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PRE-CHECKED SET NAME  
24'x40' THRU 120'x40'  
HIGH PITCH MODULAR BUILDINGS

SITE SPECIFIC PROJECT NAME

SHEET TITLE

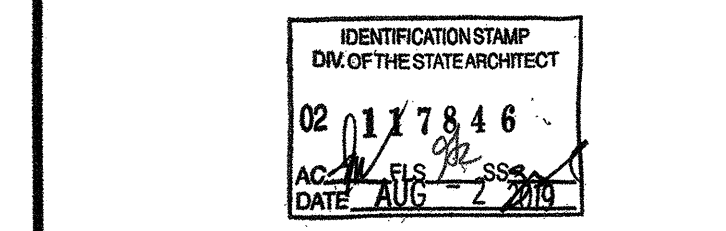
ENERGY CALCULATIONS

MANUFACTURER PROFESSIONAL OF RECORD ON PC

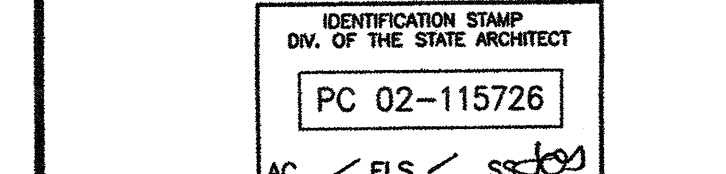


THESE DRAWINGS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS STAMPED & SIGNED BY THE ENGINEER OF RECORD.

PROJECT SPECIFIC STATE APPROVAL



ORIGINAL PC STATE AGENCY APPROVAL



PRE-CHECK (PC) DOCUMENT  
CODE 2018-036  
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED.

REVISIONS

DRAWN BY: AS NOTED

SHEET NUMBER

EN.4-02

Project Name: AMS Modular Classroom 2640  
Project Address: Palm Springs, CA  
Calculation Date/Time: 09 Oct, Tue, Feb 27, 2018  
Input File Name: AMS 2640 for USA - C215 (B) c4816  
Compliance Scope: New/Complete

**II. CERTIFICATE OF INSTALLATION, CERTIFICATE OF ACCEPTANCE & CERTIFICATE OF VERIFICATION SUMMARY (NRC/NRCA/NRNC) -**  
Documentation Author to indicate which Certificates must be submitted for the features to be recognized for compliance (NRC/NRCA/NRNC) and which forms are completed and signed for in field for Field Inspector to verify. (See Tables G and H in MCH and I1 Details Sections for Acceptance Tests and forms by equipment)

Building Component	Compliance Items (Approved for Submittal)	Pass	Fail
Plumbing	1. IRC-P18-01.4 - Hot or cold drinking water plumbing systems	<input type="checkbox"/>	<input type="checkbox"/>
	2. IRC-P18-01.6 - Hot or cold drinking water plumbing systems in high-rise residential, hotel/motel application	<input type="checkbox"/>	<input type="checkbox"/>
	3. IRC-P18-01.8 - Hot or cold drinking water plumbing systems in high-rise residential, hotel/motel application	<input type="checkbox"/>	<input type="checkbox"/>
	4. IRC-P18-01.9 - Hot or cold drinking water plumbing systems in high-rise residential, hotel/motel application	<input type="checkbox"/>	<input type="checkbox"/>
	5. IRC-P18-01.10 - Hot or cold drinking water plumbing systems in high-rise residential, hotel/motel application	<input type="checkbox"/>	<input type="checkbox"/>
	6. IRC-P18-01.11 - Hot or cold drinking water plumbing systems in high-rise residential, hotel/motel application	<input type="checkbox"/>	<input type="checkbox"/>
	7. IRC-P18-01.12 - Hot or cold drinking water plumbing systems in high-rise residential, hotel/motel application	<input type="checkbox"/>	<input type="checkbox"/>
	8. IRC-P18-01.13 - Hot or cold drinking water plumbing systems in high-rise residential, hotel/motel application	<input type="checkbox"/>	<input type="checkbox"/>
	9. IRC-P18-01.14 - Hot or cold drinking water plumbing systems in high-rise residential, hotel/motel application	<input type="checkbox"/>	<input type="checkbox"/>
	10. IRC-P18-01.15 - Hot or cold drinking water plumbing systems in high-rise residential, hotel/motel application	<input type="checkbox"/>	<input type="checkbox"/>
Indoor Lighting	1. IRC-L13-01.4 - Lighting control system, or for an Energy Management Control System (EMCS)	<input type="checkbox"/>	<input type="checkbox"/>
	2. IRC-L13-01.5 - Line voltage track lighting integral current limiter, or for a supplementary overcurrent protection panel used to integrate only line-voltage track lighting	<input type="checkbox"/>	<input type="checkbox"/>
	3. IRC-L13-01.6 - Two independent systems serving an auditorium, a convention center, a conference room, or a theater	<input type="checkbox"/>	<input type="checkbox"/>
	4. IRC-L13-01.7 - Additional lighting control system	<input type="checkbox"/>	<input type="checkbox"/>
	5. IRC-L13-01.8 - Additional lighting control system in video conferencing studio	<input type="checkbox"/>	<input type="checkbox"/>
	6. IRC-L13-01.9 - Occupancy sensors and automatic time switch controls	<input type="checkbox"/>	<input type="checkbox"/>
	7. IRC-L13-01.10 - Automatic dimming controls	<input type="checkbox"/>	<input type="checkbox"/>
	8. IRC-L13-01.11 - Demand response lighting controls	<input type="checkbox"/>	<input type="checkbox"/>
	9. IRC-L13-01.12 - Occupancy sensors and automatic time switch controls	<input type="checkbox"/>	<input type="checkbox"/>
	10. IRC-L13-01.13 - Occupancy sensors and automatic time switch controls	<input type="checkbox"/>	<input type="checkbox"/>
Outdoor Lighting	1. IRC-L14-01.1 - Outdoor Lighting Control	<input type="checkbox"/>	<input type="checkbox"/>
	2. IRC-L14-01.2 - Sign Lighting	<input type="checkbox"/>	<input type="checkbox"/>
	3. IRC-L14-01.3 - Sign Lighting	<input type="checkbox"/>	<input type="checkbox"/>
	4. IRC-L14-01.4 - Sign Lighting	<input type="checkbox"/>	<input type="checkbox"/>
	5. IRC-L14-01.5 - Sign Lighting	<input type="checkbox"/>	<input type="checkbox"/>
	6. IRC-L14-01.6 - Sign Lighting	<input type="checkbox"/>	<input type="checkbox"/>
	7. IRC-L14-01.7 - Sign Lighting	<input type="checkbox"/>	<input type="checkbox"/>
	8. IRC-L14-01.8 - Sign Lighting	<input type="checkbox"/>	<input type="checkbox"/>
	9. IRC-L14-01.9 - Sign Lighting	<input type="checkbox"/>	<input type="checkbox"/>
	10. IRC-L14-01.10 - Sign Lighting	<input type="checkbox"/>	<input type="checkbox"/>
Electrical	1. IRC-E11-01.4 - Electrical Power Distribution	<input type="checkbox"/>	<input type="checkbox"/>
	2. IRC-E11-01.5 - Electrical Power Distribution	<input type="checkbox"/>	<input type="checkbox"/>
	3. IRC-E11-01.6 - Electrical Power Distribution	<input type="checkbox"/>	<input type="checkbox"/>
	4. IRC-E11-01.7 - Electrical Power Distribution	<input type="checkbox"/>	<input type="checkbox"/>
	5. IRC-E11-01.8 - Electrical Power Distribution	<input type="checkbox"/>	<input type="checkbox"/>
	6. IRC-E11-01.9 - Electrical Power Distribution	<input type="checkbox"/>	<input type="checkbox"/>
	7. IRC-E11-01.10 - Electrical Power Distribution	<input type="checkbox"/>	<input type="checkbox"/>
	8. IRC-E11-01.11 - Electrical Power Distribution	<input type="checkbox"/>	<input type="checkbox"/>
	9. IRC-E11-01.12 - Electrical Power Distribution	<input type="checkbox"/>	<input type="checkbox"/>
	10. IRC-E11-01.13 - Electrical Power Distribution	<input type="checkbox"/>	<input type="checkbox"/>

Project Name: AMS Modular Classroom 2640  
Project Address: Palm Springs, CA  
Calculation Date/Time: 09 Oct, Tue, Feb 27, 2018  
Input File Name: AMS 2640 for USA - C215 (B) c4816  
Compliance Scope: New/Complete

**III. CERTIFICATE OF INSTALLATION, CERTIFICATE OF ACCEPTANCE & CERTIFICATE OF VERIFICATION SUMMARY (NRC/NRCA/NRNC) -**  
Documentation Author to indicate which Certificates must be submitted for the features to be recognized for compliance (NRC/NRCA/NRNC) and which forms are completed and signed for in field for Field Inspector to verify. (See Tables G and H in MCH and I1 Details Sections for Acceptance Tests and forms by equipment)

Building Component	Compliance Items (Approved for Submittal)	Pass	Fail				
Covered Process	1. NRC-P18-01.4 - Covered Process	<input type="checkbox"/>	<input type="checkbox"/>				
	2. NRC-P18-01.5 - Covered Process	<input type="checkbox"/>	<input type="checkbox"/>				
	3. NRC-P18-01.6 - Covered Process	<input type="checkbox"/>	<input type="checkbox"/>				
	4. NRC-P18-01.7 - Covered Process	<input type="checkbox"/>	<input type="checkbox"/>				
	5. NRC-P18-01.8 - Covered Process	<input type="checkbox"/>	<input type="checkbox"/>				
	6. NRC-P18-01.9 - Covered Process	<input type="checkbox"/>	<input type="checkbox"/>				
	7. NRC-P18-01.10 - Covered Process	<input type="checkbox"/>	<input type="checkbox"/>				
	8. NRC-P18-01.11 - Covered Process	<input type="checkbox"/>	<input type="checkbox"/>				
	9. NRC-P18-01.12 - Covered Process	<input type="checkbox"/>	<input type="checkbox"/>				
	10. NRC-P18-01.13 - Covered Process	<input type="checkbox"/>	<input type="checkbox"/>				
Envelope General Information	1. Total Unconditioned Floor Area (sq ft)	900	1				
	2. Total Conditioned Floor Area (sq ft)	0	0				
	3. Total Unconditioned Floor Area (sq ft)	900	1				
	4. Total Conditioned Floor Area (sq ft)	0	0				
	5. Total Unconditioned Floor Area (sq ft)	900	1				
	6. Total Conditioned Floor Area (sq ft)	0	0				
	7. Total Unconditioned Floor Area (sq ft)	900	1				
	8. Total Conditioned Floor Area (sq ft)	0	0				
	9. Total Unconditioned Floor Area (sq ft)	900	1				
	10. Total Conditioned Floor Area (sq ft)	0	0				
Energy Component	1. Energy Component	Standard Design (TDW)	Proposed Design (PDW)	Margin (MW)	Standard Design (TDW)	Proposed Design (PDW)	Margin (MW)
	Space Heating	4.2	2.1	2.1	4.2	2.1	2.1
	Space Cooling	1.0	0.5	0.5	1.0	0.5	0.5
	Water Heating	0.0	0.0	0.0	0.0	0.0	0.0
	Domestic Hot Water	0.0	0.0	0.0	0.0	0.0	0.0
	Lighting	0.0	0.0	0.0	0.0	0.0	0.0
	Plug Loads	0.0	0.0	0.0	0.0	0.0	0.0
	Other	0.0	0.0	0.0	0.0	0.0	0.0
	Total	5.2	2.6	2.6	5.2	2.6	2.6

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Compliance Scope: New/Complete

**IV. ENERGY USE SUMMARY**

Energy Component	Standard Design (TDW)	Proposed Design (PDW)	Margin (MW)	Standard Design (TDW)	Proposed Design (PDW)	Margin (MW)
Space Heating	4.2	2.1	2.1	4.2	2.1	2.1
Space Cooling	1.0	0.5	0.5	1.0	0.5	0.5
Water Heating	0.0	0.0	0.0	0.0	0.0	0.0
Domestic Hot Water	0.0	0.0	0.0	0.0	0.0	0.0
Lighting	0.0	0.0	0.0	0.0	0.0	0.0
Plug Loads	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.0	0.0
Total	5.2	2.6	2.6	5.2	2.6	2.6

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**V. MECHANICAL VENTILATION AND HUMIDITY (Adapted from 2018-NRCC-MCH-01)**

Room	Room Name	Room Volume (ft³)	Room Area (ft²)	Room Height (ft)	Room Type	Room Use	Room Category	Room Status
1	Classroom	1080	300	12	Classroom	Classroom	Classroom	Classroom

Project Name: AMS Modular Classroom 2640  
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**VI. INDOOR ENVIRONMENTAL QUALITY (IEQ) - SECTION START**

**A. MECHANICAL VENTILATION AND HUMIDITY (Adapted from 2018-NRCC-MCH-01)**

Room	Room Name	Room Volume (ft³)	Room Area (ft²)	Room Height (ft)	Room Type	Room Use	Room Category	Room Status
1	Classroom	1080	300	12	Classroom	Classroom	Classroom	Classroom

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**VII. ENERGY USE SUMMARY**

Energy Component	Standard Design (TDW)	Proposed Design (PDW)	Margin (MW)	Standard Design (TDW)	Proposed Design (PDW)	Margin (MW)
Space Heating	4.2	2.1	2.1	4.2	2.1	2.1
Space Cooling	1.0	0.5	0.5	1.0	0.5	0.5
Water Heating	0.0	0.0	0.0	0.0	0.0	0.0
Domestic Hot Water	0.0	0.0	0.0	0.0	0.0	0.0
Lighting	0.0	0.0	0.0	0.0	0.0	0.0
Plug Loads	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.0	0.0
Total	5.2	2.6	2.6	5.2	2.6	2.6

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**VIII. INDOOR ENVIRONMENTAL QUALITY (IEQ) - SECTION START**

**A. MECHANICAL VENTILATION AND HUMIDITY (Adapted from 2018-NRCC-MCH-01)**

Room	Room Name	Room Volume (ft³)	Room Area (ft²)	Room Height (ft)	Room Type	Room Use	Room Category	Room Status
1	Classroom	1080	300	12	Classroom	Classroom	Classroom	Classroom

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**IX. INDOOR ENVIRONMENTAL QUALITY (IEQ) - SECTION START**

**A. MECHANICAL VENTILATION AND HUMIDITY (Adapted from 2018-NRCC-MCH-01)**

Room	Room Name	Room Volume (ft³)	Room Area (ft²)	Room Height (ft)	Room Type	Room Use	Room Category	Room Status
1	Classroom	1080	300	12	Classroom	Classroom	Classroom	Classroom

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**X. INDOOR ENVIRONMENTAL QUALITY (IEQ) - SECTION START**

**A. MECHANICAL VENTILATION AND HUMIDITY (Adapted from 2018-NRCC-MCH-01)**

Room	Room Name	Room Volume (ft³)	Room Area (ft²)	Room Height (ft)	Room Type	Room Use	Room Category	Room Status
1	Classroom	1080	300	12	Classroom	Classroom	Classroom	Classroom

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**XI. INDOOR ENVIRONMENTAL QUALITY (IEQ) - SECTION START**

**A. MECHANICAL VENTILATION AND HUMIDITY (Adapted from 2018-NRCC-MCH-01)**

Room	Room Name	Room Volume (ft³)	Room Area (ft²)	Room Height (ft)	Room Type	Room Use	Room Category	Room Status
1	Classroom	1080	300	12	Classroom	Classroom	Classroom	Classroom

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**XII. INDOOR ENVIRONMENTAL QUALITY (IEQ) - SECTION START**

**A. MECHANICAL VENTILATION AND HUMIDITY (Adapted from 2018-NRCC-MCH-01)**

Room	Room Name	Room Volume (ft³)	Room Area (ft²)	Room Height (ft)	Room Type	Room Use	Room Category	Room Status
1	Classroom	1080	300	12	Classroom	Classroom	Classroom	Classroom

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**XIII. INDOOR ENVIRONMENTAL QUALITY (IEQ) - SECTION START**

**A. MECHANICAL VENTILATION AND HUMIDITY (Adapted from 2018-NRCC-MCH-01)**

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**XIV. INDOOR ENVIRONMENTAL QUALITY (IEQ) - SECTION START**

**A. MECHANICAL VENTILATION AND HUMIDITY (Adapted from 2018-NRCC-MCH-01)**

Room	Room Name	Room Volume (ft³)	Room Area (ft²)	Room Height (ft)	Room Type	Room Use	Room Category	Room Status
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**XV. INDOOR ENVIRONMENTAL QUALITY (IEQ) - SECTION START**

**A. MECHANICAL VENTILATION AND HUMIDITY (Adapted from 2018-NRCC-MCH-01)**

Room	Room Name	Room Volume (ft³)	Room Area (ft²)	Room Height (ft)	Room Type	Room Use	Room Category	Room Status
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**XVI. INDOOR ENVIRONMENTAL QUALITY (IEQ) - SECTION START**

**A. MECHANICAL VENTILATION AND HUMIDITY (Adapted from 2018-NRCC-MCH-01)**

Room	Room Name	Room Volume (ft³)	Room Area (ft²)	Room Height (ft)	Room Type	Room Use	Room Category	Room Status
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**XVII. INDOOR ENVIRONMENTAL QUALITY (IEQ) - SECTION START**

**A. MECHANICAL VENTILATION AND HUMIDITY (Adapted from 2018-NRCC-MCH-01)**

Room	Room Name	Room Volume (ft³)	Room Area (ft²)	Room Height (ft)	Room Type	Room Use	Room Category	Room Status
1	Classroom	1080	300	12	Classroom	Classroom	Classroom	Classroom