



Furnace Change Out Inspection Checklist

City of Rancho Palos Verdes Community Development Department

This list comprises some of the common code violations when installing a FAU or AC unit.

It does not address every possible violation, nor is it intended as an instruction manual.

General Requirements

- ✓ Furnaces located in garages must be elevated to provide 18 inches separation between garage floor and sources of ignition of flammable vapors.
- ✓ Furnaces must be out of the path of vehicles or protected by ballards or elevated on a platform as above.
- ✓ Clearances to comply with UMC standards and manufacturers installation instructions. In case of conflicting requirements, the more restrictive dimensions (s) apply.
- ✓ The reuse of existing venting system may be allowed as long as the venting systems were originally code complying and remain safe to use. Transite (AC) vent material may not be relocated, altered or repaired to accommodate a furnace change out.
- ✓ Supply and return ducts are to be sized based upon UMC section 907.1. For blower-type furnaces, ducts shall be 2 square inch per 1000 BTU input rating of the furnace.
- ✓ Combustion air to comply with UMC and manufacturer requirements regarding size, location and screening etc. Generally, two combustion air openings are required, one each in the upper and lower 12 inch of the furnace closet, sized at 1 inch per square inch per 2000 BTU input rating of the furnace (horizontal comb air ducts) or 1 square inch per 4000 BTU (vertical comb air ducts).
- ✓ Gas fired furnaces are not allowed in bedrooms, bathrooms or closets which open directly into them.

Attic Furnaces

- ✓ Upright furnaces must be in a space more than 5' in height.
- ✓ A 30"x30" attic access opening must be provided within 20' of the furnace. (22"x30" allowed if furnace is removable and will fit through that opening).
- ✓ An unobstructed 24" wide catwalk must be provided from the access opening to the furnace.
- ✓ A passageway to the unit must be continuous and a minimum of 30'x30'.
- ✓ A light controlled by a switch must be provided.
- ✓ An electrical outlet must be provided at the unit.

Under floor Furnaces

- ✓ Support must be independent from face grill.
- ✓ Suspended furnaces must be 6" above the ground.
- ✓ Excavations to provide clearances must be 12" wider at sides and rear and 30" at the control side.
- ✓ If supported by the ground must be on a 3" elevated slab.
- ✓ Access opening & passageway must be 30" x 30" min.
- ✓ Unit must be within 20' opening
- ✓ A light controlled by a switch must be provided.
- ✓ An electrical GFCI outlet must be provided at the unit.

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(except for direct vent furnaces)

Clearances & Access

- ✓ 6" minimum clearance required in front of combustion chamber.
- ✓ Minimum door width of 24".
- ✓ Minimum 30" working space provided in front with door open.

Plenum Sizes (Supply and Return)

- ✓ Must be equal to collar outlet.
- ✓ Gravity type furnaces must be 7 sq. in. min. per 1000 BTU.
- ✓ Blower type furnaces must be 2 sq. in. min. per 1000 BTU.
- ✓ Heat pump units must be 6 sq. in. min. per 1000 BTU.

Return Air Inlet

- ✓ Must be 10' away from any appliance outlet or fireplace.
- ✓ Cannot be located in a bathroom, kitchen or closet.
- ✓ Air must be taken from an area that is 25% minimum of entire area served.

Note: Both electrical and mechanical permits are required for an AC installation.

Wall Furnaces

- ✓ Ceiling plates must be cut flush with the adjacent studs.
- ✓ Solid header plate must be attached.
- ✓ The first plate line must be open with spacer straps only, unless the wall ventilation opening exception is utilized.
- ✓ Subsequent plate lines must have fire stop spacers installed.
- ✓ A sheet metal barrier must be installed against building paper.
- ✓ Vent terminations must be 12' min. above bottom of furnace.
- ✓ Vent must be protected in the attic by a metal sleeve (12" above ceiling and 2" below roof sheathing).
- ✓ Furnace shall not be closer than 6" to a room corner.
- ✓ Door swings must be 12" min. away from furnace.
- ✓ Projections above furnace shall be 18" min. away.
- ✓ Room must be at least 50 cu. Ft. in area per 1000 BTU.
- ✓ Condensing unit must be on a pad at least 3 inches above grade.
- ✓ Line sets properly insulated, supported and fire wall penetrations adequately sealed.
- ✓ AC condensing units designed to be anchored in place by manufacturer shall be so anchored.
- ✓ Manufacturer required clearances shall be maintained.
- ✓ Manufacturer's installation instructions for the AC system shall be left on site of the inspector.