

## Technical leaflet

EGGER Laminate with surface texture HG High Gloss



### Description

EGGER Laminate with the surface texture HG is a decorative laminate based on curable resins. It has a multilayer structure and consists of melamine resin impregnated decorative paper and several core layers impregnated with phenolic resins. The surface texture HG is a flat and smooth high-gloss surface.

### Product versions / Availability

Laminate with the surface texture HG is part of the **EGGER Decorative Collection**. Select decors and sizes are available ex stock and from just one sheet upwards, according to the country-specific availability guides.

|                   |                                  |
|-------------------|----------------------------------|
| Surface reference | HG HighGloss                     |
| Nominal thickness | 0.031 inch (0.80 mm)             |
| Standard size     | 4' x 8' (1,245 x 2,464 mm)       |
| Protective foil   | Exclusively with protective foil |

### Overview of our order-specific delivery options

|                                  |   |
|----------------------------------|---|
| Nominal thicknesses sheet format | 0.031 inch (0.80 mm)                              |
| Width                            | 51.575 inch (1,310 mm)                            |
| Maximum length                   | 220.472 inch (5,600 mm)                           |
| Minimum length                   | 31.496 inch (800 mm)                              |
| Individual widths                | Upon request $\geq$ 35.433 inch (900 mm) possible |
| Minimum order quantity           | 660 linear foot (200 lfm)                         |

## Added Benefit

EGGER Laminate with the surface texture HG in the nominal thicknesses 0.031 inch (0.80 mm) is **MED** (Marine Equipment Directive) certified. The MED quality, which is confirmed by Lloyd's certificates, enables the use of laminates in shipbuilding.

## Quality characteristics / Technical data

In accordance with ISO 4586-3, the EGGER Laminate with the surface texture HG is classified as a **HGS - Horizontal General-Purpose Standard** grade. Type HGS can be used in horizontal applications and is not postformable.

| Property                                       | Test standard | Unit or feature                                   | Value              |
|--|---------------|---|--------------------|
| Thickness                                      | ISO 4586-2    | Inch (mm)   | ±0.004 ( 0.10)     |
| Length and width <sup>b</sup>                  | ISO 4586-2    | Inch (mm)   | +0.394/-0 (+10/-0) |
| Flatness <sup>a</sup>                          | ISO 4586-2    | Inch (mm/m (max.))                                | 2.362 (60)         |
| Resistance to surface wear                     | ISO 4586-2    | Revolutions (min.)<br>initial point<br>wear value | 150<br>350         |
| Resistance to impact by small diameter ball    | ISO 4586-2    | N (min.)  | ≥ 20               |
| Resistance to scratching                       | ISO 4586-2    | Rating (min.)<br>smooth finishes                  | 2                  |
| Resistance to water vapour                     | ISO 4586-2    | Rating (min.)<br>gloss finish                     | 3                  |
| Resistance to dry heat (160 °C)                | ISO 4586-2    | Rating (min.)<br>gloss finish                     | 3                  |
| Dimensional stability at elevated temperatures | ISO 4586-2    | % max.<br>L <sup>a</sup><br>T <sup>b</sup>        | 0.55<br>1.05       |
| Resistance to wet heat (100 °C)                | ISO 4586-2    | Rating (min.)<br>gloss finish                     | 3                  |
| Resistance to staining (Method A)              | ISO 4586-2    | Rating (min.)<br>Groups 1 and 2<br>Group 3        | 5<br>4             |
| Lightfastness (Xenon arc lamp)                 | ISO 4586-2    | Grey scale rating                                 | 4 bis 5            |
| Gloss value <sup>1)</sup>                      | ISO 13722     | GU (Gloss units)                                  | 114 ±4             |

<sup>a</sup> Provided that the laminate is stored in the manner and conditions recommended by EGGER.

<sup>b</sup> Tolerances for cut-to-size panels shall be agreed between EGGER and purchaser.

L<sup>a</sup> = in the longitudinal direction of the fibrous sheet material (normally the direction of the longest dimension of the laminate).

T<sup>b</sup> = in the cross-longitudinal direction of the fibrous sheet material (at right angles to direction L).

<sup>1)</sup> Measured at a light incident angle of 60°.

## Application Notes and Pointers

### Balancer

In general, when manufacturing composite elements with laminate, a suitable balancer must be used to ensure equalization of tension. In this context, we refer to a symmetrical structure of the composite element, i.e., the use of identical laminate on the front and reverse sides. An asymmetrical structure generally leads to insufficient flatness and causes the element to warp.

### Protective film

The removable protective film must be peeled off no later than 12 months after production of the laminate, otherwise adhesive residue can remain on the surface. The laminate must be stored in enclosed, dry rooms in their original packing on pallets under normal climatic conditions.

If all of the laminate sheets are not going to be used immediately after the original packaging is has been opened, i.e. some of the product is returned to storage, the laminate must be completely covered by a board. The board will help to keep the laminate flat and preserve the UV resistance of the protective film.

The protective film can withstand temperatures of approximately 200°C. The following press parameters must therefore be observed:

- maximum press temperature 200°C for a pressing time of 20 seconds.
- press pressure 1.025 pound/inch<sup>2</sup> (3.5 kg/cm<sup>2</sup>)

Detailed information concerning storage and processing is available in the processing instructions "EGGER Laminates".

### Surface properties

Fundamentally, the surface properties of the EGGER laminates correspond to the high EGGER quality standard as well as valid Standards and regulations. Signs of daily wear and tear may become evident if the HG surface is subjected to high mechanical loads. The flat and high gloss surface is not textured, but it is precisely the textured effect that assists to mask scuff and scratch marks. In case of high mechanical stress, traces of usage can occur on the HG surface. Therefore, when designing work surfaces, furniture or interior installations with HG finishes, the intended application area of the final product should be chosen appropriately and with due consideration of the aforementioned special feature.

### Use as whiteboard

The resistant and dense surface of EGGER laminate with structure HG is suitable for use as a whiteboard. Tests with popular whiteboard markers, such as the STAEDTLER Lumocolor whiteboard marker and Pentel Maxiflo board marker, have shown that these can be dry wiped without residue. It should be noted that no sanitary cleaners or cleaning agents with abrasive components should be used for cleaning, since such cleaners lead to changes in the gloss level and scratches.

#### Provisional note:

This technical leaflet has been carefully drawn up to the best of our knowledge. The information provided is based on practical experience, in-house testing and reflects our current level of knowledge. It is intended for information only and does not constitute a guarantee in terms of product properties or its suitability for specific applications. We accept no liability for any mistakes, errors in standards, or printing errors. In addition, technical modifications may result from the continuous development of EGGER laminates, as well as from changes to standards and public law documents. The contents of this technical leaflet should therefore not be considered as instructions for use or as legally binding. Our General Terms and Conditions apply.