

# 視障者避難逃生速度之研究

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## 摘要

According to statistics by National Fire Agency in 2009 , 235 people had been harmed and loss NT.147 million in the case of construction fire. The damage of construction fire is harmful for the life of people and properties; therefore, how to preserve the lives and properties safe has become an important issue to the citizens. In recent years, the researches on the architectural disaster prevention have been increasing along with achievement on the fire prevention and emergency escape; however, most of the researches are focusing on elderly caring problems and medical treatment problems, and the study on the refuge weakling and care on them are far less. What is “refuge weakling” ? Besides elders, children and pregnant ladies; the disabled, the handicapped, visually impaired, hearing impaired, and intelligence handicapped are also included. According to the statistics by Minister of Interior in 2008, the population of physically and mentally handicapped has reached to 1,040,585, in which visually impaired population are 55,569. The percentage of the physically and mentally handicapped population is 5.14%. According to the statistics, visually impaired population has been increasing year by year. The visual sense is an essential factor to influence emergency escape in the fire, so the more attention to the demand of emergency escape from the visually impaired need to be made.

In recent years, the studies focus on mostly visually impaired on space consciousness, guiding facilities and accessible environment, but there is none on emergency escape. During the fire, the key element is the visibility, but there will be in a very much different situation for visually impaired from other refugee weaklings. The visually impaired can only depend on hearing and touching senses while they are visually handicap during emergency escape process, so the fire prevention program and refuge policy should be studied on the demand of special

characteristics of visually impaired people to create a perfect concept of refuge space design and counter policy.

In conclusion, the research took the facilities and user of domestic visually impaired organization as subjects. The research firstly investigated and tried to understand the emergency escape space and shelter facility of the building. The characteristics of the visually impaired in emergency escape were also studied. The research also explored the correlation between shelter facility of building and refuge characteristics of the visually impaired. It is hoped the results of the prevention calculation analysis could provide the researches on refuge of the visually impaired with basic data and improving refuge designs in future.

關鍵字：visually impaired, refuge weakling, emergency escape, escape speed