#### ORDINANCE 600

#### CITY OF LACEY

AN ORDINANCE UPDATING VARIOUS UNIFORM CODES OF THE CITY BY ADOPTING THE 1979 EDITIONS OF THE UNIFORM BUILDING CODE AND UNIFORM BUILDING CODE STANDARDS, THE UNIFORM MECHANICAL CODE, THE UNIFORM PLUMBING CODE, THE UNIFORM FIRE CODE, THE 1980 SUPPLEMENT TO THE UNIFORM BUILDING CODE, U. B. C. STANDARDS AND THE UNIFORM FIRE CODE, AND THE 1980 FIRE ALARM CODE FOR THE CITY OF LACEY AND ADOPTING THE WASHINGTON STATE ENERGY CODE; AMENDING SECTIONS 14.04.010, 14.04.015, 14.05.010, 14.06.010, 14.08.010 AND 14.10.010 OF THE LACEY MUNICIPAL CODE AND ADDING A NEW SECTION, 14.09.010, TO THE LACEY MUNICIPAL CODE

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF LACEY, WASHINGTON, as follows:

<u>Section 1</u>. Section 14.04.010 of the Lacey Municipal Code is hereby amended to read as follows:

"There is hereby adopted and by this reference made a part hereof as though fully set forth herein, at length, that certain code, known as the Uniform Building Code, 1976 1979 Edition, including the appendix therein, and the 1980 Supplement to the <u>Uniform Building Code</u>, the Uniform Building Code Standards, and the 1980 Supplement to the U. B. C. Standards, which-are-referred te-in-said-code-and-made-a-part-of-said-code-by-reference, as the building code and standards of the city; provided, that those sections of the Uniform Building Code set forth in Section 14.04.015 herein are amended to read as set forth in said section."

Section 2. Section 14.04.015 of the Lacey Municipal Code is hereby amended to read as follows:

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"The following sections of the Uniform Building Code as adopted in Section 14.04.010 hereof are hereby amended to read as follows:

Section 1302(b) <u>Special Provisions</u>. Group R-1 occupancies, more than two stores in height or having more than 3,000 square feet of floor area above the first story, shall be not less than one-hour fire-resistive construction throughout.

"EXCEPTION: Dwelling units within an apartment house not over two stories in height shall have interior walls and ceilings of three-quarter hour fire-resistive construction provided the units are separated from each other and from corridors by construction having a fire-resistance rating of not less than one hour. Openings to such corridors shall be equipped with doors conforming to Section 3304(h) or other equivalent protection.

"Every Group R-1 occupancy two or more stories in height and containing three or more dwelling units shall have an approved fire alarm system as specified in the Alarm Code.

"For Group R-1 occupancies with a Group B, Division 1 parking garage in the basement or first floor, see Section 1102(a).

"For attic space partitions and draft stops see Section 3205.

"Section 1402. Buildings or parts of buildings classed in Group R, Division 3, because of the character of the occupancy shall have interior walls and ceilings of not less than three-quarter hour fire-resistive construction and shall be limited to the types of construction set forth in Tables No. 5-c and 5-d and shall not

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exceed, in area or height, the limits specified in Sections 505, 506 and 507.

"Section 2517(c)2. Accessible underfloor areas shall be provided with a 24-inch by 30-inch exterior foundation access crawl hole. Pipes, ducts and other nonstructural construction shall not interfere with the accessibility to or within under-floor areas. Studs supporting floors, ceilings, roofs and non-bearing walls shall be spaced not more than 16 inches.

"Section 3802. Subsection (b)12 is added to read as follows:

"Standard automatic sprinkler systems shall be installed throughout all buildings 60 or more feet in height, or 10,700012,000 or more square feet in gross floor area, provided, that in lieu of a sprinkler system, approved two-hour area separation walls may be used in types II one-hour, II N or V buildings where the building is limited to one story with no basement and does not exceed 20,000 square feet, and approved four-hour separation walls may be used in all other buildings, all in accordance with Section 505(d) to maintain the maximum gross floor area stated herein. Sections-of-buildings7-for-the-purposes-of-this-subsection7-may-be considered-separate-buildings-only-when-separated-from-the-rest-of the-building-by-area-separation-walls-as-per-Section-505(d)-Uniform Fire-Code,-1976-edition. In all buildings from 5,000 to 10,000 12,000 square feet in area, the Fire Chief may impose the requirement for automatic sprinkler systems set forth in this section, when in his opinion, the design or construction of the building or complex of buildings of which it is a part is of such a nature that a fire

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must be fought from within, and the imposition of such a requirement is necessary in order to comply with the intent of this division and reasonable fire and life safety standards."

Section 3. Section 14.05.010 of the Lacey Municipal Code is hereby amended to read as follows:

"There is adopted by this reference and made a part of this chapter as though fully set forth herein, at length, that certain code, known as the Uniform Mechanical Code, 1976 1979 Edition, published by the International Conference of Building Officials, including all appendices and supplements thereto, as the mechanical code of the city; provided, however, that Chapter 20 of the Uniform Mechanical Code, 1976 1979 Edition, is superseded and replaced by the requirements of the National Fire Protection Association Pamphlet No. 96, 1976 1978 Edition, which is adopted by this reference and made a part of this chapter as though fully set forth herein, at length."

Section 4. Section 14.06.010 of the Lacey Municipal Code is hereby amended to read as follows:

"The Uniform Plumbing Code, 1976 1979 Edition and the 1980 Supplement, published by the International Association of Plumbing and Mechanical Officials, with the exception of Chapters 11 and 12 and Appendix F, and any other provisions of such code dealing with the installation of any gas piping, water heaters or vents for water heaters, are hereby adopted as the Plumbing Code for the City of Lacey. and-pProvided, further, that those sections

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set forth in Section 14.06.020 hereof are amended to read as set forth in said section."

Section 5. Section 14.08.010 of the Lacey Municipal Code is hereby amended to read as follows:

"There is adopted, for the purpose of prescribing regulations governing conditions hazardous to life and property from fire or explosion within those incorporated boundaries of the city, that certain code known as the Uniform Fire Code, developed by the International Conference of Building Officials and Western Fire Chiefs Association, being particularly the 1976 1979 Edition thereof, and the whole thereof, except-Articles-11-and-12-of-said eede, and including all appendices to said code, and the 1980 Supplement to the Uniform Fire Code, three copies of which are now on file in the office of the city clerk, and said code is adopted and incorporated as fully as though set out in this chapter at length."

Section 6. Section 14.10.010 of the Lacey Municipal Code is hereby amended to read as follows:

"There is adopted, for the purpose of prescribing regulations governing the installation, use and maintenance of fire alarm systems within the city, that certain document entitled '1976 1980 Fire Alarm Code for the City of Lacey,' three copies of which are now on file in the office of the city clerk, and said code is adopted and incorporated as fully as though set out in this chapter at length."

Section 7. There is hereby added to the Lacey Municipal Code a new section, 14.09.010, to read as follows:

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"There is hereby adopted and by this reference made a part hereof as though fully set forth herein at length, that certain code known as the 'Washington State Energy Code' developed and adopted by the state Building Code Advisory Council and dated June 30, 1980, as the energy code for the City of Lacey."

PA	ASSED BY	THE Ç	ITY C	OUNCIL	<b>OF</b>	THE	CITY	OF	LACEY,	
WASHINGTON,	this	9th	day	of(	Oc	tob	n	<u> </u>		1980.

CITY COUNCIL

arel B Mavor

Attest: City Clerk

Approved/as to Form:

Attorney CX. Passed: 10-9-80 Published: 10-15-80

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FIRE ALARM CODE for

· 1980

9-5-80

# CITY OF LACEY

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#### INTRODUCTION

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#### A. Purpose

The purpose of these standards is to specify use of fire alarm systems providing the highest degree of public safety and building protection from fire which can reasonably be required without involving unreasonable hardships or interference with normal use and occupancy of the structure. These standards, in general, provide for:

- 1. The installation of automatic detection in all new unsprinklered construction over 7,500 square feet gross floor area, except as provided in Paragraph VIII(B).
- 2. Products of combustion detection in hallways and certain other areas in buildings where a life hazard exists.
- 3. An intertie of the water flow alarm of approved sprinkler systems and other fire alarm systems to the Fire Alarm Center.

#### **II** DEFINITIONS

#### A. Adult

A person eighteen (18) years of age or older.

#### B. Alarm Service

A fire alarm system providing for:

- 1. The manual operation of a fire alarm signal station; or
- 2. The transmission of an alarm indicating the operation of protective equipment or systems; or
- 3. The transmission of an automatic fire alarm signal; or
- 4. The transmission or actuation of any other emergency fire alarm signal; or

5. Any combination of these.

#### C. Alarms

Type A - General Alarm (non-coded)

A/E - Type A with automatic detection devices

Type B - General Alarm (zone non-coded)

Type B/E - Type B with automatic detection

Type C - General alarm (zone coded)

Type C/E - Type C with automatic detection

Type D - Dual coded alarm

Type D/E - Type D with automatic detection

#### D. Annunciator

A unit containing two or more identified targets or indicator lamps in which each target or lamp indicates the circuit, condition or location to be annunciated.

#### E. Approved

Accepted in writing by the Fire Chief or his representative as a result of investigation and experience and/or by reason of test, listing or approval for specific use by Underwriters' Laboratories, Inc., Factory Mutual Research Corporation or other nationally recognized testing agencies.

#### F. Automatic Detection Devices

Approved products of combustion detectors, heat rate-of-rise detectors, heat detectors, or other heat, smoke or flame detectors approved by the Fire Department.

G. Child

A person under the age of eighteen years.

H. Coded Signal

An alarm signal which consists of not less than three complete rounds of the number transmitted.

#### I. Dwelling Unit

One or more habitable rooms which are occupied, or which are intended or designed to be occupied, by one family, and which include the facilities for living, sleeping, cooking and eating.

#### J. Educational Building

A building or structure, or any portion thereof, used by persons harbored to receive instructions such as schools, universities, colleges, and academies. It also includes part-day nursery schools, kindergartens and other schools whose purpose is primarily educational.

#### K. Fire Alarm Systems

Electrically-operated circuits, instruments, and devices, including the necessary electrical sources, designed to transmit alarms, supervisory signals and trouble signals necessary for the protection of life and property.

#### L. Fire Department

Thurston County Fire District No. 3.

#### M. Fire Alarm Center

The Alarm Receiving Agency approved by the Fire Department.

#### N. Fire Divisions

Those divisions established by area separation walls. Construction of such area separation walls shall be as per Section 505(d), Uniform Building Code, 1979 edition.

#### 0. Institutional Building

A structure, or any portion thereof, used by persons harbored or detained to receive medical, charitable, or other care or treatment, or used to detain persons involuntarily.

#### P. Local Fire Alarm System

A local system used exclusively to sound a fire alarm at the protected premises as the result of the manual or automatic operation of protection equipment or signaling systems.

#### Q. Mainténance

Repair service, including periodic inspections and tests required to keep the protective signaling system and its component parts in an operative condition at all times.

#### R. Mercantile Building

A structure or building, or any portion thereof, used for the displaying, selling, or buying of goods, wares or merchandise.

#### S. Multi-Family Buildings

A structure or portion thereof containing three or more dwelling units, including tenement house, apartment house, flat or condominium.

#### T. Owner

Any person, agent, firm, or corporation having a legal or equitable interest in the property.

#### U. Product of Combustion Detection

When used with smoke detection shall mean the following type systems:

- 1. Photo-electric cell
- 2. Refractory
- 3. Ionization
- 4. Other similar systems if approved by a national testing laboratory.

#### V. Public Assembly Building

A building or portion of a building used for the gathering together of fifty (50) or more persons for such purposes as deliberation, education, instruction, worship, entertainment, amusement, drinking or dining, or awaiting transportation.

#### W. Residential Building

A structure, or any portion thereof, used by persons for sleeping accomodations, (such as motels, hotels, apartment houses, dormitories, condominiums, lodging or rooming houses, and multiple family residences) where persons are not harbored or detained to receive medical, or other such care or treatment, or are otherwise involuntarily detained.

X. Single Station Products of Combustion Detectors

Smoke detectors conforming to Uniform Building Code Standard No. 43-6. Approved self-contained detectors are allowed.

#### Y. Smoke/Product of Combustion

See "Product of Combustion."

#### Z. Trouble Signal

A signal indicating malfunction of any nature, such as a circuit break or ground, occurring at the devices or wiring associated with a fire alarm system.

#### III GENERAL INFORMATION

#### A. Scope

The regulations contained in this code require the installation of and govern the use and maintenance of fire alarm systems within the City of Lacey. The regulations contained in this code require the installation of electrically supervised fire alarm signal systems in premises and occupancies as specified throughout this code.

#### B. Conflict With Standards

In the event of any conflict between the provisions of the National Fire Code or the Uniform Building or Fire Code and the regulations contained in this code, this code shall govern.

#### C. Maintenance

Maintenance of any fire alarm system shall be provided by the person, firm or corporation that is responsible for the building in which it is installed. Checks shall be made at least quarterly intervals to insure proper operation and maintenance of the system. Records of checking shall be maintained available for inspection by Fire Department personnel. At least semi-annually, persons properly trained and qualified shall completely test each fire alarm system. Approved records of such testing and servicing shall be forwarded to the Fire Department within seven (7) days after the completion of such testing and servicing. Persons installing and providing semi-annual servicing and testing shall hold the required valid Washington State Low Voltage Specialty Electrical Contractor's License or shall be approved by the Fire Chief or his representative.

Note: See Appendix A, B, C. EXCEPTION: Group R-3 occupancies.

#### D. Indemnity Agreement .

Any person, firm or corporation desiring to install any alarm system within the City of Lacey shall first sign an indemnity agreement holding the Fire Department and the City of Lacey harmless from any liability involving the failure of any agency circuit or equipment.

#### E. Termination and Penalties

The Fire Chief may order the removal of any alarm termination from the Fire Department or Fire Alarm Center due to repeated failure of equipment or circuitry, multiple false alarms, or failure to comply with all of the provisions of this code. Such notice of discontinuation shall be made in writing to both the company that installed and/or supplied the alarm equipment and to the person, firm or corporation that is responsible for the building in which the alarm system is installed, at least 48 hours prior to the disconnection of the alarm circuit.

In the event of temporary failure of alarm equipment or circuitry, the Fire Chief may order all emergency response actions discontinued until repairs can be made.

In each instance involving two (2) false alarms that occur from any one location within a continuous ninety (90) day period, a penalty of \$25.00 may be charged against the person, firm or corporation that is responsible for such alarm system, and when the number of false alarms exceeds two in any ninety (90) day period, the Chief shall notify in writing such person, firm or corporation that they may be held responsible for costs of responding to such false alarms if they continue to occur. In such case, the cost of each fire engine or truck company required to respond may be charged at the rate of \$250.00 per hour or fraction thereof. Any and all charges are payable to the Fire Department.

#### IV REVIEW, ACCEPTANCE AND PERMITS

#### A.. Information Required

Two (2) sets of complete plans of fire alarm systems, one of which shall be retained by the Fire Department; and regarding only the fire alarm system including specifications, wiring diagrams, and floor plans showing device locations shall be submitted to the Fire Department for review and approval prior to the issuance of a fire alarm installation permit. All fire alarm plans submitted for review and approval shall bear the contractor's valid Washington State Low Voltage Specialty Electrical Contractor's License number or shall be stamped by a registered fire protection engineer. Plans shall be reviewed by the Fire Department or by a person or firm approved by the Fire Department prior to the issuance of a building permit and/or a permit for the installation of a fire alarm system. All devices, combination of devices, and equipment constructed and installed in conformity with this standard shall be approved only for the purposes for which they are intended. All equipment shall be approved by a nationally recognized testing agency for the purposes for which it is intended. All equipment shall be approved by a nationally recognized testing agency for the use for which it will be installed.

#### B. Permits

No person shall install any fire alarm system within the City of Lacey without

first obtaining a fire alarm installation permit from the Fire Department (see Section IV(A)). The Chief or his representative may, in writing, suspend or revoke any permit issued pursuant to this section whenever the Chief of his representative finds that the permit was issued on basis of error, deception or fraud on the part of the applicant, or upon discovery of a violation of any of the applicable Codes or Ordinances of the City of Lacey, including provisions of this Code.

Upon a determination by the Chief or his representative that a fire alarm system, for which a permit is requested, complies with said Codes and Ordinances, the permit shall be issued.

EXCEPTION: No permit required for installation of single station smoke products or combustion detectors in R-3 occupancies.

#### C. Acceptance of System After Installation

Upon completion of the system, a satisfactory test of the entire installation shall be made in the presence of a representative of the Fire Department prior to final approval. Such test shall be coordinated by the Fire Chief or his representative and will require a copy of the "As Built" plans of the system and the presence of a representative of the fire alarm installer. Upon final inspection of all fire alarm systems, the installer shall provide the Fire Department representative evidence that the installer holds the required valid Washington State Low Voltage Specialty Electrical Contractor's License. The fire alarm installer shall be responsible to conduct the actual test and shall provide all equipment necessary for same. The test shall include activation of all devices. During the test where sprinkler systems are installed, a representative of that firm should be present. Acceptance of a system will be issued in writing after the above test is satisfactorily completed. The Building Official shall not issue a Certificate of Occupancy until he has such letter of acceptance on file. If, on the basis of said inspection and test, the Chief or his representative determines that said fire alarm system does not comply with applicable Ordinances or Codes of the City of Lacey, or if it does not conform to the plans as previously issued until said non-conformities or violations are rectified. The procedure for revocation of permits shall be as specified in Section 4.107, Uniform Fire Code. Any prior review is intended only as assistance to the owner and installer and does not indicate approval of the system at that time.

# EXCEPTION: Group R-3 Occupancies where single station smoke products of combustion are installed.

#### D. Standards

All fire alarm systems shall be installed in accordance with the Ordinances of the City of Lacey, and particularly those portions of the National Fire Codes dealing with fire alarm systems including Standards No. 70, 71, 72A, 72B, 72C, 72D, 72E, and 74.

#### E. Maintenance Agreement

Fire alarm systems required under this Ordinance, including existing fire alarm systems, shall have a maintenance contract in effect with a fire alarm company or person approved by the Fire Chief or his representative prior to final approval. Such agreement must provide for semi-annual testing as prescribed by adopted Local and National Standards set forth in Appendix "A" of this Ordinance. Service shall be available within twenty-four (24) hours of notification of trouble.

#### V ALARM SYSTEM COMPONENTS

#### A. Manual Sending Stations

A manually operated sending station shall be provided at each main exit and in the natural path of escape from fire at readily accessible and visible points which are not likely to be obstructed. The maximum travel distance between sending stations shall not exceed two hundred (200) feet and sending stations shall be provided on each floor. Each manually operated sending station shall be securely mounted. The bottom of the box shall be not less than four and one-half feet  $(4^{1}2')$  and not more than six feet (6') above floor level. Manual sending stations may be deleted or the required numbers lessened upon approval of the Fire Chief or his representative where, because of the design of the structure or the composition of the fire alarm system, said stations are not necessary for fire and life safety.

#### B. Sounding Devices

Sounding devices shall be provided of such character and so distributed as to be effective regardless of the maximum noise level obtained from machinery or other equipment or vocal sounds produced under normal conditions of occupancy. Each system shall be so arranged that no manual intervention will be required following the actuation of a sending station or automatic detector

for causing the effective response of all required sounding devices. No facilities shall be provided whereby such response can be controlled or modified except where specifically approved as provided in this code. Where required by the Fire Chief or his representative an outside sounding device(s) and/or facilities for the handicapped may be required.

#### C. Annunciator

Annunciators shall be required on all fire alarm systems when the building complex consists of three or more separate buildings, floors or fire divisions. Such annunciators shall have all interconnecting wiring electrically supervised. Annunciator panels shall be installed so as to be clearly visible and identifiable to personnel responding to an alarm. A map of the premises to be protected showing zones shall be provided at each annunciator panel in a location approved by the Fire Chief or his representative.

#### D. Power Supply

All systems shall provide a secondary power source and shall automatically transfer within 30 seconds to that source in the event of a primary power source interruption. Such secondary source shall provide at least 24 hours power supply. Dry cell batteries shall not be used as a secondary power source. All batteries must be of a rechargeable, self-contained type. All power supply equipment and wiring shall be installed in conformity with the requirements of National Fire Codes and rules and regulations of the State Department of Labor and Industries, Electrical Inspection Division.

#### E. Alarm and Supervision Circuits

Fire alarm system wiring and components shall be electrically supervised. All fire alarm systems shall be electrically supervised so that the appearance of a break or ground fault of its installation wiring circuits which prevents the required operation of the system or failure of the main power supply shall be indicated by a distinctive trouble signal. All systems shall be test free from ground except those parts of circuits or equipment which are intentionally and permanently grounded to provide fault detection, emergency ground signaling or circuit protective grounding. All systems shall be so designed that they do not depend upon the effectiveness of any ground connection for normal operation. A switch for silencing the trouble signal sounding appliance may be provided only if it transfers the trouble indication to a lamp or other

acceptable visible indication adjacent to the switch. The visible indicator shall remain in operation until the silencing is restored to its normal position unless the audible signal will be obtained when a fault occurs without restoring the switch to normal or unless the audible signal will be obtained when a fault occurs without restoring the switch to normal or unless the audible trouble is again energized upon correction of the fault. Where corridors in an institutional, assembly, residential or educational building are utilized for pressurized air handling systems an approved automatic smoke detector system shall be installed and connected to automatically energized fire alarm circuits which will release hold open devices on required doors in fire walls and smoke separation partitions and simultaneously de-energize the electrical power to the mechanical equipment of the interhandling system. Fire alarm control panel and/or trouble signal indicators shall be installed in areas which are normally staffed during hours a building is occupied. The fire alarm control panel shall have a constantly visible indicator showing that the system is normal. Any derangement of this system's circuits will be indicated by means of a trouble bell or buzzer. When an audible trouble signal is silenced manually, the visible signal shall continue to indicate that the system is normal. Any derangement of this system's circuits will be indicated by means of a trouble bell or buzzer. When an audible trouble signal is silenced manually, the visible signal shall continue to indicate that the system is not operating normally and shall be corrected immediately. When required, the control panels may be equipped with a momentary contact reset switch. A manually or automatically operated fire alarm system may be arranged for the accomplishment of incidental functions such as release of self-opening or self-closing doors, cutting off supplies of gas, fuel oil, electric power, switching on emergency lights, stopping of air handling equipment fans, et cetera, as long as the accomplishment of said functions does not impair the effectiveness or reliability of the required sounding devices. Directions for operating together with the instructions on how to reset the system or de-energize the circuit after the alarm has been sounded shall be posted in a location and manner approved by the Chief or his representative. A key for the alarm panel(s) shall be provided in a location and manner approved by the Fire Chief or his representative.

#### F. Sprinkler Systems

All new and existing approved sprinkler systems in the City of Lacey shall

have an approved supervised alarm that terminates at a Fire Alarm Center and shall activate a local approved alarm in the protected premises. In buildings with two or more sprinkler risers, an approved annunciator panel shall be provided when required by the Fire Chief or his representative. This alarm shall be activated by an approved water flow switching device. All systems shall terminate in equipment as specified by the Fire Chief or his representative. All water flow switching devices shall have a time delay activation switch installed thereon. All sprinkler systems shall intertie to alarm systems installed in the same building or complex. Automatic detection, except required products of combustion detection, may be eliminated where sprinkler systems are installed throughout. Sprinkler systems shall have valve supervision which conforms to NFPA Pamphlet No. 13, 1978 edition, and supervisory service which conforms to NFPA No. 72-A, 1979 edition. Waterflow devices controlling electric alarm circuits shall be provided with means for testing the electrical supply, circuits, connections and devices.

The premises having a sprinkler system(s) shall have supplementary means for manually transmitting an alarm signal located in the normal path(s) of egress for the area.

A dry pipe sprinkler system shall provide supplementary supervision of the system air pressure to avoid false alarm signals due to neglect in maintaining air pressure. Connection of the pressure supervisory signal attachment contacts to obtain trouble signal operation of the transmitter used for waterflow alarm signals is acceptable for this purpose.

- G. Where provisions of this Ordinance require extension of the fire alarm system, it shall be by approved auxiliary connection by direct wire to a Fire Alarm Center. Upon first operation of any manual or automatic detecting device, a signal shall be automatically transmitted to a Fire Alarm Center.
- H. No person shall sell or trade any form, type or kind of fire alarm equipment, including products of combustion detectors, which are not approved or which are not in proper working order or which do not meet the requirements of this Ordinance.

#### VI EXISTING BUILDINGS

No existing building (except as stated in Sections V-F; IV(E) and V(D)) shall be made to conform to the provisions of this code except where structural

deficiencies affecting life safety are involved, and in the opinion of the Fire Chief or his representative that its continued use without a fire alarm system would be hazardous to the safety of the occupants.

#### VII ALARM SYSTEMS DEFINED

#### A. Type A - General Alarm (Non-Coded)

Activation of any initiated device sounds a continuous bell on all indicating devices until manually reset.

#### B. Type B - General Alarm (Zone Non-Coded)

Activation of any initiating device sounds a continuous alarm on all indicating devices until manually reset and indicates on an annunciator panel the zone initiated.

#### C. Type C - General Alarm (Zone-Coded, Annunciated)

Activation of any initiating device sounds a coded alarm announcing the area of the fire to all occupants and indicates the zone initiated on the annunciator panel.

#### D. Type D (Dual Coded Alarm)

Activation of any initiating device shall sound a zone coded alarm on chimes to alert staff and personnel, and shall indicate the zone location of the originating device on an annunciator panel. Upon first operation of any manual or automatic detecting device, an approved signal shall be automatically transmitted to the Fire Alarm Center by approved auxiliary connection to the Fire Alarm Center. Manual pull stations must be equipped so that a key can be inserted and a general evacuation alarm sounded at any time. General evacuation alarms shall be continuously ringing bells or horns. An adjustable time delay service may be required to be incorporated in the system to activate the general evacuation alarm within a maximum of five minutes after the first actuation of any signal sending station or detection device.

#### E. Type E (Automatic Fire Detection Devices)

An automatic detection system shall consist of fixed temperature, fixed temperature rate of rise, or approved smoke products of combustion devices. When buildings are completely sprinklered, they shall not be required to have an automatic detection system other than required for smoke or products of combustion detection, including stairways and corridors. Automatic detection

system shall also include the approved installation of manual sending stations where required by the Fire Chief or his representative.

#### VIII OCCUPANCY REQUIREMENTS

#### A. Definitions

The definitions of occupancies as stated in this code shall be defined as defined in the 1979 edition of the Uniform Building Code as published by the International Conference of Building Officials and adopted by Chapter 14.04 of the Lacey Municipal Code.

#### B. Occupancy Groups

All occupancies which contain over 7,500 square feet gross floor area shall have a fire alarm system with automatic detection and shall have the fire alarm system connected to a Fire Alarm Center.

EXCEPTION: Group M occupancies may be excepted by the Fire Chief. In order for an area to be considered separately for the purpose of computing gross floor area, it must be a separate structure or be divided from other portions of a structure by area separation walls as defined in Section 505(d), Uniform Building Code, 1979 edition. Only one two-hour area separation wall may be used per building. Additional requirements for specific occupancy groups are as follows:

1. Occupancy Groups A, A2, A2.1 - With an Occupant Load of 500 or More

In addition to other fire alarm requirements an approved public address system shall be installed with speakers so arranged that a message on the system shall be heard over the ambient noise level in all areas of the building. A microphone for the system must be readily available to the management and/or firefighters and be located at a location approved by the Fire Chief. Every stage shall be provided with a fire control station and shall have the following:

- (a) Tell-tale lights to indicate the operation of all emergency light and power circuits.
- (b) Manual operating devices to actuate automatic spray heads proscenium, proscenium curtain and smoke vents.

- (c) Indicators to show that sprinkler system valves are open and system is charged with water under pressure.
- (d) A public address system energized from normal and emergency light and power sources.
- (e) An alarm system connected to the manager's office, dressing rooms and auxiliary stage spaces. It shall not sound an alarm audible in the audience or seating portion of the theatre.
- 2. Occupancy Groups E1, E2, E3 and Other Educational Occupancies

Groups El, E2, E3 and other educational occupancies including nursery school and kindergartens used for the gathering of groups of 6-49 persons for the purpose of instruction shall be provided with an approved type A/E alarm system.

An approved type A/E alarm system with termination at the Fire Alarm Center shall be provided in all such occupancies with an occupant load of 50 or more persons. All such systems shall include an alarm mounted on the exterior of the building.

Automatic detection shall be required in all hazardous areas (storage rooms, kitchens, janitor rooms and boiler rooms) and in rooms not normally occupied continually during hours of occupancy. See specific requirements for Day Care Centers under Section 10. Schools, universities, academies, and colleges shall have a type B/E or B/E with termination at the Fire Alarm Center. Stairways and corridors in all such occupancies shall be equipped with approved products of combustion detectors. All other areas shall be provided with fixed temperature, fixed temperature/rate of rise detectors.

3. Group 1-1, 1-2, 1-3 Occupancies (except Jails, Prisons and Reformatories)

Every building shall have a type D/E with termination at the Fire Alarm Center. An approved automatic smoke detection shall be installed in all corridors-stairways of hospitals, nursing homes and residential-custodial care facilities. Such systems shall be installed in accordance with the applicable NFPA Standards, but in no case shall smoke detectors be spaced further apart than 30 feet on centers or more than 15 feet from any wall. All automatic smoke detection shall be inter-connected to the fire alarm system.

- . Group B Occupancies
  - (a) Office buildings or mercantile occupancies three (3) or more stories in height, and if the total occupant load of the building is fifty (50) or more, but less than one thousand (1,000) shall be provided with a type B/E or B/E with termination at a Fire Alarm Center, fire alarm system.
  - (b) General industrial occupancies not provided with automatic sprinklers if the total occupant load of the building is five hundred (500) or more persons, or if twenty-five (25) or more persons are employed below street level shall be provided with a type C/E or C/E with termination at a Fire Alarm Center, fire alarm system.
  - (c) Office buildings twenty (20) stories or more in height or with an occupant load of one thousand (1,000) or more persons shall have a type D/E with termination at a Fire Alarm Center, fire alarm system.
  - (d) All Group B occupancies used for educational purposes shall have alarm devices and/or systems as required by the Fire Chief or his representative and as required elsewhere in this code.
- 5. Group H Occupancies

All sprinkler systems and automatic fire extinguishing systems shall have alarm devices and/or systems as required by the Fire Chief or his representative and as required elsewhere in this code.

- 6. R-1 Occupancies
  - (a) Motels, hotels, dormitories, fraternity or sorority houses, and similar occupancies housing six (6) or more persons and apartment houses and multiple dwelling units two (2) or more stories in height and containing six (6) or more dwelling units shall have a type A/E or A/E with termination at a Fire Alarm Center, fire alarm system.
  - (b) Motels, hotels, dormitories, fraternity or sorority houses, and similar occupancies of fifty (50) or more persons and two (2) or more stories in height shall have type D/E or D/E with termination at a Fire Alarm Center, fire alarm system.
  - (c) Group R-1 occupancies, two (2) or more stories in height shall be equipped with approved products of combustion detectors in interior stairways and interior corridors.

- (d) Every dwelling unit within an "R" occupancy shall be provided with an approved detector or products of combustion, other than heat, as required in the Uniform Building Code. This may be an approved self-contained unit. When actuated, the detector shall provide an alarm in the dwelling unit or guest room.
- (e) All group R-1 occupancies three (3) or more floors, basements included, shall have their fire alarm system connected to a Fire Alarm Center.
- (f) One and two story residential apartment buildings over 7,500 square feet shall be required to be provided with individual approved products of combustion detector(s) centrally located in the corridor or area giving access to rooms used for sleeping purposes. Hazardous areas (laundry, kitchen, storage room, et cetera) shall be protected with automatic detection intertied to the smoke detectors.
- (g) Products of combustion detectors in new apartment building units shall not tie into the building fire alarm system, but shall be single station and shall meet the requirements of Section 1210(a), Uniform Building Code, 1979 edition. Approved heat and/or heat rate-of-rise detectors shall be provided in each unit and shall be intertied into the building fire alarm system.

#### 7. Group R-3 Occupancies

Every dwelling shall be provided with approved detectors of products of combustion other than heat mounted on the ceiling at a point centrally located in the corridor or area giving access to rooms used for sleeping purposes. When activated, the detector(s) shall be capable of providing an alarm for all occupants of the dwelling.

8. Group 1-1, 1-2, 1-3 Occupancies (except Jails, Prisons and Reformatories)

Every building shall have a type D/E with termination at a Fire Alarm Center. An approved automatic smoke detection shall be installed in all corridors-stairways of hospitals, nursing homes and residential-custodial care facilities. Such systems shall be installed in accordance with the applicable NFPA Standards, but in no case shall smoke detectors be spaced further apart than 30 feet on centers or more than 15 feet from any wall. All automatic smoke detection shall be inter-connected to the fire alarm system.

- 9. All occupancies three (3) or more stories in height where no automatic fire detection system is required shall be provided with an approved type B/E or B/E with termination at a Fire Alarm Center.
- 10. Other Occupancies
  - (a) Maternity Homes

<u>Definition:</u> "Maternity Home" means any home, place, hospital or institution in which facilities are maintained for the care of four or more women, not related by blood or marriage to the operator, during pregnancy or during or within ten (10) days after delivery:

Provided, however, that this requirement shall not

apply to any hospital approved by the American College

of Surgeons, American Osteopathic College of Surgeons, American Osteopathic Association or its successor.

Fire Alarm Requirement: Type A/E with termination at a Fire Alarm Center. Sprinkler protection shall also be provided as per WAC 212-44-085.

- (b) Group Home in Family Abode
  - <u>Definition:</u> "Group Home" is a dwelling for the care of six to ten children under eighteen years of age and which is usually indistinguishable from nearby homes and apartments, is not part of an institutional campus, nor one of a group of child care units in one building.

Fire Alarm Requirement: A/E

(c) Group Home in Other Than the Family Abode

<u>Definition:</u> "Group Home" is a dwelling for the care of six to ten children under eighteen years of age and which is usually indistinguishable from nearby homes and apartments, is not part of an institutional campus, nor one of a group of child care units in one building.

Fire Alarm Requirement: A/E

(d) Group Home for Developmentally Disabled Persons

<u>Definition:</u> A "group home for developmentally disabled persons" means a residential facility capable of serving, among others, a small number of mentally and/or physically handicapped individuals (six to a maximum of twenty) who are able to participate in a variety of jobs, sheltered workshops, day care centers, activity centers,

educational facilities and/or community-based programs. A group home is usually a single dwelling, a series of apartments or other buildings with sound structure.

Fire Alarm Requirement: A/E

(e) Mini-Day Care Center in Family Abode

<u>Definition</u>: "Mini-Day Care Center" in a family abode means a day care center for six to a maximum of twelve children in the family abode of the person or persons under whose direct care and supervision the child is placed.

Fire Alarm Requirement: Approved products of combustion detectors conforming with Section 1413, Uniform Building Code, shall be installed.

(f) Mini-Day Center Other than in Family Abode

<u>Definition</u>: "Mini-Day Care Center" means a day care center for the care of twelve or fewer children located in a facility other than the family abode of the person or persons under whose direct care and supervision the child is placed.

Fire Alarm Requirement: If more than one floor level or a floor level above or below grade is used for day care purposes a type A/E. If one floor level at grade is used, approved products of combustion detectors conforming with Section 1413, Uniform Building Code, shall be installed.

(g) Day Care Center In Family Abode

<u>Definition</u>: "Day Care Center" means an agency which provides care for a group of thirteen or more children for periods of less than twenty-four hours.

<u>Fire Alarm Requirement</u>: Type A/E with termination at a Fire Alarm Center, shall be provided in all homes housing fifty or more children or where the day care center is on more than one floor level. Homes housing less than fifty children shall be provided with an approved type A/E system.

- (h) Day Care Center and Day Treatment Program Other Than in Family Abode Definition:
  - (1) "Day Care Center" means an agency which provides care for a group of thirteen or more children for periods of less than twenty-four hours.

(2) "Day Treatment Program" means an agency which provides care, supervision and appropriate therapeutic and educational services during part of the twenty-four hour day for a group of persons under the age of eighteen years.

<u>Fire Alarm Requirement</u>: Type A/E with termination at a Fire Alarm Center, when the occupant load is fifty or more children or where the day care facility occupies more than one floor level. Facilities with less than fifty children shall be provided with an approved type A/E system.

(i) Child Care Institutions

<u>Definition</u>: "Child Care Institution" means an agency which operates and maintains a group care facility on a twenty-four hour basis for the care of a group of eleven or more persons under the age of 18 years (including minor children of staff residing on the premises.) <u>Fire Alarm Requirement</u>: Type A/E with termination at a Fire Alarm Center, when the occupant load is 50 or more children or where the day care facility occupies more than one floor level. Facilities with less than 50 children shall be provided with an approved type A/E system.

(j) Maternity Service

<u>Definition</u>: "Maternity Service" means an agency which provides or arranges for care or services to expectant mothers, before or during confinement, or which provides care as needed to mothers and their infants after confinement.

Fire Alarm Requirement: Type A/E. Nursery areas shall be provided with approved products of combustion detection intertied to the alarm system.

#### IX Appeals

Any person feeling themselves aggrieved by a decision or action of the city or its officials under this code and claiming that the provisions of this code do not apply or that the true intent and meaning of the code have been misconstrued or wrongly interpreted, the applicant may appeal from such decision to the Board of Appeals created under the Uniform Fire Code and appointed by the city manager within thirty days from the date of the decision appealed. APPENDIX A

All fire alarm systems in the City of Lacey and/or any fire alarm system terminating at the Fire Alarm Center, shall have in effect a maintenance contract.

A maintenance contract shall ensure all systems be under the supervision of a responsible and qualified person or organization satisfactory to the Fire Department who shall be under contractural agreement to make all required inspections and tests; and to promptly have repairs made as needed.

Service personnel shall be available to initiate restoration of service following alarm or trouble within 24 hours of notification by the property owner or manager.

The Fire Department shall be promptly notified at any time any fire alarm system is out of service, needs repair or needs restoration.

Copies of the fire alarm maintenance contract shall be filed with the Fire Department. The Fire Department shall also be furnished written notification in the event the maintenance contract is cancelled or is not renewed.

Required quarterly checks of fire alarm systems shall include the following:

- Transmission of an alarm signal to the Fire Alarm Center by use of an automatic detection device and a manual sending station. Notification to the dispatch center must precede and follow this test.
- 2. Sprinkler water flow alarm to be tested by actual water flow through the use of a test connection, and trip time noted.
- 3. Each storage battery shall be inspected and tested to ensure proper operation. If the battery does not operate as per specifications it shall be replaced.
- 4. A visual inspection of all components to ensure system is in operating condition.

Required semi-annual tests of fire alarm systems shall include the following in addition to those items required in a quarterly check:

1. A test of a restorable heat detector from each circuit or zone.

2. A test of a smoke detector from each circuit or zone.

3. A test of a manual sending station from each zone or circuit.

- 4. A test of all sprinker system gate valve supervisory switches.
- 5. A test of all fire alarm facilities for the handicapped.

Records of all required tests shall be kept on the premises for a period of five (5) years. A copy of said required tests shall be forwarded semi-annually to the Fire Department within seven (7) days of such test.

Note: It is the intent of this Appendix to require tests of a different restorable heat detector, smoke detector, and manual sending station from each zone during each required semi-annual test.

#### APPENDIX B

#### STANDARD FOR BUILDING OWNER COMPLIANCE WITH REQUIRED

#### CHECKING AND TESTING OF PROTECTIVE SYSTEMS

- 1. Provide copy of maintenance contract with approved fire protective systems company to the Fire Department. Contract to ensure repairs to protective system, if needed, will commence within 24 hours of notification.
- 2. Maintenance contract to provide for checking and testing of protective systems as required on quarterly and semi-annual basis.
  - EXCEPTION: Required checking and testing of protective systems may be conducted by company of person designated in writing by building owner, as being owner representative. Approval of owners representative, as being reliable and qualified to provide required checking and testing, will be determined following interview conducted by the Fire Department.
- 3. Operational procedures for checking and testing of building protective systems must be prepared in duplicate. One shall be kept on premise, preferably in fire alarm panel, and one copy shall be forwarded with maintenance contract to the Fire Department.
- 4. Original copy of protective systems testing report shall be forwarded to the Fire Department with seven (7) days of each semi-annual test. Such testing report form shall be approved by the Fire Department.
- 5. Original copy of protective systems checking report shall be kept on the premises of the protected property and be available for inspection by Fire Department personnel.

	DATE	L CAT			
TYPE OF EQUIPMENT	TESTED	YES	ISFAC NO	TORY N/A	LOCATION OF COMPONENT TESTED
Fire Alarm Control Panel					
Manual Pull Station					• :
Heat Detectors					
Smoke Detectors					· · · · · · · · · · · · · · · · · · ·
Alarm Bells/Horns/Visual Devices					
Separation Door Hold-Open Devices					
Trouble Indicators					
Batteries					;
Charger					
Ventilation Control				·.	
Fire Alarm Center Connection			· · · · ·		· ·
Annunicators					
Exterior Water Motor or Bell		,			
Water Flow Alarm Switch	· ·	·.			•
Control Valve Supervision				: .	· · · · · · · · · · · · · · · · · · ·
Replacement Head Supply		:			· · · · · · · · · · · · · · · · · · ·
Valves Retd. to Normal Position					
type "D" system: Time delay of gener	ral evacuati	on ala	rm <u>/</u>	7	Minutes
t of Alarm System of emergency power	satisfactor	y /	7	Yes	// No
				n prop	erly inspected
nature of Owner or Representative	· · · · · · · · · · · · · · · · · · ·	<u> </u>			
nature of Person performing tests					
ļ	Manual Pull Station    Heat Detectors    Smoke Detectors    Alarm Bells/Horns/Visual Devices    Separation Door Hold-Open Devices    Trouble Indicators    Batteries    Charger    Ventilation Control    Fire Alarm Center Connection    Annunicators    Exterior Water Motor or Bell    Water Flow Alarm Switch    Control Valve Supervision    Replacement Head Supply    Valves Retd. to Normal Position    type "D" system: Time delay of generation    t of Alarm System of emergency power    s is to certify that these fire protor    reliability covering the items lister    mature of Owner or Representative_	Manual Pull Station    Heat Detectors    Smoke Detectors    Alarm Bells/Horns/Visual Devices    Separation Door Hold-Open Devices    Trouble Indicators    Batteries    Charger    Ventilation Control    Fire Alarm Center Connection    Annunicators    Exterior Water Motor or Bell    Water Flow Alarm Switch    Control Valve Supervision    Replacement Head Supply    Valves Retd. to Normal Position    type "D" system: Time delay of general evacuati    t of Alarm System of emergency power satisfactor    s is to certify that these fire protective syste    reliability covering the items listed in this r    nature of Owner or Representative	Manual Pull Station    Heat Detectors    Smoke Detectors    Alarm Bells/Horns/Visual Devices    Separation Door Hold-Open Devices    Trouble Indicators    Batteries    Charger    Ventilation Control    Fire Alarm Center Connection    Annunicators    Exterior Water Motor or Bell    Water Flow Alarm Switch    Control Valve Supervision    Replacement Head Supply    Valves Retd. to Normal Position    type "D" system: Time delay of general evacuation ala    t of Alarm System of emergency power satisfactory /	Manual Pull Station    Heat Detectors    Smoke Detectors    Alarm Bells/Horns/Visual Devices    Separation Door Hold-Open Devices    Trouble Indicators    Batteries    Charger    Ventilation Control    Fire Alarm Center Connection    Annunicators    Exterior Water Motor or Bell    Water Flow Alarm Switch    Control Valve Supervision    Replacement Head Supply    Valves Retd. to Normal Position    t of Alarm System of emergency power satisfactory /	Manual Pull Station

.....

c/o Fire Marshal's Office

.

# APPENDIX C

**RETURN TO:** 

### LACEY FIRE DEPARTMENT P.O. Box 3366 Lacey, Washington 98503

491-2410/491-9555

## PROTECTIVE SYSTEMS REPORT OF INSPECTION

T.C.D.C., 753-8255, MUST BE NOTIFIED PRIOR TO AND AFTER COMPLETION OF TESTING AND CHECKING OF ANY EXTENDED SYSTEM.

	DATE	·
Name of Facility:		
Occupied as:		· ·
Address:		
Inspection by:		
Company Performing:		· · · · · · · · · · · · · · · · · · ·
Date of Inspection:		
Type of Test // Quarterly //		
Type of System // A // B	/7 c	// D
Alarm Panel Make	Model #	· · ·
Test Received at Fire Control // Yes	// No	// N/A
Alarm Panel Reset	_A.M	P.M
Comments, explanation of unsatisfactory resu	Its and action	taken etc
······································		·
	·	·
· · · · · · · · · · · · · · · · · · ·		

THURSTON COUNTY DEPARTMENT OF FIRE ALARM I ORMATI	
Submitting Form:J	urisdiction
Burg/Hold-upBurg/Fire	Burg/TroubleOther
Address	Phone
Address	Phone
Address	Phone
larm system	
	ended, or other)
by(Fire Of	ficial approving)
RUN CARD INFORMATIC	
ency contacts during fire responses:	
	Phone
NameAddress	
NameAddress	Phone
+. NameAddress	Phone
Agency with key to building (Fire, Police, etc	e.)
Requested fire units:	
Single engine:1-11:	
OtherVehicle or grass	
SPECIAL HAZARDS AND SHUT OFF L	LOCATIONS
HAZARDS	
POWERG	GAS
WATER	
ALARM	
SPRINKLER	
FIRE DEPT. CONNECTIONS SPRI	INKLER AND STANDPIPE
Instructions: Attach completed Hold Harmless THURSTON COUNTY DEPARTMEN 2000 LAKERIDGE DRIVE S.W	NT OF COMMUNICATION
OLYMPIA, WA 98502	
TO BE COMPLETED BY T.C.D.C. ANI	
fermination completed byCo (Name)	ompany
DatePreliminary test? YesI	
Account number issuedLea	ased line number
T.C.D.C. verification by	Date
• * * * * * * * * * * * * * * * * * * *	* * * * * * * * * * * * * * * * * *
Mail back to Local File Mai.	Shall's Office,
As-built plans received by	Date
Final test given by	Date
Final approval given by	
Certificate of approval issued? Yes No	
Maintenance agreement provided with	Date