

**1 FIFTH FLOOR MECHANICAL DEMOLITION PLAN**  
Scale: 1/8" = 1'-0"

**SHEET NOTES:**

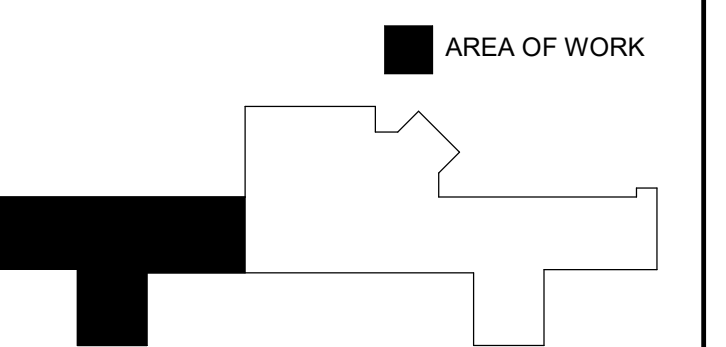
- A VERIFY ALL EXISTING CONDITIONS PRIOR TO BEGINNING WORK. NOTIFY COR OF CONFLICTS PRIOR TO PROCEEDING WITH DEMOLITION.
- B ALL ITEMS BEING REMOVED SHALL REMAIN THE PROPERTY OF THE VA MEDICAL CENTER UNTIL CONFIRMATION HAS BEEN MADE BY THE COR AS TO WHETHER THE VA WILL RETAIN SUCH ITEMS. ALL ITEMS NOT BEING RETAINED BY THE VA OR DESIGNATED ON THE DRAWINGS TO BE RELOCATED OR REINSTALLED SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR.
- C COORDINATE WORKING HOURS ALLOWED WITH THE VA COR.
- D ALL ITEMS NOT CALLED OUT FOR DEMOLITION ARE TO REMAIN UNDISTURBED.
- E REFER TO M401 FOR ADDITIONAL INFORMATION.
- F REMOVE HANGERS AND SUPPORTS ASSOCIATED WITH DEMOLISHED PIPES, DUCTS, AND EQUIPMENT.

**# SHEET KEY NOTES:**

- 1 DEMOLISH TERMINAL UNIT. TURN OVER CONTROLLER TO VA.
- 2 DEMOLISH DUCTWORK BACK TO LIMITS OF DEMOLITION AT EXISTING FIRE DAMPER.
- 3 DEMOLISH MECHANICAL PIPING BACK TO LIMITS OF DEMOLITION.
- 4 BOOSTER FAN TO BE DEMOLISH.
- 5 CONTRACTOR TO PROVIDE TEMPORARY COOLING IN THIS AREA. MAINTAIN TEMPERATURE WITH A MAX OF 75°F AND MIN OF 70°F.
- 6 PERFORM A PRE-TAB ON TERMINAL UNIT FOR AIR AND WATER.
- 7 PULL FLOOR LEVEL CONTROLS NETWORK OUT OF CONDUIT PRIOR TO DEMOLITION AND MAINTAIN BAS OPERATION FOR THE AREA NOT UNDER CONSTRUCTION.
- 8 DEMOLISH EXISTING PNEUMATIC FIRE/SMOKE DAMPER. REMOVE PNEUMATIC TUBING AND ACCESSORIES BACK TO SOURCE AND CAP. FIELD VERIFY LOCATION OF SOURCE.



**KEY PLAN**  
SCALE: NO SCALE



**FULLY SPRINKLERED  
BID DOCUMENTS**

<b>CONSULTANTS:</b> 		<b>PROJECT MANAGER</b> Headquarters <b>Apogee Consulting Group, P.A.</b> 1151 Kildaire Farm Road, Suite 120 Cary, North Carolina 27511 NC License #C-1848 www.acg-pa.com 919-858-7420		Office of <b>Construction          and Facilities          Management</b> VA U.S. Department of Veterans Affairs		Drawing Title <b>FIFTH FLOOR MECHANICAL          DEMOLITION PLAN</b> Location <b>DURHAM VA MEDICAL CENTER          508 FULTON STREET          DURHAM, NC 27705</b>		Project Title <b>IMPROVE INPATIENT          PRIVACY (RENOVATE 5B)</b> Approved ANDREKA WATLINGTON PROJECT ENGINEER Date 6/28/2019 Checked SPG Drawn SMH		VA PROJECT NUMBER 558-18-150 Building Number # 1 Drawing Number <b>MD101</b> Dwg 2 of 9	
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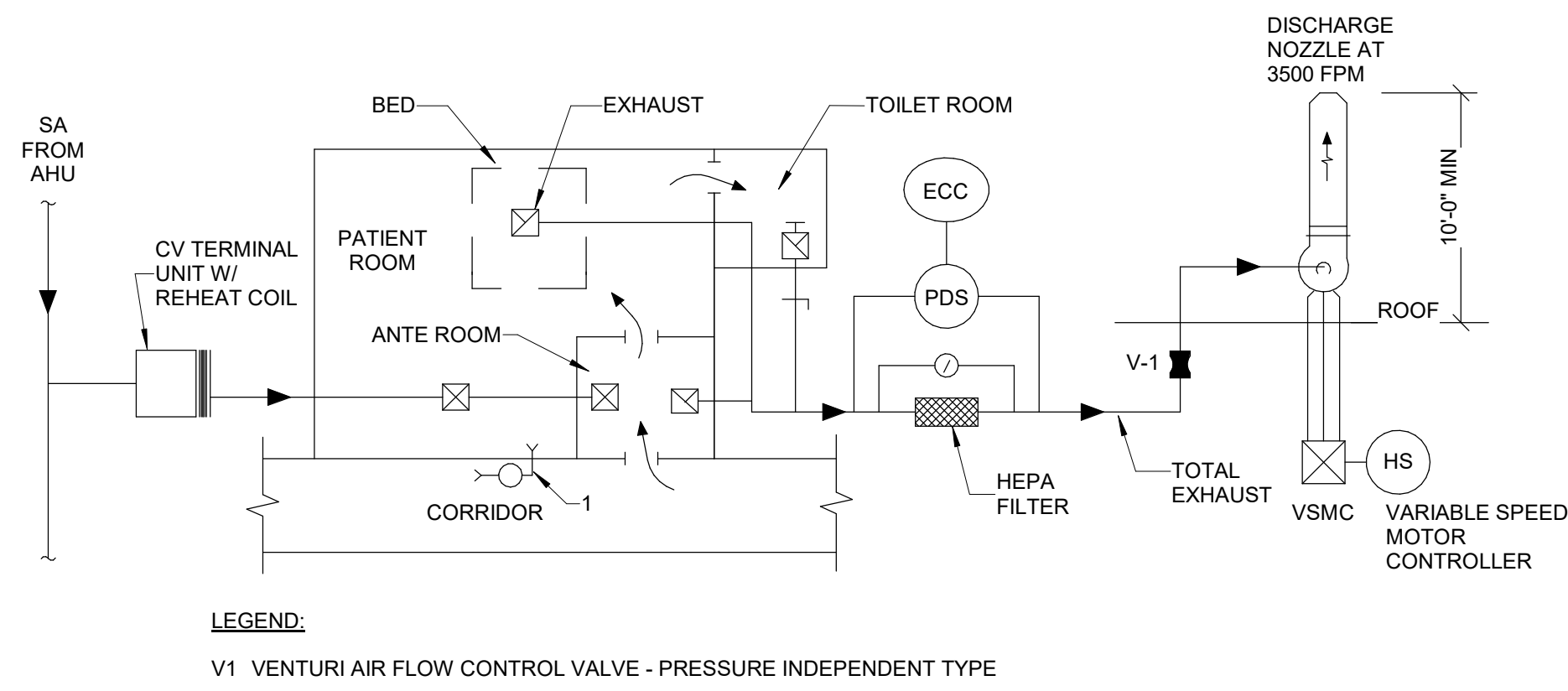
ASI #7 RISER REVISIONS 07/29/2021  
Revisions: Date





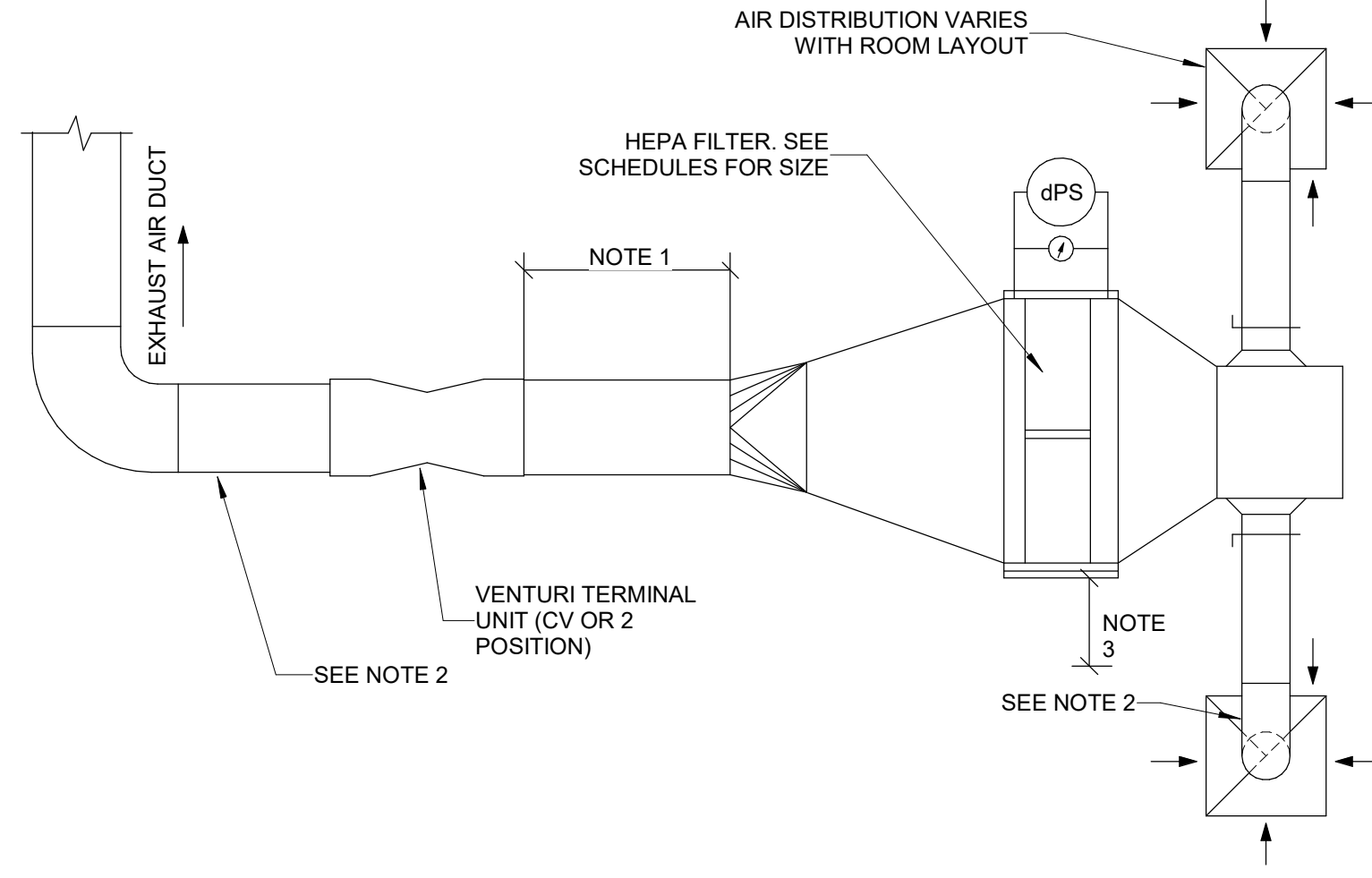






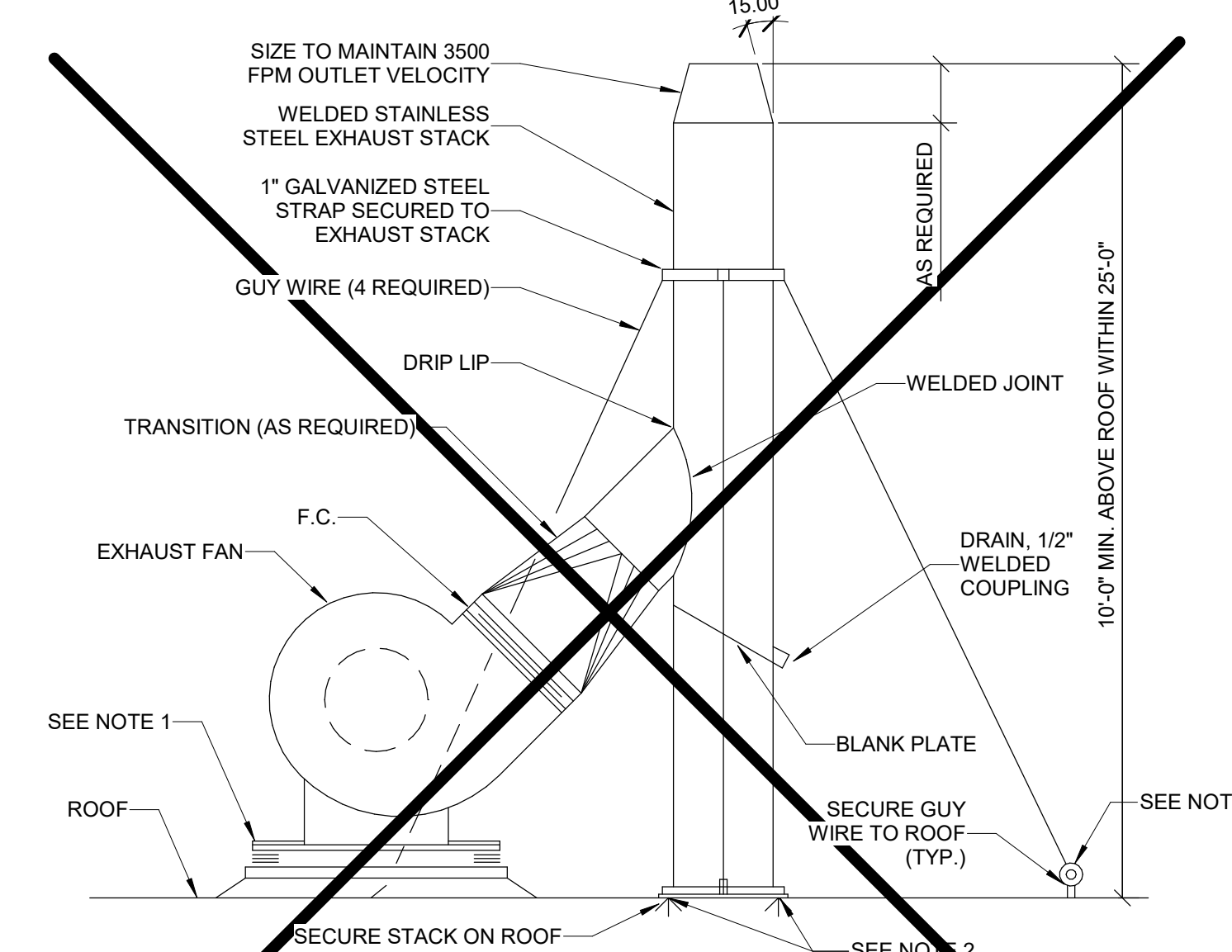
- LEGEND:**  
V-1 VENTURI AIR FLOW CONTROL VALVE - PRESSURE INDEPENDENT TYPE
- GENERAL NOTES:**
- WHEN AN ANTE ROOM IS USED, TRANSFER AIR IS REQUIRED TO MAINTAIN A NEGATIVE PRESSURE (0.01 INCH WATER COLUMN (2.6 PASCAL)) WITH RESPECT TO THE CORRIDOR OR ANY ADJOINING SPACE. AIR SHALL TRANSFER FROM THE CORRIDOR INTO THE ANTE ROOM AND THEN TO THE ISOLATION ROOM. THE ANTE ROOM IS POSITIVE WITH RESPECT TO THE ISOLATION ROOM AND NEGATIVE WITH RESPECT TO THE CORRIDOR. VALVE V-1 IS USED TO MAINTAIN A CONSTANT PRESSURE AT THE FAN AS THE FILTER IS LOADED. ALL ROOMS SHALL HAVE PERMANENTLY INSTALLED DDC ROOM DIFFERENTIAL PRESSURE SENSORS TO CONSTANTLY MONITOR THE DIFFERENTIAL AIR PRESSURE BETWEEN THE PATIENT ROOM AND THE CORRIDOR. A LOCAL VISUAL MEANS SHALL BE PROVIDED TO INDICATE WHENEVER POSITIVE DIFFERENTIAL PRESSURE IS NOT MAINTAINED IN THE PATIENT ROOM WITH RESPECT TO THE CORRIDOR (BALL-IN-WALL OR STROBE).
  - MAINTAIN THE ATTACHED TOILET, IF ANY, AT NEGATIVE AIR PRESSURE WITH RESPECT TO THE AII ROOM. HOWEVER, THE DESIGN NEED NOT INCLUDE A PRESSURE DIFFERENTIAL SENSOR FOR VERIFICATION.
  - LOCATE THE EXHAUST AIR INLET OVER OR NEAR THE PATIENT BED TO ENSURE THAT AIR FLOWS INTO THE ROOM AND AWAY FROM THE PATIENT ROOM DOOR.

**10 AIR SYSTEM FOR AIRBORNE INFECTION ISOLATION (AII) ROOM WITH ANTEROOM**  
Scale: N.T.S.



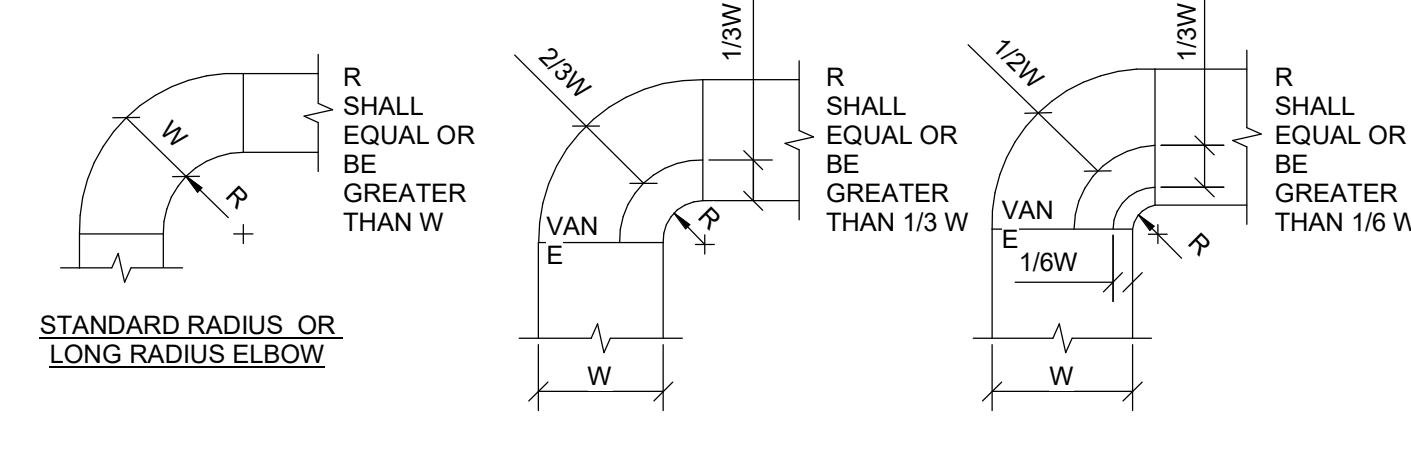
- NOTES:**
- RIGID STRAIGHT TERMINAL UNIT LENGTH SHALL BE A MINIMUM OF 3 TIMES THE DIA. OF THE INLET.
  - ALL DUCTWORK UPSTREAM AND DOWNSTREAM OF THE HEPA FILTER SHALL BE GALVANIZED STEEL.
  - PROVIDE SIDE ACCESS FOR FILTER SERVICE. SEE MANUFACTURER'S SPECIFICATION FOR CLEARANCE REQUIREMENT.

**7 VENTURI TERMINAL UNITS WITH HEPA FILTER**  
Scale: N.T.S.



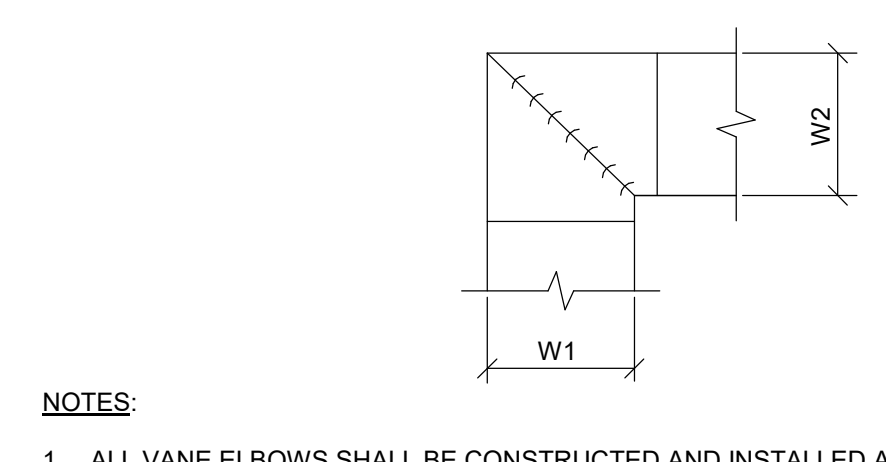
- NOTES:**
- EQUIPMENT ROOF CURB TO MEET ROOF WARRANTY REQUIREMENTS.
  - SECURE TO ROOF REAMING STRUCTURE. SEAL ALL ROOF PENETRATIONS AS REQUIRED TO PRESERVE WARRANTY.
  - 3/4" EYEBOLT, SECURE TO ROOF REAMING STRUCTURE. SEAL ALL ROOF PENETRATIONS AS REQUIRED TO PRESERVE WARRANTY.

**4 EXHAUST STACK DETAIL**  
Scale: N.T.S.



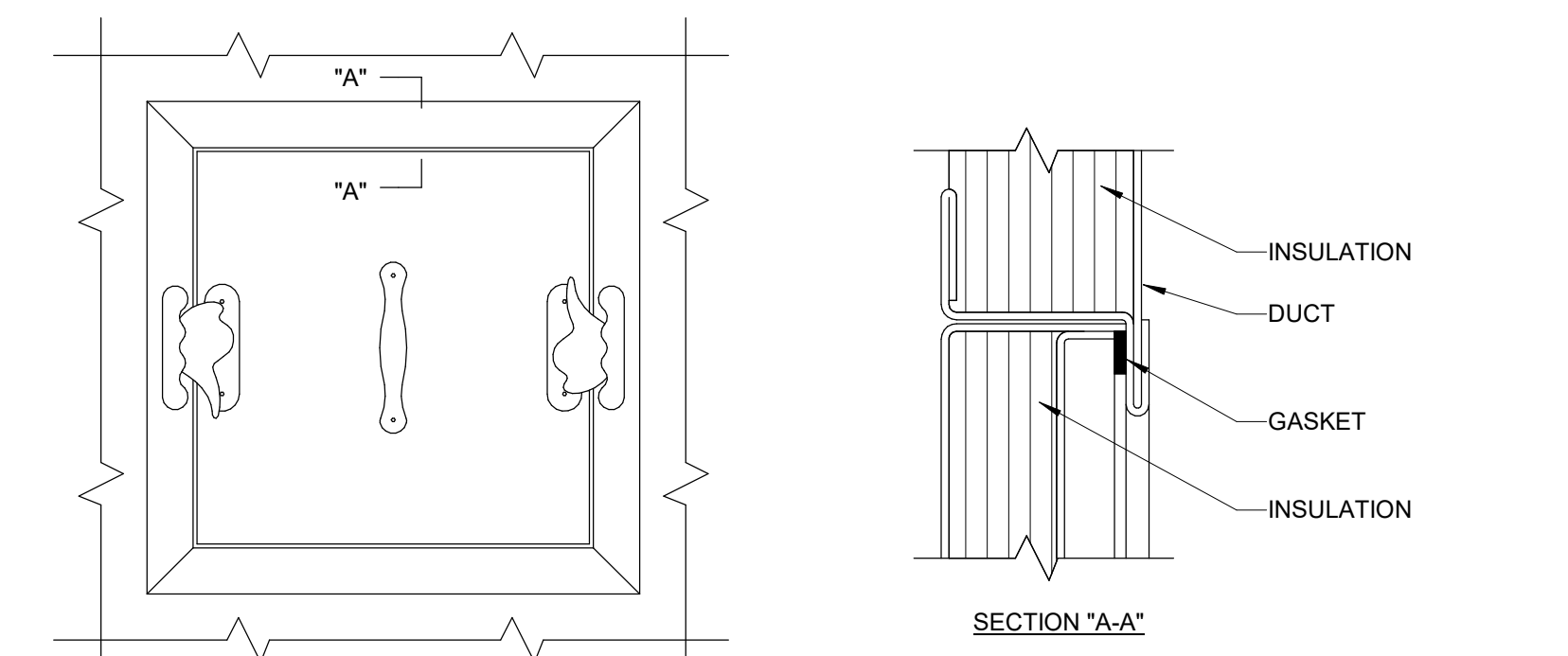
- NOTES:**
- THE INTERIOR SURFACE OF ALL RADIUS ELBOWS SHALL BE MADE ROUND.
  - ALL STANDARD ELBOWS CAN BE SUBSTITUTED WITH SHORT RADIUS ELBOWS. ALL SHORT RADIUS ELBOWS SHALL HAVE VANES. VANES SHALL BE CONSTRUCTED, SUPPORTED AND FASTENED AS RECOMMENDED BY SMACNA.

**8 DUCTWORK RADIUS ELBOW**  
Scale: N.T.S.



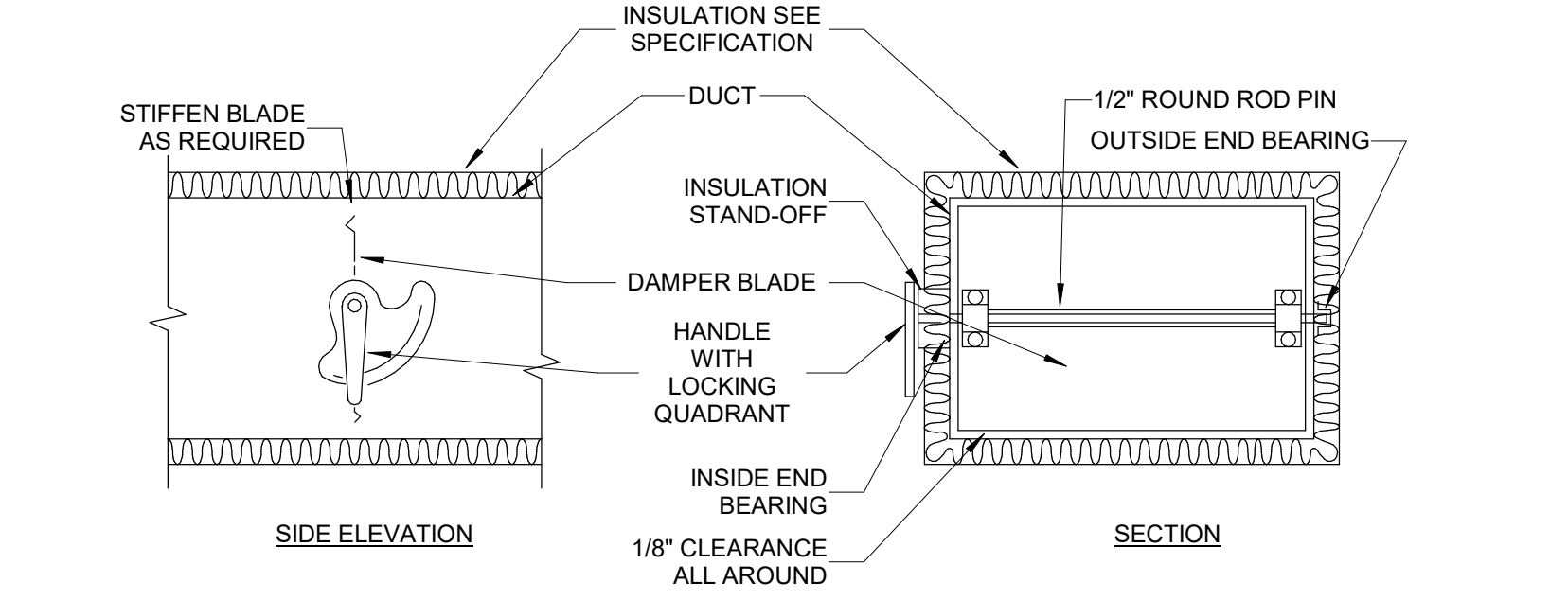
- NOTES:**
- ALL VANE ELBOWS SHALL BE CONSTRUCTED AND INSTALLED AS DETAILED BY SMACNA.
  - WHEN W1 DOES NOT EQUAL W2, VANE SHALL BE SINGLE THICKNESS VANE TYPE REGARDLESS OF W DIMENSION.
  - ALL SINGLE THICKNESS VANES SHALL HAVE A 2" RADIUS, 1-1/2" MAXIMUM SPACE BETWEEN VANES AND A 3/4" TRAILING EDGE.
  - WHEN W EQUAL W2 AND W1 IS GREATER THAN 20" VANES SHALL BE DOUBLE VANE TYPE.

**5 DUCTWORK SQUARE VANE ELBOWS**  
Scale: N.T.S.



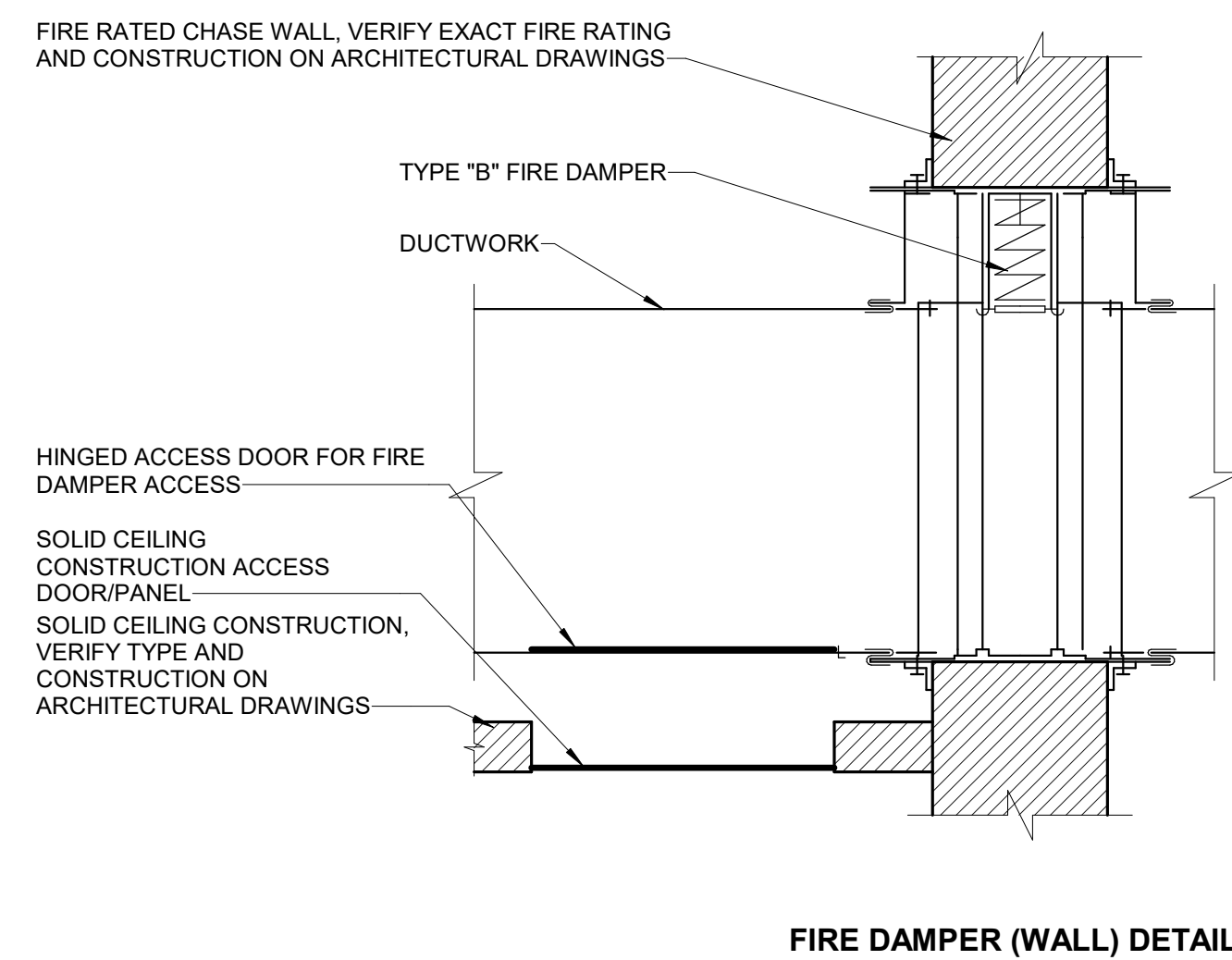
- NOTES:**
- LATCHES SHALL BE OF THE WEDGE TYPE TO CLOSE DOORS THIGHTLY.
  - HINGES ON THE ACCESS DOORS SHALL HAVE NON-CORROSIVE PINS.
  - SEE SMACNA 2005, FIGURE 9-16

**1 ACCESS PANEL AND DOOR DETAIL**  
Scale: N.T.S.



- NOTES:**
- DELETE INSULATION STAND-OFF ON DUCTWORK WITHOUT EXTERIOR INSULATION.
  - DETAIL SHOWS SINGLE BLADE DAMPER. DAMPER INSTALLATION SHALL BE SIMILAR FOR MULTI-BLADE DAMPERS & ROUND DAMPERS.

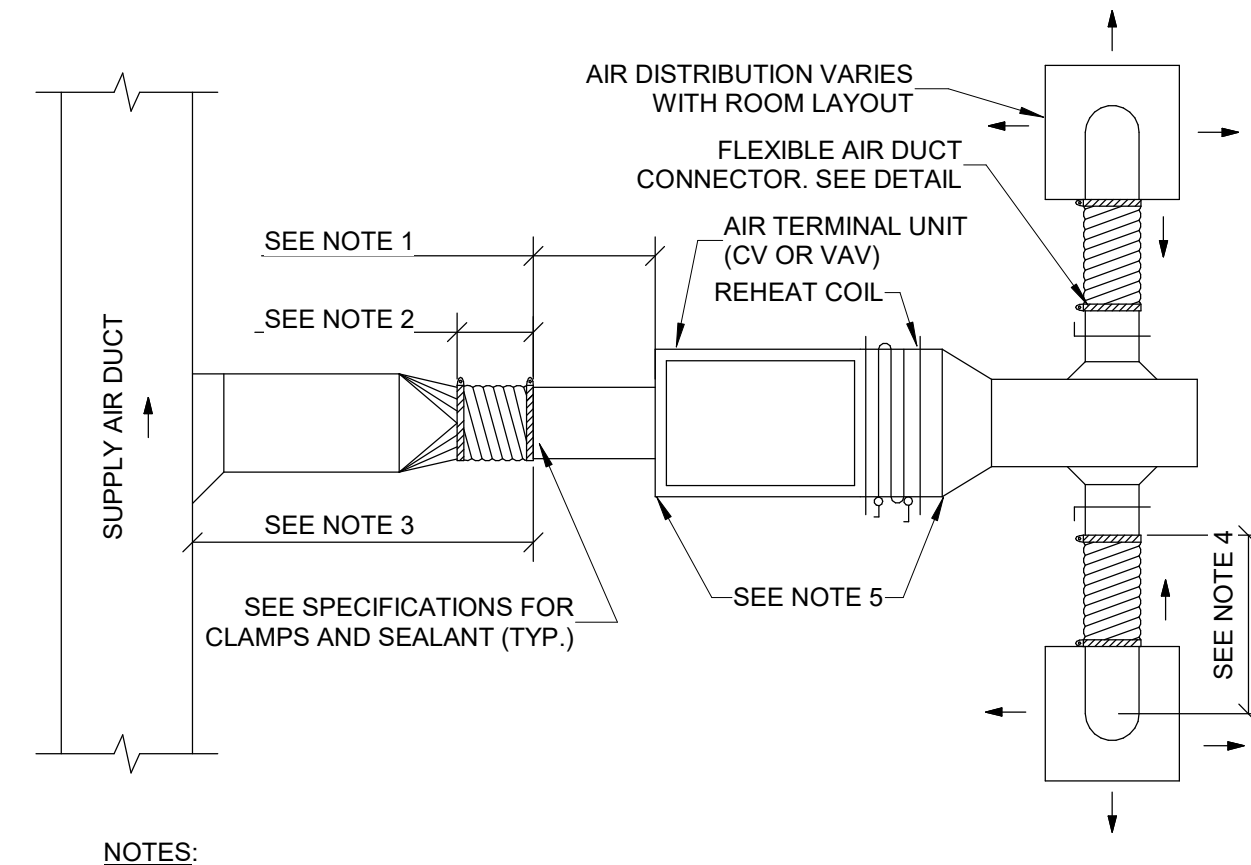
**2 VOLUME DAMPER DETAIL**  
Scale: N.T.S.



- NOTES:**
- FIRE DAMPER INSTALLATION SHALL BE IN STRICT ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS AND ALL UNDERWRITERS LABORATORY (UL), FEDERAL, STATE AND LOCAL CODE REQUIREMENTS.
  - FIRE DAMPER RATING SHALL MATCH FIRE RATING OF CHASE CONSTRUCTION. REFER TO ARCHITECTURAL DRAWINGS FOR RATING.
  - DIVISION 23 CONTRACTOR SHALL FURNISH AND INSTALL A HINGED ACCESS DOOR IN THE DUCTWORK SIZED IN ACCORDANCE WITH THE SCHEDULE AND LOCATED TO PERMIT REPLACEMENT OF FUSIBLE LINK. LABEL FIRE DAMPER ACCESS DOOR WITH "FIRE DAMPER ACCESS."
  - DIVISION 23 CONTRACTOR SHALL FURNISH ACCESS DOOR/PANEL FOR SOLID CEILING CONSTRUCTION IN ACCORDANCE WITH DIVISION 8 SPECIFICATION SECTION "ACCESS DOORS AND PANELS". ACCESS DOOR/PANEL LOCATED IN SOLID CEILING CONSTRUCTION SHALL BE NO SMALLER IN SIZE THAN THE ACCESS DOOR LOCATED IN THE DUCTWORK.

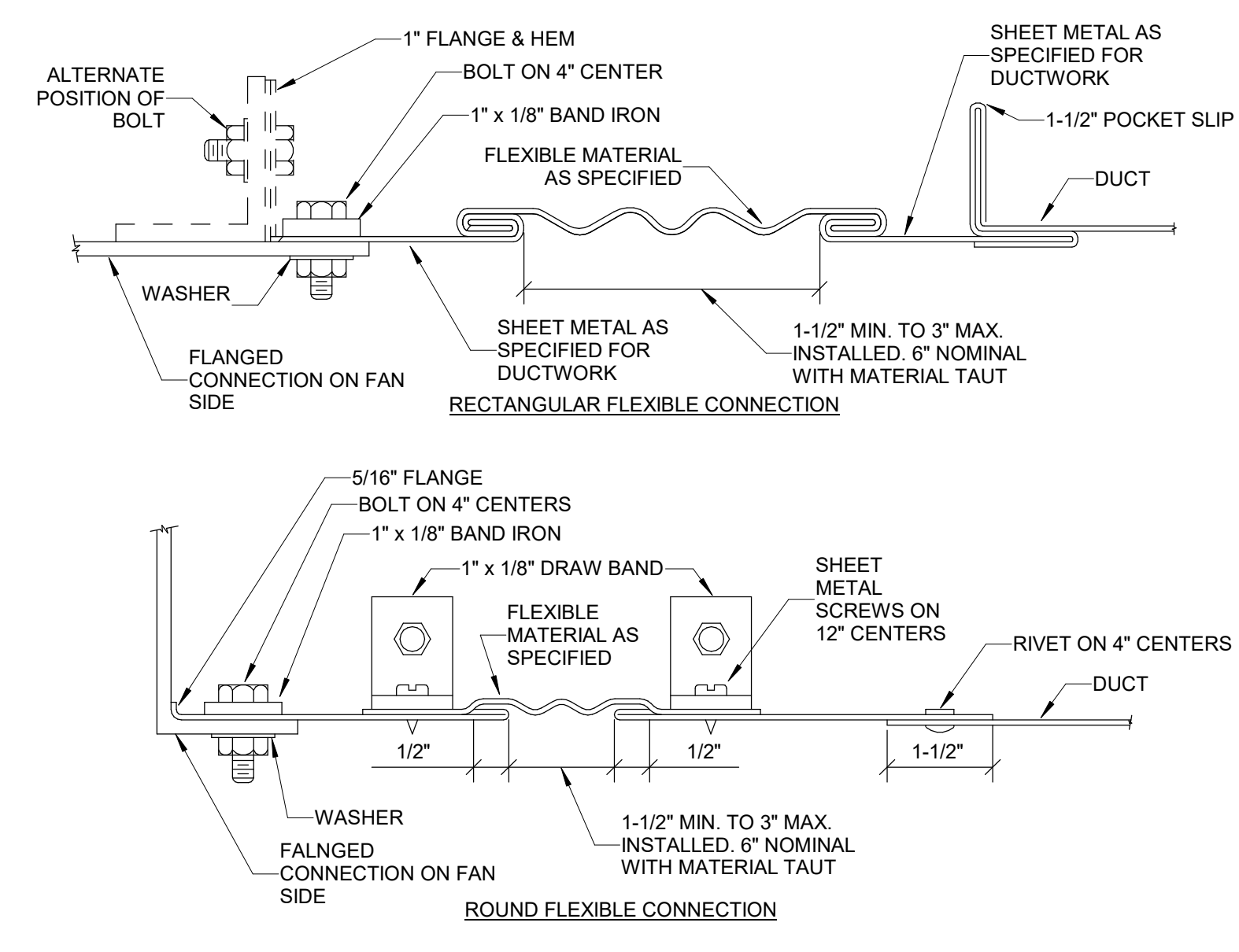
ACCESS DOOR / PANEL SCHEDULE	
DUCTWORK WIDTH	ACCESS DOOR
6"	6" x 6"
8" - 12"	8" x 8"
12" - 18"	12" x 12"
18" - 36"	18" x 18"
37" - UP	24" x 24"

**11 FIRE DAMPER (WALL) DETAIL**  
Scale: N.T.S.

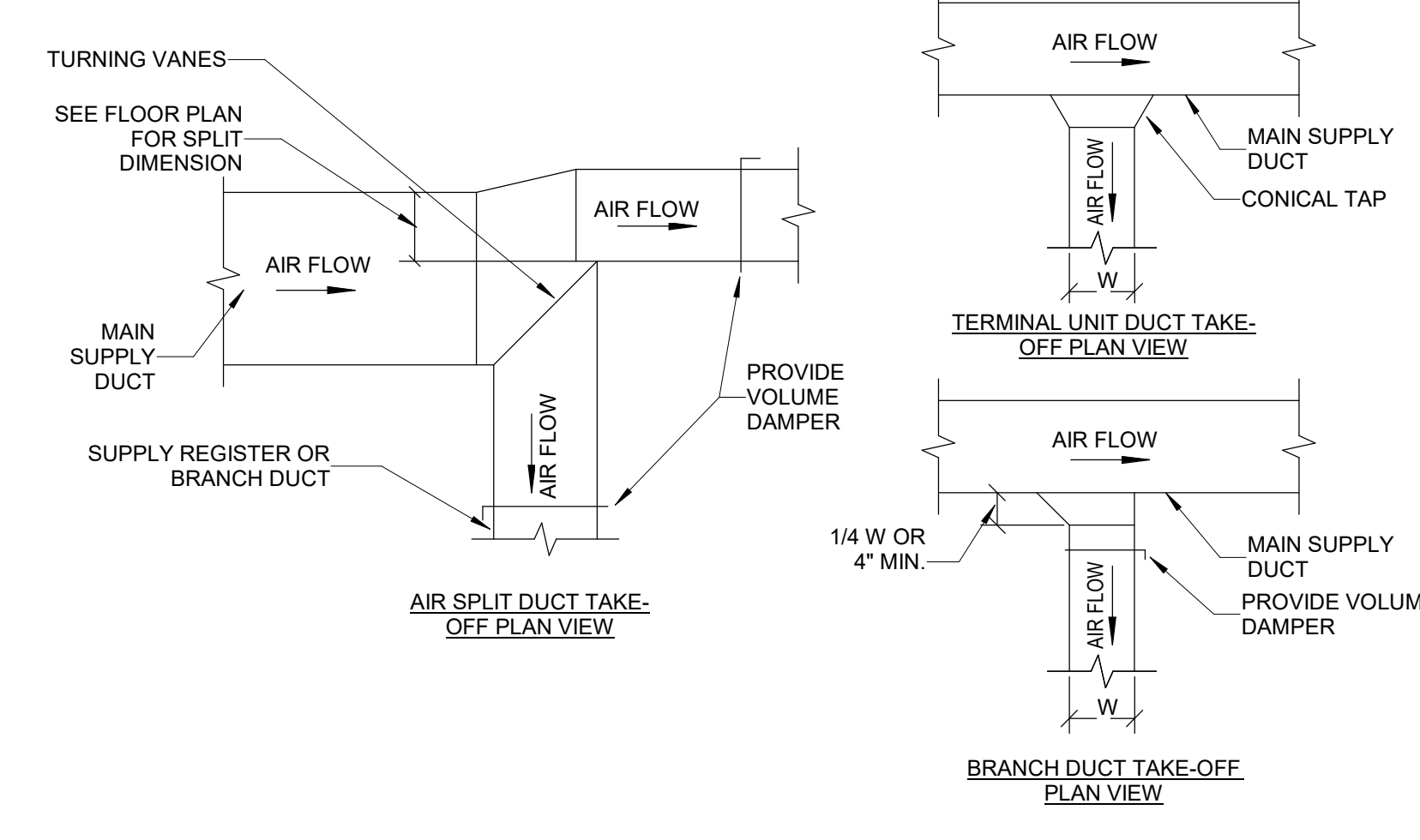


- NOTES:**
- RIGID STRAIGHT TERMINAL UNIT INLET LENGTH SHALL BE A MINIMUM OF 3 TIMES THE DIAMETER OF INLET.
  - A FLEXIBLE AIR DUCT CONNECTOR IS NOT MANDATORY FOR INLET TO THIS BOX, BUT ALLOWED TO ACCOMMODATE MINOR OFFSETS. MAXIMUM LENGTH 3'-0".
  - A BRANCH DUCT SERVING AN INDIVIDUAL BOX MAY BE THE SAME SIZE AS THE BOX INLET, PROVIDED THE EQUIVALENT LENGTH OF THE BRANCH DUCT, AS SHOWN, DOES NOT EXCEED 10 FEET. FOR LONGER LENGTHS, INCREASE THE DUCT SIZE AND PROVIDE A DUCT TRANSITION TO MAINTAIN THE DUCT STATIC PRESSURE DROP AT OR BELOW 0.27100".
  - FLEXIBLE AIR DUCT CONNECTORS, WHEN USED FROM TERMINAL UNIT SUPPLY AIR DUCT TO DIFFUSER, SHALL NOT EXCEED 5'-0". USE RIGID ELBOWS FOR CHANGE OF DIRECTION GREATER THAN 45°.
  - COMPONENT ARRANGEMENT MAY VARY BY MANUFACTURER. PROVIDE INSULATION WITH VAPOR BARRIER FOR CONNECTING DUCT SECTIONS.
  - USE OF THE FLEXIBLE AIR DUCT CONNECTORS ARE NOT PERMITTED FOR THE DEDICATED AHU SERVING THE SURGICAL SUITE.

**9 DUCT CONNECTIONS AIR TERMINAL UNITS**  
Scale: N.T.S.



**6 FLEXIBLE DUCT CONNECTIONS**  
Scale: N.T.S.



**3 SUPPLY DUCT TAKE-OFFS**  
Scale: N.T.S.

**FULLY SPRINKLERED BID DOCUMENTS**

<b>CONSULTANTS:</b> ASI #2: 03/02/2021 Revisions: Date		<b>PROJECT MANAGER</b> ACG Project Number 18-048 Headquarters <b>Apogee Consulting Group, P.A.</b> 1151 Kildaire Farm Road, Suite 120 Cary, North Carolina 27511 NC License #C-1848 www.acg-pa.com 919-858-7420		<b>Office of Construction and Facilities Management</b> U.S. Department of Veterans Affairs		Drawing Title: <b>MECHANICAL DETAILS</b> Location: <b>DURHAM VA MEDICAL CENTER</b> 508 FULTON STREET DURHAM, NC 27705		Project Title: <b>IMPROVE INPATIENT PRIVACY (RENOVATE 5B)</b> Approved: <b>ANDREKA WATLINGTON</b> PROJECT ENGINEER Date: 6/28/2019 Checked: SPG Drawn: SMH		VA PROJECT NUMBER: 558-18-150 Building Number: # 1 Drawing Number: <b>M-502</b> Dwg 7 of 9	
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AIR DEVICE SCHEDULE (SUPPLY)											
Type Mark	TYPE	AIRFLOW		MAX. APD	MOUNTING	PANEL/FRAME SIZE	NECK SIZE		DAMPER	FINISH	MATERIAL
		MIN.	MAX.				ROUND	RECT.			
SD-A	SQUARE CONE	0	135	0.08 in-wg	CEILING	24x24	6"	--	No	WHITE	STEEL
SD-B	SQUARE CONE	136	230	0.07 in-wg	CEILING	24x24	8"	--	No	WHITE	STEEL
SD-C	SQUARE CONE	231	355	0.07 in-wg	CEILING	24x24	10"	--	No	WHITE	STEEL

NOTES:  
 1. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.  
 2. PROVIDE DAMPER IN BRANCH DUCT AS SHOWN ON PLANS.

AIR DEVICE SCHEDULE (RETURN)											
Type Mark	TYPE	AIRFLOW		MAX. APD	MOUNTING	PANEL/FRAME SIZE	NECK SIZE	MAX NC	DAMPER DIFFUSER	FINISH	MATERIAL
		MIN.	MAX.								
RA-A	EGG CRATE	40	110	0.09 in-wg	CEILING	24x24	6x6	20	No	WHITE	STEEL
RA-B	EGG CRATE	131	270	0.09 in-wg	CEILING	24x24	8x8	20	No	WHITE	STEEL
RG-E	EGG CRATE	40	110	0.09 in-wg	CEILING	12x12	6x6	20	No	WHITE	STEEL
RG-F	SIDEWALL 45° FIXED	0	650	0.05 in-wg	WALL	26x12	24x10	20	No	WHITE	STEEL

NOTES:  
 1. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.  
 2. PROVIDE DAMPER IN BRANCH DUCT AS SHOWN ON PLANS.

AIR DEVICE SCHEDULE (EXHAUST)											
Type Mark	TYPE	AIRFLOW		MAX. APD	MOUNTING	PANEL/FRAME SIZE	NECK SIZE	MAX NC	DAMPER	MATERIAL	FINISH
		MIN.	MAX.								
EG-A	EGG CRATE	40	100	0.09 in-wg	CEILING	24x24	6"	20	No	STEEL	WHITE
EG-B	EGG CRATE	110	240	0.09 in-wg	CEILING	24x24	8"Ø	20	No	STEEL	WHITE
EG-C	EGG CRATE	201	430	0.09 in-wg	CEILING	24x24	10"Ø	20	No	STEEL	WHITE
EG-E	EGG CRATE	40	100	0.09 in-wg	CEILING	12x12	6"Ø	20	No	STEEL	WHITE
EG-F	EGG CRATE	101	240	0.09 in-wg	CEILING	12x12	8"Ø	20	No	STEEL	WHITE

NOTES:  
 1. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.  
 2. PROVIDE DAMPER IN BRANCH DUCT AS SHOWN ON PLANS.

DUCTLESS SPLIT INDOOR UNIT SCHEDULE								
TAG	LOCATION	AREA AND/OR ROOM SERVED	TYPE	AIRFLOW	CAPACITY	EAT DB	ELECTRICAL DATA	REMARKS
5B-SS-1	EQUIP B5004	EQUIP B5004	HORIZONTAL DUCTED	635	24,000.0 Btu/h	115 °F	208/230V 1-PHASE 60HZ	1,2,3

NOTES:  
 1. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.  
 2. INDOOR UNIT POWERED THROUGH CONDENSING UNIT.  
 3. INDOOR UNIT POWERED THROUGH CONDENSING UNIT.

DUCTLESS SPLIT CONDENSING UNIT SCHEDULE								
MARK	LOCATION	AREA AND/OR ROOM SERVED	COOLING CAPACITY RANGE (BTU)	COMPRESSOR TYPE	POWER	MCA	MOCP	REMARKS
5B-CU-1	ROOF	EQUIP B5004	12000	DC INVERTER-DRIVEN TWIN ROTARY	208/230, 1, 60	12	15	1,2,3

NOTES:  
 1. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.  
 2. INDOOR UNIT POWERED THROUGH CONDENSING UNIT.  
 3. PROVIDE WITH CONDENSING UNIT PAD FOR MOUNTING ON ROOF. COORDINATE WITH ROOFING CONTRACTOR TO MEET ROOF WARRANTY REQUIREMENTS.

FAN SCHEDULE																	
MARK	LOCATION	BUILDING/AREA SERVED	SERVICE	AIRFLOW	TYPE	ESP	TSP	MIN % EFF	DRIVE	FAN MAX RPM	BHP	HP (W)	PHASE	VOLT	R.P.M.	SPEED CONTROL	REMARKS
5B-TU-EF-B13	3E-ROOF	B5028 B5029 ISOLATION ROOMS	ISOLATION ROOM EXHAUST	1160 CFM	UTILITY SET	1.25 in-wg	0.00 in-wg	89.5	BELT	2344	.912	1-1/2	3	208	1725	CONSTANT	1,2,3,4,5

NOTES:  
 1. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.  
 2. COORDINATE WITH ELECTRICAL CONTRACTOR FOR DISCONNECT MEANS ON ROOF.  
 3. PROVIDE WITH OSHA BELT GUARD / WEATHER COVER WITH ACCESS DOOR. SPARE BELT SET, INLET PIEZOMETRIC RING WITH FLOW MONITOR, STEEL DRAIN, INLET AND OUTLET FLEX DUCT CONNECTION, AND SPRING ISOLATORS.  
 4. PROVIDE CONTROLLER TO INTEGRATE INTO EXISTING SIEMENS CONTROLS BUILDING AUTOMATION SYSTEM.  
 5. PROVIDE CLASS II FAN WITH CCW ROTATION AND BOTTOM ANGLE UP DISCHARGE.

AIR FILTER SCHEDULE											
MARK	LOCATION	AREA AND/OR BLDG SERVED	SYSTEM AND/OR SERVICE	MARK RATING	APD		HOUSING TYPE	# - CARTRIDGES	CARTRIDGES		REMARKS
					INITIAL	FINAL			SIZE	ARRANGEMENT	
5B-EF-HEPA-1	THIRD FLOOR F-WING ROOF	5B PATIENT RM ISOLATION B5028 B5029	5B TU-EF-1	HEPA	1.00 in-wg	2.50 in-wg	BAG-IN / BAG-OUT	1	27" x 30" x 24"	1 WIDE BY 1 HIGH	1

NOTES:  
 1. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

FULLY SPRINKLERED  
 BID DOCUMENTS

CONSULTANTS:		PROJECT MANAGER ACG Project Number 18-048 Headquarters <b>Apogee Consulting Group, P.A.</b> 1151 Kildaire Farm Road, Suite 120 Cary, North Carolina 27511 NC License #C-1848 www.acg-pa.com 919-858-7420		Office of Construction and Facilities Management VA U.S. Department of Veterans Affairs		Drawing Title <b>MECHANICAL SCHEDULES</b> Location <b>DURHAM VA MEDICAL CENTER                  508 FULTON STREET                  DURHAM, NC 27705</b>		Project Title <b>IMPROVE INPATIENT PRIVACY (RENOVATE 5B)</b> Approved ANDREKA WATLINGTON PROJECT ENGINEER Date 6/28/2019 Checked SPG Drawn SMH		VA PROJECT NUMBER 558-18-150 Building Number # 1 Drawing Number <b>M-601</b> Dwg 8 of 9	
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SINGLE DUCT AIR TERMINAL SCHEDULE																		
MARK	LOCATION	ROOM SERVED	SYSTEM AIR HANDLING	VAZ SIZE	AIRFLOW			CONTROL TYPE	CONTROL SEQUENCE	REHEAT ELEC	REHEAT HW	ROWS	HEATING COIL				REMARKS	
					AIRFLOW MIN	REHEAT	REHEAT						EAT	LAT	EWT	LWT		FLOW
5B-TU-3	B5007	B5007 PATIENT ROOM	1-AHU-2	6 in	225	225	225	CAV	5°F DEADBAND	No	Yes	2	55 °F	95 °F	180 °F	160 °F	0.98 GPM	1.2, 3
5B-TU-4	B5008	B5008 PATIENT ROOM	1-AHU-2	5 in	195	195	195	CAV	5°F DEADBAND	No	Yes	2	55 °F	95 °F	180 °F	160 °F	0.85 GPM	1.2, 3
5B-TU-5	B5009	B5009 CARE STATION	1-AHU-2	6 in	260	260	260	CAV	5°F DEADBAND	No	Yes	2	55 °F	95 °F	180 °F	160 °F	1.13 GPM	1.2, 3
5B-TU-6	B5010	B5010 PATIENT ROOM	1-AHU-2	5 in	185	185	185	CAV	5°F DEADBAND	No	Yes	2	55 °F	95 °F	180 °F	160 °F	0.80 GPM	1.2, 3
5B-TU-7	B5011	B5011 PATIENT ROOM	1-AHU-2	5 in	190	190	190	CAV	5°F DEADBAND	No	Yes	2	55 °F	95 °F	180 °F	160 °F	0.82 GPM	1.2, 3
5B-TU-8	B5012	B5012 PATIENT ROOM	1-AHU-2	5 in	235	235	235	CAV	5°F DEADBAND	No	Yes	2	55 °F	95 °F	180 °F	160 °F	1.02 GPM	1.2, 3
5B-TU-9	B5040	B5040 CORRIDOR B5014 CARE STATION	1-AHU-2	5 in	250	250	250	CAV	5°F DEADBAND	No	Yes	2	55 °F	95 °F	180 °F	160 °F	1.09 GPM	1.2, 3
5B-TU-10	B5015	B5015 STAFF LOUNGE B5015A LOCKER	1-AHU-2	4 in	120	120	120	CAV	5°F DEADBAND	No	Yes	2	55 °F	95 °F	180 °F	160 °F	0.52 GPM	1.2, 3
5B-TU-11	B5016	B5016 PATIENT ROOM	1-AHU-2	5 in	290	290	290	CAV	5°F DEADBAND	No	Yes	2	55 °F	95 °F	180 °F	160 °F	1.26 GPM	1.2, 3
5B-TU-12	B5017	B5017 EQUIP	1-AHU-2	4 in	100	100	100	CAV	5°F DEADBAND	No	Yes	2	55 °F	95 °F	180 °F	160 °F	0.43 GPM	1.2, 3
5B-TU-13	B5021	B5021 PATIENT ROOM	1-AHU-2	5 in	230	230	230	CAV	5°F DEADBAND	No	Yes	2	55 °F	95 °F	180 °F	160 °F	1.00 GPM	1.2, 3
5B-TU-14	B5022	B5022 PATIENT ROOM	1-AHU-2	5 in	230	230	230	CAV	5°F DEADBAND	No	Yes	2	55 °F	95 °F	180 °F	160 °F	1.00 GPM	1.2, 3
5B-TU-15	B5041	B5041 PASSAGE B5023 CARE STATION	5-AHU-1	6 in	185	185	185	CAV	5°F DEADBAND	No	Yes	2	55 °F	95 °F	180 °F	160 °F	0.80 GPM	1.2, 3
5B-TU-16	B5024	B5024 PATIENT ROOM	1-AHU-2	5 in	230	230	230	CAV	5°F DEADBAND	No	Yes	2	55 °F	95 °F	180 °F	160 °F	1.00 GPM	1.2, 3
5B-TU-17	B5025	B5025 PATIENT ROOM	1-AHU-2	5 in	230	230	230	CAV	5°F DEADBAND	No	Yes	2	55 °F	95 °F	180 °F	160 °F	1.00 GPM	1.2, 3
5B-TU-18	B5040	B5040 CORRIDOR B5027 MEDS B5020 ALCOVE B5026 NOUR	1-AHU-2	4 in	115	115	115	CAV	5°F DEADBAND	No	Yes	2	55 °F	95 °F	180 °F	160 °F	0.50 GPM	1.2, 3
5B-TU-19	B5028	B5028 PATIENT B5028A ANTE	1-AHU-2	6 in	350	350	350	CAV	5°F DEADBAND	No	Yes	2	55 °F	95 °F	180 °F	160 °F	1.52 GPM	1.2, 3
5B-TU-20	B5029	B5029 PATIENT B5028A ANTE	1-AHU-2	6 in	355	355	355	CAV	5°F DEADBAND	No	Yes	2	55 °F	95 °F	180 °F	160 °F	1.54 GPM	1.2, 3
5B-TU-21	B5030	B5030 NURSE MGR OFFICE	1-AHU-2	4 in	120	120	120	CAV	5°F DEADBAND	No	Yes	2	55 °F	95 °F	180 °F	160 °F	0.52 GPM	1.2, 3
5B-TU-22	B5031	B5031 TEAM WORK ROOM	1-AHU-2	4 in	160	160	160	CAV	5°F DEADBAND	No	Yes	2	55 °F	95 °F	180 °F	160 °F	0.69 GPM	1.2, 3
5B-TU-23	B5040	B5040 CORRIDOR B5005 CARE STATION B5006 ALCOVE	1-AHU-2	6 in	320	320	320	CAV	5°F DEADBAND	No	Yes	2	55 °F	95 °F	180 °F	160 °F	1.39 GPM	1.2, 3
5B-TU-24	B5040	B5040 CORRIDOR B5027 MEDS B5020 ALCOVE B5026 NOUR	1-AHU-2	5 in	250	250	250	CAV	5°F DEADBAND	No	Yes	2	55 °F	95 °F	180 °F	160 °F	1.09 GPM	1.2, 3
5B-TU-25	B5040	B5040 CORRIDOR B5027 MEDS B5020 ALCOVE B5026 NOUR	1-AHU-2	4 in	100	115	115	CAV	5°F DEADBAND	No	Yes	2	55 °F	95 °F	180 °F	160 °F	0.43 GPM	1.2, 3
5B-TU-EF-B12	B5031	B5028 B5029	5B-EF-1	14 in	1160	1160	0	CAV	CONST. PRESS.	No	No						1.4	

- NOTES:  
1. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.  
2. PROVIDE WITH 120V-24V TRANSFORMER.  
3. PIPE RUNNOUT SIZE IS 3/4".  
4. VENTURI TYPE PRESSURE INDEPENDENT AIR VALVE WITH MECHANICAL ADJUSTMENT.

VALVE SCHEDULE					
MARK	SYSTEM AND/OR SERVICE PIPE ACCESSORY	TYPE	SIZE	FLOW	REMARKS
V-TU-3	5B-TU-3	2-WAY FLOATING VALVE	3/4"e-3/4"e	0.98 GPM	1
V-TU-4	5B-TU-4	2-WAY FLOATING VALVE	3/4"e-3/4"e	0.85 GPM	1
V-TU-5	5B-TU-5	2-WAY FLOATING VALVE	3/4"e-3/4"e	1.13 GPM	1
V-TU-6	5B-TU-6	2-WAY FLOATING VALVE	3/4"e-3/4"e	0.80 GPM	1
V-TU-7	5B-TU-7	2-WAY FLOATING VALVE	3/4"e-3/4"e	0.82 GPM	1
V-TU-8	5B-TU-8	2-WAY FLOATING VALVE	3/4"e-3/4"e	1.02 GPM	1
V-TU-9	5B-TU-9	3-WAY FLOATING VALVE	3/4"e-3/4"e-3/4"e	1.09 GPM	1
V-TU-10	5B-TU-10	2-WAY FLOATING VALVE	3/4"e-3/4"e	0.52 GPM	1
V-TU-11	5B-TU-11	2-WAY FLOATING VALVE	3/4"e-3/4"e	1.26 GPM	1
V-TU-12	5B-TU-12	2-WAY FLOATING VALVE	3/4"e-3/4"e	0.43 GPM	1
V-TU-13	5B-TU-13	2-WAY FLOATING VALVE	3/4"e-3/4"e	1.00 GPM	1
V-TU-14	5B-TU-14	2-WAY FLOATING VALVE	3/4"e-3/4"e	1.00 GPM	1
V-TU-15	5B-TU-15	3-WAY FLOATING VALVE	3/4"e-3/4"e-3/4"e	0.80 GPM	1
V-TU-16	5B-TU-16	3-WAY FLOATING VALVE	3/4"e-3/4"e-3/4"e	1.00 GPM	1
V-TU-17	5B-TU-17	2-WAY FLOATING VALVE	3/4"e-3/4"e	1.00 GPM	1
V-TU-18	5B-TU-18	2-WAY FLOATING VALVE	3/4"e-3/4"e	0.50 GPM	1
V-TU-19	5B-TU-19	2-WAY FLOATING VALVE	3/4"e-3/4"e	1.52 GPM	1
V-TU-20	5B-TU-20	2-WAY FLOATING VALVE	3/4"e-3/4"e	0.52 GPM	1
V-TU-21	5B-TU-21	2-WAY FLOATING VALVE	3/4"e-3/4"e	0.52 GPM	1
V-TU-22	5B-TU-22	2-WAY FLOATING VALVE	3/4"e-3/4"e	0.69 GPM	1
V-TU-23	5B-TU-23	2-WAY FLOATING VALVE	3/4"e-3/4"e	1.39 GPM	1
V-TU-24	5B-TU-24	2-WAY FLOATING VALVE	3/4"e-3/4"e	1.09 GPM	1
V-TU-25	5B-TU-25	2-WAY FLOATING VALVE	3/4"e-3/4"e	0.43 GPM	1

- NOTES:  
1. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

ROOM AIR BALANCE SCHEDULE													
ROOM NO.	ROOM NAME	AIR HANDLING UNIT	TERMINAL UNIT	INDIVIDUAL ROOM TEMP CONTROL	SUPPLY		RETURN OR EXHAUST		ROOM AIRFLOW VAV / CAV	ROOM AIR BALANCE	NET INFILTRATION	NET EXFILTRATION	REMARKS
					AIRFLOW	FAN NAME	AIRFLOW	FAN NAME					
B5007	PATIENT RM, BARIATRIC	1-AHU-2	5B-TU-3	Yes	225 CFM	SF-1	100 CFM	RF-1/EF-1	CAV	+	0	125	1
B5007A	BATH	1-AHU-2	5B-TU-3	No	0 CFM	SF-1	135 CFM	RF-1/EF-1	CAV	-	135	0	
B5008	PATIENT RM	1-AHU-2	5B-TU-4	Yes	195 CFM	SF-1	100 CFM	RF-1/EF-1	CAV	+	0	95	1
B5008A	BATH	1-AHU-2	5B-TU-4	No	0 CFM	SF-1	90 CFM	RF-1/EF-1	CAV	-	90	0	
B5009	CARE STATION	1-AHU-2	5B-TU-5	Yes	260 CFM	SF-1	0 CFM	RF-1/EF-1	CAV	+	0	260	
B5010	PATIENT RM	1-AHU-2	5B-TU-6	Yes	185 CFM	SF-1	100 CFM	RF-1/EF-1	CAV	+	0	85	1
B5010A	BATH	1-AHU-2	5B-TU-6	No	0 CFM	SF-1	90 CFM	RF-1/EF-1	CAV	-	90	0	
B5011	PATIENT RM	1-AHU-2	5B-TU-7	Yes	190 CFM	SF-1	100 CFM	RF-1/EF-1	CAV	+	0	90	1
B5011A	BATH	1-AHU-2	5B-TU-7	No	0 CFM	SF-1	90 CFM	RF-1/EF-1	CAV	-	90	0	
B5012	PATIENT RM, BARIATRIC	1-AHU-2	5B-TU-8	Yes	235 CFM	SF-1	100 CFM	RF-1/EF-1	CAV	+	0	135	1
B5012A	BATH	1-AHU-2	5B-TU-8	No	0 CFM	SF-1	135 CFM	RF-1/EF-1	CAV	-	135	0	
B5013	CARE STATION	1-AHU-2	5B-TU-9	Yes	0 CFM	SF-1	0 CFM	RF-1/EF-1	CAV	0	0	0	2
B5040	CORRIDOR-2	1-AHU-2	5B-TU-9	No	250 CFM	SF-1	240 CFM	RF-1/EF-1	CAV	+	0	10	
B5014	LOCKER	1-AHU-2	5B-TU-10	No	0 CFM	SF-1	100 CFM	RF-1/EF-1	CAV	-	100	0	
B5014A	STAFF TLT	1-AHU-2	5B-TU-10	Yes	0 CFM	SF-1	75 CFM	RF-1/EF-1	CAV	-	75	0	
B5015	STAFF LOUNGE	1-AHU-2	5B-TU-10	Yes	120 CFM	SF-1	120 CFM	RF-1/EF-1	CAV	0	0	0	
B5016	PATIENT RM	1-AHU-2	5B-TU-11	Yes	290 CFM	SF-1	130 CFM	RF-1/EF-1	CAV	+	0	160	1
B5016A	BATH	1-AHU-2	5B-TU-11	No	0 CFM	SF-1	90 CFM	RF-1/EF-1	CAV	-	90	0	
B5017	EQUIP	1-AHU-2	5B-TU-12	Yes	100 CFM	SF-1	65 CFM	RF-1/EF-1	CAV	+	0	35	
B5018	SOILED UTILITY	1-AHU-2	5B-TU-12	No	0 CFM	SF-1	190 CFM	RF-1/EF-1	CAV	-	190	0	
B5021	PATIENT RM	1-AHU-2	5B-TU-13	Yes	230 CFM	SF-1	140 CFM	RF-1/EF-1	CAV	+	0	90	1
B5021A	BATH	1-AHU-2	5B-TU-13	No	0 CFM	SF-1	90 CFM	RF-1/EF-1	CAV	-	90	0	
B5022	PATIENT RM	1-AHU-2	5B-TU-14	Yes	230 CFM	SF-1	140 CFM	RF-1/EF-1	CAV	+	0	90	1
B5022A	BATH	1-AHU-2	5B-TU-14	No	0 CFM	SF-1	90 CFM	RF-1/EF-1	CAV	-	90	0	
B5023	CARE STATION	1-AHU-2	5B-TU-15	Yes	0 CFM	SF-1	0 CFM	RF-1/EF-1	CAV	0	0	0	2
B5040	CORRIDOR-4	1-AHU-2	5B-TU-15	No	0 CFM	SF-1	185 CFM	RF-1/EF-1	CAV	-	185	0	
B5041	PASSAGE	1-AHU-2	5B-TU-15	Yes	185 CFM	SF-1	0 CFM	RF-1/EF-1	CAV	+	0	185	
B5024	PATIENT RM	1-AHU-2	5B-TU-16	Yes	230 CFM	SF-1	140 CFM	RF-1/EF-1	CAV	+	0	90	1
B5024A	BATH	1-AHU-2	5B-TU-16	No	0 CFM	SF-1	90 CFM	RF-1/EF-1	CAV	-	90	0	
B5025	PATIENT RM	1-AHU-2	5B-TU-17	Yes	230 CFM	SF-1	140 CFM	RF-1/EF-1	CAV	+	0	90	1
B5025A	BATH	1-AHU-2	5B-TU-17	No	0 CFM	SF-1	90 CFM	RF-1/EF-1	CAV	-	90	0	
B5026	NOUR	1-AHU-2	5B-TU-18	No	50 CFM	SF-1	0 CFM	RF-1/EF-1	CAV	+	0	50	
B5027	MEDS	1-AHU-2	5B-TU-18	Yes	65 CFM	SF-1	0 CFM	RF-1/EF-1	CAV	+	0	65	
B5028	PATIENT RM, ISOLATION	1-AHU-2	5B-TU-19	Yes	350 CFM	SF-1	400 CFM	RF-1/EF-1	CAV	-	50	0	1
B5028A	BATH	1-AHU-2	5B-TU-19	No	0 CFM	SF-1	120 CFM	RF-1/EF-1	CAV	-	120	0	
B5028B	ANTE	1-AHU-2	5B-TU-19	No	0 CFM	SF-1	60 CFM	RF-1/EF-1	CAV	-	60	0	
B5029	PATIENT RM, ISOLATION	1-AHU-2	5B-TU-20	Yes	355 CFM	SF-1	400 CFM	RF-1/EF-1	CAV	-	45	0	1
B5029A	BATH	1-AHU-2	5B-TU-20	No	0 CFM	SF-1	120 CFM	RF-1/EF-1	CAV	-	120	0	
B5029B	ANTE	1-AHU-2	5B-TU-20	No	0 CFM	SF-1	60 CFM	RF-1/EF-1	CAV	-	60	0	
B5031A	NURSE MGR OFFICE	1-AHU-2	5B-TU-21	Yes	120 CFM	SF-1	120 CFM	RF-1/EF-1	CAV	0	0	0	
B5031	TEAM WORK ROOM	1-AHU-2	5B-TU-22	Yes	160 CFM	SF-1	160 CFM	RF-1/EF-1	CAV	0	0	0	
B5004	EQUIP	1-AHU-2	5B-TU-23	No	60 CFM	SF-1	0 CFM	RF-1/EF-1	CAV	+	0	60	
B5005	CARE STATION	1-AHU-2	5B-TU-23	Yes	0 CFM	SF-1	0 CFM	RF-1/EF-1	CAV	0	0	0	2
B5040	CORRIDOR-3	1-AHU-2	5B-TU-23	No	260 CFM	SF-1	240 CFM	RF-1/EF-1	CAV	+	0	20	
B5020	ALCOVE	1-AHU-2	5B-TU-24	Yes	0 CFM	SF-1	150 CFM	RF-1/EF-1	CAV	-	150	0	
B5040	CORRIDOR-1	1-AHU-2	5B-TU-24	No	250 CFM	SF-1	0 CFM	RF-1/EF-1	CAV	+	0	250	
B5019	CLEAN SUPPLY	1-AHU-2	5B-TU-25	Yes	100 CFM	SF-1	0 CFM	RF-1/EF-1	CAV	+	0	100	

- NOTES:  
1. PATIENT BEDROOM AIR TRANSFER