



City of Oceanside
Building Division
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Oceanside, Ca 92054
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Minimum submittal requirements for heating and cooling systems in new construction dwellings

The heating and air conditioning systems installed in new residential dwellings must be designed in accordance with the California Green Building Code, the Energy Code and the Mechanical Code.

The use of ACCA forms or equivalent design forms will result in more efficient and balanced HVAC systems that will provide homeowners with a more comfortable interior environment.

Two copies of the following are required:

1. ACCA Manual J or equivalent calculations. The calculation package shall be based on the orientation of the home on the building lot. Calculations shall show the size of the appliances: furnace and air conditioner condenser. Include the performance data for the equipment used.
2. ACCA Manual S or equivalent calculations for equipment selection.
3. ACCA Manual D or equivalent calculations are required for each new installation. These calculations and layout sheets will need to be on site at time of mechanical rough inspection. The layout sheets will need to show all duct locations and sizes, register sizes, return-air opening sizes, duct run length and duct sizes. Limited changes to this plan will be allowed in the field but approval of these field changes will be solely at the discretion of the field inspector.
4. An equipment and duct mechanical layout sheet is required to be part of the building plans. Show equipment and register locations as well as each duct size.

Recommended notes:

Typical flex duct instructions call for maximum sag of 1/2" per foot and minimum 1 1/2" wide support strapping.

The routing of flexible duct, the number of bends, the degrees in each bend, and the amount of sag or direction changes (snaking) allowed between support joints will have serious effects on system performance due to the increased resistance each introduces. Use the minimum length of flexible duct to make connections.

Avoid installations where exposure to direct sunlight can occur, e.g. turbine vents, sky lights, canopy windows, etc. Prolonged exposure to sunlight will cause degradation of the vapor barrier. Direct exposure to UV light from a source lamp installed within the HVAC system will cause degradation of some inner core/liner materials.

Repair torn or damaged vapor barrier/jacket with duct tape listed and labeled to Standard UL 181B. If internal core is penetrated, replace flexible duct or treat as a connection.

Do not bend ducts across a sharp corner of building materials such as joists or truss supports.

The bend radius at the center line of ducts shall be equal to or greater than one duct diameter.