H. EXHAUST AIR HEAT RECOVERY 140.4(q), 170.2(c)40 Exemptions to Exhaust Air Hours of Heat Recovery | Heat Recovery | Type Of Heat Fan System Design Supply Outdoor at Full Design Operation per Airflow Rate Airflow Requirement 140.4(q) & Recovery Rating Recovery Ratio Airflow per 140.4(q) & 170.2(c)40 170.2(c)40

Fan Energy Index (FEI) Name or Item Tag FEI Exception

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), 170.2(c)4D 170.2(c)4L or requirements in 141.0(b)2E 180.2(b)2 for altered space conditioning systems. Shut-Off Zone Demand Response

Floor Area 110.2(b) & (c)<sup>1</sup>, 120.2(a) Temp. Reset System Controls Window Interlocks per System Name Controls 110.12 120.2(b) & Being Served 160.3(a)2A or 141.0(b)2E & 120.2(e) & 140.4(f) & 140.4(n) & 170.2(c)4D 120.2(g) & 160.3(a)2B 160.3(a)2D 170.2(c)4D 180.2(b)2 160.3(a)2F NA: Would **Auto Timer** Setback **EMCS** Single zone increase Provided Switch energy use NA: Would Auto Timer HP-8-2 & HP-8-3 Setback Single zone <= 25,000 ft<sup>2</sup> Provided increase Switch energy use

<sup>1</sup>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

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STATE OF CALIFORNIA Mechanical Systems CALIFORNIA ENERGY COMMISSION CERTIFICATE OF COMPLIANCE NRCC-MCH-E Project Name: Matsuyama Elementary School Modernization (Page 7 of 13 12/14/2023

J. VENTILATION AND INDOOR AIR QUALITY This table is used to demonstrate compliance with mandatory ventilation requirements in 120.1 120.2(e)3B 140.4(p) and 140.4(q) for all nonresidential and hotel/motel and d:t24refnolink/]160.2, 160.3(a)3D, 170.2(a)4N, 170.2(a)4O for high-rise residential 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. O1 Check the box if the project is showing ventilation calculations on the plans, or attaching the calculations instead of completing this table.

Check this box if the project included Nonresidential, Hotel/Motel Spaces or Multifamily Common Use Spaces

Check the box if the project is using natural ventilation in any nonresidential or hotel/motel spaces to meet required ventilation rates per 120.1(c)2. nresidential and Hotel/ Motel Multifamily Common Use Ventilation Systems Air Filtration per 120.1(c) 141.0(b)2 and System Design OA CFM System Design 160.2(c)21<sup>2</sup> System Name Transfer Air CFM Provided 10 11 12 13 14 08 Exh. Vent per 120.1(c)4 & Mechanical Ventilation Required per 120.1(c)3<sup>3</sup> & 160.2(c)3 160.2(c)4 DCV or Sensor Controls per 120.1(d)3, Conditioned # of Shower # of 120.1(d)5, and 120.1(e)3<sup>6</sup> 160.2(c)5D or Item Tag Required Provided per Design Floor Area heads/ Min OA Min CFM 160.2(c)5E 160.2(c)5D Occupancy Type<sup>4</sup> toilets people<sup>5</sup> CFM NA: Not required per §120.1(d)3 960 364.8 Classroom (ages 5-18) Classroom NA: Not required 17 Total System Required Min OA CFM 365 18 Ventilation for this System Complies? Air Filtration per 120.1(c) 141.0(b)2 and System Design OA CFM System Design 160.2(c)21<sup>2</sup> HP-8-2 & HP-8-3

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Transfer Air CFM

13 | 14

Provided

Mechanical Systems CALIFORNIA ENERGY COMMISSION CERTIFICATE OF COMPLIANCE NRCC-MCH-E Project Name: Matsuyama Elementary School Modernization Report Page: (Page 8 of 13) Date Prepared: 12/14/202

J. VENTILATION AND INDOOR AIR QUALITY Exh. Vent per 120.1(c)4 & Mechanical Ventilation Required per 120.1(c)3<sup>3</sup> & 160.2(c)3 160.2(c)4 DCV or Sensor Controls per 120.1(d)3, Space Name Conditioned # of Shower # of Provided per Design Floor Area heads/ Occupancy Type<sup>4</sup> CFM

120.1(d)5, and 120.1(e)3<sup>6</sup> 160.2(c)5D or Item Tag Min OA Min CFM 160.2(c)5E 160.2(c)5D people<sup>5</sup> CFM (ft<sup>2</sup>) toilets NA: Not required per 960 364.8 Classroom (ages 5-18) Classroom NA: Not required Occ Sensor space type 17 Total System Required Min OA CFM Ventilation for this System Complies?

<sup>1</sup> FOOTNOTES: System CFM should include both mechanical and natural ventilation for the zone/system <sup>2</sup> 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

<sup>3</sup> Uniform Mechanical Code may have more stringent ventilation requirements; the most stringent code requirement takes precedence.

10 | 11 |

<sup>4</sup> See Standards Tables 120.1-A and 120.1-B. <sup>5</sup> For lecture halls with fixed seating, the expected number of occupants shall be determined in accordance with the California Building Code.

<sup>6</sup> 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  $250 \mathrm{ft}^2$  or smaller, multipurpose rooms less than  $1,000 \mathrm{\,ft}^2$ , 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).

K. TERMINAL BOX CONTROLS This section does not apply to this project. L. DISTRIBUTION (DUCTWORK and PIPING) This table is used to show compliance with mandatory pipe insulation requirements found in 120.3 and mandatory requirements found in 120.4(g) for duct sealing. 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 retrigerant 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.

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F. HVAC SYSTEM SUMMARY (DRY & WET SYSTEMS) Dry System Equipment Sizing (includes air conditioners, condensers, heat pumps, VRF, furnaces and unit heaters and DOAS systems) 06 07 08 09 10 11 Equipment Sizing per Mechanical Schedule (kBtu/h) 140.4(a&b), 170.2(c)1 & 170.2(c)2 Smallest Size Heating Output<sup>2,3</sup> Cooling Output<sup>2,3</sup> Load Calculations<sup>3,</sup> Equipment Category per Equipment Type per Tables 110.2 and Available<sup>1</sup> Name or Item Tables 110.2, 140.4(a)2 and Title 20 140.4(a) and 170.2(c)3aii Heating Per Design (kBtu/h) Load 170.2(c)1 (kBtu/h) (kBtu/h) Output (kBtu/h) (kBtu/h) (kBtu/h) PTHP newly constructed or newly 33.87 28.6 PTAC/ PTHP 141.0(b)2E and conditioned space 180.2(b)2 NA: Altered per PTHP newly constructed or newly PTAC/ PTHP 63.97 28.6 HP-8-2 & HP-8-3 141.0(b)2E and 41.22 34.49 180.2(b)2

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.

<sup>2</sup>It is common practice to show rated output capacity on the equipment schedule. Sensible cooling output comes from specification sheet tables. <sup>3</sup> If equipment is heating only, leave cooling output and load blank. If equipment is cooling only, leave heating output and load blank.

HP-8-2 & HP-8-3

33000

<sup>4</sup> Authority Having Jurisdiction may ask for load calculations used for compliance per 140.4(b) and 170.2(c). Dry system Equipment Efficiency (Package Terminal Air Conditioners (PTAC) and Package Terminal Heat Pumps (PTHP) only) 03 Heating Mode Cooling Mode Minimum EEF Name or Item Tag Rated Output Rated Output Capacity (kBtu/h) Design COP equired per Table: Design EER Required Capacity (kBtu/h) 110.2-E per Table 110.2-E 33000 36000

36000

9.5

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STATE OF CALIFORNIA Mechanical Systems CALIFORNIA ENERGY COMMISSION CERTIFICATE OF COMPLIANCE NRCC-MCH-E Project Name: Matsuyama Elementary School Modernization (Page 4 of 13 12/14/2023

G. PUMPS This section does not apply to this project. 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, and 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. packaged Elevation Units Units <54 kBtu/h Allowance Airflow through Motor Gauge Component Design Electrical Input Power Electrical Component (%) Nameplate (w.g) Method Input Horsepower Power (kW) Base Allowance for system serving 267 spaces <=6 floors away MERV 13-16 Filter upstream of Supply thermal conditioning equipment 0.44 Manufacturer provided Hydronic/DX cooling coil or heat Supply Fan System 1,150 Exhuast/Return/Relief/Transfer Fan Base Supply Fan Base Fan System Fan System Electrical Output (kW) Allowance (kW) Allowance(kW) Allowance (kW)<sup>3</sup>

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Mechanical Systems CALIFORNIA ENERGY COMMISSION NRCC-MCH-E (Page 5 of 13) Project Name: Matsuyama Elementary School Modernization Report Page: Date Prepared: 12/14/2023

System Name	HP-8-2 & HP-8-3	Quantit y	2	Fan System Status	Alteration		all other systems	Serving Dwelling Units	Not Serving Dwelling Units	Fan System Airflow (cfm)	2,300	Site Elevation	17	Economizer	NA: Altero package AC or Hi <54 kBtu
01	02	03	04			05		06	07	08	09			10	11
Fan						Airflow through Component (%)			Allow	ance	Design				
Name or Item Tag	Fan Type	Qty	Component		Water Gauge (w.g)			Compone nt Allowance	Fan Allowance (watt/cfm) 3	llowance Design Electrical Input Power		ut Power	Motor Nameplate Horsepower	Design Electrica Input Power (k	
	Supply	oply 2		se Allowance for system serving spaces <=6 floors away		1,1	150		267						
SF			MERV 13-16 Filter upstream of thermal conditioning equipment Hydronic/DX cooling coil or heat pump coil Supply Fan System						160		Manufacturer prov		vided		0.44
					1,1	150		160							
					1,1	L50		160							
Supply Fan Base Allowance (kW)			Exhuast/Return/Relief/Transf Allowance(kW)			er Fan Ba	ise		Fan System Allowance (kW) <sup>3</sup>		1 1/4 1		m Electrical out (kW)	0.87	

<sup>2</sup> 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.

<sup>3</sup> Fan system allowance includes fan system base allowance.

document..

<sup>4</sup> Filter pressure loss can only be counted once per fan system.

Complex Fan System means a fan system that combines a single cabinet fan system with other supply fans, exhaust

 $ar{b}$  Computer room economizers must meet requirements of 140.9(a) and will be documented on the NRCC-PRC-E

H. EXHAUST AIR HEAT RECOVERY 140.4(q), 170.2(c)40 Generated Date/Time: Documentation Software: EnergyPro Compliance ID: EnergyPro-4955-1223-1594 CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000

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STATE OF CALIFORNIA Mechanical Systems CALIFORNIA ENERGY COMMISSION CERTIFICATE OF COMPLIANCE This document is used to demonstrate compliance for mechanical systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive

☐ System Piping

☐ Cooling Towers

Chillers

□ Boilers

path outlined in 140.4, or 141.0(b)2 for alterations.

Project Address:

Project Name: Matsuyama Elementary School Modernization

Mechanical Controls

HP-8-2 & HP-8-3

Mechanical Controls (existing to remain, altered

A. GENERAL INFORMATION 01 Project Location (city) 04 Total Conditioned Floor Area Sacramento 1920 02 Climate Zone 05 Total Unconditioned Floor Area 03 Occupancy Types Within Project: 06 # of Stories (Habitable Above Grade)

7680 Windbridge Dr. Date Prepared:

Report Page:

 Classroom 3. 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. Air System(s) Wet System Components Dry System Components ☐ Water Economizer Air Economizer Pumps Electric Resistance Heat

Ductwork (existing to remain, altered or new)

Zonal Systems/ Terminal Boxes

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STATE OF CALIFORNIA Mechanical Systems CALIFORNIA ENERGY COMMISSION CERTIFICATE OF COMPLIANCE NRCC-MCH-E (Page 2 of 13) Project Name: Matsuyama Elementary School Modernization 12/14/202

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 compliant for guidance 09 08 Summary Pumps Controls 110.1, AND | Ventilation | AND | Controls | AND | 120.3, 140.4(k), 140.4(c), 110.2, 120.2, 110.2, 120.1, 160.2 140.4(d), 140.4(I), 110.2(e)2 170.2(c)4I 140.4(e). 140.4(f). 170.2(c) 170.2(c) 170.2(c) (See Table F) (See Table G) (See Table H) (See Table I) (See Table J) (See Table K) (See Table L) (See Table M) AND Yes AND Yes AND COMPLIES Yes AND Mandatory Measures Compliance (See Table Q for Details)

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) Space Conditioning System Information 03 05 System Name Quantity System Serving System Status Space Type Utilizing Recovered Heat HP-8-1 Single zone Alteration

Single zone

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Alteration

	TITLE 24 SHEET INDEX										
SHEET NO.	SHEET TITLE										
T24.01	TITLE 24 COMPLIANCE - BUILDING 8										
T24.02	TITLE 24 COMPLIANCE - BUILDING 8										
T24.03	TITLE 24 COMPLIANCE - BUILDING 9										
T24.04	TITLE 24 COMPLIANCE - BUILDING 9										
T24.05	TITLE 24 COMPLIANCE - BUILDING 10										
T24.06	TITLE 24 COMPLIANCE — BUILDING 10										
T24.07	TITLE 24 COMPLIANCE - BUILDING 11										
T24.08	TITLE 24 COMPLIANCE - BUILDING 11										
T24.09	TITLE 24 COMPLIANCE - KITCHEN										
T24.10	TITLE 24 COMPLIANCE - KITCHEN										
T24.11	TITLE 24 COMPLIANCE - ELECTRICAL BUILDING 2 AND SITE LIGHTING										
T24.12	TITLE 24 COMPLIANCE — ELECTRICAL BUILDING 2 AND SITE LIGHTING										

**AGENCY APPROVAL:** 

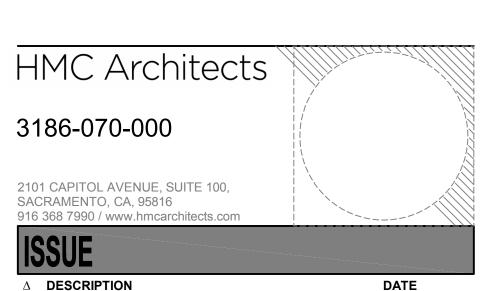
1 ADDENDUM #1

NRCC-MCH-E

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12/14/202





03/01/2024



SHEET NAME:

DATE: 01/04/2024

Roseville, CA 95678 p 916-771-0778 www.lpengineers.com Job #: 23-2274

MATSUYAMA ELEMENTARY SCHOOL 7680 WINDBRIDGE DR.

**SACRMANETO, CA 95831** 

MATSUYAMA ELEMENTARY SCHOOL MODERNIZATION

TITLE 24 COMPLIANCE -**BUILDING 8** 

CLIENT PROJ NO: 3186-070-000

Mechanical Systems

CERTIFICATE OF COMPLIANCE

Project Name: Matsuyama Elementary School Modernization

Report Page: (Page 12 of 13)

Date Prepared: 12/14/2023

Q. MANDATORY MEASURES DOCUMENTATION LOCATION

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

O1

Compliance with Mandatory Measures documented through MCH
Mandatory Measures Note Block

M-Sheets

The answers to the questions below apply to the following the following state of the property of the property

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Mechanical Systems

CERTIFICATE OF COMPLIANCE

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Report Page: (Page 13 of 13)

Project Address: 7680 Windbridge Dr. Date Prepared: 12/14/2023

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

Roseville CA 95678

I certify that this Certificate of Compliance documentation is accurate and complete. Documentation Author Signature: Light Planell. Ocumentation Author Name: Lydia Reynolds Company: LP Consulting Engineers, Inc. Signature Date: 2023-12-14 CEA/ HERS Certification Identification (if applicable): 1209 Pleasant Grove Blvd. City/State/Zip: 916.771.0778 Roseville CA 95678 RESPONSIBLE PERSON'S DECLARATION STATEMENT certify the following under penalty of perjury, under the laws of the State of California: The information provided on this Certificate of Compliance is true and correct. 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) 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. 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. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy. tesponsible Designer Name: esponsible Designer Signature: Ryan Ennis 2023-12-14 LP Consulting Engineers, Inc. 1209 Pleasant Grove Blvd. M41413

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916.771.0778

STATE OF CALIFORNIA

 Mechanical Systems
 CALIFORNIA ENERGY COMMISSION

 CERTIFICATE OF COMPLIANCE
 NRCC-MCH-E

 Project Name:
 Matsuyama Elementary School Modernization
 Report Page:
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 Date Prepared:
 12/14/2023

.. DISTRIBUTION (DUCTWORK and PIPING) Duct Leakage Testing NR/ Common Use: Duct leakage testing shall not exceed 6% per NA7.5.3 required for these systems? welling Units: Total duct leakage of duct system shall not exceed 12% The answers to the questions below apply to the following duct systems: | HP-8-1 | or duct system to outside shall not exceed 6% per RA3.1.4 required for | Duct leakage testing per CMC Section 603.10.1 required for these No The scope of the project includes only duct systems serving healthcare facilities Yes Duct system provides conditioned air to an occupiable space for a constant volume, single zone, space-conditioning system. Yes The space conditioning system serves less than 5,000 ft<sup>2</sup> of conditioned floor area. No The <u>combined</u> surface area of the ducts is more than 25% of the total surface area of the entire duct system: The scope of the project includes extending an existing duct system, which is constructed, insulated or sealed with asbestos. 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. All Ductwork and plenums with pressure class ratings shall be constructed to Seal Class A All ductwork is an extension of an existing duct system Ductwork serving individual dwelling unit < 25 ft of new or replacement space conditioning ducts installed R-8 Duct Insulation R-value NR/ Common Use: Duct leakage testing shall not exceed 6% per The answers to the questions below apply to the following duct systems: NA7.5.3 required for these systems?

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Mechanical Systems

CERTIFICATE OF COMPLIANCE

Project Name: Matsuyama Elementary School Modernization

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.. DISTRIBUTION (DUCTWORK and PIPING) **Dwelling Units:** Total duct leakage of duct system shall not exceed 12% or duct system to outside shall not exceed 6% per RA3.1.4 required for Duct leakage testing per CMC Section 603.10.1 required for these No The scope of the project includes only duct systems serving healthcare facilities Yes Duct system provides conditioned air to an occupiable space for a constant volume, single zone, space-conditioning system. The space conditioning system serves less than 5,000 ft° of conditioned floor area. No The <u>combined</u> surface area of the ducts is more than 25% of the total surface area of the entire duct system: The scope of the project includes extending an existing duct system, which is constructed, insulated or sealed with asbestos. 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. All Ductwork and plenums with pressure class ratings shall be constructed to Seal Class A All ductwork is an extension of an existing duct system Ductwork serving individual dwelling unit < 25 ft of new or replacement space conditioning ducts installed R-8 Duct Insulation R-value

M. COOLING TOWERS

This section does not apply to this project.

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

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STATE OF CALIFORNIA

Machanical Systems

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 Mechanical Systems
 CALIFORNIA ENERGY COMMISSION

 CERTIFICATE OF COMPLIANCE
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 Project Name:
 Matsuyama Elementary School Modernization
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 Date Prepared:
 12/14/2023

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 at https://www.energy.ca.gov/title24/2019standards/2019\_compliance\_documents/Nonresidential\_Documents/NRCI/

Form/Title

NRCI-MCH-01-E - Must be submitted for all buildings

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 can be found online at https://www.energy.ca.gov/title24/2019standards/2019\_compliance\_documents/Nonresidential\_Documents/NRCA/ Systems/Spaces To Be Field 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 BARD W36H; BARD W36H; 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 BARD W36H; BARD W36H; Systems are included in the scope, permit applicant should move this form to "Yes". BARD W36H; BARD W36H; NRCA-MCH-11-A Automatic Demand Shed Controls NRCA-MCH-16-A Supply Air Temperature Reset Controls BARD W36H; BARD W36H; NRCA-MCH-18-A Energy Management Control Systems BARD W36H; BARD W36H;

P. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION

There are no NRCV forms required for this project.

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AGENCY APPROVAL:



HMC Architects
3186-070-000

2101 CAPITOL AVENUE, SUITE 100,
SACRAMENTO, CA, 95816
916 368 7990 / www.hmcarchitects.com

Δ **DESCRIPTION**1 ADDENDUM#1

DATE 03/01/2024

CONSULTING

MEP & FS / Sustainability / CxA

1209 Pleasant Grove Blvd.
Roseville, CA 95678
p 916-771-0778

www.lpengineers.com
Job #: 23-2274

FACILITY:

MATSUYAMA ELEMENTARY SCHOOL

7680 WINDBRIDGE DR.

7680 WINDBRIDGE DR. SACRMANETO, CA 95831

PROJECT:
MATSUYAMA ELEMENTARY SCHOOL MODERNIZATION

SHEET NAME:
TITLE 24 COMPLIANCE BUILDING 8

DSA SUBMITTAL

DATE: 01/04/2024 CLIENT PROJ NO: 3186-070-000

T2/ 02

Documentation Software: EnergyPro

J. VENTILATION AND INDOOR AIR QUALITY

HP-9-2 & HP-9-3

System Name

08

This table is used to demonstrate compliance with mandatory ventilation requirements in 120.1 120.2(e)3B 140.4(p) and 140.4(q) for all nonresidential and hotel/motel and d:t24refnolink/]160.2, 160.3(a)3D, 170.2(a)4N, 170.2(a)4O for high-rise residential 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 O1 Check the box if the project is showing ventilation calculations on the plans, or attaching the calculations instead of completing this table. Check this box if the project included Nonresidential, Hotel/Motel Spaces or Multifamily Common Use Spaces O3 Check the box if the project is using natural ventilation in any nonresidential or hotel/motel spaces to meet required ventilation rates per 120.1(c)2.

NRCC-MCH-E

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160.2(c)21<sup>2</sup>

Provided

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CALIFORNIA ENERGY COMMISSION

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Nonresidential and Hotel/ Motel Multifamily Common Use Ventilation Systems Air Filtration per 120.1(c) 141.0(b)2 and System Design OA CFM System Design 160.2(c)21<sup>2</sup> HP-9-1 System Name Transfer Air CFM Provided 80 10 | 11 | 12 | 13 | 14 Exh. Vent per 120.1(c)4 & Mechanical Ventilation Required per 120.1(c)3<sup>3</sup> & 160.2(c)3 160.2(c)4 DCV or Sensor Controls per 120.1(d)3, Space Name Conditioned # of Shower # of 120.1(d)5, and 120.1(e)3<sup>6</sup> 160.2(c)5D or Item Tag Min OA Min CFM Required Provided per Design 160.2(c)5E 160.2(c)5D Floor Area heads/ Occupancy Type4 people<sup>5</sup> CFM toilets CFM NA: Not required per §120.1(d)3 960 364.8 Classroom (ages 5-18) Classroom NA: Not required Occ Sensor space type 17 Total System Required Min OA CFM 365 18 Ventilation for this System Complies? Air Filtration per 120.1(c) 141.0(b)2 and System Design OA CFM System Design

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Transfer Air CFM

13 14

STATE OF CALIFORNIA **Mechanical Systems** CERTIFICATE OF COMPLIANCE Project Name: Matsuyama Elementary School Modernization

10 | 11 |

Space Name or Item Tag	Mechanical Ventilation F	Required per 12	20.1(c)3 <sup>3</sup> & 1	60.2(c)3	Exh. V	/ent per 120.1(c)4 & 160.2(c)4	DCV or Sensor Controls per 120.1(d)3,			
	Occupancy Type <sup>4</sup>	Conditioned Floor Area (ft²)	# of Shower heads/ toilets	# of people <sup>5</sup>	Required Min OA CFM	Required Min CFM	Provided per Design CFM	120.1(d)5, and 120 160.2(c)5E		
Classes	Classroom (ages 5-18)	960			364.8	0	0	DCV	NA: Not required per §120.1(d)3	
Classroom	Ciassicotti (ages 5-10)	300					J	Occ Sensor	NA: Not required space type	
17	Total System Required Min OA CFM 365						Ventilation for this System Complies? Yes			

<sup>2</sup> 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

<sup>3</sup> Uniform Mechanical Code may have more stringent ventilation requirements; the most stringent code requirement takes precedence.

<sup>4</sup> See Standards Tables 120.1-A and 120.1-B.

<sup>5</sup> For lecture halls with fixed seating, the expected number of occupants shall be determined in accordance with the California Building Code. <sup>6</sup> 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  $250 \mathrm{ft}^2$  or smaller, multipurpose rooms less than  $1,000 \mathrm{\,ft}^2$ , 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).

K. TERMINAL BOX CONTROLS This section does not apply to this project.

L. DISTRIBUTION (DUCTWORK and PIPING) This table is used to show compliance with mandatory pipe insulation requirements found in 120.3 and mandatory requirements found in 120.4(g) for duct sealing. sulation 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.

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Mechanical Systems CALIFORNIA ENERGY COMMISSION CERTIFICATE OF COMPLIANCE NRCC-MCH-E Project Name: Matsuyama Elementary School Modernization Report Page: (Page 9 of 13) Date Prepared: 12/14/2023

Dust Lookage Tes	ting								
Duct Leakage Tes	ting			NR/ Common Use: Duct leakage testing shall not exceed 6% per NA7.5.3 required for these systems?	No				
The answers to th	ne questions bel	ow apply to the following duct systems:	HP-9-1	<b>Dwelling Units:</b> Total duct leakage of duct system shall not exceed 12% or duct system to outside shall not exceed 6% per RA3.1.4 required for systems?					
				Duct leakage testing per CMC Section 603.10.1 required for these systems?	Yes				
11	No	The scope of the project includes only duct systems serving healthcare facilities							
12	Yes	Duct system provides conditioned air to an occupiable space for a constant volume, single zone, space-conditioning system.							
13	Yes	The space conditioning system serves less than 5,000 ft <sup>2</sup> of conditioned floor area.							
14	No	The <u>combined</u> surface area of the ducts 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	No	, , ,	The scope of the project includes an existing duct system that is documented to have been previously sealed as confirmed through field verif and diagnostic testing in accordance with procedures in the Reference Nonresidential Appendix NA2.						
17		All Ductwork and plenums with pressu	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 u	Ductwork serving individual dwelling unit						
20		< 25 ft of new or replacement space conditioning ducts installed							
21	R-8	Duct Insulation R-value							
22									
23									
The answers to th	ne questions bel	ow apply to the following duct systems:	HP-9-2 & HP-9-3	NR/ Common Use: Duct leakage testing shall not exceed 6% per NA7.5.3 required for these systems?	No				

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G. PUMPS This section does not apply to this project. 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, and 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. NA: Altered Fan System Serving packaged | System | all other | Dwelling | Serving | System | Zoning | Systems | Dwelling | Dwelling | Airflow | HP-9-1 Economizer Status AC or HP Elevation Units Units <54 kBtu/h (cfm) 01 02 03 10 Allowance Airflow through Gauge Compone Allowance Motor Component Design Electrical Input Power Electrical Component (%) Nameplate (w.g) (watt/cfm) Method Input Horsepower Power (kW) Base Allowance for system serving 1,150 267 spaces <=6 floors away MERV 13-16 Filter upstream of 160 thermal conditioning equipment Supply 0.44 Manufacturer provided Hydronic/DX cooling coil or heat 160 pump coil Supply Fan System 1,150 160 Exhuast/Return/Relief/Transfer Fan Base Supply Fan Base Fan System Fan System Electrical Output (kW) Allowance (kW) Allowance(kW) Allowance (kW)<sup>3</sup>

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Compliance ID: EnergyPro-4955-1223-1595 Report Generated: 2023-12-14 13:50:58 Schema Version: rev 20220101 STATE OF CALIFORNIA **Mechanical Systems** CALIFORNIA ENERGY COMMISSION CERTIFICATE OF COMPLIANCE NRCC-MCH-E (Page 5 of 13 Project Name: Matsuyama Elementary School Modernization Report Page: 12/14/2023

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energy use

NA: Would

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12/14/202

H. FAN SYSTEMS & AIR ECONOMIZERS Serving System System | HP-9-2 & | Quantit Fan System Dwelling Dwelling Airflow conomizer HP-9-3 Status AC or HP Units Units <54 kBtu/ 01 02 03 10 | 11 Allowance Design Water Airflow through Motor Name Gauge Component Method Horsepower Power (kW) Base Allowance for system serving spaces <=6 floors away MERV 13-16 Filter upstream of 160 thermal conditioning equipment Supply 0.44 Manufacturer provided Hydronic/DX cooling coil or heat Supply Fan System Supply Fan Base Exhuast/Return/Relief/Transfer Fan Base Fan System Electrical Output (kW) Allowance (kW) Allowance (kW)<sup>3</sup>

<sup>1</sup> FOOTNOTES: Fans serving spaces with design background noise goals below NC35 <sup>2</sup> 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

Exemptions to

design load served by the equipment shall have fixed loads.

H. EXHAUST AIR HEAT RECOVERY 140.4(q), 170.2(c)40

HP-9-2 & HP-9-3

Single zone <= 25,000 ft<sup>2</sup>

<sup>3</sup> Fan system allowance includes fan system base allowance. Filter pressure loss can only be counted once per fan system.

Complex Fan System means a fan system that combines a single cabinet fan system with other supply fans, exhaust

<sup>6</sup> Computer room economizers must meet requirements of 140.9(a) and will be documented on the NRCC-PRC-E document..

H. EXHAUST AIR HEAT RECOVERY 140.4(q), 170.2(c)40 01 02 03 04 05 06 07 08 09 10 11 Generated Date/Time: Documentation Software: EnergyPro CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Compliance ID: EnergyPro-4955-1223-1595

Mechanical Systems CALIFORNIA ENERGY COMMISSION CERTIFICATE OF COMPLIANCE NRCC-MCH-E Project Name: Matsuyama Elementary School Modernization Report Page: (Page 6 of 13)

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Fan System Name	Qty	Operati	Hours of Operation per Year Airflow Ra		Outdoor	% Outdoor Air at Full Design Airflow	Heat Recove	ry Hea nt 14 & 17	Exhaust Air Heat Recovery 140.4(q) & 170.2(c)40		Of Heat Required Recovery Ratio			Energy Recovery Bypass	
Fan Energy Ind	lex (FEI)														
	0	1			02					03					
	Name or	Item Tag			FEI Exception					FEI					
I. SYSTEM CON	ITROLS														
This table is used 141.0(b)2E 180					ntrols in 110.2 and 1	20.2 and presc	riptive controls	in 140.4	(f) and (n),	170.2(c)4	ID 170.2	(c)4L or r	equirem	ents in	
01		02	03		04	05	06		07		08			09	
System Name		System Zoning	Conditioned Floor Area Being Served (ft <sup>2</sup> )	110.2(	Thermostats b) & (c) <sup>1</sup> , 120.2(a) 2A or 141.0(b)2E & 180.2(b)2	Shut-Off Controls 120.2(e) & 160.3(a)2D	Isolation Zone Controls 120.2(g) & 160.3(a)2F	110	Demand Response 110.12 120.2(b) & 160.3(a)2B		Supply Temp. R 140.4(f 170.2(c	Reset Window 140.4(n)		nterlocks per & 170.2(c)4D	
HP-9-1		Single zone	e zone <= 25,000 ft² Setback		Setback	Auto Timer Switch	4 Hour Timer		NA: Wou EMCS increase			Pro	ovided		

<sup>1</sup>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.

Auto Timer

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STATE OF CALIFORNIA **Mechanical Systems** CALIFORNIA ENERGY COMMISSION CERTIFICATE OF COMPLIANCE

This document is used to demonstrate compliance for mechanical systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in 140.4, or 141.0(b)2 for alterations. Project Name: Matsuyama Elementary School Modernization Report Page: (Page 1 of 13) Project Address: 7680 Windbridge Dr. Date Prepared: 12/14/202

A. GENERAL INFORMATION 01 Project Location (city) 04 Total Conditioned Floor Area Sacramento 1920 02 Climate Zone 05 Total Unconditioned Floor Area 03 Occupancy Types Within Project: 06 # of Stories (Habitable Above Grade) Classroom

3. 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. Air System(s) Wet System Components Dry System Components ☐ Water Economizer Air Economizer Pumps Electric Resistance Heat Mechanical Controls ☐ System Piping Mechanical Controls (existing to remain, altered ☐ Cooling Towers □ Ductwork (existing to remain, altered or new) Chillers □ Boilers Zonal Systems/ Terminal Boxes

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Project Name: Matsuyama Elementary School Modernization

HP-9-2 & HP-9-3

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 compliant for quidance. 09 08 Summary Pumps Controls AND | Cooling Towers 110.1, AND | Ventilation | AND | Controls | AND | 120.3, 140.4(k), 140.4(c), 110.2, 120.2, 110.2, 120.1, 160.2 140.4(d), 140.4(I), 110.2(e)2 170.2(c)4I 140.4(e). 140.4(f). 170.2(c)4B 160.2, 160.3 170.2(c) 170.2(c) 170.2(c) (See Table F) (See Table G) (See Table H) (See Table I) (See Table J) (See Table K) (See Table L) (See Table M) AND Yes AND Yes AND Yes AND COMPLIES Mandatory Measures Compliance (See Table Q for Details)

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) Space Conditioning System Information 03 System Name Quantity System Serving System Status Space Type Utilizing Recovered Heat HP-9-1 Single zone Alteration

Alteration

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Single zone

CALIFORNIA ENERGY COMMISSION CERTIFICATE OF COMPLIANCE NRCC-MCH-E (Page 3 of 13) Project Name: Matsuyama Elementary School Modernization Report Page: 12/14/2023 Date Prepared:

F. HVAC SYSTEM SUMMARY (DRY & WET SYSTEMS) Dry System Equipment Sizing (includes air conditioners, condensers, heat pumps, VRF, furnaces and unit heaters and DOAS systems) 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 Equipment Sizing per Mechanical Schedule (kBtu/h) 140.4(a&b), 170.2(c)1 & 170.2(c)2 Cooling Output<sup>2,3</sup> Load Calculations<sup>3,</sup> Heating Output<sup>2,3</sup> Equipment Category per Name or Item Equipment Type per Tables 110.2 and Tables 110.2, 140.4(a)2 and 140.4(a) and Per Design Rated Heating Per Design 170.2(c)3aii Rated Heating 170.2(c)1 (kBtu/h) (kBtu/h) Output (kBtu/h) Load (kBtu/h) Load (kBtu/h) (kBtu/h) (kBtu/h) NA: Altered per PTHP newly constructed or newly HP-9-1 PTAC/ PTHP 141.0(b)2E and 33.86 28.6 34.42 43.67 conditioned space 180.2(b)2 NA: Altered per PTHP newly constructed or newly 141.0(b)2E and 41.22 63.94 HP-9-2 & HP-9-3 PTAC/ PTHP 28.6 34.49 44.36 conditioned space 180.2(b)2 <sup>1</sup>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. <sup>2</sup>It is common practice to show rated output capacity on the equipment schedule. Sensible cooling output comes from specification sheet tables.

<sup>3</sup> If equipment is heating only, leave cooling output and load blank. If equipment is cooling only, leave heating output and load blank.

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

<sup>4</sup> Authority Having Jurisdiction may ask for load calculations used for compliance per 140.4(b) and 170.2(c). Dry system Equipment Efficiency (Package Terminal Air Conditioners (PTAC) and Package Terminal Heat Pumps (PTHP) only) 06 Heating Mode Cooling Mode Name or Item Tag Rated Output Rated Output Capacity (kBtu/h) Required per Tables Design EER Design COP Capacity (kBtu/h) per Table 110.2-E 110.2-E 36000 HP-9-1 33000 3.3 9.5 11.1 HP-9-2 & HP-9-3 36000 9.5 33000 3.3 11.1 Generated Date/Time: Documentation Software: EnergyPro

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**AGENCY APPROVAL:** 

△ **DESCRIPTION** 

1 ADDENDUM #1

NRCC-MCH-E

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**HMC** Architects 3186-070-000 2101 CAPITOL AVENUE, SUITE 100. SACRAMENTO, CA, 95816 916 368 7990 / www.hmcarchitects.com

> DATE 03/01/2024



MATSUYAMA ELEMENTARY SCHOOL **7680 WINDBRIDGE DR.** 

MATSUYAMA ELEMENTARY SCHOOL MODERNIZATION

**TITLE 24 COMPLIANCE -BUILDING 9** 

SACRMANETO, CA 95831

CLIENT PROJ NO: 3186-070-000 DATE: 01/04/2024

Compliance ID: EnergyPro-4955-1223-1595

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STATE OF CALIFORNIA Mechanical Systems CALIFORNIA ENERGY COMMISSION CERTIFICATE OF COMPLIANCE NRCC-MCH-E Project Name: Matsuyama Elementary School Modernization (Page 13 of 13) Project Address: 7680 Windbridge Dr. Date Prepared: 12/14/2023

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT I certify that this Certificate of Compliance documentation is accurate and complete. Documentation Author Signature: Landle Documentation Author Name: Lydia Reynolds Company: LP Consulting Engineers, Inc. Signature Date: 2023-12-14 CEA/ HERS Certification Identification (if applicable): 1209 Pleasant Grove Blvd. City/State/Zip: Roseville CA 95678 916.771.0778 RESPONSIBLE PERSON'S DECLARATION STATEMENT I certify the following under penalty of perjury, under the laws of the State of California: The information provided on this Certificate of Compliance is true and correct. 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) 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 will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy. Responsible Designer Name: Ryan Ennis LP Consulting Engineers, Inc. 2023-12-14 1209 Pleasant Grove Blvd. M41413 City/State/Zip: 916.771.0778 Roseville CA 95678

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Mechanical Systems CALIFORNIA ENERGY COMMISSION CERTIFICATE OF COMPLIANCE NRCC-MCH-E (Page 10 of 13) Project Name: Matsuyama Elementary School Modernization Report Page: Date Prepared: 12/14/2023

.. DISTRIBUTION (DUCTWORK and PIPING) **Dwelling Units:** Total duct leakage of duct system shall not exceed 12% or duct system to outside shall not exceed 6% per RA3.1.4 required for Duct leakage testing per CMC Section 603.10.1 required for these No The scope of the project includes only duct systems serving healthcare facilities Yes Duct system provides conditioned air to an occupiable space for a constant volume, single zone, space-conditioning system. Yes The space conditioning system serves less than 5,000 ft<sup>2</sup> of conditioned floor area. No The <u>combined</u> surface area of the ducts is more than 25% of the total surface area of the entire duct system: The scope of the project includes extending an existing duct system, which is constructed, insulated or sealed with asbestos. 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. All Ductwork and plenums with pressure class ratings shall be constructed to Seal Class A All ductwork is an extension of an existing duct system Ductwork serving individual dwelling unit 19 < 25 ft of new or replacement space conditioning ducts installed 21 R-8 Duct Insulation R-value 23

M. COOLING TOWERS

This section does not apply to this project.

NRCA-MCH-18-A Energy Management Control Systems

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STATE OF CALIFORNIA Mechanical Systems CALIFORNIA ENERGY COMMISSION CERTIFICATE OF COMPLIANCE Project Name: Matsuyama Elementary School Modernization

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 at https://www.energy.ca.gov/title24/2019standards/2019 compliance documents/Nonresidential Documents/NRCI/ Form/Title NRCI-MCH-01-E - Must be submitted for all buildings

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 can be found online at  $https://www.energy.ca.gov/title24/2019 standards/2019\_compliance\_documents/Nonresidential\_Documents/NRCA/2019\_compliance\_documents/Nonresidential\_Documents/NRCA/2019\_compliance\_documents/NRCA/2019\_compliance\_documents/Nonresidential\_Documents/NRCA/2019\_compliance\_documents/Nonresidential\_Documents/NRCA/2019\_compliance\_documents/Nonresidential\_Documents/NRCA/2019\_compliance\_documents/Nonresidential\_Documents/NRCA/2019\_compliance\_documents/NRCA/2019\_compliance\_$ Systems/Spaces To Be Field Verified 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 BARD W36H; BARD W36H; 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 BARD W36H; BARD W36H; Systems are included in the scope, permit applicant should move this form to "Yes". BARD W36H; BARD W36H; NRCA-MCH-11-A Automatic Demand Shed Controls NRCA-MCH-16-A Supply Air Temperature Reset Controls BARD W36H; BARD W36H;

P. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION There are no NRCV forms required for this project.

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Mechanical Systems CALIFORNIA ENERGY COMMISSION CERTIFICATE OF COMPLIANCE NRCC-MCH-E (Page 12 of 13) Report Page: Project Name: Matsuyama Elementary School Modernization 12/14/2023 Date Prepared:

Q. MANDATORY MEASURES DOCUMENTATION LOCATION This table is used to indicate where mandatory measures are documented in the plan set or construction documentation. Plan sheet or construction document location Compliance with Mandatory Measures documented through MCH Mandatory Measures Note Block

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**AGENCY** APPROVAL:

DATE 03/01/2024

**HMC** Architects

3186-070-000

2101 CAPITOL AVENUE, SUITE 100, SACRAMENTO, CA, 95816 916 368 7990 / www.hmcarchitects.com

NRCC-MCH-E

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BARD W36H; BARD W36H;

**△ DESCRIPTION** 1 ADDENDUM #1

ENGINEERS

Job #: 23-2274

Roseville, CA 95678 p 916-771-0778

www.lpengineers.com

MATSUYAMA ELEMENTARY SCHOOL

**7680 WINDBRIDGE DR. SACRMANETO, CA 95831** 

PROJECT: MATSUYAMA ELEMENTARY SCHOOL MODERNIZATION

SHEET NAME: TITLE 24 COMPLIANCE -**BUILDING 9** 

DATE: 01/04/2024

CLIENT PROJ NO: 3186-070-000

PLEASE RECYCLE 🖏