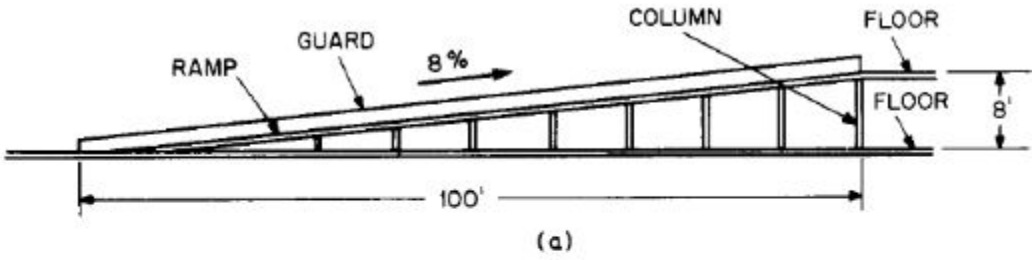
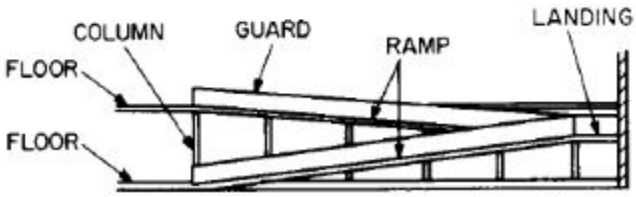


(a)



Stairs: Stairs take up less space than ramps so steeper slopes can be used. The maximum stair slope for comfort is estimated to be 1 on 2 (27°), although this angle is often surpassed for practical purposes. Exterior stairs normally have a slope of 20° to 30°, while interior stairs have a slope of 30° to 35°.

Emergency egress stairway: Interior escape stairways in certain styles of buildings must be sealed with fire-resistant walls to prevent the transmission of smoke and fires. Wall construction and ratings must adhere to municipal code standards. Wall openings should be covered by permitted, self-closing fire doors. Stairs in buildings that are required by code to be of fire-resistant construction should be constructed entirely of noncombustible materials. Except for another flight of stairs, open space under stairs to be used as a means of egress should not be used for any reason, including closets.

Planning for escalators: The location of moving stairs should be selected only after a careful study of potential traffic flow within the planned project. They should be installed where most attractive to traffic and where convenient for passengers. The facility should be designed and signed in a manner that makes it apparent where the visitor will find the escalator. Since escalators are devices that will fail on occasion, the designer must provide alternative transportation (usually adjacent stairs) for times when the escalator is unavailable for passenger use. Wide areas should be provided at both the loading and unloading areas. When pedestrian traffic is limited below the escalator's capability in the direction of travel, careful attention should be given to the probability of a catastrophe arising from a confined escape from an escalator. Similarly, landing area preparation should take into account all queuing space and what happens when an escalator is delayed for whatever reason as foot traffic proceeds.

5. CONCLUSIONS & RECOMMENDATIONS

Poor circulation has been described as a unique architectural challenge of Boat Terminals; to address this problem, adequate vehicular and pedestrian flow would be provided outside and within the terminal, as the terminal complex incorporates a variety of both ground and water operations. Congestion of boat ports all too frequently leads to division in these terminals. There

is no unison or flow of circulation and each field of circulation is treated differently. However, by properly designing the environment so that it guides and manages circulation, this issue can be mitigated. The neglect or lack of construction of waterfronts in the Niger Delta and in general is a worthy cause. The use of facilities such as boat terminals is thought to aid in the popularity and patronage of this form of public transportation.

It is proposed that sufficient financial resources be allocated to the building of boat terminals in order to build the best-planned and most efficient boat terminals. Regulatory policies should also be in order to direct the running of these Boat Terminals.

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Biography

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