

1 ENLARGED CLASSROOMS 210 & 225 - NEW WORK

## DRAWING NOTES

EXISTING ROOF MOUNTED LAB HOOD EXHAUST FAN BE REMOVED AND REPLACED WITH NEW. EXISTING CONTROL WIRING, POWER WIRING, DISCONNECT SWITCH, CURB, BACKDRAFT DAMPER AND DUCTWORK TO REMAIN. EXTEND ALL EXISTING UTILITIES NEW FAN. REFER TO FAN SCHEDULE FOR ADDITIONAL INFORMATION.

EXISTING DUCTWORK TO REMAIN.

EXISTING VAV TERMINAL BOX TO REMAIN.

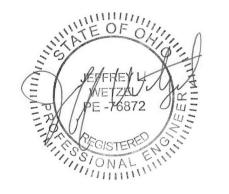
4. EXISTING AIR DEVICE TO REMAIN.

EXISTING TRANSFER OPENING TO REMAIN.

6. EXISTING THERMOSTAT TO REMAIN.



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Prınt Record

01/24/22 BID SET 02/02/22 PERMIT SET 02/10/22 ADDENDUM #3

Project Number

2021131

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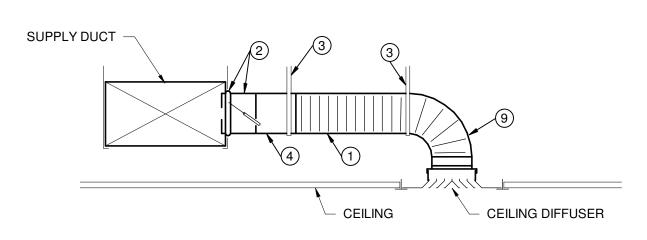
Sheet Title

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ENLARGED CLASSROOMS 208, 227 \$ 229 - NEW WORK

Sheet Number

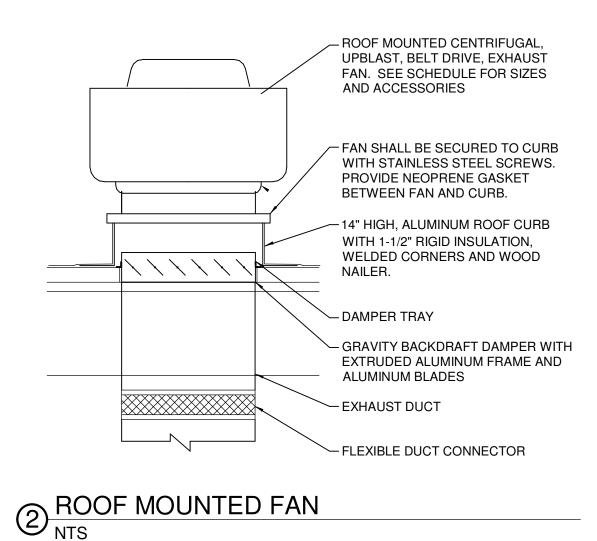
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## NOTES

- 1 INSULATED FLEXIBLE DUCT SAME DIAMETER AS BRANCH DUCT, 6 FT. MAXIMUM TOTAL LENGTH PER AIR DEVICE. STRETCH FLEXIBLE DUCT TO AT LEAST 90% OF FULLY EXTENDED LENGTH.
- 2 SPIN-IN BRANCH TAP FITTING, STRAIGHT SIDE WITH MANUAL DAMPER. DAMPER SHAFT IN HORIZONTAL. INTEGRAL INSULATION GUARD SLEEVE REQUIRED FOR TAP FITTING TO MAIN DUCT WITH INTERNAL INSULATION, AND EXTENDED DAMPER SHAFT AND HANDLE WITH STAND-OFF TO ACCOMMODATE EXTERNAL INSULATION.
- 3 DUCT STRAP HANGER. ATTACH TO STRUCTURE.
- 4 ROUND SHEET METAL BRANCH DUCT, SAME SIZE AS DIFFUSER INLET UNLESS NOTED OTHERWISE.

## ① CEILING DIFFUSER DUCT CONNECTION NTS



AUTO. FLOW CONTROLLER —
THE
6 4 3 COIL
2/- HWS

## NOTES

- LOCATE STRAINER WITH BLOW-DOWN VALVE AND HOSE CONNECTION AT LOW POINT OF COIL
- PIPE REDUCER IF REQUIRED.
- PIPE REDUCER/INCREASER IF COIL CONNECTION SIZE DIFFERS FROM AUTO CONTROL VALVE SIZE. PIPING SAME SIZE AS AUTO CONTROL VALVE OR
- COIL CONNECTION, WHICH EVER IS LARGER.
- INSULATE PIPING UP TO SHUT-OFF VALVE.
- MODULATING 2-WAY AUTOMATIC CONTROL
- 3 TERMINAL UNIT REHEAT PIPING DIAGRAM NTS

DUCT OPEN TO PLENUM	12"	AIR SOL	JND BOOT DUCT
TO PLENOWI			DUCT FULL SIZE OF AIF DEVICE NECK SIZE
DUCT SIZE AS SHOWN SCHEDULE, IF NOT	N IN	* \	CEILING
NOTED OTHERWISE		_	RETURN AIR GRILLE

INTERNALLY LINED RETURN

4 RETURN AIR SOUND BOOT

	DUCTWORK CONSTRUCTION SCHEDULE												
	DUCT CVCTEM	CHARE	PRESS. CLASS		LINER			INSULATION				NOTES	
	DUCT SYSTEM	SHAPE	W.G.	MATERIAL	THK.	TYPE	D	THK.	TYPE	D	JACKET	NOTES	
CONCEALLED SUPPLY & RETURN RND/RECT			-/+2"	GS	-	-	-	1.5"	FGW	-	FFJ	1,3	
CONCEALLED SUPPLY AIR DEVICE RUNOUT RND			+1"	IFD	-	-	-	1.5"	IFD	-	FFJ	2	
EXPOSED SUPPLY & RETURN RND/RECT			-/+2"	GS	1"	PFL	-	-	-	-	-	4	
CHEMISTRY/BIOLOGY LAB EXHAUST RND/RECT		-2"	SS	-	-	-	-	-	-	-	5		
GENERAL NOTES: A ALL PAINTING BY GENERAL CONTRACTOR. B ALL DUCT JOINTS AND SEAMS SHALL BE SEALED PER OMC CHAPTER 5.				PLENUM A ROUND RU DUCTWOF	DUCTW REA. JNOUTS RK WITH ACTOR' TED.	TO AIR D IN 15 FT C S OPTION	EVICES OF UNIT	SHALL I SHALL E LE WALL	BE EXTER BE INTERN	NALLY IALLY L	ED WITHIN THIS INSULATED INED.	).	
ABBI AIFD ALUI ABA		CT FFJ FGW FPW	FIE FIE	OIL FACED JA BERGLASS V RE WRAP	VRAP			PGGS PVCGS RECT	PVC (	COATE! ANGUL		D STEEL ZED STEEL	

GALVANIZED STEEL

PREFORMED LINER

GALVANIZED STEEL SPIRAL PIPE

INSULATED FLEXIBLE DUCT

PERFORATED FABRIC DUCT

MATT FACED FIBERGLASS

ROUND

UFD

THICKNESS

STAINLESS STEEL

UNISULATED FLEXIBLE DUCT

GS

IFD

PFD

PFL

ALL SERVICE JACKET

FIBERGLASS BOARD

DOUBLEWALL INSULATED

EXTRUDED POLYSTYRENE

CARBON STEEL

DENSITY (PCF)

**ETPS** 

	FAN SCHEDULE													
Ì	PLAN MARK	TYPE	BASIS OF DESIGN		CFM	ESP	WHEEL	DRIVE	MAX.	ELECTRICAL			NOTES	
			MANUF.	MODEL	CFIVI	("WC)	SIZE	DUIVE	SONES	HP	VOLT	PHASE	NOTES	
	EF-1	CENTRIF. UPBLAST	GREENHECK	CUBE-140	1,500	0.38"	14"	BELT	10.0	1/4	120	1	1,2	
	EF-2	CENTRIF. UPBLAST	GREENHECK	CUBE-140	1,500	0.38"	14"	BELT	10.0	1/4	120	1	1,2	
	EF-3	CENTRIF. UPBLAST	GREENHECK	CUBE-140	1,550	0.38"	14"	BELT	10.0	1/4	120	1	1,2	
	EF-4	CENTRIF. UPBLAST	GREENHECK	CUBE-140	1,550	0.38"	14"	BELT	10.0	1/4	120	1	1,2	
	Y Y		Y ~	Y Y	~			$\searrow$	γ γ	~		γ		
, [	EF-6	CENTRIF. UPBLAST	GREENHECK	VK-H-12-10	1,920	0.66"	12"	BELT	-	2	208	1	3	

EQUIPMENT PLAN MARKS ARE FOR REFERENCE. CONTRACTOR SHALL COORDINATE FINAL EQUIPMENT NAMING/NUMBERING WITH SCHOOL MAINTENANCE SUPERVISOR.

PROVIDE WITH 14" HIGH MOUNTING CURB, WON-FUSED DISCONNECT SWITCH BACKDRAFT DAMPER AND

FAN SHALL BE CONTROLLED BY WALL TIMER SWITCH. REFER TO ELECTRICAL DRAWINGS FOR SWITCH LOCATION. SWITCH AND WIRING BY E.C.

PROVIDE WITH CORROSION COATING AND CAPACITOR MOTOR START. FAN SHALL UTILIZE EXISTING CURB, DUCTWORK, POWER WIRING, CONTROL WIRING FROM FUME HOOD, ETC. FAN MUST FIT ON EXSITING 21"x21"x14"H

	AIR DEVICE SCHEDULE											
PLAN MARK	DESCRIPTION	BASIS OF DESIGN		MOUNTING	FINISH	MATERIAL	ACCESSORIES	NOTES				
		MFR	MODEL					<del>-</del>				
A1	SQUARE FACE DIFFUSER, 24x24 FACE	TITUS	OMNI	LAY-IN	WHITE	STEEL	-	-				
A2	SQUARE FACE DIFFUSER, 24x24 FACE	TITUS	OMNI	SURFACE	WHITE	STEEL	OPP. BLADE DMPR	-				
B1	EGGCRATE CEILING GRILLE	TITUS	50F	LAY-IN	WHITE	ALUM.	-	-				
B2	EGGCRATE CEILING GRILLE	TITUS	50F	SURFACE	WHITE	ALUM.	OPP. BLADE DMPR	-				

CARNES AND KRUEGER ACCEPTABLE ALTERNATE MANUFACTURER

NOTES:

			/	AIRFLOV	V			REHEA	T COIL			
PLAN MARK	TYPE	INLET SIZE	COOL MAX CFM	HEAT MAX. CFM	COOL MIN. CFM	EWT (°F)	EAT (°F)	MBH	GPM	CONN. SIZE	CTRL. VLV CV.	NOTE
VVR-118	SINGLE DUCT	12"	1,375	1,375	275	180	55	58.9	2.9	-	-	1
VVR-119	SINGLE DUCT	7"	600	600	120	180	55	25.9	1.3	1"	-	3
VVR-120	SINGLE DUCT	7"	600	600	120	180	55	25.9	1.3	1"	-	3
VVR-121	SINGLE DUCT	14"	1,800	1,800	360	180	55	77.7	3.9	1"	-	3
VVR-121B	SINGLE DUCT	14"	1,500	1,500	300	180	55	64.8	3.3	1"	-	
VVR-122	SINGLE DUCT	14"	1,275	1,275	255	180	55	50.1	2.5	-	-	2
VVR-123	SINGLE DUCT	12"	900	900	180	180	55	38.9	1.9	-	-	2
VVR-213	SINGLE DUCT	10"	600	600	120	180	55	25.9	1.3	1"	-	4
VVR-142	SINGLE DUCT	5"	275	275	0	180	55	13.4	0.6	-	-	2
VVR-143	SINGLE DUCT	4"	150	150	0	180	55	7.3	0.7	-	-	1
VVR-144	SINGLE DUCT	4"	150	150	0	180	55	7.3	0.7	-	-	1
VVR-146	SINGLE DUCT	4"	150	150	0	180	55	7.3	0.7	-	-	2
VVR-147	SINGLE DUCT	5"	225	225	0	180	55	12.2	0.5	-	-	2

GENERAL NOTES:

MANUFACTURER SHALL BE TITUS MODEL DESV MAXIMUM APD OF 0.35" WC. FOR BOX AND COIL.

HOT WATER CONTROL VALVE SHALL BE MODULATING 2-WAY UNLESS NOTED OTHERWISE.

THIS CONTRACTOR SHALL BE RESPONSIBLE FOR ALL LOW VOLTAGE POWER WIRING AND ANY

UNIT IS EXISTING TO REMAIN. UNIT SHALL BE COMMISSIONED FOR PROPER OPERATION AND

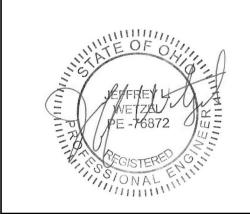
REBALANCED TO THE MAXIMUM AIRFLOW LISTED. UNIT IS EXISTING TO REMAIN. BALANCE TO PERFORMANCES LISTED.

UNIT IS RELOCATED. BALANCE TO PERFORMANCES LISTED. UNIT SHALL BE FURNISHED BY THE OWNER FOR INSTALLATION. EXISTING UNIT TAG INDICATES

VVR-213. BALANCE TO PERFORMANCES LISTED.

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Print Record 01/24/22 BID SET 02/02/22 PERMIT SET

02/10/22 ADDENDUM #3

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JANUARY 24, 2022

Sheet Title

HVAC SCHEDULES \$ DETAILS

Sheet Number

H3.0