

Importance of pre-planning a building and its impact on fire-fighter safety

[Engineering](#)



Preplanning a building helps to prevent the spread of fire; it helps fire fighting officers to have the precise framework to operate within, hence aiding the firefighter to develop an incident action plan which would consequently ensure and maximize firefighter safety (Brannigan & Corbett, 2008). Preplanning a building enables fire fighting officers to have easy access to the building and safely perform fire fighting operation in the event of a fire outbreak. It helps to guarantee that firefighters would have the upper hand during a firefight.

Preplanning a building would help the fire protection engineer to effectively coordinate the different types of fire protection systems in the building such as the coordination of fire separations with the architectural designs, the coordination of the smoke control systems with the Heating, Ventilation and air-conditioning systems (HVAC) system, coordination of the fire alarm and the inlet/outlet systems with the security of the building, coordination of the tamper switches and sprinkler system water flow with the fire alarm system and the coordination of penetrations of the fire-rated assemblies with the ductworks, piping and wiring penetrations. These series of coordination ensures the safety of life and property and maximum protection of the building in the event of a fire outbreak.

Planning a building for the prevention of a fire outbreak assists in providing the fire fighting officer with adequate information about the building structure and allows the fire fighting officers to efficiently utilize their resources. Information such as those on the exits, floor layouts and the construction, which were obtained as a result of preplanning the building will

ensure firefighter safety and would help in performing search and rescue more conveniently and efficiently.