

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	REMARKS
									VOLTS	Hz	PHASE		
SEF#1	1,375	3.0	1295	BELT	UTILITY SET	.	2.0 HP	.	460	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
-  90° ELBOW WITH TURNING VANES
-  SPIN-IN TAP FITTING W/SCOOP & DAMPER
-  METAL DUCT TO FLEX DUCT TRANSITION
-  SUPPLY DUCT IN SECTION
-  RETURN AIR DUCT IN SECTION
-  CEILING DIFFUSER
-  RETURN AIR REGISTER
-  EXHAUST AIR REGISTER
-  MOTOR OPERATED DAMPER
-  CONNECT NEW TO EXISTING
-  AHU AIR HANDLING UNIT
-  CD CEILING DIFFUSER WITH OBD
-  CFM CUBIC FEET PER MINUTE
-  EF EXHAUST FAN
-  ER EXHAUST REGISTER
-  MVD MANUAL VOLUME DAMPER
-  OA OUTDOOR AIR
-  OBD OPPOSED BLADE DAMPER
-  RA RETURN AIR
-  RAR RETURN REGISTER WITH OBD
-  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:

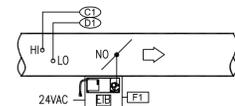
**OCCUPIED:** THE ROOM EXHAUST 2-POSITION DAMPERS POSITION TO EXHAUST FROM THE RADIO ISOTOPE HOOD AND SHUT TO THE ROOM GENERAL EXHAUST. THE EXHAUST FAN VFD CONTROLS TO A STATIC PRESSURE SETPOINT (AS DETERMINED BY TEST AND BALANCE) TO MAINTAIN 100FPM ACROSS THE FACE OF THE HOOD WHEN THE SASH IS AT NORMAL 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.

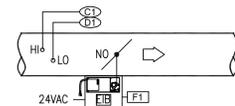
A LOW STATIC CUTOFF SAFETY SWITCH WILL SHUT DOWN THE EXHAUST VFD IN THE EVENT OF EXHAUST DAMPERS FAILING IN A CLOSED POSITION TO HELP PROTECT THE DUCT WORK FROM BEING DAMAGED.

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



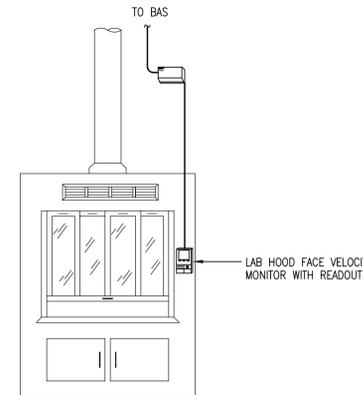
**MOTORIZED DAMPER IN DUCT FROM LAB HOOD**

NOT TO SCALE



**MOTORIZED DAMPER IN DUCT FROM CEILING EXHAUST**

NOT TO SCALE



**FUME HOOD MONITOR DIAGRAM**

NOT TO SCALE



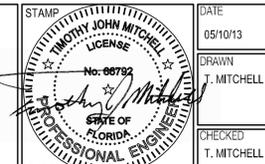
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FLORIDA REG. NO. 69792

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



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**  
Office of Facilities Management  
Department of Veterans Affairs