

Quality Management ISO 9001

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Product data sheet

EGGER Compact Laminate Flammex CE

Recipe: 961/966



EGGER Compact Laminates Flammex CE are flame-retardant compact laminates according to EN 438-4, respectively EN 438-8 with a black core. They have a multilayer structure and consist of melamine resin impregnated decorative paper as surface layer and a fibrous and with curable resins impregnated core layer.

Applications / Application Areas

EGGER Compact Laminate Flammex is used wherever higher fire protection is required.

Storage

Compact laminate must be stored in enclosed and dry rooms, at approximately 18°C to 25°C and a relative humidity of approximately 50% to 65%. When the original packaging is removed, the compact laminate must be stored on horizontal, level and sturdy protective boards. Direct floor contact and/or exposure to the sun must be avoided in all cases. A laminated protective board (no raw chipboard) of at least the same format should be used to cover the top board. If horizontal storage is not possible, the compact laminate must be stored at an angle of approximately 80° against a full-surface support with counter-support. Using a laminated protective board of at least the same format is required for upright storage as well.

Processing

Compact laminate can be readily processed like other wood-based materials. Carbide metal tools are mainly used. Choosing diamond-tipped tools is recommended for large quantities and when machining centres are used. Despite the good dimensional stability of compact laminate, changes in the surrounding conditions may affect the board. Format changes therefore have to be taken into account at the outset for processing and design. An expansion play of 2.0 mm per 1 m should generally be allowed.

Compact laminate Flammex can be mounted and installed in a wide variety of ways and with the help of various non-combustible mounting systems. Special tested mounting systems may have to be installed depending on the use of the rooms. The mounting systems and hardware have to be tailored to the area of application.

Further information on storage and processing is found in the processing instructions "EGGER Compact Laminate".

Fire behaviour

EGGER Compact Laminate Flammex CE 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:

Fire behaviour	Smoke class		Burning droplets class	
B	s	2	d	0

i.e. **B – s2, d0**

Quality Characteristics / Technical Data

EGGER Compact Laminate Flammex CE is classified as CGF (Compact General-purpose Flame-retardant) according to EN 438-4. Compact laminate with full-surface pearlescent decors is classified according to EN 438-8 as type ACF (Pearlescent laminate Compact Flame-retardant).

Property	Standard	Unit	Value	
			CGF Rec. 961	ACF Rec. 966
Resistance to surface abrasion	EN 438-2: 10	Number of revolutions (per minute) Starting abrasion point	150	-
Shock resistance to a sphere with a large diameter	EN 438-2: 21	Drop height in mm	1,400	800
		2 mm ≤ t < 6 mm	1,800	800
		6 mm ≤ t	≤ 10	≤ 12
Diameter of the impression in mm				
Scratch resistance	EN 438-2: 25	Grade	3	2
Resistance to staining group 1 and 2	EN 438-2: 26	Grade	5	5
Resistance to staining group 3	EN 438-2: 26	Grade	4	4
Light fastness Xenon arc lamp (surface) *1	EN 438-2: 27	Grey scale	4 to 5	4
Stress crack susceptibility	EN 438-2: 24	Grade	4	4
Levelness *2	EN 438-2: 9	Depending on thickness in mm/m		
		2.0 mm ≤ t < 6.0 mm	8.0	8.0
		6.0 mm ≤ t < 10.0 mm	5.0	5.0
10.0 mm ≤ t	3.0	3.0		
Resistance to immersion in boiling water	EN 438-2: 12	Mass increase in %	2.0	3.0
		t ≥ 5 mm		
		Thickness increase in %	2.0	6.0
		t ≥ 5 mm		
Appearance in degrees		4	4	
Edge rating (min)		3	3	
Dimensional stability at elevated temperatures	EN 438-2: 17	Cumulative dimension change in %		
		t ≥ 5 mm	L ^a 0.3	0.3
		T ^b 0.6	0.6	
Resistance to dry heat	EN 438-2: 16	Grade	4	-
Resistance to water vapour	EN 438-2: 14	Grade	4	3
Resistance to moist heat (100 °C)	EN 12721:2009	Grade	4	-
Density	EN ISO 1183-1	g/cm ³	≥ 1.35	≥ 1.35
Modulus of elasticity for bending	EN ISO178	MPa	9,000	9,000
Bending strength	EN ISO178	MPa	80	80

*1 Extraneous darkening and/or photochromism are due to the shock effect of accelerated exposure, and are not characteristics of natural exposure.

*2 The established levelness 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.

t is the nominal thickness of the compact laminate.

a L is lengthwise direction or compact laminate length.

b T is crosswise direction or compact laminate width.

Surface finish according to EN 13722

Surface	Gloss units	Maximum deviation
Gloss surface	> 70	± 15 GU
Semi gloss surface	30 – 70	± 10 GU
Semi matt surface	10 – 30	± 5 GU
Matt surface	<10	± 3 GU

Dimensions / Tolerances

Dimensions

Thickness range: 5, 6, 8, 10, 12 and 13 mm

Standard size: 2,790 x 2,060 mm

Maximum length: 5,600 mm

Maximum width: 2,060 mm

Tolerances

Nominal thickness [mm]	Thickness tolerance [mm]	Length tolerance [mm]	Width tolerance [mm]
5 and 6	± 0.40	+10/-0	+10/-0
8 and 10	± 0.50	+10/-0	+10/-0
12 and 13	± 0.60	+10/-0	+10/-0


Decor Information

Colour and decor match

The colour perception of the decor is influenced to a large degree by the core colour. The intensive, black core colour can result in a colour difference compared to other EGGER products.

“100% matching colours with Eurodecor and laminate cannot be guaranteed.”

Compact laminate with pearlescent decor

Pearlescent decors and therefore ACF compact laminates are identified with a special icon in the Collection. This icon  stands for: “Only for vertical applications – pearlescent decor”.

Compact laminates with pearlescent decor surfaces are produced with a single sided decorative effect. The non-pearlescent decor on the reverse acts as balancer.

Care and cleaning recommendations

Due to their resistant and hygienic, dense surfaces, EGGER Compact Laminates Flammex CE do not require any special form of care. Generally, the surfaces are easy to clean. This also applies to textured surfaces.

For further information, please consult the leaflet “Cleaning and Maintenance Instructions”.

This technical data sheet has been carefully drawn up to the best of our knowledge. The information provided is based on practical experience as well as in-house tests and reflects our current state of knowledge. It is intended for information only and does not constitute a guarantee in terms of product properties or suitability for specific applications. We accept no liability for any mistakes, errors in standards or printing errors. In addition, technical modifications can result from the continuous further development, as well as from changes in standards and documents originating from statutory bodies. The contents of this technical data sheet should therefore not be considered as instructions for use or as legally binding. Unless otherwise stated, our General Terms and Conditions apply.