

TRAINING BULLETIN NUMBER 54

HAZARDOUS/ILLEGAL MEZZANINES

INTRODUCTION

Due to recent fire incidents, this Department has become aware of hazardous and/or illegal mezzanines which, under firefighting conditions, have presented serious conditions in which members could have been seriously injured or possibly killed. Fire Department members shall be knowledgeable in the requirements for a legal mezzanine and how to abate hazardous conditions.

FIREFIGHTING CONCERNS

1. Has the mezzanine been legally constructed with a permit from the Department of Building and Safety?
2. Are there sprinklers above and beneath the mezzanine? (A fully sprinklered building must have sprinklers installed above and beneath any mezzanine.)
3. Are there overloaded storage conditions that may lead to premature mezzanine collapse under fire conditions? (Overloaded mezzanine conditions should be treated as immediate life hazards.)

DEFINITION

A mezzanine or mezzanine floor is an intermediate floor placed in any story or room. When the total area of any such mezzanine floor exceeds 33-1/3 percent of the total floor area in that room, it shall be considered as constituting an additional "story" in the building. The clear height above or below a mezzanine floor construction shall be not less than seven feet.

REQUIREMENTS

Rooms may contain mezzanine floors when constructed in accordance with the following:

1. The construction of a mezzanine shall be consistent with the requirements for the type of building construction in which the mezzanine is located, but the fire-resistive time period need not exceed one hour for unenclosed mezzanines constructed in accordance with Item Number 4 below. The clear height above and below the mezzanine floor construction shall be not less than seven feet.
2. There shall be not more than two levels of mezzanines in a room. However, there is no limitation on the number of mezzanines within a room.
3. The aggregate area of mezzanines within a room shall not exceed one-third the area of the room in which they are located.
4. All portions of a mezzanine shall be open to the room in which it is located. The side of the mezzanine which is open to the room shall be unobstructed except for columns, posts and protective walls, or railings not more than 42 inches in height.

EXCEPTIONS:

- a) Partitioning may be installed, provided the aggregate floor area of the enclosed space does not exceed ten percent of the area of the mezzanine or have an occupant load exceeding ten, whichever is greater.
- b) Mezzanines having two or more exits need not open into the story in which they are located, provided at least one of the exits gives direct access to a protected exit corridor, an exit court, enclosed exit stairway, exterior exit, exterior exit balcony, or exit passageway.
- c) In industrial facilities, mezzanines used for control equipment may be glazed on all sides. Control equipment is that equipment at which an operator is present to control the operation of machinery located in the room in which the mezzanine is located.
- d) Two exits shall be provided from mezzanines having an occupant load of more than ten or when the area of the mezzanine exceeds 2,000 square feet, whichever is the more restrictive.

e) The occupant load of the mezzanine shall be added to the occupant load of the story or room in which it is located.

HAZARD CORRECTION PROCEDURES

1. If a violation of a code or ordinance enforced by an agency other than the Fire Department constitutes a fire hazard, a notice shall be issued citing 57.20.16 of the Fire Code for the abatement of the hazard.
2. For sprinklered buildings without sprinklers extending beneath the mezzanine, a notice shall be issued directing the removal of all combustible materials beneath the mezzanine and notification shall be made to the Fire Prevention Bureau as per No. 1 above.
3. For mezzanines which do not appear to be adequate to support the weight of storage, a Fire/Life Safety Violation Notice requiring "forthwith" compliance shall be issued for removal of storage to a weight which is a safe structural load; and notification shall be made to the Fire Prevention Bureau.
4. Any questions concerning mezzanines may be telephoned to the North Industrial Unit of the Fire Prevention Bureau.