

DESIGN CONSIDERATION OF STEEL ELEMENTS AGAINST DAMAGE BY FIRE

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ABSTRACT

Steel is a type of material that performs badly in fire. At 550°C the yield has fallen to approximately 0.5 of its value at normal temperatures; that is, it has reached its working stress and failure occurs under working loads.

This report is given a brief ideal on how to design the steel element against damage by fire. In this report, it covered three sub topics; there are Calculation Of Temperature, Design Of Non-composite steelwork and methods Of Protection.

Each of the sub topics present the methods and theory that had been used in designing the steel elements against damage by fire.