

Venting about Venting

Let's get on the same page

A great deal of confusion exists around the horizontal venting of tube heaters. Survey four different manufacturer's installation instructions and you're likely to find four different methods shown, certainly with respect to suggested venting materials to be used. The problem originates with the infrared standard not having enough definition where venting of infrared tube heaters is concerned, leaving manufacturers to define their own methods.

Requirements under the standard are currently under review, which will likely result in the disallowing of B vent for horizontal venting applications. Why so? In a nutshell, B vent was never designed to operate under a positive pressure. Rather, it was designed to operate under a non-positive, or negative pressure, which is exactly what happens with a vertical flue arrangement. The stack effect, or draw created by rising, buoyant gasses created by the combustion process subject the B vent to a slightly negative pressure. Thus, the liner of the vent pipe and all of the joints will not allow the slightly acidic and corrosive mois-

ture to penetrate, initiating the breakdown of the vent materials over time. When installed in the horizontal plane, however, the pipe is subjected to a positive pressure from the fan assisted appliance, creating the corrosion described above.

Recent changes to horizontal venting of unit heaters, where stainless steel venting systems are now required have further muddied the waters, with some folks suggesting that this requirement also applies to tube heaters. This is simply not true, as infrared tube heaters, as previously mentioned, are governed by a different standard, as they are a different type of heating system than forced air unit heaters.



See inside where SRP sidewall venting materials are shown, including proper venting terminations for through the wall vent systems. See also our article on the new 90 degree vent elbow for the GR residential garage heaters required in Alberta where venting in proximity to property lines comes into play.



Infrared Gazette



Reminder:
Edmonton branch moved
to 4903-68 Avenue

Venting / Combustion Air Ducting

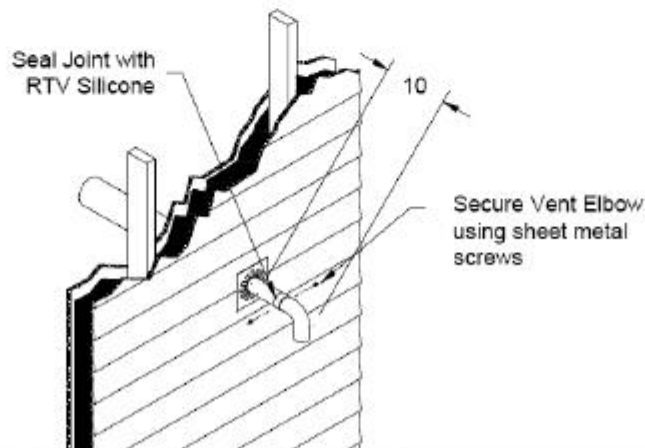
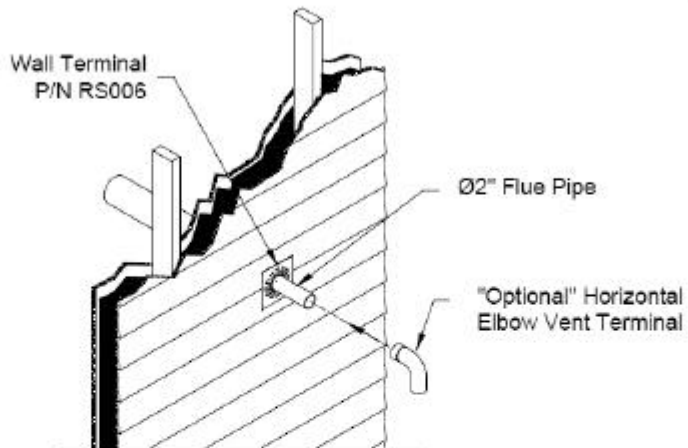
Optional Horizontal Elbow Vent Terminal

The GR Models are approved to be used with an Elbow as a Horizontal Vent Terminal see Figure 13 for installation details..

New Sidewall Vent Elbow for GR's

With the new Alberta requirements for sidewall venting (Standata G-01-10) of gas fired appliances above 35,000 BTUs, SRP had to engineer a proper vent termination to meet this code change.

Shown here is the simple and cost effective solution. All other requirements for proximity to soffits and eaves apply. Fasten this elbow to the end of the 2 inch vent pipe, and you meet the code.



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SRP Approved Sidewall Venting

Qualitec recommends the use of sidewall venting materials as shown in SRP O & M's, detail below, and also shown in the accompanying pictures.

Vent Pipe - shall be minimum 24 gauge single wall galvanized pipe, and can include spiral pipe, or shorter snap pipe sections. When venting longer runs it makes sense to use 10 foot spiral pipe sections, as we then have less joints to seal and caulk, and it is easier to properly grade the pipe slightly down to the outside.

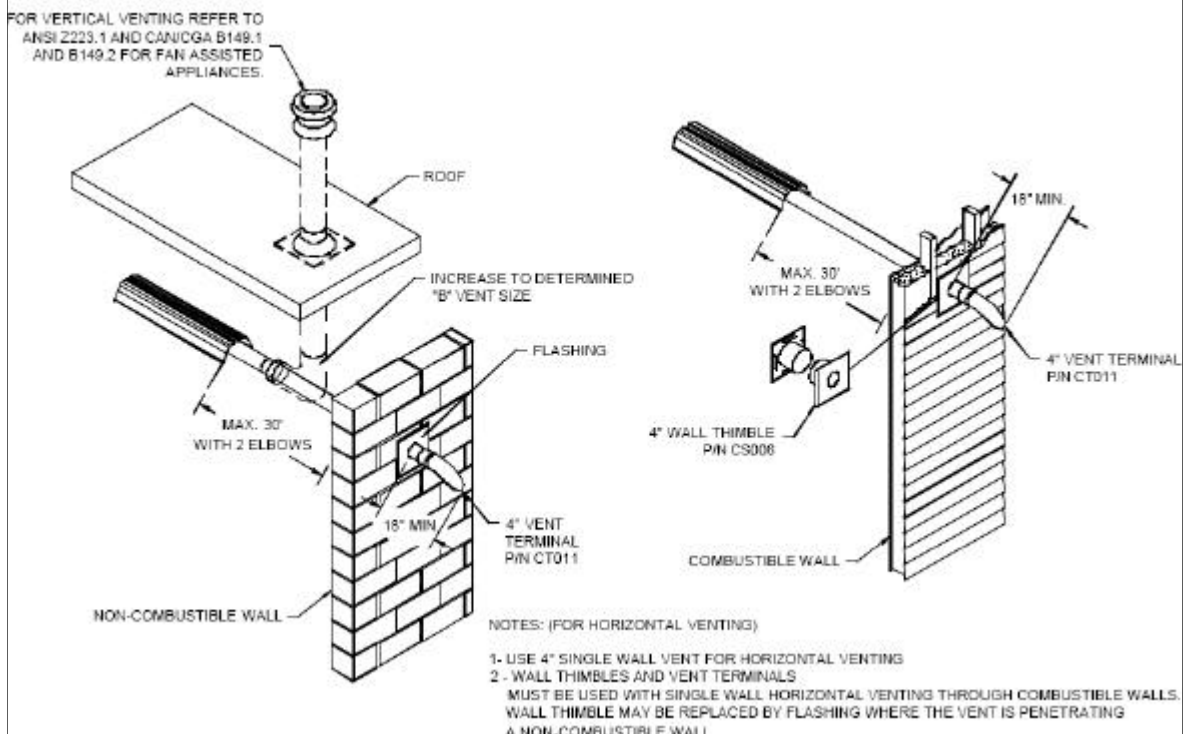


Vent Terminals - shall be the spout type c/w bird screen, and not be a rain cap style. Approved combustible wall thimbles must also be used. 4 inch diameter pipe serves all unitary heater sizes up to and including 220 MBH heaters.



This is not the case for vertical venting, where the installer must refer to the venting tables in the B149 gas code book under fan assisted appliances for proper vent pipe size.

Qualitec stocks sidewall venting materials only, B vent by others.



Make-up Air - Wall Heaters

Eskabe Direct Vent Wall Heaters

Qualitec now has in stock a full selection of the attractive new Eskabe direct vent wall heaters. Featuring milli-volt control and through the wall direct venting, Eskabe heaters are available in three sizes shown here in both natural gas and LPG versions.

Similar to the Longvie heaters we carried in the past, the Eskabe space heater provides a very modern look with its dual tone coloring and contoured surfaces. In stock now in both of our Calgary and Edmonton branches!



Specifications	8k BTU	11k BTU	17k BTU
Model Number	DVEL8-NG DVEL8-LP	DVEL12-NG DVEL12-LP	DVEL17-NG DVEL17-LP
Heat Input	8,000 BTU	11,000 BTU	17,000 BTU
Heat Output	6,400 BTU	8,800 BTU	13,600 BTU
Max. Heating Area	200 sq feet	275 sq feet	425 sq feet
Thermostat	No (Hi and Low Settings)	Yes (Modulating)	Yes (Modulating)
Shipping Weight	27 lbs	36 lbs	53 lbs
Cabinet Height	20 inches	20 inches	20 inches
Cabinet Width	13.5 inches	17.4 inches	27.4 inches
Cabinet Depth	5.5 inches	5.8 inches	6.6 inches
Vent Hole Required	5 inches	6 inches	7 inches

Manufactured in Argentina by Eskabe S.A.
 CSA and ANSI Certified
 Stylish and Attractive Design
 Vent Kit and Wall Mount Bracket included
 No electricity required
 High Altitude injectors available at no extra charge
 Charcoal grey grill, very light cream hood cover
 Warranty - 10 years on burner, 1 year on all parts
 Toll free Tech Line 888-717-7727
 Eskabe U.S.A. Importer 888-395-1104
 Website: www.eskabeUSA.com



Make-up air units by Rupp



Shown above is a 12,000 CFM RUPP unit recently supplied to *Stafford Plumbing & Heating* in Wainwright. This unit provides a variable airflow, controlled by a building static pressure controller shown to the right beside the MUA control panel. A basic interlock is set up to the first stage

fans. Additional welding fume arms and exhaust fans in the building create a momentary negative pressure, sensed by the BSP controller, which then sends a signal to speed up the MUA fan through its integral VFD. Simple, and effective. Energy efficient, too! Call us for more info.

