



Mechanical Rough Checklist

City of Rancho Palos Verdes Community Development Department

This is to be used as a general checklist; it is not inclusive of all code requirements & inspection criteria.

Attic / Forced Air:

- ✓ Attic – shall be provided with a light & switch by the access opening.
- ✓ Minimum opening for access to attic with equipment 30" x 22" or large enough to remove the unit.
- ✓ Maximum distance from opening 20 ft..
- ✓ Solid floor from access door minimum 24 inches wide.
- ✓ Minimum 30 inches deep platform in front of fire box.
- ✓ Minimum attic height 30".
- ✓ Primary condensate to terminate to the tailpiece of the lavatory, bathtub overflow or an approved location / Not drain to public way / shall be a minimum ¾" with a slope of 1/8".
- ✓ Secondary condensate to terminate in an obvious location.

Combustion Air:

- ✓ Minimum vent area 1 sq. in./4,000 BTU/Hr.each.
- ✓ Seismic support.
- ✓ Duct supports.
- ✓ Dampers shall not be installed in combustion air ducts.
- ✓ Attic – shall be provided with a light

Under floor / forced air:

- ✓ Minimum slab 3 inches above grade
- ✓ Minimum 6 inches above ground when suspended, 12 inches on each side (clearance).
- ✓ Required access to service equipment.
- ✓ Access door maximum 20 ft. to equipment (unobstructed, measured from the access to the equipment)
- ✓ Lighting with switch at or near access door.

Under floor / forced air con't:

- ✓ Minimum 18" clearance between floor joist and earth.
- ✓ Minimum clearance from duct to earth 4" encasement under concrete 2".
- ✓ Support flexible duct with 1 ½" straps every 4ft. T-6-6.
- ✓ Joints shall be taped or gasketed airtight.

Garage / Forced Air:

- ✓ Minimum 18" above floor and protected from vehicle damage.
- ✓ Ducts through fire-rated wall shall be a minimum 26 gauge (Dwellings only).
- ✓ Unconfined space is greater than 50 cubic ft. / 1000 BTU / Hr.
- ✓ Openings in upper and lower 12 inches.

Rough Mechanical - General:

- ✓ Equipment shall be listed for its use.
- ✓ Prohibited location for gas fired equipment, bedroom & bathroom & spaces that opens into these rooms.
- ✓ Horizontal vent maximum 75% to the length of the vertical (Horizontal equals less than 45 degrees from vertical, minimum vent slope ¼" per foot FAU).
- ✓ Vent terminations / property line / openings in a building / above the roof / to air intake.
- ✓ Main shut off valve readily accessible.
- ✓ Gas test – 10 psi for 15 min.
- ✓ Shutoff valves maximum 3ft ahead of the union (exception domestic range & clothes dryer).
- ✓ Gas connector shall not pass through a building wall or appliance wall.
- ✓ Required strapping of ducts.
- ✓ Clearance to single wall B vents 6", to double wall B vents 1".
- ✓ Roof top equipment screening requirements.
- ✓ R-1 or U occupancy equipment may be accessible by a portable ladder when a single story.

Rough Mechanical – General con't:

- ✓ Equipment on roofs having a slope of steeper than 4 inches, 12 shall have a level service platform minimum 30" deep 30" wide located in front of the equipment for service.
- ✓ The platform shall have a railing minimum 42" ht. to prevent passage of sphere of 21" diameter where a side is within 10 ft of a drop greater than 30".
- ✓ Ladder and catwalks for roof top equipment – ladders minimum 14" wide maximum spacing 14" rungs, toe space 6", have side rails that extend at least 30" above the roof with not obstructions. Catwalks-minimum 24" wide and railings as required for service platforms.

Clothes Dryer / Domestic / Commercial:

- ✓ Flexible connector maximum 6 ft & not concealed
- ✓ Duct shall be smooth metal inside / maximum 14ft with two 90-degree elbows (subtract 2ft for each additional 90.) or manufactures instructions, shall terminate to the outside.
- ✓ Minimum diameter 4".
- ✓ No screws allowed into airflow.
- ✓ Vent termination minimum 3ft from property line.
- ✓ Back draft damper required and no screens.
- ✓ When in a closet minimum opening of 100 sq. inches for make up air.

Bathroom Fan:

- ✓ Terminate minimum 3ft from opening or property line.
- ✓ Back draft damper.

Range:

- ✓ Vertical clearance 30" minimum to combustibles (24" if ¼" millboard or 28 gauge metal used).
- ✓ Gas valve immediately ahead of connector.

Range Hood:

- ✓ Terminate minimum 3ft from an opening in building or property line.
- ✓ Smooth interior, 26 gauge metal.
- ✓ Back draft damper.

Wall Furnace:

- ✓ Hold-down plate screwed to header.

- ✓ Cut top & floor plate's flush to stud.
- ✓ Verify venting & clearances to combustibles.
- ✓ Verify Installation with installation specs.
- ✓ Ventilate first ceiling plate above unit.
- ✓ Fire stop spacers beyond first top plate not in first stud space,
- ✓ Sleeve into attic 12 inches if ventilation required (2 inches minimum under roof sheathing).
- ✓ Clearance to door 12" clearance to corner 6" clearance to overhangs 18".

Grease Ducts Type 1:

- ✓ Exhaust outlets type 1 shall terminate 2ft above the roof, 10ft from parts of the same and neighboring buildings. 10ft from adjacent property, air intakes, building openings, 10ft above adjacent property lines, 10ft above adjoining grade.
- ✓ Clearance type 1 clearance to unprotected combustible construction minimum 18" may be reduced to not less than 3" provided the combustible construction is protected with 1 hour. UMC
- ✓ Type 1 hood penetrating a ceiling, floor, or wall shall be in an enclosure of at least 1 hour (2 hour for type 1 & 2 construction) the duct shall be separated from the enclosure by a minimum 3" maximum 12".
- ✓ Exposed grease duct systems shall have clearance from unprotected combustible construction of at least 18". The clearance may be reduced to not less than 3" provided the combustible construction is protected with material for 1 hour.
- ✓ Ducts shall be installed sloped not less than 1/4" unit in 12" where horizontal ducts exceed 75ft the slope shall not be less than 1 unit in 12.
- ✓ Canopy-type commercial hoods shall overhang or extend a horizontal distance of not less than 6" the vertical distance between the lip of the hood shall not exceed 4ft.
- ✓ Rated grease enclosures shall have access doors of the same rating at every 10ft and change of direction.
- ✓ Sprinklers or other fire-protection devices shall be installed within ducts having a cross sectional dimension exceeding 10" for ducts conveying flammable vapors or fumes. Sprinklers shall be installed at 12ft intervals in horizontal ducts and at change of directions. In vertical runs, at the top and at alternate floor levels.