

SPLIT SYSTEM HEAT PUMP SCHEDULE																		
UNIT DESIG. (AVCO)	AIR HANDLING UNIT DATA					CONDENSING UNIT				COOLING CAPACITY		HEATING CAPACITY		AUX HEATER		NOTES	HWT. TONS	
	MANUFACTURER & MODEL #	NOM. TOTAL CFM	MIN. OA CFM	MIN. E.S.P. (IN.WG)	FAN RPM	MANUFACTURER & MODEL #	VOLTY/PH	MCA	MAX. FUSE	TOTAL MMH	SECH. MMH	SEER	TOTAL MBH AT 47°F	KW	VOLTAGE			COND. DRAIN
AH-1 HP-1	CARRIER FBA400	2000	-	0.4	BY MFG	CARRIER 38TCC060	208V/1	58.8	60	56.0	42.0	10.1	58.0	7.5/10KW	208V/1	F	1-6	5.0
AH-2 HP-2	CARRIER FBA400	1200	-	0.4	BY MFG	CARRIER 38TCC060	208V/1	23.8	35	21.3	14.5	10.0	35.0	6/8 KW	208V/1	F	1-6	3.0
AH-3 HP-3	CARRIER FBA400	900	-	0.4	BY MFG	CARRIER 38TCC060	208V/1	12.8	20	17.0	12.8	10.0	17.5	5/3.8 KW	208V/1	F	1-6	1.5

NOTES:

- PROVIDE NEW FILTER FOR ALL UNITS UPON ACCEPTANCE OF PROJECT
- PROVIDE UNIT DISCONNECT FOR ALL UNITS-MOUNTED ON UNIT
- PROVIDE 7-DAY PROGRAMMABLE TIME CLOCK AND AUTOMATIC CHANGE-OVER HEAT/COOL THERMOSTAT/REMOTE FOR EACH HVAC UNIT
- OUTDOOR UNITS SHALL HAVE A MINIMUM 10.0 EER RATING
- REFRIG. PIPING TO BE SIZED PER TOTAL INSTALL. EQUIV. LENGTH. LONG-LINE APP. TO BE PROVIDED WHEREVER MFG. RECOMM. LENGTHS ARE EXCEEDED, INCL. L.I.G. LINE SOLENOID VALVES, ACCUMULATOR, ETC. MAX. T.E.L. IS 100'
- SINGLE POINT ELEC. POWER CONNECTION

DIFFUSER SCHEDULE											
SYMBOL	CFM	NECK SIZE	MODULE SIZE	FRAME TYPE	PATTERN	DAMPER	MATERIAL	SERVICE	FINISH	MANUFACTURER & MODEL No.	NOTES
(A)	AS NOTED	AS NOTED	AS NOTED	SURFACE	3-WAY	YES	STEEL	SUPPLY	NOTE 1	HART & COOLEY 681	1
(B)	AS NOTED	AS NOTED	24x24	SURFACE	30009 DEFL.	YES	STEEL	RETURN	NOTE 1	HART & COOLEY 654	1
(C)	AS NOTED	AS NOTED	12x12 24x24	SURFACE	4-WAY	YES	STEEL	SUPPLY	NOTE 1	TITUS TDC	1
(D)	AS NOTED	AS NOTED	Ø LONG	SURFACE	3/4" SLOTS HFT DIFFUSER	YES	STEEL	SUPPLY	NOTE 2	TITUS ML-54	1
(E)	AS NOTED	AS NOTED	24x24	SURFACE	-	YES	STEEL	RETURN	NOTE 1	TITUS PAR	1
(F)	AS NOTED	AS NOTED	-	SURFACE	DOUBLE DEFL.	YES	STEEL	SUPPLY	NOTE 2	TITUS 300RS	1

NOTES:

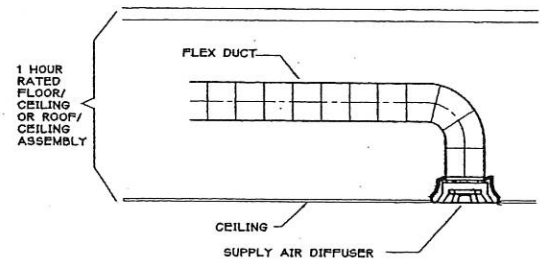
- DIFFUSER DESIGNATIONS ON PLANS AS FOLLOWS:
DIFFUSER OR NECK SIZE: 8x4 (A) DIFFUSER TYPE AS NOTED ABOVE
AIR QUANTITY: 75
- FINISH TO MATCH SURFACE MATCH CEILING OR WALL OR DOOR

FAN SCHEDULE											
UNIT NO.	SERVICE	AREA SERVED	CFM	S.P.	RPM	TYPE & ARRANGEMENT	MIN. MOTOR HP/WVA & VOLTAGE	MANUFACTURER & MODEL No.	DRIVE	CONTROL SCHEME	REMARKS
EF-1	EXHAUST	UNIT BATHROOMS	50	0.50	-	WALL	0.60A 110V/1	BROAN MODEL 688	DIRECT	A	1 2 3 4

NOTES:

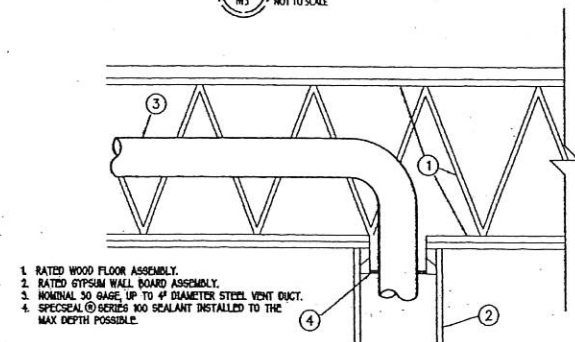
- SCREEN
- BACKDRAFT DAMPER
- COLOR BY ARCHITECT
- INTEGRAL DISCONNECT SWITCH

CONTROL OPTIONS:
A. CONTROL W/ SWITCH



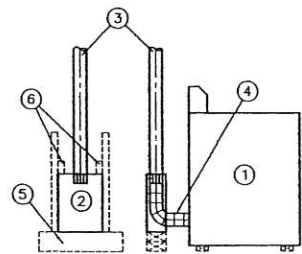
- NOTE:**
- SEE FLOOR PLANS AND SPECIFICATIONS FOR DUCT INSULATION REQUIREMENTS.
 - PROVIDE UL RADIATION DAMPER/BLANKET ASSY.

1 SUPPLY AIR DIFFUSER DETAIL
M5 NOT TO SCALE



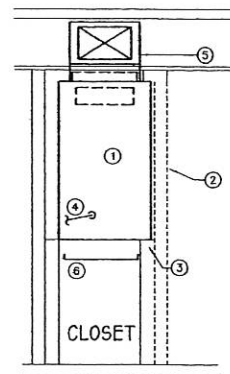
- RATED WOOD FLOOR ASSEMBLY.
- RATED GYPSUM WALL BOARD ASSEMBLY.
- NOMINAL 3/8" DIA. UP TO 4" DIAMETER STEEL VENT DUCT.
- SPECIAL SEALANT INSTALLED TO THE MAX. DEPTH POSSIBLE.

2 FIRESTOP FOR DRYER AND BATH VENT DUCTS
M5 NOT TO SCALE



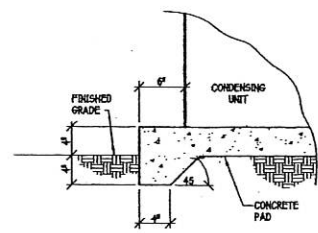
- RESIDENTIAL DRYER
- RECESSED METAL BOX (18"x18"x18")
- 4" DRYER VENT
- DRYER FLEX HOSE
- ONE 2x6 BLOCK ON BOTTOM PLATE
- 2x4 BLOCKING

4 RECESSED METAL BOX FOR DRYER EXHAUST
M5 NOT TO SCALE

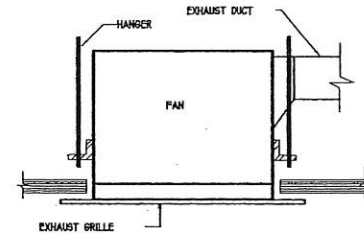


- NOTES:**
- AIR HANDLER (AH) IN CLOSET, FRONT RETURN
 - LOWERED DOOR FOR RETURN AIR
 - FILTER RACK FOR 4" THROW-AWAY FILTERS WITH UNIT STAND
 - 3/4" DRAIN FROM AH CONDENSATE TO RIS. DRAIN
 - SUPPLY DUCT IN CEILING SPACE
 - IF DEEP AUXILIARY DRAIN PAN W/ MICROFLOAT SWITCH INTERLOCK FLOAT SWITCH W/ AH, INSTALL FLOAT SWITCH IN ONE CORNER OF PAN AND TILT PAN TO THAT CORNER.

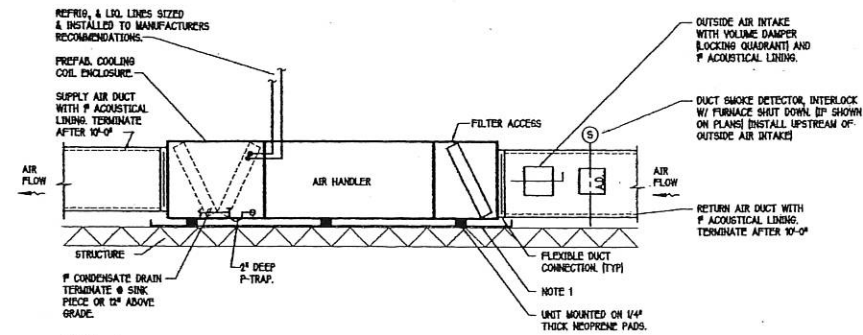
3 UNIT AIR HANDLER DETAIL
M5 NOT TO SCALE



6 CONDENSING UNIT PAD DETAIL
M5 NOT TO SCALE



7 CEILING EXHAUST FAN DETAIL
M5 NOT TO SCALE



- NOTES:**
- AUXILIARY DRAIN PAN WITH MICROFLOAT SWITCH INTERLOCK FLOAT SWITCH W/ AIR HANDLER. INSTALL FLOAT SWITCH IN ONE CORNER OF PAN AND TILT PAN TO THAT CORNER.

5 HORIZONTAL AIR HANDLING UNIT DETAIL
M5 NOT TO SCALE

- HVAC GENERAL NOTES**
- FURNISH ALL LABOR, MATERIAL, AND EQUIPMENT REQUIRED FOR THE COMPLETION AND OPERATION OF ALL SYSTEMS IN THIS SECTION OF WORK IN ACCORDANCE WITH ALL APPLICABLE CODES. MECHANICAL CONTRACTOR SHALL COORDINATE HIS WORK WITH ALL OTHER TRADES.
 - GO TO PROVIDE FRAMED OPENINGS THRU WALLS, ABOVE CEILINGS, CONCRETE METAL STUDS, FOR FULL RETURN AIR TRANSFER ABOVE THE FURRED-DOWN CEILINGS. SEE SCHEDULE, SHEET M10, FOR SIZES.
 - ALL MATERIAL AND EQUIPMENT IS TO BE INSTALLED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
 - DO NOT SCALE DRAWINGS. SEE ARCHITECTURAL DRAWINGS & REFLECTED CEILING PLANS FOR EXACT LOCATION OF DOORS, WINDOWS, CEILING DIFFUSERS, ETC.
 - ALL PIPING, DUCTS, VENTS, ETC. EXTENDING THROUGH WALLS & ROOF SHALL BE FLASHED & COUNTERFLASHED IN A WATERPROOF MANNER. SEAL ALL PENETRATIONS OF THE FLOOR/CEILING ASSEMBLY AND RATED WALLS WITH FIRE DAMPER, SEALANT MATERIAL APPROVED BY LOCAL CODE. COLOR TO MATCH EXTERIOR.
 - EXTEND ALL CONDENSATE DRAIN LINES AS INDICATED, ROUTED TO AVOID INTERFERENCE WITH PASSAGEWAYS AND MAINTENANCE. DRAINS FROM AIR HANDLING UNITS SHALL BE TRAPPED. COORDINATE WITH P.C.
 - ALL DUCTWORK INSULATION SHALL BE RIM CONTINUOUSLY THROUGH FLOORS AND PARTITIONS.
 - ALL PIPING AND DUCTWORK LOCATIONS SHALL BE COORDINATED W/ WORK UNDER OTHER DIVISIONS OF THE SPECIFICATIONS, TO AVOID INTERFERENCE.
 - LOCATE ALL THERMOSTATS AND SWITCHES 4'-0" ABOVE FINISHED FLOOR. ANY DEVICE REQUIRING A THERMOSTAT FOR CONTROL SHALL BE FURNISHED WITH A THERMOSTAT WHETHER INDICATED ON THE DRAWINGS OR NOT.
 - DUCT TO BE INSULATED ROUND ROOF OR PROPERLY INSTALLED P FIBERBOARD. ALL DUCT SYSTEMS ARE TO BE PER SMACNA AND UL STANDARDS. THERE IS NO EXPOSED DUCTWORK.
 - ALL EQUIPMENT SHALL BE UL LISTED.
 - FLEX DUCT IS TO BE INSTALLED WITHOUT SHARP BENDS OR CRUMPS. FLEX IS TO BE PERMANENTLY PASTED TO ANY SHEETMETAL FITTINGS. NO FLEX DUCT IS TO BE EXPOSED.
 - PROVIDE SHEET METAL COLLARS OR EQUAL UNDER DRYWALL WHENEVER GRILLE REGISTERS ARE TO BE INSTALLED.
 - THE MECHANICAL CONTRACTOR SHALL PROVIDE REFRIGERANT AND LOW VOLTAGE CONTROL LINES FROM THE CONDENSER TO THE AIR HANDLING UNIT. COORDINATE ROUTING AND INSTALLATION WITH THE GENERAL CONTRACTOR. SIZE REFRIGERANT LINES PER MANUFACTURER'S REQUIREMENTS.
 - KITCHEN EXHAUST DUCT SHALL BE CONTINUOUSLY WELDED AND CONSTRUCTED OF MINIMUM 0.060" THICK STEEL.
 - PIPING (INSULATED) REFRIGERANT - SEAMLESS COPPER ACR TUBING WITH SILVER SOLDERED JOINTS. CONDENSATE - SEAMLESS COPPER ACR TUBING WITH SILVER SOLDERED JOINTS.
 - MECHANICAL CONTRACTOR SHALL BALANCE SYSTEM TO AIR QUANTITIES INDICATED ON PLANS AND PROVIDE OWNERS REPRESENTATIVE WITH COMPLETE BALANCE REPORT. PROVIDE NEW AIR FILTERS FOR EACH UNIT.
 - ALL DUCT DIMENSIONS SHOWN ARE INTERIOR DUCT DIMENSIONS.
 - DUCTWORK, DIFFUSERS, REGISTERS, GRILLES AND OTHER ITEMS OF THE AIR HANDLING SYSTEM SHALL NOT BE SUPPORTED BY THE CEILING OR CEILING SUSPENSION SYSTEM. COORDINATE LOCATION OF GRILLES, DIFFUSERS AND LOWERS WITH ELECTRICAL, ARCHITECTURAL AND PLUMBING WORK.
 - THE DRYER VENT MATERIAL IS TO BE ROUND RIBBED SHEETMETAL MIN 30 GAUGE. THE LENGTH SHALL NOT EXCEED MAXIMUM ALLOWED BY CODE OR MFG. IF MFG. RECOMMENDATIONS ARE FOLLOWED, DRYER MUST BE PROVIDED AT FINAL INSPECTION. NO SCREWS PROTRUDING INTO DUCT, ETC. PER CODE.
 - ALL MECHANICAL EQUIPMENT SHALL OPERATE FREE OF ANY OBJECTIONABLE NOISE OR VIBRATION.
 - AS REQUIRED BY LOCAL CODES, MECHANICAL CONTRACTOR SHALL PROVIDE UL LISTED FIRE DAMPERS WHERE REQUIRED FOR FIRE PROTECTION REQUIREMENTS OF THE HVAC SYSTEM & THE UL ASSEMBLY.
 - ON MACHINERY CONNECTIONS TO EQUIPMENT, CARE SHOULD BE TAKEN TO AVOID PIPES SO AS NOT TO INTERFERE WITH OPENING OF ACCESS DOORS.
 - ALL GAS LOADS, PIPING, METERS, ETC. TO BE FOUND ON PLUMBING PLANS.
 - REFRIGERANT PIPING, NOT SHOWN ON PLANS, SHALL BE SIZED & INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS & INSTALLATION INSTRUCTIONS & PER THE TEL.
 - ELECTRICAL CONTRACTOR TO PROVIDE ALL HIGH VOLTAGE ELECTRICAL WIRING, CONDUIT, DISCONNECT SWITCHES, FUSES, ECT. TO CONDENSING UNITS AND AIR HANDLERS. ALL FINAL ELECTRICAL CONNECTIONS ARE BY ELECTRICAL CONTRACTOR.
 - PROVIDE 5 YEAR WARRANTY ON COMPRESSORS AND 1 YEAR ON ALL OTHER EQUIPMENT FROM DATE OF INITIAL OPERATION.
 - VERIFY CLEARANCES BEFORE FABRICATING DUCTWORK AND ORDERING EQUIPMENT.
 - MINIMUM CLEARANCE FOR UNITS SHALL BE 100
 - CONDENSING UNITS SHALL BE MOUNTED ON 4x4 PRESSURE TREATED TIMBERS. SEE DETAIL 8401.
 - DRAWINGS ARE DIAGRAMATIC AND DO NOT RELEASE THE CONTRACTOR FROM THE RESPONSIBILITY OF INSTALLING THE HVAC SYSTEM PER LOCAL CODE, AND IN EXCELLENT WORKING CONDITION.
 - KITCHEN EXHAUST DUCT SHALL BE CONTINUOUSLY WELDED AND CONSTRUCTED OF MINIMUM 0.060" THICK STEEL.



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LAKE SHORE
TOWN
HOMES

Tega Cay,
South Carolina

DATE ISSUED: 06/09/05
PROJECT NO: XXXX
ISSUED FOR: Permit & Construction

M5
MECHANICAL SCHEDULES,
DETAILS AND NOTES