

HVAC CONTRACTOR INFORMATION LETTER

TO: HVAC CONTRACTORS
FROM: STATE OF WISCONSIN, DEPARTMENT OF COMMERCE, SAFETY AND BUILDINGS
SUBJECT: MECHANICAL EQUIPMENT REGISTRATION & REVIEW REQUIREMENTS
DATE: 12/01/2008

The Division of Safety & Buildings would like to remind all heating, ventilation, and air conditioning designers and contractors of their obligations when installing or replacing HVAC equipment and appliances. Additionally, for buildings incorporating boilers, pressure vessels, and refrigeration equipment for either ventilation or processing should be aware of requirements which must be met prior to installation and operation of equipment.

BOILERS & PRESSURE VESSELS

If boilers or pressure vessels are associated with either building heating or processing in a commercial building, then the equipment must be registered prior to installing and operating in the field based on Comm 41.41. One and two family dwellings under Comm 41 are exempt from the registration requirements, not the installation requirements per Comm 41.

A new requirement per Comm 41.41(4) Registration of Solid Fuel-Fired Water-Heating Appliances Comm 41.41 (4) INSTALLATION REGISTRATION FOR SOLID FUEL-FIRED

WATER-HEATING APPLIANCES. (a) Except as specified in par. (b), the installer of a solid fuel-fired water-heating appliance shall register the unit with the department and shall use department form SBD-6314 for the registration.

(b) Registration of a solid fuel-fired water-heating appliance installed at a one-and 2-family dwelling is not required.

Registration is required to be in writing on Form SBD-6314. The form may be obtained from the Division of Safety & Buildings, Inspection Support, PO Box 7302, 53707-7302, at the Safety & Buildings web site at <http://www.commerce.state.wi.us/SB/SB-DivForms.html#Boilers> or telephone 608/261-7730, 608/264-8777 (TTY).

MECHANICAL REFRIGERATION SYSTEMS

If mechanical refrigeration equipment is associated with either building cooling or processing, and the system uses a Group A1 or B1 refrigerant having a capacity rated at or greater than 50 horsepower, 50 tons or 50,000 volt-amperes; OR the system uses a Group A2, B2, A3 or B3 refrigerant, having a capacity rated at or greater than 10 horsepower, 10 tons or 10,000 volt-amperes, then the equipment must be registered prior to installing and operating in the field per Comm 45.07. Registration is required to be in writing on Form SBD-34. The form may be obtained from the Division of Safety & Buildings, Inspection Support, PO Box 7302, 53707-7302, at the Safety & Buildings web site at <http://www.commerce.state.wi.us/SB/SB-DivForms.html#MechRefrig> or telephone 608/261-7730, 608/264-8777 (TTY).

The Refrigeration Code, Comm 45, or the Boiler & Pressure Vessel Code, Comm 41, may be viewed or downloaded for free from the internet at the following web site: <http://commerce.wi.gov/SB/SB-DivCodesListing.html>

NEW HVAC EQUIPMENT INSTALLATIONS IN COMMERCIAL BUILDINGS

If the Heating, Ventilation, Air-Conditioning (HVAC) equipment is associated with a new commercial building, a commercial building addition or an alteration to an existing commercial building, and the equipment is used, in any way, for ventilation purposes, HVAC plans may be required to be submitted for

plan review and approval. The need for submittal is dependent on the volume of the building (not just the alteration or addition). If the building (not just the volume of the alteration, and inclusive of both the existing building and the proposed addition) is over 50,000 cubic ft, a Wisconsin registered Professional Engineer, Architect, or HVAC Designer is required to prepare the plans. In all cases, the Wisconsin Commercial Building Code requirements are to be met. Below are references as to when submittals are not required, or when registration can be used in place of HVAC plan submittal.

**Table 61.30-1
Buildings Exempt from Plan Review**

Building Type or Occupancy	Building Description
Assembly Group A-2, A-3	Containing less than 25,000 cubic feet in volume
Business Group B	
Factory Group F	
Mercantile Group M	
Storage Group S	
Utility and Miscellaneous Group U	

**Table 61.30-2
Buildings Exempt from Plan Review If Registered ***

Building Type or Occupancy	Building Description
Assembly Group A-2, A-3	Buildings containing 25,000 to less than 50,000 cubic feet in volume
Business Group B	
Factory Group F	
Mercantile Group M	
Storage Group S	
Utility and Miscellaneous Group U	
Assembly Group A-1, A-4, A-5	Buildings containing less than 25,000 cubic feet in volume
Educational Group E	
High Hazard Group H	
Residential Group R	

Form SBD-10689 for use in registering a commercial building in lieu of plan review, and Form SBD- 118 for use in submitting HVAC plans may be obtained at the following web site:
<http://commerce.state.wi.us/SB/SB-DivForms.html#commercial>

Note: Buildings Exempt from HVAC Plan Review are not exempt from Boiler, Pressure Vessel and Mechanical Refrigeration installation registration requirements as stated above.

* A Wisconsin Registered Professional Engineer, Architect, or HVAC Designer is required to be obtained. A separate registration is required for building plans, HVAC plans, etc.

1. Building must be designed by WI registered Architect or Professional Engineer; HVAC, may be designed by a WI registered designer.
2. A Supervising Professional must be retained, and identified as a customer on this form. [Comm 61.50]
3. Upon completion of the work, a compliance statement must be filed with the Department. [Comm 61.50]
4. Send Registration Form & Fee to: Safety & Buildings Division, 3824 N. Creekside Ln, Holmen, WI 54636

Note that failure to obtain plan approval or registration prior to equipment installation could result in double fees.

HVAC EQUIPMENT REPLACEMENTS IN COMMERCIAL BUILDINGS:

Equipment replacement implies the removal of existing, and the installation of new heating ventilating or air conditioning equipment including, but not limited to, furnaces, air handling units, central air conditioners, refrigeration equipment, as well as boilers and pressure vessels. Replacement of equipment means no changes to existing ductwork or piping are permitted other than those necessary to fit the new equipment to the existing system. If changes to the ductwork and piping go beyond this, HVAC alteration plans must be submitted in accordance with COMM 61.30(1) if the equipment is used for ventilation purposes. Replacement does not include changing equipment sizes or capacities to accommodate building alterations or additions. When HVAC equipment sizes or output capacities are changed due to a building addition or alteration, HVAC alteration plans must be submitted in accordance with COMM 61.30(1).

Although submission to the State is not required, local ordinances may require HVAC equipment information to be submitted prior to issuing HVAC permits. Any fees associated with the HVAC permit would be defined by the municipality issuing the permit.

A Summary of Fees and Submittal Requirements is Listed Below:

<p>Replacement of Equipment (Substantially similar in size)</p>	<p>No State fee or submittal required. Boiler/refrigeration replacements are required to contact the Boiler and Pressure Inspection Unit. New HVAC equipment does NOT need to have same fuel as the old equipment (i.e. fuel oil, natural gas, etc.) Equipment replacement to be “substantially equivalent”.</p>
<p>Replacement of Equipment (Substantially smaller in size)</p>	<p>Submittal required; “substantial” means that the output of the new equipment is less than 85% of the original equipment. The lower cost of either \$250/piece of equipment, or fees based on the area of the room in which the equipment is located, plus \$100 submittal fee is required. Submittal shall include 1) A completed SBD-118 plan application form; 2) appropriate fees 3) At least four copies of a letter. The letter shall: identify the building by address, occupancy and owner; identify the name and address of the HVAC contractor or designer responsible for making the replacement; give the make model and BTU output of the equipment being replaced; give the make, model and BTU output of the replacement equipment. UL, AGA, PFS or other recognized laboratory approval shall be specified. 4) Since the BTU output of the replacement equipment is substantially less than that of the equipment being replaced, HVAC heat loss calculations must be submitted proving the adequacy and code compliance of the smaller unit(s). 5) If the replacement equipment has a BTU output substantially less than that of the equipment being replaced and the building contains more than 50,000 cubic feet total volume, the letters and heat loss calculations must be signed, sealed, and dated by a Wisconsin registered architect, engineer or HVAC designer.</p> <p>Boiler/refrigeration replacements are also required to contact the Boiler and Pressure Inspection Unit.</p>
<p>Heating ONLY equipment is replaced with equipment capable of both heating & cooling OR cooling is added to existing equipment</p>	<p>HVAC Plan Submittal required, fee based on area to be served by equipment, plus \$100 submittal fee Boiler/refrigeration replacements are also required to contact the Boiler and Pressure Inspection Unit.</p>
<p>Installation of stand alone equipment (fireplaces, commercial kitchen hoods, waste oil burners, etc.)</p>	<p>HVAC Plan Submittal required, \$250/piece of equipment plus \$100 submittal fee.</p>

In all cases involving new equipment, if the new equipment is such that it will require fire rated isolation from the balance of the building, per IBC Table 508.2, where the old equipment did not require fire rated isolation, evidence of a rated enclosure must be submitted with the plan submittal.

INSTALLING OR SERVICING HVAC EQUIPMENT REQUIRES HVAC CONTRACTOR REGISTRATION

Comm 5.70 (1) GENERAL. (a) Pursuant to ss. 101.177 (2) and (3) (a) and 101.178 (2), Stats., no person, entity or business may engage or offer to engage in the following activities, unless the person, entity or business holds a registration issued by the department as a registered HVAC contractor, except as provided in par. (b):

1. Installing or servicing heating, ventilating or air conditioning equipment.
2. Installing or servicing refrigeration or air conditioning equipment that would release or may release ozone-depleting refrigerant.
3. Selling for reuse used ozone-depleting refrigerant from refrigeration or air conditioning equipment.

(b) 1. A person, entity or business is not required to hold a registration as a registered HVAC contractor to service existing heating, ventilating, air conditioning, or refrigeration equipment within facilities or properties owned by the person, entity or business provided the air conditioning or refrigeration equipment does not involve ozone-depleting refrigerants.

HVAC Registration requirements:

2. A person, entity or business is not required to hold a registration as a registered HVAC contractor to install or service heating, ventilating, air conditioning, or refrigeration equipment within a dwelling owned by the person, entity or business and in which the person, entity or business resides or will reside provided the air conditioning or refrigeration equipment does not involve ozone-depleting refrigerants.
3. A person, entity or business is not required to hold a registration as a registered HVAC contractor for electrical or plumbing work associated with the installation or servicing of the HVAC equipment or systems.

The HVAC Contractor Registration application form and Comm 5 code is available from our website.

<http://commerce.wi.gov/SB/SB-FormCredAppList.html>

<http://commerce.wi.gov/SB/SB-DivCodesListing.html>

SIGN UP TO BE INFORMED OF UPCOMING CODE CHANGES

You can now go online to find upcoming classes on the Uniform Dwelling Code, Commercial Building Code, Boiler & Pressure Vessel Code or the Refrigeration Code, or you can sign up for automatic notification. Additionally, information on various committees involving code changes can be sent directly to you by signing up at the Department web page listed below:

<http://commerce.wi.gov/SB/SB-DivEmailSignup.html>

Thank you for your cooperation

12/01/08