

5.2 ELEVATION AND FLOODPROOFING REQUIREMENTS

A. Residential Structures

- i. In Zone A, all new construction and substantial improvements shall have the lowest floor, including basement, elevated to or above one (1) foot above the base flood elevation.

B. Nonresidential Structures

- i. In Zone A, all new construction and substantial improvements shall have the lowest floor, including basement, elevated to or above one (1) above the base flood elevation or, together with attendant utility and sanitary facilities, floodproofed so that below one (1) foot above the base flood elevation;
 - a. The structure is watertight with walls substantially impermeable to the passage of water and
 - b. The structure has structural components with the capacity of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.

***A registered professional engineer or architect shall certify that the standards of this subsection are satisfied. A floodproofing certificate shall be provided to the floodplain administrator as set forth in Section 4.*

C. Space Below Lowest Floor

- i. Fully enclosed areas below the lowest floor (excluding basements) and below the base flood elevation shall be used solely for the parking of vehicles, building access, or limited storage of readily removable items.
- ii. Fully enclosed areas below the lowest floor (excluding basements) and below the base flood elevation shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or meet or exceed the following minimum criteria:
 - a. A minimum of two openings having a net total area of not less than one (1) square inch for every one (1) square foot of enclosed space,
 - b. The bottom of all openings shall not be higher than one (1) foot above grade, and
 - c. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they allow the automatic entry and exit of floodwaters.

D. Appurtenant Structures

- i. Structures to a principal building may have the lowest floor below one foot above base flood elevation provided that the structure complied with the following requirements:
 - a. The structure shall not be used for human habitation.
 - b. The use of the structure must be limited to parking of vehicles or storage of items readily removable in the event of a flood warning.
 - c. The floor area shall not exceed 700 square feet.
 - d. The structure shall have a low damage potential.
 - e. The structure must be adequately anchored to prevent flotation, collapse, or other lateral movement.
 - f. The structure shall be designed to automatically provide for the entry and exit of floodwaters for the purpose for equalizing hydrostatic forces. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or meet or exceed the following minimal criteria:
 1. A minimum of two openings having a net area of not less than one (1) square inch for every one (1) square foot of enclosed space,
 2. The bottom of all openings shall not be higher than one (1) foot above grade, and
 3. Openings may be equipped with the screens, louvers, valves, or other coverings or devices provided that they allow the automatic entry and exit of floodwaters.
 - g. No utilities shall be installed except electrical fixtures in the structure, which must be elevated or floodproofed to one (1) foot above base flood elevation.
 - h. The structure shall be constructed and placed on the building site so as to offer the minimum resistance to the flow of floodwaters.
 - i. If the structure is converted to another use, it must be brought into full compliance with the minimum standards governing such use.