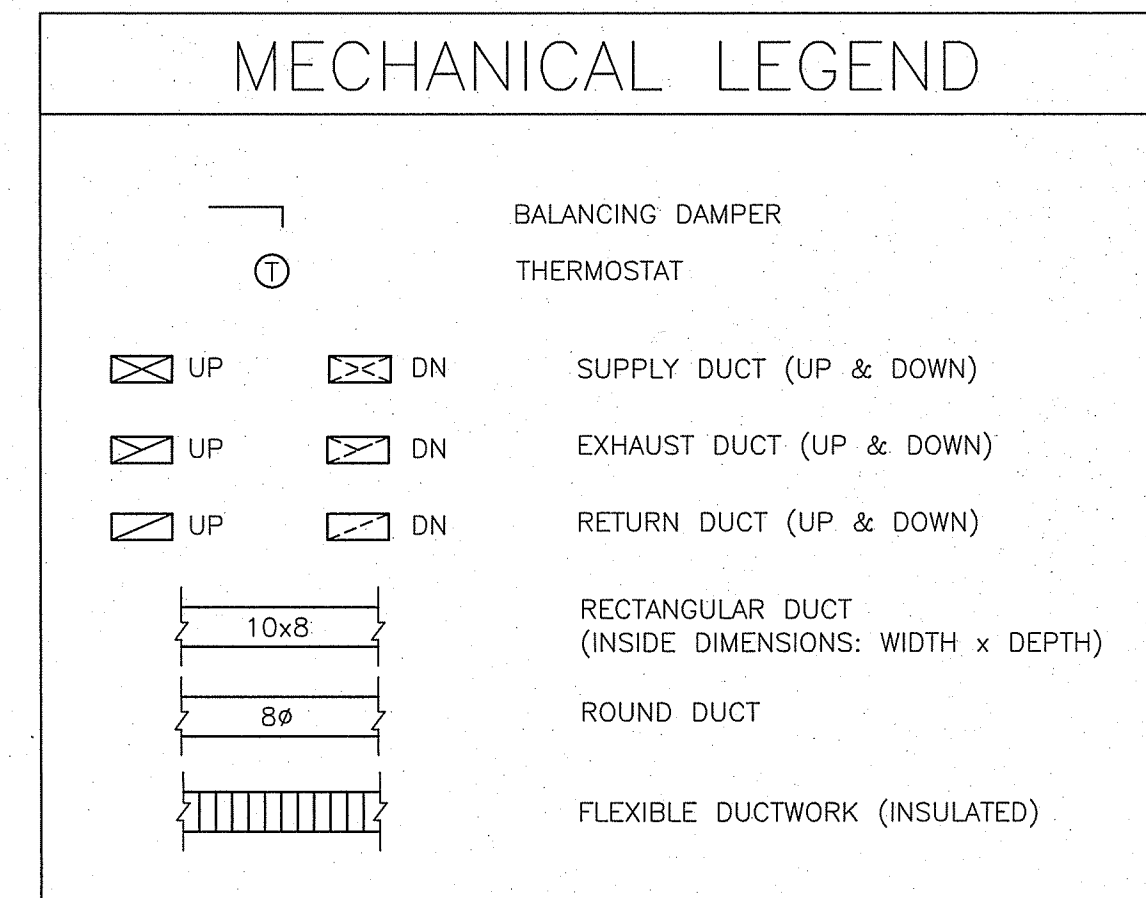


MECHANICAL GENERAL NOTES

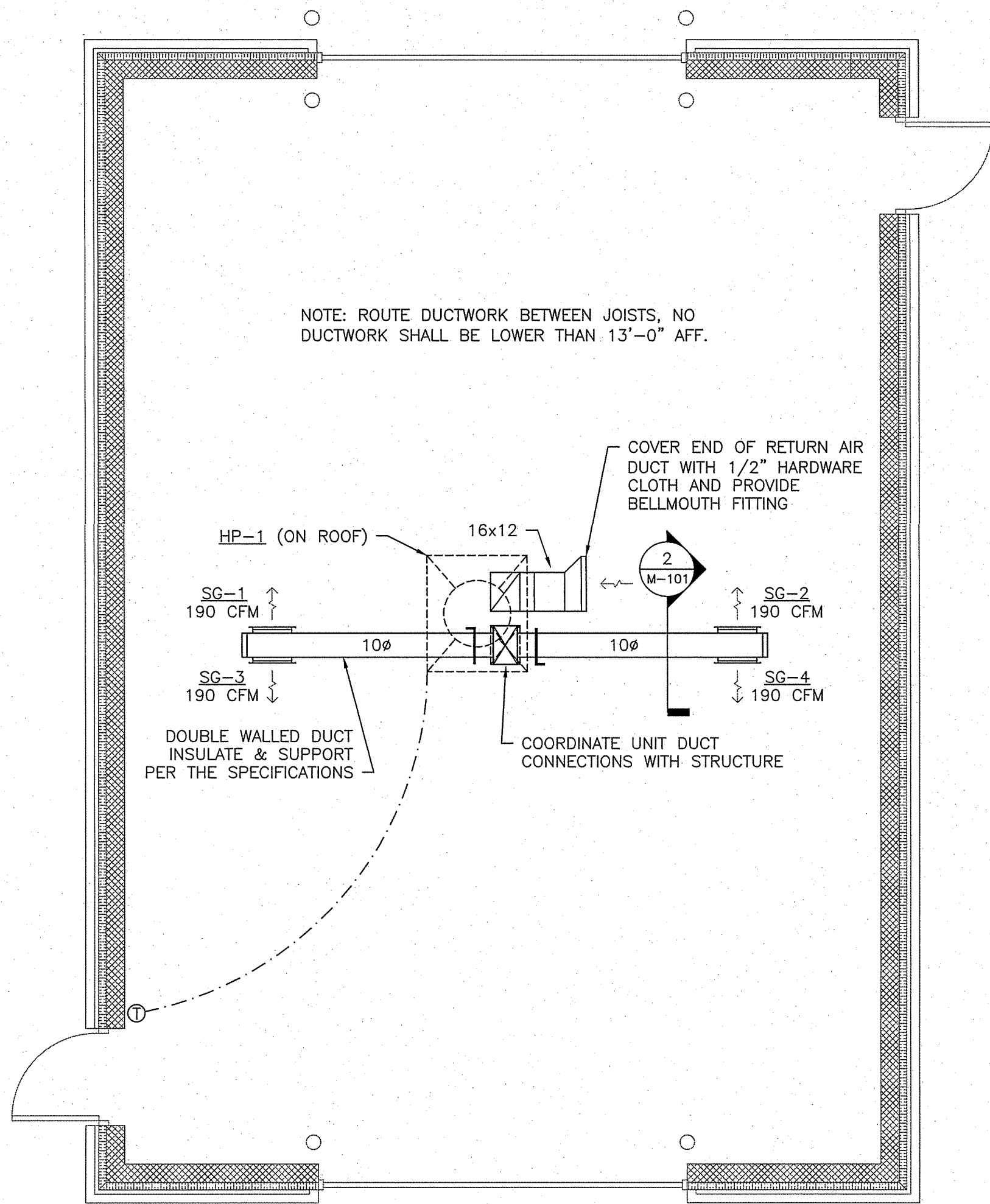
- ALL WORK SHALL CONFORM TO ALL NATIONAL CODES ALONG WITH ALL VA STANDARDS AND FEDERAL REQUIREMENTS. EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S WRITTEN RECOMMENDATIONS.
- ALL MATERIALS, EQUIPMENT AND PRODUCTS INCORPORATED IN THE WORK UNDER THE CONTRACT SHALL BE NEW, OF A SUITABLE GRADE FOR THE PURPOSES INTENDED, AND TO THE EXTENT POSSIBLE, STANDARD PRODUCTS OF THE VARIOUS MANUFACTURERS EXCEPT WHERE SPECIAL CONSTRUCTION OR PERFORMANCE FEATURES ARE CALLED FOR.
- ANY EQUIPMENT OR MATERIAL DEVIATIONS FROM THAT SPECIFIED OR DETAILED ON THIS DRAWING SHALL BE SUBJECT TO THE APPROVAL OF THE ARCHITECT/ENGINEER. ALL PROPOSED EQUIPMENT DEVIATIONS SUBMITTED SHALL BE SIMILAR BOTH IN QUALITY AND CAPACITY TO THE EQUIPMENT SPECIFIED.
- ALL MECHANICAL EQUIPMENT SHALL BE LISTED AND LABELED BY UNDERWRITERS LABORATORIES (U.L.).
- THE MECHANICAL CONTRACTOR SHALL INSTALL EQUIPMENT AS SHOWN ON THE DRAWINGS ALLOWING FOR SUFFICIENT ACCESS AND CLEARANCE SPACE FOR EQUIPMENT MAINTENANCE, REPAIRS AND REPLACEMENT. PROVIDE PROPER CLEARANCES FOR REQUIRED PIPING AND ELECTRICAL SERVICES AND CONNECTIONS. INSTALL ALL EQUIPMENT WITH REQUIRED ACCESS AND CLEARANCES IN ACCORDANCE WITH MANUFACTURER'S WRITTEN RECOMMENDATIONS AND WITH ALL APPLICABLE CODES AND STANDARDS.
- THE MECHANICAL CONTRACTOR SHALL COORDINATE THE INSTALLATION AND ROUTING OF ALL PROPOSED DUCTWORK, PIPING AND EQUIPMENT WITHIN THE BUILDING STRUCTURE.
- THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL POWER CONNECTIONS TO THE EQUIPMENT PROVIDED UNDER THIS CONTRACT.
- THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONTROL WIRING FOR HIS EQUIPMENT.
- DUCTWORK AND PIPING SHALL BE KEPT AS CLOSE AND HIGH AS POSSIBLE TO THE BUILDING WALLS, CEILING AND FLOOR AND ROOF STRUCTURE IN ORDER THAT THE MAXIMUM AMOUNT OF SPACE IS AVAILABLE. ADDITIONAL OFFSETS, FITTINGS, ETC. NOT SHOWN BUT REQUIRED TO MAINTAIN MAXIMUM CLEARANCE SHALL BE PROVIDED AT NO ADDITIONAL COST.
- THE MECHANICAL CONTRACTOR SHALL MAKE A COMPLETE REVIEW OF THE MECHANICAL PLANS, INCLUDING THE SCHEDULES AND DETAILS PRIOR TO INSTALLATION OF ANY MECHANICAL SYSTEMS AND SHALL RESOLVE ANY CONFLICTS WITH THE ENGINEER.
- COORDINATE LOCATION AND PROVIDE SUPPORT FRAMING FOR ALL ROOF MOUNTED EQUIPMENT INCLUDING EXPOSED DUCTWORK AND FRAME-MOUNTED EQUIPMENT.
- COORDINATE ALL NECESSARY POWER CONNECTIONS AS RECOMMENDED BY THE MANUFACTURER OF INSTALLED EQUIPMENT.



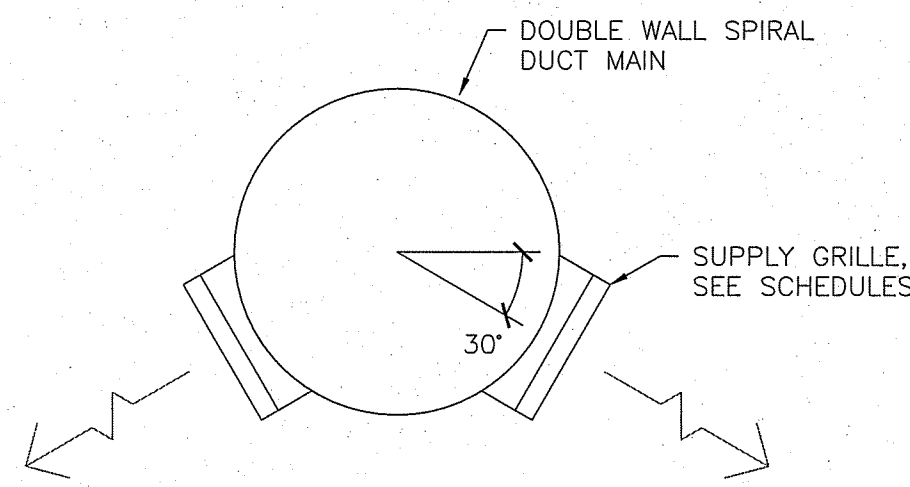
ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
APD	AIRSIDE PRESSURE DROP
BLDG	BUILDING
BOD	BOTTOM OF DUCT
CFM	CUBIC FEET PER MINUTE
DN	DOWN
EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
EX.	EXISTING
GC	GENERAL CONTRACTOR
HP	HORSEPOWER
HP	HEAT PUMP
LAT	LEAVING AIR TEMPERATURE
MC	MECHANICAL CONTRACTOR
N/A	NOT AVAILABLE
NTS	NOT TO SCALE
OA	OUTSIDE AIR
RA	RETURN AIR
SA	SUPPLY AIR

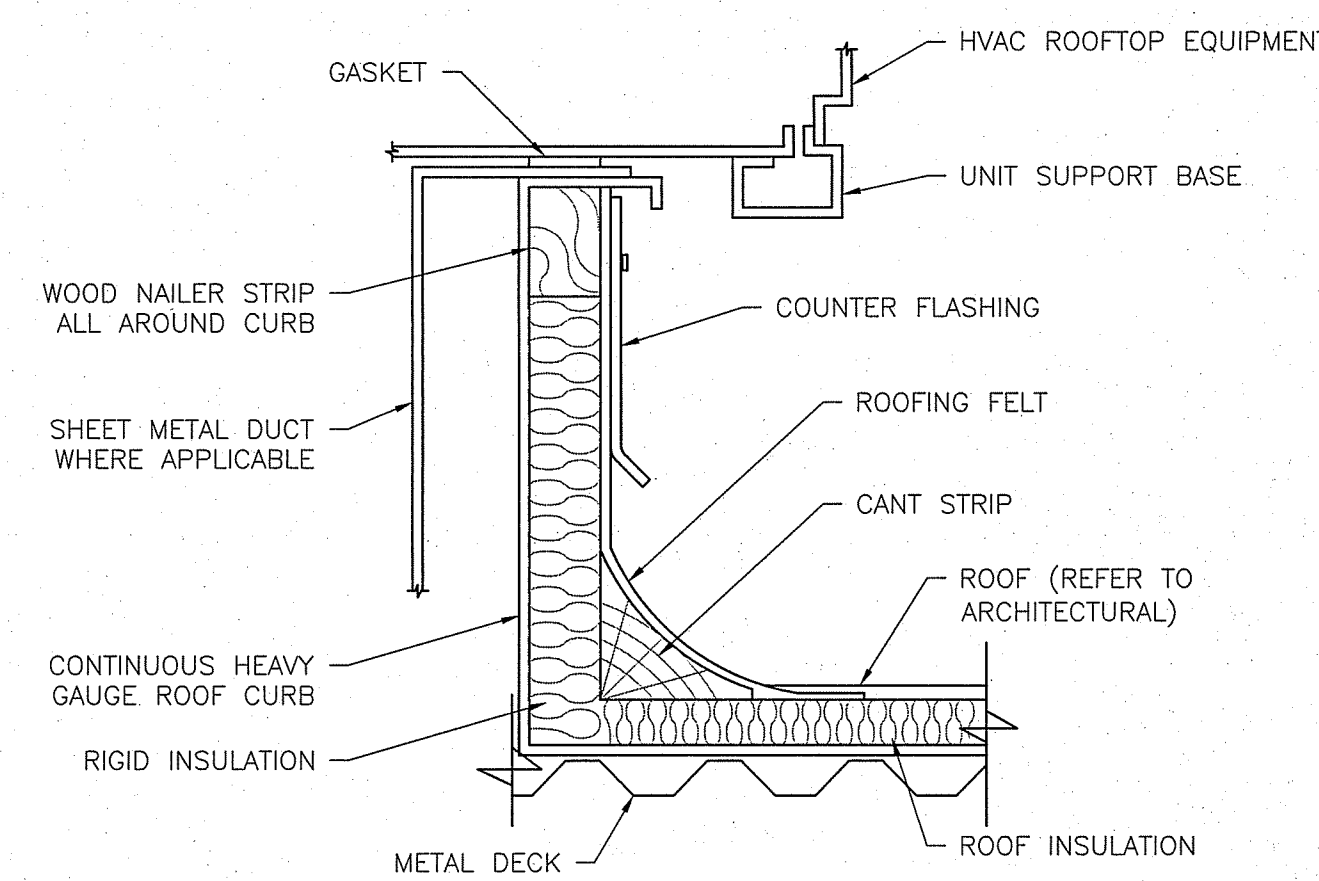
NOTE: ROUTE DUCTWORK BETWEEN JOISTS, NO DUCTWORK SHALL BE LOWER THAN 13'-0" AFF.



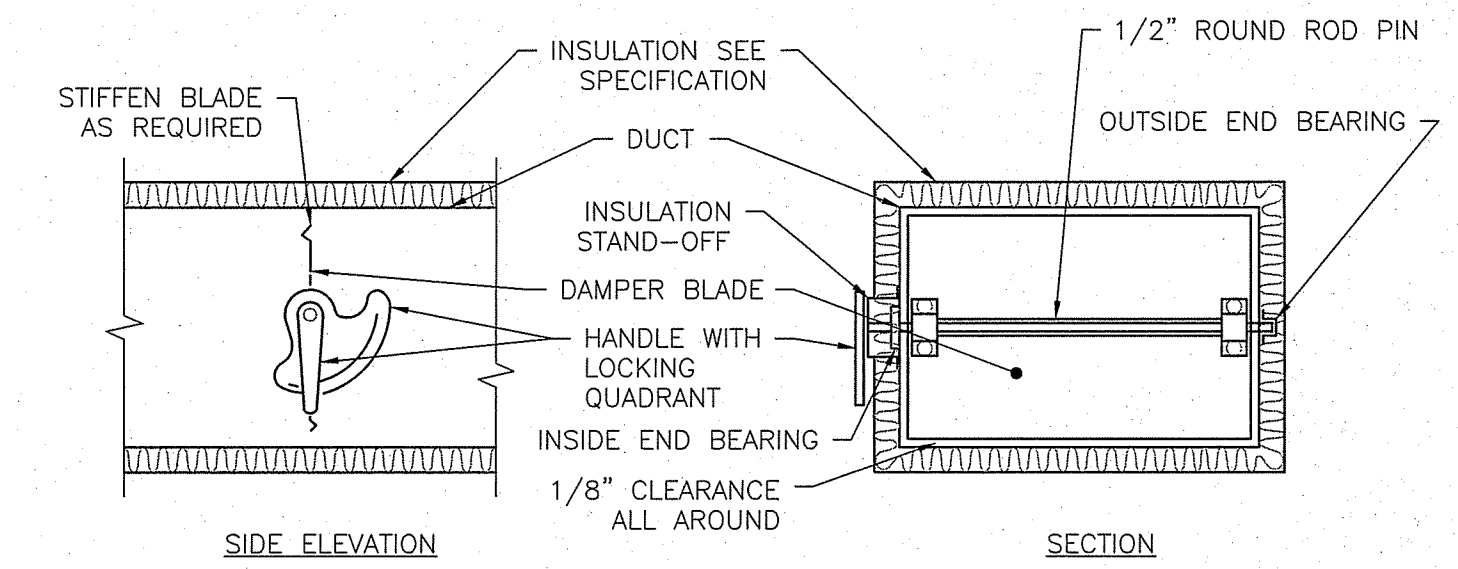
1 MECHANICAL FLOOR PLAN
1/4" = 1'-0"



2 DUCTWORK SECTION
N.T.S.

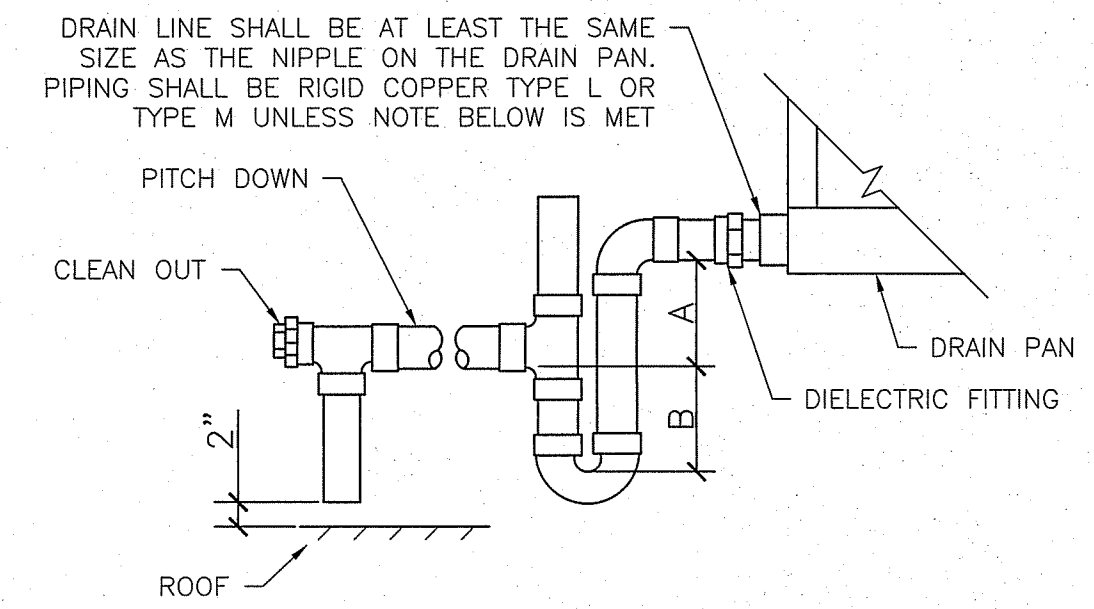


3 ROOF CURB DETAIL
N.T.S.



- NOTES:
1. DELETE INSULATION STAND-OFF ON DUCTWORK WITHOUT EXTERIOR INSULATION.
2. DETAIL SHOWS SINGLE BLADE DAMPER. DAMPER INSTALLATION SHALL BE SIMILAR FOR MULTI-BLADE DAMPERS & ROUND DAMPERS.

4 VOLUME DAMPER DETAIL
N.T.S.



- NOTES:
1. CPVC PIPE MAY BE USED ONLY IF APPROVED BY LOCAL VA AND IS INDOORS AND DOES NOT PASS THROUGH RATED BARRIERS.
2. DIELECTRIC FITTING TO BE USED WHEN TWO DISSIMILAR METALS ARE TO BE CONNECTED.

UNIT TYPE	A	B
DRAW THRU	2" PLUS X	X
BLOW THRU	1" MINIMUM	2X

WHERE X = STATIC PRESSURE IN PAN

5 RTU DRAIN TRAP DETAIL
N.T.S.

SINGLE PACKAGED AIR CONDITIONER HEAT PUMP SCHEDULE (ROOFTOP)

MARK	LOCATION	AREA AND/OR BLDG SERVED	TYPE	TOTAL SUPPLY AIR FLOW		MIN. OUTSIDE AIR FLOW	EXT. STATIC PRESSURE	COOLING CAPACITY				HEATING CAPACITY				AIR FILTER MARK NO.	ELECTRICAL DATA				REMARKS																	
				CFM	[L/s]			MIN TOTAL CAPACITY	MIN SENS CAPACITY	MIN SEER	EAT		OSA DESIGN TEMP	MIN HEAT CAPACITY	EAT DB		LAT DB	OSA DESIGN TEMP	FAN			UNIT POWER CONNECTION		SUPPLEMENTAL ELECTRIC HEAT														
											[Pa]	MBH							[kW]	MBH		[kW]	°F		[°C]	°F	[°C]	°F	[°C]	HP	[W]	CONTROL	MCA	PHASE	VOLT	Kw	PHASE	VOLT
HP-1	ROOF	BUILDING 10	PACKAGED ROOFTOP	760	[380]	75	[35]	0.2	[50]	24.6	[7.2]	N/A	14	81	[27]	67	[19]	91	[33]	[22]	[6.4]	45	[7]	80	[27]	-3	[-19]	SEE NOTE 4	0.33	[250]	CONSTANT	36	1	208	6	1	208	12.3,4

- NOTES:
1. PROVIDE WITH 7-DAY PROGRAMMABLE THERMOSTAT.
2. INSTALL PER THE MANUFACTURER'S RECOMMENDATIONS. MAINTAIN REQUIRED CLEARANCES FOR SERVICING.
3. PROVIDE WITH 16" HIGH INSULATED ROOF CURB. INSTALL UNIT LEVEL ON CURB. SEE DETAIL 3/M-101.
4. PROVIDE MERV 8 PREFILTER PER THE SPECIFICATIONS.

AIR DEVICE SCHEDULE (SUPPLY)

MARK	TYPE	AIR FLOW				MAX APD	MOUNTING	PANEL/FRAME SIZE		NECK SIZE		NC	DAMPER	FINISH	REMARKS	
		CFM	[L/s]	CFM	[L/s]			IN x IN	[mm x mm]	IN	[mm]					
																IN WG
SG-1	DOUBLE DEFLECTION LOUVERED FACE SUPPLY	190	[90]	190	[90]	0.063	[16]	DUCT	16 x 4	[406 x 102]	16 x 4	[406 x 102]	-	NONE	WHITE	1,2
SG-2	DOUBLE DEFLECTION LOUVERED FACE SUPPLY	190	[90]	190	[90]	0.063	[16]	DUCT	16 x 4	[406 x 102]	16 x 4	[406 x 102]	-	NONE	WHITE	1,2
SG-3	DOUBLE DEFLECTION LOUVERED FACE SUPPLY	190	[90]	190	[90]	0.063	[16]	DUCT	16 x 4	[406 x 102]	16 x 4	[406 x 102]	-	NONE	WHITE	1,2
SG-4	DOUBLE DEFLECTION LOUVERED FACE SUPPLY	190	[90]	190	[90]	0.063	[16]	DUCT	16 x 4	[406 x 102]	16 x 4	[406 x 102]	-	NONE	WHITE	1,2

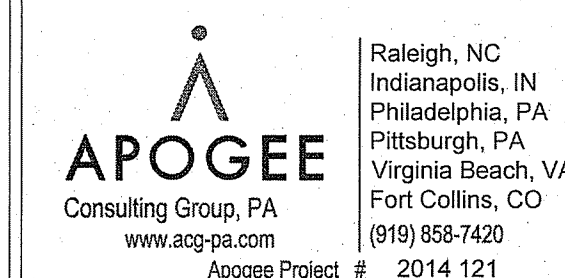
- NOTES:
1. SET VERTICAL DEFLECTION BLADES TO ABOUT 22 DEGREES
2. SELECT DIFFUSER WITH NC LESS THAN 25.

HVAC DESIGN DATA

DESIGN CONDITIONS	SUMMER			WINTER		ANNUAL EXTREME DAILY MEAN DB (MAX/MIN)
	DB TEMP	WB TEMP	HUMIDITY	DB TEMP	HUMIDITY	
OUTDOOR DESIGN CONDITIONS	91.7 °F	75.6 °F	N/A	18.8 °F	N/A	97.8 °F / 10.6 °F
INDOOR STORAGE	80.0 °F	67.0 °F	60%	60.0 °F	20%	---

CONSULTANTS:

ARCHITECT/ENGINEERS:



Civil / Structural Engineer
GUIDON

905 N Capitol Avenue, STE 100
Indianapolis, IN 46205
Tel (317) 800-6386

Drawing Title
MECHANICAL PLAN, DETAILS AND SCHEDULES

Approved: Project Director

Project Title
REPLACE MAIN ELECTRICAL TO OUT-BUILDINGS

Location
FORT WAYNE, IN

Date
9/18/2015

Checked
RCM

Drawn
JMB2

Project Number
610A4-12-188

Building Numbers
1,3,5,6,7,10,14,T5,T6

Drawing Number
M-101

Dwg. 26 of 48

Office of Construction and Facilities Management



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