DEPARTMENT OF CONSUMER AND INDUSTRY SERVICES

DIRECTOR'S OFFICE

CERTIFICATION OF FIRMS FOR FIRE ALARM SYSTEMS AND FIRE SUPPRESSION SYSTEMS IN STATE-REGULATED FACILITIES

(By authority conferred on the state fire safety board by sections 3c, 26, 27, 28, 29, 30, 32, and 33 of 1941 PA 207, and Executive Reorganization Order No. 1997-2, MCL 29.3c, 29.26, 29.27, 29.28, 29.29, 29.30, 29.32, 29.33, and 29.451)

R 29.2801 Definitions.

Rule 1. As used in these rules:

(a) "Act" means 1941 PA 207, MCL 29.1 et seq.

(b) "Approved" means acceptable to the department of consumer and industry services, office of fire safety.

(c) "As-built drawings" means drawings portraying the actual construction or installation of a system within a building or portion thereof, depicting any and all changes from the original design of the system. "As-built drawings" may also be referenced as "record drawings."

(d) "Custom designed fire alarm system or fire suppression system" means a system that is comprised of standard components which are individually listed by an approved laboratory and which are selected and installed in accordance with the listing.

(e) "Design location" means the place where system layout and application engineering is performed for a required system.

(f) "Documentation" means a written instrument signed by a qualifying person of a certified firm which does all of the following:

(i) Identifies a specific installation or a specific modification of a required fire alarm system or a required fire suppression system.

(ii) Contains statements to the effect that the required fire alarm system or required fire suppression system has been installed or modified pursuant to the instructions and specifications of the manufacturer.

(iii) Identifies applicable state laws and contains a statement that the required fire alarm system or required fire suppression system has been installed or modified in compliance with those laws.

(iv) Contains a statement that the required fire alarm system or required fire suppression system has been tested and placed in proper operating condition under the supervision of a qualifying person employed by the certified firm.

(g) "Plans and specifications" means the detailed installation drawings, calculations, and manufacturer submittals of equipment for a fire alarm system or fire suppression system being installed in a regulated facility by a certified firm. The installation drawings, calculations, and manufacturer submittals of equipment are also known as shop drawings or shop sheets.

(h) "Pre-engineered or packaged system" means a system consisting of components designed to be installed according to pretested limitations as listed by an approved laboratory.

(i) "Qualifying person" means a person who possesses technical qualifications and agrees to provide services to a firm for the purpose of qualifying the firm for certification under these rules.

(j) "Responsible person" means a person who possesses certain technical qualifications and is employed by the certified firm to perform on-site work on the system being documented. A qualifying person may also serve as the responsible person.

(k) "Supervision" means the act of oversight and monitoring of the work done by a certified firm for a fire alarm system or a fire suppression system.

(l) "Systems modification" means any changes to a required fire alarm system or required fire suppression system involving more than the direct replacement of the existing components with components approved for the use and coverage.

(m) "Technical qualification" means the knowledge of applicable codes, standards, and laws and the practical knowledge of equipment, material, methods, and theory of operation as they relate to fire alarm systems or fire suppression systems, the combination of which, when applied to a facility under the jurisdiction of the department of consumer and industry services, office of fire safety shall result in a properly operating required fire alarm system or required fire suppression system which is acceptable to the department of consumer and industry services, office of fire safety.

History: 1983 AACS; 2003 AACS.

R 29.2802 System testing, servicing, inspection, or maintenance by certified firm required.

Rule 2. (1) Testing, servicing, inspection, or maintenance functions which are intended to be performed by persons who have special training, knowledge, and equipment and which is so indicated in the manufacturer's instructions or in a nationally recognized code are required to be performed by a certified firm. At a minimum of once a year, system tests of required fire alarm systems and fire suppression systems shall be conducted in compliance with the standards adopted by reference in R 29.2809 by a certified firm.

(2) Subject to approval by the department of consumer and industry services, office of fire safety, limited testing, inspection, and adjustments to a required fire alarm or fire suppression system shall be permitted to be performed by a trained staff member who is employed by the regulated facility, and who has adequate knowledge of the installation, construction, and operation of the apparatus, and the hazards involved.

History: 1983 AACS; 2003 AACS.

R 29.2802a Out of service notification.

Rule 2a. A certified firm shall provide notification and recommendation as soon as practical to the owner or operator of a required fire alarm or fire suppression system if the required system is not completely operational or if the required system will be out of service. Notification shall include the expected duration of the out of service condition.

History: 2003 AACS.

R 29.2803 Firm certification.

Rule 3. A firm shall not be certified under these rules unless the firm employs a qualifying person to actively supervise the technical aspects of the installation, modification, testing, servicing, inspection, maintenance, and documentation of required fire alarm systems and required fire suppression systems performed by the firm. Each design location of a firm performing the operations specified in this rule shall be certified and shall be considered a separate certified firm for the purpose of these rules.

History: 1983 AACS; 2003 AACS.

R 29.2804 Qualifying person; qualifications generally.

Rule 4. The qualifying person specified in R 29.2803 shall possess technical qualifications in each category for which the firm is to be certified. A qualifying person may only perform the duties of a qualifying person for 1 certified firm. A qualifying person may work in more than 1 design location provided that he or she is not the sole qualifying person for that discipline at the other design location.

History: 1983 AACS; 2003 AACS.

R 29.2805 Qualifying person; education and experience requirements.

Rule 5. (1) A person who meets 1 or more of the following combinations of education and experience may be considered to meet the requirements of R 29.2804:

(a) Is an architect or engineer licensed under 1980 PA 299, MCL 339.101 et seq. and has 12 months of approved experience in the category for which certification is requested.

(b) Has a baccalaureate degree in an approved field of engineering, with 12 months of approved experience in the category for which certification is requested.

(c) Is a graduate of an approved 4-year apprentice training program, with 12 months of approved experience in the category for which certification is requested.

(d) Is a graduate of an approved training course provided by an equipment manufacturer, with 12 months of approved experience in the category for which certification is requested.

(e) Is the holder of a class I or class II electrician's license, with 12 months of approved experience installing or servicing firm alarm systems in the category for which certification is requested.

(f) Has 60 months of approved experience, 75% of which was accrued in the 5-year period before certification is requested.

(g) Is certified and maintains certification at level 3 or above by the National Institute of Certification in Engineering Technologies (NICET), in the category for which certification is requested.

(2) Other combinations of education and experience will be evaluated on an individual basis.

(3) All experience qualifications shall have been accumulated within the 5-year period before certification is requested.

(4) If a person is denied acceptance as a qualified person, an appeal may be submitted to the state fire safety board within 60 days of the issuance of the denial.

History: 1983 AACS; 2003 AACS.

R 29.2806 Notarized affidavit required; content.

Rule 6. A notarized affidavit signed by a qualifying person for the firm and the chief operating officer of the firm or a designated representative of the chief operating officer of the firm shall be submitted to the department of consumer and industry services, office of fire safety, on a form provided by the department of consumer and industry services, office of fire safety. The affidavit shall contain all of the following:

(a) The name and address of the employing firm.

(b) The names and addresses of all qualifying persons.

(c) A statement to the effect that the firm and all qualifying persons shall comply with the provisions of the act.

History: 1983 AACS; 2003 AACS.

R 29.2807 Notice of termination of employment of qualifying person required; filing of new notarized affidavit required.

Rule 7. (1) A certified firm shall provide written notification to the department of consumer and industry services, office of fire safety, within 15 business days, upon the termination of employment of any qualifying person of the firm.

(2) If the employment of a firm's sole qualifying person is terminated, then a new notarized affidavit nominating a new qualifying person shall be filed with the department of consumer and industry services, office of fire safety, within 60 days, pursuant to R 29.2806 or the firm's certification is invalid.

History: 1983 AACS; 2003 AACS.

R 29.2807a Responsible person; education and experience requirements.

Rule 7a. A person who meets all of the following conditions may be considered to meet the requirements of R 29.2810 as a responsible person:

(a) Is employed by the certified firm.

(b) Has technical knowledge of the fire alarm or fire suppression system to be installed, modified, tested, serviced, inspected, or maintained.

(c) Has been involved with the on-site work of the fire alarm or fire suppression system.

(d) Has conducted required acceptance testing of the fire alarm or fire suppression system.

(e) Meets any of the following combinations of education and experience:

(i) Is certified at level 2 or above by NICET, national institute of certification in engineering technologies, in the appropriate category for the fire alarm or fire suppression system being documented.

(ii) Is a graduate of an approved 4-year apprentice training program for the fire alarm or fire suppression system being documented.

(iii) Is a licensed journey electrician or a licensed fire alarm technician if the system being documented is a fire alarm system.

History: 2003 AACS.

R 29.2808 Application for certification; categories of certification.

Rule 8. (1) A firm wishing to be certified under section 26 of the act shall submit an application to the department of consumer and industry services, office of fire safety, on forms provided by the department of consumer and industry services, office of fire safety.

(2) A firm wishing to be certified may only be certified in the category or categories and for the type of work for which the firm demonstrates qualification. Categories of certification are as follows:

(a) Fire alarm systems.

(b) Fire alarm voice communication systems.

(c) Custom-designed carbon dioxide systems.

(d) Pre-engineered carbon dioxide systems.

(e) Custom-designed wet or dry chemical systems.

(f) Pre-engineered wet or dry chemical systems.

(g) Custom-designed clean agent suppression systems.

(h) Pre-engineered clean agent suppression systems.

(i) Custom-designed foam systems.

(j) Pre-engineered foam systems.

(k) Custom-designed, water-based sprinkler systems, including underground water supply.

(l) Custom designed water spray or water mist systems.

(m) Water reservoir (aboveground).

(n) Water reservoir (underground).

(o) Custom designed pressure tank water supply.

(p) Engineered pump pressure supply.

(q) Engineered explosion suppression systems.

(r) Categories for new technologies.

(3) If the categories of certification in subrule (2) of this rule do not adequately describe a required system or portion of a system for which certification is required, then the firm shall provide sufficient information so that a category can be determined.

(4) An application shall be completed and accompanied by the statutory fee, $50.00 of which is not refundable, if it is determined that the qualifying person does not meet the requirements of R 29.2804. Each question shall be answered in its entirety. The application shall request, at a minimum, all of the following information:

(a) The official name and mailing address of the firm.

(b) The location of the firm if other than the mailing address.

(c) The name or names of the chief operating officer or officers of the firm.

(d) The name or names of the qualifying person or persons, listed by

category of certification as set forth in subrule (2) of this rule, to whom the firm desires to delegate authority to document the installation or modification of required fire alarm systems or required fire suppression systems pursuant to the firm's certification.

(e) A notarized technical qualifications resume signed by the qualifying person for the qualifying person or persons who will provide the technical qualifications for the firm. The resume shall be accompanied by written evidence from employers and schools attesting to the technical qualifications stated in the resume. If the qualifying person holds certification at level 3 or above from NICET, national institute of certification in engineering technologies, then a technical resume is not required.

(f) A statement from the chief operating officer of the firm stating that the firm is capable of providing service to required fire alarm systems or required fire suppression systems within 24 hours on a 24-hour, 7-day-a-week basis.

(g) A statement from the chief operating officer of the firm stating that replacement parts are available for required fire alarm systems or required fire suppression systems.

(5) A firm shall be approved and certified by the department of consumer and industry services, office of fire safety, before performing work specified in the act. If a firm is denied certification, then the firm may request an appeal to the state fire safety board within 60 days of the certification denial.

(6) If a firm is denied certification and wishes to appeal that denial, then the firm shall provide all of the following information to the state fire safety board with a letter requesting an appeal:

(a) The history and background of the firm.

(b) A copy of the firm's employee training policy and a description of the training programs.

(c) A specific list of completed fire alarm systems or fire suppression systems installed or serviced by the firm. The list shall be submitted as evidence of qualification in the category or categories for which certification is requested. The fire alarm system or fire suppression system shall be available for inspection by the department of consumer and industry services, office of fire safety.

(d) Samples of typical operating and maintenance instructions provided by the firm to the owner or operator of a fire alarm system or fire suppression system.

(e) Samples of fire alarm system or fire suppression system inspection forms and procedures used by the firm and samples of shop drawings prepared by the firm for installed or modified systems.

(f) A list of the testing, maintenance, service, or inspection services available listed by category of certification as set forth in subrule (2) of this rule for which certification is requested.

(g) The firm's geographic area of coverage.

(h) Not less than 3 references recommending that the firm be certified by the department of consumer and industry services, office of fire safety. The references shall be from sources that have knowledge of the technical capability in the type of fire alarm system or fire suppression system for which certification is requested and can speak for the firm's qualifications.

(7) The board may request additional information before rendering a decision.

History: 1983 AACS; 2003 AACS.

R 29.2809 Plans and specifications.

Rule 9. (1) Before installation or modification of a required fire alarm system or required fire suppression system, detailed plans and specifications of the proposed required fire alarm system or required fire suppression
system or modification of the system shall be submitted to the department of consumer and industry services, office of fire safety, by a certified firm or licensed architect or engineer for approval. Violation of this rule may result in an immediate stop work order, which will remain in effect until plans are submitted to the office of fire safety and receive approval from the office of fire safety before work may resume on the project.

(2) The plans required by subrule (1) of this rule shall be sufficiently detailed and drawn with symbols of a standard form at a minimum of 1/8 inch equals 1 foot scale so that compliance with applicable fire safety rules can be determined.

(3) The specifications required by subrule (1) of this rule shall be sufficiently detailed so that correct application of equipment and materials and compliance with applicable fire safety rules can be determined.

(4) Notwithstanding subrules (2) and (3) of this rule, the plans and specifications submitted for review and approval shall contain all of the following detailed and specific information:

(a) The complete identification of the owner or occupant of the facility.

(b) The intended use of the facility.

(c) The location of the facility.

(d) The title of the facility.

(e) The electrical inspection authority having jurisdiction if the proposed installation includes any electrical equipment or wiring.

(f) The point of the compass.

(g) The identification of the specific materials and methods of proposed installation or modification to be used.

(h) The specific laws, codes, and standards which apply to the required fire alarm system or required fire suppression system.

(5) In addition to the information required in subrule (4) of this rule, plans and specifications shall include the information required in the associated sections of national fire protection association codes and standards, which are and adopted by reference as part of these rules, as follows:

(a) NFPA 11, 1998 edition, entitled "Low-expansion Foam." Cost: $28.00

(b) NFPA 11A, 1999 edition, entitled "Medium- and High-Expansion Foam Systems." cost: $25.25.

(c) NFPA 12, 2000 edition, entitled "Carbon Dioxide Extinguishing Systems." cost: $25.25.

(d) NFPA 12a, 1997 edition, entitled "Halon 1301 Fire Extinguishing Systems." cost: $28.00.

(e) NFPA 13, 1999 edition, entitled "Installation of Sprinkler Systems." cost: $40.25.

(f) NFPA 13d, 1999 edition, entitled "Installation of Sprinkler Systems in One- and two-family dwellings and manufactured homes." cost: $25.25.

(g) NFPA 13r, 1999 edition, entitled "Installation of Sprinkler Systems in Residential Occupancies Up To and Including Four Stories in Height." cost: $25.25.

(h) NFPA 14, 2000 edition, entitled "Installation of Standpipe, Private Hydrant and Hose Systems." cost: $25.25.

(i) NFPA 15, 2001 edition, entitled "Water Spray Fixed Systems for Fire Protection." cost: $28.00.

(j) NFPA 16, 1999 edition, entitled "Installation of Foam-Water Sprinkler and Foam-Water Spray Systems." cost: $25.25.

(k) NFPA 17, 1998 edition, entitled "Dry Chemical Extinguishing Systems." cost: $25.25.

(l) NFPA 17a, 1998 edition, entitled "Wet Chemical Extinguishing Systems." cost: $21.00.

(m) NFPA 20, 1999 edition, entitled "Installation of Stationary Pumps for Fire Protection." cost: $28.00.

(n) NFPA 22, 1998 edition, entitled "Water Tanks for Private Fire Protection." cost: $28.00.

(o) NFPA 24, 1995 edition, entitled "Installation of Private Fire Service Mains and Their Appurtenances." cost: $25.25.

(p) NFPA 25, 1998 edition, entitled "Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems." cost: $33.25.

(q) NFPA 72, 1999 edition, entitled "National Fire Alarm Code." cost: $40.25.

(r) NFPA 96, 2001 edition, entitled "Ventilation Control and Fire Protection of Commercial Cooking Operations." cost: $25.25.

(s) NFPA 170, 1999 edition, entitled "Fire Safety Symbols." cost: $25.25.

(t) NFPA 2001, 2000 edition, entitled "Clean Agent Fire Extinguishing Systems." COST: $33.25.

(6) Copies of the adopted codes and standards are available for inspection and distribution at cost at the Office of the State Fire Safety Board, Office of Fire Safety, Department of Consumer and Industry Services, 7150 Harris Drive, Lansing, Michigan 48909. Copies of the adopted standards may be purchased from the National Fire Protection Association, 1 Batterymarch Park, P.O. Box 9101, Quincy, Massachusetts 02269, telephone number 1-800-344-3555, internet address WWW.NFPA.ORG.

History: 1983 AACS; 2003 AACS.

R 29.2810 Documentation.

Rule 10. (1) Before the installation or modification of a required fire alarm system or required fire suppression system can be documented, all of the following shall be performed under the supervision of a qualifying person of a firm certified by the department of consumer and industry services, office of fire safety, in the category of the system involved:

(a) A visual inspection of the entire required fire alarm system or required fire suppression system, including concealed areas. This may require periodic inspections as the installation or modification of the required fire alarm system or required fire suppression system progresses.

(b) All tests required by fire safety rules promulgated pursuant to the act and required by the manufacturer of the required fire alarm system or required fire suppression system.

(c) Testing and adjustment to specifications, as recommended by the manufacturer or recognized industry standard, of all functional parts of the required fire alarm system or required fire suppression system.

(d) Correction and rechecking of all items that do not comply with applicable fire safety rules.

(e) Verification that the required fire alarm system or required fire suppression system is completely operational and ready to perform required functions.

(2) Each new required fire alarm system or required fire suppression system or each modification of a required fire alarm system or required fire suppression system shall be documented to the department of consumer and industry services, office of fire safety, on forms provided by the department of consumer and industry services, office of fire safety, by a firm certified under the act. The completed documentation form shall be accompanied by the required statutory fee.

(3) The qualifying person shall sign the documentation form stating the supervisory responsibilities of a qualifying person have been met. The responsible person shall sign the documentation form stating that the requirements of subrule (1) of this rule have been satisfied.

(4) Any fee submitted by a firm which is not certified under the act or which has had its certificate suspended or revoked is not subject to refund.

History: 1983 AACS; 2003 AACS.

R 29.2811 Electrical inspection.

Rule 11. The installation or modification of any electrical equipment or wiring shall be performed by firms and personnel licensed in compliance with, 1956 PA 217, MCL 338.881 et seq., and under permit and inspection in compliance with 1972 PA 230, MCL 125.1501 et seq. Final approval of the project by the department of consumer and industry services, office of fire safety, will not be granted until electrical approval has been verified. A certificate of approval of the installation or modification of any electrical equipment or wiring from the electrical inspection authority having jurisdiction shall be provided by the certified firm to the department of consumer and industry services, office of fire safety.

History: 1983 AACS; 2003 AACS.

R 29.2811a Inspection.

Rule 11a. Before final approval of a project, a responsible person shall be present to perform all required tests during system inspection by the department of consumer and industry services, office of fire safety.

History: 2003 AACS.

R 29.2812 Record keeping.

Rule 12. (1) A firm certified by the department of consumer and industry services, office of fire safety, shall maintain a record of the installation, modification, and documentation

of each required fire alarm system or required fire suppression system the firm installs, modifies, or documents. The records shall include, but not be limited to, all of the following information:

(a) The name and location of the facility.

(b) The name and location of the owner or operator of the facility.

(c) The type of required fire alarm system or required fire suppression system installed in the facility.

(d) The name of the firm installing the required fire alarm system or required fire suppression system if other than the firm documenting the required fire alarm system or required fire suppression system.

(e) The specific codes, rules, or laws requiring the fire alarm system or fire suppression system.

(f) Copies of all plans and specifications, shop drawings, "as built" drawings, manufacturer's data on all equipment and devices, manufacturer's installation, and maintenance instructions regarding the required fire alarm system or required fire suppression system.

(g) Copies of all tests, certificates, and approvals of the required fire alarm systems or required fire suppression systems.

(2) A copy of the records specified in subrule (1) of this rule shall be kept in the building or other location approved by the department of consumer and industry services, office of fire safety, in which the required fire alarm system or required fire suppression system is installed.

(3) A firm certified by the department of consumer and industry services, office of fire safety, shall maintain a record of all testing, service, inspection, and maintenance performed on a required fire alarm system or required fire suppression system. These records shall include, but not be
limited to, all of the following information:

(a) The name and location of the facility.

(b) The date of work on the required fire alarm system or required fire suppression system.

(c) The name of the certified firm and technician performing the work at that time.

(d) The reason for work on the required fire alarm system or required fire suppression system.

(e) The test, service, inspection, or maintenance actually performed on the required fire alarm system or required fire suppression system.

(f) The results of the test, service, inspection, or maintenance on the required fire alarm system or required fire suppression system.

(g) Identification and location in the required fire alarm system or required fire suppression system of the parts replaced or repaired.

(h) The operational status of the required fire alarm system or required fire suppression system after testing, service, inspection, or maintenance has been performed.

(i) The notification and recommendation as soon as practical to the owner or operator of the required fire alarm system or required fire suppression system if the required fire alarm system or required fire suppression system is not completely operational or will be out of service and the expected duration of the out-of-service condition.

(j) The owner's or operator's acknowledgement of the required fire alarm system's condition or the required fire suppression system's condition.

(4) A copy of the records specified in subrule (3) of this rule shall be maintained and displayed at the location of the main system control or other location approved by the department of consumer and industry services, office of fire safety.

(5) The owner or operator of a required fire alarm system or required fire suppression system shall maintain records of all tests, service, inspections, and maintenance performed under R 29.2802. The records shall comply with the requirements of subrules (3) and (4) of this rule.

(6) All records required to be maintained by these rules shall be available for inspection by the department of consumer and industry services, office of fire safety, during normal business hours. A person shall not alter, deface, or remove the records required to be maintained by these rules.

History: 1983 AACS; 2003 AACS.

R 29.2813 Availability of drawings during inspection.

Rule 13. A drawing which depicts the completed installation or modification of a required fire alarm system or required fire suppression system as built shall be available to the department of consumer and industry services, office of fire safety, for use during an inspection of a required fire alarm system or required fire suppression system. The drawings and the drawings for all subsequent modifications shall be maintained with the records required by these rules. The drawings shall depict, at a minimum, all of the following:

(a) The location and description of all control devices and equipment of the required fire alarm system or required fire suppression system.

(b) The layout, routing, and sizing of all piping and wiring of the required fire alarm system or required fire suppression system.

(c) The location of all junction boxes and terminations of the required fire alarm system or required fire suppression system.

History: 1983 AACS; 2003 AACS.

R 29.2814 Notice of noncompliance.

Rule 14. A firm, owner, qualifying person, or operator of a required fire alarm system or required fire suppression system who is found to have installed, modified, serviced, inspected, or documented a required fire alarm system or required fire suppression system in a manner which is not in compliance with sections 26 to 33 of the act shall be notified, in writing, by the department of consumer and industry services, office of fire safety, of the specific conditions of noncompliance. The firm, owner, qualifying person, or operator who is notified of noncompliance shall, within 10 days after the issuance of the notification of noncompliance, signify, in writing, the intention to correct the condition of noncompliance, stating a date by which the condition of noncompliance will be corrected. The date shall be subject to department of consumer and industry services, office of fire safety, approval. The failure on the part of a firm, an owner, a qualifying person, or an operator who has been notified of a condition of noncompliance to signify in writing the intention to comply within the time limits prescribed in this rule or the failure to correct

the condition of noncompliance by the date approved by the department of consumer and industry services, office of fire safety, shall be considered a refusal to comply. A refusal to comply will result in the immediate suspension of the firm's certification and immediate suspension of the status of the qualifying person. The suspension will remain in effect until the certified firm or the qualifying person requests an appeal hearing with the state fire safety board. The state fire safety board may affirm, reverse, or modify the suspension or may revoke the certification of a firm in accordance with section 32 of the act.

History: 1983 AACS; 2003 AACS.