

**LCB File No. R207-99**

**PROPOSED REGULATION OF THE OFFICE OF THE  
STATE FIRE MARSHAL OF THE DEPARTMENT OF  
MOTOR VEHICLES AND PUBLIC SAFETY**

**NOTICE OF INTENT TO ACT UPON A REGULATION**

Notice of Hearing for the Adoption and Amendment of Regulations of the  
Nevada State Fire Marshal Division

The Nevada State Fire Marshal Division will hold a public hearing, from **9am to 5 pm**, on **January 7th, 2000**, at the **Nevada State Library, 100 Stewart Street, Carson City, NV, in the Meeting Room**. The purpose of the hearing is to receive comments from all interested persons regarding the ...Adoption and Amendment...of regulations that pertain to Chapter 477 of the Nevada Administrative Code.

The following information is provided pursuant to the requirements of NRS 233B.0603:

- Adoption of the 1997 Uniform Codes
- Adopt the changes mandated by the 1999 Legislature
- Adopt a new fee schedule as directed by the 1999 Legislature
- Amend and update the existing N.A.C. 477 to reflect the Adoption of the Uniform Codes

The 1997 Codes are to establish minimum Life Safety Standards within the State of Nevada.

To adopt the changes mandated by the 1999 Legislature. New legislation requires the Nevada Legislative Code to be updated.

The 1999 Legislature suggested that all fees collected by the State Fire Marshal's Division shall be increased.

The purpose of the amendments and updates is to reflect the changes necessary for the adoption of the 1997 Codes.

The estimated economic effect of the Regulations would be a ten percent (10%) increase of existing fees.

The adverse effect would be a ten percent (10%) increase in existing fees.

The beneficial effect would be the continued funding of the operations and training divisions of the State Fire Marshal's Division to enable them to better serve the citizens of the State of Nevada.

The immediate effect would be the establishment of the necessary funding for the State Fire Marshal's Division.

The long term effect would be an established yearly revenue source for the State Fire Marshal's Division for the next several years.

The estimated cost to the Agency for enforcement of the proposed regulations would be very minimal.

These purposed regulations establish a minimum State standard and does not overlap any other Local or Federal regulations.

The proposed regulations are not required pursuant to Federal law and are not more stringent than Federal law.

The purposed regulations establishes an increase in existing fees.

Persons wishing to comment upon the proposed action of the Nevada State Fire Marshal Division may appear at the scheduled public hearing or may address their comments, data, views, or arguments, in written form, to the Nevada State Fire Marshal Division, 107 Jacobsen Way, Carson City, NV 89711. Written submissions must be received by the Nevada State Fire Marshal Division on or before **December 29th, 1999**. If no person who is directly affected by the proposed action appears to request time to make an oral presentation, the Nevada State Fire Marshal Division may proceed immediately to act upon any written submissions.

A copy of this notice and the regulation to be Adopted and Amended will be on file at the State Library, 100 Stewart Street, Carson City, Nevada, for inspection by members of the public during business hours. Additional copies of the notice and the regulation to be Adopted and Amended will be available at each of the following satellite offices of the State Fire marshal's Division:

- H 1360 East Basin Road, Pahrump, NV 89408
- H 3920 East Idaho Street, Elko, NV 89801
- H 2398 South Boulder Highway, Henderson, NV 89015

and in all counties in which an office of the agency is not maintained, at the main public library, for inspection and copying by members of the public during business hours. This notice and the text of the proposed regulation are also available in the State of Nevada Register of Administrative Regulations, which is prepared and published monthly by the Legislative Counsel Bureau pursuant to NRS 233B.0653, and on the Internet at: <http://www.leg.state.nv.us>. Copies of this notice and the proposed regulation will also be mailed to members of the public upon request. A reasonable fee may be charged for copies if it is deemed necessary.

Upon adoption of any regulation, the agency, if requested to do so by an interested person, either before adoption or within 30 days thereafter, will issue a concise statement of the principal

reasons for an against its adoption and incorporate therein its reason for overruling the consideration urged against its adoption.

This notice of hearing has been posed in the following locations: SEE ATTACHED

This notice of hearing has been posed in the following locations:

All Nevada State Libraries and County Libraries  
Fire Service Standards and Training Committee Members  
Board of Fire Services Members  
All Active State Fire Departments  
All Fire Marshal Appointed Committees  
All Effected State Agencies  
Reno Gazette Journal  
Elko Daily Free Press  
State Fire Marshal's Division  
Department of Vehicles and Public Safety  
Nevada Department of Transportation  
Carson Public Library  
Reno-Tahoe International Airport  
Clark County Fire Department  
Clark County Government Center

We are please to make reasonable accommodations for members of the public who are disabled. If special arrangements are necessary, please notify the Nevada State Fire Marshal Division at: (775) 687-4290.

**PROPOSED REGULATION OF THE OFFICE OF THE  
STATE FIRE MARSHAL OF THE DEPARTMENT OF  
MOTOR VEHICLES AND PUBLIC SAFETY**

**CHAPTER 477**

**STATE FIRE MARSHAL**

**IS AMENDED TO READ AS FOLLOWS IN BOLD PRINT. ITALICS ARE DELETED**

GENERAL PROVISIONS

477.010 Definitions.....0

477.015 "Administrator" defined.....0

477.020 "Alarm service" defined.....0

477.025 "Alarm signal" defined .....0

477.030 Alter .....0

477.035 "Annunciator" defined .....0

477.040 "Antifreeze system" defined .....0

477.045 "Approved" defined .....0

477.050 "Assembly" defined .....0

477.055 "Building" defined .....0

477.060 "Building official" defined.....0

477.065 Certificate.....0

477.070 "Chief" defined .....0

477.075 "Chief of police" defined .....0

477.077 "Child care facility" defined .....0

477.080 "Combination paging alarm system" defined .....0

477.085 "Custodial care facility" defined.....0

477.090 "Dry system" defined.....0

477.095 "Dwelling" defined .....0

477.100 "Dwelling unit" defined .....0

477.103 "Fire extinguisher" defined.....0

477.104 "Fire system" defined.....0

477.105 "Fixed hood system" defined .....0

477.110 "Governing body" defined .....0

477.115 "Heating or cooking appliance" defined.....0

477.125 "Hydrostatic testing" defined.....0

477.130 "I.C.C. container" defined.....0

477.135 "Inspection" defined.....0

477.140 "Jurisdiction" defined.....0

477.146 "License" defined.....0

477.150 "Maintenance" defined.....0

477.155 "N.F.P.A." defined .....0

477.165 "Owner" defined .....0

477.170 "Pipe" defined .....0

477.172 "Portable building" defined.....0

477.175 "Portable fire extinguisher" defined.....0

477.180 "Pre-engineered system" defined .....0

477.185 "Protective signaling system" defined .....0

477.190 "Protective systems, equipment or apparatus" defined.....0

477.195 "Recharging" defined.....	0
477.200 "Registrant" defined.....	0
477.205 "Restrained care facility" defined .....	0
<b>477.207 Residential Facility for Groups.....</b>	<b>0</b>
477.210 Service.....	0
477.215 "Smoking" defined.....	0
477.220 "Sprinkler system" defined .....	0
477.222 "Standpipe system" defined .....	0
477.225 "Supervisory service" defined.....	0
477.230 "Supervisory signal" defined .....	0
477.235 "System" defined .....	0
477.240 "Trouble signal" defined .....	0
477.245 "U.L." defined.....	0
477.250 "Uniform Building Code" defined .....	0
477.255 "Uniform Fire Code" defined.....	0
477.260 "Uniform Mechanical Code" defined .....	0
477.265 "Uniform Plumbing Code" defined .....	0
477.270 "Wet system" defined .....	0
477.275 Compliance with National Fire Codes .....	0
477.280 Adoption and effect of local requirements; enforcement of model codes .....	0
477.281 List of adopted codes .....	0
477.283 Additions to and deletions from adopted codes .....	0
477.285 Relief from regulations .....	0

477.287 Variance from requirements .....0

477.288 Interlocal agreements: Review by state fire marshal .....0

477.290 Severability .....0

LICENSING GENERALLY

477.300 Licenses and certificates: Application; requirements; effect; branch offices.....0

477.305 Separate, duplicate licenses .....0

477.310 Expiration and renewal of licenses and certificates; change of information; initial fees; late charges .....0

477.311 Written examinations; consideration of licensure by another state .....0

477.312 Bases of examinations; certificate required to ignite pyrotechnical material as commercial display .....0

477.313 Scheduling of examinations; failure; testing for higher classification .....0

477.314 Certification: General requirements for courses, applications, instructors and fees .....0

477.3142 Certification: Application for approval of proposed course; evaluation of course; charges for evaluation; additions to list of courses.....0

477.3144 Certification: Qualifications of instructors; written evaluations; revocation of accreditation .....0

477.3146 Certification: Course not offered through state training program.....0

477.3148 Certification: Training given by training officer or officer of fire department .....0

477.315 Disciplinary action: Authority; grounds .....0

477.320 Disciplinary action: Investigation; hearing .....0

**477.321 Interior Designers** .....0

477.323 Permit to store hazardous material: Issuance, revocation and suspension; issuance for excessive hazardous materials; fees; expiration; criminal investigation .....0

477.325 Fees; exemptions; refunds; effect of certificates of registration .....0

477.330 Records required .....0

INSPECTION SYSTEMS

477.335 Generally .....0

REGULATION OF PERSONS ENGAGED IN BUSINESS RELATED TO FIRE SYSTEMS

477.340 Scope; applicability .....0

477.345 Types of licenses; application .....0

477.346 Installation, maintenance and service of fire alarm system, standpipe system or automatic sprinkler system: Supervision; certificate of registration .....0

**477.347 Written Notice** .....0

477.348 Installation, repair, restoration or testing for maintenance of a fire system .....0

477.350 Approval of equipment .....0

477.355 Combination paging alarm systems: Equipment .....0

477.360 Combination paging alarm systems: Design .....0

477.365 Fire alarm system: Evidence of capability to service; agreement for maintenance; plans and specifications; levels of sound for alarm signal .....0

477.370 Tags for recording maintenance .....0

PORTABLE FIRE EXTINGUISHERS AND FIXED HOOD SYSTEMS

477.380 Applicability .....0



477.385 Qualifications of licensee; classification of licenses .....	0
477.390 Declaration of qualification .....	0
477.395 Application; examination.....	0
477.400 New employees; termination of employment; change of address.....	0
477.405 Approval of equipment; prohibited equipment; label required .....	0
477.407 Advertising and sales: Fire extinguishers; devices to suppress fire .....	0
477.410 Installation, inspection, maintenance and repair of equipment.....	0
477.415 Hydrostatic testing .....	0
477.420 Replacement of extinguishers .....	0
477.422 Response to call for service .....	0
477.425 Service tags .....	0
477.427 Allegation of failure to install internal maintenance tag .....	0
477.430 Fixed fire extinguishing systems: Evidence of capability to service; agreement for maintenance; plans and specifications.....	0
477.432 Servicing and repairs: Required equipment, tools and materials .....	0
477.435 Reports .....	0

**PORTABLE BUILDINGS**

477.440 Approval of plans for construction and placement; approval before placement and occupancy; temporary certification of inspectors; duties of inspectors.....	0
477.441 General requirements .....	0

477.442 Safety requirements; approval of changes in use required;  
service of systems for heating, ventilating or air conditioning ..... 0

477.443 Exits: Compliance with codes; maximum legal  
occupancy; windows; ramp or stairs .....0

477.444 Requirements for fire flow and proximity to  
fire hydrants .....0

477.445 Maintenance of exterior areas ..... 0

477.446 Access for vehicles .....0

AUTOMATIC SPRINKLER SYSTEMS

Generally

477.455 Approval of equipment; standards .....0

477.460 Inspections and testing; reports; notification;  
required tags .....0

477.465 Installation, maintenance and repairs; letter  
of certification .....0

477.470 Service tags .....0

RESIDENTIAL SYSTEMS

477.480 Applicability .....0

477.483 Requirements for installation .....0

477.485 Standards for installation .....0

477.490 Plans required .....0

477.495 Location, types of systems .....0

477.500 Water supply, demand; valves and drains; gauges .....0

477.505 Waterflow alarm ..... 0

477.510 Sprinkler heads.....	0
477.515 Area of coverage.....	0
477.520 Copper tube joints.....	0
477.525 Types of piping.....	0
477.527 Polybutylene pipes and tubing.....	0
477.530 Pipe sizing.....	0
477.535 Piping configurations, support.....	0
477.540 Inspection and testing.....	0

**INSTITUTIONAL BUILDINGS**

477.550 Scope; applicability.....	0
477.555 Identification; occupancy.....	0
477.560 Device for detection of products of combustion.....	0
477.562 General requirements.....	0
477.563 Minimum requirements based on classification.....	0
477.564 "Single-family residential occupancy" interpreted.....	0
477.566 Devices for detection of products of combustion.....	0
477.568 Sprinkler system for certain child care facilities used after midnight.....	0

**FIREWORKS**

477.571 Definitions.....	0
477.576 "Commercial display" defined.....	0
477.581 "Dangerous fireworks" defined.....	0
477.586 "Firework" defined.....	0

477.591 "Pyrotechnic composition" defined .....	0
477.596 "Special effect" defined .....	0
<b>477.597 "Show specific" defined.....</b>	<b>0</b>
<b>477.598 "Magician" defined.....</b>	<b>0</b>
477.601 Exemptions .....	0
477.606 Commercial displays: License required.....	0
477.611 Commercial displays: Application for license.....	0
477.616 Commercial displays: Categories of licenses; requirements for producing display .....	0
477.621 Commercial displays: Insurance.....	0
477.626 Pyrotechnic operators: Certificate required; exception.....	0
477.631 Pyrotechnic operators: Prerequisites for certificate .....	0
477.636 Pyrotechnic operators: Categories of certificates; authorized acts; duration of certificates .....	0
477.641 Renewal of license or certificate.....	0
477.646 Suspension, revocation or refusal to renew license or certificate.....	0
477.651 Records; reports of disappearance; investigation .....	0
477.656 Storage: Fire hazard prohibited; permits; fees; standards; inspection.....	0
477.661 Prohibited acts.....	0
477.666 Seizure; disposal or return; impoundment .....	0
 <b>CONTAINERS FOR FLAMMABLE OR COMBUSTIBLE LIQUIDS</b>	
477.680 Approval of nonmetallic containers by state fire marshal .....	0
477.685 Containers to be tested and listed.....	0

477.690 Examples of containers; required labels .....	0
477.695 Color and lettering .....	0
477.700 Spouts; vents; closures .....	0

USE OF EXPLOSIVES IN BLASTING

477.710 Certificate of registration required; qualifications of applicant; exemptions; renewal of certificate .....	0
477.720 Revocation or suspension of certificate .....	0
477.730 Duties of holder of certificate .....	0

REVIEW OF PLANS

477.740 Plans subject to review; approval; required detail .....	0
477.750 Fees; review of plans by local government.....	0
<b>477.755 Regulations for the administration of the Nevada Fire Incident Reporting System(NFIRS) .....</b>	<b>0</b>

TYPE 1 EXHAUST SYSTEMS

477.760 Standards of construction.....	0
477.770 Licensing requirements for servicing and cleaning .....	0
477.780 Submission of cleaning contract and servicing report to proper authority; cleaning requirements .....	0
477.790 Attachment and contents of tag regarding servicing.....	0

FIRE STANDPIPE SYSTEMS

477.800 Approval of equipment; compliance with codes and regulations .....	0
477.810 Inspections and reports; hydrostatic tests; required tags; certificate of registration for work .....	0
477.820 Agreement for maintenance and inspection; duties upon notification of fault in or use of system. ....	0

477.830 Submission of plans and specifications;certification  
of results of hydrostatic tests..... 0

477.840 Certification of proper installation; metal placard  
required .....0

477.850 Tag for recording installation, maintenance and  
inspection .....0

MISCELLANEOUS REQUIREMENTS

477.910 New buildings: Constructed by or for state;  
owned or occupied by state..... 0

477.915 Existing buildings owned or occupied by state;  
reporting of fires in state buildings; smoke detectors ..... 0

477.920 Commercial buildings in rural regions ..... 0

GENERAL PROVISIONS

477.010 Definitions. As used in this chapter, unless the context otherwise requires, the words and terms defined in NAC 477.015 to 477.270, inclusive, have the meanings ascribed to them in those sections.

(Supplied in codification; A by St. Fire Marshal, 8-22-86, eff. 9-1-96; 3-9-89; 2-17-94)

477.015 "Administrator" defined. "Administrator" means the executive officer of a political subdivision.

[St. Fire Marshal, ° 1.1103, eff. 11-27-78]

477.020 "Alarm service" defined. "Alarm service" means the service required following:

1. The manual operation of a fire alarm box;
2. The transmission of an alarm indicating the operation of protective equipment or systems, the discharge of carbon dioxide or the detection of smoke or excessive heat; or
3. The transmission of an alarm from other protective systems.

[St. Fire Marshal, ° 1.1104, eff. 11-27-78]

477.025 "Alarm signal" defined. "Alarm signal" means a signal indicating an emergency requiring immediate action such as an alarm of fire from a manual box, a waterflow alarm, an alarm from an automatic fire alarm system or other emergency signal.

[St. Fire Marshal, ° 1.1105, eff. 11-27-78]

477.030 "Alter," "alteration" defined. "Alter" and "alteration" mean any change, modification or deviation in construction or occupancy.

[St. Fire Marshal, ° 1.1106, eff. 11-27-78]

477.035 "Annunciator" defined. "Annunciator" means a unit containing two or more identified targets or indicator lamps in which each target or lamp indicates the circuit, condition or location annunciated.

[St. Fire Marshal, ° 1.1107, eff. 11-27-78]

477.040 "Antifreeze system" defined. "Antifreeze system" means a sprinkler system employing automatic sprinklers attached to a piping system containing an antifreeze solution and connected to a water supply in which the antifreeze solution is followed by water from the water supply.

[St. Fire Marshal, ° 1.1108, eff. 11-27-78]

477.045 "Approved" defined. "Approved" means that the state fire marshal has approved a practice or piece of equipment as the result of investigation and tests conducted under his supervision or by reason of accepted principles or tests by national authorities or technical or scientific organizations recognized by the state fire marshal.

[St. Fire Marshal, ° 1.1109, eff. 11-27-78]

477.050 "Assembly" defined. "Assembly" means the gathering together of 100 or more persons in drinking or dining establishments or 50 or more persons in any other place for any purpose.

[St. Fire Marshal, ° 1.1110, eff. 11-27-78]

477.055 "Building" defined. "Building" means any structure erected for the support, shelter or enclosure of persons, animals or property.

[St. Fire Marshal, ° 1.1111, eff. 11-27-78]

477.060 "Building official" defined. "Building official" means the official of the state or a political subdivision charged with the administration of a building code.

[St. Fire Marshal, ° 1.1112, eff. 11-27-78]

477.065 "Certificate," "certificate of registration" defined. "Certificate" and "certificate of registration" means a document issued by the state fire marshal to a person who has passed the prescribed tests which grants conditional permission to perform the acts described on the document.

[St. Fire Marshal, ° 1.1113, eff. 11-27-78]

477.070 "Chief" defined. "Chief" means the chief officer of the fire department serving a jurisdiction or his authorized representative.

[St. Fire Marshal, ° 1.1114, eff. 11-27-78]

477.075 "Chief of police" defined. "Chief of police" means the chief law enforcement officer of a jurisdiction or his authorized representative.

[St. Fire Marshal, ° 1.1115, eff. 11-27-78]

477.077 "Child care facility" defined. "Child care facility" has the meaning ascribed to it in NRS 432A.020.

(Added to NAC by St. Fire Marshal, eff. 3-9-89)

477.080 "Combination paging alarm system" defined. "Combination paging alarm system" means a fire alarm system designed to provide a general fire alarm and voice communication. The system may be used in whole or in part in common with another signaling system such as voice page or a musical program system if all components are of a type approved by the state fire marshal and the nonemergency system does not degrade the alarm and paging functions of the system.

[St. Fire Marshal, ° 1.1116, eff. 11-27-78]

477.085 "Custodial care facility" defined.

1. "Custodial care facility" means a building or a part of a building which is used for lodging or boarding four or more persons who are incapable of caring for themselves because of age or physical or mental limitations.

2. The term includes facilities such as homes for the aged, nurseries providing custodial care for children under 6 years of age, adult group care facilities and facilities for the care of the mentally retarded.

3. The term does not include day care facilities which do not provide lodging or boarding for institutional occupants.

[St. Fire Marshal, ° 1.1117, eff. 11-27-78]

477.090 "Dry system" defined. "Dry system" means a sprinkler system employing automatic sprinklers attached to a piping system containing air or inert gas under atmospheric or higher pressures in which loss of pressure from the opening of a sprinkler or detection of a fire condition causes the release of water into the piping systems and out through the opened sprinkler.

[St. Fire Marshal, ° 1.1118, eff. 11-27-78]



477.095 "Dwelling" defined. "Dwelling" means any structure which contains one or two dwelling units intended to be used for human occupancy.

[St. Fire Marshal, ° 1.1119, eff. 11-27-78]

477.100 "Dwelling unit" defined. "Dwelling unit" means a single unit which has provisions for living and sleeping and which may provide for cooking and sanitation.

[St. Fire Marshal, ° 1.1120, eff. 11-27-78]

477.103 "Fire extinguisher" defined. "Fire extinguisher" means a device:

1. Containing powder, liquid or gases which can be expelled under pressure to suppress or extinguish a fire;
2. Which is tested, listed or approved by the Underwriters Laboratories, Inc., Underwriters Laboratories of Canada, Factory Mutual Laboratory, the U.S. Coast Guard or a nationally recognized laboratory approved by the state fire marshal; and
3. Which is capable of achieving a minimum of one unit of classification of rating during testing and listing by a nationally recognized testing laboratory.

(Added to NAC by St. Fire Marshal, 8-22-86, eff. 9-1-86)

477.104 "Fire system" defined. "Fire system" means a group of devices designed to provide protection from fire, or for the suppression or detection of fire.

(Added to NAC by St. Fire Marshal, eff. 2-17-94)

477.105 "Fixed hood system" defined. "Fixed hood system" means a fixed extinguishing system which is utilized in the hood and duct system over cooking equipment.

[St. Fire Marshal, ° 1.1121, eff. 11-27-78]

477.110 "Governing body" defined. "Governing body" means:

1. If a building is within a municipality, the governing body of that municipality;
2. If a building is not within any municipality, the board of county commissioners of the county in which it is located; or
3. If a building is located within Carson City, the board of supervisors.

[St. Fire Marshal, ° 1.1122, eff. 11-27-78]

477.115 "Heating or cooking appliance" defined. "Heating or cooking appliance" means any electric, gas or oil- fired appliance not intended for central heating.

[St. Fire Marshal, ° 1.1123, eff. 11-27-78]

477.125 "Hydrostatic testing" defined. "Hydrostatic testing" means a test under pressure of the required strength of a container by hydrostatic methods.

St. Fire Marshal, ° 1.1125, eff. 11-27-78]

477.130 "I.C.C. container" defined. "I.C.C. container" means any container approved by the United States Interstate Commerce Commission for shipping any liquid, gas or solid material of a flammable, toxic or other hazardous nature.

[St. Fire Marshal, ° 1.1126, eff. 11-27-78]

477.135 "Inspection" defined.

1. "Inspection" means the handling and observation of a fixed hood system, portable fire extinguisher unit, fire sprinkler system or alarm system to check for damage to the system or unit which could preclude it functioning as designed.

2. The term does not include actual maintenance.

[St. Fire Marshal, ° 1.1127, eff. 11-27-78]

**477.138 "Interior Designers" defined**

**Any person who holds a certificate of registration issued by the State Fire Marshal to provide approved interior materials and furnishings used in interior design to the extent authorized by the Certificate.**

477.140 "Jurisdiction" defined. "Jurisdiction" means any county, city, town, district or other political subdivision in the state.

[St. Fire Marshal, ° 1.1128, eff. 11-27-78]

477.146 "License" defined. "License" means a license granted to a firm by the state fire marshal to perform certain tasks or work in an area regulated by the state fire marshal.

(Added to NAC by St. Fire Marshal, eff. 3-9-89)

477.150 "Maintenance" defined.

1. "Maintenance" means repair service, including periodic inspections and tests, required to keep the protective signaling system and automatic sprinkler systems and their component parts in an

operative condition at all times, together with replacement of the system or of their components when it becomes undependable or inoperative.

2. The term also means the disassembly of an extinguisher or extinguishing system and a complete check of all working parts and all parts which have abearing on the performance of the extinguisher or system to ensure their integrity.

[St. Fire Marshal, ° 1.1130, eff. 11-27-78]

477.155 "N.F.P.A." defined. "N.F.P.A." means the National Fire Protection Association.

[St. Fire Marshal, ° 1.1131, eff. 11-27-78]

477.165 "Owner" defined. "Owner" means a person who owns property and his authorized agent or attorney, a purchaser, devisee or fiduciary and a person having a vested or contingent interest in the property.

[St. Fire Marshal, ° 1.1133, eff. 11-27-78]

477.170 "Pipe" defined. "Pipe" includes pipe and tubing.

[St. Fire Marshal, ° 1.1135, eff. 11-27-78]

477.172 "Portable building" defined. "Portable building" means a structure that is used as a classroom or for any other purpose relating to education **or any other occupancy use under the jurisdiction of the state fire marshal** and which is intended to be moveable, whether manufactured on the site or elsewhere or purchased for or converted to a mobile capability. The term includes a mobile, manufactured, portable or relocatable building, structure or unit, by whatever name designated.

(Added to NAC by St. Fire Marshal, eff. 2-17-94)

477.281 List of adopted codes.

477.175 "Portable fire extinguisher" defined. "Portable fire extinguisher" means any approved device capable of being moved from place to place which contains dry chemicals, fluids or gases for the purpose of extinguishing fires and the means for application of its contents.

[St. Fire Marshal, ° 1.1136, eff. 11-27-78]

477.180 "Pre-engineered system" defined. "Pre-engineered system" means a packaged system of components designed to be installed according to pretested limitations as listed by a nationally recognized testing laboratory or as determined by the state fire marshal.

[St. Fire Marshal, ° 1.1137, eff. 11-27-78]

477.185 "Protective signaling system" defined. "Protective signaling system" means electrically operated circuits, instruments and devices, together with the necessary electrical energy, designed to transmit fire alarms and supervisory and trouble signals necessary for the protection of life and property.

[St. Fire Marshal, ° 1.1138, eff. 11-27-78]

477.190 "Protective systems, equipment or apparatus" defined. "Protective systems, equipment or apparatus" means automatic sprinklers, standpipes, carbon dioxide systems and other devices used for extinguishing fires and for controlling temperatures or other conditions dangerous to life or property.

[St. Fire Marshal, ° 1.1139, eff. 11-27-78]

477.195 "Recharging" defined. "Recharging" means emptying the extinguishing agent container, refilling with the appropriate extinguishing agent, charging the container with the appropriate propellant and reasonable preventative maintenance to ensure integrity.

[St. Fire Marshal, ° 1.1140, eff. 11-27-78]

477.200 "Registrant" defined. "Registrant" means a person who has been issued a certificate of registration by the state fire marshal.

[St. Fire Marshal, ° 1.1141, eff. 11-27-78]

477.205 "Restrained care facility" defined. "Restrained care facility" means a building or a part of a building which is used to house persons who are under restraint or security.

[St. Fire Marshal, ° 1.1142, eff. 11-27-78]

477.210 "Service," "servicing" defined.

1. "Service" and "servicing" means maintenance of portable fire extinguishers or fixed extinguishing systems in accordance with applicable adopted standards, including all charging, filling, recharging, refilling, repairing, installing, hydrostatic testing and tagging.

2. "Service" and "servicing" also means servicing of protective signaling systems and automatic sprinkler systems and components in accordance with adopted standards and may include maintenance, installation, repairing, restoration, inspections and tests.

[St. Fire Marshal, ° 1.1143, eff. 11-27-78]

477.215 "Smoking" defined. "Smoking" means the carrying or use of a lighted pipe, cigar, cigarette or tobacco in any form.

[St. Fire Marshal, ° 1.1144, eff. 11-27-78]

477.220 "Sprinkler system" defined. "Sprinkler system" means an integrated system of piping connected to a water supply, including a controlling valve and a device for actuating an alarm when the system operates, with sprinklers which will automatically initiate water discharge over a fire area.

[St. Fire Marshal, ° 1.1145, eff. 11-27-78]

477.222 "Standpipe system" defined. "Standpipe system" means an arrangement of piping, valves, hose connections and related equipment installed in a building or structure with the hose connections located in such a manner that water can be discharged in streams and spray patterns through attached hoses and nozzles, for the purposes of extinguishing a fire and protecting a building or structure, its contents and its occupants. A standpipe system may be connected to a system which supplies water, or use pumps, tanks or other equipment necessary to provide an adequate supply of water to the hose connections. For the purposes of this chapter, a standpipe system which is used in combination with an automatic fire sprinkler system retains its characterization as a standpipe system.

(Added to NAC by St. Fire Marshal, eff. 2-17-94)

477.225 "Supervisory service" defined. "Supervisory service" means the service required to assure the operating condition of automatic sprinkler systems and other systems for the protection of life and property.

[St. Fire Marshal, ° 1.1146, eff. 11-27-78]

477.230 "Supervisory signal" defined. "Supervisory signal" means a signal indicating the need of action in connection with the supervision of watchmen or of sprinkler and other extinguishing systems or equipment or with the maintenance features of other protective systems.

[St. Fire Marshal, ° 1.1147, eff. 11-27-78]

477.235 "System" defined. "System" means any assembly, electrical or mechanical and all parts and portions connected to it.

[St. Fire Marshal, ° 1.1148, eff. 11-27-78]

477.240 "Trouble signal" defined. "Trouble signal" means a signal indicating trouble of any nature, such as a circuit break or ground, occurring in the devices or wiring associated with a protective signaling system.

[St. Fire Marshal, ° 1.1149, eff. 11-27-78]

477.245 "U.L." defined. "U.L." means Underwriters Laboratories, Inc.

[St. Fire Marshal, ° 1.1150, eff. 11-27-78]

477.250 "Uniform Building Code" defined. "Uniform Building Code" means the code published by the International Conference of Building Officials.

[St. Fire Marshal, ° 1.1151, eff. 11-27-78]

477.255 "Uniform Fire Code" defined. "Uniform Fire Code" means the code published jointly by the Western Fire Chiefs and the International Conference of Building Officials.

[St. Fire Marshal, ° 1.1152, eff. 11-27-78]

477.260 "Uniform Mechanical Code" defined. "Uniform Mechanical Code" means the code published jointly by the International Association of Plumbing and Mechanical Officials and the International Conference of Building Officials.

[St. Fire Marshal, ° 1.1153, eff. 11-27-78]

477.265 "Uniform Plumbing Code" defined. "Uniform Plumbing Code" means the code published by the International Association of Plumbing and Mechanical Officials.

[St. Fire Marshal, ° 1.1154, eff. 11-27-78]

477.270 "Wet system" defined. "Wet system" means a system employing automatic sprinklers attached to a piping system containing water and connected to a water supply in which water discharges immediately from sprinklers opened by a fire.

[St. Fire Marshal, ° 1.1155, eff. 11-27-78]

477.275 Compliance with National Fire Codes. Where no specific standards or requirements are specified in this chapter or contained within other codes adopted by the state fire marshal, compliance with the National Fire Codes of the National Fire Protection Association as adopted by the state fire marshal is prima facie evidence of compliance with this chapter.

[St. Fire Marshal, ° 1.102, eff. 11-27-78]ù(NAC A 1-19-84)

477.280 Adoption and effect of local requirements; enforcement of model codes.

1. Where there is a conflict between this chapter and any code, ordinance or regulation adopted by a local authority, the more stringent requirement providing the greatest safety from fire and for life to the public applies

2. The model codes adopted with modifications by the state fire marshal pursuant to this chapter are enforceable jointly with the other provisions of this chapter.

3. Nothing in this section prohibits a local government from adopting any code or ordinance that is more stringent than the provisions of this chapter.

[St. Fire Marshal, ° 1.103, eff. 11-27-78]ù(NAC A 1-19-84; 8-24-90)

477.281 List of adopted codes.

1. The state fire marshal hereby adopts by reference the following nationally recognized codes with additions and deletions as noted in NAC 477.283:

(a) Uniform Fire Code, 1991 edition. A copy is available from the International Conference of Building Officials, 5360 Workman Mill Road, Whittier, California, at the price of \$47.80.

(b) Uniform Building Code, 1991 edition. A copy is available from the International Conference of Building Officials, at the price of \$67.

(c) Uniform Building Code Standards, 1991 edition. A copy is available from the International Conference of Building Officials, at the price of \$93.93

(d) Uniform Mechanical Code, 1991 edition. A copy is available from the International Conference of Building Officials, at the price of \$42.10.

(e) Uniform Code for the Abatement of Dangerous Buildings, 1991 edition. A copy is available from the International Conference of Building Officials, at the price of \$11.25.

(f) Uniform Fire Code Standards, 1991 edition. A copy is available from the International Conference of Building Officials, at the price of \$80.

2. In addition to the codes described in subsection 1, the state fire marshal hereby adopts by reference the 199[1] **1997** edition of the National Fire Codes **and Standards**, published by the N.F.P.A., to supplement the other adopted codes in this chapter. A copy of the National Fire Codes may be obtained from the National Fire Protection Association, Batterymarch Park, Quincy, MA 02269, at the price of \$447 **920.00**. In the absence of specific requirements in the other adopted codes, the state fire marshal will apply the National Fire Codes or other recognized standards of good practice or require certification by registered engineers or through practical demonstrations that show compliance with such standards.

[St. Fire Marshal, <sup>oo</sup> 8.101 & 8.102, eff. 11-27-78]ù(NAC A 1-19-84; 8-22-86, eff. 9-1-86; 3-9-89; 2-17-94)

477.283 Additions to and deletions from adopted codes.

1. The following changes are made to the 199[1]**7** edition of the Uniform Fire Code as adopted by reference by the state fire marshal:

(a) Section [2.303] 103.1.4 is deleted.

(b) To section [2.304(b)] 6-1.2 is added: "Gypsum Association, 201 N. Wells St., Chicago, IL 60606."

(c) [Section 4.104 is deleted.

(c) Section [10.401] 903.2 is revised by adding a second paragraph to read as follows: "Subject to the approval of the fire authority, if the fire flow is not available for adequate fire protection, an approved automatic fire sprinkler system must be installed throughout the building or buildings. The sprinkler system must meet the requirements of the appropriate N.F.P.A. standard. The provisions of this paragraph do not apply if a fire sprinkler system is otherwise required by this chapter or the adopted codes. [ An R-1 occupancy that has more than two stories must have an N.F.P.A. 13 system installed. An R-1 occupancy that has two stories or less must have an N.F.P.A. 13-R system installed.]

**(d) Section 1003.2.2. paragraph 5 is deleted.**

(e) The following new subsection 5 is added to section [10.507(b)] **1003.2.2**: "All buildings which are erected in the state after January 19, 1984, and which are more than 55 feet above or below street level or more than two stories, including any additional height incurred by usable floor space within a building, above the grade at any point, must be equipped throughout with approved automatic sprinkler systems. The system must be installed in accordance with nationally recognized standards."

(f) To section [10.507(c)] **1003.2.3.1** is added: "Casinos are classified as drinking establishments and must be designed and built with a sprinkler system [having a density of not less than 0.16 gallons per minute per square foot for at least 1,500 square feet of operation] **classified as an ordinary group 2.**"

(g) To section [10.507] **1001.9** is added a new paragraph (I) to read as follows: "Shell buildings, retail buildings and warehouses which are built for unknown tenants and occupancies of various hazards designed for commercial use within the general occupancy classifications, and multi-purpose, shop or storage buildings constructed on prison property, must be designed and built with a sprinkler system [having a density of not less than 0.21 gallons per minute per square foot for at least 1,500 square feet of operation] **classified as an extra hazard group 1.**"

(h) Add a new section, which is to be designated as [10.604] **1111.2.5**, to read as follows: "In all A or R-1 occupancies, draperies, decorative materials and upholstered furniture coverings in rooms, areas or exitways must be treated and maintained in a flame retardant condition by means of a flame retardant fabric, flame retardant solution or any other process approved by the state fire marshal."

(i) Section [14.104(d)] **1007.2.4.1** is amended to require that the fire alarm have a different sound which is distinctive from the local bells or alarms normally used in the school.

(j) Article 78, regarding fireworks, is amended so that section [78.202] **7802.3** reads as follows: "The storage, use and handling of fireworks is prohibited if a local ordinance has been adopted which prohibits the use of the fireworks."

**(k) Chapter 10 of the 1997 UBC is deleted and shall be replaced by Chapter 10 of the 1994 edition of the Uniform Building Code.**



(l) Article 82 is deleted.

(m) To the body of the code is added the following supplemental material of the Uniform Fire Code:

(1) The appendices following the Uniform Fire Code as adopted by reference by the state fire marshal with the exception that [*appendices I-A, I-B and VI-C are not included*] **only those references to existing buildings that are more stringent than NRS 477.110 through 170 are allowed.**

**a) To section 308 is added the following provision: All portions of care facilities which house patients or residents which are classified by the State Division of Health as Category 2, and have an occupant load of more than five (5), shall be classified as occupancy classification Group I, Division 1.1.**

(2) Appendix III-A, Fire-Flow Requirements for Buildings, is hereby amended by adding the following:

*["All fire flows obtained at the hydrant or hydrants as specified in Table A-III-A-1 must be produced with 20 psi residual pressure at the test hydrant or hydrants. The hydrant or hydrants must be able to produce a minimum supply flow.]* In areas of storage for combustible or hazardous materials that are outside of buildings and have more than 500 square feet of floor space, fire flow must be not less than 1,000 gallons per minute. Any such area with more than 2,500 square feet of floor space must have an additional 500 gallons per minute available for each side of exposure. The spacing and placement of any hydrant must be specified by the authority having jurisdiction and may vary from that required by Table III-B. As used in this paragraph, "exposure" means that stored material is within 25 feet of:

- [1]a. The center line of a public road or way; or
- [2]b. The nearest structure, building or property line."

2. The following changes are made to the 199[1] 7 edition of the Uniform Building Code as adopted by the state fire marshal:

(a) To section [204] **105** is added the following provision: "This section does not apply to the state fire marshal of Nevada."

(b) To section [1807(f)] **403.6.1** is added the following provision: "The central station for control must be housed in a room separated from the building in which it is located by noncombustible construction rated at a minimum of 2 hours. The room used for that station must be provided an exterior door if possible."

(c) From section [1807a] **403.1** is deleted the phrase " more than 75 feet," and to that section is added " more than 55 feet above the lowest level of access for a vehicle of the fire department."

(d) To section [1807e (1)] **403.5.1** is added: "Loudspeakers or horns for a fire alarm must achieve at least 80 decibels of sound in all areas within the protected property."

(e) To section [1807f] **403.6.1** is added: "All equipment contained within the central station for control must be tested quarterly by an approved agency. Systems terminating within the central station for control must be tested as required by the local authority having jurisdiction according to a schedule which is commensurate with the size and complexity of the facility being protected and the systems involved. All equipment for the safety of life must be reset and certified by an approved agency after being tested. A log of the tests required by this section must be available for inspection by the authority having jurisdiction. Graphic display annunciator panels may be required if the complexity of the systems warrant. Testing must follow procedures which are developed by the designer, manufacturer and nationally recognized standards of good practice as approved by the authority having jurisdiction."

(f) To section [1807h] **403.7** is added: "Elevators must be installed in compliance with the standards of the American National Standards Institute, 1985 edition, to detect smoke and for access by a fire department and for recall."

(g) To section [1807j (1)] **403.9** is added: "or an activation of any fire alarm system or a power failure."

(h) To section [3802b] **904.2.2, paragraph 5** is [added a new subsection 5 to read] **deleted and replaced with the following**: "In all buildings which are more than 55 feet above or below street level or more than two stories, including any additional height incurred by usable floor space within a building, above grade at any point. Any open parking garage, which meets the definition in section [709] **311.9.2.1** and which does not contain unseparated mixed occupancies, is exempt from this requirement. The application of this requirement does not preclude the application of the provisions of section **505.3, 506, [507]** or **508.**"

(i) Section [3802c (1)] **904.2.3.1** includes casinos, showrooms and all other rooms for assembly except for churches and theaters which only have seating which is fixed.

(j) [To the body of the code is added the following supplemental material of the Uniform Building Code:

(1) Appendix, Chapter 7, Aviation Control Towers.

(2) Appendix, Chapter 10, Detention and Correctional Facilities.

(3) Appendix, Chapter 12, Division II, Group R-4 Occupancies.

(4) Appendix, Chapter 32, Re-roofing.

(5) Appendix, Chapter 38, Basement Pipe Inlets.

(6) Appendix, Chapter 55, Membrane Structures.

(k) To s] Section [3310(b)] **1005.3.3.7** is added: "In a building having a floor **level** used for human occupancy which is more than 55 feet above or below the level of access for a vehicle of the fire department, all of the required [stairway exits] **exit enclosures** [ must be smoke proof enclosures] **shall be pressurized in accordance with Section 905 and this Section. Pressurization shall occur automatically upon activation of an approved fire alarm system. The exception and the relief venting provisions remain as written.**"

*[(1) Section 901(a) is amended to include the dispensing, use, handling or storage of a product in determining the primary use of a building.]*

3. The following changes are made to the 199[1]7 edition of the Uniform Building Code Standards as adopted by the state fire marshal:

(a) *[Standards 38-1 and 38-2 are deleted.]*

(b) *The following provision is added: "Automatic fire sprinkler systems must be installed in accordance with the appropriate N.F.P.A. standards. In a one-or two-family dwelling or a mobile home, each system must be installed in accordance with N.F.P.A., Standard 13-D."]* **In high schools where automatic fire sprinkler systems are provided, the auto and woodworking shop systems shall be ordinary group 1.**

4. The following changes are made to the 199[1]7 edition of the Uniform Mechanical Code as adopted by the state fire marshal:

(a) Section 1009b is deleted.

(b) The following provision is added: "Smoke-detectors must be installed in accordance with N.F.P.A. Standard 90A, Chapter 4."

(c) Flexible duct connectors shall not be more than 5 feet in length. Duct connectors shall meet the requirements of N.F.P.A., Standard 90A, section 2-1.2. Ducts shall meet the applicable standards of the Uniform Mechanical Code.

(d) In all new construction of A-1, A-2, A-2.1, A-3, I-1, I-2, I-3 or R-1 occupancies which are more than 55 feet above or below the lowest level of access for fire department vehicles, and in all E occupancies which have a maximum legal occupancy of more than 500 persons, the mechanical system for heating, ventilation and air conditioning shall be certified in writing to the authority having jurisdiction, with an original stamp and signature of the certifying engineer, as meeting the requirements of the mechanical code in effect. An engineer shall certify, in accordance with this paragraph, any modification or alteration made thereafter. The engineer shall provide a manual of instruction and initial training, including all modifications or alterations to the manual or training, to the owner of the occupancy or his representative, which show the use, operation, system design and any emergency or smoke handling features of the system. The owner shall have an agreement with a company licensed pursuant to this chapter and chapter 477 of NRS for a semi-annual review of each of the systems within the entire system. The agreement shall be made available to the authority having jurisdiction upon request.

5. The following changes are made to the [1991]7 edition of the National Fire Code as adopted by the state fire marshal:

(a) *[Standard 101, chapter 8, section 8-4.4.3, paragraph (e) is deleted and replaced with the following:]* "All exhibit booths or exhibit areas having over 100 square feet of roofed area shall be provided with smoke detectors acceptable to the authority."

(b) Standards 1, 10, 11, 11A, 11C, 12, 12A, 12B, 13, 13D, 13R, 14, 15, 16, 17, 17A, 18, 20, 22, 24, 25, 30, 30A, 30B, 31, 32, 33, 34, 35, 36, 37, 40, 40E, 43A, 43B, 43D, 45, 50, 50A, 50B, 51, 51A, 51B, 52, 54, 55, 58, 59, 59A, 61A, 61B, 61C, 61D, 65, 69, 70, 70E, 72, 75, 79, 80, 81, 82, 85C, 86, 86C, 86D, 88A, 88B, 90A, 90B, 91, 96, 99, 99B, 101, 102, 110, 111, 120, 121, 122, 123, 124, 130, 150, **160**, 170, 211, 214, 220, 231, 231C, 231D, 231F, 232, 241, 251, 252, 253, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 264A, 295, 298, 299, 302, 303, 306, 307, 312, 318, 321, 326, 327, 385, 386, 395, 403, 407, 408, 409, 410, 412, 414, 415, 416, 417, 418, 423, **430**, 472, 473, 480, 481, 482, 490, 495, 496, 498, 501A, 501C, 501D, 505, 512, 513, 600, 601, 650, 651, 654, 655, 664, 701, 703, 704, 780, 803, 1001, 1002, 1003, 1021, 1031, 1033, 1041, 1122, 1123, 1124, 1125, 1126, 1141, 1221, 1231, 1403, 1404, 1406, 1410, 1521, 1561, 1581, 1582, 1901, 1902, 1903, 1904, 1911, 1914, 1921, 1931, 1932, 1961, 1962, 1963, 1964, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1981, 1982, 1983, 1991, 1992, 1993, 1999, 8501, 8503 and 8504 are adopted.

(c) Recommended guides and practices, 10L, 10R, 13A, 13E, 14A, 16A, 26, 46, 49, 53M, 68, 70B, 77, 80A, 92A, 92B, 97, 105, 203, 204M, 231E, 232AM, 291, 297, 325M, 326, 329, 419, 422M, 424M, 471, 491M, 497A, 497B, 497M, 502, 705, 801, 802, 820, 850, 851, 906, 910, 911, 912, 914, 921, 1401, 1402, 1405, 1420 and 8505 are adopted.

477.285 Relief from regulations.

Any person desiring clarification of the provisions of this chapter, relief from the strict application of any of their terms or information concerning procedures for dealing with the division in connection with them shall address a written request for the action or information to the state fire marshal at the:

State Fire Marshal Division

Department of Motor Vehicles and Public Safety

Carson City, Nevada 89711

[St. Fire Marshal, ° 1.104, eff. 1-16-81]ù(NAC A 2-17-94)

477.287 Variance from requirements. The state fire marshal may grant a variance to any requirement of the codes or standards adopted by him. The variance shall provide an alternate method for satisfying the requirement that is being waived by the variance.

(Added to NAC by St. Fire Marshal, eff. 3-9-89)

477.288 Interlocal agreements: Review by state fire marshal.

1. A request by a local government for an interlocal agreement pursuant to the provisions of NRS 477.030 shall:

(a) Identify the local government and designate those persons who will represent the local government for the purposes of the interlocal agreement.

(b) Be accompanied by an official resolution executed by the local government which petitions the state fire marshal to develop, in cooperation with the local government, an interlocal agreement and describes the authority or duties being requested for delegation.

2. The state fire marshal, upon the receipt of such a request, will assign personnel from the state fire marshal division to determine if the proposed program and the ability of the personnel of the local government are substantially equivalent to the program and ability of the state fire marshal.

3. Personnel assigned by the state fire marshal pursuant to this section shall complete the review within 60 days and recommend that the request be approved, returned for further development or disapproved.

4. The state fire marshal is the final administrative authority and will determine which authority or duties may be assigned to the local government pursuant to the interlocal agreement. The state fire marshal may require reports on the activities being performed pursuant to the provisions of an interlocal agreement.

5. The state fire marshal may revoke an interlocal agreement with a local government if the local government fails to:

(a) Supply the required reports; or

(b) Cooperate with the state fire marshal in verifying the equivalency of personnel and programs.

6. The state fire marshal will:

(a) Notify the local government if he intends to improve, update or otherwise change any program which is part of an interlocal agreement with the local government; and

(b) Allow adequate time for the local government to adjust its personnel, programs or training to conform with the change.

(Added to NAC by St. Fire Marshal, eff. 2-17-94)

477.290 Severability. If any of the provisions of this chapter, or any application thereof to any person, thing or circumstance is held invalid, it is intended that such invalidity not affect the remaining provisions, or their application, that can be given effect without the invalid provision or application.

[St. Fire Marshal, ° 1.1101 subsec. d, eff. 11-27-78]

## LICENSING GENERALLY

477.300 Licenses and certificates: Application; requirements; effect; branch offices.

1. All applications for licenses or certificates shall be made to the state fire marshal in the manner required by this chapter. A person who performs any of the following work in this state, other than as the employee of another, shall obtain a license in accordance with this chapter and chapter 477 of NRS and shall require each person employed by him to perform that work to obtain the appropriate certificate of registration:

(a) Selling, servicing, maintaining or installing any fire extinguisher, engineered or pre-engineered fixed fire extinguishing system, fire alarm system, fire detection system, automatic fire suppression system or fire standpipe system.

(b) Cleaning of a Type 1 hood and duct and the removal of fuel.

(c) Blasting and using commercial explosives.

(d) Using and handling of pyrotechnics.

2. The state fire marshal or his authorized representative may inspect vehicles, equipment, buildings, devices, premises or any area to be used in performing the activities permitted by the license or certificate.

3. A license or certificate issued by the state fire marshal remains the property of the state fire marshal division and shall be renewed as required by NAC 477.310. The license or certificate is not transferable and is revocable for cause **and may not be issued to anyone who has not attained the age of 18 years.**

4. A licensee shall comply with any regulation adopted by a local authority which is more stringent.

5. All applications for a license for the installation and maintenance of systems for protection from fire shall be accompanied by a letter of certification from a manufacturer or supplier of the system or material or parts for the system stating that the licensee has received parts and materials for the installation, maintenance, servicing, testing and inspection of those materials, items or systems.

6. Any firm having more than one office doing business in Nevada which shall be licensed by the state fire marshal shall designate one office as the principal office and pay the standard fee for each class of license for work to be performed. Except for licenses for the sale at retail of fire extinguishers, each additional office shall be licensed as a branch office. Each branch office shall pay the prescribed fee of **\$137.50** for each class of license for the work to be performed by that branch. If a branch office performs work which is not done by the principal office, the branch office shall be deemed to be the principal office for that class of license and shall pay the full fee.

**7. A Certificate of Registration holder must be present at all job sites requiring a license issued by the state fire marshal.**

[St. Fire Marshal, <sup>o</sup> 1.301-1.304, eff. 11-27-78] (NAC A 1-19-84; 7-16-85, eff. 8-1-85; 8-22-86, eff. 9-1-86; 2-17-94)

477.305 Separate, duplicate licenses.

1. A separate license is required for each business location.
2. A duplicate license or certificate of registration may be issued to replace a license or certificate which has been lost or destroyed upon the submission of a written statement from the licensee or the registrant to the state fire marshal attesting that the license or certificate of registration has been lost or destroyed. The prescribed fee shall accompany the written statement for a duplicate license or certificate of registration.

[St. Fire Marshal, <sup>o</sup> 1.406 & 1.407, eff. 11-27-78]

477.310 Expiration and renewal of licenses and certificates; change of information; initial fees; late charges.

1. Except as otherwise provided by sections governing specific types of classes of license and certificates, all original licenses and certificates of registration expire on December 31 of the year in which they are issued.
2. Application for renewal shall be made annually. The application shall be accompanied by the appropriate fee. Renewals are valid from January 1 through December 31.
3. If an application and the appropriate fee for renewal of a license or certificate of registration is void, then the firm or registrant holding the license or certificate of registration shall cease to perform those services authorized by the license or certificate of registration.
4. If a certificate of registration has expired and the registrant desires to continue to perform the acts requiring a certificate, he shall apply to the state fire marshal for an original certificate of registration, **pay the full fee and may require a re-test.**
5. If a license has expired and the licensee desires to continue in the business for which the expired license was issued, he shall apply to the state fire marshal for an original license.
6. Any change of information on the license or certificate shall be reported to the state fire marshal in writing within 7 days after the change. A new license will be issued upon notification and payment of the prescribed fee.
7. Initial fees shall be paid in full unless the fees are paid in the final quarter of the licensing year. Initial fees which are paid in the final quarter may be reduced by 50 percent.

8. If a fee is not paid by the time it is due, a late charge of 12 percent per month may be assessed as an administrative fee for processing. The charge shall be assessed beginning at the end of the first working day after the fee is due.

[St. Fire Marshal, ° 1.701, eff. 11-27-78] (NAC A 1-19-84; 2-17-94)

477.311 Written examinations; consideration of licensure by another state. Except as otherwise provided for a certificate for blasting:

1. An applicant for a certificate of registration shall pass a written examination. The applicant shall receive a passing score on each part taken. The examination may be supplemented by practical tests or demonstrations to determine the applicants knowledge and abilities.

2. Licensure by another state may be considered in evaluating an applicants qualifications.

(Added to NAC by St. Fire Marshal, eff. 1-19-84; A 7-16-85, eff. 8-1-85)

477.312 Bases of examinations; certificate required to ignite pyrotechnical material as commercial display. The examinations administered by the state fire marshal are based on the respective sources and standards identified below:

1. The examination for a certificate of registration for fire extinguishers, fixed fire extinguishing systems, automatic sprinkler systems and fire alarm systems is based upon:

(a) The Standard for Installation, Maintenance and Use of Portable Fire Extinguishers published by the N.F.P.A., 199[1] 7 edition;

(b) The Fire Protection Handbook, *Sixteenth Eighteenth* Edition;

(c) The Standards of Installation, Maintenance and Use of Various Alarm Systems published by the N.F.P.A., 1991 1997 edition;

(d) The Standards of the Installations of Sprinkler Systems, Pumps and Tanks published by the N.F.P.A., 199[1] 1997 edition;

(e) Installation of Carbon Dioxide, Halon and Dry Chemical Extinguishing Systems published by the N.F.P.A., [1991] 7 edition;

(f) Compressed Gas Association Pamphlet C-1; and

(g) The Uniform Fire Code and Uniform Building Code Standards.

2. The examination for a certificate of registration for pyrotechnic operators is based on reference material which is available from the state fire marshal. Every person who ignites pyrotechnical material as a commercial display shall first obtain a certificate of registration.



3. The examination for a certificate of registration for the use of explosives is based upon:

- (a) The Uniform Fire Code;
- (b) The annual publication titled "Blasters Handbook";
- (c) The National Fire Codes of the N.F.P.A.;
- (d) The manufacturers recommended standards for use; and
- (e) The applicable provisions of this chapter.

(Added to NAC by St. Fire Marshal, eff. 1-19-84; A 7-16-85, eff. 8-1-85;  
3-9-89; 2-17-94)

477.313 Scheduling of examinations; failure; testing for higher classification.

1. The state fire marshal will schedule the various examinations so that an applicant may take his examination within 90 days after the date of his application. Examinations will be conducted at the state fire marshals office in Carson City during business hours with an appointment. Examinations for certificates of registration *for blasting* will also be conducted in *other parts of the state, as published from time to time by the state fire marshal. A limited schedule of other examinations will also be available in Las Vegas or Elko as published from time to time by the state fire marshal. Elko and Las Vegas.*

2. An applicant who fails the examination or a part of the examination must wait 15 days after the date of the examination **and pay the application fee** before taking the test or failed part of the test again. A person may not take the test for the same class of license more than three times in 1 calendar year.

3. An applicant who already has a certificate in one classification may apply for licensing or registration in a higher classification and will be tested only on that part of the examination pertaining to the higher classification **and pay the prescribed fee.**

(Added to NAC by St. Fire Marshal, eff. 1-19-84; A 7-16-85, eff. 8-1-85;  
2-17-94)

477.314 Certification: General requirements for courses, applications, instructors and fees.

1. The state fire marshal may issue a certification to a person who successfully completes a specialized training course which has been:

- (a) Developed by the state fire marshal;
- (b) Developed and given by the National Fire Academy; or

(c) Approved by the state fire marshal.

2. The person **shall** apply for certification in accordance with the provisions of this chapter and the applicable national guidelines adopted pursuant to this chapter.

3. An instructor for a course **shall** be accredited by the state fire marshal before the instructor may instruct the course.

4. The state fire marshal may charge for certification a reasonable fee pursuant to the provisions of this chapter plus the actual cost expended to evaluate the course.

(Added to NAC by St. Fire Marshal, eff. 2-17-94)

477.3142 Certification: Application for approval of proposed course; evaluation of course; charges for evaluation; additions to list of courses.

1. A person who requests certification **shall** submit an application for the approval of the proposed course which includes:

(a) An outline of the course and a list of reference materials to be used in the course. At least 85 percent of the course **shall** refer to material which is recognized by the state fire marshal.

(b) A manual or handout to be used by the students in the course.

(c) A manual to be used by the instructor of the course.

(d) A list of visual aids to be used in the course.

2. The state fire marshal **shall** evaluate the proposed course within 45 days after receiving an application for certification and determine whether to certify the course.

3. The state fire marshal may charge the person requesting certification of a course pursuant to this section the actual cost of evaluating the course.

4. If a course is approved and the applicable fees are collected, the state fire marshal **shall** add the course to the list of training courses which are approved by him.

(Added to NAC by St. Fire Marshal, eff. 2-17-94)

477.3144 Certification: Qualifications of instructors; written evaluations; revocation of accreditation.

1. A course which has been certified by the state fire marshal shall be taught by an accredited instructor.

2. To be an accredited instructor, a person shall:

- (a) *Be certified as a fire instructor I. **Be recognized by the state fire marshals office; or***
  - (b) Be currently employed as an instructor of fire science or fire technology within the University and Community College System of Nevada;
  - (c) Have completed a development course for instructors offered by the *peace officers **state fire marshals office standards and training committee; or***
  - (d) Have at least four semester units of upper division credit in educational materials, methods and curriculum development; or
  - (e) Possess a teaching credential or proof of successful completion of instructional course work from another state or agency, if that credential or proof is approved by the state fire marshal.
3. Students participating in a certified course shall complete written evaluations on the instructor of the course. The state fire marshal will review the written evaluations to ensure the quality of instruction. The state fire marshal, or his representative, may observe a course to assist in the evaluation of the course or its instructor.
4. The state fire marshal may revoke the accreditation of an instructor if the state fire marshal determines that such action is appropriate.

(Added to NAC by St. Fire Marshal, eff. 2-17-94)

477.3146 Certification: Course not offered through state training program.

- 1. The state fire marshal may issue a certification to a person for training received from a course which is not offered through the state training program if that course meets or exceeds the standards of the state fire marshal.
- 2. The person shall apply for certification on a form provided by the state fire marshal. The person shall provide all of the information necessary to demonstrate that the training course meets or exceeds the standards established by the state fire marshal.
- 3. In addition to any fee charged pursuant to NAC 477.325, the state fire marshal may charge a reasonable fee for performing the evaluation of a course.

(Added to NAC by St. Fire Marshal, eff. 2-17-94)

477.3148 Certification: Training given by a training officer of fire department. The state fire marshal **may** issue a certificate to each person who completes training given by a training officer of a fire department if the training officer or fire department:

1. Completes a form specified by the state fire marshal which includes the numbers of hours of training given, the name of the person who received the training and a description of the training; and

2. Timely delivers the completed form to the state fire marshal division.

(Added to NAC by St. Fire Marshal, eff. 2-17-94)

477.315 Disciplinary action: Authority; grounds.

1. The state fire marshal may refuse to issue or renew or may suspend or revoke any certificate of registration or license if he determines that an applicant, licensee or registrant has:

(a) Obtained or attempted to obtain a license or certificate of registration by fraud, misrepresentation or falsifying information required on an application form.

(b) Been found guilty of malpractice or incompetence.

(c) Failed to obtain the necessary tools or materials required by the state fire marshal for performing the work for which the license was issued.

(d) Failed to pay the annual fees for renewal of a license or certificate of registration.

(e) Violated any provision of this chapter three or more times within a 12-month period.

(f) Submitted payment for a license or certificate upon an account which has insufficient funds.

(g) Been convicted of a felony.

(h) Refused to cooperate with the state fire marshal in an investigation.

(i) Created an imminent hazard to life. For the purposes of this paragraph, an "imminent hazard to life" exists when:

(1) A system to detect, suppress or protect against fire is reduced to less than 80 percent of its design standard by an action, whether malicious or not, of a licensee or holder of a certificate of registration; or

(2) A fire appliance or device is made nonfunctional or more than 20 percent of the appliances or devices provided to a building or area become nonfunctional because of the improper service of a licensee or the holder of a certificate of registration.

(j) Agents or principals who have violated the provisions of this subsection.

2. The state fire marshal may revoke or suspend any certificate of registration or license if he determines that:

(a) It has been used by a person other than the person to whom it was issued.

(b) It has been used for a location other than that for which it was issued.

**(c) It has been used for work for which it was not issued.**

(d) Any of the conditions or limitations set forth in the license have been violated.

3. All licenses and certificates of registration remain the property of the state fire marshal and **shall** not be suspended or revoked by any other person.

4. For the purposes of this section:

(a) A revocation is permanent and applies to any person who is found to be an accomplice to a violation, whether directly or indirectly.

(b) A suspension may not exceed 24 months.

[St. Fire Marshal, <sup>o</sup> 1.901 & 1.902, eff. 11-27-78]ù(NAC A 1-19-84; 3-9-89)

477.320 Disciplinary action: Investigation; hearing.

1. When the state fire marshal receives written notice or a complaint alleging fraud, misrepresentation, malpractice or incompetence on the part of any person licensed or certified under this chapter, he **shall** conduct an investigation of the allegations. The investigation **shall** concentrate on violations of this chapter, deceptive trade practices as set forth in chapter 598 of NRS and other pertinent criminal and civil violations set forth in NRS. The use of any unauthorized, faulty or otherwise unacceptable equipment discovered during an investigation may be prohibited pending a final determination. The person being investigated shall replace or repair any such equipment with approved, comparable equipment. A license or certificate **shall** be suspended during an investigation if the investigation reveals conditions which the state fire marshal considers an imminent threat to public safety.

2. A person who has been denied an original or renewal license or certificate by the state fire marshal may request an administrative hearing within 10 days after notice of denial. A written request shall be sent to the state fire marshal. The state fire marshal, upon receipt of a request for an administrative hearing, will take necessary action to schedule an administrative hearing.

3. The failure on the part of an applicant to pass tests required in this chapter does not constitute grounds to request an administrative hearing.

4. If an administrative hearing officer finds that the state fire marshal has acted correctly, he may require restitution to the state fire marshal for the costs of the administrative hearing.

5. An administrative hearing does not preclude the state fire marshal from proceeding with a criminal investigation. Any conviction resulting from a criminal investigation may be used as prima facie evidence in an administrative hearing.

[St. Fire Marshal, <sup>o</sup> 1.1001-1.1005, eff. 11-27-78]ù(NAC A 8-22-86, eff. 9-1-86; 3-9-89; 8-24-90)

#### **477.321 Interior Design License Requirements**

##### **Certification: General requirements for courses, applications, instructors and fees for Interior Designers**

**1. The state fire marshal may issue a certification to a person who successfully completes a specialized training course which has been:**

**(a) Developed and given by the State Architects Board; or**

**(b) Approved by the State Fire Marshal.**

**2. The person shall apply for certification in accordance with the provisions of this chapter and use the most current applicable codes adopted by the Nevada State fire Marshal.**

**(a) Certification of Interior Designers. Applicants for an Interior Design Certificate of Registration and License will be made on the appropriate forms and pay the appropriate fee as listed in NAC 477.325(J).**

**(b) Applicants shall pass a written final examination with a score of not less than 75%.**

**3. An instructor for a course shall be accredited by the State Fire Marshal before the instructor may instruct the course.**

**4. The State Fire Marshal may charge for certification a reasonable fee pursuant to the provisions of this chapter plus the actual cost expended to evaluate the course.**

##### **477.3212 Certification for Interior Design Course: Application for approval of proposed course; evaluation of course; charges for evaluation; additions to list of courses.**

**1. Requests for certification shall be submitted for course approval with an application for the approval of the proposed course which contains the following:**

**(a) An outline of the course and a list of reference materials to be used in the course. At least 85 percent of the course shall refer to fire code and building code material which is adopted by the State Fire Marshal.**

**(b) A manual or handout to be used by the students in the course.**

**(c) A manual to be used by the instructor of the course.**

**(d) A copy of quizzes and tests for approval to be used in the course.**

**(e) A copy of the Certificate of Completion.**

**2. The State Fire Marshal shall evaluate the proposed course and exams within twenty (20) days after receiving an application for certification and determine whether to certify the course. The State Fire Marshal shall provide the final exam.**

**3. The State Fire Marshal may charge for requesting certification of a course pursuant to this section and the actual cost of evaluating the course.**

**4. If a course is approved and the applicable fees are collected, the State Fire Marshal shall add the course to the list of training courses which are approved by him for Certification of Interior Designers.**

**477.3213 Certification: Qualifications of instructors; written evaluations; revocation of accreditation.**

**1. A course which has been certified by the State Fire Marshal shall be taught by an accredited instructor.**

**2. To be an accredited instructor, a person shall:**

**(a) Be recognized by the State Fire Marshals office; or**

**(b) Be currently employed as an instructor within the University or Community College System of Nevada;**

**(c) Possess a teaching credential or proof of successful completion of instructional course work from another state or agency, if that credential or proof is approved by the State Fire Marshal for Interior Design for Fire and Building Code, or Architectural Interior Design.**

**3. Students participating in a certified course shall complete written evaluations on the instructor of the course. The State Fire Marshal shall review the written evaluations to ensure the quality of instruction. The State Fire Marshal, or his representative, may observe a course to assist in the evaluation of the course or its instructor.**

**4. The State Fire Marshal shall revoke the accreditation of an instructor if the State Fire Marshal determines that such action is appropriate.**

**477.3214 Certification: Course not offered through a listed training program.**

**1. The State Fire Marshal shall issue a certification to a person for Interior Design training received from a course which meets or exceeds the standard of the State Fire Marshal.**

**2. The person shall apply for certification on a form provided by the State Fire Marshal. The person shall provide all of the information necessary to demonstrate that the training course meets or exceeds the standards established by the State Fire Marshal.**

**3. In addition to any fee charged pursuant to NAC 477.325(J), the State Fire Marshal may charge a reasonable fee for performing the evaluation of a course that has not been previously listed or approved and for which certification is requested.**

477.323 Permit to store hazardous material: Issuance, revocation and suspension; issuance for excessive hazardous materials; fees; expiration; criminal investigation.

1. A person shall not store a hazardous material in excess of the amount set forth in the Uniform Fire Code, as adopted pursuant to NAC 477.281, unless he has been issued a permit by the state fire marshal to store that material. A permit shall be renewed annually.

2. Permits may be revoked or suspended when, after investigation, the state fire marshal determines that:

(a) The permit is being used by a person other than the person to whom it was issued.

(b) The permit is being used for a location other than that for which it was issued.

(c) Any of the conditions or limitations set forth in the permit have been violated.

(d) The holder of the permit has failed, refused or neglected to comply with any order or notice served upon him under the provisions of this chapter within the time provided therein.

(e) A false statement or misrepresentation as to a material fact was made in the application for the permit or the plans on which the permit was based.

3. The state fire marshal may suspend or revoke any permit if an inspection or investigation reveals a hazardous condition that endangers the safety of any person, or if the holder of the permit is not in compliance with this section. The state fire marshal may reinstate a suspended permit after the holder of the permit has paid the annual fee and corrected **all** deficiencies identified. A permit that has been revoked will not be reissued. A suspension will not exceed 24 months, after which the permit will be reissued or revoked.

4. Except as otherwise provided in subsection 5, a permit may be issued to store, transport on site, dispense, use or handle hazardous materials in excess of the amount listed in the Uniform Fire Code, 1991 edition, Article 4, section 4.108, for a fee of **\$90**.

5. The fee established by subsection 4, or any portion of it, may be waived by the state fire marshal. *[If a fee is charged by any other governmental agency for the same purpose.]* The state fire marshal may issue a permit for other facilities or appliances listed in Article 4 of the Uniform Fire Code for a fee of **\$55**, and in addition thereto may charge a fee of **\$38.50** per hour, or any fraction thereof, for inspection services and an amount equal to the actual expenses incurred for travel, salaries and



administrative expenses. The state fire marshal may issue an annual permit for the manufacture of explosives, blasting agents or fireworks for a fee of **\$1100**, and in addition thereto may charge a fee of **\$110** for each building or structure at the facility and an amount equal to the actual expenses incurred for travel, salaries and administrative expenses.

6. The \$60 surcharge required by NRS 477.045 will be collected on all permits to store hazardous materials, in addition to any other fees.

7. A permit expires on *December 31* **annually on the last day of the month** of the year it is issued, unless a different expiration date is noted on the permit.

8. Revocation or suspension of a permit does not preclude the state fire marshal from proceeding with a criminal investigation. Evidence from a criminal investigation may be used as evidence in an administrative hearing for the revocation or suspension of a permit.

**9. The permit holder or applicant shall submit a plan to the state fire marshal to terminate storage, dispensing, handling or use of hazardous materials at least thirty (30) days prior to facility closure. The plan shall demonstrate that the reportable quantities of materials have been transported, disposed of or removed in a manner that presents no hazardous conditions to any person or property.**

(Added to NAC by St. Fire Marshal, eff. 3-9-89; A 8-24-90; 5-18-94)

477.325 Fees; exemptions; *refunds*; effect of certificates of registration.

1. The schedule of fees for:

(a) A license to install or maintain portable fire extinguishers and fixed systems is as follows:

<b>(b) Nevada State Fire Marshal regulations .....</b>	<b>\$ 11.00</b>
(1) Type A for full service of portable fire extinguishers .....	<b>\$440.00</b>
(2) Type B for portable fire extinguishers without hydrostatic .....	<b>\$357.50</b>
(3) Type B, C or B, D for type B with hydrostatic service (C) is low pressure, D is high pressure hydro) .....	<b>\$357.50</b>
(4) Type E for fixed fire extinguishing systems:	
(I) E-1 for hood/duct systems .....	<b>\$137.50</b>
(II) E-2 for all other systems .....	<b>\$137.50</b>
(III) Both E-1 and E-2 .....	<b>\$275.00</b>
(5) Type F for fire alarm.....	<b>\$440.00</b>
(6) Type G for automatic sprinkler system (includes G-U).....	<b>\$440.00</b>
(7) Type G-U for underground fire sprinkler service .....	<b>\$247.50</b>
(8) Type H for hood and duct cleaning.....	<b>\$440.00</b>
(9) Type H-E for E-1 licensed companies wanting an H license .....	<b>\$125.00</b>

(10) Type I for standpipe systems .....	<b>\$440.00</b>
(11) Type I-G for G licensed companies wanting an I license.....	<b>\$137.50</b>
(12) Type J for N.F.P.A., Standard 13-D systems.....	<b>\$440.00</b>
(13) Type G-J for G licensed companies wanting to do	
Standard 13-D work.....	<b>\$137.50</b>
(14) Blaster's certificate of registration.....	<b>\$55.00</b>
(15) Five year renewal of blaster's certificate .....	<b>\$ 55.00</b>
(b) A certificate of registration (each class).....	<b>\$ 71.50</b>
(c) Renewal of a certificate of registration .....	<b>\$ 33.00</b>
(d) Issuance of a duplicate license or certificate.....	<b>\$ 11.00</b>
(e) Change of information on a certificate of license .....	<b>\$ 11.00</b>
(f) A license for each branch office, per license class .....	<b>\$110.00</b>
(g) An annual license for the sale at retail of all types of fire extinguishers .....	<b>\$ 27.50</b>
(h) An annual license for the sale at retail of only disposable fire extinguishers which are not required by a code .....	<b>\$ 11.00</b>
(i) Retaking an examination or any part of an examination.....	<b>\$ 22.00</b>
<b>(j) Annual Interior Design license and Certificate of Registration .....</b>	<b>\$100.00</b>

2. The fees for a license do not apply to this state or its political subdivisions. The fees for certificates of registration apply in all cases. A certificate of registration operates as a license for a person to perform a specific job for a company licensed pursuant to this chapter and chapter 477 of NRS.

3. The state fire marshal will refund, **less an administrative fee of \$38.50** the fee for a license if a written request for a refund, stating that the licensee has not, after being licensed, engaged in any of the activities for which the license is issued, is received by the state fire marshal within 30 days after the date of the issuance of the license.

4. The following fees are established for the administrative and regulatory services of the state fire marshal division:

(a) All copy service will be at the rate of **\$2.75** for the first copy and **.55** cents for each page thereafter for each file opened.

(b) Fees for investigative services are as follows:

(1) For expert testimony rendered by the division in a civil proceeding, **\$110** for each hour of testimony or research.

(2) The actual costs for an investigation shall be paid by the person investigated if he is *convicted found guilty*..

(3) Investigative and hearing costs shall be paid by the person investigated, if the hearing officer finds in favor of the state fire marshal.

(c) The fee for the issuance of a license or certificate of occupancy is **\$22**. The state fire marshal will issue a certificate of occupancy:

(1) Annually for a licensed facility; or

(2) **Annually**, for a facility which is not licensed, after an inspection and the removal of deficiencies, if any.

(d) The state fire marshal may charge a fee for any other inspection services. The rate for this fee is **\$38.50** per hour or any fraction thereof. The first inspection **may** be conducted at no charge. A fee for subsequent reinspections will be charged for the actual cost of travel, salaries and administrative expenses in addition to the inspection fee.

(e) The fee for witnessing any test for acceptance is **\$22** for each test requiring a separate fee for certification.

(f) A fee may be charged for the costs associated with providing training programs. The state fire marshal may waive this fee if a reasonable justification for doing so is provided.

(g) Instructional supplies and materials will be supplied at the approximate cost of providing them.

(h) Fees for instructors are **\$22** per hour, or as set by contract for specific classes.

(i) Any additional costs for service will be added, as well as an administrative fee of **5.5** percent of the total cost of each program.

(j) Costs of certification are based upon hours of training, but will not exceed **\$22**. Fees will be charged for any certification other than:

(1) Initial fire fighter certification I and II for a member of a volunteer fire department; or

(2) Certification for hazardous materials awareness and operations for all first responders for a governmental agency.

(k) Additional fees equal to those charged for initial testing will be charged for retesting those who fail.

(l) The state fire marshal will not collect fees pursuant to this section from a person if a third party, such as the employer of the person, pays that fee.

(m) Any service provided by the state fire marshal division may be billed at the rate of **\$38.50** per hour or the actual cost of providing the service, whichever is greater.

(n) Any service performed by a special deputy on behalf of the state fire marshal may be billed, pursuant to an interagency agreement, at the rate of **\$38.50** per hour, the actual cost of providing the

service, or any other rate specified by this chapter. The state fire marshal may allow such fees or any part thereof to be collected and used by the agency supporting the special deputy.

(o) Approval for equipment or materials which are not on a list published by a nationally recognized testing laboratory, inspection agency or other organization concerned with product evaluation, will be issued annually for a fee of **\$550** per product, **\$38.50** per hour of research and actual expenses incurred in evaluating the product. If a product or material is not approved there will be charged a fee of **\$38.50** per hour of research and actual expenses incurred in evaluating the product, except that the minimum fee is **\$165**. Approval of a product lapses if the:

- (1) Product is modified;
- (2) Name of the product or person manufacturing the product is changed;
- (3) Ownership of the company is changed; or
- (4) Use of the product is changed.
- (5) The annual fee is not paid.**

**(p) The State Fire Marshall may establish a fee for supplying copies of the annual report to other than fire, legislative or state agencies. The fee shall be limited to the actual cost of publication and distribution plus \$38.50 administrative fee.**

**(q) Requests received prior to the publication of the annual report for statistical information shall be supplied as available. An administrative cost shall be calculated and assessed for each request as outlined in NAC 477.325.**

5. The state fire marshal may refund all or part of any fee if he deems it appropriate. To be eligible for a training refund, a registrant shall give not less than 72 hours notice before removing his name from the registration list. The state fire marshal may require the registrant to provide written documentation of the notice.

[St. Fire Marshal, <sup>o</sup> 1.601 & 1.602, eff. 11-27-78]ù(NAC A 1-19-84; 7-16-85, eff. 8-1-85; 8-22-86, eff. 9-1-86; 3-9-89; 8-24-90; 5-18-94)

477.330 Records required.

1. A licensee shall maintain accurate records of all service performed by him and all installations and service agreements made by him. These records shall be made available for inspection by the state fire marshal or his representatives during the normal hours of business of the licensee.

2. The state fire marshal will keep a list of the names, addresses and numbers of the licenses of all licensees. The record of all numbers will be available for inspection.

3. Any change of location of a licensee shall be reported to the office of the state fire marshal, in writing, within 7 days after the change. A new license will be issued upon notification and payment of the prescribed fee.

[St. Fire Marshal, <sup>o</sup> 1.801-1.803, eff. 11-27-78]ù(NAC A 8-22-86, eff. 9-1-86)

## INSPECTION OF SYSTEMS

477.335 Generally.

1. All pre-engineered or engineered fixed fire extinguishing systems, fire alarm systems, standpipe systems or sprinkler systems shall be inspected in accordance with schedules recommended in the appropriate adopted standards and in the "Fire Protection Systems, Inspection, Test and Maintenance Manual" as published by the N.F.P.A. Those inspections, other than the annual inspection and certification, may be conducted by any person, including an employee of a firm, who, in the opinion of the authority having jurisdiction, has sufficient knowledge of the system to conduct such an inspection and who will maintain an accurate record of such inspections of the system in the designated place for each system.

2. The state fire marshal hereby adopts by reference the "Fire Protection Systems, Inspection, Test and Maintenance Manual" *as that publication 1998 exists on March 9, 1989*. **1998 Publication.** A copy is available from N.F.P.A. at the price of \$36.50 **\$62.00**.

3. The authority having jurisdiction may inspect a fire protection system at any time the contractor is present. All work shall comply with the standards adopted for the system being installed. The methods or equipment used in the installation shall not vary from those required by the **plans and** applicable standard.

(Added to NAC by St. Fire Marshal, eff. 1-19-84; A 3-9-89; 8-24-90; 2-17-94)

## REGULATION OF PERSONS ENGAGED IN BUSINESS RELATED TO FIRE SYSTEMS

477.340 Scope; applicability.

1. NAC 477.340 to 477.370, inclusive, prescribe requirements for the licensing of persons engaged in the sale, leasing, installation or servicing of fire systems and components.

2. NAC 477.340 to 477.370, inclusive, apply to all:

(a) Persons within or conducting business within the state unless specifically excepted; and

(b) Fire systems and components installed within the state after November 27, 1978.

3. NAC 477.340 to 477.370, inclusive, do not apply to municipal fire alarm systems **in municipality whose population exceeds 50,000**.

[St. Fire Marshal, <sup>oo</sup> 3.101-3.102, eff. 11-27-78]ù(NAC A 8-22-86, eff. 9-1-86; 2-17-94)

477.345 Types of licenses; application.

1. Any person who holds a license to service or install any fire alarm system, standpipe system **residential** or automatic sprinkler system shall be properly equipped and shall employ personnel who are qualified to install and perform service on fire alarm systems, standpipe systems, regulating devices for the prevention of backflow or automatic sprinkler systems and shall possess a state contractors license which is pertinent to the work being performed. Licenses will be issued in three basic classifications:

(a) Type F: Authorizes the holder to design the placement of, install, maintain and service fire alarm systems.

(b) Type G: Authorizes the holder to design the placement of, install, maintain and service automatic sprinkler systems.

(c) Type I: Authorizes the holder to design the placement of, install, maintain and service fire standpipe systems.

**(d) Type J: Authorizes the holder to design the placement of, install, maintain and service residential sprinkler systems.**

2. Each application shall be accompanied by the required fee and contain the following information:

(a) The name and address of the applicant.

(b) The applicants business address.

(c) Fictitious name used, if any.

(d) The type of work performed.

(e) Other pertinent information required by the state fire marshal.

[St. Fire Marshal, <sup>oo</sup> 1.501-1.504, eff. 11-27-78]ù(NAC A 1-19-84; 8-22-86, eff. 9-1-86; 2-17-94)

477.346 Installation, maintenance and service of fire alarm system, standpipe system or automatic sprinkler system: Supervision; certificate of registration. No person may supervise the installation, maintenance or service of a system described in NAC 477.345 unless he has a certificate of registration issued by the state fire marshal and is employed by a licensee, including exempt and restricted licenses. All work performed under the licensing requirements of this chapter shall be supervised on site, whenever work is being performed on a system, by a holder of a certificate of registration. A certificate of registration is not transferable and may not be issued to anyone who has not attained the age of 18 years. The certificate of registration shall be in the possession of

the registrant when he is performing the duties allowed. A person shall obtain a certificate of registration before he may service and test devices regulated by pressure to prevent backflow.

(Added to NAC by St. Fire Marshal, eff. 1-19-84; A 3-9-89; 2-17-94)

**477.347 The licensed company shall give a 30 day written notice to the owner, occupant, authority having jurisdiction and the state fire marshal prior to discontinuance of service.**

477.348 Installation, repair, restoration or testing for maintenance of a fire system. A person who desires to engage in the installation, repair, restoration or testing for maintenance of a fire system shall possess a certificate issued by the state fire marshal. Each applicant shall provide a certification from a manufacturer, a supplier of materials for a fire system, or firm engaged in the design and engineering of those systems, **or a letter from his employer** that he has received instruction and training in the installation, repair, testing and inspection of the specific system. The applicant shall then take and pass a written examination and pay the appropriate fee.

(Added to NAC by St. Fire Marshal, eff. 1-19-84; A 2-17-94)

477.350 Approval of equipment.

1. No fire system, device or component of any fire system may be sold, leased or installed in this state unless it is approved, labeled or listed by Underwriters Laboratories, Inc., Underwriters Laboratories of Canada, Factory Mutual Laboratories or any other testing laboratory approved by the state fire marshal as qualified to test such systems or devices or if an approved listing from a testing laboratory is not available for a system, device or a component, by the state fire marshal on the basis of a practical test or examination **and pay the required fee.**

2. In addition to other provisions of NAC 477.340 to 477.370, inclusive, fire systems shall comply with standards published by the N.F.P.A. and the International Conference of Building Officials.

3. Where smoke detectors are required by any statute, regulation or ordinance, evidence of approval shall be furnished to the purchaser at the time of purchase or delivery. The evidence shall be a listing or label from one of the approved laboratories.

**4. All new structures built for purposes of human occupancy shall be equipped with smoke detectors as a minimum. If not required by any statute, regulation or ordinance.**

[St. Fire Marshal, <sup>o</sup> 3.201-3.204, eff. 11-27-78]ù(NAC A 1-19-84; 3-9-89; 2-17-94)

477.355 Combination paging alarm systems: Equipment.

1. Cone-type and horn-type loudspeakers and line matching transformers employed in combination paging alarm systems shall meet or exceed the following requirements:

- (a) The horn or loudspeaker shall be rated at a minimum wattage to provide the coverage specified in subsection 1 of NAC 477.360.
- (b) The matching transformer shall be rated at a minimum of twice the wattage required for the load for the speaker as specified in subsection 1 of NAC 477.360.
- (c) The rating for a loudspeaker shall be calculated for the speaker as actually installed and used, with the backbox, grille and matching transformer attached.
- (d) A speaker shall be housed in a metal backbox specifically designed for loudspeakers or other approved electrical box.
- (e) Where applicable, the speaker shall be located near the initiating device.
- (f) Where enclosures for speakers are permitted to be mounted on the surface for two-way or one-way projection, they shall provide protection to the speaker. Tamperproof mounting is *recommended* **required**.
- (g) Any area where environmental conditions are detrimental to cone-type speakers shall be provided with horn-type loudspeakers mounted flush on the surface which meet the minimum requirements for a cone-type speaker.
- (h) Each sleeping room on protected premises shall be equipped with a loudspeaker.
- (i) Any device to sound an alarm shall be listed by Underwriters Laboratories for use as a fire alarm.
- (j) The engineer who designs the system shall ensure that the equipment for the alarm meets the minimum standards set forth in this section and NAC 477.350 and 477.360.
- (k) The architect or designer shall ensure that the number and placement of loudspeakers meets the requirements of subsection 1 of NAC 477.360.

2. The devices to generate and amplify signals and the equipment to supervise their operation in a combination paging alarm system shall meet current standards of the National Fire Protection Association and the following requirements:

- (a) Amplifiers, tone generators and associated equipment shall be installed to provide a completely independent operating system. Each system shall include a "fail-safe" panel which will monitor the sound system against open and short circuits, grounds, mechanical damage and loss of power in all components while equipment is in use or on standby. Power amplifiers and signal generators shall be designed with solid-state circuitry and be tested and approved for use as fire alarms by a recognized testing laboratory, an agency approved by the state fire marshal, or both.



(b) The tone generator shall emit a unique tone distinctive in sound and oscillation which will awaken a sleeping person.

(c) When the supervisory panel has detected a fault, it shall emit an audible and visual signal. These signals shall be indicated at all annunciator panels and at central control. Trouble signals shall include a switch for silencing the audio trouble signal. Visual trouble signals shall not be canceled until the fault is corrected.

3. Each combination paging alarm system shall include a central station for control with the following features:

(a) The station shall have access to all systems of vocal communications, panels for manual and automatic fire alarms, status indicators for elevators and systems for handling air, controls for unlocking stairwell doors, a public telephone with a direct outside line, indicators for valves for sprinklers and the flow of water and standby controls.

(b) All metalware of any cabinets or panels shall have been manufactured by a company regularly engaged in the manufacture of enclosures for electrical or electronic apparatus.

(c) Switching and annunciator panels shall be segmented in groups of switches with each separate group clearly marked to identify the systems it controls.

[St. Fire Marshal, ° 3.401, eff. 11-27-78] (NAC A 1-19-84; 8-22-86; eff. 9-1-86)

477.360 Combination paging alarm systems: Design.

1. Areas to be protected by a combination paging alarm system shall be covered with sufficient loudspeakers to achieve at least 80 decibels of sound at any place within the protected property.

2. The central control panel for the combination paging alarm system and the annunciator panel shall consist of switches, with one switch for the speakers in each zone. Zoning of the protected property shall be approved by the state fire marshal or the local fire department. The system shall be capable of selective vocal transmission to any zone by the use of one or more switches. One switch shall be provided for calling all zones.

3. The central control panel shall include a power supply and associated equipment and circuitry for a system of communication by telephone, and a handset shall be located at the panel. This requirement may be satisfied by installing an internal telephone system, complete with handsets at indicated locations, or installing jacks at the indicated locations, and having portable handsets stored at the central station for control.

4. A paging microphone shall be provided at each annunciator panel and the central control panel. Keying the button on the paging microphone shall mute all fire alarm signals, and the fire alarm function shall be automatically restored when the microphone is not in use. The microphone at the central control panel shall be capable of overriding all audible fire signals.

5. The capability for giving a general alarm shall be available by manual switches at the annunciator panels and the central control panel. The use of a signal from other manual stations to the management before a general alarm is sounded is permitted if the management has an emergency procedure which is approved by the state fire marshal or the local fire department. The system for those signals shall be interconnected to an approved central station for receiving signals where such services are available.

6. An annunciator panel shall be provided at the central station for control. Additional annunciator panels shall be provided if required by the local authority.

7. Any other annunciator panel shall be of the same design as the central control panel. Access to the fire departments control panel shall be by a common lock and key which is acceptable to that department.

8. Keying a microphone at the central control panel or any other annunciator panel shall automatically silence the monitor speakers at that location.

9. All components of the system shall be continuously supervised and annunciated on all panels.

10. When requested to do so by the fire department, the owner shall:

(a) Perform tests on the premises to demonstrate the operation of the system and its compliance with the audio coverage specified in this section; or

(b) Provide an engineers certification as to such performance and compliance.

11. An actual test of the system is required once each month. All equipment shall be maintained in proper operating condition.

12. Where cross-ventilation is not possible because of the design of the building or the system for handling air, controls for the ejection of smoke shall be provided at the central control panel and any other panel, including:

(a) An on-off control for the supply of air;

(b) An on-off control for the exhaust; and

(c) A control to shut down the override portion of the system for automatic detection.

[St. Fire Marshal, ° 3.402, eff. 11-27-78]ù(NAC A 1-19-84; 8-22-86, eff. 9-1-86)

477.365 Fire alarm system: Evidence of capability to service; agreement for maintenance; plans and specifications; levels of sound for alarm signal.

1. The distributor or installer of a fire alarm system shall submit evidence of his capability to provide for any needed repair and restoration of the system within 24 hours after being notified of a fire or

fault in the system. The evidence of that capability is subject to approval by the state fire marshal and shall include a showing that the distributor or installer has:

- (a) The necessary equipment and qualified personnel to perform the service;
- (b) The necessary stock of parts and devices; and
- (c) A valid license issued by the state contractors board.

2. Where fire alarm systems **with appropriate fees** are installed, a satisfactory agreement for the maintenance of the system shall be provided. **The licensed company shall give a 30 day written notice to the owner, occupant, authority having jurisdiction and the state fire marshal prior to discontinuance of service.** All systems shall be under the supervision of qualified persons. These persons shall have proper tests and inspections made at prescribed intervals and have general charge of all alterations and additions to the systems under their supervision. A copy of the maintenance agreement, along with proof that the firm or company which will provide the maintenance is adequately covered by liability insurance, shall be submitted by the firm or company to the local fire department having jurisdiction.

3. Detailed plans of alarm systems shall be submitted to **the state fire marshal for review** and *approved by the* **to the** authority having jurisdiction. The specifications shall state that the installation will conform to applicable standards and meet the approval of that authority. The specifications shall include the specific tests which may be required to meet the approval of that authority. Plans shall be drawn to an indicated scale or be suitably dimensioned and shall be made so that they can be easily reproduced. Plans shall contain sufficient detail to enable the authority having jurisdiction to evaluate the effectiveness of the system. Plans shall be submitted to **the state fire marshal** and *approved by that authority* before the work starts. Where field conditions necessitate any substantial change from the approved plan, the corrected plan showing the system as actually installed, shall be submitted to **the authorities. Fire marshals approved plans must be on the job site at all times that work is being performed.**

4. All areas in a high-rise building protected by a fire alarm system and all areas protected by a combination paging alarm system shall be provided with sufficient alarm devices to achieve 80 decibels of sound at any occupied space within the area protected. All other occupancies shall have an alarm system or systems which produce a sound that exceeds the prevailing equivalent sound level in the room or space by 15 decibels, or exceeds any maximum sound level with a duration of at least 30 seconds by at least 5 decibels, whichever is louder. The level of sound for the alarm signal shall not exceed 120 decibels.

[St. Fire Marshal, <sup>o</sup> 3.301-3.304, eff. 11-27-78] (NAC A 1-19-84; 2-17-94)

477.370 Tags for recording maintenance.

1. A tag for recording the maintenance of a protective signaling system shall be at least 4 inches long and 2 inches wide and shall be in the following form:

2. The tag shall be attached to the system by the last person to work on the system for any purpose. The tag shall be punched in an approved manner to indicate the type of service performed on the system and the date. The tag shall be signed by the holder of a certificate of registration who supervises the work.

3. A tag shall be attached to the system at the conclusion of the successful testing of the system immediately after its installation.

[St. Fire Marshal, ° 3.305, eff. 11-27-78]ù(NAC A 1-19-84; 8-22-86, eff. 9-1-86)

#### PORTABLE FIRE EXTINGUISHERS AND FIXED HOOD SYSTEMS

477.380 Applicability. The provisions of NAC 477.380 to 477.435, inclusive, do not apply to:

1. The filling or charging of a portable fire extinguisher before its initial sale by its manufacturer.
2. A person who maintains only his own portable fire extinguishers for his own use and has facilities adequate for the purpose. This subsection does not apply if the fire extinguishers are required by any statute, regulation or ordinance, in which case the person maintaining the extinguishers shall possess a certificate of registration.

[St. Fire Marshal, ° 1.409, 2.101 & 2.102, eff. 11-27-78]ù(NAC A 1-19-84)

477.385 Qualifications of licensee; classification of licenses.

1. A person who is licensed to install or maintain a portable fire extinguisher or fixed fire extinguishing system or sell at retail or provide as a part of other sales at retail a portable fire extinguisher or fixed fire extinguishing system for use within this state:

(a) Shall be properly equipped *and have a staff of persons* qualified to perform the service authorized by the type of license issued;

(b) Shall provide a shop or a vehicle as a place of business, properly equipped and subject to inspection by the *authority; and state fire marshal and authorities.*

(c) If he is engaged in the installation or maintenance of fixed fire extinguishing systems, shall possess a contractors license appropriate to the work performed as issued by the state contractors board.

2. Any advertisement that the services of selling, installing, charging or testing or other maintenance of portable fire extinguishers or fixed fire extinguishing systems are available constitutes prima facie evidence that the premises, business, building, room or establishment in or upon which the advertisement appears or to which it refers is a separate location for business.

3. Licenses are classified and defined as follows:

(a) License for a public agency - Any type of license which is issued to the state or any of its agencies or political subdivisions for work to be performed by the state or that agency or political subdivision upon its own properties and for its own use. All requirements set forth in NAC 477.300 to 477.435, inclusive, except the requirement for a **state** contractors license, shall be met.

(b) Restricted license - A license which authorizes the holder to perform work covered by the license only upon his own properties and for his own use. All fees shall be paid. Unless otherwise exempted, a valid license issued by the state contractors board is required.

(c) License - A license which is required by NRS 477.033 but is issued to a business and is not restricted.

4. Licenses for the sale at retail of portable fire extinguishers are issued in two classes, fire extinguishers required by a code and fire extinguishers not required by any code. Fire extinguishers required by a code shall conform to the standards of the National Fire Protection Association and meet the requirements for testing and listing of a nationally recognized testing laboratory. Fire extinguishers not required by a code shall meet the requirements of the N.F.P.A., be nonrefillable, achieve a minimum of one unit of classification of rating through testing and listing by a nationally recognized testing laboratory and be designed and intended for use in homes, automobiles and recreational vehicles.

[St. Fire Marshal, ° 1.401 & 1.402, eff. 11-27-78]ù(NAC A 1-19-84; 7-16-85, eff. 8-1-85; 8-22-86, eff. 9-1-86; 2-17-94)

477.390 Declaration of qualification.

1. In addition to the requirements of NAC 477.385, any person who desires to engage in the installation, maintenance or inspection of an engineered or pre-engineered fixed extinguishing system shall be declared qualified to perform such act or acts by the state fire marshal.

2. The state fire marshal will declare a person to be qualified if he provides a certification from a manufacturer of fixed extinguishing systems that he has received instruction and training in the installation, maintenance and inspection of fixed extinguishing systems and passes a written examination for a certificate of registration. The state fire marshal may accept a practical demonstration in lieu of a written examination.

[St. Fire Marshal, ° 1.403, eff. 11-27-78]ù(NAC A 1-19-84)

477.395 Application; examination.

1. Application for a license or a certificate of registration shall be made on forms prescribed by the state fire marshal.

2. Each application shall be accompanied by the required fee and contain the following information:

- (a) The name and address of the applicant.
- (b) The applicants **physical** business address.
- (c) Fictitious names used, if any.
- (d) The type of work performed.
- (e) Other pertinent information required by the state fire marshal.

3. Upon passage of the written examination and any required practical tests or demonstrations, a certificate of registration endorsed with the type of qualification will be issued to each qualified person.

4. Information needed to pass the examination on portable fire extinguishers is found in:

- (a) N.F.P.A. 10, Standard for the Installation, Maintenance and Use of Portable Fire Extinguishers;
- (b) NAC 477.380 to 477.435, inclusive; and
- (c) The Fire Protection Handbook, **Eighteenth** Edition.

5. Information needed to pass the examination on fixed fire extinguishing systems is found in:

- (a) N.F.P.A. 10, Standard for Dry Chemical Systems;
- (b) NAC 477.380 to 477.435, inclusive;
- (c) The Fire Protection Handbook, **Eighteenth** Edition;
- (d) N.F.P.A. 13, Standard for Sprinkler Systems;
- (e) N.F.P.A. 11, 12, 12A and 12B, Standards for Gas Systems; and
- (f) N.F.P.A. 96, Standard for Vapor Removal from Cooking Equipment.

6. Applicants traveling to *Carson City* for the purpose of testing shall do so at their own expense.

7. An applicant who fails that portion of the written examination related to hydrostatic services may be issued a Type (B) certificate of registration if he so desires. If at a later date the applicant wishes to reapply for a Type (A) certificate of registration, he shall **request a retest date in writing** complete an application and pay the required fees.

[St. Fire Marshal, <sup>oo</sup> 1.410-1.413, eff. 11-27-78]ù(NAC A 8-22-86; eff. 9-1-86)

477.400 New employees; termination of employment; change of address.

1. NAC 477.385 does not prohibit new employees of a licensee from performing service on portable fire extinguishers for *up to a maximum of* 90 days after the beginning of employment, if the servicing is performed in the presence and under the direct supervision of a registrant.

2. A new employee **shall** not perform service on portable fire extinguishers if after the completion of the 90-day period he fails to pass a written examination and a background investigation. A conviction of a felony or crime which would demonstrate his lack of good character is a basis for denial of a certificate of registration.

3. Within 7 days after employing a registrant or new employee who performs service on portable fire extinguishers or fixed fire extinguishing systems, a licensee shall report to the state fire marshal the name, address and certificate number of the registrant or the name and address of the new employee.

4. A licensee shall report any termination of employment by a registrant within 7 days. A registrant shall report any change in his address to the state fire marshal within 7 days after the change. The registrant shall record the new address on the reverse side of the certificate.

[St. Fire Marshal, ° 1.404, eff. 11-27-78]ù(NAC A 1-19-84)

477.405 Approval of equipment; prohibited equipment; label required.

1. No portable fire extinguisher or component of a fixed fire extinguishing system shall be sold or leased in this state unless it has been approved, labeled or listed by Underwriters Laboratories, Inc., Underwriters Laboratories of Canada, Factory Mutual Laboratories, Applied Research Laboratories, the United States Coast Guard or any other testing laboratory approved by the state fire marshal.

2. No portable fire extinguisher or fixed fire extinguishing system shall be sold, leased, installed or serviced in this state if it uses as an extinguishing agent carbon tetrachloride, chlorobromome thanmethane, methyl bromide, trichlorotrifluoroethane or any other agent which has not been accepted by a laboratory approved under subsection 1. Any accepted **fire extinguishing agents** shall be approved by the state fire marshal or his authorized representative. Plans for proposed Halon installations shall be submitted to the state fire marshal or his authorized representative with the appropriate fees and application for approval. No portable fire extinguisher containing Halon as an extinguishing agent shall be sold or used except as approved by the authority having jurisdiction for use in commercial occupancies or other special applications.

3. Inverting type extinguishers shall not be hydrostatically tested. Each such extinguisher which becomes due for hydrostatic testing shall be permanently removed from service.

4. Each portable fire extinguisher shall bear a label which includes the following information:

(a) The unit is a fire extinguisher.

(b) The manufacturers name.

- (c) The date of manufacture.
- (d) The designation of the model.
- (e) The numerical rating and classification.
- (f) The weight full and empty.
- (g) The extinguishing agent.
- (h) The test pressure determined by the manufacturer.
- (i) The testing laboratory's listing label.
- (j) The freezing limits, if applicable.

A label bearing this information shall not be removed from the extinguisher except when it has failed to pass the tests or other requirements of this chapter.

[St. Fire Marshal, <sup>o</sup> 2.201-2.203, eff. 11-27-78] (NAC A 1-19-84; 3-9-89; 2-17-94)

#### 477.407 Advertising and sales: Fire extinguishers; devices to suppress fire.

1. A fire extinguisher not required by any code shall be represented and advertised as not meeting the requirements for use where a fire extinguisher is required by any code and misrepresentation is a ground for revocation of a license for the sale at retail of portable fire extinguishers.
2. A device for suppressing fire **shall not** be sold or advertised as a fire extinguisher, provided as part of other sales, or represented, either orally or by written word to be a fire extinguisher unless it meets the requirements for a fire extinguisher pursuant to this chapter.

(Added to NAC by St. Fire Marshal, 8-22-86, eff. 9-1-86)

#### 477.410 Installation, inspection, maintenance and repair of equipment.

1. All installation, inspection, maintenance and repair of portable fire extinguishers and fixed extinguishing systems shall be performed in accordance with the standards of the N.F.P.A.
2. Regardless of exceptions contained in the N.F.P.A.'s applicable standards:
  - (a) All portable fire extinguishers except carbon dioxide extinguishers, disposable extinguishers and Halon extinguishers shall be recharged at least annually and whenever the service seal has been broken or an inspection indicates that the extinguisher might fail to function. For the recharging of any dry chemical type of extinguishment cylinder to be valid, the serviceman shall date and initial an approved self-sticking **internal** tag with the date and initials corresponding to the exterior service tag. The internal maintenance tag shall be placed securely on the topmost exposed portion of the



pick-up tube before reassembly and recharging. Failure to initial, date and place an internal maintenance tag is grounds for **immediate** suspension or revocation of a certificate of registration.

(b) All fixed cylinders for fire extinguishing systems except carbon dioxide and Halon systems shall be recharged as required to the standards of the N.F.P.A. & **Nevada State Fire Marshal**.

3. Nitrogen or approved dry air shall be used as expellant when recharging dry chemical type extinguishers unless the manufacturer recommends otherwise.

4. An extinguisher which bears the date of manufacture on the cylinder and has been charged at the factory need not be tested or recharged. The extinguisher shall have an approved tag from a licensed company affixed before it may be placed into service or installed in accordance with the Uniform Fire Code or N.F.P.A., whichever is more stringent. A factory-charged extinguisher that does not bear a date of manufacture on the cylinder shall be hydrostatically tested, recharged and tagged by a licensed company before being placed into service or installed.

5. For the recharging of any cylinder using dry chemicals to be valid, the person performing the service shall date and initial an approved internal tag. The tag shall show the same date and initials as the exterior tag. The internal tag shall be placed securely on the topmost exposed portion of the pick-up tube before reassembly and recharging. Failure to initial, date and place the internal tag is grounds for **immediate** suspension or revocation of a servicemans certificate of registration.

6. Before a fire extinguishing system using Halon is accepted, a test as referenced in Standard 12A of the N.F.P.A. shall be performed and recorded.

7. The owner of a portable fire extinguisher may enter into a verbal service agreement for the service of that extinguisher, **if the extinguisher is within thirty (30) days of needed service**.

[St. Fire Marshal, <sup>oo</sup> 2.301-2.303, eff. 11-27-78]ù(NAC A 1-19-84; 3-9-89; 2-17-94)

477.415 Hydrostatic testing.

1. Each person who performs hydrostatic testing of fire extinguishers manufactured in accordance with the specifications of the United States Department of Transportation shall do so in accordance with the procedure specified by that department for compressed gas cylinders and shall have been qualified by a test administered by the state fire marshal and have received the proper license or certificate of registration, or both.

2. The procedure concerning the hydrostatic testing of cylinders listed by the United States Department of Transportation is set forth in the Compressed Gas Associations Pamphlet C-1, Methods for Hydrostatic Testing of Compressed Gas Cylinders. The **1996** edition of the pamphlet is hereby adopted by reference. *A copy of the pamphlet may be obtained from the state fire marshal, at a price of \$5 \$18.15.*

[St. Fire Marshal, <sup>oo</sup> 1.405 & 1.414, eff. 11-27-78]ù(NAC A 1-19-84)

477.420 Replacement of extinguishers. A licensee shall replace extinguishers removed from premises for servicing with spare extinguishers of equal or higher UL ratings during the period the extinguishers being serviced are removed. **Failure to comply with this regulation is grounds for immediate suspension or revocation of a servicemans Certificate of Registration.**

[St. Fire Marshal, ° 1.408, eff. 11-27-78]

477.422 Response to call for service. A licensee shall respond to a call for service from a customer, the state fire marshal or his authorized representative within **24** hours with proper equipment to repair or replace the fire protection equipment. If unable to respond, the licensee shall communicate with another licensee who is able to respond and advise him of the location of the fire protection equipment.

(Added to NAC by St. Fire Marshal, eff. 1-19-84)

477.425 Service tags.

1. The tags used as records of service performed on fire extinguishers shall be at least 4 inches long and 2 inches wide and shall be in the following form:

2. Each tag shall be signed by the holder of a certificate of registration and shall be:

(a) Attached to the extinguisher by wire, string or a plastic tie; or

(b) A self-adhesive tag approved by the state fire marshal which is so attached as to be readily visible for inspection.

3. A label of suitable Mylar or equally durable material shall be affixed by a heatless method to each shell of an extinguisher which is not listed by the United States Department of Transportation and which has passed a hydrostatic test. The label shall show:

(a) The date on which the hydrostatic test was performed;

(b) The test pressure used; and

(c) The name of the person or agency licensed or certified by the state fire marshal which performed the test.

4. A sample of the tag and the label shall be on file with the state fire marshal before they are used in the field.

[St. Fire Marshal, ° 2.501-2.503, eff. 11-27-78]ù(NAC A 1-19-84; 8-22-86, eff. 9-1-86)

477.427 Allegation of failure to install internal maintenance tag. If a written complaint is filed with the state fire marshal alleging failure of an agency that performs service to install an internal maintenance tag the state fire marshal may require the company who last performed service on the

fire extinguisher in question to open the fire extinguisher for examination by the state fire marshal or his representative. If the allegation proves false, the person filing the allegation is responsible for charges incurred in the conducting of the inspection. If the allegation is made by the state fire marshal or his representative, the foregoing procedure is followed, and the company responsible for the unit will bear the cost of recharging the unit if the allegation proves true. The state fire marshal will bear the cost of recharging the unit if the allegation proves false.

(Added to NAC by St. Fire Marshal, eff. 1-19-84)

477.430 Fixed fire extinguishing systems: Evidence of capability to service; agreement for maintenance; plans and specifications.

1. The installer shall submit evidence of his capability to repair, recharge and restore fixed fire extinguishing systems within 24 hours after notification of a fire or a fault in the system. The installers evidence shall include a showing that the installer has:

(a) The necessary equipment, as listed in *NRS NAC 477.432*, and certified personnel for the service;

(b) The necessary stock of parts, products and devices;

(c) A valid license issued by the state contractors board; and

(d) A certification and approval of a major manufacturer of fixed fire extinguishing systems which is acceptable to the state fire marshal.

2. Where a fixed fire extinguishing system is required by a statute, regulation or ordinance, a satisfactory written agreement for maintenance of the system shall be provided. All such systems shall be maintained under the supervision of qualified persons approved by the state fire marshal. A copy of the maintenance agreement along with proof that the firm or company providing the maintenance is adequately covered by liability insurance shall be provided by the firm or company to the local fire department having jurisdiction. A tag conforming to the requirements of *NAC 477.425* shall be attached to all such systems. A person certified by the state fire marshal shall be present whenever work is performed.

3. Detailed plans of such systems shall be submitted to and approved by the authority having jurisdiction and shall conform to applicable standards and meet the approval of the authority having jurisdiction. The specifications shall require that a puff test of the system be performed by sending a charge of gas through the system to determine the presence of any obstructions. The test shall be certified by the licensee as meeting the requirements of the National Fire Code. That certification shall be sent to the authority having jurisdiction. Plans shall be drawn to an indicated scale and shall be made so that they can be easily reproduced. Plans shall contain sufficient detail to enable that authority to evaluate the effectiveness of the system. Plans shall be submitted to and approved by that authority before the work starts. Where field conditions necessitate any substantial change from the approved plan, a corrected plan showing the system as actually built shall be submitted **with appropriate fee** to that authority for approval. **The change shall meet the intent of the codes.**

4. After a fire extinguishing system has been approved and installed, a copy of the systems plans shall be placed on the premises as required by the authority. A fire extinguishing system installed in conformance to the requirements of the National Fire Code is not required to be updated to later revisions in the code until the state fire marshal adopts those revisions by reference and the hazard which is to be protected is remodeled, removed or substantially altered.

[St. Fire Marshal, <sup>o</sup> 2.601-2.604, eff. 11-27-78]ù(NAC A 1-19-84; 3-9-89)

477.432 Servicing and repairs: Required equipment, tools and materials.

1. The following equipment shall be located in a shop used to service fire extinguishers and fixed fire extinguishing systems:

(a) Either:

(1) A dry air compressor with a moisture monitor and pressurizing station;

(2) A dry nitrogen supply and pressurizing station;

(3) A carbon dioxide supply and fill station; or

(4) A Halon supply and fill station,  
depending upon the type of license issued to the licensee.

(b) Transfer pumps, as appropriate.

(c) Work benches.

(d) Cylinder racks, as appropriate.

(e) A chain hoist and trolley, as appropriate.

(f) A dry chemical fill station with an approved exhaust and collection system.

(g) A shop vacuum.

(h) One-hundred and 500-pound beam scales which shall be calibrated annually.

(i) Balance scales.

(j) Low pressure hydrostatic test equipment, as appropriate.

(k) A cylinder dryer.

(l) Internal cylinder cleaning equipment.

- (m) Test cages, as appropriate.
- (n) A cylinder vise and bench.
- (o) A chain or pipe vise.
- (p) Regulators.
- (q) A device for purging cylinders.
- (r) Gauges which shall be calibrated annually.
- (s) A system for keeping records which shall be available for inspection.
- (t) Power drills and bench grinders.

**(u) Approved service tags and internal tags.**

2. The repair shop and the vehicle used to travel to locations where repairs are to be made shall include the following inspection equipment:

- (a) A measuring tape.
- (b) A penlight.
- (c) Extension mirrors.
- (d) An internal inspection light.
- (e) Torque wrenches.
- (f) A thread-size gauge.
- (g) A scale which is able to measure weights up to 50 pounds and which is calibrated annually.
- (h) A 4 pound by 1 ounce cartridge scale.
- (i) A gauge which can measure air pressure to a minimum pressure of 150 pounds per square inch.

3. The repair shop and the vehicle used to travel to locations where repairs are to be made shall include the following tools:

- (a) Assorted recharge adapters.

- (b) Taps and dies.
- (c) Pipe and screw extractors.
- (d) Wire and nylon bristle brushes.
- (e) Hammers and mallets.
- (f) Drift pins, punches and reamers.
- (g) Pliers, wrenches and screwdrivers.
- (h) Knives, files and hacksaws.
- (i) An approved collection system.

4. The repair shop and the vehicle used to travel to locations where repairs are to be made shall include the following materials:

- (a) Lubricants.
- (b) Anti-seize compounds.
- (c) Sealing compounds.
- (d) A quantity of extinguishing agent necessary for servicing or a minimum of twenty-five (25) pounds of each agent.**
- (e) Fifty pounds of BC chemical.*
- (f) Fifty pounds of Purple K chemical.*
- (g) Fifty pounds of CO<sub>2</sub> gas, as applicable.*
- (e) Twenty-five (25) pounds each of a specialized agent.**
- (f) Fifteen dry chemical discharge nozzles of assorted sizes.
- (g) Pressure gauges in the following sizes:
  - (1) Twelve 100 psi gauges.
  - (2) Two 100 psi general vertical gauges.
  - (3) Two 115 psi gauges.
  - (4) Six 150 psi gauges.

- (5) Four 175 psi gauges.
- (6) Eight 195 psi gauges.
- (7) Six 240 psi gauges.
- (j) Two hundred and fifty assorted "O" rings.
- (k) Twelve assorted valve springs.
- (l) Thirty assorted valve stems.
- (m) Six siphon tubes.
- (n) Thirty safety pull pins.
- (o) Four water pressure siphon tubes.
- (p) Six water pressure hoses.
- (q) Three CO2 rubber handles.
- (r) Four CO2 horns in 10 pound and 15 pound sizes each.
- (s) Six 5 pound horns.
- (t) Approved service tags **and internal tags**.
- (u) Approved seals.
- (v) Eight cartridges of ansul and general types each.
- (w) Brackets and wall hangers.

5. Compliance with the standards of the National Fire Equipment Distributors is an acceptable alternative to the requirements of this section.

(Added to NAC by St. Fire Marshal, eff. 3-9-89)

477.435 Reports.

1. Each licensee shall report to the state fire marshal by December 31 of each year the name, address and certificate number of each registrant in his employ.
2. The state fire marshal will keep a list of the names, addresses and license and certificate numbers of all licensees and registrants.

3. Within 7 days after employing any new employee who will perform service on portable fire extinguishers or fixed fire extinguishing systems, a licensee shall report to the state fire marshal the name and address of the new employee and, if he is a registrant, the number of his certificate. Each licensee shall report terminations of employment of registrants within 7 days.

4. A change of address of any registrant shall be reported by him to the state fire marshal within 7 days after the change. *The registrant shall record the new address on the reverse side of the certificate.* **A new certificate will be issued upon notice and payment of the required fee.**

5. A change of location of a licensed firm shall be reported to the state fire marshal in writing within 7 days of the change. A new license may be issued upon approval of the new location by the state fire marshal and the payment of the prescribed fee.

6. Reports required by this chapter are public records and may be inspected at the office of the state fire marshal.

[St. Fire Marshal, <sup>o</sup> 2.401-2.405, eff. 11-27-78]ù(NAC A 1-19-84)

#### PORTABLE BUILDINGS

477.440 Approval of plans for construction and placement; approval before placement and occupancy; temporary certification of inspectors; duties of inspectors.

1. Each portable building in this state shall comply with all statutes and regulations relating to educational facilities or other occupancy classifications, depending on the intended use of the building.

2. All plans for the construction and placement of portable buildings shall be reviewed and approved by the local fire authority, the local building authority or the state fire marshal. The fire authority having jurisdiction shall inspect and approve the placement or relocation of a portable building before the building may be occupied.

3. Except as otherwise provided in this subsection, a portable building may not be placed or occupied, whether constructed on site or elsewhere, without the approval of the authority having jurisdiction. The state fire marshal may temporarily certify inspectors of the school district in which the portable building is to be placed to plan, inspect and certify that the movement or placement of the portable building meets the provisions of this chapter and chapter 477 of NRS. The inspectors shall certify to the authority having jurisdiction that the movement or placement of the portable building is in accordance with the provisions of this chapter and chapter 477 of NRS, or with local specific requirements if more stringent, regarding access and fire flows. A diagram of the site which shows the placement of the portable units shall accompany each certification. The school district shall correct any deficiencies found by the authority having jurisdiction before the portable building in question may be occupied.

(Added to NAC by St. Fire Marshal, eff. 2-17-94)



477.441 General requirements.

1. A portable building shall:

(a) Be placed on a surface which is:

(1) Paved or composed of dirt or any other material which is noncombustible; and

(2) Free of combustible material.

(b) Have a skirt that is noncombustible or fire-resistant and which extends from the bottom of the portable building to ground level.

(c) Have a zone of at least 18 inches that extends outward from the bottom of the skirt and which is free of trash, debris, plants or any other combustible material.

2. If two or more portable buildings are placed next to each other, there shall be no empty spaces between the buildings. Any such spaces shall be filled with noncombustible material.

3. Portable buildings may not be joined together end to end or wall to wall if the joined buildings would have more than a total of 5,000 square feet of building space unless a separation wall which is capable of resisting fire for at least 2 hours is placed between the buildings. Portable buildings may not be joined wall to wall if there are windows or other openings on the joined wall other than doors that are designed and used as access between the buildings.

4. Flammable or combustible material shall not be stored beneath a portable building.

5. Portable buildings which abut or are grouped together in accordance with subsection 3 shall not exceed the total area allowed by the Uniform Building Code for occupancies which are designated as "type 5, nonrated, Group E occupancies." There shall be maintained at least 20 feet of clear space between a portable building which is designated as a "type 5 and nonrated" occupancy or a group of such buildings and all other existing buildings, portable buildings or groups of portable buildings.

(Added to NAC by St. Fire Marshal, eff. 2-17-94)

477.442 Safety requirements; approval of changes in use required; service of systems for heating, ventilating or air conditioning.

1. A portable building which has no windows or only one door to the exterior shall be equipped with:

(a) A system for emergency lighting as required by N.F.P.A. Standard 101, section 30-7.1.3.

(b) An automatic fire sprinkler system as required by N.F.P.A. Standard 101, section 7.7 if:

(1) The maximum legal occupancy of the building exceeds 50 persons; or

(2) More than two portable buildings are joined together to be used for classrooms or assembly.

2. All other portable buildings shall:

(a) Be in compliance with the codes for building, fire and life safety as adopted by this chapter or by the local authority, whichever are more restrictive.

(b) Be equipped with a fire extinguisher which has a rating of 2-A, [10] 20 BC.

(c) Have an automatic and a manual fire alarm system if:

(1) The maximum legal occupancy of the joined portable buildings exceeds 50 persons; or

(2) Three or more portable buildings are joined together.

(d) Have all alarm signals installed and connected to a main alarm system as required by N.F.P.A. Standard 72.

(e) If smoke detectors are required, have those detectors interconnected with the fire alarm system.

(f) Have and maintain plans for fire drills and evacuation, which shall be posted as prescribed by NRS 392.450.

3. No change in the use of a portable building described in subsection 2 may be made until the proposed change is reviewed and approved by the local fire authority having jurisdiction or the state fire marshal for compliance with the adopted codes or this section.

4. A system for heating, ventilating or air conditioning which:

(a) Is in a portable building described in subsection 2;

(b) Can circulate more than 2,000 cubic feet of air per minute; and

(c) Shuts down automatically,

shall be serviced quarterly. Records of the service shall be maintained for 2 years for review by the local fire authority having jurisdiction.

(Added to NAC by St. Fire Marshal, eff. 2-17-94)

477.443 Exits: Compliance with codes; maximum legal occupancy; windows; ramp or stairs.

1. Exits from a portable building shall meet the requirements of the Uniform Building Code and Uniform Fire Code.

2. In determining the maximum legal occupancy of a classroom for the purpose of exiting, there shall be allowed not less than 20 square feet of net floor space for each person. The maximum legal occupancy of all other occupancies shall be in compliance with table 33-A of the Uniform Building Code.

3. A portable building which has no windows shall have at least two exits on opposite walls.

4. A portable building which is being used as a classroom and has a maximum legal occupancy of 50 or more persons or more than 1,000 square feet in area shall have at least two exits which shall be as far from one another as practical.

5. A window which meets the requirements set forth in N.F.P.A. Standard 101, section 11-2.11.1, may be used in lieu of an exit door if the window is on a wall which is opposite an approved exit door.

6. A portable building shall have ramps **and**/or stairs:

(a) Which *is are* in compliance with the requirements of the Americans with Disabilities Act of 1990, 42 U.S.C. <sup>o</sup> 12101 et seq., or the building code adopted by the state fire marshal, whichever is more stringent, regarding access to and egress from the building; and

(b) Which is of substantial construction.

(Added to NAC by St. Fire Marshal, eff. 2-17-94)

477.444 Requirements for fire flow and proximity to fire hydrants.

1. The local authority having jurisdiction may designate the requirements for fire flow and assist in the location of a site for a portable building based on the proximity and usability of available fire hydrants. The requirements shall comply with section *120.301 903* and appendices III-A and III-B of the Uniform Fire Code, or the local ordinance, whichever is more stringent. If it is not possible to locate a portable building in compliance with such requirements, the school district in which the building is to be placed may apply to the local fire department for a waiver of the requirements. A waiver may be granted *upon good cause shown*. **If the requested alternative meets the intent of the code.**

2. There shall be no obstruction between a hydrant and the areas to be protected. Access to a hydrant by fire trucks shall not be obstructed. If necessary, a hydrant shall be turned, moved or otherwise relocated to allow access to the hydrant by fire trucks.

(Added to NAC by St. Fire Marshal, eff. 2-17-94)

477.445 Maintenance of exterior areas. The exterior areas around a portable building, including the areas under stairs or ramps, shall be kept free and clear of accumulations of trash, weeds, dead grass, litter or any other flammable or combustible material, in accordance with the Uniform Fire Code.

Clearances from other buildings, services or hazards shall be maintained as required by the building and fire codes adopted by the state fire marshal for all structures and buildings.

(Added to NAC by St. Fire Marshal, eff. 2-17-94)

477.446 Access for vehicles. Access for vehicles shall be provided into any area where a portable building is located. Not less than two means of access which meet the requirements of the local fire authority or the Uniform Fire Code, whichever is more stringent, shall be provided, except that if physical difficulties exist, the **authority local having jurisdiction** *fire authority* may approve a single means of access.

(Added to NAC by St. Fire Marshal, eff. 2-17-94)

## AUTOMATIC SPRINKLER SYSTEMS

### Generally

477.455 Approval of equipment; standards.

1. No component or device of an automatic sprinkler system shall be sold, leased or installed in this state unless it has been approved, labeled or listed by Underwriters Laboratories, Inc., Underwriters Laboratories of Canada, Factory Mutual Laboratories or *any* other testing laboratory approved by the state fire marshal as qualified to test such a component or device.

2. Automatic sprinkler systems shall comply with the Uniform Fire Code, the American Water Works Association pamphlet M-14, and the following standards of the National Fire Protection Association:

- (a) Installation of Sprinkler Systems, Standard 13.
- (b) Care and Maintenance of Sprinkler Systems, Standard 13A.
- (c) Standpipe and Hose Systems, Standard 14.
- (d) Water Spray Fixed Systems for Fire Protection, Standard 15.
- (e) Foam-water Sprinkler Systems, Standard 16.
- (f) Centrifugal Fire Pumps, Standard 20.
- (g) Water Tanks for Private Fire Protection, Standard 22.
- (h) Installation of Sprinkler Systems in One- and Two-Family Dwellings and Mobile Homes, Standard 13-D.

(i) Private Fire Service Mains and Appurtenances, N.F.P.A. Standard 29 **24**.

*3. The American Water Works Association pamphlet M-14 is hereby adopted by reference. A copy of the pamphlet may be obtained from the American Water Works Association, 6666 West Quincy Ave., Denver, Colorado 80235, at the price of \$31.50.*

[St. Fire Marshal, <sup>o</sup> 4.201 & 4.202, eff. 11-27-78] (NAC A 1-19-84; 2-17-94)

477.460 Inspections and testing; reports; notification; required tags.

1. Each automatic fire sprinkler system shall be inspected quarterly. One of the quarterly inspections shall be termed an annual inspection and be conducted in accordance with the provisions of subsection 2. The other quarterly inspections may be conducted by any person, including an employee of a firm, who, in the opinion of the authority having jurisdiction, has sufficient knowledge of the system to conduct such inspections. The quarterly inspections shall conform to the requirements of Standards 13, 13-A and 25 of the N.F.P.A., and with the "Fire Protection Systems Inspection, Test and Maintenance Manual," published by the N.F.P.A. Systems which terminate within a station for central control for a high-rise building shall be scheduled for testing in accordance with paragraph (e) of subsection 2 of NAC 477.283.

2. The annual inspection shall be made by a qualified licensee for automatic fire sprinkler systems. The annual inspection shall comply with the standards and publications described in subsection 1 and include the following:

(a) Post indicator valves, underground gate valves and outside screw and yoke valves shall be operated to make sure that they are in good operating condition and do not leak. Each control valve shall be secured in its open position by means of a padlock and chain, except electrically supervised valves when approved by the authority having jurisdiction. At the annual and quarterly inspections, reduced pressure devices for the prevention of backflow shall be serviced and inspected by a qualified service person who holds a certificate of registration from the state fire marshal for that work and is employed by a sprinkler company licensed pursuant to this chapter.

(b) Fire pumps shall be started and operated until water is discharged freely from the relief valve and checked for ample pressure, proper supply of lubricating oil, operating condition of relief valve and level of water in priming tank. The pump shall meet full flow test requirements.

(c) Fire department connections shall be inspected, caps shall be in place, threads in good condition, ball drip or drain in order and check valve not leaking.

(d) Underground pipes connecting the water supply to the sprinkler system shall be flushed with a sufficient flow of water to remove any obstruction from the pipe lines, when physical construction allows.

(e) For wet systems with alarm valves:

(1) Test alarms by opening the inspectors test connection, the bypass test connection, or both, in conjunction with making a water flow test when facilities and conditions permit.

(2) Check cold weather valves and exposed piping to ensure their proper conditions for winter and summer operations.

(3) Test the solution in the antifreeze system for satisfactory condition, as required in the N.F.P.A.s Standard 13.

(4) Place a tag, which complies with the requirements of NAC 477.470 and indicates the temperature to which the system is protected, on the antifreeze loop.

(f) For dry systems with dry valves, accelerators and other items:

(1) Test the alarms, both water flow and air, if provided, and perform a water flow test through the drain connection when facilities and conditions permit.

(2) Check air pressure, priming water level, latching arrangements, automatic drip connections when provided, and the general condition of the dry pipe valves, accelerators or exhausters and their environment, including dry pipe valve room or enclosures.

(3) Trip test dry pipe valves, together with accelerators and exhausters, if provided, in accordance with standard testing and reporting procedures required by the authority having jurisdiction.

(4) After testing, restore the system and the dry pipe valve to operation according to the manufacturers instructions.

(5) Open condensation drains on drum drop connections and drain low points during fall and winter inspection.

3. A copy of the annual inspection report shall be sent to the owner within 30 days after the inspection and, if there are deficiencies, within **48 24 or immediately (see #9)** hours to the authority having jurisdiction by the licensee who conducted the inspection.

4. All hydrostatic tests of systems and the flushing of underground systems may be witnessed by a representative of the authority having jurisdiction.

5. The authority having jurisdiction shall be notified 48 hours before any test. The state fire marshal shall be notified if the local authority is unable to witness a test.

6. The last person who works on a fire sprinkler system shall attach a service tag to the riser. The tag shall be punched to indicate the type of service performed on the system and the date. The tag shall be signed by the person doing the work who is certified by the state fire marshal.

7. The installer of a fire sprinkler system shall place a metal tag on the system riser which displays the name of the installing company and the date the installation was completed.

8. The authority having jurisdiction shall be notified if any system is going to be shut down except while being tested by a licensed firm.

9. If a maintenance inspection indicates that additional work is required on a fire sprinkler system in order to have the system conform to code requirements, the licensee shall notify the owner and the authority having jurisdiction in writing *within 5 days immediately* after the inspection. A tag shall be properly signed, punched and attached. The word "deficient" shall be written across the bottom of the tag.

[St. Fire Marshal, <sup>o</sup> 4.401-4.403, eff. 11-27-78]ù(NAC A1-19-84; 3-9-89; 8-24-90; 2-17-94)

477.465 Installation, maintenance and repairs; letter of certification.

1. The distributor, installer or agency to provide service to customers shall submit evidence of its capability to repair and restore an automatic sprinkler system within 24 hours after notification of a fire or fault in the system and shall repair a system within 24 hours after being notified by the owner that a system requires service. The evidence of that capability is subject to approval by the state fire marshal. The evidence shall demonstrate that the licensee has:

- (a) The necessary equipment and **state fire marshal**/certified personnel;
- (b) The necessary stock of parts and devices;
- (c) A valid license issued by the state contractors board; and
- (d) A certification and approval by the manufacturer from whom the equipment is purchased.

2. Where automatic sprinkler systems are installed for any reason, a satisfactory written agreement for the maintenance of the system shall be provided. All systems shall be under the supervision of qualified persons. No work may be performed on an automatic sprinkler system unless a holder of a certificate of registration is present to supervise the work. Proper tests and inspections shall be made at prescribed intervals, and qualified persons shall have general charge of all alterations and additions to the systems under their supervision. A copy of the agreement for maintenance, along with proof that the firm or company which will provide the maintenance is adequately covered by liability insurance, shall be submitted by the firm or company to the local fire department having jurisdiction.

3. Detailed plans shall be submitted **to the state fire marshal with appropriate fees** for approval *of the and to the* local authority having jurisdiction. The specifications shall state that the installation will conform to the applicable standards and be approved by the authority having jurisdiction before the sprinkler system is installed. The specifications shall include the specific tests required by the N.F.P.A.s standards and the standards required for approval of that authority. Plans shall be drawn to an indicated scale or be suitably dimensioned and shall be made so that they can be easily reproduced. Plans shall contain sufficient detail to enable that authority to evaluate the effectiveness of the system. Plans shall be submitted to **the state fire marshal and the authority**

**having jurisdiction** before work starts. Where field conditions necessitate any substantial change from the approved plan, the corrected plan **and appropriate fee** showing the system as installed shall be submitted to **the state fire marshal and the** authority for approval. The authority shall inspect and approve any substantial changes before the job is completed. **Plans approved by the fire marshal must be on site when work is being done.**

4. Calculations shall be established from the applicable design curve for sprinkler systems as shown in Standards 13, 231 and 231C of the N.F.P.A. Calculations shall be computed from the water flow test that has been approved by the authority having jurisdiction. There shall be not less than 10 psi additional water pressure above the system demand.

5. All hydrostatic tests of systems and flushing of underground systems shall be witnessed by **the state fire marshal or** a representative of the authority having jurisdiction. All portions of the automatic fire sprinkler system, including the underground service from the gate valve, road box or check valve to the riser, shall be installed, tested and flushed by a company licensed by the state fire marshal to perform this work. A company which holds a current type G-U license may provide only the underground services from the gate valve, road box or check valve to the base of the riser. The company shall provide certification of the contractors materials and testing to the authority having jurisdiction upon the completion of the work. The underground services provided and the certification to be provided to the authority having jurisdiction shall meet the requirements of NAC 477.340 to 477.350, inclusive, and the standards of the N.F.P.A. for automatic fire sprinkler systems.

6. Upon completing the installation of an automatic sprinkler system the licensee shall issue a letter of certification to the authority having jurisdiction. The letter shall certify that the system has been installed in accordance with the approved plans and all applicable national, state and local codes. The installer shall properly identify all hydraulically designed automatic sprinkler systems with a permanently attached placard. The placard shall show the location and number of sprinkler heads and the density of discharge over the designed area.

[St. Fire Marshal, ° 4.301-4.303 & part ° 4.304, eff. 11-27-78]ù(NAC A 1-19-84; 3-9-89; 8-24-90; 2-17-94)

477.470 Service tags.

1. A tag for recording maintenance of automatic sprinkler systems shall be at least 4 inches long and 2 inches wide and shall be in the following form:

2. If the system has an outside screw and yolk valve which is not electrically supervised, the tag shall serve as a seal for the valve. If the outside screw and yolk valve is electrically supervised, the tag shall be attached in such a manner that the valve may be closed for testing of the supervision without removing the tag.

3. The last person to work on an automatic sprinkler system for any purpose shall attach the tag to the valve. The tag shall be punched to indicate the type of service which was performed on the system and the date. The service tag shall be signed by the holder of the certificate of registration supervising the work.



4. A tag shall be attached to the system at the conclusion of the successful testing of the system immediately after its installation.

[St. Fire Marshal, part <sup>oo</sup> 4.304 & 4.305, eff. 11-27-78]ù(NAC A 1-19-84; 8-22-86, eff. 9-1-86)

### Residential Systems

477.480 Applicability. NAC 477.480 to 477.535, inclusive, apply to all:

1. Persons within or conducting business within this state without restriction.
2. Sprinkler systems and components installed after November 27, 1978, within one- and two-family dwellings and mobile homes in this state. (NFPA 13-D)

[St. Fire Marshal, <sup>oo</sup> 5.101 & 5.102, eff. 11-27-78]ù(NAC A 1-19-84)

477.483 Requirements for installation.

1. A firm shall be licensed by the state fire marshal and the state contractors board to install a fire sprinkler system in any one- or two-family dwelling or mobile home.
2. The installation of a system may not begin until the plans for the job are approved by the authority having jurisdiction. An approved set of plans shall be on the job site and available for inspection during all working hours.
3. A person holding a certificate of registration issued by the state fire marshal shall be on the job site while the system is being installed.
4. Except as otherwise provided in subsection 5, all workmanship shall conform to the requirements of this chapter and N.F.P.A., Standard 13-D.
5. Each component shall be installed in accordance with the requirements set forth in subsection 4 or the manufacturers recommendations as work progresses.
6. The firm that installs the system shall:
  - (a) Certify, in a letter to the authority having jurisdiction, that the work meets the requirements of N.F.P.A., Standard 13-D, and the state fire marshal. The letter shall be sent within 10 days after the completion of the job.
  - (b) Attach to the system a metal tag that includes the firms name and address and the date of the installation.
7. If a manufacturers process or listing is used for any portion of the installation, that process or listing number shall be noted on the submitted plans.

(Added to NAC by St. Fire Marshal, eff. 8-24-90)

477.490 Plans required.

1. Working plans shall be submitted to **the state fire marshal with application fee and** the authority having jurisdiction for approval before any equipment is installed or remodeled. Working plans shall contain:

(a) The name of the company installing the system.

(b) The general location and exact address of the job location.

(c) A rough plot plan showing water supply and property lines in relation to the installation site.

(d) Water pressure at the installation site.

(e) A rough floor plan with system coverage indication.

(f) Any additional information required by the state fire marshal.

2. The authority having jurisdiction may require additional plans, documentation of testing data, engineering specifications and equipment **as deemed necessary**. *when it judges that it is necessary.*

[St. Fire Marshal, ° 5.301 & 5.514, eff. 11-27-78]

477.540 Inspection and testing.

1. The authority having jurisdiction may inspect a fire sprinkler system at any time during its installation. The authority may witness any tests of the system. The firm installing the system shall give the authority notice of any test not less than 24 hours before it occurs.

2. The owner of any fire sprinkler system installed in accordance with this chapter and N.F.P.A., Standard 13-D, shall conduct or cause to be conducted an annual test of the system. The firm that installed the system shall provide the owner with written instructions on the method of testing it. These instructions shall include the location of the inspectors test valve, which shall drain to the exterior of the building, the location of the water flow alarm mechanism and the location of the riser assembly.

(Added to NAC by St. Fire Marshal, eff. 8-24-90)

## INSTITUTIONAL BUILDINGS

477.550 Scope; applicability. NAC 477.555:

1. Prescribes classifications for health care facilities to provide a basis for code approval of licensing pursuant to NRS 477.030 and chapter 449 of NRS.

477.555 Identification; occupancy.

1. Institutional buildings are those used for:

- (a) Purposes such as medical or other treatment or care of persons suffering from a physical or mental illness, disease or infirmity;
- (b) The care of infants, convalescents or aged persons; and
- (c) Penal or corrective purposes.

2. Institutional buildings provide sleeping facilities for the occupants and are occupied by persons who are incapable of caring for themselves because of age, physical or mental disability or because of security measures not under the occupants control.

3. Institutional facilities are classified into three groups for the purpose of identification:

- (a) Medical facilities;
- (b) Custodial care facilities; and
- (c) Restrained care facilities.

4. The permissible occupancy of an institutional building shall be determined according to the standards approved by the state fire marshal.

[St. Fire Marshal, <sup>oo</sup> 6.201 & 6.202, eff. 11-27-78]ù(NAC A 1-19-84; 8-22-86, eff. 9-1-86; 3-9-89)

477.560 Device for detection of products of combustion.

In all medical facilities, custodial care facilities and restrained care facilities, a device for detection of the products of combustion, other than by detecting heat, shall be installed pursuant to section 12.3.4.5 of pamphlet 101 in the 1997 edition of the National Fire Codes, published by the National Fire Protection Association.

(Added to NAC by St. Fire Marshal, eff. 1-19-84; A 8-22-86, eff. 9-1-86)

477.562 General requirements. The following requirements apply to child care facilities:

- 1. Plans for the construction of new facilities or the remodeling of existing facilities shall be submitted to the state fire marshal, **and**/or to the local authority if the facility is in Clark County, Washoe County or Carson City, for approval before the construction or remodeling begins.
- 2. Each facility shall be inspected for compliance with applicable fire and safety regulations by the authority having jurisdiction before a license to operate the facility is issued. The facility shall be

inspected annually thereafter **and a Certificate of Occupancy issued by the state fire marshal or local authority.**

3. Smoke detectors approved by the state fire marshal shall be installed pursuant to the table provided in NAC 477.563 according to the manufacturers instructions. In newly constructed buildings smoke detectors shall receive their primary power from the buildings wiring, with provision made for the detection of smoke during a power failure. If a smoke detector powered by a battery is currently installed and it fails, the smoke detector shall be replaced by a smoke detector which receives its primary from the wiring of the building and has a battery as a backup source of power.

4. The number of occupants permitted in a facility shall be calculated pursuant to N.F.P.A. Standard 101 **or NRS 477 AND NRS 449.**

5. Smoking is prohibited in any area designated as an "E" occupancy area unless the area has specifically been designated as a smoking area by the authority having jurisdiction. Where smoking is allowed, ashtrays shall be provided.

6. All stairs shall be free of obstacles and stored combustible materials. Handrails with turn-ins shall be provided if there are two or more steps in any stairway.

7. Bathroom and closet doors shall open from the inside without the need for a key or any special knowledge or effort and shall be able to be immediately opened from the outside with the use of an appropriate device hung or placed above or near the door.

8. Basements in R-3 occupancies used for child care shall have at least two unobstructed exits which lead directly to the outside, one of which shall open directly at ground level.

9. Portable fire extinguishers shall have a minimum rating of 2-A 10BC, and shall be mounted pursuant to the requirements of the authority having jurisdiction.

10. Heaters, fireplaces or other similar devices in rooms used for child care shall be protected from contact with children by a sturdy, noncombustible partition, wire screen, or protective metal guard. No portable heating devices are allowed.

11. All heating equipment and hot water heaters shall be enclosed in a manner which prevents children from coming into contact with them.

12. Child-resistant covers shall be installed on all electrical outlets accessible to children.

13. Wastebaskets, garbage cans and other containers used to store garbage, waste, rubbish and other combustible materials, shall be constructed of noncombustible or nonfusible materials and have a tight-fitting lid of the same material. Wastebaskets or other trash containers placed in the designated smoking areas shall be constructed of noncombustible materials with a tight-fitting lid of the same material.

14. No more than 10 gallons of flammable liquid may be stored in any area designated as an "E" area. This flammable liquid shall be stored in an approved metal container and out of the reach of children.

15. Rooms in which equipment is used or where flammable liquids, combustible dust or similar hazardous materials are handled shall be separated from other portions of the building by a material which has a rating of at least 1-hour fire resistant occupancy separation and shall conform to the requirements of the Uniform Fire Code.

(Added to NAC by St. Fire Marshal, eff. 3-9-89; A 8-24-90; 2-17-94)

477.563 Minimum requirements based on classification. Buildings used for child care facilities shall be classified pursuant to the model codes approved by the state fire marshal and the following chart:

#### MINIMUM REQUIREMENTS FOR CHILD CARE FACILITIES

ITEM	FAMILY CARE	GROUP CARE	INSTITUTIONAL CARE	
	R-3	E-3	I-1.1	I-2
Number of Clients	0-6 (see note #3)	7 or more	6 or more	6 or more
Number of Clients under 2 years of age	See Child Care Regs	Same	Same	Same
Recommended Staff to Client Ratio	See Child Care Regs	Same	Same	Same
Building Construction	UBC Requirements	UCM Require	1-Hour F.R.	1-Hour F.R.
Occupant Load Factor	One Person/35 Sq. Ft.	One Person per 35 Sq. Ft. see note #3	One Person per 80 Sq. Ft.	One Person per 80 Sq. Ft.
Area of Refuge	Not Required	Not Required	Required	Required
Number of Exits	One	Two	Two	Two
Travel Distance to Exit (feet)	150 from any point in a room	75 from any point in a room	200 from any point in a room	200 from any point in a room
Exit Discharge	To Outside	One Directly to Outside Note #2	One directly to Outside	One directly to Outside
Illuminated Exit Sign	Not Required	50 or more	50 or more	50 or more
Emergency Lighting	Not Required	Required	Required	Required
Closet Door Latches and Bathroom Door Locks	Child opens from the inside	Child opens from the inside	Child opens from the inside	Child opens from the inside
Verticle Opening Protection Per UCB	Per UBC	Per UBC	Per UBC	Per UBC
Hazard Protection Flammable & Combustible Liquids	1-Hour Occupancy Separation/See Note 3	1-Hour Occupancy Separation/See Note 3	1-Hour Occupancy Separation/See Note 3	1-Hour Occupancy Separation/See Note 3
Class of Interior Finish	Class III	Class I/Vert. Exitway Class II Class II Other Exitway Class III	Class I Vert. Exitway Class II Other Exitway and Rooms	Class I Vert. Exitway Other Exitway

		Rooms		
Class of Interior Floor Finish	Not Required	Class II in Exitways and Corridors	Class I in Exitways and Corridors	Class I in Exitways and Corridors
Alarm System	Not Required	Required-50 or More w/manual pull Stations	Required	Required
Smoke Detectors	Note 3	Note 3	Note 3	Note 3
Sleeping\with 110 Volt Battery Area	Note 3	Note 3	Note 3	Note 3
Extinguishers	One/3000 sq ft	One/3000 sq ft	One/1500 sq ft	One/1500 sq ft
Corridor Protection	Not Required	1-hour required	1-Hour, 10+ Required	1-Hour, 10+ Required
Electric Equipment	NFPA 70	NFPA 70	NFPA 70	NFPA 70
HVAC Controls	Not Required	2000 CFM+ Auto Shutdown	2000 CFM+ Auto Shutdown	2000 CFM+ Auto Shutdown
Fire Sprinklers	Notes 1 & 3	Required, see notes 1 & 3	Required	Required
Commercial Cooking Equipment	H/D & FE System*	H/D & FE System*	H/D & FE System*	H/D & FE System*

Notes: #1 Care for more than 6 children between midnight and 6AM shall be equipped with an automatic sprinkler system.

#2 Second story to have two exits directly to the exterior in sprinklered facility.

#3 More restrictive than or differing from UCB.

\* Hood and Duct and Fire Extinguishing System.

(Added to NAC by St. Fire Marshall, eff. 1-19-84; A 3-9-89)

477.564 Single-family residential occupancy interpreted.

1. For the purposes of this chapter, a child care facility that is being used as a foster home and which provides care for not more than 16 children shall be deemed to be a single-family residential occupancy.

2. As used in this section, "foster home" has the meaning ascribed to it in NRS 424.010.

(Added to NAC by St. Fire Marshal, eff. 2-17-94)

477.566 Devices for detection of products of combustion.

Devices for the detection of the products of combustion, other than heat, shall be installed in every building which is used for the care of children. The devices shall be installed in accordance with section 1210 and Standard 43-6 of the Uniform Building Code.

(Added to NAC by St. Fire Marshal, eff. 1-19-84; A 8-22-86, eff. 9-1-86; 8-24-90)

#### 477.568 Sprinkler system for certain child care facilities

Used after midnight. Child care facilities which are used for child care between the hours of 12:00 p.m. and 6:00 a.m. and care for seven or more children shall have a sprinkler system installed which conforms to Standard 13 of the N.F.P.A. and the requirements of the Uniform Building Code. The sprinkler system shall be tied into the fire alarm system so that activation of any portion of the sprinkler system will activate the alarm system.

(Added to NAC by St. Fire Marshal, eff. 3-9-89)

### FIREWORKS

477.571 Definitions. As used in NAC 477.601 to 477.666, inclusive, unless the context otherwise requires, the words and terms defined in NAC 477.576 to 477.596, inclusive, have the meanings ascribed to them in those sections.

(Added to NAC by St. Fire Marshal, eff. 1-19-84)

477.576 "Commercial display" defined. "Commercial display" of fireworks means an entertainment where the public or a private group is admitted or permitted, to view the display or discharge of dangerous fireworks.

(Added to NAC by St. Fire Marshal, eff. 1-19-84)

477.581 "Dangerous/**Prohibited** fireworks" defined. "Dangerous/**Prohibited** fireworks" means a device which:

1. Contains:

(a) Arsenic sulfide, arsenates or arsenites.

(b) Boron.

(c) Chlorates, except in:

(1) A colored mixture of smoke which includes an equal or greater amount of sodium bicarbonate.

(2) Caps.

(3) A device which contains 4 grams or less of which 15 percent or less of that amount is a chlorate of potassium, sodium or barium.

- (d) Gallates or gallic acid.
- (e) Magnesium, except magnesium-aluminum alloys.
- (f) Mercury salts.
- (g) Phosphorus, except caps containing red phosphorus.
- (h) Picrates or picric acid.
- (i) Thiocyanates.
- (j) Titanium, except in particles which are greater than 100 mesh in size.
- (k) Zirconium.

2. Explodes and contains more than 50 milligrams (0.772 grains) of explosive.

3. Fires in aerial display.

4. Employs a combustible or explosive material and which rises in the air or darts about the ground during discharge.

5. Discharges balls of fire.

6. Explodes through the means of friction.

7. Explodes on impact.

8. Constitutes an assembly of materials or explosive substances designed by the manufacturer to be assembled by the person receiving the material or explosive substances and when assembled comes within the definition of a firework.

9. Is examined by the state fire marshal and determined to possess chemically hazardous properties similar to those prohibited chemicals listed in subsection 1 or to have decomposed or become chemically unstable.

(Added to NAC by St. Fire Marshal, eff. 1-19-84; A 7-16-85, eff. 8-1-85)

477.586 "Firework" defined. "Firework" means a device containing chemical elements or chemical compounds capable of burning independently of the oxygen of the atmosphere and producing audible, visual, mechanical or thermal effects which are useful as pyrotechnic devices or for entertainment.

(Added to NAC by St. Fire Marshal, eff. 1-19-84)



477.591 "Pyrotechnic composition" defined. "Pyrotechnic composition" means a combination of chemical elements or chemical compounds capable of burning independently of the oxygen of the atmosphere.

(Added to NAC by St. Fire Marshal, eff. 1-19-84)

477.596 "Special effect" defined. "Special effect" means a device containing a pyrotechnic composition which is manufactured and assembled, designed or discharged in connection with a television, theatrical or motion picture production which may or may not be presented before a live audience.

(Added to NAC by St. Fire Marshal, eff. 1-19-84)

**477.597 "Show specific" defined. "Show specific" means fixed show at a permanent site or location.**

**477.598 "Magician" defined. "Magician" the certificate will permit the registrant to handle and discharge flash paper, flash cotton, flash string, smoke composition powder/solid. The area made hazardous by these devices shall be in the magician's immediate reach, not to exceed a distance of twelve (12) feet.**

477.601 Exemptions. NAC 477.571 to 477.666, inclusive, do not apply to:

1. Arms and handguns regulated by 18 U.S.C. <sup>oo</sup> 921 et seq.
2. Activities conducted by the Department of Defense or by a contractor of the Department of Defense in connection with the transportation of, or experimentation on, missiles and rockets.
3. Paper caps containing less than 0.25 grain or pyrotechnic composition per unit load.
4. Tracer bullets or charges which are used at a qualified rifle or shotgun range or by military or naval personnel or peace officers.
5. Devices for signals used in connection with the operation of railroads or other forms of transportation.
6. The purchase at retail or use of fireworks which are not dangerous fireworks and which are classified as Class C by 18 U.S.C. <sup>oo</sup> 841 et seq. **consumer fireworks** and Standard 44 A, Fireworks of the National Fire Codes published by the N.F.P.A.
7. The use, after purchase at retail, of fireworks which are designed and intended by the manufacturer for the prevention of damage to crops or the unwanted occupancy of areas by animals or birds through the use of sound or light, or both.

(Added to NAC by St. Fire Marshal, eff. 1-19-84; A 7-16-85, eff. 8-1-85)

477.606 Commercial displays: License required. No person shall engage in the business of producing commercial displays of fireworks without possessing a license issued by the state fire marshal. Conducting commercial displays of fireworks includes the display or discharge of dangerous fireworks at an entertainment before the public or a private group which has been admitted or permitted to view the display.

(Added to NAC by St. Fire Marshal, eff. 1-19-84; A 3-9-89)

477.611 Commercial displays: Application for license. An applicant for a license for producing commercial displays of fireworks shall:

1. Make written application on the forms provided.
2. Indicate on the application which category of license **and class he/she** desires to obtain and pay the appropriate inspection and issuance fee, as follows:

**General Category**

<b>Indoor Stage .....</b>	<b>\$110.00</b>
<b>Outdoor Aerial .....</b>	<b>\$110.00</b>
<b>Special Effects.....</b>	<b>\$110.00</b>
<b>Show specific.....</b>	<b>\$110.00</b>
Limited event license (exempt).....	no fee

**Special classification: Propane, natural gas or solids**

**License Category**

<b>Permanent (pulling permits to install system).....</b>	<b>\$110.00</b>
<b>Temporary (self-contained effects 1-30 days).....</b>	<b>\$110.00</b>
<b>Special effects .....</b>	<b>\$110.00</b>

3. Furnish the division with the required certificate of insurance.

4. Sign the application as follows:

- (a) If the applicant is a sole proprietorship, by the proprietor.
- (b) If the applicant is a partnership, by each partner.
- (c) If the applicant is a corporation, by an officer.

5. Cooperate with the state fire marshal in the investigation of the applicants application.

(Added to NAC by St. Fire Marshal, eff. 1-19-84; A 2-17-94)

477.616 Commercial displays: Categories of licenses; requirements for producing display.

1. Licenses may be issued to **companies successful applicants** in one of the following categories:

(a) A general license permits the licensee to produce commercial displays of fireworks in one of the following categories:

- (1) Indoor stage;
- (2) Outdoor aerial;
- (3) Special effects;
- (4) Show specific;**

at any time and at any location subject to local requirements for a permit. A *general* license is valid until June 30 *next*, following its date of issue.

(b) A limited event license permits a nonprofit organization to produce a specific display of fireworks or series of displays at the time or times and location specified by the license subject to local requirements for a permit. A limited license is valid for the single event or series of events which it specifies.

(c) A nonprofit organization shall obtain a limited event license (exempt) for a Fourth of July event without payment of a fee. The nonprofit organization shall:

- (1) Show evidence of valid insurance which covers the event or series of events;
- (2) Require that all persons who participate in producing the display or series of displays complete the prescribed training program provided by the state fire marshal; and
- (3) Obtain a certificate of registration for the person who will be responsible for the show and the safety of the participants and spectators.

2. A license issued in one of these categories does not permit the licensee to engage in activities permitted by another, more general, category.

3. In producing a commercial display of fireworks a licensee shall:

- (a) Obtain any permit or permits required by local authority; and
- (b) Employ only pyrotechnic operators who are registered with the state fire marshal to conduct the display or discharge of the dangerous fireworks.

(Added to NAC by St. Fire Marshal, eff. 1-19-84; A 2-17-94)

477.621 Commercial displays: Insurance. The applicant shall furnish the state fire marshal with a certificate of insurance from a company authorized to provide such insurance in this state which evidences the following:

1. Minimum coverage for bodily injury arising out of the conduct of commercial displays of fireworks of:

(a) For each person, \$100,000; and

(b) For each occurrence, \$1,000,000.00.

2. Minimum coverage for property damage arising out of the conduct of commercial displays of fireworks of \$1,000,000.

3. *A required deductible payment, if any, of not more than \$25,000.*

3. Fifteen days written notice by the insurer to the state fire marshal of its intention to cancel the policy.

4. Inclusion of any pyrotechnic operator employed by the licensee, either as an employee or as an independent contractor, as an additional named insured.

5. Specific exclusion of the state from any responsibility for the payment of any premium or assessment required by the policy of insurance.

(Added to NAC by St. Fire Marshal, eff. 1-19-84; A 2-17-94)

477.626 Pyrotechnic operator's **and assistants**: Certificate required; exception. No person shall purchase pyrotechnics for the purposes of commercial display or prepare, handle, detonate, display or discharge dangerous fireworks or special effects without having first obtained a valid certificate of registration as a **pyrotechnic operator for indoor stage, outdoor aerial, special effects or show specific**. **Exception: An assistant shall be under the supervision of a certified pyrotechnic operator or pyrotechnic operator for special effects.**

**FLAME EFFECTS BEFORE AN AUDIENCE: Application for Certificate of Registration**  
**Definition: The combustion of flammable solids, liquids, or gases to produce thermal, physical, visual, or audible phenomena for entertainment, exhibition, demonstration, or simulation before a proximate audience including the rehearsal, videotaping, audio taping, or filming of any television, radio, or movie production if such production is before an audience and includes the use of flame effects.**

**FLAME EFFECTS OPERATOR:**

**Definition: The single person with primary responsibility for the controlled use of flame effects. The flame effect operator shall be responsible for storage, setup, maintenance, operations, and tear down of all flame effects materials, devices, equipment and systems and supervision of assistants.**

**FLAME EFFECT ASSISTANT:**

**Definition: A person who works under the supervision of the flame effect operator.**

**FLAME EFFECT OPERATOR/ASSISTANT:**

**Prerequisites for Certificate:**

**An applicante for a Certificate of Registration must:**

- 1. Be a natural person.**
- 2. Must be twenty-one (21) years of age.**
- 3. Make written application on the form provided by the State Fire Marshal.**
- 4. Indicate on the application, which category of Certificate he/she wishes to obtain and pay the appropriate fee.**
- 5. Successfully pass a preliminary written examination by a minimum score of 85% covering basic safety questions from NFPA 160 and the State Fire Marshal regulations.**
- 6. Upon completion of the above requirements, individuals must attend a course pertaining to classification he/she wishes to obtain. (natural gas, propane or solids)**
- 7. Upon the completion of the recognized course, present the Certificate with the prescribed fee of \$55.00 to the State Fire Marshals office for an Assistants Certificate of Registration.**
- 8. Operators Certificate of Registration must present a certificate with a prescribed fee of \$55.00 and will be issued a Certificate of Registration for the classification applied for.**

**RENEWAL OF CERTIFICATE FOR FLAME EFFECT**

- 1. Application and appropriate fee of \$27.50 for Assistant and \$55.00 for Operator.**
- 2. A log indicating a minimum of the required number of events or performances, as listed below, during the previous twelve (12) months:**

<b>Propane</b>	<b>2</b>
<b>Natural Gas</b>	<b>2</b>
<b>Solid</b>	<b>1</b>

**If multiple Certificates are held and sought for renewal, the total number of performances shall be equal to the highest single numbers provided that at least one event or performance from each applicable classification is included.**

(Added to NAC by St. Fire Marshal, eff. 1-19-84; A 7-16-85, eff. 8-1-85; 3-9-89; 2-17-94)

477.631 Pyrotechnic operators: Prerequisites for certificate. An applicant for a certificate of registration as a pyrotechnic operator shall:

- 1. Be a natural person.**
- 2. Make written application on the form provided.**
- 3. Must be twenty-one (21) years of age.**
- 4. Indicate on the application which category of certificate he/she wishes to obtain, pay the appropriate fee for issuance, as follows:**

<i>General certificate, for indoor, outdoor or special effects</i> .....	\$55.00
<b>Flame effect operator</b> .....	<b>\$55.00</b>
<i>Magicians certificate</i> .....	\$27.50
<b>Flame effect assistant</b> .....	<b>\$27.50</b>

**A. Assistant pyrotechnician certificate**

- 1) Pass written test based on NFPA 1126 with an 85%.
- 2) Pay \$50.00 initial fee.
- 3) Allows certificate holder to load, build or pack for shipping any pyro product.
- 4) Take a final examination with passing score of 80%. To advance to full pyrotechnician this test will cover the design, construction, storage and use of dangerous fireworks.

**B. Show specific pyrotechnician certificate**

- 1) Applicant must have met minimum requirements for assistance, and
- 2) Applicant must possess a log of having worked 50 performances of the show, and
- 3) Minimum of 90 days employed with the show, and
- 4) Two letters of endorsement required: one from another certificate holder (full or show specific) for the show and one from the representative of the show's license holder (i.e. hotel, producer)

**C. Full pyrotechnician certificate**

- 1) Applicant must submit a log of having worked fifteen (15) different events during the three (3) year period immediately preceding applying for the certificate, and
- 2) Three letters of endorsement required from other full certificate holders

**D. Magician**

- 1) Pass written test on basic safety questions from NFPA 1126
- 2) Pay \$50.00 initial fee
- 3) Allows certificate holder to handle and discharge flash paper, flash cotton, flash string, smoke composition powder/solid

**All applicants must successfully pass a preliminary written examination by a minimum of 85% covering basic safety questions from NFPA 1126.**

*4. Successfully pass a written examination by a minimum score of 70 percent covering one of the following categories:*

*(a) If the applicant is seeking a general certificate, the examination will cover the design, construction, storage and use of dangerous fireworks, including precautions and procedures for the safety and protection of spectators and questions relating to the state fire marshal regulations.*

(b) If the applicant is seeking a magicians certificate no examination will be required. The certificate will permit the registrant to handle and discharge flash-paper and devices that produce smoke.

5. Provide at least two letters which certify that he has been employed by a pyrotechnic firm for 500 hours or has the work experience of at least 50 pyrotechnic performances. One letter shall be from a pyrotechnic operator licensed by the state fire marshal in the class being sought by the applicant. The second letter shall be from a fire official or a licensed pyrotechnic operator.

(Added to NAC by St. Fire Marshal, eff. 1-19-84; A 8-24-90; 2-17-94)

477.636 Pyrotechnic operators: Categories of certificates; authorized acts; duration of certificates. Certificates of registration for pyrotechnic operators will be issued to *successful* applicants on *one of the two* **one** category(ies):

1. The following certificate permits the registrant to handle, supervise and discharge dangerous fireworks and special effects at events held for entertainment whether or not before a live audience. The certificate will be issued for **outdoor aerial display or for stage use, indoor stage, special effects or show specific**. Any person igniting dangerous fireworks shall be 21 years of age.

2. A certification for special effects or for stage use permits the registrant to handle, supervise and discharge special effects for the purpose of recording the result on film or video tape or for producing a sound effect where no audience is present other than incidental spectators. A registrant in this category may handle, supervise or discharge any class of fireworks if the production of a film or video tape requires their use.

A certificate issued pursuant to this section is valid until June 30 *next*, following its date of issue.

(Added to NAC by St. Fire Marshal, eff. 1-19-84; A 3-9-89)

477.641 Renewal of license or certificate.

1. A licensee or registrant who wishes to renew his license or certificate shall do so between April 1 and June 1, inclusive.

2. *Subsection 1 does not apply to a limited license as described in subsection 1 of NAC 477.616.*

**2. Renewal fees:**

Assistant .....	\$27.50
Indoor Stage .....	\$55.00
Outdoor Aerial .....	\$55.00
Outdoor Aerial .....	\$55.00
Special Effects.....	\$55.00
Show specific.....	\$55.00
Magician.....	\$27.50

(Added to NAC by St. Fire Marshal, eff. 1-19-84)

**3. A minimum required number of logged events or performances, as listed below, during the previous twelve (12) months:**

<b>Outdoor aerial</b>	<b>1 Performances per year required</b>
<b>Indoor stage</b>	<b>5 Performances per year required</b>
<b>Special effects</b>	<b>3 Performances per year required</b>
<b>Show specific</b>	<b>10 Performances per year required</b>

**If multiple certificates are held and sought for renewal, the total number of performances shall be equal to the highest single number, provided that at least one event or performance from each applicable classification is included.**

477.646 Suspension, revocation or refusal to renew license or certificate.

1. The state fire marshal may suspend, revoke or refuse to renew a license for commercial displays of fireworks or a certificate of a pyrotechnic operator if the licensee or registrant has caused **injuries** or permitted a fire hazard at a location at which he:

(a) Stores, handles or prepares fireworks, special effects or pyrotechnic devices; or

(b) Produces or conducts a commercial display of fireworks or special effects.

2. If an incident results from a fire hazard caused or permitted by a licensee or registrant, he shall **immediately** submit to the state fire marshal a report explaining the incident. The failure to make this report *is* grounds for immediate revocation of the license or certificate.

3. A person whose license or certificate has been revoked shall dispose of the fireworks, special effects or pyrotechnic devices in his possession within **30 10** days after receiving written notice to do so by the state fire marshal. In complying with this subsection, the licensee or registrant **shall** transfer the fireworks, special effects or pyrotechnic devices only to a person who is licensed to produce commercial displays of fireworks or who is otherwise permitted to lawfully purchase and possess dangerous fireworks or pyrotechnic devices. **Upon transfer the licensee shall submit a written report to the Fire Marshal including the name, license number, address and phone number of the transferee.**

(Added to NAC by St. Fire Marshal, eff. 1-19-84; A 7-16-85, eff. 8-1-85)

477.651 Records; reports of disappearance; investigation.

1. Each licensee or registrant shall maintain a complete record of the construction, manufacture, import, export, sale or other disposition for all fireworks and pyrotechnic devices which come into his possession. The record shall identify the materials by kind or class of fireworks or pyrotechnic composition.



2. Each licensee or registrant shall report the theft, loss or other disappearance of any fireworks, pyrotechnic devices or other pyrotechnic compositions. The report shall include identification of the quantity, type, kind and class of the missing materials, the location of the loss or disappearance and the circumstances in which the loss or disappearance occurred.

3. The state fire marshal or the fire department **or law enforcement agency** in whose jurisdiction the loss of the fireworks or pyrotechnic devices occurred will investigate the circumstances in which the loss or disappearance occurred and will attempt to recover the missing material.

(Added to NAC by St. Fire Marshal, eff. 1-19-84)

477.656 Storage: Fire hazard prohibited; permits; fees; standards; inspection.

1. No person shall maintain or permit the existence of a fire hazard at any location under his control where fireworks or pyrotechnic compositions are displayed, discharged or stored.

2. A permit issued by the state fire marshal is required for the storage of fireworks classified as Class B, Division 1.3, or Class C, Division 1.4, by 18 U.S.C. <sup>oo</sup> 841 et seq. and N.F.P.A., Standard 1124, except for:

(a) Fireworks classified as *Class C, Division 1.4 consumer fireworks*, which are not dangerous fireworks and which are stored at an outlet for sales at retail approved by the state fire marshal or pursuant to a permit issued by the state fire marshal after an inspection of the site is made;

(b) Fireworks for public display or special effects stored at the site of firing for immediate use; and

(c) Storage of material for special effects which weighs less than 10 pounds.

3. Fees for permits for storage are as follows:

(a) A building for permanent or temporary storage .....**\$220.00**

(b) Type 1 magazine .....**\$220.00**

(c) Type 2, 3 or 4 magazine .....**\$110.00**

4. Fireworks shall be stored in compliance with the requirements of the Uniform Building Code and Standard 1124 of the National Fire Codes of the N.F.P.A. Material for special effects which weighs less than 750 pounds may be stored in a single-story structure which is fully equipped with fire sprinklers and which otherwise conforms to the requirements for a type V, 1-hour rated building as described in the Uniform Building Code. Material for special effects which weighs 750 pounds or more shall be stored in a magazine approved for that purpose.

5. The state fire marshal will, as he determines necessary, inspect each site used for storage of fireworks to determine if the fireworks are stored properly according to their class or type.

(Added to NAC by St. Fire Marshal, eff. 1-19-84; A 7-16-85, eff. 8-1-85; 3-9-89; 2-17-94)

477.661 Prohibited acts. No person shall:

1. Use or discharge:

(a) A special effect or dangerous firework unless he is a pyrotechnic operator certified by the state fire marshal.

(b) A firework of any class or type within 100 feet of stored gasoline or other flammable liquid of Class I of Standard 30 of the N.F.P.A **or combustible material.**

2. Display or discharge a dangerous firework at a commercial display of fireworks in such a manner as to endanger any person.

**3. Discharge fireworks of any class in counties where prohibited. If such a threat exists those fireworks which create an imminent threat of danger to life or property may be seized by the state fire marshal or authority having jurisdiction without notice.**

(Added to NAC by St. Fire Marshal, eff. 1-19-84; A 7-16-85, eff. 8-1-85; 3-9-89; 2-17-94; 8-23-94)

477.666 Seizure; disposal or return; impoundment.

1. Fireworks stored in violation of NAC 477.601 to 477.666, inclusive, which have become chemically unstable or which are in the possession of a person who is not a licensee or registrant or whose license or certificate has been suspended are hereby declared to be fire hazards and shall be seized and disposed of by the state fire marshal or a local authority. This seizure shall take place only after reasonable advance written notice is given to the holder of the permit who stores the fireworks unless there exists an imminent threat of danger to life or property. If such a threat exists those fireworks which create an imminent threat of danger to life or property may be seized **by the state fire marshal or authority having jurisdiction without notice.**

2. The officer seizing the fireworks shall promptly report to the state fire marshal concerning:

(a) The quantity and type of the fireworks seized;

(b) The location where the seizure occurred; and

(c) The circumstances prompting the seizure.

**(d) Condition of containers and fireworks.**

**(e) Fireworks found to be unstable or incompatible shall be destroyed.**

3. The state fire marshal or local authority shall take and retain possession of the seized fireworks during any judicial or administrative proceedings involving the fireworks and shall, upon conclusion of the proceedings, destroy them or return them to the person from whom they were seized as directed in such proceedings.

4. Any person whose fireworks are adjudged in any judicial or administrative proceeding to be hazardous shall be charged with the expenses incurred in the seizure, transportation, storage and disposal of those fireworks. This charge constitutes a debt and is collectible by any agency of the state or any of its political subdivisions incurring any such expense in the same manner as if it is an obligation under an express or implied contract.

5. Fireworks transported in violation of any applicable federal or state law or regulation shall be seized and impounded. The explosive load of any impounded firework shall not be separated unless necessary to remove unstable or incompatible materials. **Unstable or incompatible materials shall be destroyed.**

(Added to NAC by St. Fire Marshal, eff. 1-19-84; A 7-16-85, eff. 8-1-85; 3-9-89)

#### CONTAINERS FOR FLAMMABLE OR COMBUSTIBLE LIQUIDS

477.680 Approval of nonmetallic containers by state fire marshal.

No person shall sell or offer for sale any plastic or other nonmetallic portable container for use in storage or transportation of Class I or Class II flammable or combustible liquids unless the container has been approved by the state fire marshal.

(Added to NAC by St. Fire Marshal, eff. 1-19-84)

477.685 Containers to be tested and listed.

Before being offered for sale in this state, each type of container shall be tested and listed by a nationally recognized testing laboratory as meeting the standard for plastic containers of petroleum ANSI/ASTM D 3435-78. A copy of the listing card shall be filed with the state fire marshal.

(Added to NAC by St. Fire Marshal, eff. 1-19-84)

477.690 Examples of containers; required labels.

Manufacturers shall furnish the state fire marshal with at least one example of each model and size container for which his approval is sought. Each container shall bear the label of the testing laboratory, the model number, the capacity, the safety instructions relevant to type of liquid for which the container is to be used, the name of liquid for which the container is to be used and the name of the manufacturer.

(Added to NAC by St. Fire Marshal, eff. 1-19-84)

477.695 Color and lettering.

Gasoline containers shall be solid red in color and bear the word "gasoline." Kerosene containers shall be solid blue or solid white in color and bear the word "kerosene." Lettering on both containers shall be 1-inch high and of a contrasting color in bold-faced type.

(Added to NAC by St. Fire Marshal, eff. 1-19-84)

477.700 Spouts; vents; closures.

Containers shall be provided with an integral pouring spout, or designed to accept a pouring spout supplied with the container. Containers shall be equipped with a vent which activates upon the building up of excessive pressure within the container. All openings in the container shall be equipped with threaded closures containing gaskets resistant to deterioration by petroleum products.

(Added to NAC by St. Fire Marshal, eff. 1-19-84)

## USE OF EXPLOSIVES IN BLASTING

477.710 Certificate of registration required; qualifications of applicant; exemptions; renewal of certificate.

1. Except as provided in subsection 3, no person shall use explosives in blasting operations for commercial construction unless he has a certificate of registration for blasting issued by the state fire marshal or is under the direct supervision of a person holding such a certificate. An applicant for a certificate of registration for blasting shall:

- (a) Be at least 21 years of age;
- (b) Be in adequate physical and mental condition to perform blasting operations;
- (c) Be able to understand and give oral orders in English;
- (d) Not be addicted to alcohol, controlled substances or dangerous drugs;
- (e) Not have been convicted of a violation of chapter 453, 454, 585 or 639 of NRS, relating to the possession or sale of narcotics or controlled substances, or certified for treatment of abuse of alcohol or drugs as provided in NRS 458.290 to 458.350, inclusive;
- (f) Be qualified by training, knowledge and experience in transporting, storing, handling and using explosives;
- (g) Have a knowledge of federal, state and local laws and regulations pertaining to the handling of explosive materials;
- (h) Pass a written, oral or other type of examination, as determined by the state fire marshal; and

(i) Pay a fee of **\$55.00** at the time he submits his application.

2. The certificate of registration for blasting shall be in the possession of the registrant while he is performing blasting operations. A registrant shall pay a fee of **\$11** for a duplicate of a certificate that has been lost or destroyed.

3. This section shall apply to the use of pyrotechnics governed by other provisions of this chapter or the use of explosives:

(a) By a person engaged in agriculture or ranching for occasional use on his property;

(b) By an employee of the state, a local government or the Federal Government who uses explosives for construction in the proper performance of his duties; or

(c) In gasoline, in fertilizer and in tools or other devices which are actuated by a propellant.

4. A certificate of registration for blasting shall be renewed every 5 years. An applicant for renewal shall pass a test prescribed by the state fire marshal and pay a fee of **\$55** before his certificate of registration for blasting may be renewed.

(Added to NAC by St. Fire Marshal, 7-16-85, eff. 8-1-85; A 2-17-94)

477.720 Revocation or suspension of certificate.

1. The state fire marshal may revoke a certificate of registration for blasting if the registrant:

(a) Knowingly fails or refuses to comply with an applicable order of the state fire marshal;

(b) Is convicted of a felony;

(c) Becomes a fugitive from justice;

(d) Violates any standard of safety in the use of explosives;

(e) Suffers any physical or mental infirmity which interferes with his ability to handle explosive materials safely;

(f) Willfully misrepresents a material fact in order to obtain the certificate;

(g) Causes or permits a fire hazard to exist where explosives are stored or handled; or

(h) Fails to make a report as required in subsection 3 of NAC 477.730.

2. A certificate of registration for blasting may be suspended during an investigation of any complaint alleging a ground for revocation.

3. The failure of a registrant to make a report pursuant to paragraph (h) of subsection 1 is grounds for immediate revocation of his certificate.

(Added to NAC by St. Fire Marshal, 7-16-85, eff. 8-1-85)

477.730 Duties of holder of certificate. A holder of a certificate of registration for blasting shall:

1. Immediately notify the state fire marshal upon learning of an indictment charging the registrant with a felony;
2. Report the loss or theft of any explosive material to the local law enforcement agency; and
3. After an incident involving explosives which created a hazard for any person or property, immediately submit a report to the state fire marshal explaining the incident.

(Added to NAC by St. Fire Marshal, 7-16-85, eff. 8-1-85)

#### REVIEW OF PLANS

477.740 Plans subject to review; approval; required detail.

#### **Plan review deficiencies and plan of correction must be responded to within 14 days.**

1. The state fire marshal division shall review any plans concerning the construction, the site and any system for protection from fire to determine if there is compliance with the provisions of this chapter and any adopted relating to safety from fire and the protection of life of any:

(a) Building owned or leased by the state;

(b) Facility for public education;

(c) Health and care facility or child care facility licensed by the state; and

(d) Building, project for construction or system for protection from fire, involving public occupancy, excluding single-family detached dwellings, in any county whose population is less than **50,000** or for which a request for review is received from the owner or the authority having jurisdiction.

2. All projects requiring review shall receive approval from the state fire marshal before they may be used or occupied. Under certain circumstances, the state fire marshal may allow temporary use or occupancy if, in his determination, the safety of persons or property is not jeopardized. Approval or permission of the state fire marshal for occupancy may be suspended or revoked by him if his approval was granted in error or because incorrect information was supplied, or if he determines that the project is in violation of any code adopted under this chapter, this regulation or other law.

3. The plans and specifications of the project shall be drawn to scale upon substantial paper or cloth and shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and to show in detail that it conforms to this chapter and the codes adopted under this chapter. Plans shall be drawn, signed and stamped by those persons who are authorized by specific statute and the state contractors board to draw plans and specifications. A list of those persons described in this subsection may be obtained from the state fire marshal.

4. A plan which provides for fire stopping shall provide details on the technical specifications for the materials used and the testing and listing for those materials.

5. A response to plans review deficiencies shall be submitted to the state fire marshals office within 14 working days of the date of receipt.

(Added to NAC by St. Fire Marshal, 7-16-85, eff. 8-1-85; A 2-17-94)

477.750 Fees; review of plans by local government.

1. Any plans and specifications submitted to the state fire marshal for review shall be accompanied by the appropriate fee based upon the proposed cost of construction or if a bid is accepted, the actual bid, according to the following:

Valuation	Fee	Valuation	Fee
\$1,001	\$4,000.00	\$51,001	\$52,000
\$4,001	\$5,000	\$52,001	\$53,000
\$5,001	\$6,000	\$53,001	\$54,000
\$6,001	\$7,000	\$54,001	\$55,000
\$7,001	\$8,000	\$55,001	\$56,000
\$8,001	\$9,000	\$56,001	\$57,000
\$9,001	\$10,000	\$57,001	\$58,000
\$10,001	\$11,000	\$58,001	\$59,000
\$11,001	\$12,000	\$59,001	\$60,000
\$12,001	\$13,000	\$60,001	\$61,000
\$13,001	\$14,000	\$61,001	\$62,000
\$14,001	\$15,000	\$62,001	\$63,000
\$15,001	\$16,000	\$63,001	\$64,000
\$16,001	\$17,000	\$64,001	\$65,000
\$17,001	\$18,000	\$65,001	\$66,000
\$18,001	\$19,000	\$66,001	\$67,000
\$19,001	\$20,000	\$67,001	\$68,000
\$20,001	\$21,000	\$68,001	\$69,000
\$21,001	\$22,000	\$69,001	\$70,000
\$22,001	\$23,000	\$70,001	\$71,000
\$23,001	\$24,000	\$71,001	\$72,000
\$24,001	\$25,000	\$72,001	\$73,000
\$25,001	\$26,000	\$73,001	\$74,000

\$26,001	\$27,000	<b>\$229.57</b>	\$74,001	\$75,000	<b>\$436.59</b>
\$27,001	\$28,000	<b>\$234.52</b>	\$75,001	\$76,000	<b>\$440.11</b>
\$28,001	\$29,000	<b>\$239.58</b>	\$76,001	\$77,000	<b>\$443.63</b>
\$29,001	\$30,000	<b>\$243.98</b>	\$77,001	\$78,000	<b>\$447.15</b>
\$30,001	\$31,000	<b>\$249.70</b>	\$78,001	\$79,000	<b>\$450.56</b>
\$31,001	\$32,000	<b>\$254.65</b>	\$79,001	\$80,000	<b>\$457.60</b>
\$32,001	\$33,000	<b>\$259.71</b>	\$80,001	\$81,000	<b>\$461.12</b>
\$33,001	\$34,000	<b>\$264.77</b>	\$81,001	\$82,000	<b>\$466.84</b>
\$34,001	\$35,000	<b>\$269.83</b>	\$82,001	\$83,000	<b>\$468.16</b>
\$35,001	\$36,000	<b>\$274.78</b>	\$83,001	\$84,000	<b>\$471.68</b>
\$36,001	\$37,000	<b>\$279.84</b>	\$84,001	\$85,000	<b>\$475.20</b>
\$37,001	\$38,000	<b>\$284.90</b>	\$85,001	\$86,000	<b>\$478.72</b>
\$38,001	\$39,000	<b>\$289.96</b>	\$86,001	\$87,000	<b>\$482.24</b>
\$39,001	\$40,000	<b>\$294.91</b>	\$87,001	\$88,000	<b>\$485.76</b>
\$40,001	\$41,000	<b>\$299.97</b>	\$88,001	\$89,000	<b>\$489.28</b>
\$41,001	\$42,000	<b>\$305.03</b>	\$89,001	\$90,000	<b>\$492.80</b>
\$42,001	\$43,000	<b>\$310.09</b>	\$90,001	\$91,000	<b>\$496.21</b>
\$43,001	\$44,000	<b>\$315.04</b>	\$91,001	\$92,000	<b>\$499.73</b>
\$44,001	\$45,000	<b>\$320.10</b>	\$92,001	\$93,000	<b>\$503.25</b>
\$45,001	\$46,000	<b>\$325.16</b>	\$93,001	\$94,000	<b>\$506.77</b>
\$46,001	\$47,000	<b>\$330.22</b>	\$94,001	\$95,000	<b>\$510.29</b>
\$47,001	\$48,000	<b>\$335.17</b>	\$95,001	\$96,000	<b>\$513.81</b>
\$48,001	\$49,000	<b>\$340.23</b>	\$96,001	\$97,000	<b>\$517.33</b>
\$49,001	\$50,000	<b>\$345.29</b>	\$97,001	\$98,000	<b>\$520.85</b>
\$50,001	\$51,000	<b>\$348.81</b>	\$98,001	\$99,000	<b>\$524.37</b>
			\$99,001	\$100,000	<b>\$527.89</b>

2. If the proposed cost or bid is more than \$100,000 but less than \$500,000, the fee is **\$531.41** for the first \$100,000 plus **\$2.69** for each additional \$1,000 or fraction thereof of the proposed cost or bid.
3. If the proposed cost or bid is \$500,000 or more but less than \$1,000,000, the fee is **\$1609.41** for the first \$500,000 plus **\$2.37** for each additional \$1,000 or fraction thereof of the proposed cost or bid.
4. If the proposed cost or bid is \$1,000,000 or more, the fee is **\$2780.91** for the first \$1,000,000 plus **\$1.65** for each additional \$1,000 or fraction thereof of the proposed cost or bid.

**(a) Section 107.5.1 shall be changed to read as follows: whenever any work for which a plan review is required, by the Nevada Administrative Code NAC 477, has been commenced without first obtaining said plan review, a special investigation shall be made before the work may continue.**



**(b) Section 107.5.2, shall be changed to read as follows: an investigation fee, in addition to the plan review fee, shall be collected whether or not a plan review is then or subsequently completed. The investigation fee shall be equal to the amount of the plan review fee required by Nevada Administrative Code NAC 477.750. The payment of such investigation fee shall not exempt any person or business from compliance with all other provisions of this code nor from any penalty prescribed by law.**

5. If a conference is required for any given project, a fee will be charged at the rate of **\$55** per hour or any fraction thereof, for each person from the state fire marshals office required to attend the conference.

6. If an agreement is reached by a local government and the state fire marshal whereby the process for review of the plans is delegated to the local authority, the local authority may use the schedule of fees set forth in this section or a schedule of fees which has been approved by the local authority.

7. If a review of plans by a local government waives or grants a variance of a minimum standard established by the state fire marshal or otherwise requires review by the state fire marshal, the local government shall require the plans to be submitted to the state fire marshal for review. The state fire marshal shall charge the person on whose behalf the plans are submitted a fee of **\$55** per hour for each person who participates in the review. The state fire marshal will notify the local government of his approval or disapproval of the plans upon completion of his review.

(Added to NAC by St. Fire Marshal, 7-16-85, eff. 8-1-85; A 3-9-89; 5-18-94)

#### **477.755 Regulations for the administration of the Nevada Fire Incident Reporting System (NFIRS)**

**(1) The following establish a Uniform Fire Incident Reporting System in the office of the state fire marshal pursuant to NRS 477.030.2.**

**(2) All Fire Jurisdictions in the State of Nevada shall report to the State Fire Marshal such statistics and data as required to publish a summary of fire incident information compatible with the National Fire Incident Reporting System.**

**(3) The State Fire Marshal will report to the National Fire Information Council semi-annually. Local Fire Jurisdictions are required to report within the time frame prescribed by the State Fire Marshal. Nevada has been designated as an all-incident reporting State.**

**(4) Jurisdictions facing technical difficulties will receive assistance from the State NFIRS Program Manager.**

**(5) All computer aided programs shall utilize software certified by the National Fire Information Council. Fee schedule NAC 477.325.**

## TYPE 1 EXHAUST SYSTEMS

477.760 Standards of construction. Type 1 exhaust systems shall be constructed to meet the following requirements:

1. Access doors to the duct shall be located:

(a) To allow service personnel unrestricted entrance to the access door and duct. The access doors shall not be obstructed by electrical components, mechanical systems or other impediments to access.

(b) On the sides of horizontal ducts, if possible, or on the top when not possible because of obstructions. Access doors shall not be located on the bottom of horizontal ducts.

(c) At every change in direction of the duct.

2. For ducts less than 24 x 24 inches in size, access openings shall be located at intervals not to exceed 12 feet as measured from the center of one opening to the center of the next opening.

3. For ducts 24 x 24 inches in size or larger, access openings shall be located at intervals not to exceed 16 feet as measured from the center of one opening to the center of the next opening.

4. Openings for the access door shall be as large as the duct allows but are not required to be larger than 24 x 24 inches. The access openings shall leave a 1 1/2-inch bottom lip and a 1-inch top and side lip.

5. Access doors shall be equipped with:

(a) Tight-fitting doors constructed of steel.

(b) A method of latching sufficient to hold the door tightly closed.

6. Access doors shall be designed so that they can be opened without the use of a tool.

7. Access doors shall be constructed so that there are no sharp edges which could cause cuts to service personnel.

8. In buildings consisting of Type I and II-FR construction, the duct and access doors shall be enclosed by 2-hour fire rated construction.

9. In buildings consisting of Type II-N, II-1-hour, III, IV, and V construction, the duct and access doors shall be enclosed by 1-hour fire rated construction. Access doors in the fire rated enclosure shall be at least as large as the size of the duct it serves.

(Added to NAC by St. Fire Marshal, eff. 3-9-89)

477.770 Licensing requirements for servicing and cleaning.

1. A license shall be obtained from the state fire marshal to service and clean type 1 exhaust system grease ducts. A type 1 exhaust system grease duct has the meaning ascribed to it in the National Fire Code.
2. To obtain a license to service and clean a type 1 exhaust system grease duct an applicant shall:
  - (a) Pass an examination administered by the state fire marshal; and
  - (b) Establish that he has read and understands National Fire Code sections 96-3-1 to 96-9-2, inclusive, and is properly equipped to service and clean type 1 exhaust system grease ducts.
3. A licensee who has obtained a license from the state fire marshal to service and clean type 1 exhaust system grease ducts shall also be licensed to do business in the city or county in which they are providing this service.

477.780 Submission of cleaning contract and servicing report to proper authority; cleaning requirements.

1. A copy of the cleaning contract for a type 1 exhaust system shall be submitted to the authority having jurisdiction.
2. Within 30 days of inspecting or cleaning a type 1 exhaust system a copy of the report on the servicing of the system or a notice that service was refused or extended beyond the limitations of the contract shall be sent to the authority having jurisdiction. The report shall list all problems noted during the servicing of the system including, but not limited to:
  - (a) Excessive grease;
  - (b) Inaccessible areas;
  - (c) Access panels which do not comply to code specifications;
  - (d) Fans that are not commercial or cleanable; and
  - (e) Missing filters.

The report shall be signed by a person representing the owner of the system.

3. When grease or other residues are present within the hood, ducts or devices for the removal of grease, the system shall be cleaned in accordance with N.F.P.A. section 96-8-3.

(Added to NAC by St. Fire Marshal, eff. 3-9-89)

477.790 Attachment and contents of tag regarding servicing. A tag or stick-on label approved by the authority having jurisdiction shall be attached to the hood of a type 1 exhaust system. The tag shall include: 1. A schedule of required service for the system;

2. The date when the system was last serviced;

3. The date when the next service is scheduled; and

4. The name and certificate number of the person who last serviced the system.

(Added to NAC by St. Fire Marshal, eff. 3-9-89)

### FIRE STANDPIPE SYSTEMS

477.800 Approval of equipment; compliance with codes and regulations.

1. No fire standpipe system or component of such a system shall be sold, leased or installed unless it has been approved, labeled or listed by a testing laboratory approved by the state fire marshal.

2. Fire standpipe systems shall comply with the Uniform Fire Code and the National Fire Codes. Any portion of a fire standpipe system which is underground shall meet the requirements of subsection 5 of NAC 477.465.

(Added to NAC by St. Fire Marshal, eff. 3-9-89; A 2-17-94)

477.810 Inspections and reports; hydrostatic tests; required tags; certificate of registration for work.

1. Fire standpipe systems shall be inspected annually by a person certified by the state fire marshal for fire standpipe systems who works for a firm licensed by the state fire marshal to service fire standpipe systems. The annual inspection shall conform to the requirements of "Fire Protection Systems Inspection, Test and Maintenance Manual" as published by the National Fire Protection Association and the standards of the Uniform Fire Code.

2. A copy of the annual inspection report shall be sent to the owner and the authority having jurisdiction within 30 days after the inspection.

3. The authority having jurisdiction shall be notified 2 days before hydrostatic tests are conducted on fire standpipe systems. Tests shall be certified by the licensee as meeting code requirements and a copy of that certification shall be sent to the authority.

4. The installer of a fire standpipe system shall place a metal tag on the control valve for the system which states the name of the installing company and the date of the installation.

5. Any work done on the system shall be done under the supervision of a person who has a certificate of registration for that work. At the conclusion of the service, test, inspection or installation, the person holding a certificate of registration shall sign and place an approved tag

on the system control riser. The tag shall be punched in an approved manner to indicate the type of service performed on the system and the date it was performed.

(Added to NAC by St. Fire Marshal, eff. 3-9-89)

477.820 Agreement for maintenance and inspection; duties upon notification of fault in or use of system.

1. Upon installing a fire standpipe system, the owner of the system shall obtain a satisfactory written agreement for the maintenance and inspection of the system. The agreement shall require that proper tests and inspections be performed by persons holding proper certificates of registration at the prescribed intervals. A copy of the agreement, along with proof that the firm which is to conduct the inspections is adequately covered by liability insurance, shall be submitted to the authority having jurisdiction.

2. Within **2 24 hours** *days* after being notified by the owner that a standpipe has been used or that a fault in a fire standpipe system has occurred a licensee, installer or service agency that has a service contract with the owner shall:

- (a) Respond to repair or restore the system;
- (b) Notify the authority having jurisdiction of the use of or fault in the standpipe system; and
- (c) Submit to the state fire marshal evidence that the licensee, installer or service agency has:
  - (1) The necessary equipment and approved personnel;
  - (2) The necessary stock of parts and devices;
  - (3) A valid license issued by the state contractors board; and
  - (4) A certification and approval by the manufacturer from whom the equipment is purchased.

(Added to NAC by St. Fire Marshal, eff. 3-9-89)

477.830 Submission of plans and specifications; certification of results of hydrostatic tests.

1. Before installing or remodeling a fire standpipe system, the owner of the system shall submit to the authority having jurisdiction:

- (a) Design specifications for the system;
- (b) A list of materials to be used in the system;
- (c) Scale drawings of the remodeling or installation which:

- (1) Can be easily reproduced; and
  - (2) Are of sufficient detail to enable the authority to evaluate the effectiveness of the system;
  - (d) A schedule of tests required by the appropriate code; and
  - (e) Calculations for the flow of water for the proposed system.
2. When substantial change has been made in the plans approved by the authority having jurisdiction for the construction or remodeling of the system, a corrected plan depicting the system as it was built shall be submitted to the authority for approval within 10 days after the completion of the system **with appropriate fees.**
  3. The results of hydrostatic tests of the system shall be certified to the authority and the owner in writing.

(Added to NAC by St. Fire Marshal, eff. 3-9-89)

477.840 Certification of proper installation; metal placard required.

1. Following the installation of a fire standpipe system, the licensee shall submit a letter to the authority having jurisdiction certifying that the system has been installed in accordance with the plans approved by the authority and all applicable state and local codes.
2. Within 30 days after completing the installation or remodeling of a fire standpipe system, the licensee shall attach a metal placard which shall:
  - (a) Identify all requirements for the hydraulic design.
  - (b) The number, size and location of system outlets and the calculated discharge of the highest outlet.

(Added to NAC by St. Fire Marshal, eff. 3-9-89)

477.850 Tag for recording installation, maintenance and inspection.

1. A tag for recording the installation, maintenance and inspection of fire standpipe systems shall be at least 4 inches long, 2 inches wide and conform to the requirements of NAC 477.470.
2. The tag shall serve as a seal for the riser control valve and shall be attached in such a manner that the valve cannot be closed without removing the tag.
3. The **Certificate of Registration holder** supervising the work on a system shall be present at all times that work is being done on the system and shall sign, date and punch the tag and attach it to the system immediately at the conclusion of testing or completion of the installation. If the system remains deficient and the licensee does not have the authority to correct the deficiency, the word

"deficient" shall be written across the bottom of the tag. The licensee shall notify the owner and the authority of the deficiency in writing within 5 days after completing the work.

(Added to NAC by St. Fire Marshal, eff. 3-9-89)

#### MISCELLANEOUS REQUIREMENTS

477.910 New buildings: Constructed by or for state; owned or occupied by state.

1. Every new building constructed by or for the State of Nevada shall meet or exceed the minimum requirements of this chapter and the codes adopted by the state fire marshal.

2. Every new building owned or occupied by the state that is intended for:

(a) Occupancy which does not meet the requirements of paragraph (a), (b) or (c) of subsection 1 of NAC 477.915 shall be equipped with an automatic fire suppression system.

(b) **Rooms used for** sleeping purposes shall be equipped with smoke detectors. The smoke detectors shall receive their primary power from the buildings wiring, with provision made for the detection of smoke during a power failure.

(c) **Removal of a required smoke detector is a misdemeanor as stated in NRS 477.250.**

(Added to NAC by St. Fire Marshal, eff. 8-24-90; A 2-17-94)

477.915 Existing buildings owned or occupied by state; reporting of fires in state buildings; smoke detectors.

1. Every existing building owned or occupied by the State of Nevada shall:

(a) Comply with the provisions of NRS 477.100 to 477.170, inclusive;

(b) [*To the extent possible*], Meet the requirements of the building code in effect when the building was constructed;

(c) If the building:

(1) Is designated as a B-2 occupancy;

(2) Has a floor area which exceeds 12,000 square feet on any floor or 24,000 square feet on all floors including any mezzanines; or

(3) Is an R-1 occupancy,

It shall be scheduled for installation of an automatic fire suppression system during the next remodeling of or addition to the building after July 1, 1995;

(d) Meet the requirements for fire flows contained in this chapter and the Uniform Fire Code, 1991 edition; and

(e) Be equipped with noncombustible containers for the disposal of smoking materials in designated smoking areas.

2. Every fire in a building or area of a building owned or occupied by the state shall be reported to the local fire department immediately and to the state fire marshal within 24 hours. The report shall be filed by the state agency affected and made on a form provided by the state fire marshal. A copy of the form is available at no charge from the Nevada State Fire Marshal, Carson City, Nevada 89710.

3. Upon the failure of a smoke detector which is powered by a battery and installed in a building owned or occupied by the state before February 17, 1994, the smoke detector shall be replaced by a smoke detector which is connected to the wiring of the building and has a battery as a backup source of power.

#### **4. Violation of chapter 477:**

**1. Any person who knowingly violates the provisions of Chapter 477 or any of the regulations adopted by the state fire marshal is guilty of a misdemeanor.**

**2. Each day on which a violation occurs is a separate offense.**

**(Added to NRS by 1967, 153; a 1979, 127) - (Substituted in revision for NRS 477.060)**

(Added to NAC by St. Fire Marshal, eff. 8-24-90; A 2-17-94)

477.920 Commercial buildings in rural regions.

1. Unless otherwise required by state code, local code or ordinance, a new commercial building that has more than 5,000 square feet of floor space shall be equipped with an automatic fire suppression system if:

(a) The community or area where the building is located is not served by a water system or utility and cannot produce the required fire flow;

(b) The community or area is not served by an organized fire department that is capable of responding to the report of an alarm at the building within 10 minutes; or

(c) The building is not served by an all-weather access road.

2. An increase in floor space area that is allowed by chapter 5 of the Uniform Building Code shall be approved by the authority having jurisdiction when a system is installed in compliance with this section.



3. As used in this section:

(a) "Organized fire department" means a fire department that is capable of producing a fire flow of not less than 500 gallons per minute for 30 minutes using pumper tanker operations.

(b) "All-weather access road" has the meaning ascribed to it in section 10.207 of the Uniform Fire Code.

(Added to NAC by St. Fire Marshal, eff. 8-24-90)