

### LEGEND

#### SUPPLY

**A** → DIFFUSER/GRILLE SYMBOL  
100 → AIRFLOW CAPACITY (CFM)  
6 → SQUARE NECK SIZE (IN.)

**A** → DIFFUSER/GRILLE SYMBOL  
100 → AIRFLOW CAPACITY (CFM)  
6"Ø → ROUND NECK SIZE (IN.)

#### RETURN

**B** → GRILLE/LOUVER/DAMPER SYMBOL  
6 → SQUARE NECK SIZE (IN.)

**B** → GRILLE/LOUVER/DAMPER SYMBOL  
6"Ø → ROUND NECK SIZE (IN.)

DETAIL LETTER OR NO. DESIGNATION → **C** → ARROW INDICATES SECTION VIEW

DRAWING NO. → **M3** → SECTION ARROW

REFER TO GRILLE & DIFFUSER LEGEND FOR SCHEDULING DETAILS  
DIMENSIONS NOTED ON PLANS ARE IN INCHES UNLESS OTHERWISE NOTED.

### MECHANICAL SYMBOLS

<ul style="list-style-type: none"> <li> SUPPLY AIR DUCT SECTION</li> <li> RETURN AIR DUCT SECTION</li> <li> THERMOSTAT</li> <li> NIGHT SETBACK THERMOSTAT</li> <li> SWITCH</li> <li> UNDERCUT DOOR</li> <li> HI/LO RETURN</li> <li> SPLITTER DAMPER</li> <li> TURNING VANES</li> <li> MANUAL DAMPER</li> <li> MOTORIZED DAMPER</li> <li> CONNECT TO EXISTING</li> <li> TIMED OVERRIDE SWITCH</li> <li> SMOKE DETECTOR</li> <li> CARBON MONOXIDE DETECTOR</li> <li> CARBON DIOXIDE DETECTOR</li> <li> CONDENSATE PIPING</li> <li> PIPE CLEAN-OUT</li> </ul>	<ul style="list-style-type: none"> <li> 4-WAY CEILING DIFFUSER</li> <li> 3-WAY CEILING DIFFUSER</li> <li> 2-WAY CEILING DIFFUSER</li> <li> 1-WAY CEILING DIFFUSER</li> <li> CEILING RETURN/EXHAUST GRILLE</li> <li> SIDE WALL DIFFUSER</li> <li> SIDE WALL RETURN</li> <li> AD ACCESS DOOR</li> <li> FD FIRE DAMPER</li> <li> RFD ROUND FIRE DAMPER</li> <li> OFD OVAL FIRE DAMPER</li> <li> FSD FIRE SMOKE DAMPER</li> <li> FC FLEXIBLE CONNECTION</li> <li> DAE DUCT AIR EXTRACTOR</li> <li> OA OUTSIDE AIRFLOW</li> <li> SD SMOKE DAMPER</li> <li> AFF ABOVE FINISHED FLOOR</li> <li> BFC BELOW FINISHED CEILING</li> <li> CO CASIED OPENING</li> </ul>
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### MECHANICAL NOTES

- DO NOT SCALE DRAWING. ROUGH FROM EQUIPMENT MANUFACTURER AND ARCHITECTURAL DRAWINGS.
- DIMENSIONS NOTED ON PLANS ARE IN INCHES UNLESS OTHERWISE NOTED.
- DUCT SIZES NOTED ON PLANS ARE INTERIOR DIMENSIONS.
- ROUTE PVC (COPPER IN PLENUMS) CONDENSATE DRAIN LINES TO ROOF DRAINS, GUTTERS, FLOOR DRAINS, OR FRENCH DRAIN OR AS SHOWN ON DRAWINGS.
- MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EQUIPMENT VOLTAGES, ELECTRICAL REQUIREMENTS AND DISCONNECTS WITH THE ELECTRICAL CONTRACTOR PRIOR TO RELEASING EQUIPMENT FROM MANUFACTURER.
- SOME REFRIGERANT LINE LENGTHS AND/OR VERTICAL LIFTS MAY EXCEED MANUFACTURER'S RECOMMENDATIONS. MECHANICAL CONTRACTOR IS RESPONSIBLE FOR INSURING THE EQUIPMENT MANUFACTURER SIZES ALL REFRIGERANT LINES FOR THESE PIECES OF EQUIPMENT.
- ALL DUCTWORK SHOWN ON DRAWING IS DIAGRAMMATIC. ACTUAL RUN SHALL BE SHORTEST POSSIBLE WITHOUT SHARP BENDS. ALL DUCTWORK SHALL BE GALVANIZED STEEL INSTALLED PER SMACNA INTERNATIONAL AND LOCAL CODES WITH 2-1/2" THICK FIBERGLASS DUCT WRAP INSULATION AND/OR AS OUTLINED IN SPECIFICATIONS.
- ALL DUCTWORK SHALL BE SEALED AIRTIGHT WITH MASTIC ONLY. NO HEAT SENSITIVE, PRESSURE SENSITIVE OR DUCT TAPE ALLOWED ON PROJECT. DUCTWORK FROM AIR HANDLER TO VAV BOX IS TO BE PRESSURE TESTED PER SMACNA 4" MEDIUM PRESSURE CLASS.
- ALL DUCTWRAP INSULATION SHALL BE SEALED PER MANUFACTURER'S RECOMMENDATIONS FOR GLASS FABRIC AND MASTIC INSTALLATIONS. NO PRESSURE SENSITIVE TAPE SHALL BE ALLOWED.
- FLEXIBLE DUCTWORK WILL BE ALLOWED AT THE END OF GALVANIZED STEEL RUN ONLY. MAXIMUM LENGTH OF FLEXIBLE DUCT SHALL NOT EXCEED 8'-0". REFER TO TYPICAL RUN OUT DETAIL.
- DUCT SMOKE DETECTORS FOR ALL RETURN AIR SYSTEMS 2000 CFM OR GREATER BY MECHANICAL CONTRACTOR OR AUDIBLE/VISIBLE DETECTOR BY MECHANICAL CONTRACTOR WHEN NOT THE ALARM SYSTEM AVAILABLE. DUCT SMOKE DETECTORS SHALL BE INSTALLED BY MECHANICAL CONTRACTOR PER CODE.
- ENTIRE MECHANICAL SYSTEMS SHALL BE INSTALLED PER 2015 INTERNATIONAL CODES EXCEPT 2009 INTERNATIONAL ENERGY CODE, LOCAL CODES, AND AUTHORITY HAVING JURISDICTION.
- COORDINATION OF ALL MECHANICAL SYSTEMS WITH OTHER DISCIPLINES IS THE RESPONSIBILITY OF THE CONTRACTOR. NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO INSTALLING. CONTRACTOR SHALL NOT PROCEED WITH UNCERTAINTY.
- PROVIDE PLASTIC NAMEPLATES FOR ALL EQUIPMENT IDENTIFIED ON PROJECT. LABELING TAG SHALL BE SAME AS EQUIPMENT NUMBER.
- ALL PIPING SHALL BE MANUFACTURED IN THE UNITED STATES OF AMERICA. NO FOREIGN PIPING ALLOWED ON THIS PROJECT.
- ALL PIPING SUPPORT SPACING SHALL BE PER MFG. RECOMMENDATIONS AND WITHIN 18" OF CHANGE IN DIRECTION.
- ALL EQUIPMENT PIPE SHALL BE SEISMICALLY RESTRAINED PER 2015 IBC. SEISMIC RESTRAINT SYSTEMS AS MANUFACTURED BY MASONRY BRICKS, AMBER/BOOTH OR APPROVED EQUAL WHO MUST BE A MEMBER OF THE IMA. CONTRACTOR TO PROVIDE SEISMIC CALCULATIONS AND DRAWINGS CERTIFIED AND SIGNED BY AN ENGINEER EMPLOYED BY THE MANUFACTURER. CALCULATIONS TO MEET ICC, IBC, NFPA, ASHRAE, SMACNA AND AUTHORITY HAVING JURISDICTION (AHJ).
- PROVIDE TESTING AND BALANCING OF ALL SYSTEMS BY A THIRD PARTY NEBB CERTIFIED T&B CONTRACTOR. SUBMIT T&B FORMS PRIOR TO PERFORMING WORK FOR APPROVAL.
- MECHANICAL AND ELECTRICAL CONTRACTOR SHALL REVIEW AND APPROVE ALL SHOP DRAWINGS PRIOR TO SUBMITTING TO ENGINEER/ARCHITECT. PROVIDE GENERAL & MECHANICAL "APPROVED" OR "APPROVED AS NOTED" STAMPS ON SUBMITTAL PRIOR TO SUBMITTING FOR ENGINEER/ARCHITECT'S REVIEW.

### AIR DISTRIBUTION SCHEDULE

SYMBOL	TYPE	MANUFACTURER	MODEL NUMBER	FINISH	DAMPER	REMARKS
A	LAY-IN DIFFUSER	PRICE	ASPD-31	OFF-WHITE	W/OBD	
A3	LAY-IN DIFFUSER (3-WAY)	PRICE	ASPD-31	OFF-WHITE	W/OBD	
B	LAY-IN RETURN	PRICE	APDDR-3	OFF-WHITE	---	FLAT BLACK PLENUM
C	SURF. MTD. DIFFUSER	PRICE	ASPD-31	OFF-WHITE	W/OBD	12"x12" PANEL FOR 6" & 8" W/ PLASTER FRAME
D	SURF. MTD. RETURN	PRICE	APDDR-1	OFF-WHITE	---	12"x12" PANEL FOR 6" & 8" W/ PLASTER FRAME
E	SIDEWALL DIFFUSER	PRICE	620D-FL		W/OBD	COLOR PER ARCHITECT
F	SIDEWALL RETURN	PRICE	635-FL		---	COLOR PER ARCHITECT
G	DUCT MOUNTED DIFFUSER	PRICE	620-DAL		---	COLOR PER ARCHITECT
H	LOUVER	RUSKIN	ELF81S30	KYNAR 500	---	COLOR PER ARCHITECT
DAE	DUCT AIR EXTRACTOR	PRICE	AE-1S			BLADES PARALLEL TO SHORT DIM.
BDD	BACK DRAFT DAMPER	RUSKIN	---	MILL		
M	MANUAL DAMPER	RUSKIN	MD-35/MDRS-25	MILL		
M	MOTORIZED DAMPER	RUSKIN	CD-60/CDRS-25	MILL		

**REMARKS**

- ALTERNATE AIR DISTRIBUTION SUPPLIERS SHALL INSURE THAT "NC" AND PERFORMANCE DATA MATCHES SPECIFIED DEVICES.
- COORDINATE ALL AIR DISTRIBUTION STYLES AND LOCATIONS WITH ARCHITECTURAL CEILING GRID AND ELECTRICAL LIGHT LAYOUT PRIOR TO SUBMITTING SHOP DRAWINGS OR ORDERING.

### SPLIT SYSTEM HEAT PUMP SCHEDULE

MANUFACTURER	SSHP-1,2,13,14	SSHP-3	SSHP-4,6,11,12	SSHP-5,7,8,9,10
<b>INDOOR UNIT</b>				
SYMBOL	SSHP-1,2,13,14	SSHP-3	SSHP-4,6,11,12	SSHP-5,7,8,9,10
MODEL NUMBER	TAM7A0B30	TAM7A0C36	TAM7A0C42	TAM7B0C60
SUPPLY AIRFLOW	875	1050	1225	1750
EXTERNAL S.P. (IN)	.7	.7	.7	.7
FAN MOTOR HP	1/2	1/2	1/2	1
EAT (DB/WB) (°F)	75/63	75/63	75/63	75/63
UNIT LAT (DB/WB/DP) (°F)	52.9/51.4/50.2	53.8/52.1/50.8	53.2/51.9/50.9	53.6/52.1/50.9
OUTSIDE AIR (CFM)	0	0	0	0
AUX. HTR K.W.	5.76	7.2	7.2	7.2
M.C.A.	38.0	46.0	47.0	60.0
M.O.P.C.	40.0	50.0	50.0	50.0
UNIT VOLTAGE	208/1/60	208/1/60	208/1/60	208/1/60
WEIGHT (LBS.)	150	160	165	175
<b>OUTDOOR UNIT</b>				
SYMBOL	SSHP-1A, 2A, 13A,14A	SSHP-3A	SSHP-4A, 6A,11A,12A	SSHP-5A, 7A, 8A, 9A, 10A
MODEL NUMBER	4TWA3030	4TWA3036	4TWA3042	4TWA3060
FAN QUANTITY/HP	1 @ 0.125	1 @ 0.125	1 @ 0.25	1 @ 0.20
COMP. QUANTITY	1	1	1	1
M.C.A.	11.0	14.0	18.0	21.0
M.F.S.	15.0	20.0	30.0	35.0
UNIT VOLTAGE	208/3/60	208/3/60	208/3/60	208/3/60
WEIGHT (LBS.)	240	265	270	245
AMBIENT (°F)	95	95	95	95
TOTAL (NET BTUH)	28,322	32,183	38,180	53,681
SENS. (NET BTUH)	20,701	23,910	28,709	40,156
INTEGRATED HTG. CAP. @ 17°F	13,800	21,800	25,400	37,200
SEER/VEER RATING @ ARI	14.5/12.0	15.3/12.5	14.50/12.0	13.25/11.0
HSPF/COP RATING @ 47°F	8.50/3.44	9.00/4.00	8.20/3.44	8.50/3.62

**REMARKS:**

- PRIOR TO ORDERING, CONTRACTOR SHALL VERIFY VOLTAGE AND ALL ELECTRICAL REQUIREMENTS.
- ALL CAPACITIES ARE NET TO INCLUDE INDOOR FAN HEAT.
- LEAVE AIR CONDITION INCLUDES INDOOR FAN HEAT AND IS THE TEMPERATURE (DB/WB/DP) AT UNIT DISCHARGE.
- PROVIDE WITH 1/2" INCH INDOOR FAN MOTOR WITH COMFORT R MODE. SET AIRFLOW CONTROL DIP SWITCHES FOR CONSTANT FLOW PER SCHEDULE AND ENHANCED MODE FOR DEHUMIDIFICATION.
- EXTERNAL S.P. IS EXTERIOR TO UNIT/ HEATER CABINET.
- PROVIDE HEAD PRESSURE CONTROL FOR COOLING OPERATION DOWN TO 0°F, SINGLE ENTRY POWER, COIL GUARD, COMPRESSOR SUMP HEATERS, FILTER RACK W/MERV 8 PLEATED FILTERS AND 5 YR. COMPRESSOR WARRANTY.
- PROVIDE DIGITAL THERMOSTAT WITH MANUAL/ AUTO/ 7 DAY PROGRAMMABLE SELECTABLE OPTIONS AND DEHUMIDIFICATION FEATURE. SET FOR 7 DAY PROGRAMMABLE MODE AND 50% RH.
- REFRIGERANT LINES FOR SYSTEM TO BE SIZED BY EQUIPMENT MANUFACTURER TO MINIMIZE CAPACITY AND EFFICIENCY LOSSES AND OBTAIN MAXIMUM SYSTEM RELIABILITY. LINE SIZES FOR SYSTEM TO BE INCLUDED IN EQUIPMENT SUBMITTAL.

### ELECTRIC CEILING HEATER SCHEDULE

SYMBOL	EH-1,2	MARKEL
<b>MANUFACTURER</b>		
MODEL NUMBER	F3483	
TOTAL K.W.	3	
B.T.U.	10,200	
AIR RISE (DEG. F)	32	
VOLTAGE	208/1/60	
THROW (FT)	8-12	

**REMARKS:**

- PRIOR TO ORDERING, CONTRACTOR SHALL VERIFY VOLTAGE AND ALL ELECTRICAL REQUIREMENTS.
- PROVIDE WHITE POWDER COATED 20ga GRILLE WITH STANDARD RADIAL DIFFUSER, MANUAL RESET THERMAL LIMIT, PERMANENTLY LUBRICATED TOTALLY ENCLOSED MOTOR, DISCONNECT AND INTEGRAL THERMOSTAT.
- PLASTER FRAME TRIM FOR SHEET ROCK INSTALLATION

### ELECTRIC WALL HEATER SCHEDULE

SYMBOL	EWH-1,2,3	MARKEL
<b>MANUFACTURER</b>		
MODEL NUMBER	F3453T	
TOTAL K.W.	3	
B.T.U.	10239	
AIR RISE (°F)	38.5	
VOLTAGE	208/1/60	
MOUNTING TYPE	SURFACE	

**REMARKS:**

- PRIOR TO ORDERING, CONTRACTOR SHALL VERIFY VOLTAGE AND ALL ELECTRICAL REQUIREMENTS.
- PROVIDE FORCED AIR HEATER WITH TOTALLY ENCLOSED, PERMANENTLY LUBRICATED MOTOR, MANUAL RESET THERMAL OVERLOAD, INTEGRALLY MOUNTED THERMOSTAT, INTEGRAL CIRCUIT BREAKER, HORIZONTAL STEEL LOUVERS WITH ANODIZED ALUMINUM FRAME MOUNTED IN 16ga STEEL ZINC COATED ENCLOSURE WITH TAMPER-RESISTANT SCREWS.
- PROVIDE WITH FACTORY MOUNTED EMS INTERFACE RELAY.
- PROVIDE FULL SURFACE MOUNTING EXTENSION FRAME.

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Designed: TAS  
Approved: PPC  
Job No.: 116226  
Plot Date: 08/14/17

**McCreary/Snow Architects, PA**  
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**Mechanical Schedules**  
**Pinewood Community Bldg.**  
**Richland County**  
**Old Garners Ferry Road**  
**Columbia SC 29206**

File date: 8/14/2017

Construction Documents

Drawn: -  
Revised: -  
Checked: -  
Project No.: #####  
File: -