

**HEAT PUMP FAN COIL UNIT SCHEDULE**

MARK	MANUFACTURER	MODEL	SUPPLY FAN				COOLING						HEAT PUMP HEATING CAPACITY				MCA	MCOCP	V/PH	DISC TYPE	WEIGHT LBS	NOTES
			AIRFLOW (CFM)	MOTOR HP	ESP (IN)	TH (MBH)	SH (MBH)	EAT	WB	DB	WB	DB	WB	HT PUMP (MBH)	AMBIENT (DB)	EAT						
FCU-1	CARRIER	40RUQ	2,400	1.0	0.6	79.6	49.7	77	66	58	57.5	22	45	70	90	700	7.0	15.0	208/3	NF	380	A-E

MODEL NUMBERS SHALL NOT BE CONSIDERED COMPLETE AND MATERIAL SHALL NOT BE ORDERED BY MANUFACTURER AND MODEL NUMBERS ONLY. REVIEW THE COMPLETE DESCRIPTION, NOTES AND SPECIFICATIONS TO DETERMINE THE EXACT MATERIAL AND ACCESSORIES TO BE ORDERED. THE MANUFACTURERS LISTED ARE THE BASIS FOR THE DESIGN.

**NOTES:**

- A. EQUIPMENT COMPONENTS SHALL BE BY THE SAME MANUFACTURER.
- B. FOR COOLING, EQUIPMENT SIZED FOR 95F AMBIENT TEMPERATURE.
- C. HEAT PUMP HEATING CAPACITY BASED ON AMBIENT TEMPERATURE LISTED.
- D. PROVIDE 1" PANEL THROWAWAY AIR FILTERS.
- E. PROVIDE FACTORY MOUNTED STARTER AND DISCONNECT SWITCH.

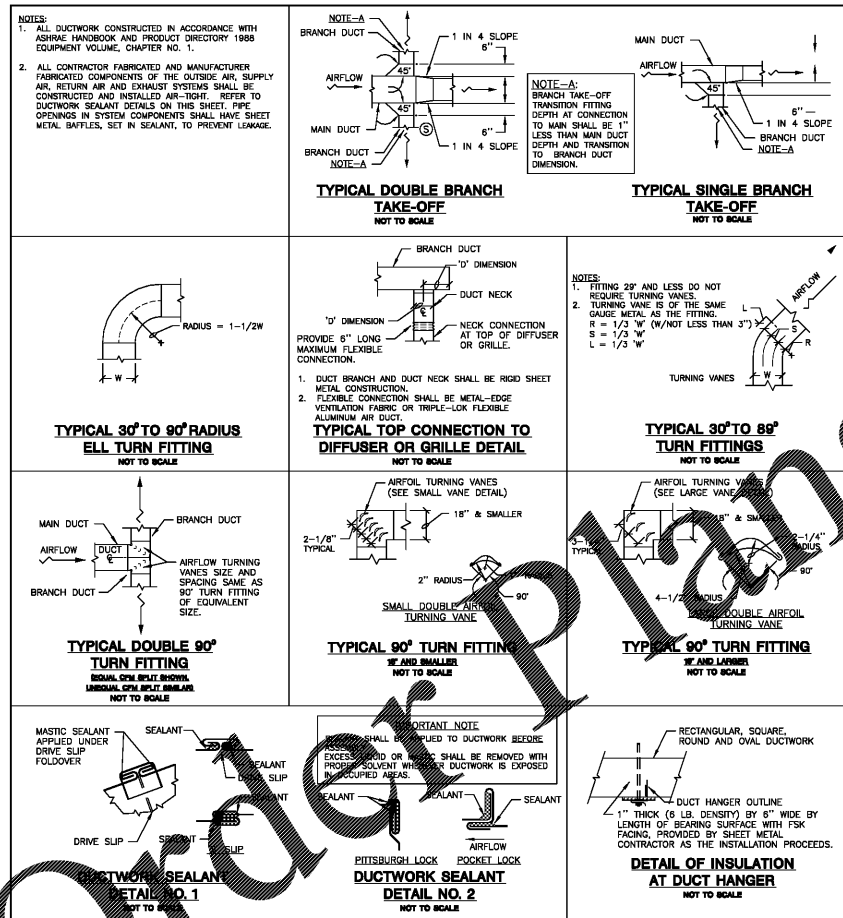
**HEAT PUMP CONDENSING COIL UNIT SCHEDULE**

MARK	SERVICE	MANUFACTURER	MODEL	REFR. TYPE	COOLING CAPACITY		HEATING CAPACITY		MCA	MCOCP	V/PH	DISC TYPE	WEIGHT LBS	NOTES
					TOTAL (MBH)	MIN EER (SEER)	HEAT PUMP (MBH)	AMBIENT (DB)						
CU-1	FCU-1	CARRIER	38AUG	PURON	79.80	11	22	45	25	30	208/3	NF	450	A-J

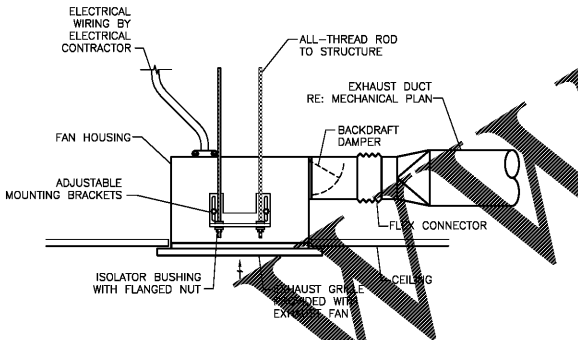
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**NOTES:**

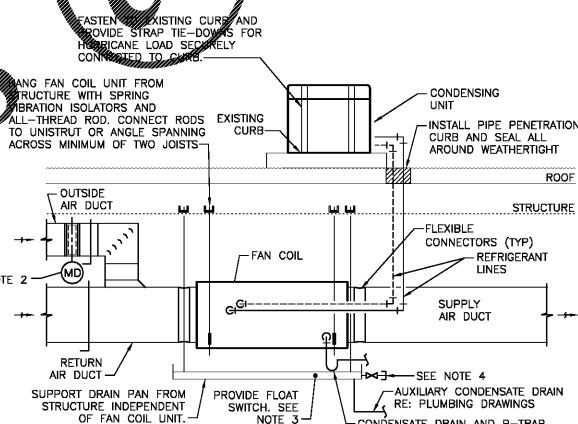
- A. PROVIDE LOW AMBIENT CONTROL TO 40F.
- B. EQUIPMENT SIZED FOR 95F AMBIENT TEMPERATURE.
- C. HEAT PUMP (MBH) IS EQUIPMENT CAPACITY AT AMBIENT TEMPERATURE INDICATED.
- D. CONTRACTOR SHALL VERIFY WITH EQUIPMENT SUPPLIER EXACT QUANTITY AND SIZE OF REFRIGERANT PIPING.
- E. PROVIDE LIQUID LINE FILTER DRYER AND SIGHT GLASS.
- F. PROVIDE FACTORY MOUNTED DISCONNECT INSTALLED ON SERVICE SIDE OF UNIT.
- G. STARTERS FOR ALL MOTORS SHALL BE FURNISHED INTEGRAL WITH UNIT.
- H. COORDINATE SIZE OF CONDUCTOR TERMINATION LUGS WITH CONDUCTOR SIZES SHOWN ON ELECTRICAL DRAWINGS.
- I. PROVIDE CONDENSER COIL HAIL GUARDS.



**1 DUCTWORK DETAILS NOT TO SCALE**

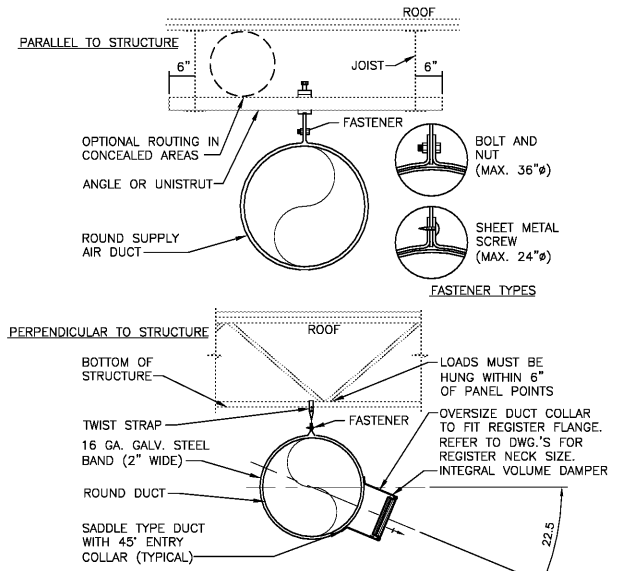


**3 CEILING MOUNTED EXHAUST FAN NO SCALE**



- NOTES:**
- ARRANGEMENT SHOWN IS SCHEMATIC, ADJUST TO SUIT FIELD CONDITIONS OR MEET LOCAL CODE REQUIREMENTS.
  - INTERLOCK 2-POSITION MOTORIZED OUTDOOR AIR DAMPER WITH FAN TO OPEN WHEN FAN STARTS IN OCCUPIED MODE. SET OPEN POSITION TO MINIMUM OUTSIDE AIR VENTILATION CFM SCHEDULED.
  - PROVIDE FLOAT SWITCH IN 1/2" COUPLING 1" ABOVE BOTTOM OF DRAIN PAN. INTERLOCK FLOAT SWITCH TO TURN OFF UNIT WHEN WATER IS PRESENT.
  - PROVIDE 3/4" NORMALLY CLOSED SHUTOFF VALVE WITH 3/4" HOSE CONNECTION AND CAP.

**2 HORIZONTAL DX FAN COIL UNIT DETAIL WITH CONDENSING UNIT ON ROOF NO SCALE**



- NOTES:**
- FOR DUCTS LARGER THAN 36", USE TWO HANGER RODS, WIRES OR STRAPS TO SUPPORT DUCT FROM EACH SIDE.

**4 ROUND DUCT SUPPORT AND REGISTER DETAIL NOT TO SCALE**

**PROJECT DESIGN CONDITIONS**

SPACE SERVED	SUMMER DESIGN DB TEMPERATURE	SUMMER DESIGN WB/RH%	WINTER DESIGN TEMPERATURE
OUTSIDE AIR	93F	78/52%	45F
SALES	72F	67/54%	72F
FITTING ROOM	72F	67/54%	72F
STORAGE	72F	67/54%	72F

**GRILLE, REGISTER, AND DIFFUSER SCHEDULE**

MARK	MANUFACTURER	MODEL	TYPE	FACE TYPE	MOUNTING	NECK SIZE	FACE SIZE	MAX NC	NOTES
SG-1	TITUS	300FS	SUPPLY	LOUVERED	SURFACE	12"x8"	12" x 8"	30	
SG-2	TITUS	300FS	SUPPLY	LOUVERED	SURFACE	8"x6"	10"x8"	30	A-C
SD-1	TITUS	TMS	SUPPLY	LOUVERED	LAT-IN	6"Ø	12"x12"	30	A-D

- NOTES:**
- A. REFERENCE ARCHITECTURAL DRAWINGS FOR FINAL FINISH REQUIREMENTS.
  - B. BRANCH DUCT SIZE SHALL BE SAME AS NECK SIZE, UNLESS NOTED OTHERWISE ON DRAWING.
  - C. PROVIDE WITH OPPOSED BLADE DAMPER.
  - D. PROVIDE WITH TITUS MODEL #TRM-S MOUNTING FRAME FOR GYP BOARD CEILING INSTALLATION.

**FAN SCHEDULE**

MARK	MANUFACTURER	MODEL	MOUNTING	CFM	ESP (IN. W.C.)	VOLTAGE	PHASE	WATTS	WEIGHT	SEALS	NOTES
EF-1	COOK	GC-164	CEILING	120	0.35	120	1	1/8			RESTRICTED A, B

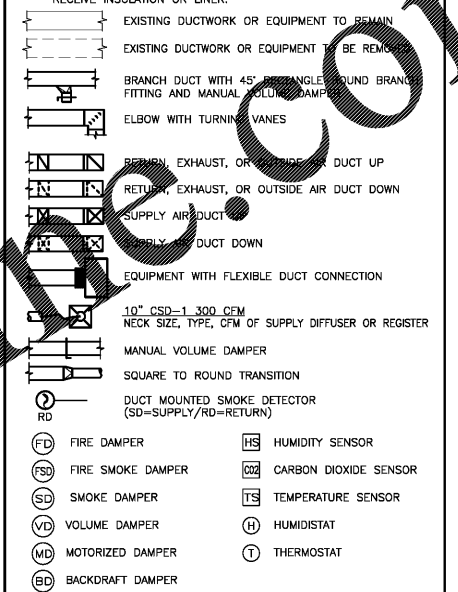
- NOTES:**
- A. PROVIDE WITH BACKDRAFT DAMPER, DISCONNECT AND UNIT MOUNTED FAN SPEED CONTROLLER.
  - B. ELECTRICAL CONTRACTOR SHALL INTERLOCK FAN OPERATION WITH RESTROOM LIGHT SWITCH.

**MECHANICAL SYMBOLS**

**NOTE:** THIS IS A MASTER LEGEND AND NOT ALL SYMBOLS, ETC. ARE NECESSARILY USED ON THE DRAWINGS.

**HVAC EQUIPMENT & DUCTWORK**

**NOTE:** ALL DUCT DIMENSIONS SHOWN ON DRAWINGS ARE INSIDE DIMENSIONS. SEE SECTION 15250 OF THE SPECIFICATION FOR DUCTWORK TO RECEIVE INSULATION OR LINER.



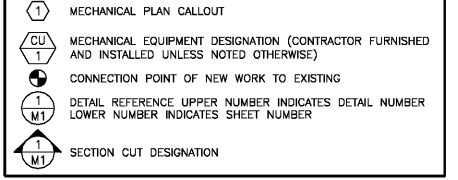
**ABBREVIATIONS**

AFF	ABOVE FINISHED FLOOR	NC	NOISE CRITERIA
BAS	BUILDING AUTOMATION SYSTEM	OA	OUTSIDE AIR
BD	BACKDRAFT DAMPER	RA	RETURN AIR
CFM	CUBIC FEET PER MINUTE	SA	SUPPLY AIR
DDC	DIRECT DIGITAL CONTROL	SD	SMOKE DUCT DETECTOR
DX	DIRECT EXPANSION	TFA	TO FLOOR ABOVE
EA	EXHAUST AIR	TFB	TO FLOOR BELOW
FFA	FROM FLOOR ABOVE	TYP	TYPICAL
FFB	FROM FLOOR BELOW	UNO	UNLESS NOTED OTHERWISE
GPM	GALLONS PER MINUTE	W/	WITH
IN WC	INCHES OF WATER COLUMN	W/O	WITHOUT
MAX	MAXIMUM		
MBH	1000 BTU PER HOUR		
MC	MECHANICAL CONTRACTOR		
MIN	MINIMUM		

**STANDARD MOUNTING HEIGHTS**

MECHANICAL	(AFF, AVG, UNLESS NOTED OTHERWISE)
THERMOSTATS (USER ADJUSTABLE)	48"
CONTROLS (CENTERLINE)	48"

**ANNOTATION**



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**"OFF THE WALL" SINCE 1966**  
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**MECHANICAL DETAILS AND SCHEDULES**

DRAWN BY	HEI
CHECKED BY	HEI
JOB NUMBER	17182-522
SHEET NAME	M-1.2

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