

Room evacuation through two contiguous exits

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Resumen

Current regulations demand that at least two exits should be available for a safe evacuation during a panic situation. Although the "faster is slower" effect is expected to take place near the exits, the evacuation time will improve because of the additional exits. However, rooms having contiguous doors not always reduce the leaving time as expected. We investigated the relation between the doors separation and the evacuation performance. We found that there exists a separation distance range that does not really improve the evacuation time, or it can even worsen the process performance. To our knowledge, no attention has been given to this issue in the literature. This work reports how the pedestrians dynamics differ when the separation distance between two exit doors changes and how this affects the overall performance.

Palabras Claves: UTN; FRD; Panic evacuation, Social force model, Clogging delay