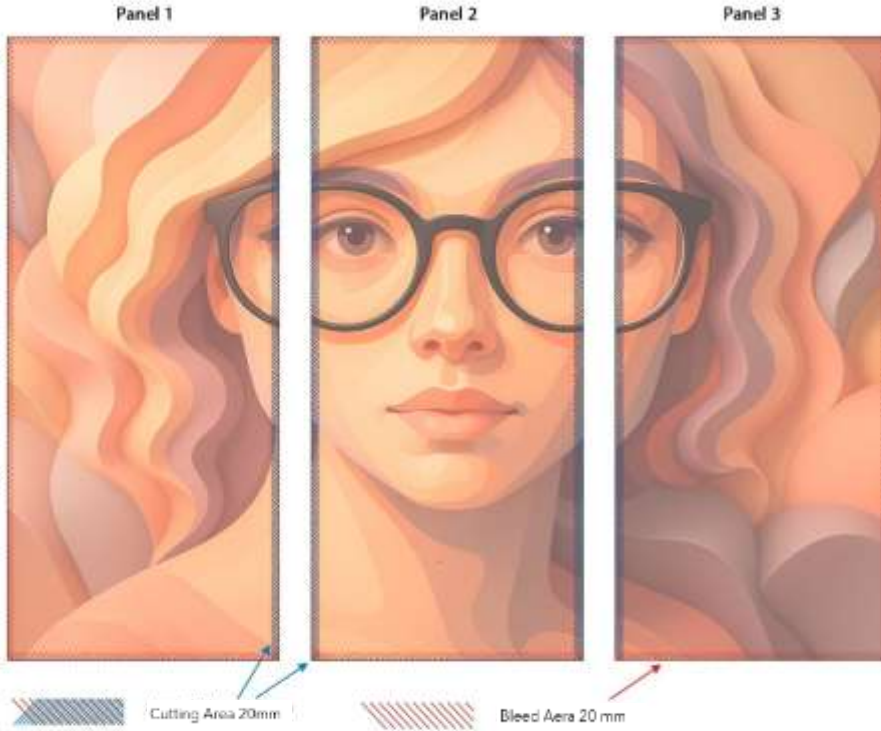
The exact transitions of the image/motif must be checked before cutting by placing the panels to be joined side by side. If the joint is not precise, the panels to be joined must be shifted until an exact match is found. This joint is then marked on the panels and the panels are cut according to this marking in line with the processing guidelines.

After cutting, the accuracy of the decor alignment at the panel joint must be checked again.

To achieve a continuous image/motif without interruption across the entire installation width, the panels must be laid starting in the middle of the installation area.

With this approach, the width of the panels at both ends may need to be reduced to ensure symmetrical direction.

If necessary, single panels can also be cut to the desired size by trimming the height and width.



### 7.3 MANUFACTURING OF BONDED BOARDS

POLYREY HPL® Signature panels and its substrate must be stacked and conditioned together before processing ( $\geq 3$  days). A good conditioning is achieved in a moderate interior climate (18–25 °C and 40–65 % relative humidity). These conditions are also recommended for the location where the product will be later used. If the composite element to be manufactured will be exposed to consistently low or high humidity during its subsequent use, it is advisable to expose the HPL and substrate to a correspondingly low or high level of humidity or increased temperature during conditioning.

The following adhesives can be used to bond POLYREY HPL® Signature to a wood based substrate:

Dispersion adhesives	e.g., PVAc (polyvinyl acetate) adhesive
Condensation resin adhesives	e.g., urea resin adhesives
Hotmelt adhesives	
Contact adhesives	

The use of the right adhesive is of particular importance from a technical point of view, but also from an allergology and health point of view. If possible, low-pollutant adhesives should be used (such as dispersion adhesives) that evaporate quickly. If technically necessary, all other adhesives can also be used, but longer evaporation times must then be observed.

Adhesives require special care during processing and storage. Therefore, the guidelines and processing instructions of the adhesive manufacturer must be observed. Basically, test bonding must be carried out according to the respective application and requirements for the bonded board.

Tension-free composite elements are most safely produced at press temperatures of 20 °C. Higher press temperatures allow for a reduction in setting time. As the dimensional changes of POLYREY HPL® Signature panels compared to the substrate are temperature-dependent, press temperatures should not exceed 60 °C to avoid increased tension. We recommend a cold pressing process of the panels at 20 °C to avoid unnecessary tension on composite elements.

Regarding selecting the proper adhesive for POLYREY HPL® Signature panels, we recommend following the technical advice of the manufacturer/processor.

### 7.4 BACKER

When manufacturing bonded board with POLYREY HPL® Signature panels, it is especially important to ensure that tension is equalized in the composite element.

A symmetrical structure (including protective film) is always recommended. This must be considered especially when using self-supporting or non-structurally supported composite elements (e.g., furniture doors). In addition, POLYREY HPL® Signature of both sides must be subjected to the same temperature and humidity conditions and should be cut in the same production direction (sanding direction).

In case of non-self-supporting or structurally supported composite elements (e.g., wall cladding) under normal conditions (18–25°C and 40–65 % relative humidity), asymmetrical composite elements can be produced by using another HPL panel of the same type of core and thickness (POLYREY Backer X999-60). It is recommended that only substrates with a thickness of  $\geq 18$  mm

are used to produce non-symmetrical elements. The correct balancing depends even on the thickness, the usage and the mounting type of Polyrey® Signature.

The production of non-symmetrical elements is the responsibility of the processor. For non-symmetrical composition, we recommend preliminary tests to check feasibility regarding the respective application.

The protective film must be removed simultaneously on both sides.

More information on the handling and machining of POLYREY HPL® Signature can be found in the HPL Compendium of ICDLI.

## 8. CLEANING AND CARE

POLYREY HPL® Signature surfaces do not require special care due to their homogenic and resistant surface, even too many substances/chemicals (see Chemical resistance data sheet). Surfaces and edges require no further treatment (e.g., with lacquers, paints, oils, waxes etc.), as they are neither corrosive nor oxidized.

For residue-free cleaning of POLYREY HPL® Signature surfaces, these four steps must be followed:

- 01 Choose the appropriate cleaning aids (cloth/sponge/brush) – depending on the structure  
Choose the appropriate cleaning agent/solvent – depending on dirt residues.
- 02 Cleaning of the surface with the appropriate cleaning aids and cleaning agents/solvents.
- 03 Rinse of all cleaning agent/solvent with warm water.
- 04 Dry the surface with a soft cloth after cleaning.

Clean the entire surface without too much “pressure” to avoid polish marks.

Especially matt textures/structures of POLYREY HPL® Signature, it's important to regularly clean the surface according to the above instruction and clean with warm water to avoid the accumulation of dirt and residue of cleaning agent/solvent into the tight structure folding.

In case of stubborn stains and soiling which lay in the depth of the texture/structure, the dirt can be removed with the help of microfiber cloth. Other stubborn stains (e.g., varnish) can be removed with organic solvents (e.g., ethanol, isopropanol, etc.).

Abrasive cleaning aids (e.g., scouring powder, steel wool) must not be used, as these alter the surfaces. At the beginning carry out cleaning tests with each cleaning agent/solvent on non-visible areas.

Strongly staining substances (e.g. wine, coffee, tea, mustard, curcuma etc.) may leave slight stains on the surface of POLYREY HPL® Signature panels. To avoid permanent staining these stains must be removed immediately.

The visual perception of traces of daily use (e.g., gloss deviations, dirt, and grease stains etc.) are influenced by the decor and surface texture. The traces of use are more visible on smooth surfaces and become even more visible in combination with dark decors.

For horizontal applications involving contact with water, ensure that standing water is not allowed to remain on the surface for long periods of time.

For further information, please refer to the Care Manual available at [www.polyrey.com](http://www.polyrey.com).

## 9. SUSTAINABILITY AND ENVIRONMENT

Polyrey is certified according to EN ISO 14001 and EN ISO 50001.

POLYREY HPL® Signature panels are cured, and therefore inert, duroplast. The release of formaldehyde from POLYREY HPL® Signature ( $\leq 0.05$  ppm in testing according to EN 16516) are far below the legally permissible level ( $\leq 0.1$  ppm regard to German Chemikalienverbotsverordnung)).

Furthermore, the emissions of volatile organic compounds (VOC) are so low that, depending on the test scenario, the following classification according to the French VOC regulation has been given by Eurofins test report:

**Class A+** (with the test scenario for small areas (e.g., doors)  
with a loading factor of  $0.05 \text{ m}^2 / \text{m}^3$ )

**Class A** (with the test scenario for walls with a loading factor of  $1.0 \text{ m}^2/\text{m}^3$ )

POLYREY HPL® Signature is **GREENGUARD GOLD** certified according UL2818 standard.

POLYREY HPL® Signature can come into direct contact with all foods and can safely be used as intended in food processing.

Individual Environmental Product Declaration (EPD) are available. Using clearly defined parameters, it provides quantitative, verified, and objective information about the effects of HPL on the environment and could be used for sustainable building certification. (e.g., LEED, BREEAM). The entire lifecycle of HPL (raw material extraction, production, transport, use, disposal) is taken into consideration.

POLYREY HPL® Signature panels can be offered as a PEFC or FSC® certified product on request. In addition, all the paper used (core paper and decorative paper) come from uncontroversial or controlled sources and meets the requirements of EUTR Regulation (EU) No. 995/2010.

POLYREY HPL® Signature (thickness 0.8mm-1.0mm/except flame-retardant) contains 20% "post-consumer" recycled paper and thus has a recycled content of 20% according to the international standard ISO 14021-2016.

POLYREY HPL® Signature panels are articles and not a chemical substance, therefore the REACH regulation is not applicable. However, it is important to ensure the exchange of information between Polyrey and the raw material suppliers regarding REACH-relevant components (for more information, please refer to the REACH statement). We hereby confirm that no substance from the Candidate List is used in our above-mentioned product in a quantity requiring information ( $\geq 0,1\%$  w/w) and that we comply with the requirements of Annexes XIV and XVII of the REACH Regulation.

## 10. DISPOSAL AND ENERGY RECOVERY

POLYREY HPL® Signature panels can be disposed of at controlled waste disposal facilities (e.g., landfills) that comply with the applicable national and regional regulations. According to the European Waste List Regulation, HPL/Compact waste is classified with code 030105 (wood wastes) or 200301 (mixed municipal waste).

POLYREY HPL® Signature panels are particularly suitable for thermal recycling due to its high calorific value (18–20 MJ/kg). During complete combustion at 700 °C, the boards burn to form water, carbon dioxide and nitrogen oxides.

The information in this sales brochure is reliable and is intended to inform users of POLYREY's products about the essential properties of these products. However, POLYREY cannot guarantee that the information is exhaustive. The information given may be modified at any time due to developments in technical characteristics or product ranges and, more generally, any changes in the standards, laws and regulations that apply to the products. Users of POLYREY's products should obtain information on the suitability of the products for their intended use from POLYREY's official professional resellers or directly from POLYREY. For further information, product users are invited to consult the brochures, certificates, technical data sheets, usage advice and maintenance sheets on POLYREY.com. POLYREY accepts no responsibility for the misuse of the information contained in this brochure. The information contained in this sales brochure only concerns the products shown and should not be used for any purpose other than that stated in the brochure. Users of the products must respect the precautions for use and maintenance of the products. POLYREY declines all responsibility for uses that do not comply with these precautions. Clients should always check the terms and conditions that apply to the intended sales, which are always subject to POLYREY's general terms and conditions of sale available on polyrey.com