



HVAC ELECTRICAL COORDINATION SCHEDULE													
ABBREVIATIONS				CONTRACTOR TYPE				MOTOR CONTROL TYPE				CONTROL TYPE	
DC	LOCAL DISCONNECT	EC	ELECTRICAL CONTRACTOR	CS	COMBINATION STARTER	TC	TIMECLOCK	CPT	CONTROL POWER TRANSFORMER	BAS	BUILDING AUTOMATION SYSTEM	LOW	LOW VOLTAGE CONTROLS
MC	MOTOR CONTROL (POWER)	EX	EXISTING	MG	MAGNETIC STARTER OR CONTACT	MAN	MANUAL STARTER	LINE	LINE VOLTAGE CONTROLS	RLINE	REVERSE ACTING LINE VOLTAGE STAT	MAN	MANUAL
SD	DUCT SMOKE DETECTOR	FC	FIRE PROTECTION CONTRACTOR	MS	MANUAL STARTER	MSR	MANUAL STARTER W/CONTROL RELAY	OV	OVERCURRENT PROTECTION	CO	CARBON MONOXIDE SENSOR	INT	INTEGRAL TO EQUIPMENT
CN	CONTROLS	GC	GENERAL CONTRACTOR	PC	PLUMBING CONTRACTOR	OR	OWNER OR OTHERS						
TS	TOGGLE SWITCH	HC	HVAC CONTRACTOR										
C/B	H.A.C.R. CIRCUIT BREAKER AT SOURCE PANELBOARD												
FUSE	FUSE AT LOCAL DISCONNECT (VERIFY FIELD RATING)												
FLA	OPERATING FULL LOAD AMPS												
MCA	MINIMUM CIRCUIT AMPACITY												
CP	CORD AND PLUG CONNECTION												
MARK	DESCRIPTION	DC FURN	DC INST	DC WIRE	MC TYPE	MC FURN	MC INST	MC WIRE	CN TYPE	CN FURN	CN INST	CN WIRE	SD QUAN
EF-1	EXHAUST FAN	MFR	MFR	MFR	CS	EC	EC	EC	MAN	EC	EC	EC	0
EF-2	EXHAUST FAN	MFR	MFR	MFR	CS	EC	EC	EC	MAN	EC	EC	EC	0
VAV-1	VAV BOX	EC	EC	EC	MG	MFR	MFR	MFR	LOW	HC	HC	HC	
VAV-2	VAV BOX	EC	EC	EC	MG	MFR	MFR	MFR	LOW	HC	HC	HC	

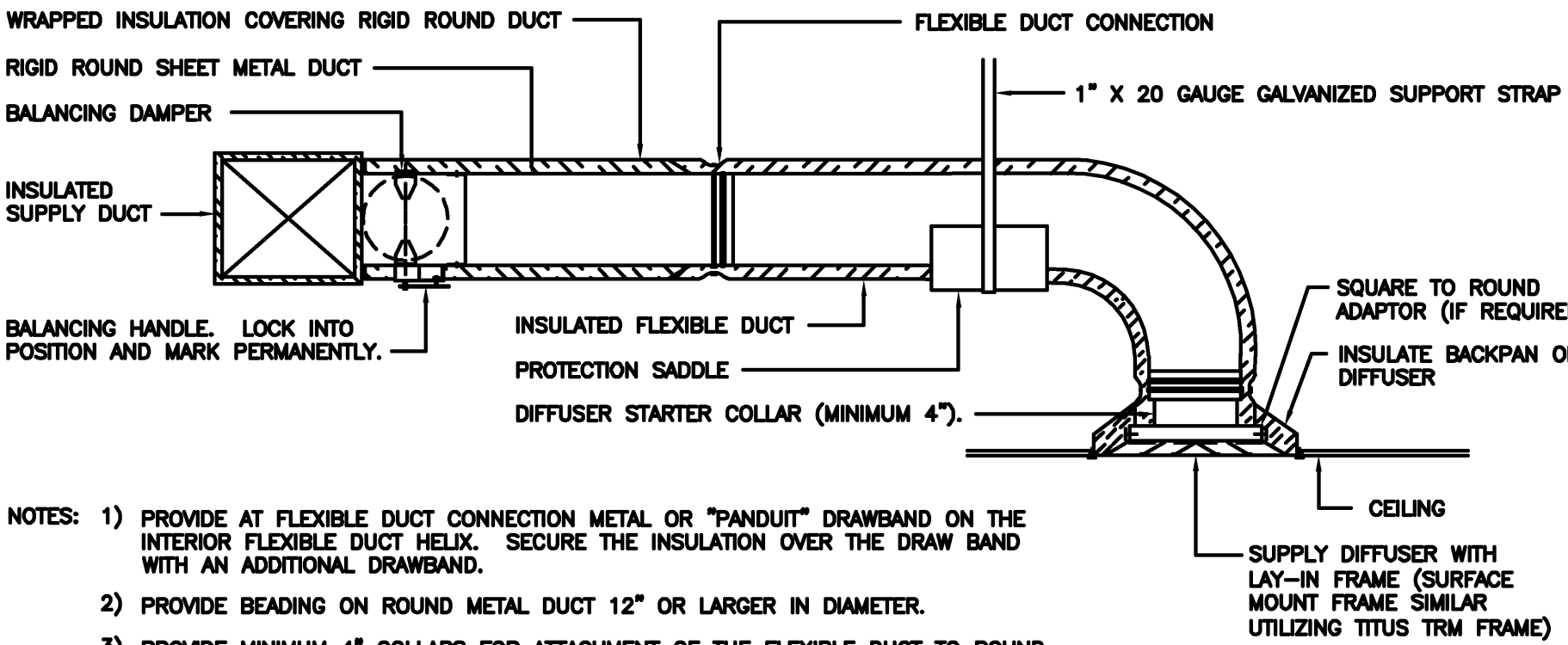
AIR DEVICE SCHEDULE 													
NOTES:				3. VOLUME DAMPER--FACTORY FURNISHED. OPPOSED BLADE OR BUTTERFLY WHERE AVAILABLE. ADJUSTABLE FROM FACE.									
1. SYMBOL KEY--SD--SUPPLY DIFFUSER, SR--SUPPLY REGISTER, TG--TRANSFER GRILLE, RG--RETURN GRILLE				4. BORDER STYLE--"A" SURFACE MOUNTED (FOR DRYWALL MOUNTED DIFFUSERS ONLY). "B" LAY-IN, PROVIDE WITH TITUS MODEL NUMBER TRIM FRAME FOR DRYWALL CEILING. SEE DETAIL SHEET.									
2. FINISH--"A" GALVANIZED FINISH "B" WHITE (G.C. TO FIELD PAINT TO MATCH CEILING OR WALL WITH ENAMEL FINISH, SEE ARCHITECTURAL PLANS).													
SYMBOL	MANUFACTURER/CATALOG NUMBER	SIZE	MOUNTING				MATERIAL	FINISH	DAMPER	BORDER	REMARKS		
		MOD.	NECK	CEILING	DUCT	WALL	STEEL	ALUM.					
SD1	TITUS OMNI	24"x24"	10"x6"	o					B	o	B	ALL DIFFUSERS TO BE 4-WAY THROW TYPE.	
SR1	TITUS 300RL	12"x8"	10"x6"		o		o		A	o	A	SEE PLAN/M1.0 FOR THROW PATTERN	
SR2	TITUS 300RL	8"x8"	6"x6"		o		o		A	o	A	SEE PLAN/M1.0 FOR THROW PATTERN	
TG1	TITUS 355RL	20"x14"	18"x12"			o	o		A	N/A	A		
TG2	TITUS 355RL	10"x8"	8"x6"			o	o		A	N/A	A		
RG1	TITUS 355RL	24"x24"	22"x22"	o			o		B	o	B		

VAV BOX (COOLING ONLY) SCHEDULE 											
MARK	MANUFACTURER	MODEL #	CFM			VOLTS / PHASE	COOLING CAPACITY	INLET SIZE	DISCHARGE SIZE	AREA SERVED	ACCESSORIES / NOTES
			NOMINAL	MAX	MIN						
VAV-1	TRANE	VCCF-10	1200	1250	600	120/1	36.0 MBH	10"	16"x14"	SALES	1,2
VAV-2	TRANE	VCCF-10	1200	1250	600	120/1	36.0 MBH	10"	16"x14"	SALES/BOH	1,2
<div>ACCESSORIES:</div> <div>1. SOUND ATTENUATOR</div> <div>2. ELECTRONIC CONTROL</div> <div>OUTSIDE AIR NOTE:</div> <div>CENTRAL AIR CONDITIONING SUPPLY SYSTEM WILL PROVIDE MINIMUM OUTSIDE AIR PER OCCUPANT, AS REQUIRED BY CODE.</div> <div>OUTSIDE AIR CALCULATIONS FOR RETAIL OCCUPANCY IS BASED ON 75 SF/PERSON. THIS VARIES FROM THE CODE DEFAULT OCCUPANCY DENSITY OF 0.66 SF/PERSON.</div> <div>5144 SQ. FT./ 75 SF/PERSON = 68.6 X 7.5 = 514.5 CFM</div> <div>514.5 CFM + (5144 X 0.12) = 617.3 CFM</div> <div>TOTAL OUTSIDE AIR FOR SPACE IS 1132 CFM</div>											

UNIT HEATER SCHEDULE								
MARK	MANUFACTURER	MODEL #	VOLTS / PHASE	KW	CFM	DISCHARGE SIZE	AREA SERVED	ACCESSORIES / NOTES
EUH-1	Q-MARK	MUH05B1	120/1	5.0	350	16"x14"	STOCK	1,2
ACCESSORIES: 1. UNIVERSAL WALL BRACKET 2. THERMOSTAT (SET AND LOCKED AT 55°F)								

HVAC LOAD SCHEDULE						
RTU-1 AND 2						
ZONE LOADS	DESIGN COOLING			DESIGN HEATING		
	COOLING DATA AT Jul 1500			HEATING DATA AT DES HTO		
	COOLING OA DB / WB	92.0 °F / 77.0 °F		HEATING OA DB / WB	36.0 °F / 30.3 °F	
	Details	Sensible (BTU/hr)	Latent (BTU/hr)	Details	Sensible (BTU/hr)	Latent (BTU/hr)
Window & Skylight Solar Loads	0 Bt	0	-	0 Bt	-	-
Wall Transmission	0 Bt	0	-	0 Bt	0	-
Roof Transmission	4875 Bt	3825	-	4875 Bt	7925	-
Window Transmission	0 Bt	0	-	0 Bt	0	-
Skylight Transmission	0 Bt	0	-	0 Bt	0	-
Door Loads	0 Bt	0	-	0 Bt	0	-
Floor Transmission	0 Bt	0	-	0 Bt	0	-
Partitions	0 Bt	0	-	0 Bt	0	-
Ceiling	0 Bt	0	-	0 Bt	0	-
Overhead Lighting	7888 W	15125	-	0	0	-
Task Lighting	0 W	0	-	0	0	-
Electric Equipment	2154 W	6905	-	0	0	-
People	58	11847	11942	0	0	0
Infiltration	-	0	0	-	0	0
Miscellaneous	-	8196	0	-	0	0
Safety Factor	0% / 0%	0	0	0%	0	0
>> Total Zone Loads	-	45898	11942	-	7925	0
Zone Conditioning	-	42544	11942	-	6923	0
Plenum Wall Load	0%	0	-	0	0	-
Plenum Roof Load	70%	8924	-	0	0	-
Plenum Lighting Load	30%	7540	-	0	0	-
Return Fan Load	2045 CFM	0	-	24 CFM	0	-
Ventilation Load	0 CFM	0	0	0 CFM	0	0
Supply Fan Load	2045 CFM	0	-	24 CFM	0	-
Space Fan Coil Fans	-	0	-	-	0	-
Duct Heat Gain / Loss	0	0	-	0	0	-
>> Total System Loads	-	59007	11942	0%	6923	0
Central Cooling Coil	-	59007	11943	-	-273	0
Terminal Reheat Coils	-	0	-	-	7196	-
>> Total Conditioning	-	59007	11943	-	6923	0
Key:	Positive values are cog loads Negative values are htg loads			Positive values are htg loads Negative values are cog loads		

WEATHER DATA	
City Name	Sarasota
Location	Florida
Latitude	27.3 Deg
Longitude	82.5 Deg
Elevation	20.0 ft
Summer Design Dry-Bulb	92.0 °F
Summer Coincident Wet-Bulb	77.0 °F
Summer Daily Range	15.0 °F
Winter Design Dry-Bulb	36.0 °F
Winter Design Wet-Bulb	30.3 °F
Atmospheric Clearness Number	0.90
Average Ground Reflectance	0.20
Soil Conductivity	0.800 BTU/(hr-ft-°F)
Local Time Zone (GMT +/- N hours)	5.0 hours
Consider Daylight Savings Time	No
Simulation Weather Data	N/A
Current Data is	User Modified
Design Cooling Months	January to December

5 DUCT DIFFUSER CONNECTION DETAIL													
SCALE: NONE													
 <p>NOTES:</p> <ol style="list-style-type: none"> 1) PROVIDE AT FLEXIBLE DUCT CONNECTION METAL OR "PANDUIT" DRAWBAND ON THE INTERIOR FLEXIBLE DUCT HELIX. SECURE THE INSULATION OVER THE DRAW BAND WITH AN ADDITIONAL DRAWBAND. 2) PROVIDE BEADING ON ROUND METAL DUCT 12" OR LARGER IN DIAMETER. 3) PROVIDE MINIMUM 4" COLLARS FOR ATTACHMENT OF THE FLEXIBLE DUCT TO ROUND DUCT, DAMPERS AND DIFFUSERS. 4) BAND RIGID ROUND DUCT INSULATION TO DUCT AND PROVIDE TAPE FOR INSULATION OVERLAP. 													

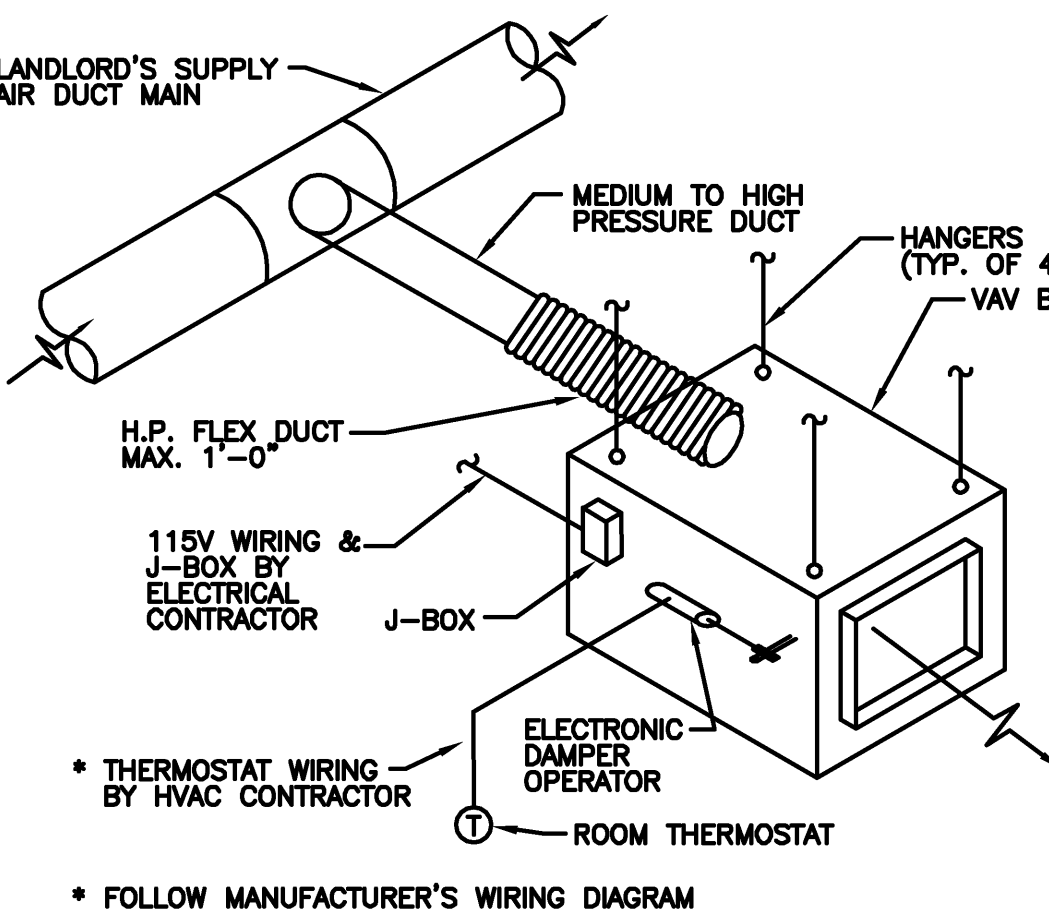
4 VAV BOX CONNECTION DETAIL													
SCALE: NONE													
 <p>NOTES:</p> <ol style="list-style-type: none"> * THERMOSTAT WIRING BY HVAC CONTRACTOR * FOLLOW MANUFACTURER'S WIRING DIAGRAM 													

Diagram illustrating the detail of a Round Duct Hanger. The hanger is shown suspended from a roof joist by a hanger wire. The hanger consists of a sheet metal duct hanger and a spiral duct. The external insulation is shown running continuously through the hangers.

2

ROUND DUCT HANGER DETAIL

SCALE: NONE

Diagram illustrating the detail of a Pipe Hanger. The hanger is shown suspended from a beam by a beam clamp. The hanger consists of a clevis hanger and a 16" rolled sleeve for support. The hanger is oversized for insulation.

HANGER SPACING AND ROD SIZE

PIPE SIZE	MAX SPAN	ROD SIZE
1/2"	7'	3/8"
3/4"	7'	3/8"
1"	7'	3/8"
1 1/2"	9'	3/8"
2"	10'	3/8"
2 1/2"	11'	1/2"
3"	12'	1/2"
3 1/2"	13'	1/2"
4"	14'	5/8"
4 1/2"	15'	5/8"
5"	16'	3/4"
5 1/2"	17'	3/4"
6"	19'	7/8"
6 1/2"	20'	7/8"
7"	22'	1"
7 1/2"	23'	1"
8"	25'	1 1/4"
8 1/2"	27'	1 1/4"
9"	28'	1"
10"	30'	1 1/4"
12"	32'	1 1/4"

3

PIPE HANGER DETAIL

SCALE: NONE