

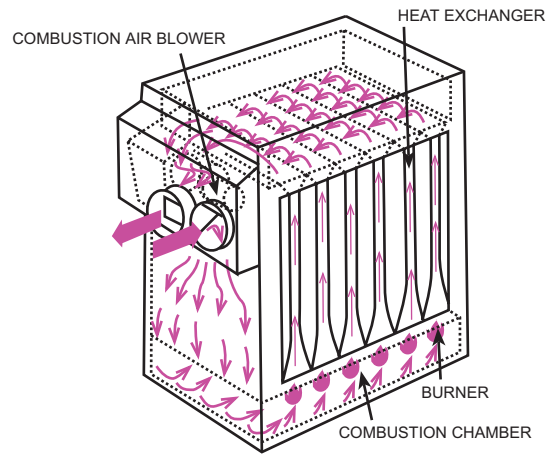
MODEL SC SEPARATED COMBUSTION VENTING ARRANGEMENTS

Reznor Separated Combustion Systems

For years, Reznor has pioneered in separated combustion system technology, eliminating “open flame” combustion problems. This has resulted in a complete line of Reznor products using the separated combustion principle-

- air for combustion is mechanically induced from outside the building, preventing dirt, lint, dust or other contaminants in the indoor atmosphere from entering the burner, pilot or combustion zone of the furnace,
- the air flow is metered to provide optimum and efficient combustion that is unaffected by negative building pressure or wind,
- after combustion, the air is exhausted back to the outdoor atmosphere.

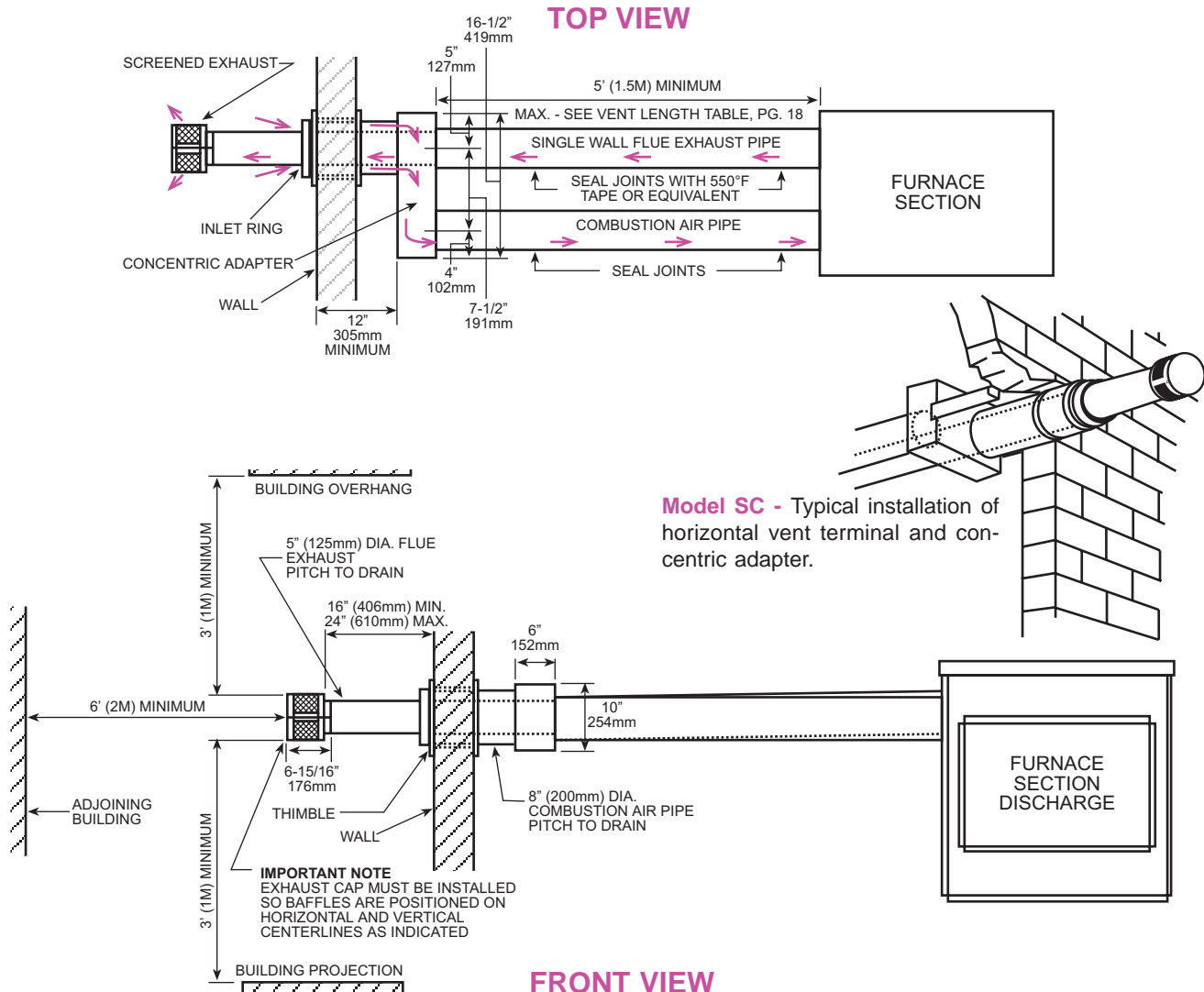
Reznor separated combustion products provide all of the benefits while requiring only one building penetration. See the venting illustration below and on the following page.



Horizontal Vent Terminal/Combustion Air Inlet Assembly - Fig. A

Illustrations show approved vent terminals and usage. No other venting arrangements are approved or certified for use with SC Models.

Both the horizontal and vertical assemblies include: concentric adapter, screened exhaust or exhaust cap, inlet ring or combustion air inlet, vent pipe rubber seal and a tube of high temperature silicone sealant.

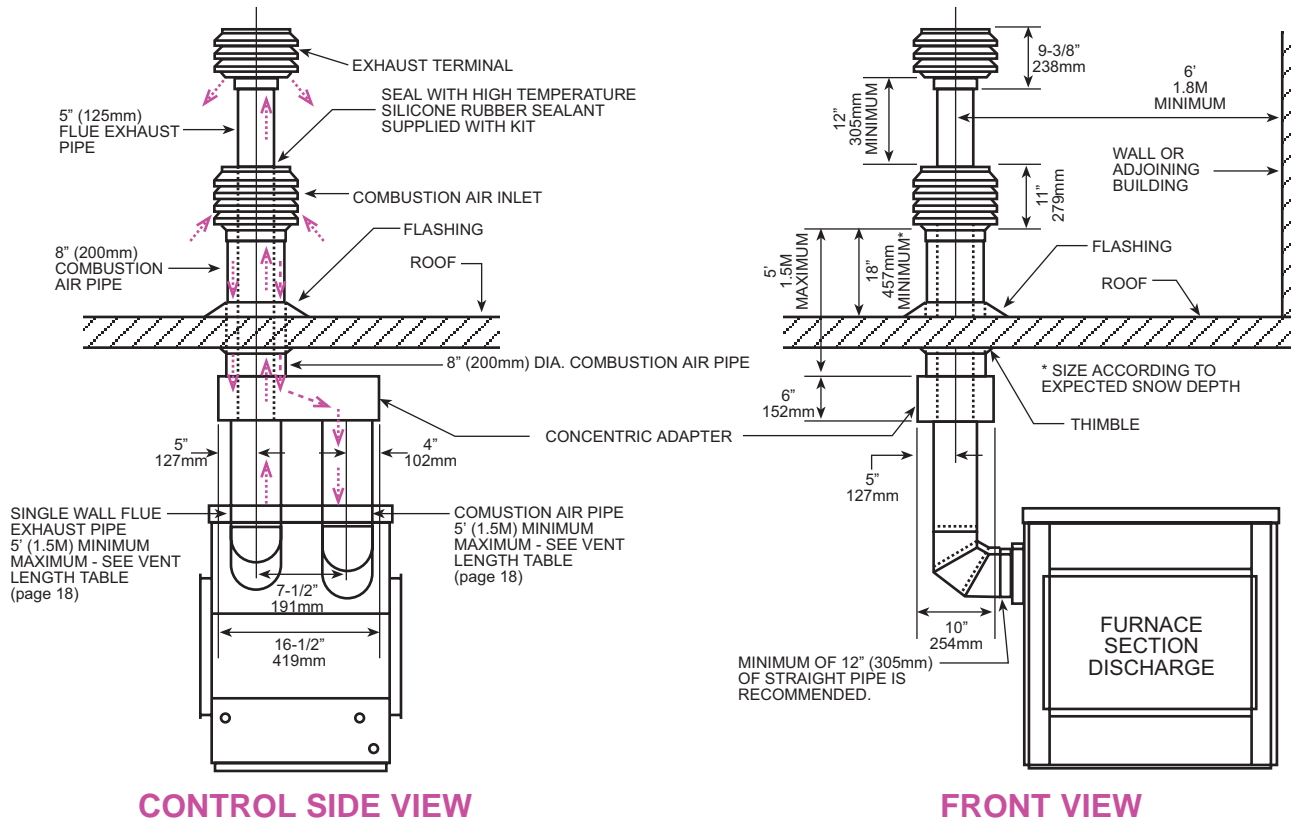


Model SC - Typical installation of horizontal vent terminal and concentric adapter.

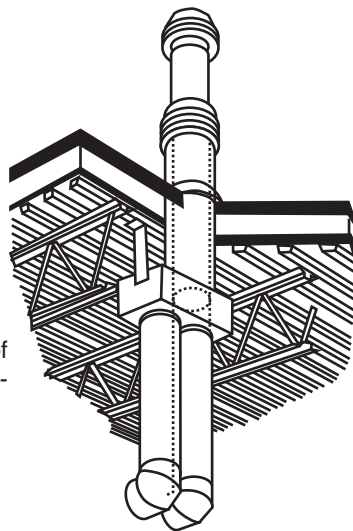
FRONT VIEW

MODEL SC SEPARATED COMBUSTION VENTING ARRANGEMENTS (cont'd)

Standard Vertical Vent Terminal/Combustion Air Inlet Assembly - Fig. B



Model SC - Typical installation of vertical vent terminal and concentric adapter.



For Model SC venting requirements, see next page.

MODEL SC VENTING REQUIREMENTS

Vent terminals are required as illustrated in Figure A or B. No other venting arrangements are approved or certified for use on SC Models.

All pipes are field-supplied and should be either 26 gauge or heavier galvanized steel or a material of equivalent durability and corrosion resistance or vent pipe approved for a Category III appliance. Single wall pipe is also recommended for combustion air pipes.

All joints of the 5" flue exhaust pipe within the confines of the 8" combustion air pipe must be sealed with the high temperature silicone rubber sealant included with the kit. Some connections require taper-type pipe connectors. When the diameter change is at the heater, install the connection within six inches (152mm) of the heater. When the diameter change is at the adapter box, install the connection within six inches (152mm) of the box.

VENT LENGTHS FOR SC SERIES 6 HEATERS		
SIZE	PIPE DIAMETER	MAXIMUM LENGTH
100	6 inch	40 feet
125-300	6 inch	50 feet
200-400	7 inch	70 feet
350-400	6 inch	30 feet
90° elbow equals 8 feet of pipe. 45° elbow equals 4 feet of pipe. Minimum vent length is 5 feet.		

NOTE: Thimble, flashing, flue pipe, combustion air pipe and taper-type connectors are field supplied. (A thimble is not required if wall or roof penetration is of noncombustible construction.)

PILOT AND GAS CONTROL DESCRIPTIONS

PILOT IGNITION SYSTEMS

MANUAL PILOT

Manual match-lit pilot. Pilot remains on 100% of time until pilot gas flow is shut off. Not recommended for makeup air applications or downstream from an air conditioning coil. Certified for use with natural and propane gas.

INTERMITTENT SPARK PILOT

Automatic lighting of pilot with an electronic spark on a call for heat. Pilot gas flow is shut off between heat cycles. Certified for use with natural and propane gas for outdoor units in the United States. Certified for use with natural gas only on indoor units installed in the United States. Certified for use with natural gas only for installation of indoor and outdoor units in Canada.

INTERMITTENT SPARK PILOT WITH 100% SHUT-OFF

Automatic lighting of pilot with an electronic spark on a call for heat. Pilot gas flow is shut off between heat cycles. This system also incorporates a lockout device which stops gas flow to the pilot if the pilot fails to light in 120 seconds. Reset of lockout requires manual interruption of thermostat cycle. Certified for use with natural or propane gas.

GAS CONTROL SYSTEMS

(Available with either natural or propane gas unless noted otherwise.)

HEATING APPLICATION OPTIONS

AG1 - ONE-STAGE CONTROL

Single-stage gas valve which cycles on at 100% fire on a call for heat. Thermostat is not included.

AG2 - TWO-STAGE CONTROL

Two-stage gas valve which fires at 100% or 50%, as required, on call by a remote two-stage thermostat. Thermostat not included.

AG7 - ELECTRONIC MODULATION (55°-90°F)

Solid state control system, providing close temperature control through related manifold pressure. On a call for heat from a remote electronic thermostat, controls modulate between 50% and 100%. Remote thermostat not included.

MAKEUP AIR APPLICATION OPTIONS

(Require Fan Control - page 19)

AG3 - TWO-STAGE CONTROL FROM DUCTSTAT (60°-110°F)

Two-stage gas valve which fires at 100% or 50% as required, on call from a unit-mounted, two-stage ductstat.

AG15 - TWO-STAGE CONTROL USING ELECTRONIC DUCTSTAT WITH REMOTE TEMPERATURE ADJUSTMENT (50°-130°F)

Same type of control as Option AG3, but the setpoint of the ductstat is adjustable from a remote temperature-selector. Includes factory-installed sensor and field-installed temperature-selector module with an adjustable stage-adapter module.

AG16 - TWO-STAGE CONTROL USING ELECTRONIC DUCTSTAT WITH REMOTE TEMPERATURE ADJUSTMENT (50°-130°F) AND TEMPERATURE DISPLAY

Same as Option AG15, plus a digital (liquid crystal) temperature-display module that provides continuous display of sensor reading.

AG6 - MECHANICAL MODULATION (50°-100°F)

Nonelectric control system, hydraulic capillary-actuated. Upon sensing a requirement for heat, control modulate between 50% and 100%.