

ANSI/IEEE C2, *National Electrical Safety Code*, 2002.

ANSI/UL 217, *Standard for Safety Single and Multiple Station Smoke Alarms*, 1997.

ANSI/UL 268, *Standard for Safety Smoke Detectors for Fire Protective Signaling Systems*, 1996.

ANSI/UL 827, *Standard for Safety Central-Station for Alarm Services*, 1996.

ANSI/UL 985, *Standard for Safety Household Fire Warning Systems Units*, 2000.

ANSI/UL 1730, *Standard for Safety for Smoke Detector Monitors and Accessories for Individual Living Units of Multifamily Residences and Hotel/Motel Rooms*, 1998.

ANSI/UL 1971, *Standard for Safety Signaling Devices for Hearing Impaired*, 1995.

2.3.2 EIA Publication.

Electronic Industries Alliance, 2500 Wilson Boulevard, Arlington, VA 22201-3834.

EIA Tr 41.3, *Telephones*.

2.3.3 IEC Publications.

International Electrotechnical Commission, 3 rue de Varembé, P.O. Box 131, 1211 Geneva 20, Switzerland. IEC documents are available through ANSI.

IEC 60849, *Sound systems for emergency purposes*, second edition, 1998.

IEC 60268, Part 16, *The objective rating of speech intelligibility by speech transmission index*, second edition, 1998.

2.3.4 ISO Publication.

International Organization for Standardization, 1 rue de Varembé, Case Postale 56 CH-1211 Geneva 20, Switzerland.

ISO 7731, *Danger signals for work places — Auditory danger signals*, 1986.

Chapter 3 Definitions

3.1 General.

The definitions contained in this chapter shall apply to the terms used in this Code. Where terms are not included, common usage of the terms shall apply.

3.2 NFPA Official Definitions.

3.2.1* Approved. Acceptable to the authority having jurisdiction.

3.2.2* Authority Having Jurisdiction (AHJ). The organization, office, or individual

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responsible for approving equipment, materials, an installation, or a procedure.

3.2.3* Code. A standard that is an extensive compilation of provisions covering broad subject matter or that is suitable for adoption into law independently of other codes and standards.

3.2.4 Labeled. Equipment or materials to which has been attached a label, symbol, or other identifying mark of an organization that is acceptable to the authority having jurisdiction and concerned with product evaluation, that maintains periodic inspection of production of labeled equipment or materials, and by whose labeling the manufacturer indicates compliance with appropriate standards or performance in a specified manner.

3.2.5* Listed. Equipment, materials, or services included in a list published by an organization that is acceptable to the authority having jurisdiction and concerned with evaluation of products or services, that maintains periodic inspection of production of listed equipment or materials or periodic evaluation of services, and whose listing states that either the equipment, material, or service meets appropriate designated standards or has been tested and found suitable for a specified purpose.

3.2.6 Shall. Indicates a mandatory requirement.

3.2.7 Should. Indicates a recommendation or that which is advised but not required.

3.3 General Definitions.

3.3.1 Acknowledge. To confirm that a message or signal has been received, such as by the pressing of a button or the selection of a software command. (SIG-SSS)

3.3.2 Active Multiplex System. A multiplexing system in which signaling devices such as transponders are employed to transmit status signals of each initiating device or initiating device circuit within a prescribed time interval so that the lack of receipt of such a signal can be interpreted as a trouble signal. (SIG-SSS)

3.3.3 Addressable Device. A fire alarm system component with discrete identification that can have its status individually identified or that is used to individually control other functions. (SIG-IDS)

3.3.4 Adverse Condition. Any condition occurring in a communications or transmission channel that interferes with the proper transmission or interpretation, or both, of status change signals at the supervising station. (*See also 3.3.171.7, Trouble Signal.*) (SIG-SSS)

3.3.5 Alarm. A warning of fire danger. (SIG-FUN)

3.3.5.1 Nuisance Alarm. Any alarm caused by mechanical failure, malfunction, improper installation, or lack of proper maintenance, or any alarm activated by a cause that cannot be determined. (SIG-FUN)

3.3.6 Alarm Service. The service required following the receipt of an alarm signal. (SIG-SSS)

3.3.7 Alarm Signal. See 3.3.171, Signal.

3.3.8 Alarm Verification Feature. A feature of automatic fire detection and alarm systems to reduce unwanted alarms wherein smoke detectors report alarm conditions for a minimum period of time, or confirm alarm conditions within a given time period after being reset, in order to be accepted as a valid alarm initiation signal. (SIG-PRO)

3.3.9 Alert Tone. An attention-getting signal to alert occupants of the pending transmission of a voice message. (SIG-PRO)

3.3.10 Analog Initiating Device (Sensor). See 3.3.88, Initiating Device.

3.3.11 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. (SIG-FUN)

3.3.12 Apartment Building. A building containing three or more dwelling units with independent cooking and bathroom facilities. [*101:3.3.25.1*](SIG-HOU)

3.3.13 Audible Notification Appliance. See 3.3.113, Notification Appliance.

3.3.14 Automatic Extinguishing System Supervisory Device. See 3.3.88, Initiating Device.

3.3.15 Automatic Fire Detector. See 3.3.43, Detector.

3.3.16 Auxiliary Box. See 3.3.63, Fire Alarm Box.

3.3.17 Auxiliary Fire Alarm System. See 3.3.67, Fire Alarm System.

3.3.18 Average Ambient Sound Level. The root mean square, A-weighted, sound pressure level measured over the period of time that any person is present, or a 24-hour period, whichever time period is the lesser. (SIG-NAS)

3.3.19 Beam Construction. See 3.3.24, Ceiling Surfaces.

3.3.20 Carrier. High-frequency energy that can be modulated by voice or signaling impulses. (SIG-SSS)

3.3.21 Carrier System. A means of conveying a number of channels over a single path by modulating each channel on a different carrier frequency and demodulating at the receiving point to restore the signals to their original form. (SIG-SSS)

3.3.22 Ceiling. The upper surface of a space, regardless of height. Areas with a suspended ceiling have two ceilings, one visible from the floor and one above the suspended ceiling. (SIG-IDS)

3.3.22.1 Level Ceilings. Ceilings that are level or have a slope of less than or equal to 1 in 8. (SIG-IDS)

3.3.22.2 Sloping Ceiling. A ceiling that has a slope of more than 1 in 8. (SIG-IDS)

3.3.22.3* Sloping Peaked-Type Ceiling. A ceiling in which the ceiling slopes in two directions

from the highest point. Curved or domed ceilings can be considered peaked with the slope figured as the slope of the chord from highest to lowest point. (SIG-IDS)

3.3.22.4* *Sloping Shed-Type Ceiling.* A ceiling in which the high point is at one side with the slope extending toward the opposite side. (SIG-IDS)

3.3.23 *Ceiling Height.* The height from the continuous floor of a room to the continuous ceiling of a room or space. (SIG-IDS)

3.3.24 *Ceiling Surfaces.*

3.3.24.1 *Beam Construction.* Ceilings that have solid structural or solid nonstructural members projecting down from the ceiling surface more than 100 mm (4 in.) and spaced more than 0.9 m (3 ft), center to center. (SIG-IDS)

3.3.24.2 *Girder.* A support for beams or joists that runs at right angles to the beams or joists. If the top of the girder is within 100 mm (4 in.) of the ceiling, the girder is a factor in determining the number of detectors and is to be considered a beam. If the top of the girder is more than 100 mm (4 in.) from the ceiling, the girder is not a factor in detector location. (SIG-IDS)

3.3.24.3* *Smooth Ceiling.* A ceiling surface uninterrupted by continuous projections, such as solid joists, beams, or ducts, extending more than 100 mm (4 in.) below the ceiling surface. (SIG-IDS)

3.3.24.4 *Solid Joist Construction.* Ceilings that have solid structural or solid nonstructural members projecting down from the ceiling surface for a distance of more than 100 mm (4 in.) and spaced at intervals of 0.9 m (3 ft) or less, center to center. (SIG-IDS)

3.3.25 *Central Station.* See 3.3.193, Supervising Station.

3.3.26 *Central Station Fire Alarm System.* See 3.3.67, Fire Alarm System.

3.3.27 *Central Station Service.* The use of a system or a group of systems in which the operations of circuits and devices at a protected property are signaled to, recorded in, and supervised from a listed central station that has competent and experienced operators who, upon receipt of a signal, take such action as required by this Code. Related activities at the protected property, such as equipment installation, inspection, testing, maintenance, and runner service, are the responsibility of the central station or a listed fire alarm service local company. Central station service is controlled and operated by a person, firm, or corporation whose business is the furnishing of such contracted services or whose properties are the protected premises. (SIG-SSS)

3.3.28 *Certification.* A systematic program that uses randomly selected follow-up inspections of the certificated systems installed under the program that allows the listing organization to verify that a fire alarm system complies with all the requirements of this Code. A system installed under such a program is identified by the issuance of a certificate and is designated as a certificated system. (SIG-SSS)

3.3.29* Certification of Personnel. A formal program of related instruction and testing as provided by a recognized organization or the authority having jurisdiction. (SIG-FUN)

3.3.30 Channel. A path for voice or signal transmission that uses modulation of light or alternating current within a frequency band. (SIG-SSS)

3.3.30.1 Communications Channel. A circuit or path connecting a subsidiary station(s) to a supervising station(s) over which signals are carried. (SIG-SSS)

3.3.30.2 Derived Channel. A signaling line circuit that uses the local leg of the public switched network as an active multiplex channel while simultaneously allowing that leg's use for normal telephone communications. (SIG-SSS)

3.3.30.3* Radio Channel. A band of frequencies of a width sufficient to allow its use for radio communications. (SIG-SSS)

3.3.30.4 Transmission Channel. A circuit or path connecting transmitters to supervising stations or subsidiary stations on which signals are carried. (SIG-SSS)

3.3.31 Circuit Interface. A circuit component that interfaces initiating devices or control circuits, or both; notification appliances or circuits, or both; system control outputs; and other signaling line circuits to a signaling line circuit. (SIG-PRO)

3.3.32 Cloud Chamber Smoke Detection. See 3.3.180, Smoke Detection.

3.3.33 Coded. An audible or visible signal that conveys several discrete bits or units of information. Notification signal examples are numbered strokes of an impact-type appliance and numbered flashes of a visible appliance. (SIG-NAS)

3.3.34 Combination Detector. See 3.3.43, Detector.

3.3.35 Combination Fire Alarm and Guard's Tour Box. See 3.3.63, Fire Alarm Box.

3.3.36 Combination System. See 3.3.67, Fire Alarm System.

• **3.3.37 Compatibility Listed.** A specific listing process that applies only to two-wire devices, such as smoke detectors, that are designed to operate with certain control equipment. (SIG-FUN)

3.3.38 Contiguous Property. See 3.3.140, Property.

3.3.39 Control Unit. A system component that monitors inputs and controls outputs through various types of circuits. (SIG-PRO)

3.3.39.1 Fire Alarm Control Unit (Panel). A system component that receives inputs from automatic and manual fire alarm devices and might supply power to detection devices and to a transponder(s) or off-premises transmitter(s). The control unit might also provide transfer of power to the notification appliances and transfer of condition to relays or devices connected to the control unit. The fire alarm control unit can be a local fire alarm control unit or a master

control unit. (SIG-PRO)

3.3.39.2 Intermediate Fire Alarm or Fire Supervisory Control Unit. A control unit used to provide area fire alarm or area fire supervisory service that, where connected to the proprietary fire alarm system, becomes a part of that system. (SIG-PRO)

3.3.39.3 Master Control Unit (Panel). A control unit that serves the protected premises or portion of the protected premises as a local control unit and accepts inputs from other fire alarm control units. (SIG-PRO)

3.3.39.4 Protected Premises (Local) Control Unit (Panel). A control unit that serves the protected premises or a portion of the protected premises and indicates the alarm via notification appliances inside the protected premises. (SIG-PRO)

3.3.40 Day-Care Home. A building or portion of a building in which more than three but not more than 12 clients receive care, maintenance, and supervision, by other than their relative(s) or legal guardians(s), for less than 24 hours per day. [101:3.3.39] (SIG-HOU)

3.3.41 Delinquency Signal. See 3.3.171, Signal.

3.3.42 Derived Channel. See 3.3.30, Channel.

3.3.43 Detector. A device suitable for connection to a circuit that has a sensor that responds to a physical stimulus such as heat or smoke. (SIG-IDS)

3.3.43.1 Air Sampling–Type Detector. A detector that consists of a piping or tubing distribution network that runs from the detector to the area(s) to be protected. An aspiration fan in the detector housing draws air from the protected area back to the detector through air sampling ports, piping, or tubing. At the detector, the air is analyzed for fire products. (SIG-IDS)

3.3.43.2 Automatic Fire Detector. A device designed to detect the presence of a fire signature and to initiate action. For the purpose of this Code, automatic fire detectors are classified as follows: Automatic Fire Extinguishing or Suppression System Operation Detector, Fire–Gas Detector, Heat Detector, Other Fire Detectors, Radiant Energy–Sensing Fire Detector, Smoke Detector. (SIG-IDS)

3.3.43.3 Automatic Fire Extinguishing or Suppression System Operation Detector. A device that automatically detects the operation of a fire extinguishing or suppression system by means appropriate to the system employed. (SIG-IDS)

3.3.43.4 Combination Detector. A device that either responds to more than one of the fire phenomenon or employs more than one operating principle to sense one of these phenomenon. Typical examples are a combination of a heat detector with a smoke detector or a combination rate-of-rise and fixed-temperature heat detector. (SIG-IDS)

3.3.43.5 Electrical Conductivity Heat Detector. A line-type or spot-type sensing element in which resistance varies as a function of temperature. (SIG-IDS)

3.3.43.6 Fire-Gas Detector. A device that detects gases produced by a fire. (SIG-IDS)

3.3.43.7* Fixed-Temperature Detector. A device that responds when its operating element becomes heated to a predetermined level. (SIG-IDS)

3.3.43.8* Flame Detector. A radiant energy-sensing fire detector that detects the radiant energy emitted by a flame. (*Refer to A.5.8.2.*) (SIG-IDS)

3.3.43.9 Heat Detector. A fire detector that detects either abnormally high temperature or rate of temperature rise, or both. (SIG-IDS)

3.3.43.10 Line-Type Detector. A device in which detection is continuous along a path. Typical examples are rate-of-rise pneumatic tubing detectors, projected beam smoke detectors, and heat-sensitive cable. (SIG-IDS)

3.3.43.11 Other Fire Detectors. Devices that detect a phenomenon other than heat, smoke, flame, or gases produced by a fire. (SIG-IDS)

3.3.43.12 Pneumatic Rate-of-Rise Tubing Heat Detector. A line-type detector comprising small-diameter tubing, usually copper, that is installed on the ceiling or high on the walls throughout the protected area. The tubing is terminated in a detector unit containing diaphragms and associated contacts set to actuate at a predetermined pressure. The system is sealed except for calibrated vents that compensate for normal changes in temperature. (SIG-IDS)

3.3.43.13 Projected Beam-Type Detector. A type of photoelectric light obscuration smoke detector wherein the beam spans the protected area. (SIG-IDS)

3.3.43.14 Radiant Energy-Sensing Fire Detector. A device that detects radiant energy, such as ultraviolet, visible, or infrared, that is emitted as a product of combustion reaction and obeys the laws of optics. (SIG-IDS)

3.3.43.15* Rate Compensation Detector. A device that responds when the temperature of the air surrounding the device reaches a predetermined level, regardless of the rate of temperature rise. (SIG-IDS)

3.3.43.16* Rate-of-Rise Detector. A device that responds when the temperature rises at a rate exceeding a predetermined value. (SIG-IDS)

3.3.43.17 Smoke Detector. A device that detects visible or invisible particles of combustion. (SIG-IDS)

3.3.43.18 Spark/Ember Detector. A radiant energy-sensing fire detector that is designed to detect sparks or embers, or both. These devices are normally intended to operate in dark environments and in the infrared part of the spectrum. (SIG-IDS)

3.3.43.19 Spot-Type Detector. A device in which the detecting element is concentrated at a particular location. Typical examples are bimetallic detectors, fusible alloy detectors, certain pneumatic rate-of-rise detectors, certain smoke detectors, and thermoelectric detectors.

(SIG-IDS)

3.3.44 Digital Alarm Communicator Receiver (DACR). A system component that accepts and displays signals from digital alarm communicator transmitters (DACTs) sent over the public switched telephone network. (SIG-SSS)

3.3.45 Digital Alarm Communicator System (DACS). A system in which signals are transmitted from a digital alarm communicator transmitter (DACT) located at the protected premises through the public switched telephone network to a digital alarm communicator receiver (DACR). (SIG-SSS)

3.3.46 Digital Alarm Communicator Transmitter (DACT). A system component at the protected premises to which initiating devices or groups of devices are connected. The DACT seizes the connected telephone line, dials a preselected number to connect to a DACR, and transmits signals indicating a status change of the initiating device. (SIG-SSS)

3.3.47 Digital Alarm Radio Receiver (DARR). A system component composed of two subcomponents: one that receives and decodes radio signals, the other that annunciates the decoded data. These two subcomponents can be coresident at the central station or separated by means of a data transmission channel. (SIG-SSS)

3.3.48 Digital Alarm Radio System (DARS). A system in which signals are transmitted from a digital alarm radio transmitter (DART) located at a protected premises through a radio channel to a digital alarm radio receiver (DARR). (SIG-SSS)

3.3.49 Digital Alarm Radio Transmitter (DART). A system component that is connected to or an integral part of a digital alarm communicator transmitter (DACT) that is used to provide an alternate radio transmission channel. (SIG-SSS)

3.3.50 Display. The visual representation of output data, other than printed copy. (SIG-NAS)

3.3.51 Dormitory. A building or a space in a building in which group sleeping accommodations are provided for more than 16 persons who are not members of the same family in one room or a series of closely associated rooms under joint occupancy and single management, with or without meals, but without individual cooking facilities. [*101*:3.3.46] (SIG-HOU)

3.3.52* Double Doorway. A single opening that has no intervening wall space or door trim separating the two doors. (SIG-IDS)

3.3.53 Dual Control. The use of two primary trunk facilities over separate routes or different methods to control one communications channel. (SIG-SSS)

3.3.54 Dwelling Unit. A single unit, providing complete, independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking, and sanitation. [*101*:3.3.48] (SIG-HOU)

3.3.54.1 Multiple Dwelling Unit. A building containing three or more dwelling units. (SIG-HOU)

3.3.54.2 Single Dwelling Unit. A building consisting solely of one dwelling unit. (SIG-HOU)

3.3.55 Effective Masked Threshold. The minimum sound level at which the tone signal is audible in ambient noise. (SIG-NAS)

3.3.56* Ember. A particle of solid material that emits radiant energy due either to its temperature or the process of combustion on its surface. (*See also 3.3.186, Spark.*) (SIG-IDS)

3.3.57 Emergency Voice/Alarm Communications. Dedicated manual or automatic facilities for originating and distributing voice instructions, as well as alert and evacuation signals pertaining to a fire emergency, to the occupants of a building. (SIG-PRO)

3.3.58* Evacuation. The withdrawal of occupants from a building. (SIG-PRO)

3.3.59 Evacuation Signal. See 3.3.171, Signal.

3.3.60 Evacuation Signaling Zone. See 3.3.214, Zone.

3.3.61 Exit Plan. A plan for the emergency evacuation of the premises. (SIG-FUN)

3.3.62 Field of View. The solid cone that extends out from the detector within which the effective sensitivity of the detector is at least 50 percent of its on-axis, listed, or approved sensitivity. (SIG-IDS)

3.3.63 Fire Alarm Box.

3.3.63.1 Auxiliary Box. A fire alarm box that can be operated from one or more remote actuating devices. (SIG-PRS)

3.3.63.2 Combination Fire Alarm and Guard's Tour Box. A manually operated box for separately transmitting a fire alarm signal and a distinctive guard patrol tour supervisory signal. (SIG-IDS)

3.3.63.3 Manual Fire Alarm Box. A manually operated device used to initiate an alarm signal. (SIG-IDS)

3.3.63.4 Master Box. A municipal fire alarm box that can also be operated by remote means. (SIG-PRS)

3.3.63.5 Municipal Fire Alarm Box (Street Box). An enclosure housing a manually operated transmitter used to send an alarm to the public fire service communications center. (SIG-PRS)

3.3.64 Fire Alarm Control Unit (Panel). See 3.3.39, Control Unit.

3.3.65 Fire Alarm/Evacuation Signal Tone Generator. A device that produces a fire alarm/evacuation tone upon command. (SIG-PRO)

3.3.66 Fire Alarm Signal. See 3.3.171, Signal.

3.3.67 Fire Alarm System. A system or portion of a combination system that consists of components and circuits arranged to monitor and annunciate the status of fire alarm or

supervisory signal-initiating devices and to initiate the appropriate response to those signals. (SIG-FUN)

3.3.67.1 Auxiliary Fire Alarm System. A system connected to a municipal fire alarm system for transmitting an alarm of fire to the public fire service communications center. Fire alarms from an auxiliary fire alarm system are received at the public fire service communications center on the same equipment and by the same methods as alarms transmitted manually from municipal fire alarm boxes located on streets. (SIG-PRS)

3.3.67.1.1 Local Energy Type Auxiliary Fire Alarm System. An auxiliary system that employs a locally complete arrangement of parts, initiating devices, relays, power supply, and associated components to automatically trip a municipal transmitter or master box over electrical circuits that are electrically isolated from the municipal system circuits. (SIG-PRS)

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3.3.67.1.2 Shunt Auxiliary Type Auxiliary Fire Alarm System. An auxiliary system electrically connected to an integral part of the municipal alarm system extending the municipal circuit into the protected premises to interconnect the initiating devices, which, when operated, open the municipal circuit shunted around the trip coil of the municipal transmitter or master box. The municipal transmitter or master box is thereupon energized to start transmission without any assistance from a local source of power. (SIG-PRS)

3.3.67.2 Central Station Fire Alarm System. A system or group of systems in which the operations of circuits and devices are transmitted automatically to, recorded in, maintained by, and supervised from a listed central station that has competent and experienced servers and operators who, upon receipt of a signal, take such action as required by this Code. Such service is to be controlled and operated by a person, firm, or corporation whose business is the furnishing, maintaining, or monitoring of supervised fire alarm systems. (SIG-SSS)

3.3.67.3* Combination System. A fire alarm system in which components are used, in whole or in part, in common with a non-fire signaling system. (SIG-PRO)

3.3.67.4 Household Fire Alarm System. A system of devices that uses a fire alarm control unit (panel) to produce an alarm signal in the household for the purpose of notifying the occupants of the presence of a fire so that they will evacuate the premises. (SIG-HOU)

3.3.67.5 Municipal Fire Alarm System. A system of alarm-initiating devices, receiving equipment, and connecting circuits (other than a public telephone network) used to transmit alarms from street locations to the public fire service communications center. (SIG-PRS)

3.3.67.6 Proprietary Supervising Station Fire Alarm System. An installation of fire alarm systems that serves contiguous and noncontiguous properties, under one ownership, from a proprietary supervising station located at the protected property, or at one of multiple non-contiguous protected properties, at which trained, competent personnel are in constant attendance. This includes the proprietary supervising station; power supplies; signal-initiating devices; initiating device circuits; signal notification appliances; equipment for the automatic,

permanent visual recording of signals; and equipment for initiating the operation of emergency building control services. (SIG-SSS)

3.3.67.7 Protected Premises (Local) Fire Alarm System. A protected premises system that sounds an alarm at the protected premises as the result of the manual operation of a fire alarm box or the operation of protection equipment or systems, such as water flowing in a sprinkler system, the discharge of carbon dioxide, the detection of smoke, or the detection of heat. (SIG-PRO)

3.3.67.8 Public Fire Alarm Reporting System. A system of fire alarm-initiating devices, receiving equipment, and connecting circuits used to transmit alarms from street locations to the communications center. (SIG-PRS)

3.3.67.8.1 Type A Public Fire Alarm Reporting System. A system in which an alarm from a fire alarm box is received and is retransmitted to fire stations either manually or automatically. (SIG-PRS)

3.3.67.8.2 Type B Public Fire Alarm Reporting System. A system in which an alarm from a fire alarm box is automatically transmitted to fire stations and, if used, is transmitted to supplementary alerting devices. (SIG-PRS)

3.3.67.9 Remote Supervising Station Fire Alarm System. A system installed in accordance with this Code to transmit alarm, supervisory, and trouble signals from one or more protected premises to a remote location where appropriate action is taken. (SIG-SSS)

3.3.68 Fire Command Center. The principal attended or unattended location where the status of the detection, alarm communications, and control systems is displayed and from which the system(s) can be manually controlled. (SIG-PRO)

3.3.69 Fire Rating. The classification indicating in time (hours) the ability of a structure or component to withstand a standardized fire test. This classification does not necessarily reflect performance of rated components in an actual fire. (SIG-FUN)

3.3.70 Fire Safety Function Control Device. The fire alarm system component that directly interfaces with the control system that controls the fire safety function. (SIG-PRO)

3.3.71 Fire Safety Functions. Building and fire control functions that are intended to increase the level of life safety for occupants or to control the spread of the harmful effects of fire. (SIG-PRO)

3.3.72 Fire Warden. A building staff member or a tenant trained to perform assigned duties in the event of a fire emergency. (SIG-PRO)

3.3.73 Fire Warning Equipment. Any detector, alarm, device, or material related to single- and multiple-station alarms or household fire alarm systems. (SIG-HOU)

3.3.74 Fixed Temperature Detector. See 3.3.43, Detector.

3.3.75 Flame. A body or stream of gaseous material involved in the combustion process and

emitting radiant energy at specific wavelength bands determined by the combustion chemistry of the fuel. In most cases, some portion of the emitted radiant energy is visible to the human eye. (SIG-IDS)

3.3.76 Flame Detector. See 3.3.43, Detector.

3.3.77 Flame Detector Sensitivity. The distance along the optical axis of the detector at which the detector can detect a fire of specified size and fuel within a given time frame. (SIG-IDS)

3.3.78 Gateway. A device that is used in the transmission of serial data (digital or analog) from the fire alarm control unit to other building system control units, equipment, or networks and/or from other building system control units to the fire alarm control unit. (SIG-PRO)

3.3.79 Guard's Tour Reporting Station. A device that is manually or automatically initiated to indicate the route being followed and the timing of a guard's tour. (SIG-IDS)

3.3.80 Guard's Tour Supervisory Signal. See 3.3.171, Signal.

3.3.81 Guest Room. An accommodation combining living, sleeping, sanitary, and storage facilities within a compartment. [101:3.3.94] (SIG-HOU)

3.3.82 Guest Suite. An accommodation with two or more contiguous rooms comprising a compartment, with or without doors between such rooms, that provides living, sleeping, sanitary, and storage facilities. [101:3.3.95] (SIG-FUN)

3.3.83 Heat Alarm. A single or multiple station alarm responsive to heat. (SIG-IDS)

3.3.84 Heat Detector. See 3.3.43, Detector.

3.3.85 Hotel. A building or groups of buildings under the same management in which there are sleeping accommodations for more than 16 persons and primarily used by transients for lodging with or without meals. [101:3.3.105] (SIG-HOU)

3.3.86 Household Fire Alarm System. See 3.3.67, Fire Alarm System.

3.3.87 Hunt Group. A group of associated telephone lines within which an incoming call is automatically routed to an idle (not busy) telephone line for completion. (SIG-SSS)

3.3.88 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. (SIG-IDS)

3.3.88.1 Analog Initiating Device (Sensor). An initiating device that transmits a signal indicating varying degrees of condition as contrasted with a conventional initiating device, which can only indicate an on-off condition. (SIG-IDS)

3.3.88.2 Automatic Extinguishing System Supervisory Device. A device that responds to abnormal conditions that could affect the proper operation of an automatic sprinkler system or other fire extinguishing system(s) or suppression system(s), including, but not limited to, control valves, pressure levels, liquid agent levels and temperatures, pump power and running, engine

temperature and overspeed, and room temperature. (SIG-IDS)

3.3.88.3 Nonrestorable Initiating Device. A device in which the sensing element is designed to be destroyed in the process of operation. (SIG-IDS)

3.3.88.4 Restorable Initiating Device. A device in which the sensing element is not ordinarily destroyed in the process of operation, whose restoration can be manual or automatic. (SIG-IDS)

3.3.88.5 Supervisory Signal-Initiating Device. An initiating device such as a valve supervisory switch, water level indicator, or low air pressure switch on a dry-pipe sprinkler system in which the change of state signals an off-normal condition and its restoration to normal of a fire protection or life safety system; or a need for action in connection with guard tours, fire suppression systems or equipment, or maintenance features of related systems. (SIG-IDS)

3.3.89 Initiating Device Circuit. A circuit to which automatic or manual initiating devices are connected where the signal received does not identify the individual device operated. (SIG-PRO)

3.3.90 Intermediate Fire Alarm or Fire Supervisory Control Unit. See 3.3.39, Control Unit.

3.3.91 Ionization Smoke Detection. See 3.3.180, Smoke Detection.

3.3.92 Leg Facility. The portion of a communications channel that connects not more than one protected premises to a primary or secondary trunk facility. The leg facility includes the portion of the signal transmission circuit from its point of connection with a trunk facility to the point where it is terminated within the protected premises at one or more transponders. (SIG-SSS)

3.3.93 Level Ceilings. See 3.3.22, Ceiling.

3.3.94 Life Safety Network. A type of combination system that transmits fire safety control data through gateways to other building system control units. (SIG-PRO)

3.3.95 Living Area. Any normally occupiable space in a residential occupancy, other than sleeping rooms or rooms that are intended for combination sleeping/living, bathrooms, toilet compartments, kitchens, closets, halls, storage or utility spaces, and similar areas. [101:3.3.13.3] (SIG-HOU)

3.3.96 Loading Capacity. The maximum number of discrete elements of fire alarm systems permitted to be used in a particular configuration. (SIG-SSS)

3.3.97 Lodging or Rooming House. A building or portion thereof that does not qualify as a one- or two-family dwelling, that provides sleeping accommodations for a total of 16 or fewer people on a transient or permanent basis, without personal care services, with or without meals, but without separate cooking facilities for individual occupants. [101:3.3.120] (SIG-HOU)

3.3.98 Loss of Power. The reduction of available voltage at the load below the point at which equipment can function as designed. (SIG-FUN)

3.3.99 Low-Power Radio Transmitter. Any device that communicates with associated

control/receiving equipment by low-power radio signals. (SIG-PRO)

3.3.100 Maintenance. Work, including, but not limited to, repair, replacement, and service, performed to ensure that equipment operates properly. (SIG-TMS)

3.3.101 Manual Fire Alarm Box. See 3.3.63, Fire Alarm Box.

3.3.102 Master Box. See 3.3.63, Fire Alarm Box.

3.3.103 Master Control Unit (Panel). See 3.3.39, Control Unit.

3.3.104 Multiple Station Alarm. A single station alarm capable of being interconnected to one or more additional alarms so that the actuation of one causes the appropriate alarm signal to operate in all interconnected alarms. (SIG-HOU)

3.3.105 Multiple Station Alarm Device. Two or more single station alarm devices that can be interconnected so that actuation of one causes all integral or separate audible alarms to operate; or one single station alarm device having connections to other detectors or to a manual fire alarm box. (SIG-HOU)

3.3.106 Multiplexing. A signaling method characterized by simultaneous or sequential transmission, or both, and reception of multiple signals on a signaling line circuit, a transmission channel, or a communications channel, including means for positively identifying each signal. (SIG-SSS)

3.3.107 Municipal Fire Alarm Box (Street Box). See 3.3.63, Fire Alarm Box.

3.3.108 Municipal Fire Alarm System. See 3.3.67, Fire Alarm System.

3.3.109 Municipal Transmitter. A transmitter that can only be tripped remotely that is used to send an alarm to the public fire service communications center. (SIG-PRS)

• **3.3.110 Noncontiguous Property.** See 3.3.140, Property.

3.3.111 Nonrequired (Voluntary) System. A fire alarm system component or group of components that is installed at the option of the owner, and is not installed due to a building or fire code requirement. (SIG-FUN)

3.3.112 Nonrestorable Initiating Device. See 3.3.88, Initiating Device.

3.3.113 Notification Appliance. A fire alarm system component such as a bell, horn, speaker, light, or text display that provides audible, tactile, or visible outputs, or any combination thereof. (SIG-NAS)

3.3.113.1 Audible Notification Appliance. A notification appliance that alerts by the sense of hearing. (SIG-NAS)

3.3.113.1.1 Textual Audible Notification Appliance. A notification appliance that conveys a stream of audible information. An example of a textual audible notification appliance is a

speaker that reproduces a voice message. (SIG-NAS)

3.3.113.2 Tactile Notification Appliance. A notification appliance that alerts by the sense of touch or vibration. (SIG-NAS)

3.3.113.3 Visible Notification Appliance. A notification appliance that alerts by the sense of sight. (SIG-NAS)

3.3.113.3.1 Textual Visible Notification Appliance. A notification appliance that conveys a stream of visible information that displays an alphanumeric or pictorial message. Textual visible notification appliances provide temporary text, permanent text, or symbols. Textual visible notification appliances include, but are not limited to, annunciators, monitors, CRTs, displays, and printers. (SIG-NAS)

3.3.114 Notification Appliance Circuit. A circuit or path directly connected to a notification appliance(s). (SIG-PRO)

3.3.115 Notification Zone. See 3.3.214, Zone.

3.3.116 Nuisance Alarm. See 3.3.5, Alarm.

3.3.117* Occupiable Area. The spaces of a facility that can be occupied or used by the facility occupants as part of the building function or to support building operations and maintenance. This includes, but is not limited to, storage areas, mechanical and electrical equipment areas, walk-in closets or janitor's rooms, restrooms, conference rooms, and individual offices. (SIG-NAS)

3.3.118 Octave. The bandwidth of a filter that comprises a frequency range of a factor of 2. (That is, $f_2 = 2f_1$ as defined in IEC 61260. For example, for an octave-band centered on 500 Hz, the lower frequency is 353 Hz, and the upper frequency is 707 Hz). (SIG-NAS)

3.3.118.1 One-Third Octave. The bandwidth of a filter that comprises a frequency range of a factor of $2^{1/3}$. (That is, $f_2 = 2^{1/3} f_1$ as defined in IEC 61260). The octave filter can be subdivided into three $\frac{1}{3}$ octave-bands. (SIG-NAS)

3.3.119 Off-Hook. To make connection with the public-switched telephone network in preparation for dialing a telephone number. (SIG-SSS)

3.3.120 On-Hook. To disconnect from the public-switched telephone network. (SIG-SSS)

3.3.121 Open Area Detection (Protection). Protection of an area such as a room or space with detectors to provide early warning of fire. (SIG-IDS)

3.3.122 Operating Mode.

3.3.122.1 Private Operating Mode. Audible or visible signaling only to those persons directly concerned with the implementation and direction of emergency action initiation and procedure in the area protected by the fire alarm system. (SIG-NAS)

3.3.122.2 Public Operating Mode. Audible or visible signaling to occupants or inhabitants of

the area protected by the fire alarm system. (SIG-NAS)

3.3.123 Operating System Software. The basic operating system software that can be altered only by the equipment manufacturer or its authorized representative. Operating system software is sometimes referred to as *firmware*, *BIOS*, or *executive program*. (SIG-FUN)

3.3.124* Ownership. Any property or building or its contents under legal control by the occupant, by contract, or by holding of a title or deed. (SIG-SSS)

3.3.125 Paging System. A system intended to page one or more persons by such means as voice over loudspeaker, coded audible signals or visible signals, or lamp annunciators. (SIG-PRO)

3.3.126 Parallel Telephone System. A telephone system in which an individually wired circuit is used for each fire alarm box. (SIG-SSS)

3.3.127 Path (Pathways). Any conductor, optic fiber, radio carrier, or other means for transmitting fire alarm system information between two or more locations. (SIG-FUN)

3.3.128 Permanent Visual Record (Recording). An immediately readable, not easily alterable, print, slash, or punch record of all occurrences of status change. (SIG-SSS)

3.3.129 Photoelectric Light Obscuration Smoke Detection. See 3.3.180, Smoke Detection.

3.3.130 Photoelectric Light-Scattering Smoke Detection. See 3.3.180, Smoke Detection.

3.3.131 Placarded. A means to signify that the fire alarm system of a particular facility is receiving central station service in accordance with this Code by a listed central station or listed fire alarm service–local company that is part of a systematic follow-up program under the control of an independent third-party listing organization. (SIG-SSS)

3.3.132 Plant. One or more buildings under the same ownership or control on a single property. (SIG-SSS)

3.3.133 Positive Alarm Sequence. An automatic sequence that results in an alarm signal, even when manually delayed for investigation, unless the system is reset. (SIG-PRO)

3.3.134 Power Supply. A source of electrical operating power, including the circuits and terminations connecting it to the dependent system components. (SIG-FUN)

3.3.135 Primary Battery (Dry Cell). A nonrechargeable battery requiring periodic replacement. (SIG-FUN)

3.3.136 Primary Trunk Facility. That part of a transmission channel connecting all leg facilities to a supervising or subsidiary station. (SIG-SSS)

3.3.137 Prime Contractor. The one company contractually responsible for providing central station services to a subscriber as required by this Code. The prime contractor can be either a listed central station or a listed fire alarm service–local company. (SIG-SSS)

3.3.138 Private Operating Mode. See 3.3.122, Operating Mode.

3.3.139 Private Radio Signaling. A radio system under control of the proprietary supervising station. (SIG-SSS)

3.3.140 Property.

3.3.140.1 Contiguous Property. A single-owner or single-user protected premises on a continuous plot of ground, including any buildings thereon, that is not separated by a public thoroughfare, transportation right-of-way, property owned or used by others, or body of water not under the same ownership. (SIG-SSS)

3.3.140.2 Noncontiguous Property. An owner- or user-protected premises where two or more protected premises, controlled by the same owner or user, are separated by a public thoroughfare, body of water, transportation right-of-way, or property owned or used by others. (SIG-SSS)

3.3.141 Proprietary Supervising Station. See 3.3.193, Supervising Station.

3.3.142 Proprietary Supervising Station Fire Alarm System. See 3.3.67, Fire Alarm System.

3.3.143 Protected Premises. The physical location protected by a fire alarm system. (SIG-PRO)

3.3.144 Protected Premises (Local) Control Unit (Panel). See 3.3.39, Control Unit.

3.3.145 Protected Premises (Local) Fire Alarm System. See 3.3.67, Fire Alarm System.

3.3.146 Public Fire Alarm Reporting System. See 3.3.67, Fire Alarm System.

3.3.147 Public Fire Service Communications Center. The building or portion of the building used to house the central operating part of the fire alarm system; usually the place where the necessary testing, switching, receiving, transmitting, and power supply devices are located. (SIG-PRS)

3.3.148 Public Operating Mode. See 3.3.122, Operating Mode.

3.3.149 Radio Alarm Repeater Station Receiver (RARSR). A system component that receives radio signals and resides at a repeater station that is located at a remote receiving location. (SIG-SSS)

3.3.150 Radio Alarm Supervising Station Receiver (RASSR). A system component that receives data and annunciates that data at the supervising station. (SIG-SSS)

3.3.151 Radio Alarm System (RAS). A system in which signals are transmitted from a radio alarm transmitter (RAT) located at a protected premises through a radio channel to two or more radio alarm repeater station receivers (RARSR) and that are annunciated by a radio alarm supervising station receiver (RASSR) located at the central station. (SIG-SSS)

3.3.152 Radio Alarm Transmitter (RAT). A system component at the protected premises to which initiating devices or groups of devices are connected that transmits signals indicating a status change of the initiating devices. (SIG-SSS)

3.3.153 Radio Channel. See 3.3.30, Channel.

3.3.154 Rate Compensation Detector. See 3.3.43, Detector.

3.3.155 Rate-of-Rise Detector. See 3.3.43, Detector.

3.3.156 Record Drawings. Drawings (as-built) that document the location of all devices, appliances, wiring sequences, wiring methods, and connections of the components of the fire alarm system as installed. (SIG-FUN)

3.3.157 Record of Completion. A document that acknowledges the features of installation, operation (performance), service, and equipment with representation by the property owner, system installer, system supplier, service organization, and the authority having jurisdiction. (SIG-FUN)

3.3.158 Relocation. The movement of occupants from a fire zone to a safe area within the same building. (SIG-PRO)

3.3.159 Remote Supervising Station Fire Alarm System. See 3.3.67, Fire Alarm System.

3.3.160 Repeater Station. The location of the equipment needed to relay signals between supervising stations, subsidiary stations, and protected premises. (SIG-SSS)

3.3.161 Reset. A control function that attempts to return a system or device to its normal, nonalarm state. (SIG-FUN)

3.3.162 Residential Board and Care Occupancy. A building or portion thereof that is used for lodging and boarding of four or more residents, not related by blood or marriage to the owners or operators, for the purpose of providing personal care services. [**101**:3.3.134.13] (SIG-HOU)

3.3.163 Residential Occupancy. An occupancy that provides sleeping accommodations for purposes other than health care or detention and correctional. [**101**:3.3.134.12] (SIG-HOU)

3.3.164 Restorable Initiating Device. See 3.3.88, Initiating Device.

3.3.165 Runner. A person other than the required number of operators on duty at central, supervising, or runner stations (or otherwise in contact with these stations) available for prompt dispatching, when necessary, to the protected premises. (SIG-SSS)

3.3.166 Runner Service. The service provided by a runner at the protected premises, including resetting and silencing of all equipment transmitting fire alarm or supervisory signals to an off-premises location. (SIG-SSS)

• **3.3.167 Scanner.** Equipment located at the telephone company wire center that monitors each local leg and relays status changes to the alarm center. Processors and associated equipment might also be included. (SIG-SSS)

3.3.168 Secondary Trunk Facility. That part of a transmission channel connecting two or more,

but fewer than all, leg facilities to a primary trunk facility. (SIG-SSS)

3.3.169 Separate Sleeping Area. An area of the family living unit in which the bedrooms (or sleeping rooms) are located. Bedrooms (or sleeping rooms) separated by other use areas, such as kitchens or living rooms (but not bathrooms), are considered as separate sleeping areas. (SIG-HOU)

3.3.170 Shapes of Ceilings. The shapes of ceilings can be classified as sloping or smooth. (SIG-IDS)

3.3.171 Signal. A status indication communicated by electrical or other means. (SIG-FUN)

3.3.171.1 Alarm Signal. A signal indicating an emergency that requires immediate action, such as a signal indicative of fire. (SIG-FUN)

3.3.171.2 Delinquency Signal. A signal indicating the need for action in connection with the supervision of guards or system attendants. (SIG-PRO)

3.3.171.3 Evacuation Signal. A distinctive signal intended to be recognized by the occupants as requiring evacuation of the building. (SIG-PRO)

3.3.171.4 Fire Alarm Signal. A signal initiated by a fire alarm-initiating device such as a manual fire alarm box, automatic fire detector, waterflow switch, or other device in which activation is indicative of the presence of a fire or fire signature. (SIG-FUN)

3.3.171.5 Guard's Tour Supervisory Signal. A supervisory signal monitoring the performance of guard patrols. (SIG-PRO)

3.3.171.6 Supervisory Signal. A signal indicating the need for action in connection with the supervision of guard tours, the fire suppression systems or equipment, or the maintenance features of related systems. (SIG-FUN)

3.3.171.7 Trouble Signal. A signal initiated by the fire alarm system or device indicative of a fault in a monitored circuit or component. (SIG-FUN)

3.3.172 Signaling Line Circuit. A circuit or path between any combination of circuit interfaces, control units, or transmitters over which multiple system input signals or output signals, or both, are carried. (SIG-PRO)

3.3.173 Signaling Line Circuit Interface. A system component that connects a signaling line circuit to any combination of initiating devices, initiating device circuits, notification appliances, notification appliance circuits, system control outputs, and other signaling line circuits. (SIG-PRO)

3.3.174 Signal Transmission Sequence. A DACT that obtains dial tone, dials the number(s) of the DACR, obtains verification that the DACR is ready to receive signals, transmits the signals, and receives acknowledgment that the DACR has accepted that signal before disconnecting (going on-hook). (SIG-SSS)

3.3.175 Single Station Alarm. A detector comprising an assembly that incorporates a sensor, control components, and an alarm notification appliance in one unit operated from a power source either located in the unit or obtained at the point of installation. (SIG-HOU)

3.3.176 Single Station Alarm Device. An assembly that incorporates the detector, the control equipment, and the alarm-sounding device in one unit operated from a power supply either in the unit or obtained at the point of installation. (SIG-HOU)

3.3.177 Site-Specific Software. Software that defines the specific operation and configuration of a particular system. Typically, it defines the type and quantity of hardware modules, customized labels, and specific operating features of a system. (SIG-TMS)

3.3.178 Sloping Ceiling. See 3.3.22, Ceiling.

3.3.179 Smoke Alarm. A single or multiple station alarm responsive to smoke. (SIG-HOU)

3.3.180 Smoke Detection.

3.3.180.1 Cloud Chamber Smoke Detection. The principle of using an air sample drawn from the protected area into a high-humidity chamber combined with a lowering of chamber pressure to create an environment in which the resultant moisture in the air condenses on any smoke particles present, forming a cloud. The cloud density is measured by a photoelectric principle. The density signal is processed and used to convey an alarm condition when it meets preset criteria. (SIG-IDS)

3.3.180.2* Ionization Smoke Detection. The principle of using a small amount of radioactive material to ionize the air between two differentially charged electrodes to sense the presence of smoke particles. Smoke particles entering the ionization volume decrease the conductance of the air by reducing ion mobility. The reduced conductance signal is processed and used to convey an alarm condition when it meets preset criteria. (SIG-IDS)

3.3.180.3* Photoelectric Light Obscuration Smoke Detection. The principle of using a light source and a photosensitive sensor onto which the principal portion of the source emissions is focused. When smoke particles enter the light path, some of the light is scattered and some is absorbed, thereby reducing the light reaching the receiving sensor. The light reduction signal is processed and used to convey an alarm condition when it meets preset criteria. (SIG-IDS)

3.3.180.4* Photoelectric Light-Scattering Smoke Detection. The principle of using a light source and a photosensitive sensor arranged so that the rays from the light source do not normally fall onto the photosensitive sensor. When smoke particles enter the light path, some of the light is scattered by reflection and refraction onto the sensor. The light signal is processed and used to convey an alarm condition when it meets preset criteria. (SIG-IDS)

3.3.181 Smoke Detector. See 3.3.43, Detector.

3.3.182 Smooth Ceiling. See 3.3.24, Ceiling Surfaces.

3.3.183 Solid Joist Construction. See 3.3.24, Ceiling Surfaces.

3.3.184 Spacing. A horizontally measured dimension related to the allowable coverage of fire detectors. (SIG-IDS)

3.3.185* Spark. A moving ember. (SIG-IDS)

3.3.186 Spark/Ember Detector. See 3.3.43, Detector.

3.3.187 Spark/Ember Detector Sensitivity. The number of watts (or the fraction of a watt) of radiant power from a point source radiator, applied as a unit step signal at the wavelength of maximum detector sensitivity, necessary to produce an alarm signal from the detector within the specified response time. (SIG-IDS)

3.3.188 Spot-Type Detector. See 3.3.43, Detector.

3.3.189 Story. The portion of a building located between the upper surface of a floor and the upper surface of the floor or roof next above. [*101:3.3.194*] (SIG-FUN)

3.3.190 Stratification. The phenomenon where the upward movement of smoke and gases ceases due to the loss of buoyancy. (SIG-IDS)

3.3.191 Subscriber. The recipient of a contractual supervising station signal service(s). In case of multiple, noncontiguous properties having single ownership, the term refers to each protected premises or its local management. (SIG-SSS)

3.3.192 Subsidiary Station. A subsidiary station is a normally unattended location that is remote from the supervising station and is linked by a communications channel(s) to the supervising station. Interconnection of signals on one or more transmission channels from protected premises with a communications channel(s) to the supervising station is performed at this location. (SIG-SSS)

3.3.193 Supervising Station. A facility that receives signals and at which personnel are in attendance at all times to respond to these signals. (SIG-SSS)

3.3.193.1 Central Station. A supervising station that is listed for central station service. (SIG-SSS)

3.3.193.2 Proprietary Supervising Station. A location to which alarm or supervisory signaling devices on proprietary fire alarm systems are connected and where personnel are in attendance at all times to supervise operation and investigate signals. (SIG-SSS)

3.3.194 Supervisory Service. The service required to monitor performance of guard tours and the operative condition of fixed suppression systems or other systems for the protection of life and property. (SIG-PRO)

3.3.195 Supervisory Signal. See 3.3.171, Signal.

3.3.196 Supervisory Signal-Initiating Device. See 3.3.88, Initiating Device.

3.3.197 Supplementary. As used in this Code, supplementary refers to equipment or operations

not required by this Code and designated as such by the authority having jurisdiction. (SIG-FUN)

3.3.198 Switched Telephone Network. An assembly of communications facilities and central office equipment operated jointly by authorized service providers that provides the general public with the ability to establish transmission channels via discrete dialing. (SIG-SSS)

3.3.198.1 Public Switched Telephone Network. An assembly of communications facilities and central office equipment operated jointly by authorized common carriers that provides the general public with the ability to establish communications channels via discrete dialing codes. (SIG-SSS)

3.3.199 System Unit. The active subassemblies at the central station used for signal receiving, processing, display, or recording of status change signals; a failure of one of these subassemblies causes the loss of a number of alarm signals by that unit. (SIG-SSS)

3.3.200 Tactile Notification Appliance. See 3.3.113, Notification Appliance.

3.3.201 Textual Audible Notification Appliance. See 3.3.113, Notification Appliance.

3.3.202 Textual Visual Notification Appliance. See 3.3.113, Notification Appliance.

3.3.203 Transmission Channel. See 3.3.30, Channel.

3.3.204 Transmitter. A system component that provides an interface between signaling line circuits, initiating device circuits, or control units and the transmission channel. (SIG-SSS)

3.3.205 Transponder. A multiplex alarm transmission system functional assembly located at the protected premises. (SIG-SSS)

3.3.206 Trouble Signal. See 3.3.171, Signal.

3.3.207 Visible Notification Appliance. See 3.3.113, Notification Appliance.

3.3.208* Voice Intelligibility. Audible voice information that is distinguishable and understandable. (SIG-NAS)

3.3.209 WATS (Wide Area Telephone Service). Telephone company service allowing reduced costs for certain telephone call arrangements. In-WATS or 800-number service calls can be placed from anywhere in the continental United States to the called party at no cost to the calling party. Out-WATS is a service whereby, for a flat-rate charge, dependent on the total duration of all such calls, a subscriber can make an unlimited number of calls within a prescribed area from a particular telephone terminal without the registration of individual call charges. (SIG-SSS)

3.3.210* Wavelength. The distance between the peaks of a sinusoidal wave. All radiant energy can be described as a wave having a wavelength. Wavelength serves as the unit of measure for distinguishing between different parts of the spectrum. Wavelengths are measured in microns (μ m), nanometers (nm), or angstroms (\AA). (SIG-IDS)

3.3.211 Wireless Control Panel. A component that transmits/receives and processes wireless signals. (SIG-PRO)

3.3.212 Wireless Protection System. A system or a part of a system that can transmit and receive signals without the aid of wire. It can consist of either a wireless control panel or a wireless repeater. (SIG-PRO)

3.3.213 Wireless Repeater. A component used to relay signals between wireless receivers or wireless control panels, or both. (SIG-PRO)

3.3.214 Zone. A defined area within the protected premises. A zone can define an area from which a signal can be received, an area to which a signal can be sent, or an area in which a form of control can be executed. (SIG-FUN)

3.3.214.1* Evacuation Signaling Zone. A discrete area of a building, bounded by smoke or fire barriers, from which occupants are intended to relocate or evacuate. (SIG-PRO)

3.3.214.2 Notification Zone. An area covered by notification appliances that are activated simultaneously. (SIG-PRO)

Chapter 4 Fundamentals of Fire Alarm Systems

4.1 Application.

4.1.1 The basic functions of a complete fire alarm system shall comply with the requirements of this chapter.

4.1.2 The requirements of this chapter shall apply to fire alarm systems, equipment, and components addressed in Chapter 5 through Chapter 10.

4.2 Purpose.

The purpose of fire alarm systems shall be primarily to provide notification of fire alarm, supervisory, and trouble conditions; to alert the occupants; to summon aid; and to control fire safety functions.

4.3 Equipment and Personnel.

4.3.1 Equipment. Equipment constructed and installed in conformity with this Code shall be listed for the purpose for which it is used. Fire alarm system components shall be installed in accordance with the manufacturers' installation instructions.

4.3.2* System Designer.

4.3.2.1 Fire alarm system plans and specifications shall be developed in accordance with this Code by persons who are experienced in the proper design, application, installation, and testing of fire alarm systems.

4.3.2.2 The system designer shall be identified on the system design documents. Evidence of