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CHAPTER 4

BUILDING DESIGN

400	GENERAL
400-1	BUILDING DESIGN
	Building design shall provide for ease of circulation and housekeeping, visual and auditory privacy, accident protection, accessory services and economy in maintenance and use of space.
401	SPACE PLANNING
401-1	NON-RESIDENTIAL SPACES
	Management and maintenance space shall be provided commensurate with the number of living units served. Also, space shall be provided for necessary staff where social services are provided.
401-2	BATHS
401-2.1	Every living unit shall be provided with a water closet, lavatory and a bathtub or shower.
401-2.2	Shower compartment floors and walls shall be finished

with a wear resistant and non-absorbent surface to a height of not less than 6 ft. above the floor.

402 ACCESS AND CIRCULATION

402-1 DOORS AND OPENINGS

402-1.1 Living Unit Doors

Living unit entrance doors shall be side-hinged doors not less than 3 ft. in width and 6 ft. 8 in. in height.

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402-1.1 Living Unit Doors - Continued

402-1.2 Locking devices at doors and windows shall be as follows:

- a. Each exterior doorway and each doorway leading to garage areas, common hallways, terraces, balconies, or other areas affording easy access to the premises shall be protected by a door which, if not a sliding door, shall be equipped with a deadlock using either an interlocking vertical bolt and striker, a minimum of 1.2 in. throw dead bolt or a minimum 1/2 in. throw self-locking dead latch. Locks shall not require the use of a key for operation from the inside.
- b. All sliding doors, first floor and basement windows and windows opening onto stairways, fire escapes, porches, terraces, balconies or other areas affording easy access to the premises shall be equipped with a locking device. A sliding door used as a main or service entrance shall be equipped with a keyed locking device.

402-2 HANDRAILS AND RAILINGS

Required railings shall have a minimum height of 36 in. and balusters shall be designed to prevent the passage of a spherical object having a diameter of 6 in.

402-3 ELEVATORS

402-3.1 Service Required

- a. Elevators shall be provided in buildings of:
 - (1) Five or more stories;
 - (2) Four stories where deemed necessary by the HUD Field Office to satisfy market

considerations;

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402.3-2 Service or Combination Elevators

In elevator type buildings, at least one of the elevators shall have a minimum capacity of 2500 lbs and minimum size as required for service elevators under 614-1.

403 VENTILATION

403-1 CRAWL AND ATTIC SPACE

403-1.1 Crawl Space

a. The space between the bottom of the floor joists and the earth under any building (except such space as is occupied by a basement or cellar) shall be provided with a sufficient number of ventilating openings through foundation walls or exterior walls to ensure ample ventilation. Such openings shall be covered with a corrosion-resistant wire mesh with a mesh size not greater than 1/2 in. nor less than 1/4 in. in any dimension. The minimum net area of ventilating openings shall not be less than 1 sq. ft. for each 150 sq. ft. of crawl space area.

403-1.1 Crawl Space - Continued

One ventilating opening shall be within 3 ft. of each corner of each building where such openings are required.

Exceptions:

- (1) Ventilation openings may be vented to the interior of buildings where warranted by climatic conditions; and
- (2) The total area of ventilation openings may be reduced to 1/1500 of the under floor area where the ground surface is treated with an acceptable vapor retarder material, and one such ventilation opening is within 3 ft. of each corner of said building. The vents may have operable louvers.

- b. The under floor grade shall be cleaned of all vegetation and organic material.

403-1.2

Attic Space

- a. Cross ventilation shall be provided for each separate space. Ventilation openings shall be protected against the entrance of rain and snow.
- b. The ratio of the total net free ventilation area to the area of ceiling shall be not less than 1/150, except that the ratio may be 1/300 if:
 - (1) A vapor retarder having a transmission rate not exceeding one perm is installed on the warm side of the ceiling;
 - (2) Between 25 and 50 percent of the required ventilating area is provided by vents located in the eaves or cornices with the balance of the required ventilation provided by ventilators located at least 3'-0" above the vents in the eaves or cornices; or
 - (3) The attic space is accessible and suitable for future habitable rooms or walled-off storage spaces have at least 50% of the required ventilating area located in the upper part of the ventilated spaces as near the high point of the roof as practicable and above the probable level of any future ceiling.