BURNBLOCK[®]

NATURAL & NON-TOXIC FIRE RETARDANT



Vacuum Pressure Impregnation

Burnblock is certified according to the most strict market demands, which enables Burnblock[®] to be applied when fire proofing wooden construction surfaces in all kinds of commercial and residential buildings including high-rise projects.

Impregnation of wood is classified as diffusive, capillary, or hydrostatic (pressure treatment), depending on the physical phenomena involved in the process. Diffusive impregnation is based on the diffusive migration of impregnants through the moisture-filled capillaries; only water-soluble impregnants are suitable for this method. In capillary impregnation, the impregnating fluid migrates through the capillaries in the wood under capillary pressure.

In commercial practice, wood usually is treated by immersing it in impregnating fluid in an autoclave that applies high pressure, driving the impregnating fluid into the wood. Pressure processes differ in details, but the general principle is the same. Pressure forces the fire retardant into the wood until the desired amount has been absorbed and has penetrated. Commonly, three general pressure processes are used: full cell, modified full cell, and empty cell. Commercial treaters often use variations or combinations of these processes.

Penetration and Retention

Penetration and retention requirements are equally important in determining the quality of fire retardant treatment. Penetration levels vary widely, even in pressure-treated material. In most species, heartwood is more difficult to penetrate than sapwood. In addition, species differ greatly in the degree to which their heartwood may be penetrated.

We use updated and modern production equipment, hereby guaranteeing a competitive product and a strong logistic setup. Burnblock[®] vaccum pressure impregnation (VPI) guaranties full penetration of the majority of wood species.

The service life of Burnblock[®] fire retardant treated wood and wood-products, equals the lifespan of the Wood/timber and the fire retardant effect will diminish at the same pace as the wood/Timber itself.

Testing and Certification

Burnblock[®] is a world-patented fire retardant for the timber and building industry. We collaborate with the following testing institutes and organisations on the testing of materials treated with Burnblock[®]: Danish Technological Institute / SP Technical Research Institute of Sweden / CENCON - Centro de Control Total de Calidades S.A. de C.V.

Our partners contribute to continuous research and development of all types of fire retardant products to ensure the implementation of the latest know-how in the field in the ongoing development of the Burnblock[®] fire retardant.

Paw Fælled Technical Manager, Burnblock