

Why Long Term Properties?



Fire retardants may considerably improve the reaction to fire properties of wood products, but the durability in interior and exterior applications needs to be addressed.

The problems with maintained reaction to fire performance over time have been known for a long time in the US and the UK, but are not so well known in the rest of Europe. It is of utmost importance that downstream users in step 1 determine the use of fire-impregnated wood, step 2 determines whether the wood panel should be surface-treated with covering paint or alternatively only be stained or left completely wood-neutral finish. When steps 1 and 2 are established, the relevant fire protection agent shall be checked as permanent long-term properties for compliance with building regulations, e.g. Plan, and Bygglagen PBL (SFS 2010:900).

In case of improper choice of the properties of the fire protection product, long-term fire safety cannot be ensured. In some cases, the active substances of the flame retardant may start to leach out from the wood panel at first opportunity for adverse weather conditions.

The weather's powers with UV, rain, moisture, cold, heat etc. drives moisture into the wooden board to dry up, when the fire protection product does not have confirmed properties that meet EN16755 EXT, the fire protection agent overtime will disappear completely.

There are three different systems to fire-protect wood, but all must nevertheless have approved properties according to long-time durability.

System 1. Fire protection paint and varnish.

System 2. Fire impregnation to be painted with covering color.

System 3. Fire impregnation to be stained or left completely with neutral untreated surface.

It is important to understand that system 2 cannot be used as a replacement product for system 3 since the properties have completely different properties even though fire class is apparently verified. Fire class has nothing to do with long-term durability even if they are dependent on each other.

Finally, it should be noted that THR value below 7.5 does not entail approval according to long-term durability. How properties are verified is clarified separately factsheet No.73.

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