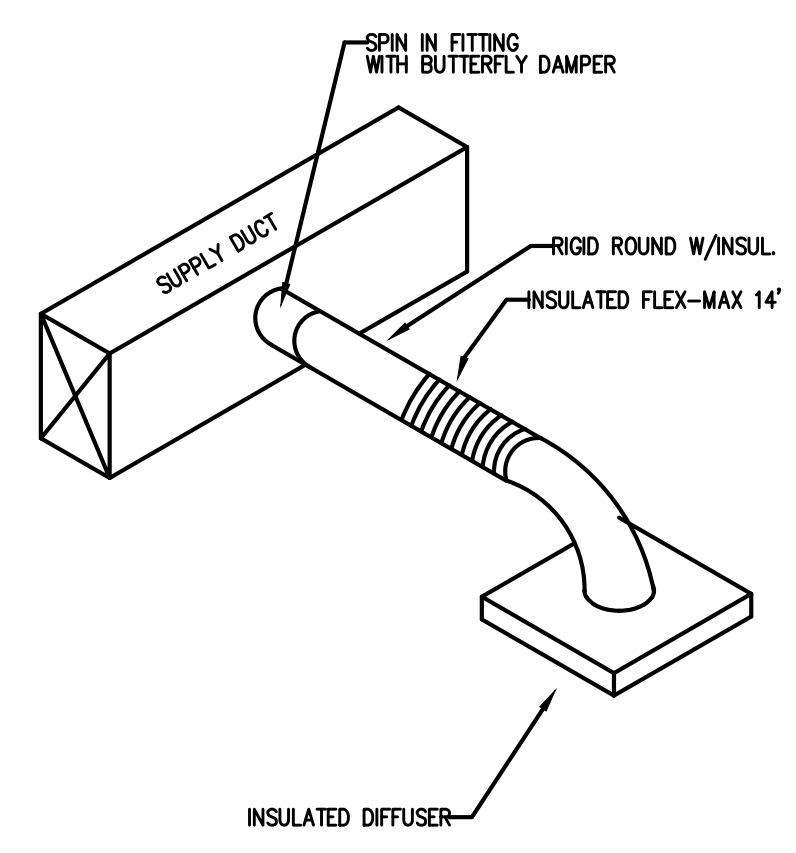


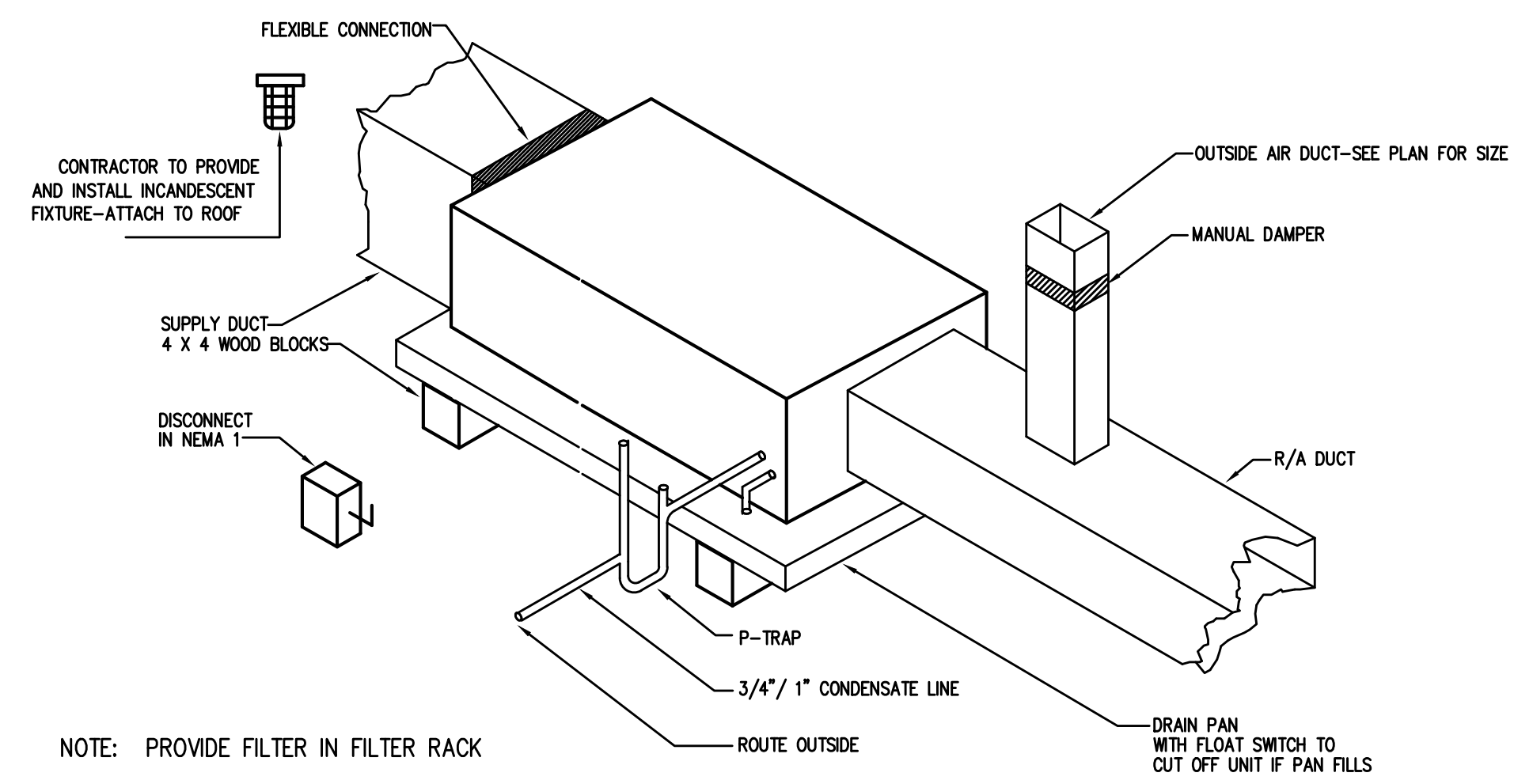
1
M1
MECHANICAL PLAN
1/4"=1'



2
M1
DIFFUSER TAKE-OFF DETAIL
N.T.S.

OA CALCULATIONS

UNIT	ROOM	OCCUPANCY	O.A. CFM PER PERSON (Rp)	O.A. CFM PER SqFt (Ra)	DEFAULT OCCUPANCY DENSITY #/1000 SqFt (Dd)	# OF OCCUPANTS	EXHAUST AIR FLOW RATE (CFM/SqFt)	AREA SqFt (Az)	REQUIRED OUTSIDE AIR	ACTUAL OUTSIDE AIR	REQUIRED EXHAUST AIR
AHU-1	Office 1	OFFICE AREAS	5	0.06	5	0.60	0	120	10	0	0
	Office 2	OFFICE AREAS	5	0.06	5	0.49	0	98	8	0	0
	Office 3	OFFICE AREAS	5	0.06	5	0.51	0	102	9	0	0
	Office 4	OFFICE AREAS	5	0.06	5	1.02	0	203	17	0	0
	Storage	STORAGE ROOMS	0	0.12	0	0.00	0	48	6	0	0
	Corridor	CORRIDORS	0	0.06	0	0.00	0	341	20	0	0
	Display	RECEPTION AREAS	5	0.06	30	10.33	0	344	72	0	0
	Closet	STORAGE ROOMS	0	0.12	0	0.00	0	14	2	0	0
	Toilet	TOILET ROOMS (PUBLIC SPACES)	0	0	0	0.00	50/70	62	0	70	0
	Server	COMPUTER W/O PRINTING	5	0.06	4	0.26	0	64	5	0	0
Reception	RECEPTION AREAS	5	0.06	30	3.63	0	121	25	0	0	
Storage/pickup	WAREHOUSES	0	0.06	0	0.00	0	937	56	0	0	
ZONE TOTAL								2454	231	250	70



4
M1
AIR HANDLER DETAIL
N.T.S.

ALL WORK SHALL BE IN ACCORDANCE WITH THE 2012 NC MECHANICAL CODE.

ALL DUCTWORK SHALL BE CONSTRUCTED OF GALVANIZED SHEET METAL IN ACCORDANCE WITH ASHRAE & SMACNA. DUCT SIZES SHOWN ARE NET FREE AREA REQUIRED. ALL SUPPLY AND RETURN DUCTS AND FLEX SHALL BE INSULATED WITH MIN. R-8.0 INSULATION UNLESS OTHERWISE NOTED IN THE DRAWING.

ALL DUCTS SHALL BE AIR TIGHT, RIGID AND FREE FROM VIBRATION AND NOISE. ALL LAP JOINTS SHALL BE IN THE DIRECTION OF FLOW. VOLUME OR SPLITTER DAMPERS SHALL BE INSTALLED WHERE NECESSARY TO GUIDE AND CONTROL THE AIR FLOW. PROVIDE SHEET METAL SLEEVES AND COLLARS WHERE DUCTS PASS THROUGH WALLS.

STRUCTURAL MEMBERS OF THE BUILDING SHALL NOT BE CUT IN ANY MANNER FOR THE INSTALLATION OF ANY EQUIPMENT UNLESS PRIOR APPROVAL IS OBTAINED FROM THE ARCHITECT.

MECHANICAL CONTRACTOR TO CONFIRM BREAKER/DISCONNECT SIZES OF HIS EQUIPMENT WITH THE ELECTRICAL CONTRACTOR.

FURNISH AND INSTALL A DUCT MOUNTED SMOKE DETECTOR IN THE RETURN DUCT OF THE A/C UNIT IN ACCORDANCE WITH 2012 NC MECHANICAL CODE. THE DETECTOR SHALL BE WIRED TO SHUT DOWN THE FAN IN THE EVENT THE DETECTOR IS ACTIVATED. THE MECHANICAL CONTRACTOR SHALL FURNISH AND INSTALL THE DUCT DETECTOR AND RUN THE NECESSARY CONTROL WIRING FROM THE DETECTOR TO HIS EQUIPMENT. SMOKE DETECTORS ARE ONLY REQUIRED FOR UNITS SUPPLYING 2000 CFM OR MORE.

MECHANICAL CONTRACTOR SHALL PROVIDE A TEST AND BALANCE REPORT SYSTEM COMPLIANCE STATEMENT REQUIRES A WRITTEN TAB REPORT. FINAL PROJECT SIGNOFF WILL BE DENIED WITHOUT THIS REPORT.

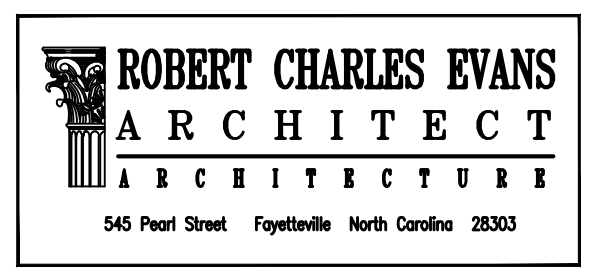
MECHANICAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE LOCATIONS AND ROUTING OF ALL DUCTWORK WITH OTHER TRADES TO AVOID CONFLICTS.

ALL EQUIPMENT MATERIALS AND WORKMANSHIP SHALL BE GUARANTEED TO BE FREE OF DEFECTS FOR A PERIOD OF ONE YEAR AFTER FINAL ACCEPTANCE OF THE WORK OR IN ACCORDANCE WITH THE PARTICULAR MANUFACTURER'S STANDARD GUARANTEE. IF LONGER. ANY FAILURE MATERIAL OR WORKMANSHIP OR FAILURE OF ANY PART OF THE SYSTEM DURING NORMAL OPERATIONS UNDER THIS GUARANTEE SHALL BE CORRECTED WITHOUT COST TO THE OWNER.

ALL THERMOSTATS SHALL BE OF A PROGRAMMABLE TYPE.

BUILDING CONTRACTOR SHALL PROVIDE PERMANENT ACCESS TO ROOF STRUCTURE FOR ACCESS TO MECHANICAL EQUIPMENT WHEN ROOF STRUCTURE IS GREATER THAN 16'-0" HIGH.

3
M1
HVAC NOTES
N.T.S.



Mohler Homes, Inc.
Office Building

Drawing Name:
MECHANICAL PLAN

Project Name:
An Office Building for
Mohler Homes, Inc.

Project Location:
Lot 5, Comm Park Lane
Angier
North Carolina

DRAWINGS AND THE DESIGN ARE THE PROPERTY OF THE ARCHITECT WHETHER THE PROJECT FOR WHICH THEY ARE PREPARED IS EXECUTED OR NOT. THE DRAWINGS SHALL NOT BE USED BY THE PROJECT OWNER OR ANYONE ELSE FOR ANY OTHER PROJECT.

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11-27-18



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PROJECT NO: 18-128
DRAWN BY: SLI
DATE: 11.27.18
REVISIONS:

SHEET NO:
M1