



Application example

deko FireSafe®

Product Description

deko FireSafe® - this product name stands for a decorative high pressure laminate with melamine resin coating. It has been classified, certified and patented as non-flammable and features building Class A or 1 quality as composite.

deko FireSafe® laminates are available in large sizes and meet the approval criteria of EN 13501-1 as A1 or A2-s1-d0 as composite.

deko FireSafe® is a decorative high pressure laminate (HPL) according to DIN EN 438-1 and classified, certified and patented as EN 438-9 available in plain colours, fantasy decors as well as replicas of natural materials, such as woven patterns, wood, marble and many more but also in high pressure metal laminates (HPML) with genuine aluminum surface (A 341, A 350, A 351, A 352, A 353, A 356). The plain papers from our dekoplus collection used for **deko FireSafe®** are homogeneously coloured in mass. The producible colour scale ranges from white through coloured to black. When combined with the dekonova product group, the surface layer forms a printed paper melamine film. The printed papers used are preferably manufactured in gravure printing. The colour consistency is ensured for these plain colours and printings. The decors are free from heavy metals and have a high light stability (in the context of normal commercial tolerances).

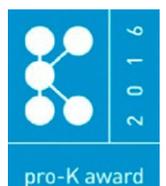
deko FireSafe® is characterised by a good surface finish, easy to process, biologically safe and a non-combustible A1 module according to the building materials class EN 13501-1 as A1 or A2-s1-d0 as composite as incombustible component classified.

deko FireSafe® offers the following benefits:

- for a variety of applications
- with many decorative surfaces
- based on glass and gypsum fibre board
- free of formaldehyde
- to 99% made from recycled materials
- acoustic effect
- healthy indoor air quality

Characteristics:

- Non-fading
- Resistant to chemicals
- Food safe
- Resistant to cleaning
- Non combustible
- Shockproof
- Wear-resistant
- Graffiti resistant



Receives pro-K award 2016 (product of the year)

FireSafe decors are available in the following collections:



dekolor collection



dekonova collection



starline decors

More FireSafe decors can be found on www.dekodur.com/en/firesafe-en.html

deko FireSafe[®] develops "acoustics" - with appropriate perforations, grooves or slits, it creates a superb surround sound and acoustic effect. Here are optionally different off tours of perforation and geometries are available for the surface design with deko FireSafe[®].

deko FireSafe[®] presents itself as composite panel for claddings with the highest requirements on different designs, aesthetics, fire and acoustic.

deko FireSafe[®] is preferably used:

- as cladding in escape and rescue routes
- staircases
- manholes
- switch cabinets
- electronic ducts
- at large venues

deko FireSafe[®] products are made exclusively from environmentally friendly as well as pollutant-free and solvent-free components. deko FireSafe[®] also ensures maintaining a healthy indoor air quality.

In contrast to conventional wood-based panels, the coated composite panel (gypsum fibre board) acts as a support for deko FireSafe[®], is formaldehyde-free and made of 99% recycled materials: recycled water, REA gypsum and cellulose from waste paper. Wood as a raw material for cellulose and paper is a renewable resource.

The deko FireSafe[®] colour combinations can be produced (see product line dekovario) with various surface structures. As for composite panels, a symmetrical structure with deko FireSafe[®] is generally recommended as backing for deko FireSafe[®]. The deko FireSafe[®] backing is a plain melamine laminate panel with a smooth surface without particular quality requirements.

Delivery and Quality

Metal may show a slight natural variation in colour and structure and a pearlescent shine on some decors. These deviations are not reason for complaint.

All deko FireSafe[®] panels can be manufactured and delivered as laminate panels in the following dimensions:

2440 x 1220 mm and **3050 x 1220 mm**

The tolerance for the length and width as required in **EN 438** must correspond to the threshold deviations for laminates with a **length tolerance -0 mm and +10 mm**.

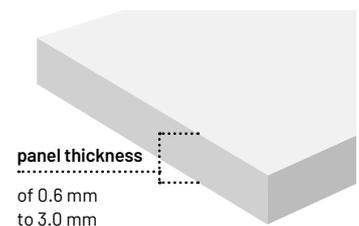
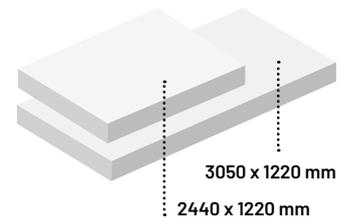
The panel thickness of deko FireSafe[®] panels can be manufactured with nominal thicknesses of **0.6 mm to 3.0 mm**.

Standard qualities of type ST are the thicknesses 0,6 mm and 1,2 mm.

Also for variations in thickness, the thresholds are in accordance with **DIN EN 438**.

Nominal thickness	Threshold deviations
0.6 – 1.0 mm	± 0.15 mm
> 1.0 – 2.0 mm	± 0.18 mm
> 2.0 – 3.0 mm	± 0.25 mm

deko FireSafe[®] The purchase of deko FireSafe[®] panels with larger nominal thicknesses can be clarified by a request to the manufacturer.



The fire behaviour of deko FireSafe[®] standard quality is in accordance with EN 13501-1 as A1 or A2-s1-d0 as composite. Thus, the quality of deko FireSafe[®] panels is considered to be „**non-combustible**“.

All deko FireSafe[®] versions are made exclusively in standard quality.

Application and Processing

deko FireSafe[®] is preferably used for stressed decorative areas in the interior construction for the cladding of escape and rescue routes, stairways, inspection shafts, switch cabinets, electronic ducts, public facilities and large meeting venues. The melamine resin on the laminate surface ensures the use of deko FireSafe[®] in both vertical and horizontal overhead applications. The laminate surface is easy to clean, has a closed surface and is a seamless construction which meets the highest hygienic standards. The mechanical and chemical properties (e.g. scratch resistance, im-pact resistance, heat and stain resistance) are high performance characteristics of deko FireSafe[®].

deko FireSafe[®] laminates can be used with carbide-tipped tools for sawing, milling and drilling. deko FireSafe[®] composite panels can be cut, milled and drilled with all standard tools, preferably with carbide-tipped tools. Due to the high mineral content, however, they should be processed using a separate exhaust system.

Suitable adhesive types for gluing:

For gluing deko FireSafe[®] high pressure laminates with a support panel to a composite element or building material panel, only non-flammable adhesives are used. These special adhesives must always be selected separately, taking into account the subsequent application.

In the case of deko FireSafe[®] composite elements, attention must be paid to a symmetric structure, i.e. the back should be bonded with a corresponding deko FireSafe[®] backing sheet.

Cleaning and Care

deko FireSafe[®] surfaces must be cleaned with a clean cloth, with a soft, damp sponge or a soft brush. Water with washing powder, soft soap or curd soap can be used as a cleaner. The surface can be wiped dry with paper towels. With stronger Pollute, the surface can also be cleaned with a melamine sponge (miracles sponge).

Abrasive cleaning agents should not be used.

Storage

deko FireSafe[®] laminates are to be stored in a closed room, at a temperature between **18 and 25°C** and a relative humidity between **50 and 60%**. The laminates must be stored horizontally and completely supported, leaving **200 mm space between the floor and the supports**.

The panel stacks:

- are to be protected from moisture
- must not be exposed to direct sun radiation
- must not be stored in a warm-air-stream

Disposal

- deko FireSafe[®] waste can be burned and/or incinerated in officially authorized industrial incineration plants.
- deko FireSafe[®] waste can be deposited on landfills in compliance with the local waste regulations.
- According to the German TA - technical instructions on waste as of March 28, 1991, category I, no. 571 - HPL waste is classified as "other hardened plastic waste". Category I means that a material is similar to household waste.

Do you have questions?

Please contact our service department if you have any further questions. We will also gladly support you in answering any open questions regarding particular details of DIN EN 438. If you need samples, you may request these in the form of sample chains or DIN A 5 or DIN A 4 hand samples by contacting Dekodur[®].

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