

Product data sheet

Langenthaler Str. 4
69434 Hirschhorn/Neckar
Germany
phone 00-49-6272-689-0
fax 00-49-6272-689-30

Version: 10ZT09E

dekorial

antique

Product Description

The name *dekorial - antique* stands for a high pressure laminate (HPL) with surface of pure copper. The metal sheet is applied to a core of phenolic resin using high pressure.

All our products are coated with an UV – lacquer based on acryl. The lacquer has scratch hardness in EN 438 of

> 1, 5 N.

The surface is unaffected by common household agents / solvents. Alcohol has no effect. Slight variations of the silky shine / gloss coming from raw copper material are unavoidable.

A slight unevenness in the surface of the laminates is one of the features of this product. The slight indentations are at the present stand of the technique and are unavoidable and normal. The same holds for the colours. Slight colour variations may occur during the production process and are not detrimental to the overall appearance.

The pure metal surface is suitable in connection with rustic surface structures for individual internal decorative fittings. These are enhanced by the possibility of a brown toning. The various products available are characterised by stark surface structures.

Backing sheets for *antique*:

1. C 409 real - copper (brown-toned or lacquered)

This copper-variety without special quality requirements is suited as a backing sheet.

2. A 209 real-aluminium smooth and lacquered (natural colour)

This aluminium-quality can also be recommended, produced in smooth surface or hammered-structure as an inexpensive backing sheet.

Dimensions and Quality

All *antique* sheets are delivered in the standard dimensions 2440 mm x 1220 mm. The tolerance limits for the dimensions along and across the sheets as required in EN 438 are:

- 0 mm and + 10 mm

The *antique* sheets can be produced in thickness from 1.2 mm to 3.0 mm. The standard thickness is 1.2 mm, giving a density of 2.1 kg/m².

The limits for variations in thickness are also governed by EN 438:

Nominal thickness	Maximum tolerances
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

If thicker sheets of *antique* are required, direct contact with **Dekodur®** is advised.

Behaviour in case of fire – the standard quality of *antique* is classified as B1 – B2 when tested according to DIN 4102. For *antique* sheets in the quality of “Flame retardant” a direct contact with **Dekodur®** is advised. This quality is certified by Lloyd’s Register and fulfils the requirements of IMO FTC.

A protective surface foil can be applied. This foil must be removed after 6 months at the latest, as by later removal the copper surface could be damaged.

All *antique* sheets are available in standard quality only

Application and Processing

Dekorial – antique is intended for use as decorative vertical surfaces in interior application, also for surfaces which are not exposed to heavy wear.

Typical applications are: Wall cladding, ceiling cladding, home furniture, hotel and restaurant furniture, fronts of drawers, signs for shops and firms, shelve cladding, counters and displays in shops, surfacing for doors and doorframes, shipbuilding and coach fittings etc.

For use on surfaces exposed to heavy wear, it is recommended that the surface should be protected i.e. by a glass sheet.

The *antique* laminates can be sawed, routed and drilled using carbide tipped tools.

Cautions to be taken when bonding *antique* in surface presses.

Maximum temperature 60°C
Press pressure 0.15 – 0.20 N/mm² (1.5 – 2.0 bar)
Soft cushioning between laminate surface and Press plates.

All standard commercial glues which can be used for bonding standard high pressure laminates can be used.

Glue types: dispersion glues (PVAc)
 condensation resin glues (Urea resin)
 contact glues
 2 component glues
 hot melt glues

When PU glues are used great care must be taken that glue residues are completely removed from the surface before they harden.

With elements, a symmetric construction is necessary. This is obtained by the use of a balancing sheet which must be bonded to the reverse side. A flat element can be obtained by using a sheet of the same type in 2nd quality or a balancing sheet A 209.

Bonding HPL-sheets surfaced with pure metal foils

The bonding of HPL sheets surfaced with pure metal sheets using

- I contact glues (containing a solvent)
- I condensation glues (resins based on phenol and/or resorcinol)

requires special precautions and close adherence to the manufacturer's instructions. Special attention must be paid to a uniform, but not too higher gluespred, sufficient airing (insufficient airing can lead to later-on blistering between the metalfoil and the core of the laminat and/or lead to the seperation of the metalfoil to the laminat. Here contact with the manufacturer is essential) and sufficient pressure in the press. The surfaces to be bonded should be kept as small as possible. At least one edge should not exceed 800 mm.

General rules for bonding HPL, surfaced with pure metal, to wooden substrates

(particle board V 20, particle board V 100, plywood, hardboard or solid wood)

Glues employed	Condensation glues		
	Urea resin with approx. 10% filter	Urea-Melamine resin	Phenol Resorcinol resins
For use as in DIN 204	D 3	D 3	D 3 / D 4
Resistance in Temperature	between - 20°C + 150°C		between - 20°C + 150°C
	~ Gluespred: 90-150 g/m ² on HPL or substrate ~ Open time: 2-20 min ~ Press pressure approx. 3-5 bar ~ Press temperature/Press time: 20 °C / 15-180 min 40 °C / 5-30 min 60 °C / 1-12 min ~ Open and press times are dependant on the amount hardener used.		100-180 g/m ² 2-15 min 3-5 bar 20°C approx. 9 hours 80°C approx. 10 min 110°C approx. 5 min

Glues employed	Contact glues		
	without hardener	with hardener	with built-in hardener
For use as in EN 204	not classified under EN 204		
Resistance to Temperature	between - 20 °C + 70 °C	between - 20 °C + 100 °C	Contact the manufacturer
	~ Gluespred: 150-200 g/m ² on both HPL and substrate ~ Open times: dependant on ambient temperature and on the type of glue used (Fingertest) ~ Presspressure: at least 5 bar ~ Press temperature: 20 /40 / 60 °C ~ Pressing times: short A roller press is recommended		These are special glues and therefor no values can be given. Contact with the manufacturer is essential.

Cleaning and Maintenance

Cleaning the surface is best carried out using a clean cloth or soft sponge, using soap and plenty of water or a glass cleaner.

Abrasive cleaners, acids or alkalis should never be used.

Storage

The *antique* sheets should be stored in a closed room with a temperature of 18-25°C and 50-60% relative humidity. Furthermore, they have to be stored full-laminar and horizontally with a distance of 200 mm to the ground.

The sheets

- are to be protected from moisture
- should not be exposed to direct sunlight
- should not be stored in a warm-air-stream

Should horizontal storage not be possible a skew of 80°, with the surface being entirely supported by a fully covering back-support, is recommended.

Waste Disposal

Antique waste can be **burnt** in officially accepted incinerators.

Antique can also be disposed of in landfills in accordance with the local regulations.

The German authorities classify high pressure laminate waste as “other hardened plastic waste material”, which means that it is similar to household waste.

Should you have any further questions, please do not hesitate to contact our service department. If you need samples you can order these in the form of chains, A5 or A4 from Dekodur®.