

CPD **LIVE**

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This CPD seminar entitles you to 1 formal CPD point. Please be aware you are required to manage your own CPD records. We will provide you with your participation certificate and CPD evaluation based on our attendance records post event and your completion of the below questionnaire.

The below answer sheet is for your own self-assessment.

Please keep your completed questionnaires and answers on file for your record.

These do not need to be sent to the AIA or to CPD Live. CPD-Live will send you a Refuel certificate.

HOW TO PROTECT STEEL STRUCTURES FROM FIRE

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1) What are the three elements of the fire triangle?

Oxygen, heat, and fuel. If any one element is removed, the fire will be extinguished.

2) What is Passive Fire Protection?

Passive fire protection refers to methods that aim to contain fire. Examples include fire-resisting doors; fire shutters; and compartment walls and floors.

3) What is Active Fire Protection?

Active fire protection refers to methods that aim to stop fire. Examples include fire hoses, water spray, fire extinguishers, sprinklers, firewater monitors, and steam rings around flanges.

4) Why do we protect steel structures from fire?

Steel softens at temperatures of 1,000 degrees C and begins to lose its design margin of safety at temperatures of around 550 degrees C.

5) What are the three common types of protection systems for structural steel?

The three key passive fire protection systems are spray applied vermiculite sprays, board encasement systems, and intumescent coatings.

6) Why is knowing the section factor, size, and exposure important for structural steel protection specs?

Section Factor is needed to calculate the correct material thickness required to achieve the given FRL; size is important because larger steel members require less protection; and exposure is used to calculate section factor.