

Chapter 7

Conclusion

The present study employed egress modelling tools to investigate the effectiveness of different evacuation strategies for high-rise buildings. Two evacuation strategies resulted as the most efficient, i.e. the sole use of Occupant Evacuation Elevators and the strategy employing a combined use of vertical (stairs and elevators) and horizontal egress components (transfer floors and sky-bridges). The effectiveness of the strategies employing a combined use of elevators and stairs is dependent on the information provided to the evacuees. In fact, if no appropriate information is provided to the occupants, a significant percentage of evacuees may re-direct their movement to stairs after a maximum time waiting for elevators. The study highlighted the need for further studies on the behaviours of the occupants in the case of a combined use of egress components in relation to different building configurations and egress component layouts.