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Subject: Commercial/Residential Unit Heater Venting Material

The following is to serve as a guide for using Category I or III venting materials in both commercial and residential applications. Verify all venting requirements with applicable national/local codes and REZNOR venting guides.

1) Residential

- a. Horizontal (All MBH Sizes)
 - i. Category III Venting
- b. Vertical (75,100,125MBH)
 - i. Category III Venting
- c. Vertical (30, 45, 60 MBH)
 - i. Category I* Venting**
 - ii. Category III Venting

2) Commercial/Industrial

- a. Horizontal (All MBH Sizes)
 - i. Category III Venting
 - ii. Appropriately Sealed 26GA or heavier Galv Steel
 - iii. Equivalent Single Wall Pipe
- b. Vertical
 - i. Category III Venting
 - ii. Appropriately Sealed 26GA or heavier Galv Steel
 - iii. Equivalent Single Wall Pipe
- c. Vertical (30, 45, 60MBH ONLY)
 - i. Category I* Venting**
 - ii. Category III Venting
 - iii. Appropriately Sealed 26GA or heavier Galv Steel
 - iv. Equivalent Single Wall Pipe

****Category I** venting only allowed if at least 75% of the equivalent length of vent is vertical **and** the vent terminates at least 5 feet about the vent outlet of the heater. The most common Category I material is B-Vent or Double Wall.*

*****Category III** venting is most commonly stainless steel.*

Attached are the excerpts from UDAP/UDAS venting guides. Please contact your territory manager if more information is needed.

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Residential Installation
Std Power Vent fan type unit heater - Sizes 30, 45, 60, 75, 100, 125

2.0 Venting Requirements and Instructions - Residential Installation

A Category III vent as defined by the National Fuel Gas Code Z223.1 or CAN/CSA B149.1 and B149.2 is required for a residential installation of a Std Power Vent fan type unit heater. Some venting requirements will vary, however, depending on whether the vent is horizontal or vertical.

Read and follow all of the requirements and instructions in Paragraphs 2.1 through 2.7.

2.1 Type of Vent Pipe Required for Vent Run

Type of Pipe for Standard Horizontal Vent (Category III)

- Vent pipe approved to UL Std 1738 for Category III appliance.

Type of Pipe for Standard Vertical Vent (Category III)

- Vent pipe approved to UL Std 1738 for Category III appliance.

Commercial / Industrial Installation
Std Power Vent fan type or blower type unit heater - All Sizes

3.0 Venting Requirements and Instructions - Commercial/Industrial Installation

3.1 Type of Vent Pipe Required for Vent Run

A commercial/industrial installation may have either a horizontal or a vertical vent run using one of the types of vent pipe listed.

<u>Horizontal Vent Run</u>	Vent pipe approved to UL Std 1738 for a Category III appliance, <u>OR</u> Appropriately sealed 26-gauge or heavier galvanized steel or equivalent single-wall pipe
<u>Vertical Vent Run</u>	Vent pipe approved to UL Std 1738 for a Category III appliance, <u>OR</u> Appropriately sealed 26-gauge or heavier galvanized steel or equivalent single-wall pipe, <u>OR</u> If at least 75% of the equivalent length of the vent run is vertical - Double-wall (Type B) vent pipe

Residential or Commercial / Industrial Installation
Vertical Category I, Std Power Vent fan type unit heater
Size 30, 45, 60

4.0 Venting Requirements & Instructions

On vent systems where at least 75% of the equivalent length of the vent run is vertical and the vent terminates at least 5 feet above the vent outlet of the heater. All vertically vented heaters that are Category I must be connected to a chimney or vent complying with a recognized standard or a lined masonry (or concrete) chimney with a material acceptable to the authority having jurisdiction. Venting into an unlined masonry chimney is not permitted.

Only Category I Allowed

4.1 Type of Vent Pipe Required for Vent Run

Type of Pipe for Standard Vertical (Category I)
 Double wall vent pipe - **Recommended**.
 Single wall vent pipe if requirements of the National Fuel Gas Code are followed.
 All pipe must be UL listed for Category I appliances.