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**Commerce & Labor Committee**

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**HB 2966**

**Brief Description:** Providing for the certification of heating, ventilation, air conditioning, and refrigeration contractors and mechanics.

**Sponsors:** Representatives Conway, Wood, McIntire, Campbell, Simpson, Appleton, Hasegawa and Ormsby.

**Brief Summary of Bill**

- Establishes requirements for registration of HVAC/R contractors, and for certification of HVAC/R mechanics and various specialty mechanics.
- Directs the Department of Labor and Industries to administer and enforce HVAC/R-related registration and certification requirements.

**Hearing Date:** 1/22/08

**Staff:** Jill Reinmuth (786-7134).

**Background:**

State laws require registration or licensure for construction, electrical, and plumbing contractors, and certification for electrical administrators, electricians, and plumbers. These laws are administered and enforced by the Department of Labor and Industries (Department).

Depending on the type of heating, ventilating, air conditioning, and refrigeration (HVAC/R) work that a contractor performs, state law may require that the contractor be registered as a general or specialty construction contractor or licensed as an electrical contractor or both. If the contractor performs electrical work, the contractor must be licensed as an electrical contractor, and employ a certified electrical administrator and certified electricians. The electricians may be certified as journeyman electricians or as HVAC/R specialty electricians.

Local ordinances in a number of cities require persons performing HVAC/R work to obtain additional certification. Some require certification for mechanical work and gas fitting work. Others require certification for heating oil and air conditioning/refrigeration work.

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*This analysis was prepared by non-partisan legislative staff for the use of legislative members in their deliberations. This analysis is not a part of the legislation nor does it constitute a statement of legislative intent.*

In 2005 the Joint Legislative Audit and Review Committee (JLARC) completed a study of the state's rules relating to the licensing and testing requirements for HVAC/R contractors and installers. The study said that ". . . certifying other aspects of HVAC/R work may be an option for the state to consider" and that "[the Department] should provide fiscal and public safety estimates of scenarios that would certify other aspects of HVAC/R work."

In 2006 the Department organized the HVAC/R Task Force. A regulatory alternatives subcommittee considered various options for regulation of the HVAC/R industry, but was not able to reach consensus on a single option.

### **Summary of Bill:**

Provisions governing the heating, ventilating, air conditioning, and refrigeration (HVAC/R) industry are enacted. Requirements for registration of HVAC/R contractors and certification of HVAC/R mechanics and various specialty mechanics are established. These requirements are to be administered by the Department of Labor and Industries (Department).

### Definitions

Numerous terms are defined including HVAC/R work, HVAC work, refrigeration work, and gas piping work.

"HVAC/R work" means all HVAC work, refrigeration work, and gas piping work that is not exempt from regulation.

"HVAC work" means to design, fabricate, construct, install, replace, service, test, or adjust and balance HVAC equipment and systems. "HVAC equipment and systems" do not include solid fuel burning devices (e.g., wood stoves and coal stoves), gas piping other than that necessary to deliver fuel, or boilers.

"Refrigeration work" means to design, fabricate, construct, install, replace, or service refrigeration systems.

"Gas piping work" means to design, fabricate, construct, install, replace, or service gas piping and venting related to gas piping. "Gas piping" does not include gas company service piping that is owned or controlled by a gas company and used for transmission or distribution of natural gas to the point of contact at the premises or property that is supplied.

### HVAC/R Board

A 13-member HVAC/R Board (Board) is established. Members of the Board consist of four mechanics, four contractors, one public member familiar with HVAC/R work, one building operator representing the commercial property management industry, one member from the stationary operating engineers, one member from a technical college or an apprenticeship training program, and one building official familiar with enforcement of HVAC/R work.

The Board must conduct proceedings for denying applications, suspending or revoking certificates, and imposing penalties. The Board also must approve expenditures, and advise the Department on HVAC/R matters.

### Contractor Registration

Persons may not engage in business as HVAC/R contractors without being registered as contractors under the Contractor Registration Act and as HVAC/R contractors. On and after January 1, 2010, persons may not employ persons to perform HVAC/R work who are not certified to do so.

There are two exemptions from the HVAC/R contractor registration requirement. This requirement does not apply to: (1) persons contracting for HVAC/R work on their own residences; and (2) property management companies whose employees perform only HVAC/R work that is exempt from the mechanic certification requirement.

### Mechanic Certification

On and after January 1, 2010, persons may not perform HVAC/R work without being issued an HVAC/R mechanic certificate, a specialty certificate, a temporary certificate, or a trainee certificate by the Department. The types of certificates and their scopes of work are as follows:

- HVAC/R Mechanics. A Mechanic I may perform gas piping, refrigeration, and HVAC work performed by a specialty mechanic I. A Mechanic II may perform gas piping work performed by a specialty mechanic I, and refrigeration and HVAC work performed by a specialty mechanic II. A Mechanic III may perform gas piping, refrigeration, and HVAC work performed by a specialty mechanic III.
- Gas Piping Specialty Mechanics. A Mechanic I may perform gas piping work on fuel burning appliances and systems with a maximum capacity of 500,000 British thermal units per hour (BTUH). A Mechanic III may perform all gas piping work on any fuel burning appliances and systems. (There is not a Gas Piping Specialty Mechanic II.)
- Refrigeration Specialty Mechanics. A Mechanic I may perform refrigeration work on refrigeration systems with one or more compressors not exceeding 90,000 BTUH per compressor using class A1 refrigerants. A Mechanic II may perform refrigeration work performed by a Mechanic I, installation or replacement of self-contained refrigeration systems up to 300,000 BTUH, and except for installation or replacement, refrigeration work on refrigeration systems with one or more compressors not exceeding 300,000 BTUH per compressor using class A1 refrigerants. A Mechanic III may perform refrigeration work on any refrigeration systems using any refrigerants.
- HVAC Specialty Mechanics. A Mechanic I may perform HVAC work on HVAC equipment and systems of 7.5 tons or less or 3,375 cubic feet per minute (CFM) or less. A Mechanic II may perform HVAC work performed by a Mechanic I, and HVAC work on HVAC equipment and systems of 20 tons or less or 9,000 CFM or less. A Mechanic III may perform all HVAC work on HVAC equipment and systems.

There are 11 exemptions from the HVAC/R mechanic certification requirement. This requirement does not apply to persons who are: (1) cleaning or performing certain routine maintenance work on HVAC/R equipment and systems; (2) performing HVAC/R work on HVAC/R equipment or systems that contain small amounts of refrigerant and are actuated by small motors or engines, or that are absorption systems with low ratings of refrigeration effect; (3) setting oil tanks and related piping to furnaces; (4) setting propane tanks and related piping outside of buildings; (5) performing gas piping work on certain fuel burning appliances and systems pursuant to valid plumbing certificates; (6) performing HVAC/R work on their own

property, unless on new buildings intended for rent, sale, or lease; (7) performing HVAC/R work on their own property or regularly employed persons working on their employers' premises, unless on new buildings intended for rent, sale or lease; (8) performing work for gas companies that is incidental to natural gas deliveries; (9) licensed architects, engineers, and land surveyor who are designing HVAC/R equipment or systems; (10) replacing household appliances; and (11) installing wood or pellet stoves.

### Operator Certification

HVAC/R operating engineers may apply for and take examinations to obtain HVAC/R operator certificates. The scope of work is cleaning or performing certain routine maintenance work on HVAC/R equipment and systems, and performing minor repairs on HVAC/R equipment and systems and HVAC/R work on sealed HVAC/R equipment and systems. Persons licensed by the City of Seattle as refrigeration operating engineers are not required to meet additional requirements to be issued HVAC/R operator certificates.

### Certification With Examination

Examinations for HVAC/R mechanic certificates must contain distinct portions that assess competency in gas piping, refrigeration, and HVAC work. Applicants who pass all portions are entitled to be issued HVAC/R mechanic certificates. Those who pass some portions are entitled to be issued specialty mechanic certificates for those portions. The qualifications required to take examinations are as follows:

- HVAC/R Mechanic I. A person must have: (1) performed 1,000 hours of HVAC/R work, all of which must be supervised; (2) performed 2,000 hours of HVAC/R work, 75 percent of which must be supervised; or (3) completed an appropriate apprenticeship program.
- HVAC/R Mechanic II. A person must have: (1) performed 4,000 hours of HVAC/R work, 75 percent of which must be supervised; or (2) completed an appropriate apprenticeship program.
- HVAC/R Mechanic III. A person must have: (1) performed 4,000 hours of HVAC/R work, 75 percent of which must be supervised, plus an additional 2,000 hours, all of which must be supervised; (2) performed 8,000 hours of HVAC/R work, 75 percent of which must be supervised; or (3) completed an appropriate apprenticeship program.

Hours of a technical college program may be substituted for hours of work experience. Similarly, hours of armed forces work experience may be substituted for hours of work experience.

Examinations for HVAC/R operators must be comparable to the City of Seattle's test to obtain refrigeration operating engineer licenses.

### Certification Without Examination; "Grandfather" Clause

In 2009 persons who have performed HVAC/R work may apply for HVAC/R mechanic certificates without examination. Applications must include evidence of hours of HVAC/R work performed since January 1, 1988. The qualifications required to become certified without examination are as follows:

- HVAC/R Mechanics. For Mechanic I, a person must have performed at least 2,000 hours of HVAC/R work. For Mechanic II, a person must have performed at least 4,000 hours of HVAC/R work. For Mechanic III, a person must have performed at least 8,000 hours of HVAC/R work, or completed an appropriate apprenticeship program.
- Gas Piping Specialty Mechanics. For Mechanic I, a person must have performed at least 1,000 hours of gas piping work or hold a local license to perform gas piping work on fuel burning appliances and systems with a maximum capacity of 500,000 BTUH. For Mechanic III, a person must hold a local license to perform all gas piping work on any fuel burning appliances and systems. (There is not a Gas Piping Specialty Mechanic II.)
- Refrigeration Specialty Mechanics. For Mechanic III, a person must hold a City of Seattle journey refrigeration mechanic license.
- HVAC Specialty Mechanics. For Mechanic III, a person must hold a City of Seattle journey refrigeration mechanic license.

#### Certification Without Examination; Reciprocity Provision

The Department may enter into reciprocity agreements with other states whose certification requirements are equal to Washington's standards. The agreements must provide for acceptance of Washington and the other state's certification program by Washington and the other states.

#### Supervision Requirements

Mechanics may supervise two trainees not in a technical college program or four trainees in a technical college program. When the ratio of mechanics to trainees on a job site is one mechanic to one or two trainees, mechanics must be on the same job site as trainees at least 75 percent of each working day. When the ratio is one mechanic to three or four trainees, mechanics must directly supervise and instruct trainees and may not directly make or engage in HVAC/R work. They also must be on the same job site as trainees all of each working day.

There are exceptions to the supervision requirements for persons who have performed certain hours of work and passed certain portions of examinations. These persons may perform, unsupervised, the remaining hours required for certification.

#### Other

Various provisions address enforcement activities, including investigations, notices of infraction, and civil and criminal penalties.

Other provisions require mechanics to complete 24 hours of continuing education and trainees to complete 60 hours of related supplemental instruction or equivalent training.

With certain exceptions, nothing in state HVAC/R laws shall be construed to: (1) modify state plumbing or electrical laws; (2) prohibit or restrict certified plumbers or electricians from engaging in their trades; or (3) regulate or include electrical or plumbing work. These exceptions include provisions relating to concurrent registration and certification, as well as concurrent work experience, examination, and continuing education.

**Rules Authority:** The Director of the Department is authorized to adopt rules necessary to administer HVAC/R certification requirements, but may not do so until the HVAC/R Board has conducted its review and made its recommendations. The Department is also authorized, with approval of the HVAC/R Board, to adopt rules to establish specific criteria for recognizing a national certification for propane gas in place of a state certification.

**Appropriation:** None.

**Fiscal Note:** Available.

**Effective Date:** The bill takes effect on January 1, 2009.