

Passive Fire Protection Options for Structural Steel



Wet mix Spray-applied Fire Resistive Material (SFRM) has been used in structural steel fire protection for decades. It is a low cost option and is generally used for internal environments as it is susceptible to damage by water ingress.



Intumescent is the newest fire protection methodology to come onto the market. Unlike boards and vermiculite, intumescent is a reactive material which expands to insulate structural steel in a fire event. Every intumescent has different material properties and therefore have different required thicknesses and expansion behaviour.



Fire-rated boards can be framed around steel or timber structures in order to fire protect structural members. The composition of boards will differ between manufactures however their general composition is made up of processed gypsum.

	Fire Sprays	Intumescent Coatings	Fire Rated Boards
Cost of Application	Low	High	Medium
Final Finish	Good	Best	Better
Weather Resistant	Achievable	Achievable	Achievable
Ease of Application	Specialised (wet trade)	Specialised (wet trade)	Simplest

