$\left(\frac{1}{2} \mid \varpi \right)$ CFN & T D U **_** <u>A</u> N 10" ø DUC AYO ᅙ GRID MOUNTED NOTE:

SEE DETAIL "D" ON OSHEET S4 FOR HVAC COPENING LOCATION. THERMOSTAT @ +48" SEALED
THERMOSTAT PROVIDED BY DISTRICT FLEX DUCT TYP. WORK THICK 2" SEWER STUB

I REGISTERS SUPP ._< D R BENDS IN FLEX-DUCT () ROS S S AIR RETURN CONCEALED SUPPLY
- AIR DUCT ABOVE
T-BAR CEILING STUB-OUT CONDENSATE
DRAINAGE LINE BELOW
UNIT FOR CONTINUATION
BY OTHERS HVAC UNIT(500 LB. MAX. OPERATING WEIGHT) 450 CFM MINIMUM OUTISDE AIR

> CHM CHART

DUCT SUPPORT

Flex duct to be supported with 1-1/2" wide x 26
ga. galv. strap @ max 6'-0" o.c. Attach to rafter W/2 #8
SMS @ each end.

Supply air plenum to be supported with 1-1/2"
wide x 26 ga. galv. straps min. 2 per plenum.
Supply air box and diffusers to be supported with (2) 12
ga. hanger wires to box @ opposite corners.

Supply air box and diffusers to be braced with (2) 12 ga.
slack wires to box @ opposite corners. Attach supply air
diffusers to ceiling grid to resist a lateral load equal to
the weight of the diffuser and supply air box W/2 #8 SMS.

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SHIT HE THESE DRAWINGS COMPLY ENERGY CONSERVATION REQUIREMENTS 24 OF THE STATE OF CALIFORNIA

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1/4"=1'-0"

| RANGE C12631 40 PROPERTY OF CALIFORNIA TO | |
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See Title 24 Energy Compliance Report Booklet for More Datails なみ ENERGY Manufacture COMP BUILDING DESCRIPTION: LIANCE SUMMARY

Roof: R-19 (Batt) NSULATION nvelope Measures Panes GLAZING

Floor: R-11 (Batt) R-11 (Batt) Frames: Metal SHGC:

Code: Quantity: Description (3) 4ft fluorescent TB Elec (3) 4/1 fluoresceni F32T8 / Electronic F32T8 / Electronic Total Watts:

Lighting Measures

Controls for Credit: Occ Sensor 250 sq (4) m E A & (1) TYPE B. =

Modular: Type: Qty: 710 OSA: 10.20 SEER

Heating

7.00 HSPF

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Electric Heat (KW): 0.0 kw Duct Location: conditioned Space

Duct Insulation: R-4.2

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T-Stat:

WH431-A 3 1/2 TON HEAT PUMP
WH482-A 4 TON HEAT PUMP HVAC 5 TON HEAT PUMP

CUSTOMER: BAKERSFIELD STY STY SCHOOL DISTRICT

MECHANICAL PLAN

24 X 40 HP(ES)
RELOCATABLE
CLASSROOMS

American Modular Systems 787 Spreckels Ave. Manteca, CA 95336 7209)825-1921 Fax (209)825-7018 americanmodular.com

NOTES

DATE: 04/21/08
SCALE: NONE

DRAWN BY:
CHECKED BY:
CHECKED BY:
SERIAL NO.

GENERAL NOTES
HEATING VENTILATING AND AIR CONDITIONING (HVAC)

1. Heat Pump: Single package wall mounted air to air electric heat pump unit shall be rated in accordance with ARI Standard 240-77.

Reference
Brands: BARD WH431A-XXXXXX 12 SEE

BARD WH431A-XXXXXX 12 SEER

MAXIMUM AC SIZE FOR THIS BUILDING WILL BE A 5-TON UNIT

14, 15 & 16

All units shall be 230/208 volt, 1 phase system, UL tested & approved or comparable and meet current energy standards.

A.) The system shall maintain an automatically controlled indoor classroom temperature of 78 degrees F. When the outdoor dry bulb temperature varies between 100 degrees F. in the summer B.) The system must maintain the above temperature when the damper is adjusted to use approximately one third fresh air. shall be 230/208 volt, 1 phase system, UL approved or comparable and meet current energy

Ductwork.
A.) Construct all ductwork of galvanized sheet metal in accordance with C.M.C., Ashrae Guide Equipment volume and Smacna Low Velocity Duct Construction manual latest editions. All ductwork shabe insulated with 1" thick fiberglass duct wrap with vapor barrier. Provide 1" duct attenuation at all ductwork within 2—'0" of HVAC unit. with with

B.) Non-metallic ductwork option: In accessible concealed portions of duct system rigid 1" fiberglass or insulated flex-duct with vapor barrier may be substituted for sheet metal ductwork. All ductwork within 2' of the HVAC unit and all interface connections shall be metal. Ductwork and reinforcement shall be designed for 2" static pressure.

Reference Brands: Owens-Corning fiberglass ducttboard, 1" thick, and Micro-aire, TYPE 475.

Non-metallic ductwork shall conform to NFPA 90-A and SMACNA Class 1 rating.

Air duct insulation and limings shall comply with flame spread less than or equal to 25, smoke generation less than or equal to 50.

Supply air diffusers shall be 675 CFM max. 12" round. 1" fiberglass or flexduct ductwork specifically designed to provide air thermal cooling systems. 24*x8"x1" Micro-Aire type #475 Owens-Corning, Knauf, Certainteed, or equal and 90-B: UL #131 test, class 1 rating with "SMACNA".

Registers and diffusers: Provide three (Min) 4-way throw air diffusers as manufactured Carnes, Titus, Hart and Cooley, Metalaire, Shoemaker, Barber-Coleman or Krueger commercial grade grills and registers Air conditioning controls.

Thermostat: Provide electronic programmable thermostat: Provide electronic programmable functions.

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functions.

A.) 5 and 2 weekday/weekend programming with 4
separate time/temperature setting for 24—hour period.

B.) Key board lockout switch.

C.) Programmable display.

D.) 2—hour override minimum.

E.) Status Indicated Led's.

F.) Battery back—up.

Provide locking clear thermostat cover with thermostat cover with access hole for program override. White Rodgers IF92 @ +48" SEALED.

7.

DATE APP03 1 1 2 8 8 5 FLS 4C 88 BSC 3-24-2010

IDENTIFICATION STAMP
OF THE STATE ARCHITECT
OF REGULATION SERVICES

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