



MasqueSafe

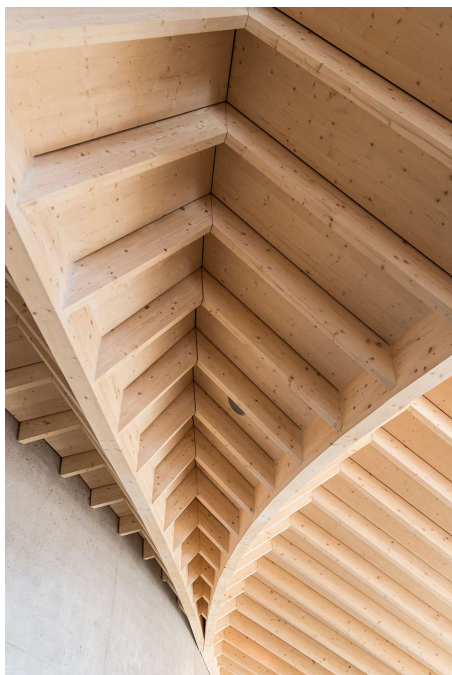
Fire protection of interior wooden elements

Wood as a construction material is on the rise and is a very attractive choice for building material because of its strength, aesthetic and acoustic properties.

However, its use in certain types of buildings may be limited by fire-prevention regulations and regulations regarding wood construction, including fire safety, have been updated over the years.

However, depending on the site and customer requirements, treatment with Masquelack's Fire Retardant product technology can make the building even safer and this extra protection enables a wider use, for example in the following types of buildings:

- Schools, kindergartens, and assisted-living facilities
- Storage facilities
- Detached houses, terraced houses, and apartment buildings
- Offices
- Hotels
- Libraries...



What happens in case of a fire?

When there is a fire, every second counts. The faster a fire spreads in a building, the less time there is to save lives. Therefore, and with good reason, authorities in the EU and many other countries place high demands on fire behaviour for materials used in constructions.

There are several ways to protect wooden surfaces against fire, and using Masquelack's innovative Fire Retardant technology is one of them. Our product technology works in that way when exposed to heat, the fire-retardant material expands and creates an insulating foam layer on the wood. The porous foam layer insulates the wood from the flames, preventing the wooden surface from heating up rapidly or catching fire.

Fire classification

Construction products and building elements are divided into various fire classifications according to the EN 13501-1 European fire safety standard. The classification also includes an A class, reserved for non-combustible materials such as steel. Below is a more detailed listing of the fire classifications for construction materials:

EURO-CLASS	TARGET SAFETY LEVEL
A1	No contribution to fire even under fully developed fire conditions
A2	Only negligible contributions to fire even under fully developed fire conditions; no spread of fire from the area of the primary fire in the fire development phase
B	In the fire development phase, no spread of fire from the area of the primary fire and very limited contribution to the fire
C	Under the conditions of a fire in the development phase, very limited spread of fire and limited energy release and ignitability
D	Under the conditions of a fire in the development phase, limited spread of fire and acceptable energy release and ignitability
E	In the case of a very small fire (match flame) acceptable reaction to fire (ignitability, flame spread)
F	No requirements concerning the reaction to fire

Additional assessment classes for smoke development and burning droplets/particles

Smoke development	s3 (there are no restrictions regarding smoke development) s2 (the fully released amount of smoke, and the rise in smoke development are restricted) s1 (sticter criteria than for s2 must be fulfilled)
Burning droplets/particles	d2 (there are no restrictions) d1 (burning droplets not longer than the defined time) d0 (dripping fire debris is not permitted)

MasqueSafe translucent for interior wood elements

Masquelack’s translucent fire-retardant products are designed to provide the highest possible level of fire protection for interior wooden walls, roofs and decorative panels carry the **B-s1, d0** fire safety classification which is the best possible fire-safety classification for wooden materials according to the EN 13501-1:2007 A1:2009 standard.

If the fire-protected surface needs to be abrasion resistant, it should be finished with one of our special designed clear topcoats **Masquesafe FR 715** or **Masquesafe FR 770**

For wood surfaces that are not subject to wear and tear, splashes such as e.g. ceilings then application of MasqueSafe FR product is enough.

The wet application amount needed to obtain the fire protection class is 250 gram/m2 of the **MasqueSafe FR** product and if combined with suitable topcoat up to max.100 gram of the MasqueSafe FR Topcoat.

Certification and Product Standard

For timber products, structural timbers and board materials, the EU has introduced Product Standards, in accordance with which all timber manufacturers have to document their own products before they can be sold within the European market. Fire-retardant wood-based products must, at the manufacturers site be certified by a Notified Body.



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