MORE FROM WOOD.

EGGER

Flammex products

Preventive fire protection

GETTING THERE FASTER

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Title image:
Hotel BeauxArts Gent (BE),
Decor used H3734 ST9,
Natural Dijon Walnut

All decors shown and mentioned are reproductions.

Fire protection

With our flame-retardant Flammex products, classified as B in accordance with EN 13501-1, we offer the highest degree of planning and implementation reliability for the planning and design of projects with increased fire protection requirements.

Primary school Kotten (CH),
© Hertig Nötzli Architekten, Thomas Widmer

Types of fire protection

Fire protection in general is divided into **preventive and defensive fire protection**. Preventive fire protection includes all measures that prevent or effectively limit the development, spread or effects of fires. Preventive fire protection includes structural, technical and organisational fire protection.

This brochure is dedicated to structural fire protection with EGGER products.

Arte Hotel (AT), © Derenko Innenarchitektur;
decor in use U999 ST2 Black

What is structural fire protection?

All fire protection measures taken in connection with the construction or alteration of buildings are part of structural fire protection (e.g. fire partitioning). The essential criteria are **the fire behaviour of building materials**, the fire behaviour of building components and the planning and creation of sufficient escape and rescue routes for people and animals.

The architect, as the representative of the client and as coordinator, bears a high responsibility for the conception and implementation of all required fire protection measures.

Our flame-retardant **Flammex product range meets the specifications of international standards** and offers the highest level of verified safety.

Click here for more information:

» To the Flammex products

Key objectives of fire protection planning

- Preventing the development of a fire and the spread of fire and smoke
- Enabling effective fire-fighting operations in the event of a fire
- Protecting the health and lives of users and rescuers by forming adequately protected escape routes
- Protecting the building, inventory and operational capability
- Protecting the environment from toxic fire or reaction gases.

In order to achieve these goals, it is necessary to observe various boundary conditions. In addition to the utilisation concept, the work and operational procedures for the building (e.g. number of users, frequency and intensity of non-local visitor traffic, material flows for production); this also includes the building geometry such as the area, internal accessibility and height (e.g. the model high-rise building guideline with regard to fire flashover). The planning of fire-fighting operations also requires the consideration of boundary distances to neighbouring buildings, connection to public traffic routes and the installation and mobility area for the fire brigade.

An essential part of the planning is the **assessment of the fire hazard**, i.e. the testing of the risk of ignition and **the fire load from combustible materials**. In Europe, the fire behaviour of building materials and components is **regulated** by EN 13501-1. By designating building material classes, the fire behaviour of building materials is classified in order to assess the fire risk.
Building components, on the other hand, are identified by the fire behaviour class (F, G, W, T) and the fire behaviour duration in minutes. Further classifications exist, e.g. S (cable penetration seals), R (pipelines) and E (electrical cable systems). Depending on the stress and function of the building component (e.g. load-bearing capacity, requirement for limiting heat radiation), different components must comply with the fire behaviour duration according to special requirements.

Click here for more information:

» Classification of EGGER products

» To the Flammex products

Headquarters of Sofistik AG (DE).
© SOFiSTiK AG / Studio Höhn

The European classification

Robert Lansemann School (DE)

Fire protection is a key issue in high-traffic buildings. Accordingly, larger companies or **public buildings and institutions,** such as hospitals, schools, nursing homes, shopping centres, shops and hotels, place **increased demands on fire protection**. Entrance and waiting areas as well as corridors are key areas, as they are also used as escape routes.

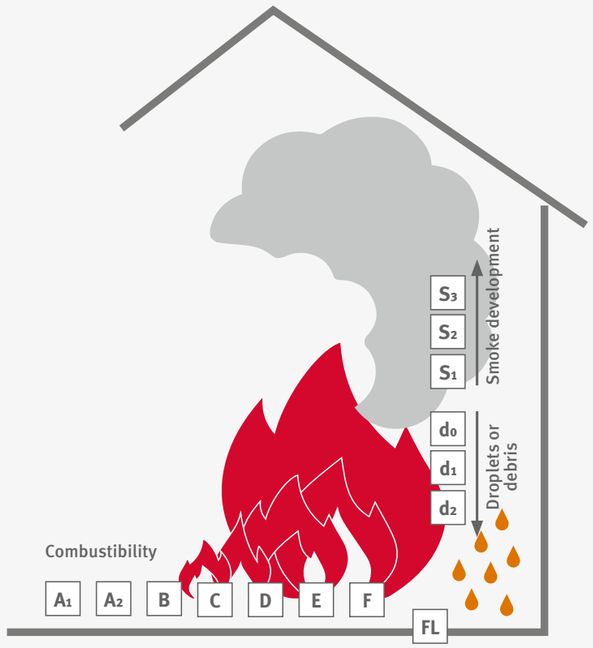
In the event of a fire, it takes an average of 10 - 15 minutes for the fire brigade to arrive on the scene. It is precisely at this time that it is important to prevent the flames from spreading.

In order to offer the highest level of safety for the planning and design of these buildings, our flame-retardant products are classified in accordance with EN 13501-1. Flammex products are highly functional without limiting design flexibility.

For more information, click here:

- Classification report Eurodekor Flammex Chipboards and MDF
- Classification report Eurodekor Flammex Chipboards E1E05 P2
- Classification report Compact Laminates Flammex in accordance with EN 438-7
- Classification report Compact Laminates Flammex with reduced rear ventilation
- Classification of EGGER products

The assessment standard for the fire behaviour of building products at European level is a classification system that was published at the beginning of 2010 with the EN 13501 **series of standards Fire classification of construction products, building elements and construction types**. It sets **uniform requirements for fire protection** throughout Europe, divided into building material classes (Euroclasses) A to F according to their fire behaviour:



A – Non-combustible, no contribution to fire
B – Flame-retardant, very limited contribution to fire
C – Flame-retardant, limited contribution to fire
D – Normal level of flammability, acceptable contribution to fire
E – Normal level of flammability, acceptable fire behaviour
F – Easily flammable, no performance determined

Further subdivisions classify fire side effects such as the development of smoke (s = smoke) and the burning droplets / debris from building materials (d = droplets):

s1 Low smoke development
s2 Medium smoke development
s3 High smoke development or smoke development not tested

d0 No burning droplets / debris within 600 seconds
d1 No burning droplets / debris with an afterglow time that is longer than 10 seconds within 600 seconds
d2 No performance detected

A classification in accordance with EN 13501 classifies the fire behaviour of the coating material of a certain manufacturer on its systems.
The classification is therefore specific to the manufacturer and not transferable to other manufacturers. Fundamental changes to the material or installation system require a reclassification.

For example: If an acoustic element is produced from a Eurodekor Flammex board with large surface cut-outs, a post-classification or individual test must be carried out for the element.

The documents for European classification

Test report
Record of the performance of a single test. Does not state whether the requirements are met.

Classification report
Report on the classification of a product after several tests have been carried out (multiple testing). It is guaranteed that the entire product spectrum is covered by tests. In addition to the SBI test (EN 13823) a test in accordance with the small burner test (EN11925-2) is also carried out.

DoP Declaration of Performance
The declarations of performance state the essential product parameters. The parameters to be declared are specified by the relevant harmonised standard. Performance data are collected from tables of the harmonised standard, from manufacturer test results or from external tests. Performance data such as fire behaviour are monitored through regular tests (twice a year) by an external testing institute. For Flammex products, the DoP number consists of the abbreviation FR and the recipe number of the core board. The DoP number is indicated on the pallet card directly under the CE logo. All required DoPs can be found on our homepage in the Product area under Downloads.
The validity of the declaration of performance is in principle unlimited as long as the product type remains the same.

UK Conformity Assessed
Due to the United Kingdom leaving the European Union on 01/01/2021, all European standards and specifications are no longer valid for the UK. The validity of CE-compliant building products was guaranteed by the British government in the current coexistence phase until 30 June 2025. Until then, the CE and UKCA markings for building products in accordance with the EU CPR will be recognised to the same extent in the UK. This regulation applies to Eurodekor faced boards (in accordance with EN13986), as well as compact laminates and laminate bonded boards in accordance with EN438-7.

For more information, click here:

» DoP Eurodekor Chipboards Flammex E1E05 P2

» DoP Eurodekor MDF Flammex E1E05 TSCA ST

» DoP Compact Laminate Flammex

» UK CA Certificate of Conformity

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Beauty and wellbeing, © Dougan Contracts;
Decor in use H1146 ST10 Grey Bardolino Oak

CE marking

The CE marking certifies that goods comply with European Union requirements.
The objective is to guarantee safe, flawless and high-quality goods on all European markets. Building products that are regulated through a harmonised standard are subject to the provisions of the Construction Products Regulation. A declaration of performance and CE marking are therefore mandatory.

Harmonised standards are European standards for products, production processes or services. EN 13986 applies to wood-based materials. It defines in general terms wood-based materials for use in construction, specifies their key properties and describes suitable test methods for determining these properties. **EN 13986 covers raw, laminated, veneered and lacquered wood-based materials.**

For laminates and compact laminates, the relevant harmonised standard is the EN438 series of standards. In particular, the **part of standard EN 438-7** for the CE marking of **compact laminates and laminate bonded boards**.

With the CE marking and the declaration of performance, we as the manufacturer assume responsibility for the conformity of the product with the declared performance. The compliance of the building products is assigned to different AVCP systems (+1, 1, +2, 3 and 4), depending on the design. System 4 products, such as Eurospan chipboard P2 or compact laminates with black core, may be self-declared by the manufacturer. Products with additional performance, such as Flammex products with improved fire behaviour, are subject to system 1. These products can no longer be self-declared by the manufacturer.

In the case of flame-retardant products, an independent and approved testing institute monitors the manufacturer, its production, laboratory and quality standards twice a year. In addition, fire properties are also verified on the basis of testing boards sampled by the auditor. The continued **quality and performance of the products is thus also tested and certified by an external body.** The CE certificate is issued by the testing institute for this purpose.

The **validity of the CE certificate** is in principle **unlimited,** as long as the product type and all specifications are complied with.

For more information, click here:

» CE certificate Eurodekor Chipboards Flammex E1E05 P2

» CE certificate Eurodekor Flammex chipboards and MDF

Technical terms

Building products
The term building product is used to define building materials, components and installations that are manufactured in order to be permanently installed in building structures.

Building materials
Building material is the term for the material used in the construction of buildings, e.g. steel, wood, concrete, etc. Only building materials that have successfully passed a building material test may be used. With regard to their fire behaviour, building materials in Europe are divided into building material classes.

Primary school (CZ), © Filip Györe;
decor in use H3303 ST10 Natural Hamilton Oak

Building material class
Building materials are classified with regard to their combustibility and flammability at European level in accordance with EN 13501 Fire classification of construction products, building elements and construction types. The term fire protection class is often used instead of building material class.
Abbreviation:
A – Non-combustible, no contribution to fire
B – Flame-retardant,
very limited contribution to fire
C – Flame-retardant, limited contribution to fire
D – Normal level of flammability,
admissible contribution to fire
E – Normal level of flammability, acceptable fire behaviour
F – Easily flammable, no performance determined
Building materials are divided into:

- Non-combustible
- Flame-retardant
- Normal level of flammability

Building components
Building components are parts of building structures made of building materials, such as walls, ceilings, columns, stairs and doors. Building components with building code requirements are specially tested and classified in accordance with EN 13501. In terms of fire protection, building components can be divided into load-bearing, reinforcing (non-room-enclosing) and room-enclosing components. Building components are divided according to their fire behaviour requirements.

Fire compartment
A fire compartment is a structurally demarcated area which, in the event of damage (fire), goes through internal burning as intended and thus may not allow fire to spread to other fire compartments. The spread of fire to adjacent compartments is prevented by fire-resistant components.

Fire load
Fire load means the cumulative quantity and type of combustible materials. It is derived from all combustible materials that are built into or brought into a building. The total fire load is obtained by adding all the fire loads in a room.

Fire side effects
Fire side effects are e.g. the development of smoke (s = smoke) as well as the burning droplets/debris (d = droplets) of building materials. They are considered in EN 13501 Fire classification of construction products and building elements.

Fire protection
All measures that prevent the development and spread of a fire and enable the rescuing of people and animals as well as effective fire-fighting operations in the event of a fire. Fire protection in general is subdivided into preventive and defensive fire protection. Preventive fire protection includes structural, technical and organisational fire protection.

Fire behaviour (fire properties)
Fire behaviour is the term used to describe the behaviour of substances and materials that are exposed to fire. Fire behaviour is divided into different building material classes.

European Construction Products Regulation
On 1 July 2013, the new Construction Products Regulation (CPR) replaced the Construction Products Directive (CPD), which had been in force since 1989. As a European regulation it now applies in all Member States. Its objective is to remove barriers to trade on the internal market. The CPR regulates the conditions for placing building products on the European market and specifies generally applicable requirements for the manufacturer's declaration of performance and the CE marking.

Fire behaviour / fire behaviour class
The fire behaviour of a building component represents the duration during which it retains its function in the event of a standard fire. Depending on the tested building component, defined requirements are set for load-bearing capacity, room closure or thermal insulation, among other things. Fire behaviour together with other criteria form the fire behaviour class of a building component. EN 13501 was introduced as the European standard. Part 2 of the standard covers the fire behaviour classes.

Figra value = fire growth rate = heat development rate
Maximum of the quotient of the heat release rate of the sample and the associated time, with a THR threshold of 0.2 MJ or 0.4 MJ.

Flame spread index
It is a calculated value from various measured values of the Steiner Tunnel Test and is used in the following standards: ASTM E84, UL 723 and ULC S102. The flame spread index provides information about the flame spread during the test and, in addition to the smoke spread index, it is the decisive parameter for classifying building materials in North America according to ASTM E84.

Bartending school (DE), © Friedrich Schwarze GmbH & Co. KG;
Decor in use H3303 ST10 Natural Hamilton Oak

All decors shown and mentioned are reproductions.

Intumescence
In preventive fire protection, intumescence means the deliberate increase in volume of a building material when exposed to heat. The objective is to form an insulating layer as a heat barrier.

SBI test
The SBI test (SBI = "Single Burning Item") is a test method for determining the fire behaviour of building products when subjected to thermal stress by a single burning item, excluding floor coverings. The course of the fire is recorded metrologically over a period of 20 minutes, allowing heat release and smoke development rates to be calculated. Fire side effects, such as burning droplets/debris, are visually recorded. The test results can be used within a building material classification in accordance with EN 13501-1. At least three test samples must be tested as part of a classification.

Smogra = smoke growth rate = smoke development rate
Maximum of the quotient of the smoke development rate of the sample and the corresponding time.

Smoke spread index
It is a calculated value from several measured values of the Steiner Tunnel Test and is used in the following standards ASTM E84, UL 723 and ULC S102. The smoke spread index only provides information about the smoke development in relation to heptane (previously a comparative value for red oak). In ASTM E84, the smoke spread index is a parameter for classifying building materials in North America.

Steiner Tunnel Test
The Steiner Tunnel Test is a test method for building materials for wall and ceiling applications with regard to their ability to support and spread fire and their tendency to develop smoke. The Steiner Tunnel Test is the basic test for the North American standards ASTM E84, NFPA 255 (withdrawn), UL 723 and ULC S102. These standards are the basis for material selection for interior construction in North America.

THR = total heat release
Total released energy that is caused by the stress on the main burner.

TSP = total smoke production
Total smoke development caused by the stress on the main burner.

Flammex products

Public buildings and institutions such as hospitals, schools, nursing homes, shopping centres, shops and hotels, place increased demands on fire protection. Our flame-retardant Flammex product range meets the specifications of international standards. Flammex products are highly functional, easy to process and recyclable like conventional wood-based materials.

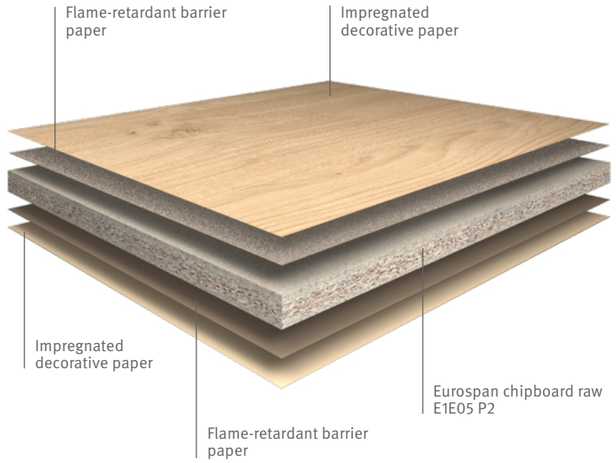
All decors shown and mentioned are reproductions.

Eurodekor® Flammex Faced Chipboards E1E05 TSCA P2

Casa Oval (South America),
Decor used H3730 ST10 Natural Hickory

Product details

Eurodekor Flammex faced chipboards are boards coated on both sides with a flame-retardant multilayer structure (according to EN 14322). They meet the requirements of the European fire behaviour class EUROCLASS B-s1, d0 according to EN 13501-1.



Available in the decor/texture combinations of the current collection	
Coating	Multilayer structure on both sides: 0.3 mm per side
Possible core material thicknesses in mm	8, 10, 12, 16, 18, 19, 22, 25, 28, 30, 38
Formats in mm	5,610/2,800x2,070
Properties	▪ Flame-retardant ▪ Low smoke emission ▪ Low heat release ▪ No burning droplets
Benefits	▪ Realisation of projects with increased fire protection requirements ▪ Consistent design concepts with flame-retardant product solutions ▪ Decor match with non-flame-retardant products allows maximum design flexibility ▪ Can be recycled like conventional wood-based materials

» Further details about the product can be found here: to.egger.link/eurodekor-flammex-e1e05p2

AREAS OF APPLICATION

Preventive fire protection in decorative furniture and interior design for wall and ceiling coverings, fixtures, room dividers and furniture in public areas.

- » Classification report
- » DoP
- » EHD
- » Technical data sheet
- » Processing instructions
- » Eurodekor Chipboard Flammex TÜV PROFICERT Rambervillers
- » Eurodekor Chipboard Flammex TÜV PROFICERT Brilon
- » Eurodekor Chipboard Flammex TÜV PROFICERT St. Johann

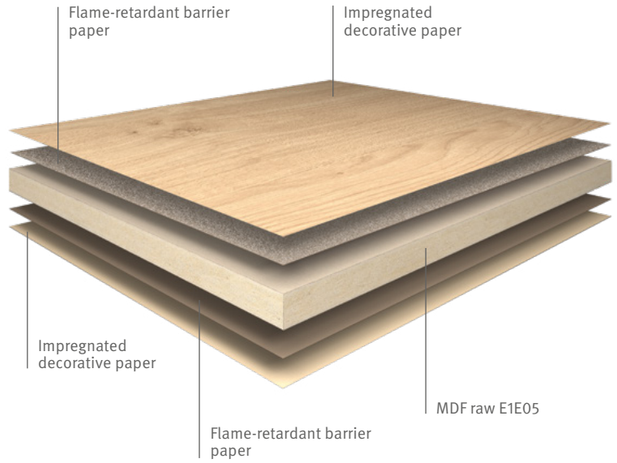
All decors shown and mentioned are reproductions.

Eurodekor® Flammex Faced MDF E1E05 TSCA ST

German Pavilion Expo 2015 (IT), © Nicolas Tarantino; decor in use: H3309 ST28 Sand Gladstone Oak

Product details

Eurodekor Flammex faced MDF is MDF with good profiling properties, coated on both sides, with a flame-retardant multilayer structure. It has strong physical properties and is suitable for furniture and interior design with increased fire behaviour requirements. Eurodekor MDF Flammex meets the requirements of the European fire behaviour class EUROCLASS B-s2, d0 in accordance with EN 13501-1.



Available in the decor/texture combinations of the current collection	
Coating	Multilayer structure on both sides: 0.3 mm per side
Possible core material thicknesses in mm	12, 16, 18, 19, 22, 25, 28
Formats in mm	5,610/2,800 x 2,070
Properties	▪ Flame-retardant ▪ Medium smoke development ▪ No burning droplets ▪ High transverse tensile strength and edge stability ▪ Low swelling behaviour ▪ Good profiling properties
Benefits	▪ Realisation of projects with increased fire protection requirements ▪ Consistent design concepts with flame-retardant product solutions ▪ Decor match with non-flame-retardant products allows maximum design flexibility ▪ Can be recycled like conventional wood-based materials

» Additional details about the product can be found here: to.egger.link/eurodekor-mdf-flammex

AREAS OF APPLICATION

Preventive fire protection in decorative furniture and interior design. For applications that require a wood-based panel with good profiling properties, such as wall and ceiling cladding, room dividers and furniture in public areas.

» Classification report

» DoP

» Technical data sheet

» Processing instructions

» Eurodekor MDF Flammex TÜV PROFICERT Brilon

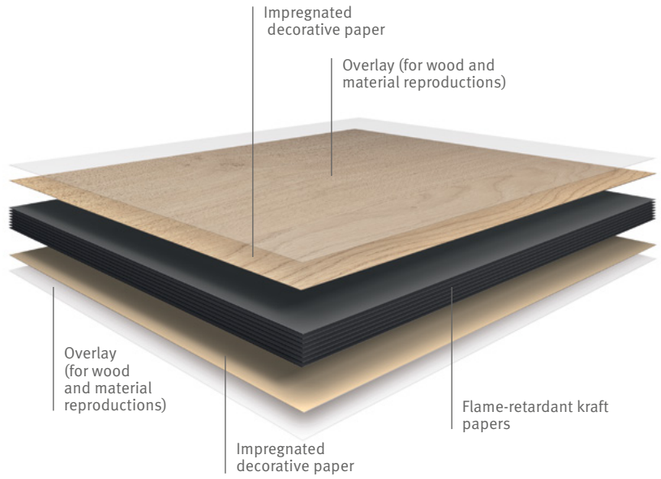
All decors shown and mentioned are reproductions.

Compact Laminates Flammex®

Cat house (DE), (C) Fotografische Werkstatt Katharina Jaeger

Product details

Compact laminates have a slim design and excellent product properties. Their durability and moisture resistance make them the ideal material for interior applications with increased stress and requiring special attention to hygiene and cleanliness. Compact laminates Flammex are manufactured with a black core and are classified as B-s2, d0 according to EN 13501-1. With reduced rear ventilation and a flame-retardant or non-combustible substructure, the compact laminates Flammex can even be classified and used as B-s1, d0.



Available in the decor/texture combinations for compact laminates black core in the current collection		
Dimensions (mm)	**Formats:** 5,600/2,790 x 2,060	**Thicknesses:** 5, 6, 8, 10, 12, 13
Properties	▪ Flame-retardant ▪ Medium smoke development ▪ No burning droplets ▪ Resistant to abrasion, impact and scratches	▪ Moisture-resistant ▪ Hygienic ▪ Resistant to many cleaning agents and chemicals
Benefits	▪ Realisation of projects with increased fire protection requirements ▪ Extended business segment thanks to applicability in the hygiene and clean room area ▪ Consistent design concepts with flame-retardant product solutions ▪ Decor match with non-flame-retardant products allows maximum design flexibility	

» Additional details about the product can be found here: to.egger.link/compact-laminate-flammex

AREAS OF APPLICATION

Preventive fire protection in decorative furniture and interior design. For interior applications with increased stress, such as wall cladding in hospitals or areas with requiring special attention to hygiene and cleanliness. These include not only sanitary rooms but also clean rooms, hospitals and restaurants. Compact laminates are ideal for open edge solutions due to their moisture resistance.

» Classification report Compact Laminates Flammex in accordance with EN 438-7

» Classification report Compact Laminates Flammex with reduced rear ventilation

» DoP

» Technical data sheet

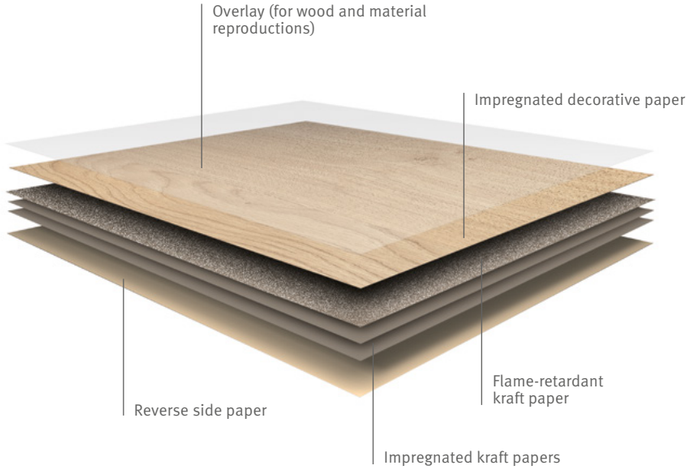
» Processing instructions

All decors shown and mentioned are reproductions.

Laminates Flammex®

Product details

Laminates Flammex harmoniously combine resistance with attractive design. They are the ideal solution for horizontal and vertical surfaces, as well as for curved or rounded elements. They are suitable as decorative and flame-retardant coating material in combination with flame-retardant core boards. Combinations with corresponding composite elements enable applications with increased requirements for fire behaviour. They meet the requirements of the German building material class B1 and the French fire behaviour class M1.



Available in the decor/texture combinations of the current collection		
Dimensions (mm)	**Formats:** Standard: 2,800/3,050 x 1,310 variable length from 800 - 5,600	**Thicknesses:** 0.6, 0.8, 1.2
Minimum order quantity	Available to order from 260 m2	
Properties	▪ Flame-retardant ▪ Low smoke development ▪ No burning droplets	▪ Resistant to abrasion, impact and scratches ▪ Postformable (in the cold)
Benefits	▪ Realisation of projects with increased fire protection requirements ▪ Suitable for horizontal and vertical surfaces in furniture and interior design for public spaces ▪ Consistent design concepts with flame-retardant product solutions ▪ Decor match with non-flame-retardant products allows maximum design flexibility	

» Detailed information is available online: to.egger.link/laminate-flammex

AREAS OF APPLICATION

Laminates are the ideal solution for horizontal and vertical surfaces with medium to high stress as well as for curved or rounded elements. They are suitable as decorative and flame-retardant coating material in combination with low-flammability core boards in preventive fire protection.

» M1 certificate

» B1 certificate

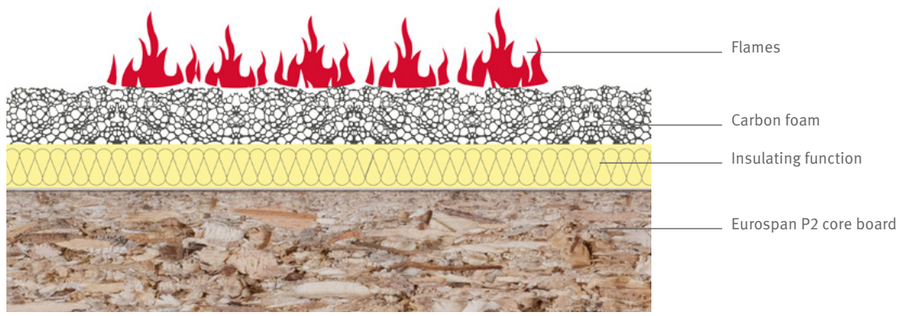
» Technical data sheet

» Processing instructions

All decors shown and mentioned are reproductions.

Mode of action of the flame-retardant coating

Under **the influence of heat**, the **intumescent agent** contained in the barrier paper starts a multi-stage chemical reaction (so-called intumescent reaction). This **results** in the formation of **carbon foam**. It has an **insulating effect** on the underlying material. Due to this insulating layer, less temperature reaches the surface of the core board material for a certain period of time. This delays **the fire** and **slows down** the process overall. This technology is used in **Eurodekor faced Flammex boards** and **Laminates Flammex.**



Fire behaviour in comparison

Eurodekor Faced Chipboard Flammex

Cross-section Eurodekor Flammex
after 30 minutes of burning

Eurodekor Faced Chipboard

Cross-section Eurodekor
after 30 minutes of burning

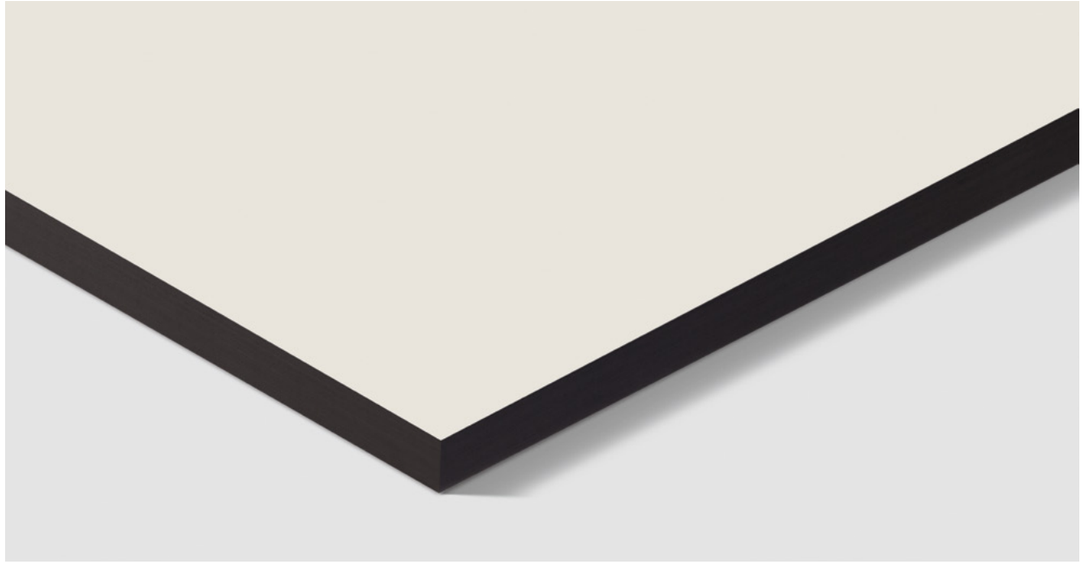
The pictures show the product cross-section after an exemplary test carried out in the in-house laboratory.
They document the result after a 30-minute flame exposure using a Bunsen burner.
The test does not correspond to any standard specifications.

» Link to the Video

Mode of action of the flame-retardant core papers

The phosphate-based flame-retardant impregnating liquid contained in the kraft sulphate paper triggers a condensation reaction when exposed to heat. The chemical reaction must be constantly supplied with energy, which weakens the pyrolysis process. The water produced by the condensation must also be evaporated. This slows down the fire even more.

We use this technology for compact laminates in flame-retardant Flammex quality.



Compact Laminate Flammex

Decormatch

You do not have to compromise on design and quality for projects with increased fire protection requirements in interior design. Matched to the respective application, our Flammex products Eurodekor chipboards, Eurodekor MDF, laminates and compact laminates are available as flame-retardant materials. In addition, we offer you edging solutions that are perfectly matched to the decor and texture.

» Find out more online: to.egger.link/decormatch

Classification of EGGER products

European fire classification in accordance with EN-13501-1	Product	Euroclass	Additional information (construction, thickness range, test certificate, etc.)
Flame-retardant building materials	Compact Laminates Flammex	B-s1,d0	Classification from ≥ 6 mm minimum thickness with reduced rear ventilation gap and B or A substructure
	Compact Laminates Flammex	B-s2,d0	Classification 5 - 13 mm
	Eurodekor Flammex Faced Chipboards E1E05 P2	B-s1,d0	Classification 8 - 38 mm
	Eurodekor Flammex Faced Chipboards E1 P2	B-s2,d0	Classification 12 - 38 mm
	Eurodekor Flammex Faced Chipboards JP F0.3 (F****)/GB ENF MR	B-s1,d0	Individual test certificate 18 mm › Test report on request
	Eurodekor MDF Flammex E1E05	B-s2,d0	Classification 12 - 38 mm
Building materials with a normal level of flammability	PerfectSense Premium Lacquered MDF Matt/Gloss	D-s1,d0	Individual test certificate › test report on request
	Eurospan Raw Chipboards P2	D-s2,d0	Classified without further testing (CWFT)
	Eurospan Raw Chipboards JP F0,3 (F****)/GB ENF MR		In accordance with EN 13986 ≥ 9 mm and raw density › 600 kg/m³ › without air gap behind the wood-based material
	Raw MDF E1E05 ST		
	Eurodekor Faced Chipboards P2		In accordance with EN 13986 ≥ 15 mm and raw density › 600 kg/m³ › with closed air gap behind the wood-based material
	Eurodekor Faced Chipboards JP F0.3 (F****)/GB ENF MR		
	Eurodekor Faced MDF E1E05 ST		In accordance with EN 13986 ≥ 18 mm and raw density › 600 kg/m³ › with open air gap behind the wood-based material
	Compact Laminates Black Core	D-s2,d0	Classified without further testing (CWFT) in accordance with EN348-4
	Laminate Bonded Boards with MDF or chipboard core material (› 600 kg/m³) and laminate (≥ 0.5 mm) covering	D-s2,d0	Minimum thickness 12 mm after PVAC or thermosetting adhesive application and an application quantity of 60 g/m² to 120 g/m²

Local approval BRD according to DIN 4102-1	Product	Euroclass	Additional information (construction, thickness range, test certificate, etc.)
Flame-retardant building materials	Laminates Flammex	B1	Thickness 0.6 - 1.2 mm

All our shown and mentioned decors are reproductions.

US fire classification in accordance with ASTM E84	Product	Class	Additional information (construction, thickness range, test, certificate, etc.)
	Eurodekor Flammex Faced Chipboards E1E05 P2	A	Individual test certificate 12 - 38 mm Tested for St. Johann plant
	Laminates Coloured Core	A	Individual test certificate 0.8 mm
	Laminates XL	A	Individual test certificate 0.8 mm
	Laminates	B	Individual test certificate 0.8 mm
	Compact Laminates Black Core	B	Individual test certificate 3 - 13 mm
	Eurodekor TFL PB TSCA 187	C	Individual test certificate 12 - 38 mm

Russian fire classification in accordance with Federal Law No. 123	Product	Class	Additional information
	Eurodekor Flammex Faced Chipboards E1E05 P2	KM2	12 - 38 mm Tested for St. Johann plant
	Compact Laminates Flammex	KM2	5 - 13 mm

Chinese fire classification according to GB 8624-2012	Product	Class	Additional information
	Eurodekor Flammex Faced Chipboards JP F0.3 (F****)/GB ENF MR	B-s1,d0	Individual classification

Our wood comes from 100% verified legal and controlled sources according to ISO 38200. Ask for suitably certified products.

FSC www.fsc.org FSC® C017963 The mark of responsible forestry

PEFC PEFC/06-38-171 Promoting Sustainable Forest Management

» Find out more about sustainable forest management

All decors shown and mentioned are reproductions.

Municipal Hospital Lüneburg, (DE), © Eurodeco; decor in use W1000 ST9 Premium White

Non-combustible products

The **decors of the EGGER Decorative Collection** are also available in non-combustible version A2-s1,d0. Please contact the manufacturer listed beside if required.

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All decors shown and mentioned are reproductions.

FAQs

Are the flame retardants used for Eurodekor and Laminate Flammex products different from those used for compact laminates Flammex?
There are differences in the way they work. However, the chemical basis is always a phosphate. Eurodekor and Laminates Flammex use a different technology based on intumescent additives. Our compact laminates work with a condensation-based flame-retardant impregnating liquid. An alternative method of action to the classic condensation base is necessary due to the small but concentrated amount of flame-retardant impregnating liquid in the coating of Eurodekor and Laminates Flammex.

Are Flammex products to be processed differently than standard products?
For the processing of compact laminates and laminates in Flammex quality, the same specifications apply as for standard materials. Please note that Eurodekor is a two-sided multilayer structure (0.3 mm per side).

Can Flammex products be further processed as desired?
There are almost no limits to design flexibility with Flammex products. Please note, however, that fundamental changes to the product require a reclassification of the material or of the entire system. Thus, when processing laminates Flammex, it is always necessary to provide proof of fire behaviour for the composite system created by the customer. This also applies when Flammex products are painted over. Even if Eurodekor Flammex faced boards are processed excessively, e.g. to create acoustic elements, separate proof of the effectiveness of the element is required.

Do Flammex products have a limited service life?
No. The effect of the fire protection additives remains in place. This is also absolutely necessary, as our products usually remain installed for several decades and their fire protection effect must be guaranteed at all times.

Andreas Herzog
Product Management
Flammex Products
St. Johann in Tirol, Austria

How can Flammex products be disposed of?
All Flammex products can be disposed of in the same way as their corresponding non-flame-retardant products. Flammex products based on wood-based materials can be entered directly into the recycling process.

Are flame-retardant products available in all decors of the collection?
Yes. If decors are offered on a standard product, they are also available as a flame-retardant product.

How can Eurodekor Flammex be distinguished from standard Eurodekor Faced Boards?
The distinction between the Eurodekor Flammex faced boards and normal Eurodekor faced board variants is made via the pallet card. The Flammex product is indicated on the pallet card, as well as the legally required CE marking and the reference to the appropriate DoP. The board itself is not marked.

In the case of Eurodekor, the flame-retardant impregnating liquid is only present on the surface. Can this cause problems for the edging?
It is correct that no additional flame-retardant impregnating liquid is used in the board and therefore also not on the edging. The foaming of the flame-retardant substructure even closes butt joints to a certain extent for a short time. Therefore, no negative influence on the cross-section of the board is to be expected.

Can the flame-retardant effect of Eurodekor Flammex Faced Boards be triggered by mistake?
The foaming effect of the intumescent material is triggered at about 250 °C. Theoretically, the chemical reaction can be set in motion if corresponding heat is applied. Regardless of this, our products should not be exposed to such high temperatures.

How do I recognise Eurodekor Flammex Faced Boards if I do not have a pallet card?
In this case, you can recognise the Flammex quality by its effect. Use a section and heat it for approx. 5-10 seconds at more than 250 °C. You will immediately notice the foaming effect (carbon foam) on the surface.

Does the flame-retardant barrier paper in the Eurodekor Flammex Faced Boards multilayer structure have an influence on the surface/surface quality of the board?
The additional flame-retardant layer has no detrimental effect on the surface quality. On the contrary, the impact resistance of the board is improved thanks to the increased layer thickness of 0.3 mm per side.

Is the flame-retardant layer in Eurodekor products pressed on both sides?
Yes. This is necessary for two reasons: Firstly, the customer cannot inadvertently install the board incorrectly and secondly, a symmetrical structure is needed to protect the board from warpage.

Hotel Hilton (PL), © Natalia Szuldrzynska;
decor in use H1387 ST10 Graphite Denver Oak

Antibacterial surface property

Cleanliness and hygiene play a central role in care facilities and high-traffic public buildings. Here, the surfaces are often also subject to special cleaning and disinfection schedules. Flammex products gain points here with their antibacterial surface properties in accordance with ISO 22196 (= JIS Z 2801) and are resistant to many cleaning agents and chemicals.

On the hygienically sealed and closed surfaces, bacteria and germs are reduced by 99.9 % within 24 hours. This property also prevents their proliferation when cleaned regularly. This means you are on the safe side with our Flammex surfaces for projects with increased hygiene requirements.

» More information and certificates regarding the antibacterial surface property

Click here for more information:

» Eurodekor antimicrobial activity

» Laminate antibacterial activity

» Compact laminate antibacterial activity

Hospital; decors in use U775 ST9 White Grey, U727 ST9 Stone Grey, H3700 ST10 Natural Pacific Walnut

Furnish a "healthy home" with our products

We are aware of the growing importance of indoor air quality. This is why we intensively test the emissions of our products and also have them tested by independent institutes for their suitability for "healthy homes".

The following products for furniture and interior design are certified in accordance with "TÜV PROFiCERT-product Interior". This confirms that you are purchasing safe products that are suitable for "healthy homes". For you, this means that you work with products that **have been tested for harmful substances** and at the same time are able to confirm **compliance with international emission requirements**.

Example

Eurodekor Flammex Faced
Chipboards E1E05 TSCA P2

Eurodekor Flammex Faced MDF
E1E05 TSCA ST

TÜV PROFiCERT-product Interior (Premium) complies with the following international emission limits:

- AgBB 2018
- BREAAM Exemplary Level
- ChemVerbotsV E1 DE 2020
- Émissions dans l'air intérieur: A+
- Finnish M1 classification
- The Austrian Ecolabel, Guideline UZ 07
- Belgian VOC Regulation
- Annex 8 MVV TB (ABG)
- CAM Italy
- LEED v4 (outside North America)
- DE-UZ 76 (Blauer Engel)

All information is available at
to.egger.link/healthy-living-products

All decors shown and mentioned are reproductions.

www.egger.com

Sources

www.baunetzwissen.de

www.wko.at

CEN_en_07/2024_SCG

All our shown and mentioned decors are reproductions. Due to variables in the printing process, colours may vary slightly from the actual product. Colour-matching decor selection only possible on the original sample. Decor illustrations on a scale of 1:2. Subject to technical modifications and printing errors.