	TYPICAL PTAC-2	TYPICAL PTAC-1	AC#1	AC UNIT		
NOTES:	2ND. FL. UNITS 2 & 3. 2P/320SF	2ND. FL. UNITS 2 & 3. 2P/230SF	GR. FL.	SERVING AREA	IAQ	
	2P/320SF	2P/230SF	3P/1315SF	OCCUPANCY / AREA	VENTI	
	-		1	VENTILATION RATE CFM/SQFT	LATION I	
	15	15	15	VENTILATION VENTILATION RATE RATE CFM/SQFT CFM/PERSON	IAQ - VENTILATION DESIGN CRITERIA	
	30	30	45	VENTILATION REQUIRED CFM	RITERIA	
	30	30	45	VENTILATION PROVIDED CFM		
C					_	<u>l</u>

2. THE DESIGN WILL NEED TO BE RE-EVALUATED IF, AT A LATER TIME, CHANGES OCCUR IN THE USAGE OF THE SPACE, OR IF UNUSUALLY STROSOURCES OF SPECIFIC CONTAMINANTS ARE INTRODUCED INTO THE SPACE 1. DESIGN BASED ON THE VENTILATION RATE PROCEDURE (TABLE 403.3). PER F.B.C.M

I ONG	TO L	30		30		45		CFM	PROVIDED	FINALITY III	
AIR HANDLER UNIT SHALL BE PROVIDED WITH CONDENSATE PUMP, MODEL : 6TVCMA21ULST; THERMALLY PROTECTED; 1.5 A; 110 V.	CONDENSATE PUMP SCHEDULE		SMOKE CONTROL	FIRE STOPPING	FIRE RATED ROOF/ FLOOR CEILING ASSEMBLY	FIRE RATED ENCLOSURE	SMOKE DAMPER(S)	FIRE DAMPER(S)	DUCT SMOKE DETECTOR	HVAC DESIGN REQUIRES	
CONDENS, ROTECTEI	 		1	X	1	×	1	×	×	YES NO	
ATE D; 1.5	HE		×	1	×	1	×	1	1	NO	
		,	/		~~		/	<u> </u>	\mathcal{I}	$\overline{}$	

VPICAL TAC #2 UNIT DESIGNATION LOCATION DESIGN MANUFACTURER MODEL NO. SEER / EER TOTAL AIR, CFM (NOMINAL) 13.3 FAN MOTOR FLA - HP 10.2 COL AREA (sq.ft) 16* X 22* 36 NOMINAL CAPACITY (TONS) TYPE OF FAN NO. OF FANS, FLA - HP MODEL NO. NOMINAL CAPACITY (TONS) TYPE OF FAN NO. OF COMPRESSORS COMPRESSORS R.L.A. / LR.A. EXIT. STATIC PRESS., INCHES OF H2O MODEL NO. SEER / EER TOTAL AIR, CFM (NOMINAL) OUTDOOR AIR, CFM (NOMINAL) OUTDOOR AIR, CFM (NOMINAL) OUTDOOR AIR, CFM (NOMINAL) TOTAL SENSIBLE CAPACITY, MBH ENTERING AIR TEMP. ° F DB/WB COIL AREA (sq.ft) ELECTRICAL SERVICE OPERATING WEIGHT, LBS. OPERATING WEIGHT, LBS. MODEL NO. NOMINAL CAPACITY (TONS) TYPE OF FANS, FLA - HP MODEL NO. OONDENSING TEMP., F DB' SO CONDENSING TEMP., F DB' CAPACITY REDUCTION CAPACITY REDUCTION		0.080 120 42" X 16" X 22" 42") 36 SLEEVE AND DRAIN KIT	9.4 7.1 75 / 63 75 / 63 208-240/1/60 208 3.7 19.5/3.5	FRIEDRICH PDH09K 12.1 / 3.5 / 7.4 12 775/695 355/300 30 8.3	→	SCHEDULE
UNIT DESIGNATION LOCATION DESIGN MANUFACTURER MODEL NO. SEER / EER TOTAL AIR, CFM (NOMINAL) OUTDOOR AIR, CFM EXT. STATIC PRESS., INCHES OF H20 FAN MOTOR FLA - HP ELECTRIC HEAT, KW, MCA, MOCP TOTAL SENSIBLE CAPACITY, MBH TOTAL SENSIBLE CAPACITY, MBH ENTERING AIR TEMP. °F DB/WB COIL AREA (sq.ft) ELECTRICAL SERVICE OPERATING WEIGHT, LBS. UNIT DIMENSIONS DXWXH (IN) UNIT DESIGNATION DESIGN MANUFACTURER MODEL NO. NOMINAL CAPACITY (TONS) TYPE OF FAN NO. OF FANS, FLA - HP AMBIENT AIR TEMP., F DB NO. OF COMPRESSORS COMPRESSORS R.L.A. / L.R.A. CAPACITY REDUCTION MCA/MOCP			14.9 10.2 5 / 63 3-240/1/60 6.7 28.9/5.9	FRIEDRICH PDH15K / 3.4 / 7.4 1390/1255 400/325 75 13.3	TYPICAL PTAC #2	
SIGNATION SIGNATION N MANUFACTURER VO. EER ATIC PRESS., INCHES OF H20 TOR FLA – HP C HEAT, KW, MCA, MOCP APACITY, MBH SENSIBLE CAPACITY, MBH G AIR TEMP. °F DB/WB EA (sq.ft) CAL SERVICE NG WEIGHT, LBS. MENSIONS DXWXH (IN) SIGNATION MANUFACTURER VO. CAPACITY (TONS) FANS, FLA – HP AIR TEMP., F DB° SING TEMP., F DB° SING TEMP., F DB° SING TEMP., F DB° SING TEMP., F DB° COMPRESSORS SSORS R.L.A. / L.R.A. Y REDUCTION	AIR COOLED CONDENSING (UNIT	Alf	R HANDLER UNIT		
, , , , , , , , , , , , , , , , , , ,	\ \ \ \ \ \ \		RP. OF CE DXWXH (EER VIR, CFM (NOMINAL) R AIR, CFM ATIC PRESS., INCHES OF TOR FLA – HP C HEAT, KW, MCA, MOCP CAPACITY, MBH	UNIT DESIGNATION LOCATION DESIGN MANUFACTURER MODEL NO.	

PACKAGE TERMINAL AIR CONDITIONER

TOTAL

CAPACITY,

TOTAL SENSIBLE CAPACITY,

MBH

HEAT PUMP, MBH

AIR FLOW H/L CFM OUT SIDE AIR (O/A,

, CFM)

DESIGN MANUFACTURER
BASE ON CARRIER INFINITY SERIES
MODEL NO.

LOCATION/MOUNTING

|⊷`

UNIT DESIGNATION

PTAC

TINU

EER / COP/ HPSF

WATTS

ENTERING AIR TEMP.

F °DB/WB

CURRENT, AMPS

NOTE: CONDENSER UNIT SHOULD BE INSTALLED OBSERVING MANUFACTURER SERVICE CLEARANCES.
NOTE: CONDENSER UNIT SHOULD BE PLACED SO ROOF RUN-OFF WATER DOES NOT POUR DIRECTLY ON UNIT

AIR HANDLER AVAILABLE ONLY IN 208/230-1-60.	NOTES: 1. CONDENSING UNIT LINE VOLTAGE — AIR H
3/8	REF LINE LIQUID TYPE (Ib-oz)
7/8 R-410A	REF. LINE GAS, REF. CHARGE
32 X 32 X 36	UNIT DIMENSIONS LXWXH (IN)
186	OPERATING WEIGHT,LBS.
208-240/1/60	ELECTRICAL SERVICE
26.2 / 40	MCA/MOCP
	CAPACITY REDUCTION
19.9 / 109.0	COMPRESSORS R.L.A. / L.R.A.
1/SCROLL	NO. OF COMPRESSORS
1	CONDENSING TEMP., F DB
95*	AMBIENT AIR TEMP., DB O
1, 1.4 & 1/4	NO. OF FANS, FLA — HP
PROPELLER	TYPE OF FAN
4.0	NOMINAL CAPACITY (TONS)
24ABB348A	MODEL NO.
CARRIER	DESIGN MANUFACTURER
CU #1	UNIT DESIGNATION
22 X 25 X 54	UNIT DIMENSIONS DXWXH (IN)
185	OPERATING WEIGHT, LBS.
208-240/1/60	ELECTRICAL SERVICE
	COIL AREA (sq.ft)
80/67	ENTERING AIR TEMP. OF DB/WB
33.8	TOTAL SENSIBLE CAPACITY, MBH
43.5	TOTAL CAPACITY, MBH
6.0, 25.7, 35	ELECTRIC HEAT, KW, MCA, MOCP
6.0 - 3/4	FAN MOTOR FLA — HP
0.4	EXT. STATIC PRESS., INCHES OF H20
SEE VENTILATION DESIGN CRITERIA	OUTDOOR AIR, CFM
1600	TOTAL AIR, CFM (NOMINAL)
14.5/	SEER / EER
FX4DNF049	MODEL NO.
CARRIER	DESIGN MANUFACTURER
GROUND FL. VERTICAL	LOCATION
AHU #1	UNIT DESIGNATION
UNIT SCHEDULE	SPLIT A/C

OUTDOOR FAN MOTOR, HP
OPERATING WEIGHT, LBS.
UNIT DIMENSIONS W X H X D (IN)

PROVIDE WALL SLEEVE AND DRA

CONDENSER UNIT SHOULD BE INSTALLED OBSERVING MANUFACTURER SERVICE CLEARANCES.	ALL EXTERIOR COILS TO BE COATED. HIGH EFFICIENCY ECM BLOWER MOTOR — FIVE (5) SPEED.
NOTE: CONDENSER UNIT SHOULD BE PLACED SO ROOF RUN-OFF WATER DOES NOT POUR DIRECTLY ON UNIT	- FIVE (5) SPEED.

3. UNITS RATED WITH 25FT OF LINESET LENGTH. SEE VAPOR LINE SIZING CAPACITY LOSS TABLE WHEN USING OTHER SIZES/LENGTHS.

& COOLING

ALL THERMOSTATS SHALL BE PROGRAMABLE TYPE

	TITUS 300 FS
	TITUS 350 FL
STRUC	STRUCTION. AMEL STANDARD.
F NC	F NC-19 MAXIMUM.

HVAC

SCHEDUL

ALL AIR DISTRIBUTION DEVICES SHALL BE ALL ALUMINUM CONST COORDINATE COLOR FINISH WITH ARCHITECT, WHITE BAKED ENAI ARROWS INDICATE DIRECTION OF AIR DISTRIBUTION.

PROVIDE SELECTION BASED ON A MAXIMUM RADIATED NOISE OF

RETURN

AIR

CEILING OR WALL GRILLE

SUPPLY AIR

SIDE

WALL REGISTER

0.B.D.

USE

AIR

DISTRIBUTION

SCHEDULE

ACCESORIES

DESIGN

MANUFACTURER

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MODEL

SYMBOL DESCRIPTION

FILTER AND FILTER FRAME	FACTORY FABRICATED CURB	THERMOSTAT CONTROL	SOLID STATE SPEED CONTROL	ROOF JACK/BIRDSCREEN	BACKDRAFT DAMPER	CONSTRUCTION	FIRE DAMPER	DUCT SIZE	SERVICE SMTCH	MODEL NUMBER	DESIGN MANUFACTURER	SONES	UNIT DIMENSIONS WXLXH (IN)	ELECTRICAL SERVICE	STARTER FURNISHED BY	FAN MOTOR TYPE	FAN MOTOR (AMPS/WATTS)	TOTAL STATIC PRESSURE, IN OF W.C.	FAN SPEED, RPM	WITH LIGHT	FAN WHEEL TYPE	DRIVE TYPE	TOTAL AIR, CFM	FAN TYPE	LOCATION	OPERATING WEIGHT, LBS	AREA SERVED	UNIT DESIGNATION	BATHROOM FAN S
NO	NO	NO	YES	NO	YES	ALUM/PLASTIC		4"ø	YES	SIG80	DELTA	0.3	10X10X8	120-1-60	MC	DC	0.30/10.8	c. 0.10" - 0.25"		NO	CENTRIFUGAL	DIRECT	80 - 65	EXHAUST	CEILING	12	BATHROOM	EF-1	SCHEDULE

MOTORIZED DAMPER	MOT
VOLUME DAMPER	Š
CONDENSER UNIT	C
AIR HANDLER UNIT	AHU
PACKAGE TERMINAL AIR CONDITIONER UNIT	PTAC
CUBIC FEET PER MINUTE	CFM
RETURN AIR	RA
SUPPLY AIR	SA
DOOR UNDERCUT	\ \ \ \ \
X: AIR DEVICE TYPE AXB: NECK SIZE # CFM	
DUCT MOUNT SMOKE DETECTOR WITH REMOTE AUDIBLE & VISUAL ALARMS.	(SD)
COOLING THERMOSTAT	<u>-</u>
CEILING EXHAUST FAN # CFM	#EFF
RETURN AIR GRILLE	
SUPPLY AIR DIFFUSER	\boxtimes
CONDENSATE LINE	CD
& LIQUID LINES	REF. G&L

OTAL STATIC PRESSURE, IN OF W.C.	0.10 - 0.23
AN MOTOR (AMPS/WATTS)	0.30/10.8
AN MOTOR TYPE	DC
TARTER FURNISHED BY	MC
LECTRICAL SERVICE	120-1-60
NIT DIMENSIONS WXLXH (IN)	10X10X8
ONES	0.3
ESIGN MANUFACTURER	DELTA
NODEL NUMBER	SIG80
SERVICE SWITCH	YES
DUCT SIZE	4"ø
TRE DAMPER	
CONSTRUCTION	ALUM/PLASTIC
8ACKDRAFT DAMPER	YES
ROOF JACK/BIRDSCREEN	NO
SOLID STATE SPEED CONTROL	YES
HERMOSTAT CONTROL	NO.

		ACCESSORIES											
FILTER AND FILTER FRAME	FACTORY FABRICATED CURB	THERMOSTAT CONTROL	SOLID STATE SPEED CONTROL	ROOF JACK/BIRDSCREEN	BACKDRAFT DAMPER	CONSTRUCTION	FIRE DAMPER	DUCT SIZE	OFINIOR OFFICE				
NO	NO	NO	YES	NO	YES	ALUM/PLASTIC	-	4"ø	Ē				

GENERAL NOTES:

HVAC

SYMBOL

LEGEND

- ALL MECHANICAL SYSTEMS ARE TO BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE SECTIONS OF THE NFPA STANDARDS, ANSI STANDARDS, THE LOCAL BUILDING CODE, NOISE & HEIGHT ORDINANCES, PLANS AND SPECIFICATIONS. ALL MATERIALS SHALL BE NEW AND ALL WORKMANSHIP AND MATERIALS SHALL IN STRICT ACCORDANCE WITH APPLICABLE LOCAL CODES, PRODUCT APPROVAL, RULES AND ORDINANCES, ANY DAMAGED EQUIPMENT SHALL BE REPLACED OR RESTORED TO ORIGINAL CONDITION. 黑
- THE CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, EQUIPMENT, ACCESS PANELS, CONTROL SYSTEMS, DEVICES, PERMITS AND SERVICES NECESSARY FOR FURNISHING AND INSTALLING A COMPLETE OPERABLE MECHANICAL SYSTEM.
- ALL LOUVERS, GRILLES, PIPING, ETC. SHALL BE PAINTED TO MATCH SURROUNDING COLOR AND TEXTURES AS REQUIRED BY ARCHITECT. VERIFY COLOR AND TEXTURE WITH ARCHITECT. PAINT ALL EXPOSED MECHANICAL EQUIPMENT WITH BENJAMIN MOORE EPOXY ENAMEL 182.
- ALL OPENINGS IN BUILDING STRUCTURE, FOR DUCTWORK, PIPING, ETC. TO E 1/2" LARGER (ON ALL SIDES) THEN THE OUTSIDE DIMENSIONS. FILL VOIDS WITH FIRE RETARDANT SILICONE FOAM (I.E. CHASE—FOAM CTC PR—855 BY (TECHNOLOGY CORP.). ALL CUTTING, PATCHING, STRUCTURAL STEEL, WEATHER PROOFING, PAINTING, AND WALL OPENINGS SHALL BE BY THE GENERAL CONTRACTOR.
- BUILDING HVAC CALCULATIONS ARE BASED ON THE FOLLOWING:
- INDOOR DESIGN: SUMMER 75 DDB/50% RH, WINTER 70 DDB.
 OUTDOOR DESIGN: SUMMER 95 DDB/79 DWB, WINTER 46 DDB.
 BUILDING CONDITIONS:
 GLASS U VALUE
 1.25
 GLASS S.C.
 0.75
 WALL U VALUE
 0.20
 ROOF U VALUE
 0.05
- ALL STORAGE ROOMS, TOILETS, ETC. , WILL HAVE UNDERCUT DOORS TO PROVIDE VENTILATION REQUIRED WHEN DOOR OR TRANSFER GRILLES ARE NOT SHOWN. IF APPLICABLE.
- PROVIDE THERMOSTAT CONTROL OF ALL FANS THAT EXHAUST MECHANICAL AND ELECTRICAL ROOMS. IF APPLICABLE.
- PROVIDE MAINTENANCE AND OPERATION MANUAL ON ALL MECHANICAL EQUIPMENT OR SYSTEMS. PROVIDE 5 SETS OF SUBMITTALS ON ALL HVAC EQUIPMENT. SUBMITTALS SHALL HAVE A SUMMARY SHEET SHOWING ALL SCHEDULED INFORMATION. PROVIDE FLEXIBLE DUCT CONNECTORS, RATED AS REQUIRED, TO ALL FANS, A/C UNITS, OR MECHANICAL EQUIPMENT.

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HVAC CONTRACTOR WILL WARRANTY ALL MECHANICAL SYSTEMS, DUCTWORK, THERMOSTATS, AND ALL OTHER EQUIPMENT, PARTS AND LABOR UNDER THESE DRAWINGS AND SPECIFICATIONS FOR A PERIOD OF ONE (1) YEAR AFTER C.O. OF BUILDING. ANY REPAIRS REQUIRING SYSTEM SHUT DOWN WILL BE DONE DURING NON OPERATIONAL PERIODS.

<u>.</u>

12.

MECHANICAL EQUIPMENT NOTES:

- ALL MECHANICAL EQUIPMENT SHALL BE ARI & U.L. LISTED WHERE APPLICA AND RATED FOR THE REQUIRED SERVICE, PRESSURES, TEMPERATURES, AND BE PROVIDED WITH ALL NECESSARY TRANSFORMERS, SEALS, VALVES, CONNECTIONS, ETC. TO FUNCTION PROPERLY.
- PROVIDE SMOKE DETECTORS WITH ACCESS DOORS IN ALL SUPPLY AIR DUCTS FOR FAN AND AHD'34 SERVING A COMMON PLENUM OF 2000 CFM OR ABOVE. ALL SMOKE DETECTORS SHALL BE BY ONE MANUFACTURE. COORDINATE VOLTAGE ETC. WITH ELECTRICAL CONTRACTOR AND FIRE ALARM SYSTEM BEFORE ORDERING. UPON DETECTION, SMOKE DETECTORS SHALL SHUT DOWN ASSOCIATED AIR MOVING EQUIPMENT AND ALL AIR MOVING EQUIPMENT SERVING THAT COMMON

5.

- PROVIDE TYPE "B" FIRE DAMPERS IN ALL DUCTS OR OPENINGS PENETRATING FIRE RATED WALLS, MECHANICAL AND ELECTRICAL EQUIPMENT ROOMS. TENANT SEPARATION, PARTITIONS, FLOORS OR ROOF SLABS AND AT FRESH AIR INTAKES (SEE ARCHITECTS PLANS FOR RATINGS). PROVIDE RADIATION DAMPERS IN RATED CEILINGS FOR ALL CEILINGS OPENINGS, CEILING FANS, DIFFUSERS OR GRILLES RATED FOR USE IN THE CEILING ASSEMBLY AS SPECIFIED BY ARCHITECT. IF APPLICABLE.
- PROVIDE VIBRATION ISOLATORS ON ALL MECHANICAL EQUIPMENT AS CALLED FOR IN THE SPECIFICATIONS. IF NOT SPECIFIED, AS RECOMMENDED BY MANUFACTURER FOR QUIET OPERATION (WITH 99% ISOLATION EFFICIENCY). PROVIDE BACK DRAFTS DAMPERS ON ALL EXHAUST FANS AND/OR IN-LINE FANS. A MIN. OF 10' CLEARANCE BETWEEN O/A INTAKES AND VTR OR EXHAUST
- THERMOSTAT LOCATION SHALL BE APPROVED BY OWNER, ENGINEER AND ARCHITECT/INTERIOR DESIGNER BEFORE INSTALLATION.
- RUN INSULATED FIRE RATED CONDENSATE DRAINS AS PER MECHANICAL DRAWINGS. IF APPLICABLE.
- MOUNT ALL ROOFTOP EQUIPMENT FOR WIND LOADS AND MOUNTING HEIGHTS AS REQUIRED BY LOCAL CODES. ALL CURBS SHALL EXTEND 8" MIN. ABOVE FINISHED
- PROVIDE STRANDED COPPER CONTROL WIRING.

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- ALL PIPING AND DUCTWORK SHALL BE SLEEVED THRU WALLS, BEAMS, SLABS, ETC, AS REQUIRED AND COORDINATED WITH THE STRUCTURAL ENGINEER. REWORK BAR JOIST CROSS BRACING AND PROVIDE NECESSARY TRANSITIONS AS REQUIRED FOR DUCTWORK INSTALLATION.
- ALL INSULATION WILL HAVE FIRE/SMOKE RATING LESS THAN 25/50.
- PROVIDE A MIN. OF 3' CLEARANCE IN FRONT OF ALL 120—240 VOLT PANELS AND 4' CLEARANCE IN FRONT OF 480 VOLT PANEL. PROVIDE ADEQUATE SIDE CLEARANCE PER NEC.

13.

12.

- PROVIDE MOTOR STARTERS AS FOLLOWS (UNLESS OTHERWISE RECOMMENDED BY MOTOR / EQUIPMENT MANUFACTURER):
 A: PROVIDE OVERLOAD PROTECTION 1/3 HP AND ABOVE (ALL PHASES).
 B: PROVIDE REDUCED VOLTAGE STARTING 25 HP AND ABOVE.
 C: PROVIDE ACROSS THE LINE VOLTAGE STARTING BELOW 25 HP.

ALL OUTDOOR EQUIPMENT SHALL COMPLY WITH LOCAL ZONING NOISE ORDINANCES OR NOT EXCEED A NOISE LEVEL OF 65 DB AS MEASURED RADIALLY 30 FEET FROM THE EQUIPMENT IN ALL DIRECTIONS.

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16. VERIFY WITH ARCHITECT ALL LOCATIONS OF LOUVERS, GRILLES, SWITCHES, ACCESS PANELS ETC... BEFORE INSTALLATION. FOR ALL BELT DRIVEN AHU'S PROVIDE ONE SET OF ADJUSTABLE PULLEY'S FOR PRELIMINARY BALANCE, AND REPLACE WITH FIXED PULLEYS AFTER FINAL FAN RPM BEEN SET.

AIR DISTRIBUTION / DUCTWORK NOTES

- REFER TO ARCHITECTURAL PLANS FOR CEILING TYPE.
- PROVIDE OFF WHITE FINISH (SUBJECT TO ARCHITECT'S APPROVAL).

 USE SPIN IN COLLAR WITH VOLUME DAMPER AT TRUNK TO FLEX DUCT CONNECTION. (SEE DETAIL)

 ALL DUCTWORK WHERE ALLOWED BY LOCAL CODES AND CEILING RATINGS AS EXPLORME. ALLOWED BY LOCAL CODES AND CEILING RATING SHALL
- SUPPLY AIR RIGID FIBER GLASS DUCT BOARD 1-1/2" THICK (R-6) INSULATION. OPERATING STATIC PRESSURE ±2 IN. WG. (500 PA)

 RETURN AIR SAME AS SUPPLY AIR DUCT WORK.

 EXHAUST AIR MINIMUM 30 GAGE, GALVANIZED METAL OR MINIMUM 26

 GAGE ALUMINUM.
- OUT SIDE AIR NOT LIGHTER THAN 30 GAGE, GALVANIZED METAL OR 26 GAGE MINIMUM ALUMINUM INSULATED (R-6).

CASTELLANOS DESIGN STUDIO

P.

- DRYER DUCTWORK: 26 GA. MIN. GALVINIZED STEEL, HAVING A SMOOTH INTERIOR SURFACE WITH JOINTS RUNNING IN THE DIRECTION OF AIRFLOW AND WITHOUT SHEET METAL SCREWS OR OTHER FASTNERS IN THE AIR STREAM. MAXIMUM LENGTH SHALL NOT EXCEED 25 FEET. WALL CAPS SHALL BE PROVIDED WITH BACKDRAFT DAMPER. NO SCREEN. IF APPLICABLE.
- 5. ALL DUCTWORK AND DIFFUSERS SHALL BE RATED FOR THE USE, PRESSURE AND TEMPERATURE SPECIFIED AND AS REQUIRED BY THE CEILING SYSTEM RATING.
 6. ALL DUCTWORK SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH "SMACNA" STANDARDS AND LOCAL BUILDING CODES.
 7. ALL DUCT SIZES ARE CLEAR INSIDE DIMENSIONS.
 8. SEAL ALL DUCTS, JOINTS AND SEAMS IN AN APPROVED MANNER AND INSURE AGAINST LEAKAGE.
- PROVIDE ACCESS DOORS AS REQUIRED FOR ALL MECHANICAL EQUIPMENT TO SERVICE AND VISUALLY CHECK ROTATION OF FANS AND MOTORS, POSITION OF DAMPERS, REPLACE FIRE DAMPER LINKS, ADJUST OR REPLACE CONTROLS, ETC.
- PROVIDE VANED ELBOWS IN ALL CASES, SPLITTER DAMPERS WHERE INDICATED ON DRAWINGS AND VOLUME CONTROL DAMPERS IN ALL BRANCH DUCTS OR DIFFUSER CONNECTIONS.
- TERMINAL AIR DISTRIBUTION DEVICES SHALL BE AS FOLLOWS: CEILING DIFFUSER: EQUIV. TO TITUS AS SPECIFIED IN AIR DISTRIBUTION SCHEDULE; RETURN REGISTER: EQUIV. TO TITUS AS SPECIFIED IN AIR DISTRIBUTION SCHEDULE (NEW AC DIFF/GRILLES SHALL MATCH EXISTING; IF APPLICABLE).

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12.

- FILTERS SHALL BE IN PLACE DURING CONSTRUCTION. PROVIDE A NEW SET PRIOR TO TEST AND BALANCE AND A FINAL SET AT THE END OF ONE YEAR SERVICE PERIOD. IF APPLICABLE.
- 13. AIR QUALITY SHOULD BE TESTED BEFORE OCCUPANCY AND SHOULD BE INSTRUMENTED AND MONITORED THEREAFTER, OR AT LEAST AT REGULAR INTERVALS
- 14. TEST AND ADJUST SUPPLY AND RETURN AIR TEMPERATURES TO BE WITHIN 5% OF DESIGN REQUIREMENTS.
- INDEPENDENT CONTRACTOR SHALL TEST AND BALANCE ALL MECHANICAL EQUIPMENT AIR DEVICES, EXTRACTORS, DAMPERS, AHU'S & FAN RATES, ETC. TO PROVIDE THE DESIGN QUANTITIES AS SHOWN ON THE PLANS OR SCHEDULES. PROVIDE T & B REPORT IN ACCORDANCE WITH THE AIR BALANCE COUNCIL STANDARDS, SIGNED AND SEALED BY A REGISTERED FLORIDA ENGINEER. PROVIDE FINAL BALANCING FOR ALL SYSTEMS TO SATISFACTION OF OWNER AND ENGINEER. & B CONTRACTOR SHALL VISIT JOB SITE DURING CONSTRUCTION TO ENSURE THAT ALL DUCTS, DAMPERS, ETC. ARE INSTALLED FOR PROPER AND QUIET AIR DELIVERY.

COORDINATION NOTES:

- A/C CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE HIS WORK FOR SIZE, LOCATION, CLEARANCE, ACCESS AND ELECTRICAL CHARACTERISTICS WITH ALL OTHER TRADES AND TO PROVIDE SHOP DRAWINGS TO THE ENGINEER FOR REVIEW BEFORE INSTALLATION OF DUCTWORK OR EQUIPMENT. SHOP DRAWING WILL INCLUDE BEAM OR STRUCTURE ELEVATION & REQUIRED EQUIPMENT ACCESS AREAS.
- WALL, ROOF, AND CEILING OPENINGS INDICATED ON CONTRACTOR DRAWINGS ARE NOMINAL DIMENSIONS ONLY AND ALL DUCT, PIPE OR EQUIPMENT PENETRATIONS SHALL BE SLEEVED AND FIRE RATED AS REQUIRED, ADJUST OPENINGS
- COORDINATE LOCATION OF A/C UNITS, THERMOSTATS, FANS AND DUCTWORK WITH BUILDING STRUCTURE AND OTHER TRADES SO THAT NO INTERFERENCES OCCUR. COORDINATE LOCATION OF CEILING DIFFUSERS, GRILLES AND REGISTERS IN THE FIELD WITH LIGHTS, SPRINKLERS AND ARCHITECTURAL ELEMENTS.

IN GENERAL, DUCT OFFSETS HAVE NOT BEEN SHOWN. A/C CONTRACTOR TO COORDINATE THESE AS REQUIRED.

- 6. MECHANICAL PLANS IN GENERAL, ARE DIAGRAMMATIC IN NATURE, AND ARE TO BE READ IN CONJUNCTION WITH ARCH. PLUMBING, ELECTRICAL AND STRUCTURAL PLANS AND SHALL BE CONSIDERED AS ONE SET OF DOCUMENTS. DUCT AND PIPING OFFSETS, BENDS AND TRANSITIONS WILL BE REQUIRED TO PROVIDE AND INSTALL A COMPLETE FUNCTIONAL SYSTEM AND SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- 7. THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO BIDDING, ORDERING, FABRICATION OR INSTALLATION OF MATERIALS OR EQUIPMENT.
- ALL THERMOSTATS SHALL BE INSTALLED 42" TO 55" A.F.F. VERIFY EXACT LOCATION WITH ARCHITECT / INTERIOR DESIGNER. CONTROLS / EQUIPMENT SEQUENCE OF OPERATION:
- UPON DETECTION OF SMOKE. SMOKE DETECTORS SHALL SHUT DOWN REQUIRED ASSOCIATED AIR MOVING EQUIPMENT AND ALL AIR MOVING EQUIPMENT SERVING THAT COMMON PLENUM.



Amarilis Rodriguez, P.E. License Number 60236 C.A. 26359

SCHEDUL **HVAC** PLAN ES

WESLEY ART CASTE IDA ARCHITECT LICI

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