

# dekoplus

dekolor | dekonova | decore | magic touch

## Product description

The product names **dekoplus** - dekolor, dekonova and decore refer to decorative high-pressure laminates (HPL) in accordance with DIN EN 438-1 in plain colors, fantasy decors and images of natural materials such as fabrics, wood, marble and many more. As defined in this standard, kraft papers impregnated with phenolic and/or aminoplast resins and a top layer or top layers impregnated with aminoplast resin, mainly melamine resin, are pressed into decorative high-pressure laminates.

### decolor

In the dekolor product group (HPL-VGS), the top layer is a plain decorative paper melamine film that forms the surface. The plain decor papers are homogeneously colored in the mass. The color scale that can be produced ranges from white to colored to black. A color

The high quality of the finish is guaranteed with these paper qualities. These decors are free of heavy metals and have good light stability.

### dekonova

The top layer of the dekonova product group (HPL-VGS) is a printed paper melamine film. The printed papers are preferably produced using gravure printing. A color connection is ensured when reproducing the decors. The printed decor papers are free of heavy metals and have good light stability.

### decore

With decore products (HPL-BTS:BCS), the core layers are homogeneously colored and can be selected to match the top layer or individually.



dekoplus

### Properties:

-  **Lightfast Abrasion-**
-  **resistant Scratch-**
-  **resistant Food-safe**
-  **Resistant to cleaning**
-  **Flame retardant**
- 

Properties of the dekodur **magic touch** surface can be found on page 2.

## magic touch

In the magic touch product group (HPL-HDS; HDP), the surface is hardened using a special ESH process, making it extremely robust and resistant. The surface of magic touch thus achieves a scratch resistance of >3 N (Level 2) in accordance with EN 438 Part 3 and can therefore be used without restriction in horizontal areas, such as tables, desks and worktops.

magic touch is available in 6 standard colors and 3 surfaces:

| MT01/white | MT03/light gray | MT04/dark gray | MT05/black | MT 06/night blue | MT 07/bordeau | and in the formats 244 x 122 cm, 305 x 122 cm and 305 x 132 cm (on request).

### Surfaces:

Matt (MAT), Rust (RST), Stone (STO)

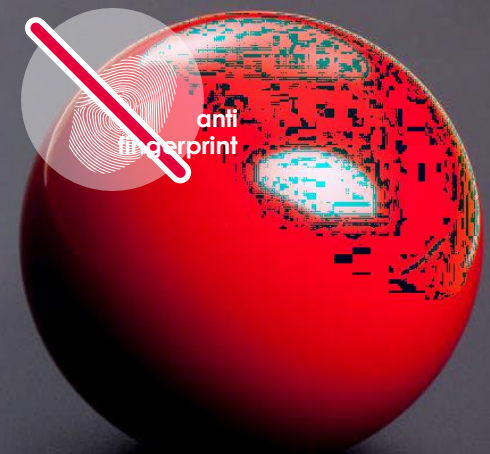
Other structures on request.



### magic touch Properties:

- supermatt
- soft touch
- postforming
- hydrophobic
- anti-staining food
- safe UV resistant

**Antibacterial**  
on request



Properties	Test procedure	Feature	Unit	HPL	Compact
Surface Density	ISO 1183		g/cm <sup>3</sup>	1,4	1,4
Resistance to surface abrasion	DIN EN 438-2: 10	Abrasion resistance	Initial wear point	≥ 200	≥ 200
Resistance to boiling water	DIN EN 438-2: 12	Mass increase Thickness increase Appearance	% % Degree	- -5	≤ 2,0 ≤ 2,0 5
Resistance to water vapor	DIN EN 438-2: 14	Appearance	Degree	5	5
Resistance to dry heat (160 °C)	DIN EN 438-2: 16	Appearance	Degree	5	5
Dimensional stability at elevated temperatures length width cross wise	DIN EN 438-2: 17	Cumulative dimensional change	% %	0,4 0,8	0,2 0,4
Resistance to damp heat (100°C)	DIN EN 438-2: 18	Appearance	Degree	5	5
Resistance to impact stress with a small diameter ball	DIN EN 438-2: 20	Spring force	N Key figure	≥ 25 <b>3-4</b>	- -
Resistance to impact stress with a large diameter ball	DIN EN 438-2: 21	Drop height Diameter	mm mm	-	1800
Susceptibility to cracking under stress	DIN EN 438-2: 23	Appearance	Degree	≥ 4	≥ 4
Scratch resistance	DIN EN 438-2: 25 DIN 68861-4	Power	Grade N	3-5 3-5	3-5 3-5
Stain resistance group 1 and 2 Group 3	DIN EN 438-2: 26	Appearance	Degr ee Degr ee	5* 4	5* 4

**DIN EN 438 divides HPL products into material types and their special basic properties:**

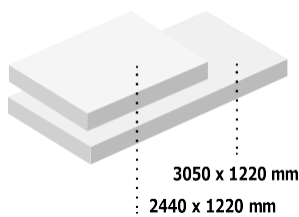
- 1) Standard quality = type S (thickness < 2.0 mm) 3) Postforming quality = type P
- 2) Standard quality = type S (thickness ≥ 2.0 mm) 4) Standard quality with specific fire behavior = type F

These dekoplus color combinations can be produced in a variety of surface textures (see dekovario product group). Backing for dekoplus with a **nominal thickness of 0.80 mm**: Here we recommend an equivalent backing without color and quality requirements.

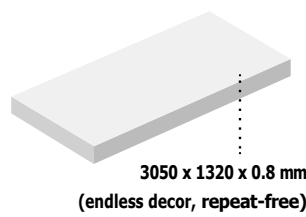
## Delivery form and quality

dekoplus panels are supplied in the following formats:

### dekolor

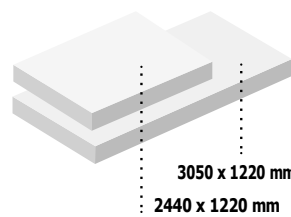


### dekonova

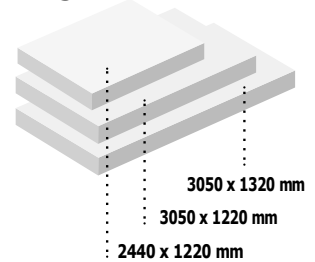


The decors D 070 and D 071 are available in the dimensions 2440 x 1220 x 0.8 mm and 3050 x 1220 x 0.8 mm (with repeat)

### dekocore



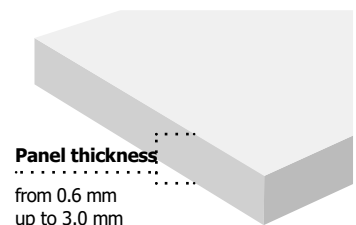
### magic touch



Ausgenommen hiervon ist die Waffelstruktur ( WAF ), diese hat eine **Nutzbreite von 1200 mm** bei einem **Längsmaß von 2440 mm** (special formats on request). The tolerance for the nominal length and width must correspond to the limit dimensions of **- 0 mm and + 10 mm** in accordance with DIN EN 438.

The panel thickness of dekoplus panels can be produced from **0.6 mm to 3.0 mm**. The standard thickness for these versions is **0.8 mm (weight: 1.4 kg/m<sup>2</sup>)**. The limits according to DIN EN 438 also apply to thickness deviations.

Nominal thickness	Limit deviations
0.6 - 1.0 mm	± 0.10 mm
> 1.0 - 2.0 mm	± 0.15 mm
> 2.0 - 2.5 mm	± 0.18 mm
> 2.5 - 3.0 mm	± 0.20 mm



The purchase of thicker dekoplus sheets can be clarified by contacting us.

The fire behavior of the dekoplus standard quality corresponds to class B 2 according to DIN 4102 and D- s2-d0 according to DIN EN 13501-1. dekoplus panels in the qualities **flame-retardant** and **non-combustible** are available on request.

**All dekoplus designs can be produced in standard quality and in postforming quality.**

In our article description, the postforming quality is marked with the abbreviation **NF**. On request, the products must be laminated with a heat-resistant protective film. The processing of dekoplus postforming quality is influenced or determined by a variety of material and processing parameters. (Thickness of the material, decor, structure, temperature, feed rate, rounding profile, rounding radius, etc.).

In addition to the material properties, the specific production parameters must also be adapted to the equipment and adhesive selection. A general specification for the forming temperature of the laminate panel is a value range of 140 - 160° C, the feed rate of 10-20 m/min is a further guideline for the postforming process. The laminate panel can generally be realized in a bending radius in mm of approx. 10 x the panel thickness. If stored under normal climatic conditions (approx. 18 - 23° C ambient temperature and a relative humidity of 50 - 65 % ), the postforming properties will change only insignificantly for up to one year.



## Applications and processing methods

The use of dekoplus is intended for stressed decorative surfaces in the interior design and furniture sector. The melamine resin on the laminate surface ensures the use of dekoplus products in vertical and horizontal applications.

The surfaces are easy to clean, a closed surface and a joint-free construction meet the highest hygiene requirements. The mechanical and chemical properties (e.g. scratch resistance, impact resistance, heat resistance and stain resistance) are usage properties of dekoplus.

### Typical application examples are

- Wall cladding Ceiling
- cladding Doors
- Stairs
- Windows Kitchen furniture
- Bathroom furniture Living room furniture
- Hotel and restaurant furniture Laboratories
- Operating theaters Hospitals

The dekoplus laminates can be sawn, routed and drilled using carbide-tipped tools.

### Adhesive types suitable for gluing:

- Dispersion adhesives ( PVAc )
- Condensation resin adhesives ( urea resin )
- Contact adhesives
- Reactive adhesives
- Hot melt adhesives

Dispersion adhesives and condensation resin adhesives are glued with a glue application of approx. **100 - 150 g/m<sup>2</sup>** and a surface pressure of **approx. 2 - 5 bar** (corresponds to a physical pressure of approx. 2 - 5 kp/cm<sup>2</sup>).

The pressing temperature should be set at a maximum of 60° C.

**Important note: The higher the gluing temperature, the greater the risk of warping.**



For contact adhesives, reaction adhesives and hot-melt adhesives, the manufacturer's processing instructions must be observed.

With composite elements, special attention must be paid to a symmetrical structure, i.e. the rear side is glued with a corresponding backing board.

With reference to the standard DIN EN 14322:2017-7, a guarantee for warpage of composite elements can only be given if the elements are covered with the identical material (surface, thickness and structure) on the front and back.

### Note:

Protective films are equipped with rubber adhesives, and on HPL boards they are used exclusively for transport protection and should be removed before further processing (e.g. pressing on chipboard/MDF boards); they are UV-sensitive and must not be exposed to direct sunlight or overhead light, as this can damage the film and leave possible residues on the HPL surface. Protective film serves as a transport protection film

## Cleaning and care

The dekoplus surface is cleaned with a clean cloth, a soft damp sponge or a soft brush. Water with washing powder, soft soap or curd soap can be used as a cleaning agent. The surface can be wiped dry with soft paper towels.

**Abrasive cleaning agents should not be used.**



You can download more detailed information on cleaning the **dekodur magic touch** surface from our website: [www.dekodur.com/files/dekodur/downloads/dekodur-magic-touch-Pflege-Reinigung.pdf](http://www.dekodur.com/files/dekodur/downloads/dekodur-magic-touch-Pflege-Reinigung.pdf)



## Storage

The dekoplus laminate panels should be stored in a closed room at **18 - 25°C and 50 - 60% relative humidity, with the entire surface horizontal and 200 mm from the floor.**

**The panel stacks are:**

- protect from moisture
- must not be exposed to direct sunlight ■ must not be placed in a hot air stream


If horizontal mounting is not possible, an inclined position of approx. 80° with full-surface support and lower counter bearing is recommended.


## Waste disposal

- dekoplus waste can be incinerated in officially approved industrial combustion plants.
- dekoplus waste can be deposited in landfills in accordance with local waste regulations.
- According to TA-Abfall, version of 28.3.91, Category I, No. 571, HPL residues are classified as "other hardened plastic waste". Category I means that a material is similar to household waste.

## Sie haben Fragen?

Then please contact our service department. You can also clarify any open questions about special details from DIN EN 438 with our company. If you require viewing samples, you can request these from Dekodur® in the form of sample chains or hand samples in DIN A5 or DIN A4.

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