

Sajjad's Stair Alt. Program

SUGGESTED TIME: 1 HOUR

In order to meet new accessibility standards and increased occupant loads, schematic plans are being developed for a new exit located within an existing stairwell in a two-story Administration Building. The design for the other building exits -- a second stairway and the building's main entrance -- has been completed.

1. Design the stairway to serve as a means of egress from all three building levels leading into the stairwell and through the exit discharge door to the sidewalk at grade (a public way).
 - The stairway must provide a continuous path from Second floor to Ground floor exit that includes a landing at the Intermediate level.
2. The total occupant load and number of exits for each level of the building are as follows:

Building Level	Total Occupant Load	Number of Exits
Ground Floor Level	5	1
Storage Room	440	2
Second Floor	320	2

3. The stairs will be constructed from precast concrete components with the following dimensions:
 - Landings: 9 inches deep between the landing soffit and the surface.
 - Stair flights/stringers: 12 inches deep between the stair nosings and the stringer soffit measured along a line perpendicular to the soffit.

CODE

Use the written stair code provided with the NCARB problem.