

DIRECT VENT APPLIANCES AND EQUIPMENT Requiring ULC S636 Certified Venting Systems

This bulletin has been jointly developed by Safety Services and the Gas Sub-Council to inform designers, vendors, builders, contractors and owners of the minimum requirements to ensure the safe and effective venting of gas-fired appliances. Under the *Safety Codes Act* it is the responsibility of the installer to ensure the installation and operation of gas-fired appliances are in full compliance with CSA-B149.1 "Natural Gas and Propane Installation Code". This code applies to the installation of appliances, equipment, components, and accessories where gas is to be used for fuel purposes. In Alberta, under the *Safety Codes Act*, the inspection and approval of gas-fired appliances and equipment shall comply with the requirements listed below.

The increased application of high efficiency furnaces and hot water tanks has resulted in increased failures due to confusion with similar locations for combustion air and venting piping systems. The accidental installation of ABS/PVC piping on venting outlets that were intended for the combustion air piping is causing venting failures.

- ULC-S636-08 Standard for BH type gas venting systems.
- Type BH vent – a vent complying with ULC S636 and consisting entirely of factory-made parts, each designed to be assembled with the others without requiring field fabrication, and intended for venting gas appliances.
- Class I venting systems are suitable for gas-fired appliances producing flue gas temperatures of more than 135° C but not more than 245° C.
- Class II venting systems are suitable for gas-fired appliances producing flue gas temperatures of 135° C or less.
- The proper application and use of ULC S636 certified CPVC, PPE or PVC should be based on the exhaust temperature of the intended appliance.
 - ULC S636 certified PVC venting systems are suitable for flue gas temperatures identified by the manufacturer (typical maximums are 65° C).
 - ULC S636 certified CPVC venting systems are suitable for flue gas temperatures identified by the manufacturer (typical maximums are 90° C).
 - ULC S636 certified PPE venting systems are suitable for flue gas temperatures identified by the manufacturer (typical maximums are 110° C).
- Vent and combustion air locations on appliances should be separately identified.
- ULC S636 certified pipe and fittings are required on all plastic venting arrangements.
- Special consideration must be considered for proper glue, primer, and transition cement applications.
- No allowances are made for transitions back and forth across different venting systems other than appliance manufacturer supplied connections and terminations.