

ABSTRACT

One of the mayor accident that happen on building is catching on fire. Therefore, one of the essential building security system that must be taken into account is emergency exit . the higher level of occupants makes the need for security system growth, particularly the provision of emergency rescue facility. The example of high level occupancy is commercial building such as office building. PT Pertamina (Persero) Surabaya is the example of commercial building.

The goal of the research is to analyse capacity, components and emergency exit equipment, the people speed movement and the duration for escaping from burning building. The research also creates macromedia emergency exit visualization.

The research uses observational research method. The object of the study is the emergency exit means. The research variables are the capacity, component the emergency exit means, the speed of individual and the escape duration. The research analysis is to compare amergency exit PT Pertamina (Persero) surabaya with Standar Nasional Indonesia (SNI).

The result of the research shows that the emergency exit including the occupant maximum capacity, the exit width. The exit number and the number of people that is accomodated in rescue equipment meets the requirement the capacity of 1 up to 3 floors are less than 204 people, on 4 until 12 are less than 67 people. There are 2 exit emergency with more than 52,5 width. All exit emergency can carry about 503 people. Some items such as corridors and stairwell are not qualified. That is, smoke control system, hole for fireman, rescue path, the light for direction sign and helipad are not available. The kalkulation of people speed is more than 1,39 m/s, escaping time more than 59 s. the visualization of emergency exit design is formed in two dimensions, then it is implemented in power point show and flash.

It's recommended for the facility emergency exit design to consider the standard requirements, in order make facility work properly.

Keyword: Fire, building and emergency exit means.