

Product Description

Magic Touch® HARD SHIELD represents a quantum leap in HPL surface technology. With revolutionary electron beam curing (EBC), this premium surface achieves a tested scratch resistance of up to 9 Newton according to EN 438-2 – more than twice as high as the highest standard classification (grade 5 = 4N). The abrasion resistance is also twice as high as standard HPL (IP 150).

The combination of extreme surface hardness, ECO core technology, and completely low-emission production positions HARD SHIELD as the sustainable premium solution for highly stressed surfaces.

Properties









Magic Touch® HARD SHIELD properties:

- ✓ Highest scratch resistance – up to 9 Newton
- ✓ Low emissions – ECO core technology
- ✓ Anti-fingerprint – velvety matt surface
- ✓ Food safe – for hygienic applications
- ✓ UV-resistant – long-lasting color stability
- ✓ Cleaning resistant – chemical resistant

dekodur®

Magic Touch® HARD SHIELD

Properties

-  Lightfast
-  Resistant to chemicals
-  Food safe
-  Resistant to cleaning
-  Scratch and abrasion resistant
-  Highly scratch-resistant up to 9N
-  Environmentally friendly
-  Antifingerprint



Technical Specifications

Technical Properties	Test Method	Unit	HARD SHIELD
Dimensions			
Formats	–	mm	2440 × 1220 / 3050 × 1220
Panel thickness	–	mm	0.8
Mechanical properties			
Scratch resistance	EN 438-2:2019	Newton	up to 9*
Abrasion resistance	EN 438-2:2019	IP Rev.	~ 300
Water vapor resistance	EN 438-2:2019	Grade	5
Surface properties			
Gloss level (60° angle)	ISO 2813	–	~ 3.5 ± 1.5
Stain resistance Group 1	EN 438-2:2019	Grade	5
Stain resistance group 2	EN 438-2:2019	Grade	2** / 5***
Stain resistance Group 3	EN 438-2:2019	Grade	5
Environmental properties			
VOC emissions	EN 16516	-	0 (emission-free)
Formaldehyde	EN 16516	ppm	< 0.025
*Exceeds the highest standard classification (grade 5 = 4N) by more than double **Grade 2 for light colors ***Grade 5 for dark colors			

Delivery Form and Quality

Magic Touch® HARD SHIELD is available in the following formats:

- 2440 × 1220 × 0.8 mm
- 3050 × 1220 × 0.8 mm

The tolerance for nominal length and width must comply with the limit dimensions of -0 mm and +10 mm in accordance with DIN EN 438.

Structure and Composition

- **Technology:** Electron beam curing (EBC)
- **Core:** ECO core (emission-optimized)
- **Coating:** Pigmented EB-cured acrylic resins
- **Surface structure:** Microcrystalline Hard Shield texture (scrambled)





Available Designs

- **Standard colors:** White, Cool White, Beige, Grey, Anthracite, Black, Deep Black
- **Trend colors:** Pigeon Blue, Sapphire Blue, Grey Beige, Pastel Violet, Tuscany Red, Pretty Pink, Petrol Blue, Mint, Black Oyster
- **Natural designs:** Elegant marble variants (e.g. Calacatta), authentic stone structures and selected wood designs

Applications and Processing Methods

Magic Touch[®] HARD SHIELD is intended for use on highly stressed decorative surfaces in interior design. The extreme surface hardness ensures suitability for vertical and horizontal applications.

Typical Application include:

			
Healthcare	Catering & hospitality	Retail & shop-fitting	Object area
<ul style="list-style-type: none"> • Operating rooms • Laboratories • Patient rooms 	<ul style="list-style-type: none"> • Counters • Work surfaces • Customer areas 	<ul style="list-style-type: none"> • Cash register areas • Sales counters • Changing rooms 	<ul style="list-style-type: none"> • Conference tables • Reception counters • Premium Office

Magic Touch[®] HARD SHIELD panels can be sawed, milled, and drilled with carbide-tipped tools.

Suitable Adhesive Types for Bonding

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

Dispersion adhesives and condensation resin adhesives are bonded with an adhesive application of approx. 100-150 g/m² and a surface pressure of approx. 2-5 bar. The pressing temperature should be set to a maximum of 60°C.

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

Cleaning and Care

- The Magic Touch® HARD SHIELD surface should be 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.
- Avoid using abrasive cleaning agents.

The anti-fingerprint properties of the HARD SHIELD surface significantly reduce the frequency of cleaning.

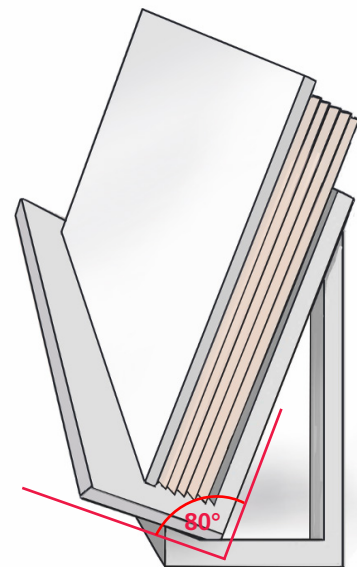
Storage

The Magic Touch® HARD SHIELD panels should be stored in a closed room at 18-25°C and 50-60% relative humidity, laid flat horizontally and 200 mm above the floor..

The stacks of panels must:

- be protected from moisture
- not be exposed to direct sunlight
- not be exposed to hot air currents

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



Disposal

- Magic Touch® HARD SHIELD waste can be incinerated in officially approved industrial incineration plants.
- The waste can be disposed of in landfills in accordance with local waste regulations.
- According to TA-Abfall, HPL residues are classified as „other hardened plastic waste.“

Do you have any questions?

Then please contact our service department. You are also welcome to clarify any questions you may have about specific details from DIN EN 438 with our company. If you require 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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