UL 827

STANDARD FOR SAFETY

Central-Station Alarm Services

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UL Standard for Safety for Central-Station Alarm Services, UL 827

Seventh Edition, Dated June 11, 2008

Summary of Topics

The revision pages dated July 3, 2013 were issued to incorporate the following changes and reflects the July 3, 2013 ANSI approval date for UL 827:

Central Station Glossary Definition

Storage Battery Testing

Portable Water Sheds - Elaboration

Engine Driven Generators, 9.12.11

UPS Standby Power Testing, 9.14.3 and 9.14.4

Text that has been changed in any manner or impacted by UL's electronic publishing system is marked with a vertical line in the margin. Changes in requirements are marked with a vertical line in the margin and are followed by an effective date note indicating the date of publication or the date on which the changed requirement becomes effective.

These requirements are substantially in accordance with Proposal(s) on this subject dated October 19, 2012.

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CONTENTS

INTRODUCTION

1 Scope 6
2 General 7
2.1 Components 7
2.2 Units of measurement 8
2.3 Undated references 8
3 Glossary 8
3.1 General 8
3.2 Definitions common to burglar- and fire-alarm systems 8
3.3 Definitions common to burglar-alarm 12
3.4 Definitions common to fire-alarm 13
3.5 Definitions common to residential monitoring stations 13

FACILITIES AND EQUIPMENT

4 Building Construction Requirements 13
5 Physical Protection 15
6 Fire Protection 17
6.1 Portable fire extinguishers 17
6.2 Fire suppression system 18
6.3 Water sheds 18
6.4 Repeater station fire protection 18
6.5 Automatic fire-alarm system 18
7 Standby Lighting 18A
8 Clocks 19
9 Power Supply 19
9.1 General 19
9.2 Installation 20
9.3 Source 20
9.4 Primary power supply 20
9.5 Secondary power supply 20
9.6 Continuity of power supply 21
9.7 Storage batteries 22
9.8 Overcurrent protection for external batteries 22
9.9 Charging method 23
9.10 Trickle- or float-charged batteries 23
9.11 Battery chargers and DC power supplies 24
9.12 Stationary, engine-driven generators 24
9.13 Security 26
9.14 Uninterruptible power supply (UPS) units 26A
9.15 Uninterruptible battery supply (UBS) units 27
10 Cable System 27
10.1 General 27
10.2 Underground entrance 28
10.3 Overhead entrance 28
10.4 Conductors inside the building 28
10.5 Antenna cable 29
11 Subsidiary Stations 30
12 Equipment 32

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13 Receiver Units 33
13.1 Direct-wire burglar-alarm systems 33
13.2 Code (McCulloh) transmitter systems 33
13.3 Multiplex systems 35
13.4 Digital alarm radio system (DARS) 36
13.5 One way radio alarm system (OWRAS) 37
13.6 Two-way radio alarm system (TWRAS) 39
13.7 Digital alarm communicator system units 39
14 Automation Systems 41

FIRE-ALARM SERVICES

15 Type of Service 43
16 Central-Station Operation 43
17 Personnel (Operators and Runners) 44
18 Runner's Equipment 45
19 Communication and Test 45
20 Re-Transmission 45
21 Records 45
22 Maintenance and Service 47
22.1 Contracts and agreements 47
22.2 Alarm, supervisory, and trouble signals 47
22.3 Signals from systems other than central-station fire-alarm systems 48
23 Testing and Inspection 48
24 Protected Premises Control and Transmitter Units 48

BURGLAR-ALARM SERVICES

25 Central-Station Operation 48
26 Personnel (Operators and Runners) 49
27 Runner's Equipment 50
28 Communication and Test 50
29 Re-Transmission 50
30 Burglar-Alarm Protected Premises Control Units 50
30.1 General 50
30.2 Direct-wire, burglar-alarm subscriber control units 51
30.3 Code (McCulloh) transmitter burglar-alarm systems subscriber control units 51
30.4 Multiplex burglar-alarm systems subscriber control unit 51
30.5 Digital alarm communicator transmitter (DACT) subscriber control unit 51
30.6 Radio (RF) systems subscriber's control unit 52
31 Burglar-Alarm Protection Service 52
31.1 Alarm response time 52
31.2 Signal transmission methods for burglar-alarm systems 53
31.3 Line security 56
32 Openings and Closing 56
32.1 General 56
32.2 Openings and closing without a schedule 56
32.3 Openings and closing with a schedule 57
32.4 Unscheduled 57
32.5 Control unit programming 58
33 Closing and Malfunctions During Closing 58
34 Alarms and Unauthorized Openings 59
34.1 Alarm investigation 59

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34.2 Alarm verification 60
34.3 Investigation of a compromise attempt 62
34.4 Investigation of a missing check-in signal 62
34.5 Multiplex communication channel disruption 63
34.6 Alarm response overruns 63
34.7 Unwanted alarms 63
34.8 Signals from systems other than central-station burglar-alarm systems 64
35 Identification of Subscribers 64
36 Handling of Subscriber's Keys 64
36.1 General 64
36.2 Key vaults 65
37 Records 65
38 Maintenance and Service 66
38.1 Contracts and agreements 66
38.2 Repairs 66
39 Power Failure 67

RESIDENTIAL MONITORING STATION

40 Residential Monitoring Station Operation 68
41 Personnel (Operators) 69
42 Signal Processing 69
43 Re-Transmission 69
44 Records 70

APPENDIX A

Standards for Components A1

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INTRODUCTION

1 Scope

1.1 These requirements apply to:

a) Central-stations providing watchman, fire-alarm, and supervisory services as described in the National Fire Alarm Code, NFPA 72;

b) Central-station burglar-alarm systems intended and specifically designated for burglary protection use at mercantile and banking premises, on mercantile safes and vaults, and on bank safes and vaults; and

c) Residential monitoring stations monitoring residential alarm systems.

1.2 These requirements apply to central-stations, subsidiary stations and residential monitoring stations that are intended to be located in buildings constructed in accordance with building codes, such as the Building Officials and Code Administrators (BOCA) National Building Code, the Standard Building Code, and the Uniform Building Code.

1.3 The central-station burglar- and fire-alarm station and residential alarm systems covered by these requirements are systems in which the operation of electrical protection circuits and devices are signaled automatically to, recorded in, maintained in, and supervised from a central-station or residential monitoring station having trained operators and runners on duty at all times.

1.4 Requirements covering the construction and operation of burglar-alarm units used in the burglar-alarm systems covered by this standard are contained in the Standard for Central-Station Burglar-Alarm Units, UL 1610, and the Standard for Digital Alarm Communicator System Units, UL 1635.

1.5 Burglar-alarm protective devices installed on individual properties are classified as to the extent of protection at each location. Requirements covering installation and classification (of extent) of alarm protective equipment at individual locations are contained in the Standard for Installation and Classification of Burglar and Holdup Alarm Systems, UL 681.

1.6 Requirements covering the construction and operation of fire-protective signaling equipment used in the systems covered by this standard are contained in the Standard for Control Units and Accessories for Fire Alarm Systems, UL 864.

1.7 Systems covered by these requirements operate within the limits of the National Electrical Code, ANSI/NFPA 70, as applied by the local authority having jurisdiction. The Articles of the National Electrical Code that apply are:

a) Article 725, within the limits of Class 2 or Class 3 remote-control and signaling circuits for burglar-alarm systems;

b) Article 760 for fire-alarm systems;

c) Article 800 for outside wiring and protectors; and

d) Article 820 for protectors for radio antennas.

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1.8 Requirements for software and hardware, and the installation and operation of an automation system in a central-station, subsidiary station or residential monitoring station are covered by the Standard for Central-Station Automation Systems, UL 1981, or by the Standard for Control Units and Accessories for Fire Alarm Systems, UL 864, and/or the Standard for Central-Station Burglar-Alarm Units, UL 1610.

1.9 A reference made to ″station″ refers to a central-station (burglary or fire), subsidiary station or residential monitoring station, depending upon the context in which it is used.

1.10 These requirements do not cover the communication channel between the protected property and the station. This includes:

a) The company that provides the communication channel and

b) The equipment that is used to provide the communication channel.

Exception No. 1: If the communication channel is owned and operated by the station, these requirements do apply.

Exception No. 2: These requirements do apply to an alarm and signal transport service company.

2 General

2.1 Components

2.1.1 Except as indicated in 2.1.2, a component used in a station or a burglar-alarm or fire-alarm installation covered by this standard shall comply with the requirements for that component. See Appendix A for a list of standards covering components generally used to provide the services covered by this standard.

2.1.2 A component is not required to comply with a specific requirement that:

a) Involves a feature or characteristic not required in the application of the component in the product covered by this standard, or

b) Is superseded by a requirement in this standard.

2.1.3 A component shall be used in accordance with its rating established for the intended conditions of use.

2.1.4 Specific components are incomplete in construction features or restricted in performance capabilities. Such components are intended for use only under limited conditions, such as certain temperatures not exceeding specified limits, and shall be used only under those specific conditions.

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2.2 Units of measurement

2.2.1 Values stated without parentheses are the requirement. Values in parentheses are explanatory or approximate information.

2.3 Undated references

2.3.1 Any undated reference to a code or standard appearing in the requirements of this standard shall be interpreted as referring to the latest edition of that code or standard.

3 Glossary

3.1 General

3.1.1 For the purpose of this standard, the following definitions apply.

3.2 Definitions common to burglar- and fire-alarm systems

3.2.1 ACTIVE SYSTEM – A system that transmits one or both of the following signals to the central-station on a regular basis:

a) A signal that the system has been disarmed and the protection removed (commonly referred to as ″opened″) or

b) A signal that the system has been armed and the protection activated (commonly referred to as ″closed″).

If an alarm system sends opening and closing (disarm and arm) signals, it is considered to be an active system. The 24-hour supervisory check-in signal transmitted by a digital alarm communicator transmitter or a one-way radio (RF) transmitter does not make a system an active system. A system is considered inactive if the 24-hour supervisory check-in signal is the only signal normally transmitted on a daily basis.

3.2.2 ALARM AND SIGNAL TRANSPORT SERVICE – A service provided by a company to transmit signals from a protection system to either a station, law enforcement department, fire department, or the like. The service may be connected to multiple stations, law enforcement departments, fire departments, and the like. The service is independent of the protection systems and the organizations that receive the alarms and signals. A company providing this service provides the equipment, service, and maintenance for the transport system. The equipment used in the transport system shall comply with the requirements of the Standard for Control Units and Accessories for Fire Alarm Systems, UL 864, and the Standard for Central-Station Burglar-Alarm Units, UL 1610.

3.2.3 AUTOMATIC FIRE-ALARM SYSTEM – A fire detection system that will automatically detect and annunciate the presence of fire by the detection of one or more products of combustion. Annunciation is through a fire-alarm system control unit.

3.2.4 BUILDING, MULTIPLE OCCUPANCY – A building that is occupied by two or more independent tenants which do not have control of or association with each other.

3.2.5 BUILDING, SINGLE OCCUPANCY – A building that is occupied by and under the control of the alarm service company only. Any business in the building that is not directly associated with the alarm service shall be the business of, and controlled by, the alarm service company.

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3.2.6 CENTRAL-STATION – A building or distributed group of buildings or enclosed area within a building that houses an operating room and / or equipment used to provide central-station service to protected properties.

3.2.6 revised July 3, 2013

3.2.7 CENTRAL-STATION SERVICE – The use of a system or a group of systems in which the operation of circuits and devices at a protected property are signaled to, recorded in, and supervised from a central-station having trained operators who, upon the receipt of a signal, take such action as required by the nature of the signal received.

3.2.8 DERIVED CHANNEL – A signaling line circuit that uses the local leg of the public telephone company's switched network as an active multiplex channel, while simultaneously allowing the leg's use for normal telephone communications.

3.2.9 DIGITAL ALARM COMMUNICATOR RECEIVER (DACR) – A system component located at the central-station that will receive and display signals from a DACT (see 3.2.10).

3.2.10 DIGITAL ALARM COMMUNICATOR TRANSMITTER (DACT) – A system component located at the protected premises that will contact a DACR (see 3.2.9) through the public telephone company's switched network or through a cellular telephone system (dial system) and transmit the necessary data to identify the protected premises and the change of status. A DACT is either integral with the control unit that provides alarm or monitoring functions, or interfaces with a control unit that provides these functions.

3.2.11 DIGITAL ALARM RADIO RECEIVER (DARR) – A system component used in a DARS (see 3.2.12) to receive radio signals transmitted from a DART (see 3.2.13).

3.2.12 DIGITAL ALARM RADIO SYSTEM (DARS) – A one-way radio system that provides backup transmission for a DACT (see 3.2.10).

3.2.13 DIGITAL ALARM RADIO TRANSMITTER (DART) – A system component used in a DARS (see 3.2.12) to transmit signals to a DARR (see 3.2.11) via radio signals.

3.2.14 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.

3.2.15 IDENTIFICATION CODE – The numeric, alpha numeric, alpha, word(s), or similar device used to identify a subscriber.

3.2.16 INACTIVE SYSTEM – A system that transmits a signal to the central-station only when an unintended condition exists or it is under test. Examples of inactive systems are fire- and holdup alarms, or a burglar alarm system supervising a protected premise without the use of opening and closing signals. The 24-hour supervisory check-in signal transmitted by a digital alarm communicator transmitter or a one-way radio (RF) transmitter does not make a system an active system. Such a system is considered inactive if that is the only signal transmitted on a daily basis.

3.2.17 KEY VAULT – An attack resistant container mounted outside of the protected premises that contains the key(s) that will allow entrance into the protected premises. The key vault can be opened with a mechanical key or a card key that is common to several key vaults and which is carried by the runner. Other emergency services, such as the fire department, law enforcement department and authorized private guard service may also have access to the key vault.

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3.2.18 ONE-WAY RADIO ALARM SYSTEM (OWRAS) – A system in which alarm system signals are transmitted from a RAT (see 3.2.25) through a radio channel to at least two independently powered, independently operating, and separately located RARSRs (see 3.2.23) and which are then relayed to a RASSR (see 3.2.24). Signals may be transmitted through one RARSR provided they are also transmitted directly to the RASSR.

3.2.19 OPERATING ROOM – The physically enclosed area within a station that is physically secure and where the operators receive and act on the signals that are transmitted to the station.

3.2.20 OPERATOR – A trained employee stationed at the station whose duty is to provide immediate response to all signals received.

3.2.21 PERSONAL IDENTIFIER – A physical attribute of a person used as a means of verification of personnel identity, such as by retina scan, voice print, fingerprint, hand span, and the like.

3.2.22 POWER ROOM – The area(s) in which the primary and secondary power supplies are housed. This room may or may not include an engine driven generator or uninterruptible battery supply.

3.2.23 RADIO ALARM REPEATER STATION RECEIVER (RARSR) – A system component, used in a OWRAS (see 3.2.18) or a TWRAS (see 3.2.36), consisting of a radio receiver and transmitter located at a repeater station or subsidiary station. This component receives radio signals from a RAT (see 3.2.25) and retransmits them to another RARSR or to a RASSR (see 3.2.24) in a OWRAS (see 3.2.18), or relays signals between a RATR (see 3.2.26) and a RASSR in a TWRAS.

3.2.24 RADIO ALARM SUPERVISING STATION RECEIVER (RASSR) – A radio receiver or receiver/transmitter located at a station, to receive signals from a RARSR (see 3.2.23), RAT (see 3.2.25), or RATR (see 3.2.26) and either annunciates them or interfaces with an automation system that annunciates them.

3.2.25 RADIO ALARM TRANSMITTER (RAT) – A radio transmitter used in an OWRAS (see 3.2.18) located at a protected premises that will transmit signals to at least two independently powered, independently operating, and separately located RARSRs (see 3.2.23). Signals may be transmitted through one RARSR if they are also transmitted directly to the RASSR. A RAT either:

a) Is integral with a control unit that provides alarm or monitoring functions or

b) Interfaces with a control unit that provides these functions.

3.2.26 RADIO ALARM TRANSMITTER/RECEIVER (RATR) – A radio transmitter/receiver used in a TWRAS (see 3.2.36) that is located at a protected premises that will transmit and receive signals through at least two independently powered, independently operating, and separately located RARSRs (see 3.2.23) to and from a RASSR (see 3.2.24), or transmits and receives signals directly to and from a RASSR. A RATR either:

a) Is integral with a control unit that provides alarm or monitoring functions or

b) Interfaces with a control unit that provides these functions.

3.2.27 REPEATER STATION – Equipment, such as radio, which is used to relay signals from protected systems at remote location(s).

3.2.28 RUNNER – A person whose duties are to investigate signals from protected systems that require investigation.

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3.2.29 RUNNER OR SERVICEPERSON STATION – A location separate from the central-station, subsidiary station, or service center, where runners or servicepersons are stationed awaiting instructions to respond to signals received at the central-station. Signals are not to be received at a runner or serviceperson station.

3.2.30 RUNNER SERVICE COMPANY – A company that is independent of the central-station which provides runners to respond to signals received by the station as required by this standard.

3.2.31 SERVICE CENTER – A location which may be separate from a central-station that provides required installation, maintenance, repair, and alarm investigator service to systems served by the company. Keys (where required) and maintenance records for protected premises are retained at the service center. Maintenance records are not required to be physically kept at the service center if they can be readily accessed at the service center from another location.

3.2.32 SERVICE VEHICLE – A vehicle that is used to provide required alarm investigator, installation, maintenance, and repair service to systems served by the company.

3.2.33 SERVICEPERSON – A person whose duties are to provide service to protected systems.

3.2.34 SUBSCRIBER – The user of a premise or item protected by a central-station burglar or- fire-alarm system. An authorized representative of the user may also be considered a subscriber. For residential monitoring stations, a subscriber would be an occupant of a residence protected by the alarm system.

3.2.35 SUBSIDIARY STATION – A normally unattended physically secure facility linked by communication channels to a central-station or residential monitoring station. Signals from protected properties are transmitted to the subsidiary station and then relayed to the station. If the communication link between the subsidiary station and the station is out of service, the subsidiary station can be manned and operated as a central-station or residential monitoring station.

3.2.36 TWO-WAY RADIO ALARM SYSTEM (TWRAS) – A system in which alarm system signals are transmitted and received through a radio channel between a RATR (see 3.2.26) and a RASSR (see 3.2.24). The signals may or may not be relayed through a RARSR (see 3.2.23).

3.2.37 UNINTERRUPTIBLE BATTERY SUPPLY (UBS) – A direct current (DC) generator driven by a combustion engine. The DC output is used to provide the DC power required by an uninterruptible power supply (UPS) or by DC powered units.

3.2.38 UNINTERRUPTIBLE POWER SUPPLY (UPS) – Equipment that will continue to provide alternating current (AC) power to a load in the event of failure of the normal AC power source. A UPS may also provide a more constant voltage and frequency supply to the load. When the normal source of AC fails, the UPS is powered by a DC source from batteries, a UBS, or both.

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3.3 Definitions common to burglar-alarm

3.3.1 ACKNOWLEDGMENT SIGNAL – An audible and/or visual signal that is sent to the subscriber by the station to notify the subscriber that a signal has been received indicating that the protection system has been properly armed. The acknowledgment signal is to be sent manually or automatically.

3.3.2 CENTRAL-STATION BURGLAR-ALARM COMPANY – A company that is engaged in the business of operating one or more central-stations that provide monitoring, record keeping, and reporting for signals received from central-station burglar-alarm systems. The company shall directly provide for equipment installation, inspection, testing, maintenance and repair service of central-station systems, and runners for alarm investigation service, or it may subcontract for these services. The company may also operate one or more subsidiary stations.

3.3.3 CENTRAL-STATION BURGLAR-ALARM SYSTEM – A system or group of systems consisting of control units, intrusion detection units, contacts, protective wiring, installation wiring, and the like, installed at a protected property in accordance with the Standard for Installation and Classification of Burglar and Holdup Alarm Systems, UL 681. When the system is armed, detection of an intrusion will cause a signal to be automatically transmitted to a central-station complying with this standard. Arming the system will cause a closing signal to be transmitted and disarming the system will cause an opening signal to be transmitted. The system is to be controlled and operated by a central-station burglar-alarm company.

3.3.4 LINE SECURITY, STANDARD AND ENCRYPTION – Methods of supervising the communication channel used to transmit signals between the protected premises and the central-station or residential monitoring station. This supervision serves to detect compromise attempts on the communication channel that are intended to not cause signals to be annunciated at the station and which would allow entry into the protected premises without initiating a signal at the station.

3.3.5 NORMAL OPERATION SIGNALS – A signal transmitted from the protected premises in accordance with established procedures to indicate to the station that the premises is being closed and armed (or opened and disarmed).

3.3.6 SUBSCRIBER'S BURGLAR-ALARM CONTROL UNIT – Equipment located at the protected premises that controls the protective circuit(s), transmits signals to the central-station or residential monitoring station, and allows the subscriber to arm and disarm the alarm system.

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3.4 Definitions common to fire-alarm

3.4.1 CENTRAL-STATION FIRE-ALARM COMPANY – A company that is engaged in the business of operating one or more central-stations that provide monitoring, re-transmission of signals, and associated record keeping and reporting for signals from central-station fire-alarm systems. The station shall directly provide for equipment installation, inspection, testing, maintenance and repair service of central-station systems, runner service, and associated central-station services, or they may subcontract for these services. The company may also operate one or more subsidiary stations.

3.4.2 CENTRAL-STATION FIRE-ALARM SYSTEM – A system or group of systems installed in accordance with the requirements of the National Fire Alarm Code, NFPA 72, in which the operation of circuits and devices are transmitted automatically to, recorded in, maintained by, and supervised from a central-station having trained operators who, upon receipt of a signal, take action as required by NFPA 72. The system is to be controlled and operated by a central-station fire-alarm company.

3.4.3 FIRE-ALARM SERVICE – LOCAL COMPANY – A company that provides protected premises equipment installation, inspection, testing, maintenance and repair service of central-station fire-alarm systems with its own facilities and personnel in accordance with the requirements of the National Fire Alarm Code, NFPA 72. The company subcontracts the monitoring, re-transmission, and associated record keeping and reporting with a central-station. The required runner service is provided by the company or by the central-station.

3.5 Definitions common to residential monitoring stations

3.5.1 RESIDENTIAL MONITORING STATION COMPANY – A company that is engaged in the business of operating one or more residential monitoring stations that provide monitoring, record keeping, and reporting for signals from alarm systems. The company may also operate one or more subsidiary stations.

3.5.2 RESIDENTIAL MONITORING STATION – A building or enclosed area within a building that houses an operating room and equipment used to provide residential monitoring station service to protected properties.

FACILITIES AND EQUIPMENT

4 Building Construction Requirements

4.1 A building that houses a central-station or subsidiary station or residential monitoring station shall comply with one of the following:

a) All bearing walls, floors, ceilings, columns, beams, girders, trusses, and arches have a one hour fire resistant rating or are constructed of the materials specified in 4.4;

b) A sprinkler system, supervised by the station, installed in all parts of the building except for the operating room and power room; or

c) The building is single occupancy and the exterior walls have a one hour fire resistant rating or are constructed of the materials specified in 4.4.

See also Figure 4.1.

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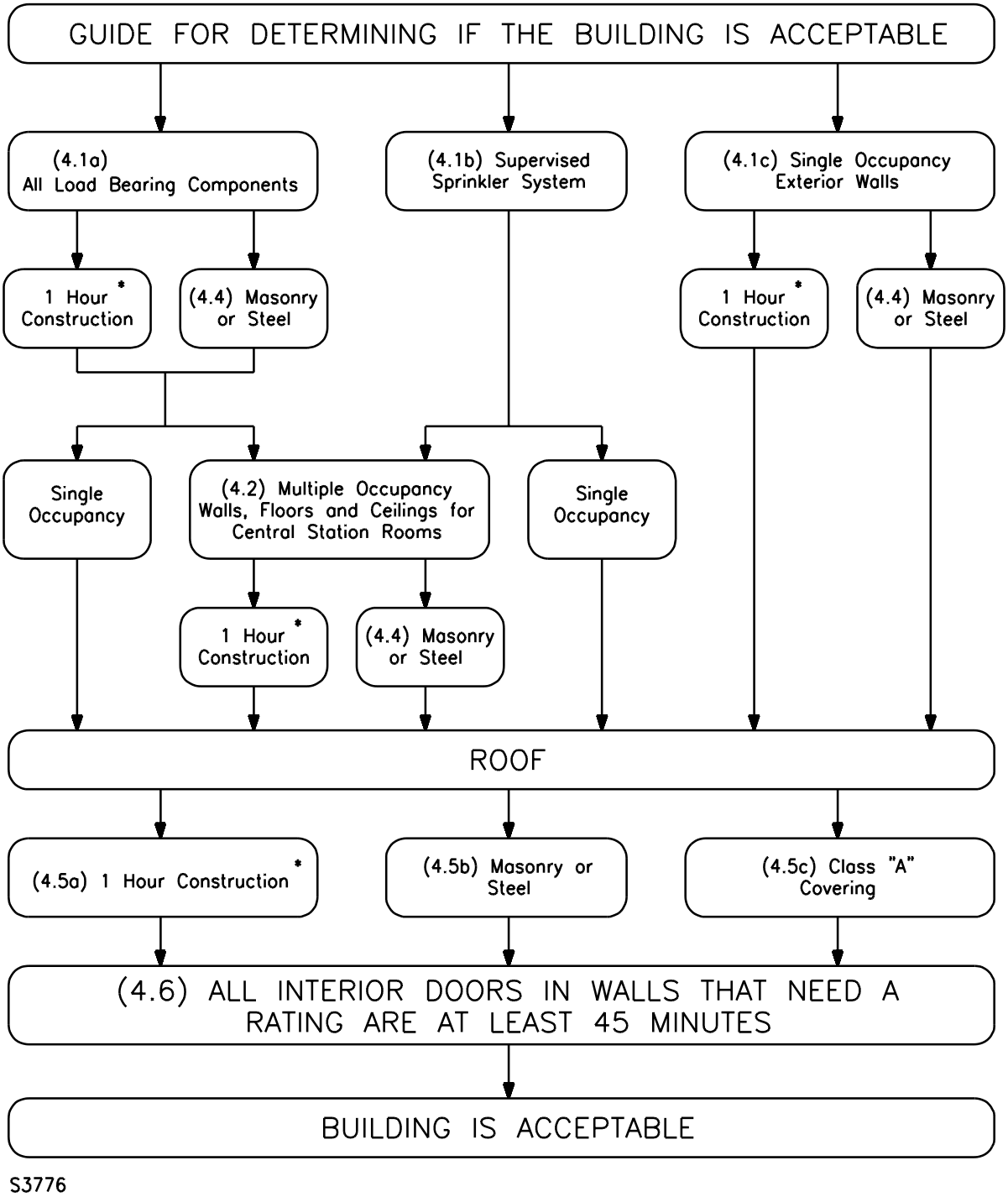
Figure 4.1
Building construction



* May be determined by compliance with the local building code, or the Standard for Fire Tests of Building Construction and Materials, UL 263. See 4.3.

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4.2 In a multiple occupancy building, the walls, floors and ceilings enclosing the station shall have a one hour fire resistant rating or be constructed of the materials specified in 4.4.

4.3 The fire resistant rating of building construction shall:

a) Meet the requirements of the local building code or

b) Be determined by the test methods in the Standard for Fire Tests of Building Construction and Materials, UL 263.

4.4 Walls, floors, ceilings, beams, girders, trusses, and arches that are constructed of masonry or steel, or other materials deemed to have similar combustive characteristics are not required to have a fire resistant rating.

4.5 A building that houses a station shall either have a roof:

a) With a one-hour, fire-resistant rating;

b) Constructed of materials specified in 4.4; or

c) Constructed of a combustible deck with a Class A roof covering complying with the Standard for Materials for Built-Up Roof Coverings, UL 55A, and the Standard Test Methods for Fire Tests of Roof Coverings, UL 790.

4.6 Any door in an interior wall that is required to have a fire resistant rating shall have a minimum 3/4-hour fire resistant rating.

4.7 If a repeater station is located in a building:

a) The building shall comply with the fire resistive requirements of this section or

b) The repeater station shall be duplicated at separate sites and signals shall be able to be relayed through either site.

5 Physical Protection

5.1 The operating room of a central, subsidiary, and residential monitoring station, shall be completely enclosed within a boundary that is fixed in place and shall be protected at all times against attack or entrance by unauthorized persons. Walls enclosing an operating room shall extend from a fixed-in-place floor deck to a fixed-in-place ceiling. If a suspended ceiling is used, and the wall construction above the suspended ceiling is not required to serve as a fire stop, the portion of the wall above the suspended ceiling may be constructed of wire-mesh screening constructed of at least 0.053 inch (1.35 mm) expanded sheet steel or 10 AWG (0.102 inch diameter) (5.26 mm^2) steel wire with openings not greater than 2 inches (51 mm).

Exception: Wall construction above a suspended ceiling is not required provided that solid walls, floor, and ceiling or roof enclose the entire alarm company quarters and the alarm company has controlled access throughout their quarters and there is a burglar-alarm system installed in areas surrounding the operating room that become unoccupied outside of normal business hours. The burglar-alarm system shall comply with Extent No. 3 in the Standard for Installation and Classification of Burglar and Holdup Alarm Systems, UL 681, shall be armed when those areas are unoccupied, and shall be monitored in the operating room.

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5.2 Entrances into the operating room shall be kept locked at all times and arranged so that positive identification can be made by vision and voice of any person seeking admittance. If the person is unknown to the personnel, they shall be identified by an identification card or the like. If closed circuit television is used, a second means of manual visual identification shall be provided.

5.3 A door into the operating room of a station shall be one of the following:

a) A recognized fire-resistant door and door frame;

b) A solid or hollow metal door; or

c) A solid wood, or solid wood core door with wood, plastic, or composition cladding a minimum of 1-1/2 inches (38 mm) thick.

5.4 The entry door shall be equipped with an automatic door closer without a hold open feature, and a locking means that cannot be changed to an unlocked condition.

5.5 If the door is locked with an electromagnetic lock, or similar device that requires electrical power to maintain the locking of the door, standby power or a backup mechanical lock shall be provided to maintain the locking of the door. The standby power shall be provided from the secondary power supply (see 9.5).

5.6 The operating room shall be arranged so that a person that is outside of the operating room in an area that is controlled by the station, cannot view the signal processing equipment so as to obtain information about an alarm system served by the station.

5.7 Any transparent window or panel that will provide a view of the operating room from a location that is not under the control of the station shall be made translucent or opaque by painting, screening, blinds, curtains, drapes, or similar coverings. Mirrored, tinted and one-way glass shall not be used for that purpose.

5.8 Any exterior opening, other than a door, that leads into the operating room from an area that is not controlled by the station, and which is accessible as defined in the Standard for Installation and Classification of Burglar and Holdup Alarm Systems, UL 681, shall be covered with either:

a) Permanently-installed solid bars constructed of iron or steel at least 1/2 inch (12.7 mm) diameter, or rectangular with a minimum cross-section area of 0.25 square inch (40 mm^2) with the minimum dimension 1/4 inch (6.4 mm). The space between bars shall be 4 inches (102 mm) or less and the space between supporting cross pieces shall be 18 inches (457 mm) or less. The supporting cross pieces shall be of the same material and dimension as the bars or larger;

b) Wire-mesh screening constructed of at least 0.053 inch (1.35 mm) expanded sheet steel or 10 AWG (0.102 inch diameter) (5.26 mm^2) steel wire with openings not greater than 2 inches (51 mm);

c) Glazing complying with the Standard for Burglary Resisting Glazing Material, UL 972; or

d) Glazing complying with the Standard for Bullet-Resisting Equipment, UL 752.

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5.9 A subsidiary station repeater station shall be equipped with a burglar-alarm and automatic fire-alarm system connected to the central-station or residential monitoring station. The automatic fire-alarm system shall comply with the requirements in the National Fire Alarm Code, NFPA 72. The burglar-alarm system shall comply with Extent No. 3 in the Standard for Installation and Classification of Burglar and Holdup Alarm Systems, UL 681, and shall be armed when the station is unattended. See 11.7. A repeater station is not required to be equipped with a burglar-alarm and automatic fire-alarm system if the repeater station is duplicated at separate sites and signals are able to be relayed through either site.

6 Fire Protection

6.1 Portable fire extinguishers

6.1.1 Each station operating room shall be equipped with a minimum of two portable fire extinguishers rated 2-A or greater and two portable fire extinguishers rated 10-B:C or greater. Two multipurpose fire extinguishers rated 2-A:10-B:C will satisfy this requirement.

6.1.2 Each power room, battery room, and engine-driven generator room or enclosure shall be equipped with a minimum of one portable fire extinguisher rated 2-A or greater and one portable fire extinguisher rated 10-B:C or greater. One multipurpose fire extinguisher rated 2-A:10-B:C will satisfy this requirement.

6.1.3 Portable fire extinguishers shall comply with the Standard for Water Fire Extinguishers, UL 626; the Standard for Carbon-Dioxide Fire Extinguishers, UL 154; the Standard for Dry Chemical Fire Extinguishers, UL 299; or the Standard for Halogenated Agent Fire Extinguishers, UL 1093.

6.1.4 Fire extinguishers shall be located where they will be readily accessible and immediately available. A fire extinguisher intended to be used on electronic equipment, such as an automation system, shall be of the carbon dioxide or halogenated agent type and shall be located next to the automation system equipment. If the automation system equipment is in a separate room, the extinguisher shall be located outside of the room, within 3 feet (0.9 m) of the door. A separate room for automation equipment shall be provided with an automatic smoke and fire detection system with annunciation in the operating room.

6.1.5 A fire extinguisher shall be installed on the hanger or in the bracket supplied, or placed in a cabinet or a wall recess. A hanger or bracket shall be securely anchored to the mounting surface. If a cabinet is used, the door shall not be locked.

6.1.6 Fire extinguishers shall be maintained in accordance with the instructions marked on each extinguisher. Fire extinguishers shall be inspected once a year and the date of the inspection recorded in ink on a tag attached to the extinguisher.

6.1.7 The fire extinguisher for a power room, battery room, or engine-driven generator shall be located inside or just outside of the door to the room, within 3 feet (0.9 m). If the engine-driven generator is enclosed as specified in 9.13.2 or 9.13.6, the extinguisher shall be located within 10 feet (3.05 m) of the enclosure. If the enclosure for the engine-driven generator is provided with a personnel door or gate, the extinguisher shall be located inside or just outside the door or gate, within 3 feet.

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6.2 Fire suppression system

6.2.1 If the automation system equipment is located in a separate room that is not normally occupied by personnel, and it is protected by a fire suppression system using a carbon-dioxide or halogenated or clean agent extinguishing agent, the discharge of the extinguishing agent shall either be automatic and an audible signal shall announce that it is has been discharged, or the discharge of the extinguishing agent shall be under manual control. If under manual control, the automation system room shall be equipped with an automatic fire-alarm system that complies with the National Fire Alarm Code, NFPA 72, with annunciation in the operating room. Manual discharge is not acceptable in a subsidiary station.

6.3 Water sheds

6.3.1 A water shed shall be installed over any equipment that is sensitive to water damage if there is a possibility of water damage from overhead, such as the discharging of a sprinkler head. The water shed may be a fixed-in-place deflector, an enclosed rack designed to deflect water from the equipment, or may be a movable waterproof cover or shield installed next to the equipment so that it can be immediately positioned by one person to protect the equipment. A movable waterproof cover shall only be used in a staffed station.When staff is not always in the same room as the equipment and the source of water is a pre-action sprinkler system, the discharge of the sprinkler shall be annunciated to designated personnel trained in the implementation of a written operating procedure for rapidly positioning the water shed.

6.3.1 revised July 3, 2013

6.4 Repeater station fire protection

6.4.1 A repeater station need not be provided with fire protection equipment, unless located in a building. A repeater station in a building is not required to be provided with fire protection equipment if it is duplicated at separate sites and signals are able to be relayed through either site.

6.5 Automatic fire-alarm system

6.5.1 A station shall have an automatic fire-alarm system installed in all areas not continuously occupied by alarm service company personnel, but which are under its control. The system shall comply with the National Fire Alarm Code, NFPA 72, and shall notify the operators of any trouble or fire condition that is detected.

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7 Standby Lighting

7.1 Fixed standby lighting that is independent of the power source normally used for lighting, and which can be placed into service immediately, shall be provided in:

a) The operating room of a station;

b) Each runner and serviceperson station; and

c) An automation system room or equipment room that is separated from the operating room.

7.2 Fixed or portable standby lighting that is independent of the power source normally used for lighting, and which can be placed into service immediately, shall be provided:

a) In a power room and

b) For an engine-driven generator(s).

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