MECHANICAL SYSTEMS

CERTIFICATE OF COMPLAINCE

Project Name:	Enforcement Agency:
Dwelling Address:	Permit Number:
City and Zip Code:	Date Permit Issued:

A. GENERAL INFORMATION

01	Project Location (city)				04	Total Conditioned Floor Area					
02	Climate Zone				05	Total Unconditioned Floor Area					
03	Occupancy Types Within Project:				06	# of Stories (Habitable Above Grade)					
☐	Office	☐	Retail	☐	Warehouse	☐	Hotel/Motel	☐	School	☐	Support Areas
☐	Low-Rise Residential	☐	Commercial	☐	Healthcare Facility	☐	Parking Garage	☐	Theater	☐	Sports Arena
☐	Auditorium	☐	Library	☐	Relocatable School Building	☐	Medical Clinic	☐	Data Center	☐	Convention Center
☐	Classroom	☐	Gymnasium	☐	Grocery Store	☐	Religious Facility	☐	Financial Institution	☐	All Others
☐	Restaurant/Commercial Kitchen										

B. PROJECT SCOPE

This table includes mechanical systems or components that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in §140.4, 170.2(b) or §141.0(b)2 and 180.2(b)2 for alterations.

My project consists of (check all that apply)

01		02		03	
Air System(s)		Wet System Components		Dry System Components	
☐	Heating Air System	☐	Water Economizer	☐	Air Economizer
☐	Cooling Air System	☐	Pumps	☐	Electric Resistance Heat
☐	Ventilation (including DOAS, ERV, HRV systems)	☐	System Piping	☐	Fan Systems
Mechanical Controls		☐	Cooling Towers	☐	Ductwork (existing to remain, altered or new)
		☐	Chillers	☐	Zonal Systems/ Terminal Boxes
☐	Mechanical Controls (existing to remain, altered or new)	☐	Boilers		

C. COMPLIANCE RESULTS

Table C will indicate if the project data input into the compliance document is compliant with mechanical requirements. This table is not editable by the user. If this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D., or the table indicated as not compliance for guidance.

01		02		03		04		05		06		07		08	09
System Summary §110.1, §110.2, §140.4, §170.2(c), §141.0(b), §180.2(b) 2	AND	Pumps §140.4(k), §170.2(c)4I	AND	Fans/ Economizers §140.4(c), §140.4€, §140.4(p), §170.2(c)	AND	System Controls §110.2, §120.2, §140.4(f), §140.4(r), §170.2(c)	AND	Ventilation §120.1, §160.2	AND	Terminal Box Controls §140.4(d), §170.2(c)4B	AND	Distributio n §120.3, §120.4, §160.2, §160.3, §141.0(b) 2D, §180.2(b) 2Bii	AND	Cooling Towers §110.2(e)2	**Compliance Results**
(See Table F)		(See Table G)		(See Table H)		(See Table I)		(See Table J)		(See Table K)		(See Table L)		(See Table M)	
❍ Yes ❍ No	AND	❍ Yes ❍ No	AND	❍ Yes ❍ No	AND	❍ Yes ❍ No	AND	❍ Yes ❍ No	AND	❍ Yes ❍ No	AND	❍ Yes ❍ No	AND	❍ Yes ❍ No	❍ **COMPLIES** ❍ **COMPLIES WITH EXCEPTIONAL CONDITIONS"** ❍ **DOES NOT COMPLY**
Mandatory Measures Compliance (See Table Q for Details)															❍ **COMPLIES** ❍ **DOES NOT COMPLY**

D. EXCEPTIONAL CONDITIONS

This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

E. ADDITIONAL REMARKS

This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

F. HVAC SYSTEM SUMMARY (DRY & WET SYSTEMS)

This table is used to demonstrate compliance for mechanical equipment with mandatory requirements found in §110.1 and §110.2(a) and prescriptive requirements found in §140.4 (a), §140.4(b), §170.2(c)1, §170.2(c)3, §140.4(k) or §141.0(b)2 and §180.2(b)2 for alterations.

Space Conditioning System Information

01	02	03	04	05	06	07
Name or Item Tag	Quantity	System Serving	System Status	Space Type	Utilizing Recovered Heat	Distribution System Type
					☐	

Dry System Equipment Sizing (includes air conditioners, condensers, heat pumps, VRF, furnaces, unit heaters and DOAS systems)

01	02	03	04	05	06	07	08	09	10	11
Name or Item Tag	Equipment Category per Tables 110.2, §140.4(a)2 and §170.2(c)3ai	Equipment Type per Tables 110.2 & Title 20	Smallest Size Available[1] §140.4(a) & §170.2(c)1	Equipment Sizing per Mechanical Schedule (kBtu/h) §140.4 (a&b), §170.2(c)1 & §170.2(c)2						
				Heating Output2,3			Cooling Output[2,3]		Load Calculations[3,4]	
				Per Design (kBtu/h)	Rated (kBtu/h)	Supp. Heating Output (kBtu/h)	Sensible Per Design (kBtu/h)	Rated (kBtu/h)	Total Heating Load (kBtu/h)	Total Sensible Cooling Load (kBtu/h)

[1] FOOTNOTES: Equipment shall be the smallest size, within the available options of the desired equipment line, necessary to meet the design heating and cooling loads of the building per §140.4(a) and §170.2(c)1. Healthcare facilities are excepted.

[2] It is common practice to show rated output capacity on the equipment schedule. Sensible cooling output comes from specification sheet tables.

[3] If equipment is heating only, leave cooling output and load blank. If equipment is cooling only, leave heating output and load blank.

[4] Authority Having Jurisdiction may ask for load calculations used for compliance per §140.4(b) and §170.2(c)2.

Dry System Equipment Efficiency (other than Package Terminal Air Conditioners (PTAC), Package Terminal Heat Pumps (PTHP), DX-DOAS and Dual Fuel Heat Pumps)

01	02	03	04	05	06	07	08	09	10
Name or Item Tag	Size Category (Btu/h)	Heating Mode				Cooling Mode			
		Rating Condition (°F)	Efficiency Unit	Minimum Efficiency Required per Tables 110.2/ Title 20	Design Efficiency	Refrigerant Loop Heat Recovery	Efficiency Unit	Minimum Efficiency Required per Tables 110.2/ Title 20	Design Efficiency

Dry System Equipment Efficiency (Package Terminal Air Conditioners (PTAC) and Package Terminal Heat Pumps (PTHP) only)

01	02	03	04	05	06	07
Name or Item Tag	Heating Mode			Cooling Mode		
	Rated Output Capacity (kBtu/h)	Minimum COP Required per Table 110.2-E	Design COP	Rated Output Capacity (kBtu/h)	Minimum EER Required per Table 110.2-E	Design EER

Boiler Efficiency and Controls

Boiler System Serving:										
☐	25% of annual space heating is provided by on site renewable energy, site recovered energy, or heat recovery chillers									
☐	50% or more of the design heating load is served using permiter convective heating, and/or radiant panels									
☐	Installed In Multifamily Building									
☐	Boiler system added to an existing building									
01	02	03	04	05	06	07	08	09	09	10
Boiler System Serving:	Equipment Type[1]	Qty	Rated Input Capacity (Btu/h)[2, 3]	Rated Efficiency	Minimum Efficiency Required per §110.2	Efficiency Unit	Boiler Controls per §140.4(k) & §170.2(c)Iiii		High Capacity Boiler Exceptions	HVAC Hot Water Supply Temperature §120.2(I)
							Isolation Valve	Temperature Reset		
System Efficiency				*Minimum System Efficiency Required per Tables 110.2/ Title 20*						

[1] FOOTNOTES: Use LMCC-PLB to document compliance with domestic hot water and service water heating systems

[2] Maximum capacity-maximum ratings per the certified unit capacity

[3] Includes oil-fired (residual)

Chiller & Air To Water Heat Pump Efficiency and Controls

01	02	03	04	05	06	07	08	09	10
Name or Item Tag	Equipment Type	Qty	Size Category[1] (Tons)	Chiller Efficiency "Path B" Exception per §140.4(i) & §170.2(c)g	Rated Efficiencies	Efficiencies Required per §110.2[2]	Efficiency Unit	Controls per §140.4(k) & §170.2(c)I	
								Isolation Valve	Temperature Reset

[1] FOOTNOTES: Chilled water plants shall not have more than 300 tons provided by air-cooled chillers. Exceptions may apply per §140.4(j).

[2] Efficiency required is a minimum when "EER" or "COP" is the Efficiency Unit in column 08. It is also a minimum when "IPLV" is the unit for air-cooled, absorption, and water cooled gas engine chillers. Efficiency required is a maximum when "kW/ton" is the Efficiency Unit and when "IPLV" is the unit for water cooled electrically operated chillers.

DX-DOAS EFFICIENCY

01	02	03	04	05	06	07	08
Name or Item Tag	Equipment Type	Quantity	Energy Recovery	Rating Condition	Rated Efficiencies	Efficiency Unit	Minimum Efficiency

Dual Fuel Heat Pump

01	02	03	04	05	06	07	08	09	10	11
Name or Item Tag	Equipment Category	Equipment Type	Size Category (Btu/h)	Heating Mode				Cooling Mode		
				Rating Condition (°F)	Efficiency Unit	Minimum Efficiency Required per Tables 110.2/ Title 20	Design Efficiency	Efficiency Unit	Minimum Efficiency Required per Tables 110.2/ Title 20	Design Efficiency

Heat Rejection Equipment (Cooling Towers, Condensers, Waterside Economizers) Efficiency and Controls

01	02	03	04	05	06	07	08	09	10	11	12
Name or Item Tag	Equipment Type[1]	Qty	Rating Condition (°F)	Rated Performance	Minimum Required Performance per Table 110.2-E, §140.4(h)5 & §170.2(c)fv	Performance Unit	Fan Speed Control §140.4(h)1	Tower Flow Turndown §140.4(h)2	Fan Control in Multiple Cell Equipment §140.4(h)4	Economizer Controls §140.4(e)	Condenser Water Temp Reset Controls

[1] FOOTNOTES: Centrifugal fan open-circuit towers are not allowed for rated capacities ≥ 900 gpm at 95°F condenser water return, 85°F condenser water supply and 75°F outdoor wet-bulb temperature. Exceptions may apply per §140.4(h)4.

Electric Resistance Heating

01	02	03	04
Name or Item Tag	Equipment Description	Output Capacity (kW)	Applicable Exception to §140.4(g) Allowing Electric Resistance Heating

Mechanical Heat Recovery

01	02	03	04	05	06	07
Name or Item Tag	Coincident Peak Cooling Load of All High Load Spaces	Design Capacity of All Mechanical Cooling Systems[2]	Design Capacity of All Service Water Heating Systems[1]	Design Capacity for all space heating systems	Simultaneous Mechanical Heat Recovery	Heat Recovery Systems Shall: - Transferring the lesser of the following from spaces in cooling to spaces in heating: - 25% of the peak heat rejection of the cooling system - 25% of design capacity of all service water heating systems + design capacity of all space heating systems - Heat or preheat the service water heating to the smaller of: - 30% of the peak heat rejection of the cooling system; or - 30% of design capacity of all service water heating systems

G. PUMPS

This table is used to demonstrate compliance with Prescriptive hydronic system requirements found in §140.4(k) & §170.2(c)4I applicable to pumps < 5hp.

01	02	03	04	05	06	07	08
Name or Item Tag	Equipment Type	Qty	HP	Controls per §140.4(k) & §170.2(c)4I			
				Variable Flow	Hydronic Heat Pump Isolation	VSD on Pumps > 5HP	Differential Pressure Sensor

H. FAN SYSTEMS & AIR ECONOMIZERS

This table is used to demonstrate compliance with prescriptive requirements found in §140.4(c), §140.4(e) §140.4(m), §170.2(c)3 & §170.2(c)4A for fan systems. Fan systems serving only process loads are exempt from these requirements and do not need to be included in Table H.

System Name:		Quantity		Fan System Status:		System Zoning		Serving Dwelling Units		Fan System Airflow (cfm)		Site Elevation		Economizer	
01	02	03	04						05	06	07	08	09	10	11
Fan Name or Item Tag	Fan Type	Qty	Components						Airflow Through Component (%)	Water Gauge (w.g.)	Allowance		Design		
											Component Allowance	Fan Allowance[3] (watt/cfm)	Design Electrical Input Power Method	Motor Nameplate Horsepower	Design Electrical Input Power (kw)
									Fan System Allowance[3] (kW)				Fan System Electrical Input Power (kW)		

[1] *Fans serving spaces with design background noise goals below NC35*

[2] Low-turndown single-zone VAV fan system must be capable of and configured to reduce airflow to 50 percent of design airflow and use no more than 30 percent of the design wattage at that airflow. No more than 10 percent of the design load served by the equipment shall have fixed loads.

[3] Fan system allowance includes fan system base allowance

[4] Filter pressure loss can only be counted once per fan system

[5] Complex Fan System means a fan system that combines a single cabinet fan system with other supply fans, exhaust fans, or both

[6] Computer room economizers must meet requirements of §140.9(a) and will be documented on the NRCC-PRC-E document.

[7] FOOTNOTE: Indoor fans meeting the requirements of 140.4(a)3D shall turn off when there is no demand for heating or cooling in the space. At 66% air flow the power draw shall be no more than 51% of the fan power at full fan speed and at 33% airflow the power draw shall be no more than 12% of the fan power at full fan speed.

Dwelling Unit Fan Efficacy & Energy/Heat Recovery 170.2(C)3b

01	02	03	04	05	06	07	08	09	10	11
Fan System Name or Item Tag	Qty	System Dwelling Units	Forced Air System	System Airflow (cfm)	Design Power (kW)	Design Watts/CFM §170.2(c)3b	Maximum Watts/CFM §170.2(c)3b	ERV/HRV §170.2(c)3biv	Design Sensible Recovery/Effectiveness	Required Sensible Recovery/Effectiveness

Exhaust Air Heat Recovery 140.4(Q), 170.2(C)4o

01	02	03	04	05	06	07	08	09	10	11
Fan System Name	Qty	Hours of Operation Per Year	Design Supply Airflow Rate	Outdoor Airflow	% Outdoor Air at Full Design Airflow	Exemptions to Exhaust Air Heat Recovery Requirement per §140.4(q) & §170.2(c)4o	Exhaust Air Heat Recovery §140.4(q) & §170.2(c)4o	Type Of Heat Recovery Rating	Required Recovery Ratio	Energy Recovery Bypass

Dedicated Outdoor Air System (DOAS)

01	02	03	04	05	06
Name or Item Tag	Quantity	Delivered Directly To The Space	DOAS Fan Control	Multi-Zone DOAS with Cooling §140.4(p)4 & §170.2(c)4N	Multifamily DOAS

Fan Energy Index (FEI)

01	02	03
Name or Item Tag	FEI Exception	FEI

I. SYSTEM CONTROLS

This table is used to demonstrate compliance with mandatory controls in §110.2 and §120.2 and prescriptive controls in §140.4(f) and (n) or requirements in §141.0(b)2E for altered space conditioning systems.

01	02	03	04	05	06	07	08	09	10
System Name	System Zoning	Conditioned Floor Area Being Served (ft^2)	Thermostats §110.2(b), (c)[1], §120.2(a), §160.3(a)2a or §141.0(b)2E & §180.2(b)2	Shut-Off Controls §120.2€ & §160.3(a)2d	Isolation Zone Controls §120.2(g) & §160.3(a)2f	Demand Response §110.12, §120.2(b) & §160.3(a)2b	Supply Air Temp. Reset §140.4(f) & §170.2(c)4d	Window Interlocks per §140.4(n) & §170.2(c)4d	Direct Digital Control (DDC) per §110.12

[1] *FOOTNOTES: Gravity gas wall heaters, gravity floor heaters, gravity room heaters, non-central electric heaters, fireplaces or decorative gas appliances, wood stoves are not required to have setback thermostats.*

J. VENTILATION AND INDOOR AIR QUALITY

This table is used to demonstrate compliance with mandatory ventilation requirements in §120.1 and §120.2(e)3B for all nonresidential, high-rise residential and hotel/motel occupancies. For alterations, only ventilation systems being altered within the scope of the permit application need to be documented in this table. In lieu of this table, the required outdoor ventilation rates and airflows may be shown on the plans or the calculations can be presented in a spreadsheet.

01	☐	Check the box if the project is showing ventilation calculations on the plans, or attaching the calculations instead of completing this table.		
02	☐	Check this box if the project includes Nonresidential, Hotel/Motel spaces or Multifamily Common Use Spaces	Check this box if the project includes new or altered multifamily dwelling units	☐
03	☐	Check the box if the project is using natural ventilation in any nonresidential spaces to meet required ventilation rates per §120.1(c)2.		

Nonresidential Hotel/ Motel and Multifamily Common Use Ventilation Systems

04		05			06			07	
System Name:		System Design OA CFM Air Flow[1]			System Design Transfer Air CFM			Air Filtration per §120.1(c), §141.0(b)2, 160.2(c)1 and [2]	
08	09	10	11	12	13	14	15	16	
Space Name or Item Tag	Mechanical Ventilation Required per §120.1(c)3[3] & §160.2(c)3					Exh. Vent. per §120.1(c)4 & §160.2(c)4		DCV or Occupant Sensor Controls per §120.1(d)3, §120.1(d)5 & §120.2(e)3[6,] §160.2(c)5d, §160.2(c)5e & §160.2(c)diii	
	Occupancy Type[4]	Conditioned Floor Area (ft^2)	# of showerheads/ toilets	# of people[5]	Required Min OA CFM	Required Minimum CFM	Provided per Design CFM		
								DCV	
								Occ Sensor	
17	Total System Required Min OA CFM					18	Ventilation for this System Complies?		

[1] FOOTNOTES: System CFM should include both mechanical and natural ventilation for the zone/system.

[2] Air filtration requirements apply to the following three system types per §120.1(c)1A: space conditioning systems utilizing ducts to supply air to occupiable space; supply-only ventilation systems providing outside air to occupiable space; supply side of balanced ventilation systems including heat recovery and energy recovery ventilation systems providing outside air to occupiable space.

[3] Uniform Mechanical Code may have more stringent ventilation requirements; the most stringent code requirement takes precedence.

[4] See Standards Tables 120.1-A and 120.1-B.

[5] For lecture halls with fixed seating, the expected number of occupants shall be determined in accordance with the California Building Code.

[6] §120.2(e)3 requires systems serving rooms that are required by §130.1(c) to have lighting occupancy sensing controls to also have occupancy sensing zone controls for ventilation. Examples of spaces which require lighting occupancy sensors include offices 250ft^2 or smaller, multipurpose rooms less than 1,000ft^2, classrooms, conference rooms, restrooms, aisles and open areas in warehouses, library book stack aisles, corridors, stairwells, parking garages, and loading and unloading zones, unless excepted by §130.1(c).

[7] Air classification and recirculation limitations of air shall be based on the air classification as listed in Table 120.1-A or Table 120.1-C, and in accordance with the requirements of Sections 120.1(g)1 through 4

Multifamily Dwelling Unit Ventilation Systems

☐	Check the box if the system is using continuous ventilation to meet the ventilation requirements per §160.2(b)2Aivb2										
19	20	21	22	23	24	25	26	27		28	29
Space Name or Item Tag	System Type	Mechanical Ventilation Required per §120.1(b)2 & §160.2(b)2				Ventilation per Design		Local Exhaust		Air Filtration per 120.1(c) & §160.2(b)1	Compartmentalization test[5]
		Conditioned Floor Area (ft²)	# bedrooms	# dwelling units	Required Min OA CFM [1]	Supply Air CFM	Exhaust CFM				
								☐	Bathroom/Kitchen IAQ		
								☐	Bathroom/Kitchen IAQ & Vent.		
								☐	Kitchen Range Hood [2]		
								☐	Bathroom/Kitchen IAQ		
								☐	Bathroom/Kitchen IAQ & Vent.		
								☐	Kitchen Range Hood [2]		
30	Is this a balanced system? [4]				31	Meeting Outside Air Requirements?					

[1] FOOTNOTES: Uniform Mechanical Code may have more stringent ventilation requirements; the most stringent code requirement takes precedence.

[2] Kitchen range hood will be verified per NA7.18.1 to confirm model is rated by HVI or AHAM.

[3] Air filtration requirements apply to the following three system types per §160.1(b)1A: space conditioning systems utilizing ducts to supply air to occupiable space; supply-only ventilation systems providing outside air to occupiable space; supply side of balanced ventilation systems including heat recovery and energy recovery ventilation systems providing outside air to occupiable space.

[4] A balanced ventilation system provides ventilation airflow to each dwelling-unit at a rate equal to or greater than the required minimum rate, but not more than twenty percent greater.

[5] Compartmentalization testing per §160.2(b)2Aivb2 is required for all new multifamily attached dwelling units; leakage shall not exceed 0.3 CFM50/ft² of envelope surface area, verified per RA3.8 or NA2.3.

K. TERMINAL BOX CONTROLS

This table is used to demonstrate compliance with prescriptive zone control requirements in §140.4(d) & §170.2(c)4B.

01	02	03	04	05	06	07	08	09	10	11	12
Zone/System/VAV Box Name or Item Tag	Zonal Control Strategy per §140.4(d)	Design			Deadband Compliance				Reheated, Recooled, Mixed Air Compliance		Complies
		Peak Primary Airflow CFM	Primary Air in Deadband CFM	Reheated Recooled Mixed Airflow CFM	Outside Air CFM	30% of Peak Primary Airflow CFM	Max Deadb and Airflow CFM	50% of Peak Primary Airflow	1st Stage Modulates ≤95°F and Maintains DB Rate?	2nd Stage Modulates from DB Flow to Heating Max Flow?	

L. DISTRIBUTION (DUCTWORK and PIPING)

This table is used to demonstrate compliance with mandatory pipe insulation requirements found in §120.3 and mandatory requirements found in §120.4(g) for duct sealing.

Mandatory Pipe Insulation									
01	☐	Insulation shall be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind. Insulation exposed to weather shall be installed with a cover suitable for outdoor service. Insulation covering chilled water piping and refrigerant suction piping located outside the conditioned space shall have a Class I or Class II vapor retarder. All penetrations and joints of which shall be sealed.							
02	03	04	05	06	07	08	09	10	11
System Type	Nominal Pipe Diameter (in)	Fluid Temperature Range (°F)	Conductivity Range (Btu-in per hr per ft² per °F)	Insulation Mean Rating Temp. (°F)	Min. Insulation Thickness Required per Table 120.3-A (in)	Min. Insulation Thickness Required per §120.3(c)2 & §160.3(c)1dii (in)	Insulation Thickness per Design (in)	Exception to §120.3 & §160.3(c) (if applicable)	Serving Res or NR Space?

Duct Leakage Testing

The answers to the questions below apply to the following duct system(s):			**NR/Common Use:** Duct leakage testing shall not exceed ____% per NA7.5.3 required for these systems?	
			Dwelling Units: Total duct leakage of duct system shall not exceed 12% or duct leakage system to outside shall not exceed 6% per RA3.1.4 required for these systems?	
			Duct leakage testing per CMC Section 603.10.1 required for these systems?	
11		The scope of the project includes only duct systems serving healthcare facilities.		
12		Duct system provides conditioned air to an occupiable space for a constant volume, single zone, space-conditioning system.		
13		The space conditioning system serves less than 5,000 ft^2 of conditioned floor area.		
14		The combined surface area of ducts located outdoors or in unconditioned spaces is more than 25% of the total surface area of the entire duct system:		
15		The scope of the project includes extending an existing duct system, which is constructed, insulated or sealed with asbestos.		
16		The scope of the project includes an existing duct system that is documented to have been previously sealed as confirmed through field verification and diagnostic testing in accordance with procedures in the Reference Nonresidential Appendix NA2.		
17		All Ductwork and plenums with pressure class ratings shall be constructed to Seal Class A		
18		All ductwork is an extension of an existing duct system		
19		Ductwork serving individual dwelling unit		
20		< 25 ft of new or replacement space conditioning ducts installed		
21		Duct Insulation R-Value		

M. COOLING TOWERS

This table is used to demonstrate compliance with mandatory requirements in §110.2(e)2 for cooling towers with a rated capacity > 150 tons. This Table calculates the Maximum Achievable Cycles of Concentration using the Langelier Saturation Index (LSI) calculations per §110.2(e)2.

01	☐	Check the box if the project is showing calculations on the plans, or attaching the calculations instead of completing this Table.											
02	03	04	05	06	07	08	09	10	11	12	13	14	15
Name or Item Tag	Design Conditions		Rated Conditions	Maximum Skin Temp (˚F)	Conductivity	M-Alkalinity Excluding Galvanized Steel	M-Alkalinity Including Galvanized Steel	Calcium Hardness	Magnesium Hardness	Total Dissolved Solids	Chlorides	Sulfates	Silica
	Design GPM	Min Flow GPM	GPM/HP										

16	17	18
Target Tower Cycles	Maximum Achievable Cycles of Concentration	Complies

N. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online.

YES	NO	Form/Title	Field Inspector	
			Pass	Fail
❍	❍	LMCI-MCH-01-E - Must be submitted for all buildings.	☐	☐
❍	❍	LMCI-MCH-20-H Duct Leakage Diagnostic Test	☐	☐
❍	❍	LMCI-MCH-21-H Duct Location Verification	☐	☐
❍	❍	LMCI-MCH-22-H Fan Efficacy	☐	☐
❍	❍	LMCI-MCH-23-H Airflow Rate	☐	☐
❍	❍	LMCI-MCH-24-H Building Envelope Air Leakage Worksheet	☐	☐
❍	❍	LMCI-MCH-25 Refrigerant Charge Verification	☐	☐
❍	❍	LMCI-MCH-26-H Rated Space Conditioning System Equipment Verification	☐	☐
❍	❍	LMCI-MCH-27-H Indoor Air Quality and Mechanical Ventilation	☐	☐
❍	❍	LMCI-MCH-28-H Return Duct Design and Air Filter Grille Device Sizing	☐	☐
❍	❍	LMCI-MCH-29-H Duct Surface Area Reduction; Buried Ducts Compliance Credit	☐	☐
❍	❍	LMCI-MCH-32-H Local Mechanical Exhaust	☐	☐
❍	❍	LMCI-MCH-33-H Variable Capacity Heat Pump Compliance Credit	☐	☐

O. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and any with "-A" in the form name must be completed through an Acceptance Test Technician Certification Provider (ATTCP). For more information visit: http://www.energy.ca.gov/title24/attcp/providers.html.

YES	NO	Form/Title	Systems To Be Field Verified	Field Inspector	
				Pass	Fail
❍	❍	NRCA-MCH-02-A Outdoor Air must be submitted for all newly installed HVAC units. *Note: MCH-02-A can be performed in conjunction with MCH-07-A Supply Fan VFD Acceptance (if applicable) since testing activities overlap.*		☐	☐
❍	❍	NRCA-MCH-03-A Constant Volume Single Zone HVAC NOTE: This form does not automatically move to "Yes". If Constant Volume Single Zone HVAC Systems are included in the scope, permit applicant should move this form to "Yes".		☐	☐
❍	❍	NRCA-MCH-04 Air Distribution Duct Leakage		☐	☐
❍	❍	NRCA-MCH-05-A Air Economizer, DOAS, HRV, & ERV Controls		☐	☐
❍	❍	NRCA-MCH-06-A Demand Control Ventilation Systems Acceptance must be submitted for all systems required to employ demand controlled ventilation (refer to §120.1(c)3) can vary outside ventilation flow rates based on maintaining interior carbon dioxide (CO_2) concentration setpoints.		☐	☐
❍	❍	NRCA-MCH-07-A Supply Fan Variable Flow Controls		☐	☐
❍	❍	NRCA-MCH-08-A Valve Leakage Test		☐	☐
❍	❍	NRCA-MCH-09-A Supply Water Temperature Reset Controls		☐	☐
❍	❍	NRCA-MCH-10-A Hydronic System Variable Flow Controls		☐	☐
❍	❍	NRCA-MCH-11-A Automatic Demand Shed Controls		☐	☐
❍	❍	NRCA-MCH-12-A FDD for Packaged Direct Expansion Units		☐	☐
❍	❍	NRCA-MCH-13-A Automatic FDD for Air Handling Units and Zone Terminal Units Acceptance		☐	☐

YES	NO	Form/Title	Systems To Be Field Verified	Field Inspector	
				Pass	Fail
❍	❍	NRCA-MCH-14-A Distributed Energy Storage DX AC Systems Acceptance *NOTE: This form does not automatically move to "Yes". If Distributed Energy Storage DX AC Systems are included in the scope, permit applicant should move this form to "Yes".*		☐	☐
❍	❍	NRCA-MCH-15-A Thermal Energy Storage (TES) System Acceptance *NOTE: This form does not automatically move to "Yes". If Chilled Water Storage, Ice-on-Coil Internal Melt, Ice-on-Coil External Melt, Ice Harvester, Brine, Ice-Slurry, Eutectic Salt, Clathrate Hydrate Slurry (CHS), Cryogenic or Encapsulated (Ice Ball) Systems are included in the scope, permit applicant should move this form to "Yes".*		☐	☐
❍	❍	NRCA-MCH-16-A Supply Air Temperature Reset Controls		☐	☐
❍	❍	NRCA-MCH-17-A Condenser Water Temperature Reset Controls		☐	☐
❍	❍	NRCA-MCH-18 Energy Management Control Systems		☐	☐
❍	❍	NRCA-MCH-19 Occupancy Sensor Controls		☐	☐
❍	❍	NRCA-MCH-20 Multi-Family Ventilation		☐	☐
❍	❍	NRCA-MCH-21 Multi-Family Envelope Leakage		☐	☐
❍	❍	NRCA-MCH-22-A MF Duct Leakage		☐	☐
❍	❍	NRCA-MCH-23-A MF HRV/ERV Verification		☐	☐
❍	❍	NRCA-MCH-24A-Cooling Tower Conductivity Controls		☐	☐

P. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION

Selections have been made based on information provided in this document. If any selections have been changed by the permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be completed by an ECC Rater and provided to the building inspector during construction. The final documents must be created by an ECC Providers registry, but drafts can be found online.

YES	NO	Form/Title	Systems To Be Field Verified	Field Inspector	
				Pass	Fail
❍	❍	LMCV-MCH-21 Duct Location Verification *NOTE: Must be completed by an ECC Rater*		☐	☐
❍	❍	LMCV-MCH-22-H Fan Efficacy *NOTE: Must be completed by an ECC Rater*		☐	☐
❍	❍	LMCV-MCH-23-H Airflow Rate *NOTE: Must be completed by an ECC Rater*		☐	☐
❍	❍	LMCV-MCH-24 Enclosure Air Leakage Worksheet *NOTE: Must be completed by an ECC Rater*		☐	☐
❍	❍	LMCV-MCH-25 Refrigerant Charge Verification NOTE: Must be completed by an ECC Rater		☐	☐
❍	❍	LMCV-MCH-26-H Rated Space Conditioning System Equipment Verification NOTE: Must be completed by an ECC Rater		☐	☐
❍	❍	LMCV-MCH-27 Indoor Air Quality and Mechanical Ventilation *NOTE: Must be completed by an ECC Rater*		☐	☐
❍	❍	LMCV-MCH-28-H Return Duct Design and Air Filter Grille Device Sizing NOTE: Must be completed by an ECC Rater		☐	☐
❍	❍	LMCV-MCH-29-H Duct Surface Area Reduction; Buried Ducts Compliance Credit NOTE: Must be completed by an ECC Rater		☐	☐
❍	❍	LMCV-MCH-32 Local Mechanical Exhaust *NOTE: Must be completed by an ECC Rater*		☐	☐
❍	❍	LMCV-MCH-33-H Variable Capacity Heat Pump Compliance Credit NOTE: Must be completed by an ECC Rater		☐	☐

In addition to the Certificates of Compliance, the Standards may also require Certificates of Verification to be submitted to the authority having jurisdiction.

This section of the compliance documentation serves as an acknowledgement of, and a declaration that Certificates of Verification are required to be submitted for compliance. The boxes must be checked for every Certificate of Verification that applies to the job.

Q. MANDATORY MEASURES DOCUMENTATION LOCATION

This table is used to indicate where mandatory measures are documented in the plan set or construction documentation.

01		02
Compliance with Mandatory Measures documented through MCH Mandatory Measures Note Block:		Plan sheet or construction document location
03		04
Mandatory Measure		Plan sheet or construction document location
Heating Equipment Efficiency per §110.1b, Title 20, and federal minimums		
Cooling Equipment Efficiency per §110.1, Title 20, and federal minimums		
Furnace Standby Loss Control per §110.2(d)		
Duct Insulation per §120.4		
Heating Hot Water Equipment Efficiency per §110.1, Title 20, and federal minimums		
Cooling Chilled and Condenser Water Equipment Efficiency per §110.1		
Open and Closed Circuit Cooling Towers conductivity of flow-based controls per §110.2(e)1		
Open and Closed Circuit Cooling Towers Flow Meter with analog output per §110.2(e)3		
Open and Closed Circuit Cooling Towers Overflow Alarm per §110.2(e)4		
Open and Closed Circuit Cooling Towers Efficient Drift Eliminators per §110.2(e)5		
Pipe Insulation per §120.3(b)		
Combustion air shutoff, combustion air fan controls and stack design and controls for boilers per §120.9		
Heat Pump with Supplementary Electric Resistance Heater Controls per §110.2(b)		
The air duct and plenum system is designed per §120.4(a)-(f)		
Kitchen range hoods shall be rated for sound in accordance with Section 7.2 of ASHRAE 62.2		
HVAC hot water supply temperature shall be no greater than 130F per 120.2(I)		
Ventilation accessibility requirements of 160.2(b)2xi		

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name:	Documentation Author Signature:
Company:	Signature Date:
Address:	CEA/AEA/ECC Certification Identification (if applicable):
City/State/Zip:	Phone:

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I understand that a registered copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building and shall be made available to the enforcement agency for all applicable inspections. I will take the necessary steps to fulfill this requirement.
6. I understand that a registered copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy. I will take the necessary steps to fulfill this requirement.

Responsible Designer Name:	Responsible Designer Signature:
Company :	Date Signed:
Responsible Person Scope:	
Address:	License:
City/State/Zip:	Phone:

A. General Information

1. Enter the City the project is located in.
2. Climate Zone: Select from dropdown.
3. Select the applicable Occupancy Types within the project.
4. Enter the total conditioned floor area of the project.
5. Enter the total unconditioned floor area of the project.
6. Enter the total number of habitable above grade stories of the project.

B. Project Scope

1. Select whether the project includes heating and/or cooling air systems and/or mechanical controls.
2. Select the wet system components included in your project.
3. Select the dry system components included in your project.

C. Compliance Results

1. Results in this table are automatically calculated from data input and calculations in Tables F through M.

D. Exceptional Conditions

1. This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

E. Additional Remarks

1. Enter any notes or comments for the AHJ.

F. HVAC System Summary (Dry and Wet Systems)

Space Conditioning System Information

1. Enter the Name or Item Tag.
2. Enter the quantity of the system.
3. Zone(s) that the system is serving: Select from dropdown.
4. Status of the system: Select from dropdown.
5. Space type that the system is serving: Select from dropdown.
6. Is the system utilizing recovered heat?
7. Distribution system type: Select from dropdown.

Dry System Equipment Sizing (includes air conditioners, condensers, heat pumps, VRF, furnaces, unit heaters and DOAS systems)

1. This field is filled out automatically.
2. Equipment category of the system: Select from dropdown.
3. Equipment type of the system: Select from dropdown.
4. Is the equipment the smallest size available?: Select from dropdown
5. Enter the heating output per design of the system.
6. Enter the heating output rated capacity of the system.
7. Enter the supplemental heating output of the system
8. Enter the cooling sensible output per design of the system.
9. Enter the cooling output rated capacity of the system.
10. Enter the total heating load.
11. Enter the total sensible cooling load.

Dry System Equipment Efficiency (other than package terminal air conditioners (PTAC) and package terminal heat pumps (PTHP), DX-DOAS and Dual Fuel Heat Pumps)

1. This field is field out automatically.
2. Size category of the system: Select from dropdown.
3. Rating condition of the system: Select from dropdown.
4. Heating efficiency unit of the system: Select from dropdown.
5. This field is filled out automatically.
6. Enter the heating design efficiency of the system.
7. This field is filled out automatically.
8. This field is filled out automatically.
9. Enter the cooling design efficiency of the system.

Dry System Equipment Efficiency (Package Terminal Air Conditioners (PTAC) and Package Terminal Heat Pumps (PTHP) only)

1. This field is field out automatically.
2. This field is filled out automatically
3. This field is filled out automatically
4. Enter the heating mode design COP of the system.
5. This field is filled out automatically.
6. This field is filled out automatically
7. Enter the cooling mode design EER.

Boiler Efficiency and Controls

1. Enter the Name or Item Tag.

2. Equipment type: Select from dropdown.
3. Enter the quantity of identical boilers.
4. Enter the rated input capacity.
5. Enter the rated efficiency.
6. This field is filled out automatically.
7. This field is filled out automatically.
8. Select the isolation valve control exception or indicate that it has been included in the design: Select from dropdown.
9. Select the temperature reset control exception or indicate that is has been included in the design: Select from dropdown.
10. High capacity boiler exceptions: Select from dropdown.

Chiller Efficiency and Controls

1. Enter the name or item tag of the chiller.
2. Select the equipment type: Select from dropdown.
3. Enter the quantity of identical chillers.
4. Size category in tons: Select from dropdown.
5. Chiller efficiency Path B exception: Select from dropdown.
6. Enter the rated efficiencies
7. This field is filled out automatically.
8. This field is filled out automatically.
9. Select the isolation valve control exception or indicate that it has been included in the design: Select from dropdown.
10. Select the temperature reset control exception or indicate that is has been included in the design: Select from dropdown.

Direct-Expansion Dedicated Outdoor Air System (DX-DOAS) EFFICIENCY

1. This field is filled out automatically.
2. equipment type: Select from dropdown.
3. Enter the quantity of identical DX-DOAS systems.
4. Does the system have energy recovery?: Select from dropdown.
5. Rating condition of the system: Select from dropdown.
6. Enter the rated efficiencies.
7. This field is filled out automatically.
8. This field is filled out automatically.

Dual Fuel Heat Pump

1. This field is filled out automatically.
2. Equipment category: Select from dropdown.

3. Equipment type: Select from dropdown.
4. Size category: Select from dropdown.
5. Select the rating condition: Select from dropdown.
6. This field is filled out automatically.
7. This field is filled out automatically.
8. Enter the design heating efficiency.
9. This field is filled out automatically.
10. This field is filled out automatically.
11. Enter the design cooling efficiency.

Heat Rejection Equipment (Cooling Towers, Conders, Waterside Economizers) Efficiency and Controls.

1. Enter the name or item tag of the equipment.
2. Equipment type: Select from dropdown.
3. Enter the quantity of identical boilers.
4. Rated input capacity: Select from dropdown.
5. Enter the rated efficiency.
6. This field is filled out automatically.
7. Enter Performance Unit.
8. Fan Speed Control: Select from dropdown.
9. Tower Flow Turndown: Select from dropdown.
10. Fan Control in Multiple Cell Equipment: Select from dropdown.
11. Economizer Controls: Select from dropdown.
12. Condenser Water Temp Reset Controls: Select from dropdown.

Electric Resistance Heating

1. Enter the name or item tag of the electric resistance heating system.
2. Equipment description: Select from dropdown.
3. Enter the output capacity.
4. Equipment exception: Select from dropdown.

G. Pumps

1. Enter the name or item tag of the pump.
2. Select the equipment type: Select from dropdown.
3. Enter the quantity of identical pumps.
4. Enter the horsepower.
5. Select the exception of the variable flow control or indicate it has been included in the design: Select from dropdown.
6. Select the exception of the heat pump isolation controls or indicate it has been included in the design: Select from dropdown.
7. Select the exception for variable speed drive or indicate it has been included in the design: Select from dropdown.
8. This field is filled out automatically.

H. Fan Systems & Air Economizers

- Enter the system name.
- Enter the quantity of identical systems.
- Select the fan system status: Select from dropdown.
- Select the system zoning: Select from dropdown.
- Select what types of spaces the system is serving: Select from dropdown.
- Enter the fan system airflow.
- Enter the site elevation.
- Select the type of economizer or applicable exception: Select from dropdown.

1. Enter the fan name or item tag.
2. Fan type: Select from dropdown.
3. Enter the quantity of identical systems.
4. Select the components included in the system: Select from dropdown.
5. Enter the airflow through the selected component.
6. Enter the inches of water gauge in w.g.
7. This field is filled out automatically.
8. This field is filled out automatically.
9. Select the design electrical input power method: Select from dropdown.
10. Select the motor nameplate horsepower: Select from dropdown.
11. This field is filled out automatically.

Dwelling Unit Fan Efficacy & Energy/Heat Recovery

1. This field is filled out automatically.
2. This field is filled out automatically.
3. This field is filled out automatically.
4. Select the system type: Select from dropdown.
5. Enter the system airflow in CFM.
6. Enter the design power in kW.
7. This field is filled out automatically.
8. This field is filled out automatically.
9. Select the ERV/HRV exception or indicate is has been included in the design: Select from dropdown.
10. Enter the design sensible recovery/effectiveness.
11. This field is filled out automatically.
12. This field is filled out automatically.

Exhaust Air Heat Recovery

1. This field is filled out automatically.
2. This field is filled out automatically.
3. Hours of operation per year: Select from dropdown.
4. Enter the design supply airflow rate in CFM.
5. Enter the outdoor airflow in CFM.
6. This field is filled out automatically.
7. Select the exemption to exhaust air heat recovery requirements or indicate is has been included in the design: Select from dropdown.
8. This field is filled out automatically.
9. Select the type of heat recovery rating: Select from dropdown.
10. This field is filled out automatically.
11. Select the type of energy recovery bypass control: Select from dropdown.

Dedicated Outdoor Air System (DOAS)

1. Enter the name or item tag of the DOAS system.
2. Enter the quantity of identical DOAS systems.
3. Is the outdoor air delivered directly to the space? : Select from dropdown
4. Select the DOAS fan control: Select from dropdown.
5. Select the multizone DOAS cooling heat recovery controls: Select from dropdown.
6. Is the DOAS serving multifamily common use space? : Select from dropdown

Fan Energy Index (FEI)

1. The field is filled out automatically.
2. Select the FEI exception that applies: Select from dropdown.
3. Enter the fan energy index.

I. System Controls

1. Enter the system name.
2. Select the system zoning: Select from dropdown.
3. Select the conditioned floor area being served: Select from dropdown.
4. Select the type of thermostats: Select from dropdown.
5. Select the type of shut-off controls: Select from dropdown.
6. Select the type of isolation zone controls: Select from dropdown.
7. Select the type of demand response controls: Select from dropdown.
8. Select the type of supply air temperature reset controls: Select from dropdown.
9. Select the window interlock exceptions or indicate they have been included in the design: Select from dropdown.
10. Select the direct digital control exceptions or indicate they have been included in the design: Select from dropdown.

J. Ventilation And Indoor Air Quality

1. Check the box to confirm that the ventilation calculations are included in the plans or as part of a separate document.
2. Check the box to confirm that the project includes NR, Hotel/Motel or multifamily common use space. Check the box to confirm that the project includes new or altered multifamily dwelling units.
3. Check the box to confirm that the project is using natural ventilation to meet required ventilation rates.
4. Enter the system name.
5. Enter the system design outside airflow in CFM.
6. Enter the system design transfer air in CFM.
7. Select the air filtration device: Select from dropdown.
8. Enter the space name or item tag.
9. Select the occupancy type: Select from dropdown.
10. Enter the conditioned floor area in square feet.
11. Enter the number of showerheads or toilets.
12. Enter the number of designed occupants for the space.
13. This field is filled out automatically.

14. This field is filled out automatically.
15. Enter the provided exhaust ventilation airflow in CFM.
16. Select the demand control ventilation and occupant sensor controls: Select from dropdowns.
17. This field is filled out automatically.
18. This field is filled out automatically.

Multifamily Dwelling Unit Ventilation Systems

- Check the box to confirm that the system is using continuous ventilation to meet the ventilation requirements.

19. Enter the space name or item tag.
20. Enter the System Type.
21. Enter the conditioned floor area in square feet.
22. Enter the number of bedrooms.
23. Enter the number of dwelling units.
24. This field is filled out automatically.
25. Enter the supply airflow in CFM.
26. Enter the exhaust airflow in CFM.
27. Check the boxes with the applicable types of local exhaust.
28. Has air filtration been included?: Select from dropdown.
29. Has Compartmentalization test?

K. Terminal Box Controls

1. Enter the zone/system/VAV box name or item tag
2. Select the zonal control strategy: Select from dropdown.
3. Enter the peak primary airflow in CFM.
4. Enter the primary airflow in the deadband in CFM.
5. Enter the reheated, recooled, or mixed airflow in CFM.
6. Enter the outside airflow in CFM.
7. This field is filled out automatically.
8. This field is filled out automatically.
9. This field is filled out automatically.
10. Does the 1st stage modules and maintain the DB rate?
11. Does the second stage modulate from DV flow to heating max airflow?

12. This field is filled out automatically.

L. Distribution (Ductwork and Piping)

1. Check the box to confirm that the insulation is protected from damage including damage due to sunlight, moisture, equipment maintenance and wind.
2. Select the system type: Select from dropdown.
3. Select the nominal pipe diameter in inches: Select from dropdown.
4. Select the fluid temperate range in Fahrenheit: Select from dropdown.
5. Select the conductivity rage in BTU-inch per hour per square foot per degree Fahrenheit: Select from dropdown.
6. This field is filled out automatically.
7. This field is filled out automatically.
8. Enter the min insulation thickness required.
9. Enter the insulation thickness per design.
10. Select the exception for pipe insulation requirements or indicate the requirements apply: Select from dropdown.
11. Is the distribution system serving residential or nonresidential space? : Select from dropdown.

Duct Leakage Testing

12. Does the duct system serve a licensed healthcare facility?: Select from dropdown.
13. Does the duct system provided conditioned air to an occupiable space for a constant volume single zone space conditioning system?: Select from dropdown.
14. Does the space conditioned system serve less than 5,000 square feet of conditioned floor area?: Select from dropdown.
15. Is 25% or more of the total surface area of the combined duct system located outdoors or unconditioned spaces?: Select from dropdown.
16. Does the scope of the project include extending and existing duct system which is constructed, insulated or sealed with asbestos?: Select from dropdown.
17. Does the scope of the project include an existing duct system that is documented to have been previously sealed as confirm through field verification and diagnostic testing in accordance with Reference Appendix NA2?: Select from dropdown.
18. Are all ductwork and plenums with pressure class ratings sealed to Seal Class A?: Select from dropdown.
19. Is all the ductwork an extension of an existing duct system?: Select from dropdown.
20. Is the ductwork serving and individual dwelling unit?: Select from dropdown.
21. Is less than 25 feet of new or replacement ducting installed?: Select from dropdown.

M. Cooling Towers

1. Check the box to confirm that the project is showing cooling tower calculations on the plans or attaching calculations instead of completing the NRCC cooling tower table.
2. Enter the name or item tag of the cooling tower.
3. Enter the design gallons per minute.
4. Enter the min flow in gallons per minute.
5. Enter the rated condition gallons per minute per horsepower.
6. Enter the maximum skin temperature in Degrees Fahrenheit.
7. Enter the conductivity.
8. Enter the M-alkalinity.
9. Enter the calcium hardness.
10. Enter the magnesium hardness.
11. Enter the target tower cycles.
12. This field is filled out automatically.
13. This field is filled out automatically.
14. This field is filled out automatically.
15. This field is filled out automatically.

N. Declaration of Required Certificates of Installation

1. Selections have been automatically made based on information provided in this document. If any selections have been changed by the permit applicant, an explanation should be included in Table E. Additional Remarks.

O. Declaration of Required Certificates of Acceptance

1. Selections have been made based on information provided in this document. If any selections have been changed by the permit applicant, an explanation should be included in Table E. Additional Remarks.

P. Declaration of Required Certificates of Verification

1. Selections have been made based on information provided in this document. If any selections have been changed by the permit applicant, an explanation should be included in Table E. Additional Remarks.

Q. Mandatory Measures

1. Are mandatory measures documented through the mandatory measures note block?: Select from dropdown.
2. Enter the plan sheet or construction document location of the mandatory measure documentation.
3. List of mandatory measures.

-Enter the plan sheet or construction document location of the heating equipment efficiency per §110.1.

-Enter the plan sheet or construction document location of the cooling equipment efficiency per §110.1.
-Enter the plan sheet or construction document location of the furnace standby loss per §110.2(d).
-Enter the plan sheet or construction document location of the duct insulation per §120.4.
-Enter the plan sheet or construction document location of the heating hot water equipment efficiency per §110.1
-Enter the plan sheet or construction document location of the cooling chilled and condenser water equipment efficiency per §110.1.
-Enter the plan sheet or construction document location of the Open and Closed Circuit Cooling Towers conductivity of flow-based controls per §110.2(e)1.
-Enter the plan sheet or construction document location of the Open and Closed Circuit Cooling Towers Flow Meter with analog output per §110.2(e)3.
-Enter the plan sheet or construction document location of the Open and Closed Circuit Cooling Towers Overflow Alarm per §110.2(e)4.
-Enter the plan sheet or construction document location of the Open and Closed Circuit Cooling Towers Efficient Drift Eliminators per §110.2(e)5.
-Enter the plan sheet or construction document location of the Pipe Insulation per §120.3(b).
-Enter the plan sheet or construction document location of the Combustion air shutoff, combustion air fan controls and stack design and controls for boilers per §120.9.
-Enter the plan sheet or construction document location of the Heat Pump with Supplementary Electric Resistance Heater Controls per §110.2(b).
-Enter the plan sheet or construction document location of the air duct and plenum system per §120.4(a)-(f).
-Enter the plan sheet or construction document location of the Kitchen range hoods shall be rated for sound in accordance with Section 7.2 of ASHRAE 62.2.

4. Plan sheet or construction document location.

Documentation Declaration Statements

1. The person who prepared the LMCC will sign and complete the fields for their name, company (if applicable), address, phone number, certification information (if applicable), date and signature.
2. The person who is assuming responsibility for the project being built to comply with Title 24, Part 6, will complete the fields for their name, company (if applicable), address, phone number, license number (if applicable), date and signature.