

AIR HANDLING UNIT SCHEDULE						
MARK	AHU-1	AHU-2	AHU-3	AHU-4		
FAN	SUPPLY AIR - CFM	4,500	4,900	4,950	4,400	
	MINIMUM O.A. - CFM	1,800	1,800	1,300	3,700	
	EXT. S.P. - IN. W.G.	1.75	1.75	1.5	1.75	
	BLOWER MOTOR - HP (MINIMUM)	5	5	5	5	
	ELECTRICAL - V/ø/Hz	460/3/60	460/3/60	460/3/60	460/3/60	
COOLING COIL	TOTAL CAPACITY - BTUH	275,500	285,000	242,000	384,000	
	SENSIBLE CAPACITY - BTUH	143,000	152,000	142,000	165,000	
	ENT. AIR TEMP. - °F db/wb	82.3/71.8	81.9/71.2	80/68.8	88.2/78.8	
	LVG. AIR TEMP. - °F db/wb	52.9/52.4	52.9/52.3	53.4/52.6	53.4/53.3	
	AIR PRESSURE DROP - IN. W.G.	0.70	0.90	0.90	0.70	
	MAXIMUM FACE VELOCITY - FPM	500	500	500	500	
	GPM	54.9	57.2	48.4	76.6	
	ENT./LVG. WATER TEMP. - °F	44/54	44/54	44/54	44/54	
	PRESSURE DROP - FT. W.G.	10	10	10	10	
	HEATING COIL	CAPACITY - BTUH	163,000	171,000	149,000	245,000
ENT. AIR TEMP. - °F db		51.6	52.9	57.2	33.6	
AIR PRESSURE DROP - IN. W.G.		0.15	0.15	0.15	0.15	
MAXIMUM FACE VELOCITY - FPM		550	550	550	550	
GPM		16.3	17.1	14.9	24.5	
ENT./LVG. WATER TEMP. - °F	180/160	180/160	180/160	180/160		
PRESSURE DROP - FT. W.G.	5.0	5.0	5.0	5.0		
FILTER TYPE	4" PLEATED 35% EFF.	4" PLEATED 35% EFF.	4" PLEATED 35% EFF.	4" PLEATED 35% EFF.		
INITIAL FILTER PRESSURE DROP - IN. W.G.	0.25	0.25	0.25	0.25		
NOTES	1,2,3	1,2,3	1,2,3	1,2,3		

- NOTES:
- EXTERNAL STATIC PRESSURE IS FOR DUCTWORK SYSTEM ONLY. FILTERS, COILS AND CASING LOSSES ARE INTERNAL.
  - PROVIDE A SECOND DRIVE SET (PULLEYS AND SHEAVES) NECESSARY TO BALANCE THE SYSTEM WITH ACTUAL FIELD CONDITIONS.
  - SEE SECTION A/M-402 FOR TYPICAL AHU ARRANGEMENT.

FILTER BANK SCHEDULE			
MARK	EF-1	EF-2	
SUPPLY AIR CFM	1,700	5,500	
FILTER TYPE	2" PLEATED 35% EFF.	2" PLEATED 35% EFF.	
FILTER QUANTITY/SIZE	8 @ 24x24	4 @ 24x24 2 @ 24x12	
FRAME SIZE	4 WIDE x 2 HIGH	2 1/2 WIDE x 2 HIGH	
MAXIMUM FACE VELOCITY - FPM	325	325	
INITIAL FILTER PRESSURE DROP - IN. W.G.	0.15	0.15	
NOTES	1	1	

AIR DEVICE SCHEDULE					
MARK	TYPE	NECK SIZE	AIR PATTERN	DESCRIPTION AND REMARKS	MIN. THROW @ 50 FPM
A	PERFORATED RETURN/EXHAUST	6x6	-	12x12 MODULE FOR T-BAR CEILINGS	-
B	PERFORATED RETURN/EXHAUST	10x10	-	12x12 MODULE FOR T-BAR CEILINGS	-
C	SIDEWALL RETURN	36x16	-	45° ANGLED VANES PARALLEL TO LONG DIMENSION	-
D	SIDEWALL RETURN	44x20	-	45° ANGLED VANES PARALLEL TO LONG DIMENSION	-
E	ROUND SUPPLY DIFFUSER	12"ø	CIRCULAR	MULTIPLE CONE DIFFUSER WITH HORIZ./VERTICAL ADJUSTMENT	10' @ 500CFM
F	DIRECTIONAL SUPPLY DIFFUSER	12x12	2-WAY OPPOSITE	24x24 MODULE FOR T-BAR CEILINGS	12' @ 500CFM
G	DIRECTIONAL SUPPLY DIFFUSER	15x15	2-WAY OPPOSITE	24x24 MODULE FOR T-BAR CEILINGS	12' @ 500CFM
H	DIRECTIONAL SUPPLY DIFFUSER	9x9	4-WAY	24x24 MODULE FOR T-BAR CEILINGS	7' @ 150CFM
J	DIRECTIONAL SUPPLY DIFFUSER	6x6	2-WAY OPPOSITE	12x12 MODULE FOR T-BAR CEILINGS	8' @ 100CFM
K	PERFORATED CEILING RETURN	6x6	-	24x24 MODULE FOR T-BAR CEILINGS	-
L	PERFORATED CEILING RETURN	10x10	-	24x24 MODULE FOR T-BAR CEILINGS	-
M	PERFORATED CEILING RETURN	22x22	-	24x24 MODULE FOR T-BAR CEILINGS	-
N	ROUND SUPPLY DIFFUSER	10"ø	CIRCULAR	MULTIPLE CONE DIFFUSER WITH HORIZ./VERTICAL ADJUSTMENT	8' @ 100CFM
P	SIDEWALL SUPPLY	30x10	-	DOUBLE DEFLECTION WITH FRONT BLADES PARALLEL TO LONG DIMENSION	25' @ 500CFM
Q	PERFORATED RETURN/EXHAUST	12x12	-	12x12 MODULE FOR T-BAR CEILINGS	-
R	PERFORATED CEILING RETURN	8x8	-	24x24 MODULE FOR T-BAR CEILINGS	-
S	PERFORATED CEILING RETURN	15x15	-	24x24 MODULE FOR T-BAR CEILINGS	-
T	DIRECTIONAL SUPPLY DIFFUSER	12x12	2-WAY OPPOSITE	SQUARE FACE FOR SLANT MOUNTING	12' @ 400CFM
U	DIRECTIONAL SUPPLY DIFFUSER	15x15	2-WAY OPPOSITE	SQUARE FACE FOR SURFACE MOUNTING	12' @ 500CFM
V	DIRECTIONAL SUPPLY DIFFUSER	9x9	2-WAY OPPOSITE	SQUARE FACE FOR SURFACE MOUNTING	7' @ 150CFM
W	ROUND SUPPLY DIFFUSER	6"ø	CIRCULAR	MULTIPLE CONE DIFFUSER WITH HORIZ./VERTICAL ADJUSTMENT	8' @ 100CFM

NOTES:

- COORDINATE FINISH COLORS OF AIR DEVICES WITH ARCHITECT.
- AIR DEVICES SHALL BE ALL ALUMINUM CONSTRUCTION UNLESS NOTED OTHERWISE.
- ALL INTERIOR PORTIONS VISIBLE THROUGH AIR DEVICES SHALL BE PAINTED FLAT BLACK.

FAN SCHEDULE										
MARK	EF-1	SF-2	EF-3	SF-4	SF-5	EF-6	EF-7	EF-8	EF-9	
FAN TYPE	ROOF MTD. UPBLAST EXHAUST	IN-LINE MAKE-UP SUPPLY	ROOF MTD. UPBLAST EXHAUST	IN-LINE MAKE-UP SUPPLY	ROOF MTD. LOUVERED SUPPLY	IN-LINE CENTRIF. EXHAUST	IN-LINE CENTRIF. EXHAUST	ROOF MTD. CENTRIF. EXHAUST	ROOF MTD. CENTRIF. EXHAUST	
AIR QUANTITY - CFM	12,100	9,700	7,070	5,657	2,400	925	800	1,980	5,500	
EXT. S.P. - IN. W.G.	2.25	0.75	2.25	0.75	0.125	0.25	0.25	0.5	0.25	
DRIVE	BELT	BELT	BELT	BELT	BELT	DIRECT	DIRECT	DIRECT	BELT	
SONES (MAXIMUM)	28	20	25	15.0	12.0	7.0	7.0	12.0	16.0	
MOTOR - HP	7.5	5	5	2	1/2	1/6	1/6	1/2	1	
ELECTRICAL - V/ø/Hz	460/3/60	460/3/60	460/3/60	460/3/60	120/1/60	120/1/60	120/1/60	120/1/60	480/3/60	
NOTES	1,3,4,6,7	2,3,7	1,3,4,6,7	2,3,7	3,4,7	3	3	3,4	3,4,5,7	

NOTES:

- EXHAUST FAN SERVING KITCHEN HOOD UNIT.
- FILTERED SUPPLY FAN SERVING KITCHEN HOOD UNIT. SEE FILTER BANK SCHEDULE ON THIS SHEET.
- PROVIDE A FACTORY FURNISHED UNIT MOUNTED DISCONNECT SWITCH. (NEMA 3R FOR OUTDOOR USE, NEMA 1 FOR INDOOR USE)
- ROOF CURB PROVIDED BY DIVISION 07600 "FLASHING AND SHEET METAL".
- ATTIC VENTILATION FAN.
- PROVIDE A VENTED ROOF CURB EXTENSION TO EXTEND FAN DISCHARGE OUTLET TO 40' ABOVE ROOF, GREASE DRAIN AND GREASE DRAIN TRAP AND HINGING KITS WITH HOLD OPEN RETAINER. FAN SHALL BE U.L. LISTED FOR GREASE REMOVAL.
- PROVIDE A SECOND DRIVE SET (PULLEYS AND SHEAVES) NECESSARY TO BALANCE THE SYSTEM WITH ACTUAL FIELD CONDITIONS.

VIBRATION ISOLATOR & SEISMIC RESTRAINT SCHEDULE				
EQUIPMENT	NOTES	ISOLATOR TYPE	BASE TYPE	MINIMUM DEFLECTION (INCHES)
SUSPENDED COILS	3	-	-	-
AIR HANDLING UNITS	1,2,3,4	3 OR 4	B	1"
BOILER	3,5	1	-	0.25"
IN-LINE FANS	3	-	A	"
UNIT HEATERS	3	-	-	-
CHILLER (OUTDOOR AIR COOLED)	-	1	-	0.25"
NEW PUMPS (EXCEPT FOR BLDGS. 464, 466 AND 473)	1,2,3	-	C	1"
NEW PUMPS FOR BLDGS. 464, 466 AND 473	1,2,3,6	4	B	1"
TANKS	3	-	-	-
PIPING SYSTEMS	1,3	3	-	3/4"
COILING TOWERS	3,5	1	A	0.25"
CHILLER (INDOOR WATER COOLED)	1,3,5	1	A	0.25"

NOTE:

- ISOLATE PIPING WITHIN MECHANICAL ROOMS THAT IS CONNECTED TO VIBRATION ISOLATED EQUIPMENT.
- STRUCTURAL STEEL BASE PROVIDED AS PART OF THE EQUIPMENT.
- SEISMIC RESTRAINTS REQUIRED.
- EQUIPMENT WITH INTERNAL VIBRATION ISOLATION AND SEISMIC SNUBBERS DO NOT REQUIRE EXTERNAL ISOLATORS OR SNUBBERS.
- EQUIPMENT MAY BE BOLTED TO CONCRETE PADS OR SLABS IN LIEU OF SEISMIC SNUBBERS RESTRAINTS.
- MOUNT NEW PUMPS ON EXISTING CONCRETE CURBS.

ISOLATOR TYPE:

- PAD, RUBBER OR GLASS FIBER
- RUBBER FLOOR ISOLATOR OR HANGER
- SPRING FLOOR ISOLATOR OR HANGER
- RESTRAINED SPRING ISOLATOR
- THRUST RESTRAINT

BASE TYPE:

- NO BASE - ISOLATORS ATTACHED DIRECTLY TO EQUIPMENT
- STRUCTURAL STEEL RAILS OR BASE
- CONCRETE INERTIA BASE
- CURB MOUNTED BASE

CHARLESTON AIR FORCE BASE  
 CHARLESTON, SOUTH CAROLINA  
 DINING FACILITY  
 MECHANICAL SCHEDULES - BASE BID  
 APPROVED: *[Signature]* PE UNIT: *[Signature]* EOP FOR COMMANDER, NAFC  
 RECORD DRAWING DATE: 9/27/04  
 CODE LD. NO. 8081  
 DRAWING SIZE: D  
 SPEC. NO. 06-88-0938  
 CONSTR. CONTR. NO. 162467-98-C-5939  
 TRAFAC DRAWING NO. 53738T  
 SHEET 158 OF 194  
 M-601

Order Plans