CERTIFICATE OF COMPLIANCE — Part 2 of 2 — MECH-2-C

PROJECT NAME: Lambe Apts Community Building — DATE: 10/4/2005

SYSTEM FEATURES

ITEM OR SYSTEM TAG(S) / Number of Systems		[2] WATER SIDE SYSTEMS: Chillers, Towers, Boilers, Hydronic Loops		

MANDATORY MEASURES	T-24 Section	Reference on Plans or Specifications [1]		
Equipment Efficiency	112(a)			
Pipe Insulation	123			
PRESCRIPTIVE MEASURES				
Calculated Capacity	144(a & b)			
Proposed Capacity	144(a & b)			
Tower Fan Controls	144(h)			
Tower Flow Controls	144(h)			
Variable Flow System Design	144(j)			
Chiller and Boiler Isolation	144(p)			
CHW and HHW Reset Controls	144(j)			
WLHP Isolation Valves	144(j)			
VSD on CHW, CW & WLHP Pumps>5 HP	144(j)			
DP Sensor Location	144(j)			

1: For each chiller, cooling tower, boiler, and hydronic loop (or groups of similar equipment) fill in the reference to sheet number and/or specification section and paragraph number where the required features are documented. If a requirement is not applicable, put "N/A" in the column.

2: Water side systems include wet side system using other liquids such as glycol or brine.

ITEM OR SYSTEM TAG(S) / Number of Systems		Service Hot Water, Pool Heating		
		DHW Heater		
		1		

MANDATORY MEASURES		Reference on Plans or Specifications [1]		
Water Heater Certification	113(a)	Standard Gas 50 gal or Less		
Water Heater Efficiency	113(b)	78%		
Service Water Heating Installation	113(c)			
Pool and Spa Efficiency and Control	114(a)	n/a		
Pool and Spa Installation	114(b)	n/a		
Pool Heater – No Pilot Light	115(c)	n/a		
Spa Heater – No Pilot Light	115(d)	n/a		

1: For each water heater, pool heat and domestic water loop (or groups of similar equipment) fill in the reference to sheet number and/or specification section and paragraph number where the required features are documented. If a requirement is not applicable, put "N/A" in the column.

NOTES TO FIELD – For Building Department Use Only

Run Initiation Time: 10/04/05 15:56:43 — Run Code: 1128466603

CERTIFICATE OF COMPLIANCE — Part 1 of 2 — MECH-2-C

PROJECT NAME: Lambe Apts Community Building — DATE: 10/4/2005

SYSTEM FEATURES

ITEM OR SYSTEM TAG(S) / Number of Systems		AIR SYSTEMS, Central or Single Zone		
		Split Sys Gas-Elec		
		1		

MANDATORY MEASURES	T-24 Section	Reference on Plans or Specifications [1]		
Heating Equipment Efficiency	112(a)	94% AFUE		
Cooling Equipment Efficiency	112(a)	14.7 SEER/12.0 EER		
Heat Pump Thermostat	112(b)	n/a		
Furnace Controls	112(c), 115(a)	n/a		
Natural Ventilation	121(b)	No		
Minimum Ventilation	121(b)	362 cfm		
VAV Minimum Ventilation	121(c)	No		
Demand Control Ventilation	121(c)	No		
Time Control	121(c), 122(e)	Programmable Switch		
Setback and Setup Control	122(e)	Heating & Cooling Required		
Outdoor Damper Control	122(f)	Gravity		
Isolation Zones	122(g)	n/a		
Pipe Insulation	123	Refrigerant		
Duct Insulation	124	R-8.0		
PRESCRIPTIVE MEASURES				
Calculated Heating Capacity x 1.43 [2]	144 (a & b)	n/a		
Proposed Heating Capacity [2]	144 (a & b)	75,000 btuh		
Calculated Sensible Cooling Capacity x 1.21 [2]	144 (a & b)	n/a		
Proposed Sensible Cooling Capacity [2]	144 (a & b)	42,740 btuh		
Fan Control	144 (c)	Constant Volume		
DP Sensor Location	144 (c)			
Supply Pressure Reset (DDC only)	144 (c)			
Simultaneous Heat/Cool	144 (d)	No		
Economizer	144 (e)	No Economizer		
Heating Air Supply Reset	144 (f)	Constant Temp		
Cooling Air Supply Reset	144 (f)	Constant Temp		
Duct Sealing for Prescriptive Compliance [3]	144 (k)	No		

1: For each central and single zone air systems (or group of similar units) fill in the reference to sheet number and/or specification section and paragraph number where the required features are documented. If a requirement is not applicable, put "N/A" in the column.

2: Not required for hydronic heating and cooling. Either enter a value here or put in reference of plans and specifications per footnote 1.

3: Enter Yes if system is Constant Volume, Single Zone; Serves <5,000 sqft; Has > 25% duct in unconditioned space. Duct sealing is required for Prescriptive Compliance, see PERF-1 for performance method duct sealing requirements

NOTES TO FIELD – For Building Department Use Only

Run Initiation Time: 10/04/05 15:56:43 — Run Code: 1128466603

CERTIFICATE OF COMPLIANCE — MECH-1-C

PROJECT NAME: Lambe Apts Community Building — DATE: 10/4/2005

Designer:

This form is to be used by the designer and attached to the plans. Listed below are all the acceptance tests for mechanical systems. The designer is required to check the boxes by all acceptance tests that apply and list all equipment that requires an acceptance test. If all equipment of a certain type requires a test, list the equipment description and the number of systems to be tested in parentheses. The NJ number designates the Section in the Appendix of the Nonresidential ACM Manual that describes the test. Also indicate the person responsible for performing the tests (i.e. the installing contractor, design professional or an agent selected by the owner). Since this form will be part of the plans, completion of this section will allow the responsible party to budget for the scope of work appropriately.

Building Departments:

SYSTEM ACCEPTANCE. Before an occupancy permit is granted for a newly constructed building or space, or a new space-conditioning system serving a building or space is operated for normal use, all control devices serving the building or space shall be certified as meeting the Acceptance Requirements for Code Compliance.

In addition a Certificate of Acceptance, MECH-1-A Form shall be submitted to the building department that certifies plans, specifications, installation certificates, and operating and maintenance information meet requirements of Section 10-103(b) and Title 24 Part 6.

STATEMENT OF COMPLIANCE

- [x] MECH-2-A: Ventilation system Acceptance Document
  - -Variable Air Volume Systems Outdoor Air Acceptance
  - -Constant Air Volume Systems Outdoor Air Acceptance
  - Equipment requiring acceptance testing: N/A
- [ ] MECH-3-A: Packaged HVAC Systems Acceptance Document
  - Equipment requiring acceptance testing: N/A
- [x] MECH-4-A: Air Distribution Acceptance Document
  - Equipment requiring acceptance testing: F/CC-1 (1) INSTALLING CONTRACTOR
- [ ] MECH-5-A: Air-Side Economizer Acceptance Document
  - Equipment requiring acceptance testing: N/A
- [ ] MECH-6-A: Demand Control Ventilation Acceptance Document
  - Equipment requiring acceptance testing: N/A
- [ ] MECH-7-A: Supply Fan Variable Flow Control Acceptance Document
  - Equipment requiring acceptance testing: N/A
- [ ] MECH-8-A: -Hydronic System Control Acceptance Document
  - -Variable Flow Controls
  - -Automatic Isolation Con-trols
  - -Water-loop Heat Pump Controls
  - -Variable Frequency Controls
  - Equipment requiring acceptance testing: N/A

MECHANICAL MANDATORY MEASURES — Part 2 of 2 — MECH-MM

PROJECT NAME: Lambe Apts Community Building — DATE: 10/4/2005

Description		Designer	Enforcement
Ventilation			
[X] 121(a)	Controls shall be provided to allow outside air dampers or devices to be operated at the ventilation rates as specified on these plans.		
[ ] 122(f)	Gravity or automatic dampers interlocked and closed on fan shutdown shall be provided on the outside air intakes and discharges of all space conditioning and exhaust systems.		
[X] 122(f)	All gravity ventilating systems shall be provided with automatic or readily accessible manually operated dampers in all openings to the outside, except for combustion air openings.		
[X] 121(f)1	Air Balancing: The system shall be balanced in accordance with the National Environmental Balancing Bureau (NEBB) Procedural Standards (1983), or Associated Air Balance Council (AABC) National Standards (1989); or		
[ ] 121(f)2	Outside Air Certification: The system shall provide the minimum outside air as shown on the mechanical drawings, and shall be measured and certified by the installing licensed C-20 mechanical contractor and certified by (1) the design mechanical engineer, (2) the installing licenced C-20 mechanical contractor, or (3) the person with overall responsibility for the design of the ventilation system; or		
[ ] 121(f)3	Outside Air Measurement: The system shall be equipped with a calibrated local or remote device capable of measuring the quantity of outside air on a continuous basis and displaying that quantity on a readily accessible display device; or		
[ ] 121(f)4	Another method approved by the Commission.		
Service Water Heating Systems			
[ ] 113(b)2	If a circulating hot water system is installed, it shall have a control capable of automatically turning off the circulating pump(s) when hot water is not required.		
[ ] 113(b)3B	Lavatories in restrooms of public facilities shall be equipped with controls to limit the outlet temperature to 110 degrees F.		
[X] 113(b)3C	Lavatories in restrooms of public facilities shall be equipped with one of the following:		
	Outlet devices that limit the flow of hot water to a maximum of 0.5 gallons per minute.		
	Foot actuated control valves, and outlet devices that limit the flow of hot water to a maximum of 0.75 gallons per minute.		
	Proximity sensor actuated control valves, and outlet devices that limit the flow of hot water to a maximum of 0.75 gallons per minute.		
	Self-closing valves, and outlet devices that limit the flow of hot water to a maximum of 2.5 gallons per minute, and 0.25 gallons/cycle (circulating system).		
	Self-closing valves, and outlet devices that limit the flow of hot water to a maximum of 2.5 gallons per minute, and 0.50 gallons/cycle (non-circulating system).		
	Self-closing valves, and outlet devices that limit the flow of hot water to a maximum of 2.5 gallons per minute, and 0.75 gallons/cycle (foot switches and proximity sensor controls).		

MECHANICAL MANDATORY MEASURES — Part 1 of 2 — MECH-MM

PROJECT NAME: Lambe Apts Community Building — DATE: 10/4/2005

DESCRIPTION		Designer	Enforcement
Equipment and Systems Efficiencies			
[X] 111	Any appliance for which there is a California standard established in the Appliance Efficiency Regulations will comply with the applicable standard.		
[X] 115(a)	Fan type central furnaces shall not have a pilot light.		
[ ] 123	Piping, except that conveying fluids at temperatures between 60 and 105 degrees Fahrenheit, or within HVAC equipment, shall be insulated in accordance with Standards Section 123.		
[X] 124	Air handling duct systems shall be installed and insulated in compliance with Sections 601, 603 and 604 of the Uniform Mechanical Code.		
Controls			
122(e)	Each space conditioning system shall be installed with one of the following:		
[X] 122(e)1A	Each space conditioning system serving building types such as offices and manufacturing facilities (and all others not explicitly exempt from the requirements of Section 112 (d)) shall be installed with an automatic time switch with an accessible manual override that allows operation of the system during off-hours for up to 4 hours. The time switch shall be capable of programming different schedules for weekdays and weekends and have a program backup capabilities that prevent the loss of the device's program and time setting for at least 10 hours if power is interrupted; or		
[ ] 122(e)1B	An occupancy sensor to control the operating period of the system; or		
[ ] 122(e)1C	A 4-hour timer that can be manually operated to control the operating period of the system.		
[ ] 122(e)2	Each space conditioning system shall be installed with controls that temporarily restart and temporarily operate the system as required to maintain a setback heating and/or a setup cooling thermostat setpoint.		
[ ] 122(g)	Each space conditioning system serving multiple zones with a combined conditioned floor area more than 25,000 square feet shall be provided with isolation zones. Each zone: shall not exceed 25,000 square feet; shall be provided with isolation devices, such as valves or dampers, that allow the supply of heating cooling to be setback or shut off independently of other isolation areas; and shall be controlled by a time control device as described above.		
[X] 122(a&b)	Each space conditioning system shall be controlled by an individual thermostat that responds to temperature within the zone. Where used to control heating, the control shall be adjustable down to 55 degrees F or lower. For cooling, the control shall be adjustable up to 85 degrees F or higher. Where used for both heating and cooling, the control shall be capable of providing a deadband of at least 5 degrees F within which the supply of heating and cooling is shut off or reduced to a minimum.		
[X] 122(c)	Thermostats shall have numeric setpoints in degrees Fahrenheit (F) and adjustable setpoint stops accessible only to authorized personnel.		
[ ] 112(b)	Heat pumps shall be installed with controls to prevent electric resistance supplementary heater operation when the heating load can be met by the heat pump alone.		

ENVELOPE MANDATORY MEASURES — ENV-MM

PROJECT NAME: Lambe Apts Community Building — DATE: 10/4/2005

DESCRIPTION		Designer	Enforcement
[X] 118(a)	Installed Insulating Material shall have been certified by the manufacturer to comply with the California Quality Standards for Insulating material, Title 20, Chapter 4, Article 3.		
[X] 118(c)	All Insulating Materials shall be installed in compliance with the flame spread rating and smoke density requirements of Sections 2602 and 707 of Title 24, Part 2.		
[X] 117(a)	All Exterior Joints and openings in the building that are observable sources of air leakage shall be caulked, gasketed, weatherstripped or otherwise sealed.		
[X] 116(b)	Site Constructed Doors, Windows and Skylights shall be caulked between the unit and the building, and shall be weatherstripped (except for unframed glass doors and fire doors).		
[X] 116(a)1	Manufactured Doors and Windows installed shall have air infiltration rates not exceeding those shown in Table Number 1-E of the Standards. Manufactured fenestration products must be labeled for U-value according to NFRC procedures.		
[X] 118(e)	Demising Walls in Nonresidential Buildings: The opaque portions of framed demising walls in nonresidential buildings shall have insulation with an installed R-value of no less than R-11 between framing members.		

COMMUNITY BUILDING

ENERGY COMPLIANCE FORMS

REGISTERED PROFESSIONAL ENGINEER — BRUCE D. HAGGARD — Exp. 9/30/07 — 8063 — MECHANICAL — STATE OF CALIFORNIA

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4325 N. Golden State Blvd., #106 Fresno, CA 93722
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THE VINCENT COMPANY
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Revisions — Date

PROPOSED APARTMENTS FOR:
MR. ANTHONY LAMBE
NEC WEST PALO ALTO & NORTH POLK AVENUES
FRESNO, CALIFORNIA

Project Architect:

REGISTERED ARCHITECT — SCOTT A. VINCENT — Exp. 12/31/05 — No. C-15290 — STATE OF CALIFORNIA

Issuances: Date:
- DESIGN REVIEW
- PLAN CHECK 11.07.05
- BACK CHECK
- PERMITS
- CONSTRUCTION
- AS BUILT

All drawings and written material appearing herein constitute original work of the architect and may not be duplicated, used, or disclosed without written consent of the architect.

Scale: NOT APPLICABLE
Project Name: LAMBE APARTMENTS FRESNO, CALIFORNIA
Project Number: 240723
Date: 10-19-05
Sheet Number: M10
Of Sheets

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