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 typology.

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emergent technologies and implications on architectural practice.

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Abstract

The information revolution is running its course: the world is experiencing the  
convergence of microelectronics, computing and telecommunication technologies to  
form powerful information systems. And these information systems are changing the  
way our society and economy operates. How are architects affected by these  
changes? This study attempts to understand the salient points of the information  
revolution. The practice of architecture has changed since the industrial revolution. The  
architect as a professional performs his work in a different way compared to the time  
when the architect was a master builder. What are the new issues facing the  
professional architect? This study traces the development of the architect as a  
professional through the 20th century to understand the climate of practice and with that  
surveys and brings to light some of the new processes that have emerged due to the  
information revolution. Implications on how the new technologies are affecting the  
practice and the profession are discussed.

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