CERTIFICATE OF COMPLIANCE	MECH-1C-ALT-HVAC
Prescriptive HVAC Alterations	**(Page 1 of 2)**

Project Name/Address:	Date:

Enforcement Agency:	Permit Number:	Climate Zone

NOTE: This form may be used only for single zone constant volume systems. This form shall not be used for newly constructed buildings, additions, or VAV multi-zone systems.

Select one "Existing Building Project Type" and complete the corresponding steps listed in the "Complete Steps" column below. *Note: After installation of HVAC units and/or ducts, the Installation and the applicable Acceptance Forms are required to be submitted for verification by the field inspector and a copy shall be made available to building owner.*

Existing Building Project Type (select one):	Complete Steps:
☐ *New or Replacement HVAC unit*	*1, 2, 3, 4, 5 and 6 (If criteria is met), 7 (When economizer is installed)*
☐ *New or Replacement ducts*	*1, 2, 3, 4, 5 and 6 (If criteria is met)*
☐ *New Space Conditioning System (HVAC and ducts)*	*1, 2, 3, 4, 5 and 6 (If criteria is met), 7 (When economizer is installed), 8 (DCV)*

☐ Step 1 – Ducts and HVAC Equipment

Equipment Type, Efficiency and Capacity[1]	Floor Area Served[2]	Distribution Type and Location[3]	Duct Insulation R-Value[4]	Thermostat Type[5]	Configuration (Central, Split, Package)

1. Indicate Equipment Type; Air Handler, Condenser, Heat Pump, Evap. Cooling, Boiler, Electric Resistance, etc. & HVAC Capacity; or Ducts (new or replaced).
2. If the Floor Area Served (per duct system) exceeds 5,000 square feet, skip Steps 5 and 6.
3. Indicate Type and Location (Ducts on roof, ducts in conditioned space, ducts in attic, etc.)
4. Newly installed or replaced duct insulation: R-8 in unconditioned space or in buried concrete slab; R-4.2 in indirectly conditioned space; and R-0 for conditioned space.
5. Existing non-setback thermostats shall be replaced with setback thermostats for all altered units, and all newly installed space conditioning systems requiring a thermostat shall be equipped with a setback thermostat. Setback thermostats shall meet the requirements of Section 112(c).

☐ Step 2 – Mechanical Ventilation Calculations

Both options (Area and Occupancy Basis) shall be completed to determine the minimum mechanical ventilation rates and Column I must be the greater of either Column E or H.

		AREA BASIS			OCCUPANCY BASIS			
A	B	C	D	E	F	G	H	I
Zone/ System	Type of Use	Condition Area (ft²)	CFM[1] Per ft²	Min CFM[2] C x D	Num of People[2]	CFM per Person	Min CFM[3] F x G	Design Vent. CFM Larger of E or H
						15		
						15		
						15		

AREA BASIS

1. Minimum ventilation rate (CFM/ ft²) for the Type of Use in the Table below.
2. The conditioned floor area of the space multiplied by the applicable minimum ventilation rate from Table 4-1 CFM/ft² Column below. For additional ventilation rates, see Table 4-3 and use the values listed in the *Required Ventilation Column* in the Nonresidential Compliance Manual. This provides dilution for the building-borne contaminants like off-gassing of paints and carpets.

OCCUPANCY BASIS

2. For spaces with fixed seating such as a theater or auditorium, the expected number of occupants is the number of fixed seats.
3. The expected number of occupants or people multiplied by 15 cfm per person.

Type of Use	CFM per ft²	Type of Use	CFM per ft²
Auto repair workshops	1.50	High-rise residential	Ventilation Rates Specified by the CBC
Barber shops	0.40	Hotel guest rooms (less than 500 ft²)	30 cfm/guest room
Bars, cocktail lounges, and casinos	0.20	Hotel guest rooms (500 ft² or greater)	0.15
Beauty shops	0.40	Retail stores	0.20
Coin-operated dry cleaning	0.30	All Others[1]	0.15
Commercial dry cleaning	0.45		

1. For additional ventilation rates, see Table 4-3 in the Nonresidential Compliance Manual

Project Name/Address:	**Date:**

Installation Certificate requirement: *The installing contractor shall complete and sign an Installation Certificate (MECH-INST) to certify that the installed HVAC features, materials, components, or manufactured devices (the installation) conforms to all applicable codes and regulations, and the installation is consistent with any required plans and specifications approved by the enforcement agency*

Certificate of Acceptance requirement: *After completing the installation, all required acceptance testing shall be completed, and all applicable Certificate of Acceptance forms are required to be* ***filled out completely, signed,*** *and made available to the enforcement agency at final inspection. Copies of the completed, signed Certificate of Acceptance forms shall also be made available to the building owner.*

☐ **Step 3 - MECH-2A - Outdoor Air Acceptance** – *This test is required for newly installed or replacement HVAC Systems (HVAC equipment and ducts) to verify minimum outside air is provided in accordance with Section 125 of the Energy Standards.*

☐ **Step 4 – MECH-3A - Constant Volume, Single Zone Unitary A/C and HP Controls Acceptance**– *This test is required for new or replaced constant volume, single-zone unitary air conditioners and heat pumps to verify controls function, including: thermostat installation and programming, supply fan, heating, cooling, and damper operation in accordance with Section 125 of the Energy Standards.*

☐ **Step 5 – MECH-4A - Air Distribution Systems Acceptance** – *This test is required when the new or altered system is a single zone, constant volume system serving 5,000 ft² or less, and 25% or more of the duct surface area is located in the outdoors, unconditioned space, or a ventilated attic in accordance with Section 125 of the Energy Standards.*

☐ **Step 6 - MECH-4-HERS - Air Distribution System Leakage Diagnostic** – *This test is required to be completed by a HERS Rater when the new or altered system meets the criteria in Step 5 to verify duct leakage in accordance with Section 125 of the Energy Standards. The HERS Rater shall register the MECH-4-HERS Form with an approved HERS Provider.*

☐ **Step 7 - MECH-5A - Economizer Testing Acceptance** - *This test is required for newly installed or replacement HVAC equipment when an economizer is installed in accordance with Section 125 of the Energy Standards.*

☐ **Step 8 - MECH-6A - Demand Control Ventilation Systems (DCV) Acceptance** - *This test is required for newly installed DCV systems or replacement of HVAC equipment with the following characteristics to verify controls and sensors function in accordance with 125 of the Energy Standards. : A. They have an air economizer; and B. They serve a space with a design occupant density, or a maximum occupant load factor for egress purposes greater than or equal to 25 people per 1000 ft² (40 square foot per person); and C. They are either:*
i. Single zone systems with any controls; or
ii. Multiple zone systems with Direct Digital Controls (DDC) to the zone level.

Documentation Author's Declaration Statement

- I certify that this Certificate of Compliance documentation is accurate and complete.

Name:	Signature:
Company:	Date:
Address:	If Applicable CEA # CEPE #
City/State/Zip	Phone:

Principal Mechanical Designer's Declaration Statement

- I am eligible under Division 3 of the California Business and Professions Code to accept responsibility for the mechanical design.
- This Certificate of Compliance identifies the mechanical features and performance specifications required for compliance with Title 24, Parts 1 and 6 of the California Code of Regulations.
- The design features represented on this Certificate of Compliance are consistent with the information provided to document this design on the other applicable compliance forms, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.

Name:	Signature:
Company Name:	Date:
Address:	License #
City/State/Zip:	Phone: