

6. FLAME RETARDANT TREATED TIMBER = F-exterior

By making ignition more difficult and reducing the rate at which flame spreads across the surface of the timber, flame retardants play an important role in the protection of human life and property.

By treating timber with flame retardants, timber can be used in applications where it otherwise would be necessary to use man-made materials. From an economic, aesthetic, technical and environmental perspective, the use of timber is a great advantage compared to the use of man-made materials as the latter consume finite raw materials and precious energy in their production, while timber is a truly renewable resource with a very low carbon foot print.

6.1 Properties

- i) Meets Euro Class B, s1, d0.
- Chemicals are fixed in the timber, so that the timber can be used outdoor.
- iii) Excellent appearance.

6.2 Limitations

- Treatment with flame retardants is a relative expensive process due to the large quantity of chemicals required (100 – 150 kgs of flame retardant per m3 of timber).
- ii) A slight reduction in strength is to be expected.
- iii) Can only be used for treatment of sapwood of timber species that are easy permeable.
- iv) Timber used outdoor should be surface coated with a suitable sealer to minimize leaching of fire retardant chemicals from the treated timber.

6.3 Applications

- i) Exterior cladding.
- ii) Interior cladding / ceiling.





