FRAMING FACTSHEET #3

SUPERIOR FIRE PERFORMANCE

A timber framed home gives you more security

The structural integrity of steel framing is compromised at temperatures above 350-400° C, at which point distortion of the framing will accelerate and can result in sudden structural failure of load bearing walls and trusses.

Because house fires typically reach temperatures of over 1000° C, it is likely that structural failure of steel framing will occur quickly whereas timber framing will maintain its structural integrity for longer due to the "charring effect".

In a typical house fire, timber chars from the outside and maintains its structural strength long after steel has buckled in the heat.

It is likely that the impact of a small fire in a steel framed house will be potentially more damaging and costly to repair than if the house was built with timber framing.

That's because once steel framing has been distorted by heat, it cannot be straightened which means that affected wall frames and roof trusses will have to be replaced with considerable cost and effort.

In a timber framed home, a small amount of char on the timber would in most instances not result in the loss of structural integrity so the timber can remain in place with only superficial repairs to finishes being required. If a fire has been so severe as to require the replacement of framing this can be more easily be achieved in a timber framed house.

Structural integrity under fire

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WWW.FRAMINGFACTS.CO.NZ

Laserframe®