MARKETING BULLETIN

BULLETIN NO: MB-1430
DATE: September 19, 2014

TO: All Weil-McLain Sales Representatives, Manufacturer's Representatives and Distributors

FROM: John Kopf – Sr. Product Manager

SUBJECT: SlimFit™ SF1000, SF1500, SF2000 Common Venting

Great news! The SlimFit™ commercial boilers sizes 1,000 MBH, 1,500 MBH and 2,000 MBH have been approved for Category II venting by CSA. These boilers were previously approved only for Category IV and now with the addition of Category II approval are ready for common venting under the following conditions:

- Boiler models SF1000, SF1500, SF2000
- Maximum number of boilers allowed to be connected to a common duct is 8 (eight)
- All boilers in the common vent system must be the same size
- Vertical vent only
- Direct exhaust (combustion air from the boiler room) only should be considered

Additionally, when used in a Category II application, the venting system for even a single boiler may be designed in the field, and need not follow the application guidelines for Category IV venting as published in the boiler manual. As an example, consider a SlimFit 1000 which is limited to 100 ft. of 6" venting material (boiler manual, pg. 30) as a Category IV appliance. Under the Category II certification, a field designed vent system may exceed the 100 feet and/or use a different size vent material as long as it meets the specific design criteria in the attached addendum and application guide.

A common venting system for Category II appliances has to be designed in the field by a competent industry professional applying ASHRAE principles. A modulating draft inducer is likely to be required to maintain the correct vent pressure, due to the lower flue temperatures created by a condensing boiler. In the absence of a draft inducer, sizing the ductwork and designing connections should be done with special care to ensure that the vent system will remain in the prescribed negative pressure range while in operation. Several venting material suppliers have selection tools and are willing to provide assistance with sizing and configuring the system layouts. To properly size the common venting system the following inputs are required:

- Appliance rated input
    - High fire and low fire (can be found in the boiler manual)
- Blower flow rate (cfm)
- High fire and low fire values
    - % of CO_2
    - Temperature of flue gas at appliance outlet
    - Exhaust pressure
- Is a barometric damper required for each appliance with the common vented system? Y/N
- <u>Most critical input includes</u>

- A vent schematic showing distances, elevation and directional changes (elbows and tees) for the routing of the system and the placement of the appliances in relationship to the schematic
    - Center line to center line is best and a stick drawing works fine

Along with this marketing bulletin we are sending you two documents:

- Addendum to SlimFit boiler manual - Part Number 550-100-124/0914
- Application Guide for Common Venting SlimFit Boilers – Part Number SF-E008-A/0914

We will hold a series of training webinars that will discuss the Category II approval, applications, selection software and configuring common venting systems. Please note that the factory will procure correct labeling, and transition production shortly. If you have a project requiring this Category II certification now, please contact us per below before placing the order.

If you have any questions regarding the common venting for the SlimFit boilers, please contact John Kopf or Dave Burggren, Director of Commercial Sales.