

GAS CODE

- (4.16.4) Where a forced air appliance for heating of the attached residential building is installed in a residential garage, no opening shall be located in the portion of the appliance return air system located within the garage and the return air system shall be made air tight to prevent the infiltration of air from inside the garage.
- (4.17.2) Return air ducts installed in an enclosure shall be in accordance with the provisions set out for duct systems in the National Building Code of Canada.
- (6.7.6) Piping or tubing may be installed in a *false ceiling space*, including one used as a return-air plenum of a central warm-air or air-conditioning system
- (7.13.3) Return-air inlets shall not be installed in an enclosure or crawl space that provides combustion air to a furnace.
- (7.13.6) Furnace return-air ducting installed in an enclosure in which any spillage-susceptible appliances are located (including the furnace) shall be sealed to the furnace casing, and joints in the ducting shall be sealed to prevent infiltration of air from the enclosure into the return-air ducting.
- (7.27.6) Except for direct-vent water heaters, when the water heater is used in a combo heating system, return-air inlets shall not be installed in the same enclosure that contains both an air handling unit and the water heater. Adequate combustion air shall be provided for the water heater.
- (7.27.7) When the return air duct(s) of an air handling unit in a combo heating system is installed in an enclosure in which any spillage-susceptible appliances are located, it shall be sealed to the air handling unit casing, and joints in the ducting shall be sealed to prevent infiltration of air from the enclosure into the return-air ducting.
- (8.10.12) A flue gas vent or a vent connector shall not be installed in either a duct or a shaft used for return air, hot air, ventilating air, or combustion air.
- (8.10.13) Joints and seams in vents or vent connectors installed in space used to convey return air, such as the space in a false ceiling, shall be sealed.
- (8.21.4) When a forced-air *furnace* is installed in an *enclosure* in accordance with Clause 8.21.2, no opening shall be located in the *furnace* return-air system within the *enclosure*, and means shall be provided on the return-air system to prevent the infiltration of air from inside the *enclosure*.

BUILDING CODE

6.2.3.20. Return-Air System

- (1) The return-air system shall be designed to handle the entire air supply.
- (2) Where any part of a return duct will be exposed to radiation from the furnace heat exchanger or other radiating part within the furnace, such part of a return duct directly above or within 600 mm of the outside furnace casing shall be noncombustible.
- (3) Return ducts serving solid fuel-fired furnaces shall be constructed of noncombustible material.
- (4) Where combustible return ducts are permitted, they shall be lined with noncombustible material below floor registers, at the bottom of vertical ducts and under furnaces having a bottom return.
- (5) The return-air system shall be designed so that the negative pressure from the circulating fan cannot affect the furnace combustion air supply nor draw combustion products from joints or openings in the furnace or flue pipe.
- (6) Return-air inlets shall not be installed in an enclosed room or crawl space that provides combustion air to a fuel-fired appliance.

6.2.4.7. Return-Air System

- (1) The return-air system shall be designed to handle the entire air supply.
- (2) Except as provided in Sentences (3) and (4), return ducts shall be constructed of material having a surface flame-spread rating of not more than 150.
- (3) Where any part of a return duct will be exposed to radiation from the furnace heat exchanger or other radiating part within the furnace, such part of a return duct directly above or within 600 mm of the outside furnace casing shall be noncombustible.
- (4) Return ducts serving solid fuel-fired furnaces shall be constructed of noncombustible material.
- (5) Combustible return ducts shall be lined with noncombustible material below floor registers, at the bottom of vertical ducts and under furnaces having a bottom return.
- (6) Spaces between studs and joists used as return ducts shall be separated from the unused portions of such spaces by tight-fitting metal stops or wood blocking.
- (7) A vertical return duct shall have openings to return air on not more than 1 floor.
- (8) A public corridor shall comply with Sentences 6.2.3.9.(4) and (5).
- (9) The return-air system shall be designed so that the negative pressure from the circulating fan cannot affect the furnace combustion air supply nor draw combustion products from joints or openings in the furnace or flue pipe.
- (10) Return-air from a dwelling unit shall not be recirculated to any other dwelling unit.
- (11) Except for floor levels that are less than 900 mm above or below an adjacent floor level that is provided with a return-air inlet, at least one return-air inlet shall be provided in each floor level in a dwelling unit.
- (12) Provision shall be made for the return of air from all rooms by leaving gaps beneath doors, using louvred doors or installing return duct inlets.
- (13) Return-air inlets shall not be installed in an enclosed room or crawl space that provides combustion air to a furnace.