

Division III
FIRE PROTECTION
APPENDIX III-A

FIRE-FLOW REQUIREMENTS FOR BUILDINGS

(See UFC Section 903.3)

SECTION 1 — SCOPE

The procedure determining fire-flow requirements for buildings or portions of buildings hereafter constructed shall be in accordance with Appendix III-A. Appendix III-A does not apply to structures other than buildings.

SECTION 2 — DEFINITIONS

For the purpose of Appendix III-A, certain terms are defined as follows:

FIRE AREA is the floor area, in square feet, used to determine the required fire flow.

FIRE FLOW is the flow rate of a water supply, measured at 20 psi (137.9 kPa) residual pressure, that is available for firefighting.

SECTION 2 — MODIFICATIONS

2.1 Decreases. Fire-flow requirements may be modified downward by the chief for isolated buildings or a group of buildings in rural areas or small communities where the development of full fire-flow requirements is impractical.

2.2 Increases. Fire flow may be modified upward by the chief where conditions indicate an unusual susceptibility to group fires or conflagrations. An upward modification shall not be more than twice that required for the building under consideration.

SECTION 3 — FIRE AREA

3.1 General. The fire area shall be the total floor area of all floor levels except as modified in Section 4

3.2 Area Separation. Portions of buildings which are separated by one or more four-hour area separation walls constructed in accordance with the Building Code, without openings and provided with a 30-inch (762 mm) parapet, are allowed to be considered as separate fire areas.

3.3 Type I and Type II-F.R. Construction. The fire area of buildings constructed of Type I and Type II-F.R. construction shall be the area of the three largest successive floors.

SECTION 4 — FIRE-FLOW REQUIREMENTS FOR BUILDINGS

4.1 One- and Two-Family Dwellings. The minimum fire flow and flow duration requirements for one- and two-family dwellings having a fire area which does not exceed 3,600 square feet (344.5 m²) shall be 1,000 gallons per minute (3785.4 L/min.). Fire flow and flow duration for dwellings having a fire area in excess of 3,600 square feet (344.5 m²) shall not be less than that specified in Table A-III-A-1.

EXCEPTION: A reduction in required fire flow of 50 percent, as approved, is allowed when the building is provided with an approved automatic sprinkler system.

4.2 Buildings other than One- and Two-Family Dwellings. The minimum fire flow and flow duration for buildings other than one- and two-family dwellings shall be as specified in Table A-III-A-1.

EXCEPTION: A reduction in required fire flow of up to 75 percent, as approved, is allowed when the building is provided with an approved automatic sprinkler system. The resulting fire flow shall not be less than 1,500 gallons per minute (5677.5 L/min.).