

one eighth inch = one foot (for a sheet plotted at 30"x42")

one quarter inch = one foot (for a sheet plotted at 30"x42")

one half inch = one foot (for a sheet plotted at 30"x42")

one inch = one foot (for a sheet plotted at 30"x42")

one and one eighth inches = one foot (for a sheet plotted at 30"x42")

one and one quarter inches = one foot (for a sheet plotted at 30"x42")

one and one half inches = one foot (for a sheet plotted at 30"x42")

one and three quarters inch = one foot (for a sheet plotted at 30"x42")

two inches = one foot (for a sheet plotted at 30"x42")

three quarters inch = one foot (for a sheet plotted at 30"x42")

one half inch = one foot (for a sheet plotted at 30"x42")

one quarter inch = one foot (for a sheet plotted at 30"x42")

one eighth inch = one foot (for a sheet plotted at 30"x42")

EXISTING EXHAUST FAN SCHEDULE												
FAN NO.	CFM TOTAL	TSP IN WC	MAX RPM	TYPE DRIVE	TYPE FAN	CONTROL WITH	MOTOR HP/WATTS	MAX SONES	ELECTRICAL DATA			FAN SERVICE
									VOLTS	Hz	PHASE	REMARKS
SEF#1	1,375	3.0	1295	BELT	UTILITY SET	.	2.0 HP	.	480	60	3	RADIOISOTOPE HOOD NOTE 1

NOTES:  
1. REPLACE FAN MOTOR AND DISCONNECT WITH NEW EXPLOSION PROOF MOTOR AND NEW NEMA 7&9 DISCONNECT.

AIR BALANCE SCHEDULE									
MODE	VAV-3-26 AIRFLOW			SEF#1	HOOD EXHAUST		ROOM EXHAUST		REMARKS
	GRILLE 1	GRILLE 2	TOTAL		AIRFLOW	DAMPER	AIRFLOW	DAMPER	
"HOOD ON" (OCCUPIED)	600	600	1,200	1,375	1,375	OPEN	0	CLOSED	.
"HOOD OFF" (UNOCCUPIED)	175	175	350	525	0	CLOSED	525	OPEN	.

MECHANICAL LEGEND:			
	THERMOSTAT/SENSOR	AHU	AIR HANDLING UNIT
	90° ELBOW WITH TURNING VANES	CD	CEILING DIFFUSER WITH OBD
	SPIN-IN TAP FITTING W/SCOOP & DAMPER	CFM	CUBIC FEET PER MINUTE
	METAL DUCT TO FLEX DUCT TRANSITION	EF	EXHAUST FAN
	SUPPLY DUCT IN SECTION	ER	EXHAUST REGISTER
	RETURN AIR DUCT IN SECTION	MVD	MANUAL VOLUME DAMPER
	CEILING DIFFUSER	OA	OUTDOOR AIR
	RETURN AIR REGISTER	OBD	OPPOSED BLADE DAMPER
	EXHAUST AIR REGISTER	RA	RETURN AIR
	MOTOR OPERATED DAMPER	RAR	RETURN REGISTER WITH OBD
	CONNECT NEW TO EXISTING	SA	SUPPLY AIR

SEQUENCE OF OPERATION:

THE ROOM PRESSURIZATION AND RADIO ISOTOPE HOOD SYSTEM CONSISTS OF AN EXHAUST FAN WITH VARIABLE FREQUENCY DRIVE, A FUME HOOD MONITOR FOR AIR VELOCITY AND ALARMS, TWO 2-POSITION DAMPERS TO INDEX EXHAUST TO EITHER THE HOOD OR THE ROOM, AND A CONSTANT VOLUME SUPPLY BOX WITH HOT WATER REHEAT. THE ROOM EXHAUST SYSTEM IS TOGGLED INTO FUME HOOD OPERATIONS OR NORMAL OPERATIONS WITH A LOCAL OCCUPIED/UNOCCUPIED SWITCH.

THE FUME HOOD MONITOR OPERATES IN OCCUPIED AND UNOCCUPIED MODES AS FOLLOWS:

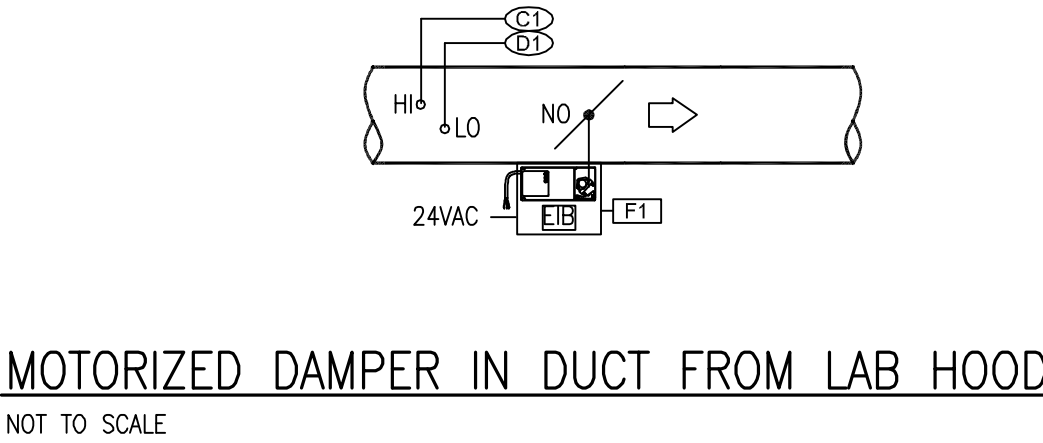
OCCUPIED: THE ROOM EXHAUST 2-POSITION DAMPERS POSITION TO EXHAUST FROM THE RADIO ISOTOPE HOOD AND SHUT TO THE ROOM GENERAL EXHAUST. THE EXHAUST FAN VFD CONTROLS TO A STATIC PRESSURE SETPOINT (AS DETERMINED BY TEST AND BALANCE) TO MAINTAIN 100FPM ACROSS THE FACE OF THE HOOD WHEN THE SASH IS AT NORMAL OPERATING HEIGHT. THE FUME HOOD MONITOR IS ENABLED TO DETECT ALARMS, DISPLAY FACE VELOCITY, AND ALLOW FOR LOCAL ALARMING.

UNOCCUPIED: THE ROOM EXHAUST 2-POSITION DAMPERS POSITION TO GENERAL EXHAUST FROM THE ROOM AND SHUT TO THE RADIO ISOTOPE HOOD. THE EXHAUST FAN VFD CONTROLS TO A STATIC PRESSURE SETPOINT (AS DETERMINED BY TEST AND BALANCE) TO MAINTAIN THE PROPER ROOM PRESSURIZATION. THE FUME HOOD MONITOR DISABLES FROM DETECTING ALARMS AND DISPLAYING FACE VELOCITY.

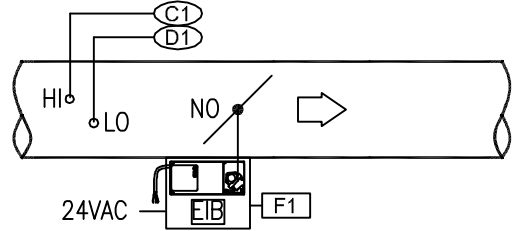
THE SUPPLY VAV BOX SUPPLIES A CONSTANT VOLUME OF SUPPLY AIR BASED ON THE OCCUPANCY OF THE RADIO ISOTOPE HOOD PER THE LOCAL OCCUPIED/UNOCCUPIED SWITCH. THE HOT WATER REHEAT VALVE MODULATES TO MAINTAIN ROOM TEMPERATURE AT SET POINT.

A LOW STATIC CUTOFF SAFETY SWITCH WILL SHUT DOWN THE EXHAUST VFD IN THE EVENT OF EXHAUST DAMPERS FAILING IN A CLOSED POSITION TO HELP PROTECT THE DUCT WORK FROM BEING DAMAGED.

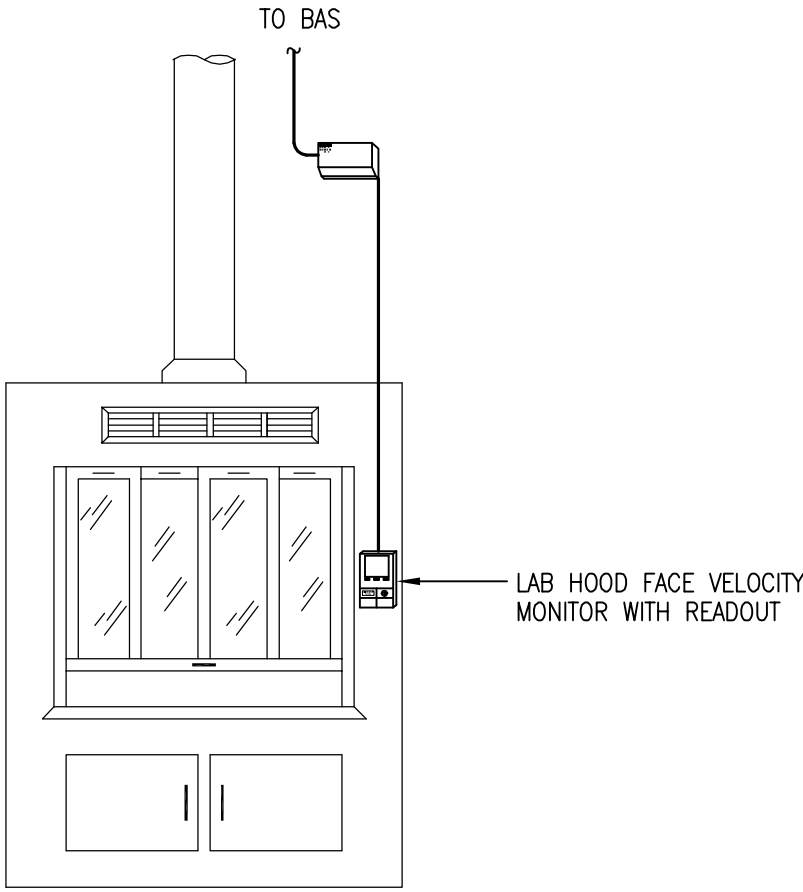
THE FUME HOOD MONITOR, CONSTANT VOLUME SUPPLY BOX CONTROLLER, AND EXHAUST FAN VFD WILL BE INTERFACED WITH THE EXISTING SIEMENS APOGEE BUILDING AUTOMATION SYSTEM.



MOTORIZED DAMPER IN DUCT FROM LAB HOOD  
NOT TO SCALE



MOTORIZED DAMPER IN DUCT FROM CEILING EXHAUST  
NOT TO SCALE



FUME HOOD MONITOR DIAGRAM  
NOT TO SCALE

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\* CERTIFICATE OF AUTHORIZATION NO.: 5254  
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FLORIDA REG. NO. 68792

PROJECT NAME

JOINT AMBULATORY CARE CENTER  
NUCLEAR MEDICAL RADIOISOTOPE HOOD

VA GULF COAST VETERANS HEALTH CARE SYSTEM  
6425 OFFICE PARK PLAZA  
NORTH PENSACOLA BLVD.  
PENSACOLA, FL 32503

REVISIONS	DATE

KEY PLAN

STAMP

DATE

05/10/13

DRAWN

T. MITCHELL

CHECKED

T. MITCHELL

SHEET TITLE

HVAC SCHEDULES,  
LEGEND AND DETAILS

SCALE

1/8" = 1'-0"

0 16' 32'

CONSTRUCTION SUBMITTAL

PROJECT NUMBER	05090-00
BUILDING NUMBER	N/A
DRAWING NUMBER	M-301

Department of  
Veterans Affairs