FIRE PRECAUTIONS DURING CONSTRUCTION

Fire protection during construction is a very real concern for the Building and Construction Industry. Every year there are fires on construction sites affecting both internal and external elements of construction as well as plant on site.

The Building Code of Australia (BCA) and the National Construction Code (NCC) 2016 (Amendment 1), are designed to raise awareness and ensure that building contractors construct buildings that are safe for the occupants but also for themselves during the construction phase.

Sections E1.9 and **E1.10** of the latest Amendment cover the provision of fire hoses and portable fire extinguishers in buildings under construction. There are two main factors to take into account when making an allowance for the requirement of Fire Hose Reels (FHRs) and portable extinguishers during the construction phase. These are outlined below, but in all cases you need to remember that in the event of a fire, evacuation of your employees is a priority.

PERFORMANCE REQUIREMENT

Suitable means of firefighting must be installed to the degree necessary in a building under construction, to allow initial fire attack by construction workers and for the fire brigade to undertake an attack on the fire appropriate to:

1. The fire hazard.
2. The height the building has reached during construction.

FIRE PRECAUTIONS DURING CONSTRUCTION (DEEMED-TO-SATISFY)

In a building under construction, no less than one fire extinguisher to suit Class A, B and C fires and electrical fires must be provided at all times on each storey adjacent to each required exit or temporary stairway or exit. After the building has reached an effective height of 12 metres:

1. The required fire hydrants and FHRs must be operational in every storey that is covered by the roof or the floor structure above, except the two uppermost storeys.
2. Any required booster pumps and connections must be installed and be functional.

ACHIEVING DEREGULATION AND BETTER FIRE SAFETY OUTCOMES AT THE SAME TIME

Reducing regulatory burden, at the same time as achieving better fire safety outcomes, sounds like an impossible task. For a number of years, concern has been expressed about the potential dangers associated with FHRs in Class 2, 3 and 4 parts of buildings. It is highly unlikely that an occupant who uses the FHR in the event of a fire will be trained in its safe use. Also, water as an extinguishing medium can be a very dangerous mix with electrical, fat, and oil fires that typically occur in residential occupancies, particularly when combined with the potential for the fire hose to prop open doors that form part of the building's fire separating construction.

Following consideration of these concerns and the commissioning of an assessment of the relative risks associated with FHRs and portable fire extinguishers used in residential occupancies, the requirement to provide FHRs in Class 2, 3 and 4 parts of buildings has been removed. In their place, additional installation requirements for portable fire extinguishers, including a requirement to cover Class A fire risks, has been introduced. For further information see *NCC 2016 Amendment 1, Section E – Services and Equipment*.