

## Technical data sheet

### EGGER Compact Laminates Flammex Flame Retardant



### Description

EGGER Compact Laminates Flammex Flame Retardant are decorative compact laminates based on curable resins. They have a multi-layered structure and consist of impregnated decorative papers and several impregnated core layers.

Description: EGGER Compact Laminates Flammex Flame Retardant  
Type of material: **CGF** (Compact General-Purpose Flame-retardant) according to EN 438-4  
**ACF** (Pearlescent laminate Compact Flame-retardant) according to EN 438-8  
Application: wall and ceiling cladding in public areas with higher fire requirements

### Availability

Decors from the **EGGER Decorative Collection** are available made to order and with a minimum order quantity – see section “Delivery form”.

### Technical data

In accordance with the EN 438-4, EGGER Compact Laminates Flammex Flame Retardant are classified as a compact laminate type **CGF** (Compact General-Purpose Flame-retardant).

Compact laminates with full-surface pearlescent decors are classified as type **ACF** (Pearlescent laminate Compact Flame-retardant) in accordance with EN 438-8. Compact laminates type ACF are only suitable for vertical applications.

| Property                                     | Test standard | Unit or feature                                         | Value          |                |
|----------------------------------------------|---------------|---------------------------------------------------------|----------------|----------------|
|                                              |               |                                                         | CGF (Rec. 961) | ACF (Rec. 966) |
| Resistance to surface wear*                  | EN 438-2      | Revolutions (min.)<br>Initial point                     | ≥ 150          | -              |
| Resistance to impact by large diameter ball* | EN 438-2      | Drop height in mm<br>$2\text{ mm} \leq t < 6\text{ mm}$ | 1,400          | 800            |
|                                              |               | $6\text{ mm} \leq t$                                    | 1,800          | 800            |
|                                              |               | Impact diameter in mm                                   | ≤ 10           | ≤ 12           |
| Resistance to scratching*                    | EN 438-2      | Rating (min)                                            | 3              | 2              |
| Thickness                                    | EN 438-2      | mm                                                      |                |                |
|                                              |               | nominal thickness 12 and 13 mm                          |                | ± 0.60         |
|                                              |               | nominal thickness 8 and 10 mm                           |                | ± 0.50         |
|                                              |               | nominal thickness 5 and 6 mm                            |                | ± 0.40         |

| Property                                       | Test standard | Unit or feature                                                           | Value             |                |
|------------------------------------------------|---------------|---------------------------------------------------------------------------|-------------------|----------------|
|                                                |               |                                                                           | CGF (Rec. 961)    | ACF (Rec. 966) |
| Length and width <sup>1)</sup>                 | EN 438-2      | mm                                                                        | + 10 / - 0        |                |
| Flatness <sup>2)</sup>                         | EN 438-2      | mm/m (max.)<br>2.0 mm ≤ t < 6.0 mm<br>6.0 mm ≤ t < 10.0 mm<br>10.0 mm ≤ t | 8.0<br>5.0<br>3.0 |                |
| Resistance to water vapour                     | EN 438-2      | Rating (min)                                                              | 4                 | 3              |
| Resistance to dry heat (160 °C)                | EN 438-2      | Rating (min)                                                              | 4                 | -              |
| Resistance to wet heat (100 °C)                | EN 438-2      | Rating (min)                                                              | 4                 | -              |
| Resistance to immersion in boiling water       | EN 438-2      | Mass increase % (max.)<br>t ≥ 5 mm                                        | 3.0               | 3.0            |
|                                                |               | Thickness increase % (max.)<br>t ≥ 5 mm                                   | 6.0               | 6.0            |
|                                                |               | Rating (min.)<br>Surface                                                  | 4                 | 4              |
|                                                |               | Edge                                                                      | 3                 | 3              |
| Dimensional stability at elevated temperatures | EN 438-2      | cum. dimensional change % (max.)<br>t ≥ 5 mm                              | 0.30<br>0.60      | 0.30<br>0.60   |
|                                                |               | L <sup>a</sup><br>T <sup>b</sup>                                          |                   |                |
| Resistance to staining                         | EN 438-2      | Rating (min.)<br>Groups 1 and 2                                           | 5                 | 5              |
|                                                |               | Group 3                                                                   | 4                 | 4              |
| Lightfastness (Xenon arc lamp) <sup>3)</sup>   | EN 438-2      | Grey scale rating<br>Surface                                              | 4 bis 5           | 4              |
| Resistance to crazing                          | EN 438-2      | Rating (min.)                                                             | 4                 | 4              |
| Density                                        | EN ISO 1183-1 | g/cm <sup>3</sup>                                                         | ≥ 1.30            |                |
| Flexural modulus                               | EN ISO 178    | MPa                                                                       | 9,000             |                |
| Flexural strength                              | EN ISO 178    | MPa                                                                       | 80                |                |
| Fire behaviour                                 | EN 13501-1    | Euro class                                                                | B-s2,d0           |                |

\* Property is relevant for the classification of the material type.

<sup>1)</sup> Tolerances for cut-to-size panels shall be agreed between EGGER and purchaser.

<sup>2)</sup> Provided that the compact laminates are stored in the manner and conditions recommended by EGGER. The established flatness values apply to compact laminate with decor on two sides. The limits for compact laminate with decor on one side need to be agreed upon.

<sup>3)</sup> Extraneous darkening and/or photochromism are due to the shock effect of accelerated exposure, and are not characteristics of natural exposure.

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).

## Form of delivery

Our order-related delivery options for Compact Laminates Flammex Flame Retardant in overview:

| Options EGGER Compact Laminates Flammex Flame Retardant |                                     |
|---------------------------------------------------------|-------------------------------------|
| Nominal thickness range                                 | 5 to 13 mm                          |
| Maximum length                                          | 5,600 mm                            |
| Maximum width                                           | 2,060 mm                            |
| Standard format                                         | 2,790 x 2,060 mm / 5,600 x 2,060 mm |

## Technical application note

Slight colour deviations in the same product are possible due to tolerances in the primary materials used. Components that are used next to each other should therefore be checked for colour uniformity. A deviation in colour and surface between the EGGER reference colour sample and the customer's test piece is permissible in accordance with EN 438.

Due to the production that differs by product, colour and surface differences can also occur between different products (e.g. faced board, laminate, edging) with the same decor-texture combination. For an accurate representation of the colour, order a sample in the relevant product.

For the production of Compact laminates we only use polymerised resins which do not exhibit any hazardous properties after curing the product and are harmless for the intended use of the product. In particular, free melamine is not contained in Compact laminates in a concentration that would trigger additional information obligations, for example under Regulation (EC) No. 1907/2006 (REACH). Furthermore, Compact laminates naturally comply with the existing migration thresholds according to Regulation (EU) No. 10/2011 on plastic materials and articles intended to come into contact with food.

## Reaction to fire

EGGER Compact Laminates Flammex Flame Retardant meets the special requirements of EN 13501-1 in case of fire.

According to EN 13501-1, the reaction to fire is classified as follows: **B**

The additional classification in regards to smoke development is: **s2**

The additional classification in regards to dripping / dropping while burning is: **d0**

The classification format for the reaction to fire of the construction product is: **B – s2, d0**

## Care and cleaning recommendation

EGGER Compact Laminates Flammex Flame Retardant do not require any special care due to their resistant and hygienic, dense surfaces. The surfaces are generally easy to clean. This also applies to textured surfaces. Do not use sanitary cleaners or detergents with abrasive components, as using such cleaners may lead to changes in the degree of gloss and/or scratch the material.

For detailed information, please refer to the leaflet "Cleaning and care recommendations for EGGER product surfaces".

## Additional documents / Product information

You will find further information in the following documents:

- » Processing Instructions "EGGER Compact Laminates"
- » Technical leaflet "Resistance of EGGER surfaces to disinfectant"
- » Technical leaflet "Cleaning and care recommendations for EGGER product surfaces"

### Provisional note:

This technical data sheet 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 Compact Laminates Flammex Flame Retardant, as well as from changes to standards and public law documents. The contents of this technical data sheet should therefore not be considered as instructions for use or as legally binding. Our General Terms and Conditions apply.