TABLE 20.05-A [1,2,3]

FIRE ALARM SYSTEMS

Occupancy Group Classification	Square Feet Of Floor Area	Occupant Load
Group A-1, 3 and 4	4500	300 or more
Group A-2	4500	100 or more
Group A-5	1000	300 or more
Group B	6000	See IFC section 907.2.2
Group E	All- See 20.05.020	All - See 20.02.020
Group F-1	6000	See IFC section 907.2.4
Group F-2	9000	See IFC section 907.2.4
Group H – 1, 2, 3, 4 and 5	All- See IFC section 907.2.5	N/A
Group I – 1, 2, 3, 4 and 5	All- See IFC section 907.2.6	N/A
Group LC	See state amendments	See state amendments
Group M	6000	See IFC section 907.2.7
Group R-1 and 2	All	N/A
Group R-3 and 4	N/A - See section 907.2.10	N/A
Group S-1 and 2	6000	N/A
Group U	N/A	N/A

N/A=Not Applicable/No Requirement

1 = In the event there are conflicting requirements between the Richland Municipal Code and the International Fire Code, the more restrictive standard shall apply.

2 = For the purposes of this table, refer to IFC section 1002 – FLOOR AREA, GROSS - as the proper method of calculating square feet of floor area.

3 = A fire barrier meeting the requirements of IBC section 706 may be provide to divide buildings in excess of the square footage listed in this table.

All occupancies requiring an alarm system (see Table 20.05A) shall have a fire-detection and alarm system consisting of the following:

1. FIRE ALARM CONTROL UNIT. A system component that receives inputs from automatic and manual fire alarm initiating devices and is capable of supplying power to detection devices and transponder(s) of off-premises transmitter(s).

The control unit is capable of providing a transfer of power to the notification appliances and transfer of condition to relays of devices.

2. **FIRE ALARM SIGNAL INITIATING DEVICE. A system component that originates transmission of a change-of-state condition, such as in a smoke detector, manual fire alarm box, or supervisory switch.**
   a) **Automatic smoke detection shall be provided for the protection of all required rated corridors.**
   b) **Heat detectors shall be installed throughout the building.**

   Exception: Where automatic sprinkler protection installed in accordance with International Fire Code is provided and connected to the building fire alarm system, automatic heat detection required by this section shall not be required.
   c) **Manual alarm actuating devices in accordance with International Fire Code Chapter 9.**

   Exception: Manual fire alarm boxes are not required where the building is equipped throughout with an automatic sprinkler system and the alarm notification appliances will activate upon sprinkler water flow.

3. **FIRE ALARM NOTIFICATION DEVICE. System components that alert occupants and fire department response personnel of a fire condition.**
   a.) **Audible and visible notification appliances shall be installed throughout the building. Device locations shall comply with NFPA 72 and manufacturer's product listing requirements.**
   b.) **Fire alarm control unit shall transmit an alarm to a constantly attended off-site UL certified or FM approved monitoring station.**

4. **FIRE ALARM ANNUNCIATOR. A unit containing one or more indicator lamps, alphanumeric displays, or other equivalent means in which each indication provides status information about a circuit, condition or location. A fire alarm annunciator shall be provided at the primary entrance to the building**

5. **FIRE DETECTION AND ALARM SYSTEM DESIGN. Approved automatic fire-detection and alarm systems shall be installed in accordance with the provisions of this code and the National Fire Protection Association National Fire Alarm Code (NFPA 72). Devices, combinations of devices, appliances and equipment shall be approved for the intended application.**