

ENERGY RECOVERY VENTILATOR SCHEDULE																													
EQUIPMENT TAG	MANUFACTURER (OR ACCEPT. EQUAL)	MODEL	FRESH AIR FLOW RATE (CFM)	EXHAUST AIR FLOW RATE (CFM)	ROOM EXH. AIR (°F)				OUTSIDE AIR (°F)				SUPPLY AIR (°F)				RECOVERY EFFECTIVENESS				ELECTRICAL DATA							WEIGHT (LB)	NOTES
					WINTER		SUMMER		WINTER		SUMMER		WINTER		SUMMER		SENSIBLE		TOTAL		MOTOR		VOLT	PHASE	Hz.	MCA	MOCP		
					DB	WB	DB	WB	DB	WB	DB	WB	DB	WB	DB	WB	WINTER	SUMMER	WINTER	SUMMER	W	FLA							
ERV-1	RENEWAIRE	HE07-JRTY-D11AA-DGNTF-L	300	300	70.0	54.4	75.0	62.6	0.0	-2.0	95.0	75.0	53.8	44.1	79.4	68.0	76.8%	76.8%	75.1%	59.9%	357 (2)	5.4	120	1	60	12.2	15	218-373	FURNISH W/ MERV 8 FILTERS, ECM MOTOR, DISCONNECT SWITCH, 24" INSULATED ROOF CURB & BACKDRAFT DAMPERS.

DUCTED HOT WATER COIL SCHEDULE																		
EQUIPMENT TAG	MANUFACTURER (OR ACCEPT. EQUAL)	MODEL	AIRFLOW (CFM)	AIR PRESS. DROP (IN. W.C.)	EFT (°F)	LFT (°F)	CAPACITY (MBH)	E.A.T. DB (°F)	L.A.T. DB (°F)	FPD (FT)	FLOW RATE (GPM)	ROWS	FIN HEIGHT (IN)	FIN LENGTH (IN)	COIL HEIGHT (IN)	COIL LENGTH (IN)	OVERALL LENGTH (IN)	NOTES
HWC-1	TRANE	D5WB12012G0AA142EABA00A	300	0.35	180	160	11.78	53.8	90	0.02	1.18	1	12	12	13.5	13.375	26	-

INDOOR MINI-SPLIT UNIT SCHEDULE																			
EQUIPMENT TAG	MANUFACTURER (OR ACCEPT. EQUAL)	MODEL	MINI-SPLIT UNIT TYPE	AREA OF BUILDING SERVED	AIRFLOW (CFM)	COOLING			HEATING			PAIRED OUTDOOR UNIT	EXTERNAL STATIC PRESSURE (IN. W.C.)	ELECTRICAL POWER REQUIREMENTS				WEIGHT (LB)	NOTES
						CAPACITY (MBH)	EDB (°F)	EWB (°F)	CAPACITY (MBH)	EDB (°F)	EWB (°F)			VOLT.	PHASE	Hz.	W		
FCU-1	TRANE	TPLFY008FM104A	CEILING RECESSED UNIT	NURSE'S SUITE	315	8	80.0	67.0	9	70.0	60.0	HP-1	-	208	1	60	50	28.9	PROVIDE W/ BUILT IN CONDENSATE PUMP
FCU-2	TRANE	TPLFY008FM104A	CEILING RECESSED UNIT	CONFERENCE ROOM	315	8	80.0	67.0	9	70.0	60.0		-	208	1	60	50	28.9	PROVIDE W/ BUILT IN CONDENSATE PUMP
FCU-3	TRANE	TPLFY008FM104A	CEILING RECESSED UNIT	ASSISTANT PRINCIPAL	315	8	80.0	67.0	9	70.0	60.0		-	208	1	60	50	28.9	PROVIDE W/ BUILT IN CONDENSATE PUMP
FCU-4	TRANE	TPLFY012FM140A	CEILING RECESSED UNIT	MAIN OFFICE	335	12	81.0	66.0	13.5	68.0	60.0		-	208	1	60	50	31.3	PROVIDE W/ BUILT IN CONDENSATE PUMP
FCU-5	TRANE	TPLFY008FM104A	CEILING RECESSED UNIT	SECURITY OFFICE	315	8	80.0	67.0	9	70.0	60.0		-	208	1	60	50	28.9	PROVIDE W/ BUILT IN CONDENSATE PUMP
FCU-6	TRANE	TPLFY008FM104A	CEILING RECESSED UNIT	OFFICE	315	8	80.0	67.0	9	70.0	60.0		-	208	1	60	50	28.9	PROVIDE W/ BUILT IN CONDENSATE PUMP
FCU-7	TRANE	TPLFY012FM140A	CEILING RECESSED UNIT	PRINCIPAL	335	12	81.0	66.0	13.5	68.0	60.0		-	208	1	60	50	31.3	PROVIDE W/ BUILT IN CONDENSATE PUMP

AIR-COOLED HEAT PUMP SCHEDULE																				
EQUIPMENT TAG	MANUFACTURER (OR ACCEPT. EQUAL)	MODEL	INDOOR UNITS SERVED	COMPRESSOR TYPE	NOM. COOL CAPACITY (MBH)	NOM. HEAT CAPACITY (MBH)	OUTDOOR OPERATING TEMP. RANGE (°F)		AHRU EFFICIENCY RATINGS			REFRIGERANT	SOUND PRESSURE LEVEL COOLING/HEATING (SBA)	ELECTRICAL POWER REQUIREMENTS					WEIGHT (LB)	NOTES
							COOLING	HEATING	EER	IEER	COP			VOLT.	PHASE	Hz.	MCA	MOCP		
HP-1	TRANE	TUHYH0723AN40AN	FCU-1 THRU FCU-7	INVERTER SCROLL HEMETIC	72	80	23 TO 126	-22 TO 60	13.1	27.2	4.39	R410A	55/57	208	3	60	38	60	609	FURNISH W/ REQUIRED PIPING ACCESSORIES

NOTES:  
1. FAN GUARD FROM TRANE IS TO BE USED IN COMBINATION WITH THIS DEVICE, MUST BE MOUNTED 12" OF GROUND OR 12" ABOVE HIGHEST AVERAGE SNOW DEPTH, WHICHEVER IS GREATER

AIR GRILLE/DIFFUSER SCHEDULE														
EQUIPMENT TAG	MANUFACTURER (OR ACCEPT. EQUAL)	MODEL	AIR DEVICE TYPE	AIRFLOW (CFM)		MAX AIR PRESS. DROP (IN. W.C.)	MOUNTING	PANEL/FRAME SIZE (IN.)	NECK SIZE (IN.)	MAX NC	DAMPER	FINISH	NOTES	
				MIN.	MAX.									
D-1	KRUEGER	PLQ-8-F23-24x24-PR10-IB-44	SQUARE PLAQUE FACE DIFFUSER	50	175	0.10	LAY-IN	24"x24"	6"Ø	20	OBD	WHITE	PROVIDE W/ INSULATED BLANKET ON BACKPAN	
D-2	KRUEGER	PLQ-8-F23-24x24-PR10-IB-44	SQUARE PLAQUE FACE DIFFUSER	176	300	0.10	LAY-IN	24"x24"	8"Ø	20	OBD	WHITE	PROVIDE W/ INSULATED BLANKET ON BACKPAN	
R-1	KRUEGER	S80P-20x20-F23-24x24-00-00-00-44	PERFORATED FACE RETURN GRILLE	0	1,600	0.10	LAY-IN	24"x24"	20"x20"	25	-	WHITE	FURNISH & INSTALL FULL-SIZE SHEET METAL PLENUM BOX ON REAR OF GRILLE, PAINT INSIDE FLAT BLACK	

FINNED TUBE SCHEDULE														
EQUIPMENT TAG	MANUFACTURER (OR ACCEPT. EQUAL)	MODEL	AVG WATER TEMP (°F)	BTU/FT	ELEMENT TUBE SIZE (IN)	ELEMENT TUBE MATERIAL	ELEMENT FIN SIZE (IN)	FINS PER FT	ACTIVE FIN LENGTH	ROW QUANTITY	ENCLOSURE MATERIAL	FINISH	COLOR	NOTES
FT-1	STERLING	JVB-S 24	150	860	3/4	COPPER	4-1/4 X 3-5/8	40	(2) 7FT SECTIONS	1	16 GAUGE STEEL	STANDARD PRIME FINISH	SELECTED BY ARCHITECT	PROVIDE W/ REMOVE 12" ACCESS PANEL AT EACH END PROVIDE W/ FULL SIZE BACK PLATE AND MOUNTING BRACKETS

FAN SCHEDULE															
EQUIPMENT TAG	MANUFACTURER	MODEL	SERVICE	FAN C.F.M.	R.P.M.	EXTERNAL STATIC PRESSURE INCH H <sub>2</sub> O	MOTOR					REMARKS			
							POWER (HP)	FLA	VOLT.	PHASE	HZ.				
EF-1	GREENHECK	G-133-VG	CLASSROOM	500 (1,500)	818	0.25	1/4	3.7	120	1	60	PROVIDE W/ FAN SPEED CONTROLLER, 24" HIGH INSULATED ROOF CURB & BACKDRAFT DAMPER			
EF-2	GREENHECK	G-133-VG	CLASSROOM	500 (1,500)	818	0.25	1/4	3.7	120	1	60	PROVIDE W/ FAN SPEED CONTROLLER, 24" HIGH INSULATED ROOF CURB & BACKDRAFT DAMPER			
EF-3	GREENHECK	G-090-VG	TOILET ROOM	150	1,336	0.25	1/4	2.6	120	1	60	PROVIDE W/ FAN SPEED CONTROLLER, 24" HIGH INSULATED ROOF CURB & BACKDRAFT DAMPER			

VENTILATION SCHEDULE															
SYSTEM	SPACE SERVED	SPACE TYPE	SPACE AREA (SQ. FT.)	OCCUPANTS PER 1000 SQ. FT.	# OF OCCUPANTS (NOTE 1)	CFM PER PERSON	CFM PER SQ. FT.	CALCULATED VENTILATION RATE (CFM)	ZONE AIR DISTRIBUTION EFFECTIVENESS	ADJUSTED VENTILATION RATE (CFM)	PROVIDED VENTILATION RATE (CFM)	EA CFM PER FIXTURE	EA CFM PER SQ. FT.	MIN. EA RATE (CFM)	EA PROVIDED (CFM)
ERV-1	NURSE'S SUITE 121	OFFICE/ SICKROOM	435	10	5	10	0.18	128	0.8	160	160	-	-	-	-
	MGT/PT ROOM 122J	CONFERENCE ROOM	194	10	50	5	0.06	62	0.8	77	80	-	-	-	-
	ASSISTENT PRINCIPAL'S 122B	OFFICE	204	5	2	5	0.06	22	0.8	28	30	-	-	-	-
	MAIN OFFICE 122A	RECEPTION AREA	522	30	16	5	0.06	111	0.8	139	140	-	-	-	-
	SECURITY OFFICE 122E	OFFICE	73	5	1	5	0.06	9	0.8	12	15	-	-	-	-
	OFFICE 122D	OFFICE	114	5	1	5	0.06	12	0.8	15	15	-	-	-	-
	PRINCIPAL'S OFFICE 122C	OFFICE	266	5	2	5	0.06	26	0.8	32	35	-	-	-	-
EXISTING RTU	KINDERGARTEN 160	CLASSROOM (AGES 5-8)	876	25	30	10	0.12	325	0.8	507	510	-	-	-	-
	KINDERGARTEN 161	CLASSROOM (AGES 5-8)	872	25	30	10	0.12	325	0.8	507	510	-	-	-	-
	COUNSELOR	OFFICE	198	5	1	5	0.06	17	0.8	21	25	-	-	-	-
	COPY ROOM	COPY, PRINTING	299	4	2	5	0.06	28	0.8	35	35	-	-	-	-

NOTES:  
1. QUANTITY OF OCCUPANTS FOR STANDARD CLASSROOMS ARE 25 TO 30 OCCUPANTS BASED ON NYSED STATISTICAL DATA. ALL OTHER OCCUPANCIES ARE BASED UPON OCCUPANT DENSITIES FROM THE 2015 INTERNATIONAL MECHANICAL CODE

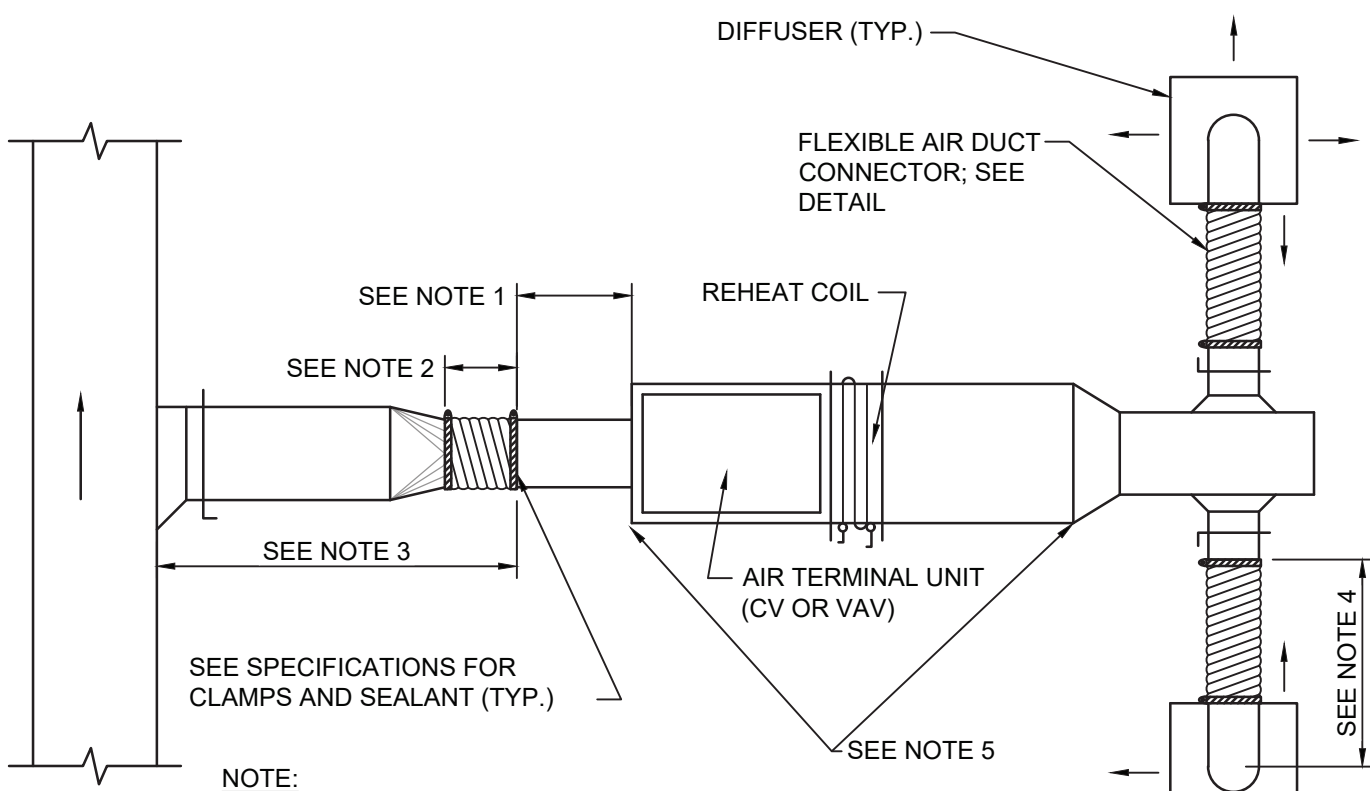
AIR TERMINAL UNIT SCHEDULE																
EQUIPMENT TAG	MANUFACTURER	MODEL	MAXIMUM PRIMARY CFM	MINIMUM PRIMARY CFM	SENSOR SP IN. W.C.	HYDRONIC REHEAT COIL										NOTES
						HEAT CFM	EAT DEG F	LAT DEG F	CAPACITY MBH	EWT DEG F	LWT DEG F	COIL APD FT. W.G.	WATER GPM	COIL ROWS	WPD FT. W.G.	
VAV-1	KRUEGER	LMHS	1,500	510	-	1,125	55	90	42.5	180	160	0.23	4.0	2	1.17	1 - 4
VAV-2	KRUEGER	LMHS	1,500	510	-	1,125	55	90	42.5	180	160	0.23	4.0	2	1.17	1 - 4
1. PROVIDE WITH HOT WATER REHEAT COIL OF SIZE & CAPACITY SPECIFIED 2. PROVIDE W/ FACTORY INSTALLED AIRFLOW MEASURING SENSOR 3. PROVIDE W/ BACNET COMPATIBLE DDC CONTROLLER 4. PROVIDE W/ FACTORY INSTALLED TOGGLE DISCONNECT SWITCH																

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3. PROVIDE W/ BACNET COMPATIBLE DDC CONTROLLER  
4. PROVIDE W/ FACTORY INSTALLED TOGGLE DISCONNECT SWITCH

ENERGY RECOVERY VENTILATOR, HOT WATER COIL & VRF SYSTEM FURNISHED BY OWNER, INSTALLED BY CONTRACTOR. CONTRACTOR IS RESPONSIBLE TO RECEIVE THE EQUIPMENT DELIVERY AT THE PROJECT SITE, MOVE EQUIPMENT FROM TRUCK(S) TO A DESIGNATED STORAGE LOCATION ON THE SITE & RIG THE UNIT INTO THE FINAL INSTALLATION LOCATION. CONTRACTOR IS TO PROVIDE ALL ASSOCIATED COMPONENTS, I.E. DUCTWORK, PIPING, CONTROLS, ACCESSORIES, ETC. UNLESS OTHERWISE NOTED IN THE PROJECT DOCUMENTS; REFER TO FRONT END DOCUMENTS FOR ADDITIONAL INFORMATION

#### VRF System Notes:

- WIRED 7 DAY PROGRAMMABLE THERMOSTAT SHALL BE FURNISHED BY OWNER FOR EACH INDOOR UNIT. THERMOSTATS SHIP LOOSE FOR FIELD INSTALLATION AND WIRING BY THE MECHANICAL CONTRACTOR.
- OWNER TO FURNISH CENTRAL CONTROLLER FOR LOCAL SET POINT CONTROL AND SYSTEM VIEWING. CONTROLLER TO BE INSTALLED AND WIRING BY MECHANICAL CONTRACTOR. 24W POWER BY ELECTRICAL CONTRACTOR.
- DISCONNECT SWITCHES FOR CONDENSING UNITS AND INDOOR UNITS SHALL BE FURNISHED BY THE OWNER AND INSTALLED BY THE ELECTRICAL CONTRACTOR.
- EXTERNAL SUPPORTS FOR INDOOR AND CONDENSING UNITS SHALL BE FURNISHED BY OWNER AND INSTALLED BY THE MECHANICAL CONTRACTOR.
- FILTER RACK AND 2" PLEATED MERV-13 FILTERS FOR DUCTED UNITS SHALL FURNISHED BY OWNER AND INSTALLED BY THE MECHANICAL CONTRACTOR. FILTER RACK SHALL BE GALVANIZED STEEL, FULLY INSULATED & FACTORY ASSEMBLED. TYPICAL OF FLT-H SERIES OR EQUAL.
- CONDENSATE PUMPS SHIP FOR FIELD INSTALLATION BY MECHANICAL CONTRACTOR FOR WALL MOUNTED UNITS. DUCTED UNITS FURNISHED WITH FACTORY MOUNTED CONDENSATE PUMP. MECHANICAL CONTRACTOR TO PROVIDE CONDENSATE PIPING FROM ALL UNITS TO SANITARY DRAIN. FIELD VERIFY EXACT ROUTING AND TERMINATION POINT IN BUILDING.
- PROVIDE REFRIGERANT ISOLATION VALVES ON LIQUID AND GAS LINES AT EVERY FAN COIL UNIT.

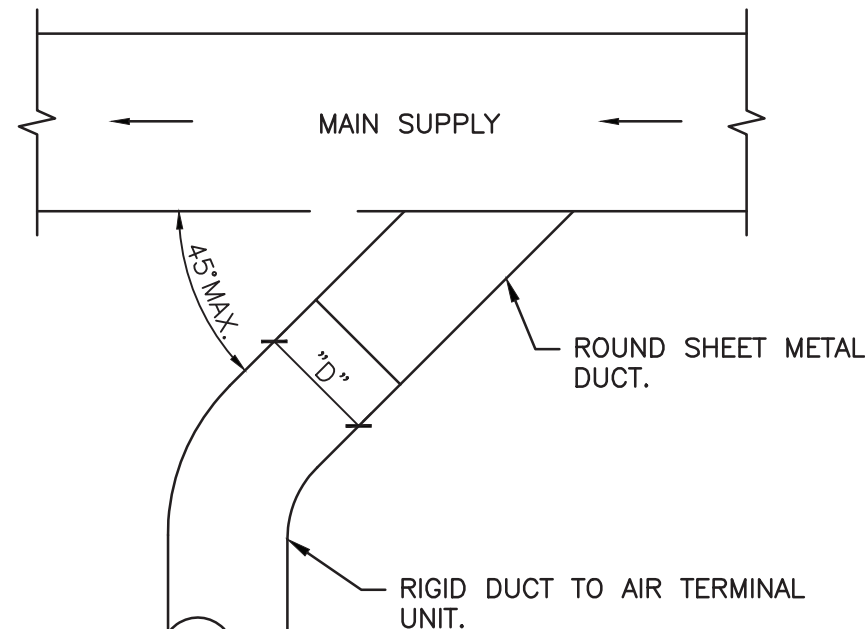


NOTE:

- 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 0.2"/100'.
- FLEXIBLE AIR DUCT CONNECTORS, WHEN USED FROM TERMINAL UNIT SUPPLY AIR DUCT TO DIFFUSER, SHALL NOT EXCEED 8'-0". USE RIGID ELBOWS FOR CHANGE OF DIRECTION GREATER THAN 45°.
- COMPONENT ARRANGEMENT MAY VARY BY MANUFACTURER. PROVIDE INSULATION W/ VAPOR BARRIER FOR CONNECTING DUCT SECTIONS.

#### VAV Air Terminal Unit Duct Connection Detail

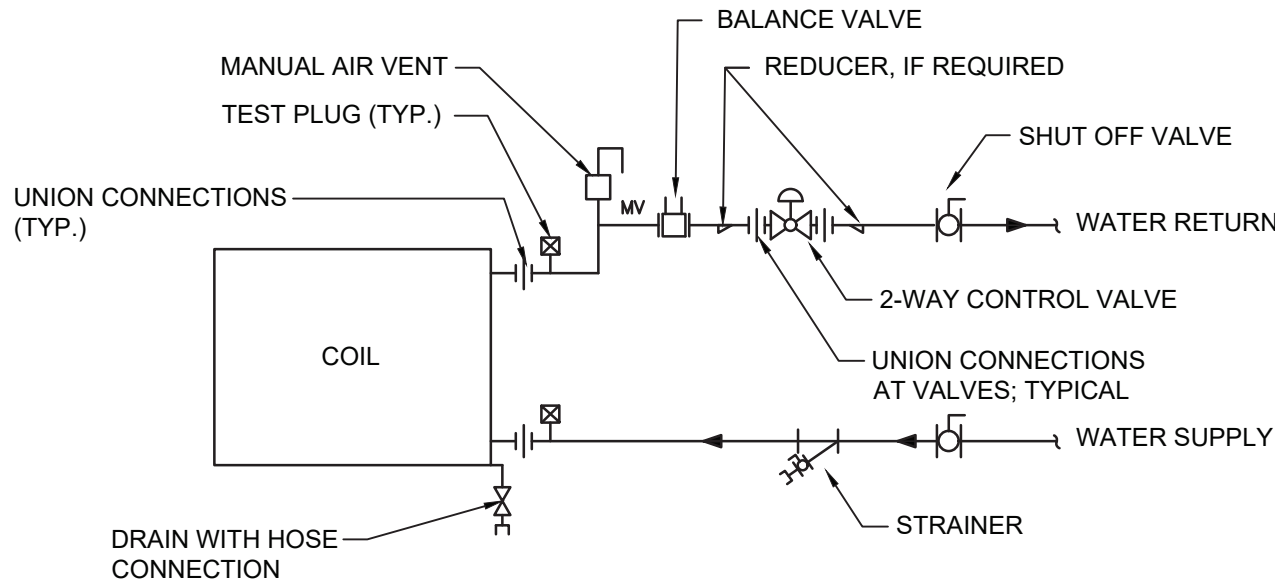
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PLAN VIEW

#### Supply Duct Takeoff for Air Terminal Unit

N.T.S.



#### Coil Piping Connection Detail