DESIGN AND FIRE PRINCIPLES IN AIRPORTS
with particular reference to Changi Airport Terminal 2

by

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ABSTRACT

Airports trends toward monumental design and uninterrupted expanse of spaces to facilitate passenger flows and the accommodation of increasing numbers of people have contributed to the need for good fire protection measures as fire and smoke spread quickly in such large spaces. Fire containment is difficult as spaces must remain uninterrupted for efficient passenger flow. Evacuation and communication is impeded due to the high occupancy load and unfamiliarity of users to the building. Design of airports for clarity and user orientation is crucial as a large number of users of air terminals are unfamiliar with the building.

The research objective of this paper is to find the impact of fire considerations in airport design, by analyzing both airport design principles with fire safety principles. Airport typologies and planning considerations are be studied and analyzed in relation to issues of design and fire. A comprehensive case study of Changi Airport Terminal 2 will delve into its design and fire aspects as well as its linear and pier airport planning typography.

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