

# Is one wide door better than many small ones?

## Configuration of Different Scenarios

### 1. Construct Room 1

- **Dimensions:** 10m x 10m

### 2. Construct a Second Room

- **Details:** Annexed to the first room to prevent agents from “falling into an abyss” after leaving Room 1.

### 3. Create Evenly Distributed Doors Between the Rooms

- **Door Configurations:**
  - 1 door measuring 4.8m
  - 2 doors measuring 2.4m each
  - 4 doors measuring 1.2m each
  - 8 doors measuring 0.6m each

### 4. Fill Holding Area

- **Details:** Maximize the number of agents in the holding area (5m x 10m starting from left of Room 1).

## Analysis

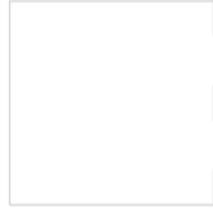
### 1. Evacuation Time

- **Objective:** Record the time needed for the last agent to leave the room during evacuation.
- Plot the evacuation time versus scenario (A, B, C, D), see Figure.

**A**



**B**



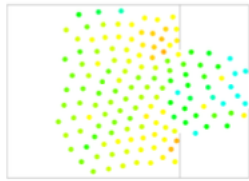
**C**



**D**



**A**



**B**



**C**



**D**

