MECHANICAL GENERAL NOTES

1.	THE DRAWINGS INDICATE THE GENERAL SCOPE OF WORK ASSOCIATED WITH THE INSTALLATION OF HVAC EQUIPMENT AND SYSTEMS BUT ARE NOT NECESSARILY INCLUSIVE OF ACTUAL CONDITIONS. THE FULL EXTENT OF THE WORK SHALL BE DETERMINED IN THE FIELD BASED ON THE ACTUAL CONDITIONS ENCOUNTERED AND AS REQUIRED FOR THE SATISFACTORY EXECUTION OF THE NEW WORK.
2.	THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THE EQUIPMENT AND SYSTEMS IN ACCORDANCE WITH THE PROJECT CONSTRUCTION SCHEDULE.
3.	THE CONTRACTOR SHALL COORDINATE THE INSTALLATION AND SCHEDULING OF THEIR WORK WITH ALL OTHER TRADES (PLUMBING, ELECTRICAL, GENERAL ETC.). ANY CONFLICTS DUE TO FAILURE OF THIS CONTRACTOR TO COORDINATE WORK WITH OTHER TRADES SHALL BE THEIR RESPONSIBILITY TO RESOLVE.
4.	ALL CUTTING AND PATCHING OF WALLS, FLOORS, ROOFS, AND CEILINGS, AS REQUIRED TO INSTALL DUCTWORK, PIPING, ROOF CURBS ETC. SHALL BE PERFORMED BY THIS CONTRACTOR UNLESS SPECIFICALLY NOTED OTHERWISE ON THE DRAWINGS. PATCHING SHALL MATCH EXISTING METHODS, MATERIALS OF CONSTRUCTION, AND ADJACENT FINISHES.
5.	WHERE THE DRAWINGS SPECIFICALLY INDICATE, CUTTING AND PATCHING IS TO BE PERFORMED BY THE GENERAL CONTRACTOR. THE CONTRACTOR SHALL VERIFY THE DIMENSIONS AND EXACT LOCATIONS OF THE OPENINGS.
6.	THE CONTRACTOR SHALL PROVIDE ALL METHODS AND MATERIALS FOR SUPPORTING ALL EQUIPMENT, PIPING, AND DUCTWORK FURNISHED UNDER THIS CONTRACT. IN AREAS OF BAR JOIST CONSTRUCTION ALL PIPING, DUCTWORK, AND SUSPENDED EQUIPMENT WITH A CONCENTRATED LOAD (I.E. HANGERS) IN EXCESS OF 150 LBS. SHALL BE SUPPORTED FROM THE TOP CHORD OF THE BAR JOISTS. DO NOT HANG ANY PIPING OR DUCTWORK FROM THE ROOF DECK.
7.	VERIFY THE FINAL MOUNTING HEIGHTS AND LOCATIONS OF LOUVERS, BRICK VENTS, CABINET HEATERS, SIDEWALL GRILLES AND REGISTERS, AND ALL OTHER VISIBLE EQUIPMENT WITH THE ARCHITECTURAL INTERIOR AND EXTERIOR ELEVATIONS.
8.	COORDINATE FINAL CEILING GRILLE AND DIFFUSER LOCATIONS WITH ARCHITECTURAL REFLECTED CEILING PLANS, FIRE PROTECTION PLANS, AND ELECTRICAL/TECHNOLOGY PLANS.
9.	SEAL ALL DUCT AND PIPING PENETRATIONS OF FIRE AND SMOKE RATED PARTITIONS AND FLOORS WITH FIRE STOPPING MATERIALS AS SPECIFIED IN THE DIVISION 1 SPECIFICATIONS. WHERE FIRESTOPPING MATERIALS ARE NOT SPECIFIED IN DIVISION 1, ALL FIRESTOPPING MATERIALS SHALL BE U.L. LISTED FOR USE AND AS MANUFACTURED BY 3M OR EQUAL.
10.	PROVIDE ACOUSTICAL SEALS AROUND ALL DUCTWORK AND PIPING PENETRATIONS OF INTERIOR ACOUSTICALLY RATED PARTITIONS. REFER TO THE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF ACOUSTICAL PARTITIONS.
11.	ALL ADJUSTABLE THERMOSTATS, SENSORS AND SWITCHES INTENDED FOR NORMAL USE BY THE BUILDING'S OCCUPANTS SHALL BE MOUNTED 48" A.F.F. TO THE TOP OF THE DEVICE IN ACCORDANCE WITH ADA REQUIREMENTS.
12.	DO NOT UTILIZE AIR HANDLING EQUIPMENT AND DUCTED AIR SYSTEMS FURNISHED UNDER THIS CONTRACT AS A MEANS OF TEMPORARY HEAT DURING CONSTRUCTION. OBTAIN WRITTEN APPROVAL FROM THE ENGINEER PRIOR TO PLACING EQUIPMENT IN SUSTAINED OPERATION.
13.	BOTTOM OF DUCT AND BOTTOM OF PIPE ELEVATIONS ARE FOR REFERENCE ONLY, FINAL ELEVATIONS ARE SUBJECT TO ACTUAL FIELD CONDITIONS. FIELD VERIFY ALL CLEARANCES AND DIMENSIONS PRIOR TO FABRICATING AND INSTALLING DUCTWORK AND PIPING. COORDINATE DUCT AND PIPING INSTALLATIONS WITH ALL OTHER TRADES TO AVOID INTERFERENCE WITH LIGHT FIXTURES, SPRINKLERS, SPEAKERS, ETC.
14.	ALL DUCT DIMENSIONS ARE CLEAR INSIDE DIMENSIONS. FIELD VERIFY ACTUAL CLEARANCES AND CONDITIONS PRIOR TO FABRICATING DUCTWORK. DO NOT ORDER FIRE DAMPERS UNTIL VERIFYING ACTUAL CONDITIONS AND DIMENSIONS.
15.	SUBMIT SHEET METAL SHOP DRAWINGS TO SCALE 3/8" = 1'-0", DETAILING DUCTWORK, HVAC EQUIPMENT AND DIFFUSERS. SHOP DRAWINGS SHALL BE DIMENSIONED, SHALL INDICATE DUCT ELEVATIONS, AND SHALL DEPICT CEILING GRID, STRUCTURAL STEEL, LIGHT FIXTURES, SPRINKLER HEADS, AND PLUMBING AND HVAC PIPING MAINS.
16.	THE CONTRACTOR SHALL FURNISH ALL ACCESS DOORS IN WALLS AND PLASTER CEILINGS AS REQUIRED TO ACCESS VOLUME DAMPERS, FIRE DAMPERS, AND OTHER SERVICEABLE DEVICES. ACCESS DOORS SHALL BE UL LISTED WHEN INSTALLED IN RATED CONSTRUCTION. FIELD VERIFY ACCESS DOOR LOCATIONS AND SIZES WITH ARCHITECT.
17.	PROVIDE LOCATION/IDENTIFICATION MARKERS ON CEILING T-BAR GRIDS (OR ON CEILING ACCESS DOORS AS APPLICABLE) JUST BELOW CONCEALED SHUT-OFF VALVES, CONTROL VALVES, AND HVAC EQUIPMENT.
18.	ALL ROUND DUCTWORK SHALL BE ROUND SPIRAL DUCT EXCEPT WHERE NOTED AS FLEXIBLE. ROUND FLEXIBLE DUCTWORK IS LIMITED TO LOCATIONS ONLY AS SHOWN ON THE DRAWINGS. MAXIMUM LENGTH SHALL NOT EXCEED 6'-0".
19.	THE CONTRACTOR SHALL COORDINATE THE RIGGING, MOVING AND HOISTING OF EQUIPMENT FURNISHED UNDER THIS CONTRACT WITH EXISTING ARCHITECTURAL CONSTRAINTS.

MECHANICAL SYMBOLS & ABBREVIATIONS

G.C.	GENERAL CONTRACTOR
H.C. / M.C.	MECHANICAL CONTRACTOR
E.C.	ELECTRICAL CONTRACTOR
P.C.	PLUMBING CONTRACTOR
S/A	SUPPLY AIR
R/A	RETURN AIR
T/A	TRANSFER AIR
E/A	EXHAUST AIR
O/A	OUTSIDE AIR
	REMOVE EXISTING
	CONNECT TO EXISTING
	SUPPLY AIR DIFFUSER/DROP/RISE
	RETURN AIR GRILLE/DROP/RISE
	EXHAUST AIR GRILLE/DROP/RISE
T	TEMPERATURE/HUMIDITY SENSOR
S	SWITCH
	VOLUME DAMPER
ATC	AUTOMATIC TEMPERATURE CONTROL DAMPER
BDD	BACKDRAFT DAMPER
EF #	EXHAUST FAN # = MARK
SF #	SUPPLY FAN # = MARK
# V CFM	GRILLE/DIFFUSER TAG V = VOLUME

NOTE: NOT ALL SYMBOLS & ABBREVIATIONS SHOWN ARE USED ON THIS PROJECT.

DESIGN CODE COMPLIANCE

PA - UCC	PENNSYLVANIA UNIFORM CONSTRUCTION CODE; 2018
IBC	ICC - INTERNATIONAL BUILDING CODE; 2018
IMC	ICC - INTERNATIONAL MECHANICAL CODE; 2018
IEEC	ICC - INTERNATIONAL ENERGY CONSERVATION CODE; 2018
IFGC	ICC - INTERNATIONAL FUEL GAS CODE; 2018
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NEC	NATIONAL ELECTRIC CODE; 2017

FAN SCHEDULE

EF # = EXHAUST FAN # = MARK

TAG	AREA(S) SERVED	MFR	MODEL	CFM	ESP"	RPM	DRIVE	SONES	MOTOR HP	V/P/Hz	CONTROL	DAMPER	WEIGHT LBS	NOTES
EF-1	MEN'S CHANGING	GREENHECK	G-140-A	2500	1.00	1725	DIRECT	17.1	1.0	115/1/60	-	GBBD	114	1
EF-2	WOMEN'S CHANGING	GREENHECK	G-140-A	2500	1.00	1725	DIRECT	17.1	1.0	115/1/60	-	GBBD	114	1
EF-3	CHEMICAL STORAGE 203	GREENHECK	CUE-080-D	150	0.50	1550	DIRECT	7.8	1/20	115/1/60	SWITCH BY E.C.	GBBD	60	1
EF-4	FILTER BUILDING 201	GREENHECK	G-099-A	1000	0.75	1725	DIRECT	12.4	1/4	115/1/60	SWITCH BY E.C.	GBBD	72	1
EF-5	UNISEX TR 101	GREENHECK	G-080-D	200	0.50	1550	DIRECT	7.7	1/20	115/1/60	-	GBBD	51	1
EF-6	ELECTRIC ROOM 202	GREENHECK	G-080-D	250	0.50	1550	DIRECT	7.5	1/20	115/1/60	SWITCH BY E.C.	GBBD	48	1
EF-7	GUARD ROOM	GREENHECK	G-090-D	500	0.375	1550	DIRECT	7.4	1/15	115/1/60	SWITCH BY E.C.	GBBD	49	1

NOTES:
1. PROVIDE DISCONNECT SWITCH.

GRILLE, REGISTER, & DIFFUSER SCHEDULE

V CFM = # TAG, V = VOLUME

TAG	MFR	MODEL	SIZE	PATTERN	TYPE	MOUNT	FINISH	MAX N.C.	NOTES
1	TITUS	350FL	10x10	-	EXHAUST	SURFACE	BWE	25	1
2	TITUS	350FL	18x18	-	EXHAUST	SURFACE	BWE	25	1
3	TITUS	350FL	12x12	-	EXHAUST	SURFACE	BWE	25	1

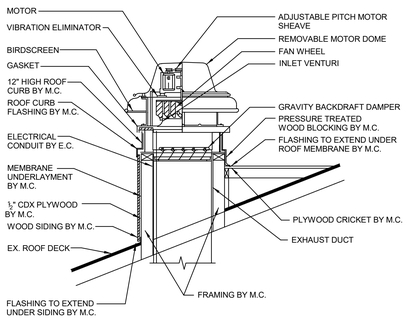
NOTES:
1. PROVIDE BORDERS COMPATIBLE WITH ADJACENT SURFACES AND CEILING FINISHES.

OUTSIDE AIR INTAKE SCHEDULE

OAI # = OUTSIDE AIR INTAKE # = MARK

TAG No.	MFR.	SERVING	MODEL NO.	THROAT L"xW"	CFM	APD"	NOTES
OAI-1	GREENHECK	FILTER BUILDING 201	FGI	14x14	1000	0.127	1,2

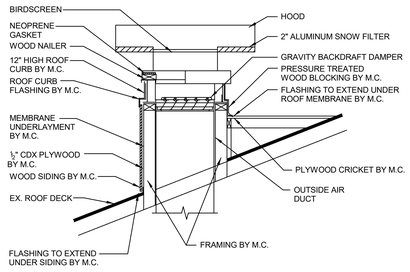
NOTES:
1. PROVIDE AUXILIARY DRAIN PAN.
2. PROVIDE MOTOR OPERATED DAMPER. INTERLOCK DAMPER TO OPEN WHENEVER EF-4 IS ENERGIZED.



ROOF EXHAUST FAN DETAIL

NO SCALE

NOTE:
UPBLAST EXHAUST FAN WILL BE SIMILAR.



OUTSIDE AIR INTAKE DETAIL

NO SCALE

NOTE:
UPBLAST EXHAUST FAN WILL BE SIMILAR.

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REVISIONS
05.19.23 - Issued for Permit

No.	Date	Description

DRAWING TITLE
COVER SHEET - HVAC

PROJECT NUMBER
22.226

DRAWN BY
LSH

SCALE

DATE
05/19/2023

DRAWING NUMBER
H000

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