

**Fire Protection** 

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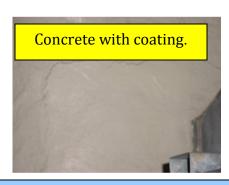
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## Fire Protection Coatings – by Christopher Huston

Fire Protection coatings make a difference at 0300 hours. A non protected load bearing will fail sooner than a protected one. However this is not the time to worry about what type of application was used. Pre planning can do more for us at 0300 than any other task. Getting out and learning our buildings before the products of combustion eat away at these gravity resistance systems will aid in our IAP when the house tones drop...

Treating wood to have resistance to fire propagation can be achieved easily by applying a stain like substance called FIRE RETARDANT COATINGS. The coatings must reduce flame spread by at least 50%. NFPA has two classes A & B. These are determined by test meeting the ASTM standard. Today contractors can purchase wood that is already impregnated with these Fire Retardants.





Spray on Fire Protection Coatings help to increase fire resistance and act as high temperature insulation. A spray on coating is applied after construction in areas where other types of fire barriers are not practical, like gypsum board. These coatings can be applied to ceilings, walls, piping, steel beams, columns and plywood. If a flame retardant is added to wood, covering it in a coating increases it's fire resistance. Spray on coatings can also be mixed to be used as caulk cracks, cabling, electrical, and plumbing penetrations.

Another type is a coating added to concrete to increase its fire resistance.

Coat Thickness Resistance Rating:

3/16" - 30 min

3/8" - 60 min

3/4" - 120 min

\*manufactures stat3ment

Check out NFPA 703 Standard for Fire Retardant Treated Wood and Fire Retardant Coatings for Building Materials for more information.