

Z:\VA\_General\070959 - VA Design Build - 11A Design Build - 11E, 10E, 9E, 8E & 7E - 244-C-001 Drawings\070959 - Record Drawings\070959 - 11E & 8E.dwg 12/15/08

PRESSURE REDUCING STATIONS									
EQUIP. TAG NUMBER	MANUFACTURER/ MODEL	SIZE	POUNDS PER HOUR	LEAVING PRESSURE (P.S.I.G.)	ENTERING PRESSURE (P.S.I.G.)	NOISE (DBA)	DRIP PAN ELON	MODEL	RELIEF VALVE
PRV-AHU-7/1IE	ARMSTRONG 60-2000	2 1/2"	6500	15	80	81	6"	#41	4"x6" P

NOTE: PROVIDE 8" MUFFLING ORIFICE PLATE.

AIR HANDLING UNIT COMPONENT TAG NUMBERS									
SYSTEM TAG NO.	SUPPLY	FAN	RELIEF	COOLING COIL	STEAM HEATING COIL	PRE FILTER	AFTER FILTER	FINAL	ECONOMIZER DAMPERS
AHU-7/1IE	SF1-7/1IE SF2-7/1IE	RF1-7/1IE RF2-7/1IE	CC-7/1IE	SHC-7/1IE	PF-7/1IE	AF-7/1IE	FF-7/1IE	YES	SA-SA-7/1IE
									SH-7/1IE

AIR FILTERS																	
TAG NUMBER	TYPE	CFM TOTAL	ASHRAE MINIMUM EFFICIENCY		CARTRIDGES OR PANELS										DESIGN BASIS		
					NUMBER		SIZE (INCHES)		DEPTH (INCHES)		FACE VELOCITY (FFP)		INITIAL P.D. (IN. W.C.)				
PRE	FINAL	PRE	FINAL	PRE	FINAL	PRE	FINAL	PRE	FINAL	PRE	FINAL	PRE	FINAL				
PF-7/1IE	THROWAWAY	86,000	30	-	10	50	-	12x24	24x24	-	2	-	391	-	.1	-	CAPFILL FARR
PFF-7/1IE	CARTRIDGE	86,000	-	95	-	10	50	-	12x24	24x24	-	12	-	391	-	.35	CAPFILL FARR
FF-7/1IE	CARTRIDGE	86,000	-	65	-	10	50	-	12x24	24x24	-	12	-	391	-	.56	CAPFILL FARR
AF-7/1IE	CARTRIDGE HEPA	86,000	-	95	-	10	50	-	12x24	24x24	-	12	-	391	-	1.0	CAPFILL FARR

AIR FLOW MEASUREMENT STATIONS						
TAG NUMBER	FAN SYSTEM	MINIMUM AIR FLOW (CFM)	EMERGENCY MAXIMUM AIR FLOW (CFM)	NORMAL OPERATIONAL AIR FLOW	LOCATION	MANUFACTURER
AFS1-7/1IE	SF1-7/1IE	0	60,000	43,000	SF1-7/1IE INLET	TEKAIR
AFS2-7/1IE	SF2-7/1IE	0	60,000	43,000	SF2-7/1IE INLET	TEKAIR
AFS3-7/1IE	RF1-7/1IE	0	60,000	43,000	RF1-7/1IE INLET	TEKAIR
AFS4-7/1IE	RF2-7/1IE	0	60,000	43,000	RF2-7/1IE INLET	TEKAIR

HYDRONIC FLOW MEASUREMENT STATION						
TAG NUMBER	SYSTEM	MAX GPM	WATER TEMP.	PIPE SIZE	COIL TAG	SYSTEM TAG
FFS-CC-7/1IE	CHILLED WATER	1266.2	45/55	6"	CC-7/1IE	AHU-7/1IE

COOLING COILS									
EQUIP. TAG NUMBER	CFM	(TDBH)		AIR TEMPERATURE		MAXIMUM AIR PRESSURE DROP (IN. W.C.)	WATER (ENT. (°F) LWT (°F))	GPM	MANUFACTURER
		SENS.	TOTAL	EDB (°F)	ENB (°F)				
CC-7/1IE	86,000	3,806.9	6,330.6	89	72	48	48	1,37	45

TOTAL OF 6 COILS - 3 STACKED ON EACH OTHER PER COIL BANK.

FANS										
EQUIP. TAG NUMBER	SYSTEM	OUTLET VEL.	ARRANG.	CFM	STATIC PRESSURE (IN. W.C.)	RPM	WHEEL		MOTOR	VOLUME CONTROL DEVICE
							TYPE	DIA.		
SF1-7/1IE	AHU-7/1IE	3,118	CENTRIF.	43,000	9.4	1468	DHDI	36.5	125	VFD
SF2-7/1IE	AHU-7/1IE	3,118	CENTRIF.	43,000	9.4	1468	DHDI	36.5	125	VFD
RF1-7/1IE	AHU-7/1IE	N/A	PLENUM	43,000	4.1	716	SKSI	54.25	60	VFD
RF2-7/1IE	AHU-7/1IE	N/A	PLENUM	43,000	4.1	716	SKSI	54.25	60	VFD
SF1 & 2-7/1IE	AHU-7/1IE	4351	CENTRIF.	60,000	7.9	1616	DHDI	36.5	125	VFD
RF1 & 2-7/1IE	AHU-7/1IE	N/A	PLENUM	60,000	3.45	805	SKSI	54.25	60	VFD

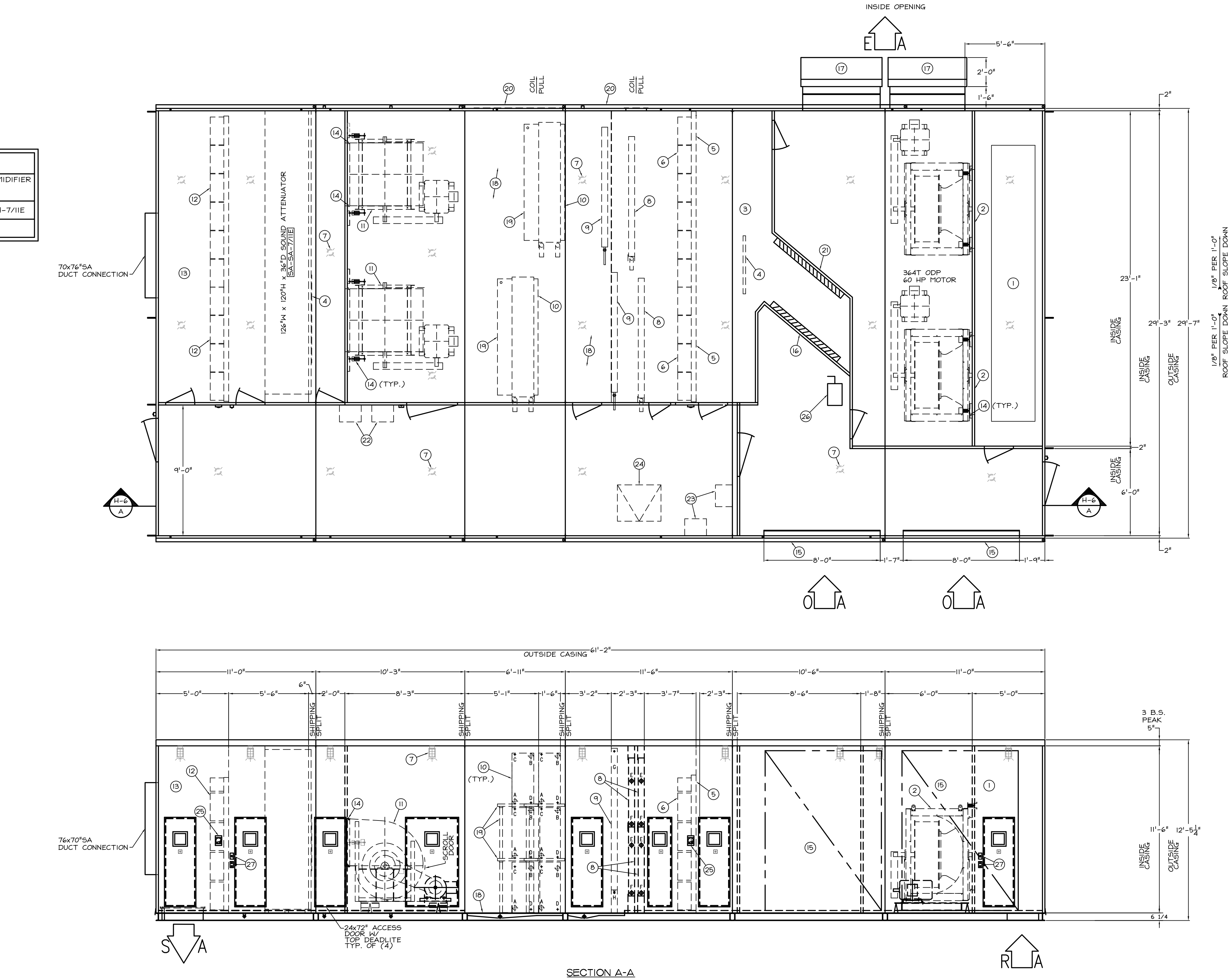
NOTE: ① CAPACITIES SHOWN ARE FOR EMERGENCY CONDITIONS. IF ONE SUPPLY FAN OR ONE RETURN FAN FAILS, THEN THE REMAINING FAN SHALL INCREASE SPEED AND AIRFLOW IN ORDER TO PRODUCE CAPACITIES SHOWN.

SOUND ATTENUATOR										
EQUIPMENT TAG NUMBER	FAN SYSTEM	FACE DIMENSION		FLOW CFM	SILENCER P.D.	DYNAMIC INSERTION LOSS				
		WIDTH	HEIGHT			63	125	250	500	1000
SA-SA-7/1IE	AHU-7/1IE	216"	120"	3'-0"	36,000	X	8	14	14	14

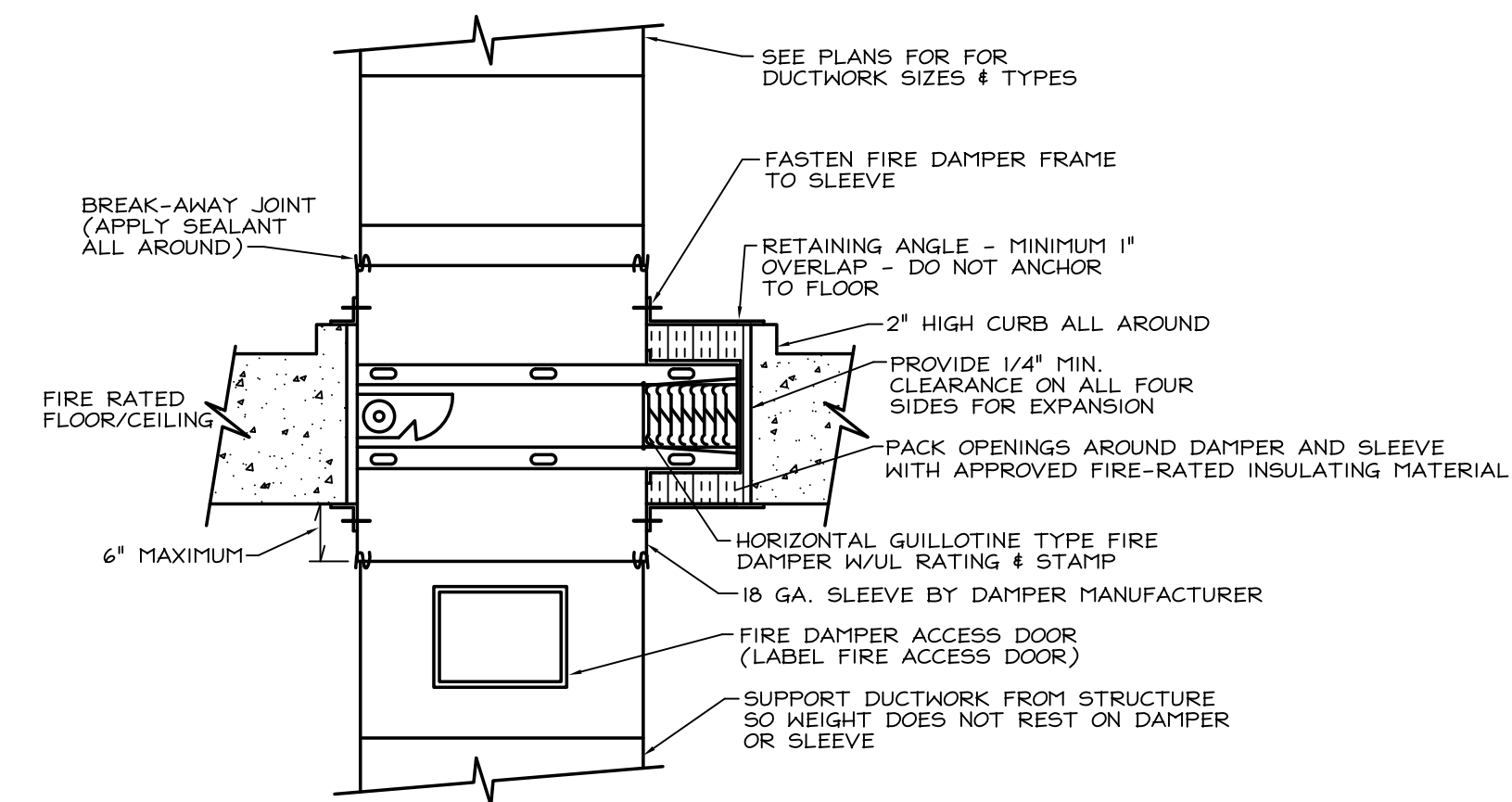
STEAM COILS										
EQUIP. TAG NUMBER	TYPE	CFM	AIR TEMP.		MAXIMUM FACE VELOCITY	P.S.I.G.	LBS./HR	MAXIMUM AIR P.D. (IN. W.C.)	NUMBER ROWS	MEH
			EDB (°F)	ENB (°F)						
SHC-7/1IE	DISTRIBUTING	86,000	23	70	549	10	4,579.6	0.12	4 COILS @	1/6

STEAM HUMIDIFIERS						
TAG NUMBER	SERVES	CAPACITY (POUNDS/HOUR)	STEAM PRESSURE	CFM	AIR (IN. P.D.)	MANUFACTURER AND MODEL
SH-7/1IE	AHU-7/1IE	2000	10	86000	X	DRI-STEEM-ULTRASORB LV

NOTE: SCHEDULED CAPACITY SHOWN FOR TOTAL AIRFLOW. TWO HUMIDIFIERS REQUIRED, EACH RATED FOR 1000 POUNDS/HOUR.



AHU-7/1IE: PLAN & SECTION DETAILS  
SCALE: 1/4" = 1'-0"



- INSTALL WHERE FD IS SHOWN ON DRAWINGS.
- INSTALL PER NFPA 803, PRINTED INSTRUCTIONS, AND LOCAL CODES.
- EXTERNAL DUCT INSULATION SHALL STOP AT FLOOR SLAB.
- INFILL ANY FLOOR VOID AROUND FRAMES WITH FIRE RATED INSULATION TO MAINTAIN FIRE RATING.

1  
H-6  
PRIMARY FIRE DAMPER (HORIZONTAL)  
DETAIL  
NOT TO SCALE

REVISIONS:	DATE		VAPHS · UD University Drive Pittsburgh, PA 15240			DRAWING TITLE	PROJECT TITLE	DATE	SCALE:	DRAWING NO.	DEPARTMENT OF VETERANS AFFAIRS
RECORD DRAWINGS	12/15/08										
						HVAC SCHEDULES AND UNIT DETAILS	DESIGN BUILD - REPLACE AHU 11E, 10E, 9E, 8E & 7E	11/12/07	AS NOTED	H-6	
						PROJECT NO. 646-06-112	CONTRACT NO. V244C-0017	DESIGNED BY: JVL	DRAWN BY: DRS/MJK	CHECKED BY: CEM	
						BUILDING NO. 1	JOB NO. XXXXX TUBE NO. XXXXX	LOCATION		VAMC UNIVERSITY DR. PITTSBURGH, PA	