

MECHANICAL LEGEND (Misc.)	
SYMBOL	DESCRIPTION
	SUPPLY DIFFUSER; 4-WAY THROW UNLESS NOTED OTHERWISE
	AIR FLOW ARROW
	SMOKE DETECTOR
	THERMOSTAT, PNEUMATIC
	THERMOSTAT, PNEUMATIC
	CARBON DIOXIDE SENSOR
	INDICATES NOTES ELSEWHERE ON DRAWING
	CONNECTION BETWEEN NEW AND EXISTING
	DISCONNECTION POINT
	REVISION NUMBER
	DETAIL NUMBER OR SECTION LETTER DRAWING NUMBER WHERE DETAIL IS DRAWN
	SECTION LETTER DRAWING NUMBER WHERE SECTION IS DRAWN

MECHANICAL ABBREVIATIONS :

ABV	ABOVE
ACCU	AIR COOLED CONDENSING UNIT
AHU	AIR HANDLING UNIT
CAP	CAPACITY
CFM	CUBIC FEET PER MINUTE
CHAR	CHARACTERISTIC
SDC	SUPPLY DIFFUSER CEILING
RG	RETURN GRILLE CEILING
EGC	EXHAUST GRILLE CEILING
FPM	FEET PER MINUTE
GRV	GRAVITY ROOF VENTILATOR
BTU/HR	BRITISH THERMAL UNITS PER HOUR
BTUH	BRITISH THERMAL UNITS PER HOUR
MBH	MILLION BRITISH THERMAL UNITS PER HOUR
EA	EXHAUST AIR
SA	SUPPLY AIR
RA	RETURN/RELIEF AIR
OA	OUTSIDE AIR
TA	TRANSFER AIR
HP	HORSEPOWER
BHP	BRAKE HORSEPOWER
RPM	REVOLUTIONS PER MINUTE
IN.	INCHES
FT.	FEET
Ø	DIAMETER/PHASE
PH	PHASE
ELEC	ELECTRICAL
EX	EXISTING
GC	GENERAL CONTRACTOR
EC	ELECTRICAL CONTRACTOR
MC	MECHANICAL CONTRACTOR
PC	PLUMBING CONTRACTOR
DN	DOWN
BLW	BELOW
EF	EXHAUST FAN
HZ	HERTZ
REQ.	REQUIREMENTS/REQUIRED
MIN	MINIMUM
MAX	MAXIMUM
W	WIDTH
D	DEPTH
H	HEIGHT
ESP	EXTERNAL STATIC PRESSURE
TSP	TOTAL STATIC PRESSURE
SP	STATIC PRESSURE
"W.G.	INCHES WATER GAUGE
VCD	VOLUME CONTROL DAMPER

DUCTWORK LEGEND			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	DUCTWORK TO BE REMOVED		SUPPLY/OUTDOOR/MAKE-UP AIR RECTANGULAR DUCT SECTION
	EXISTING DUCT TO REMAIN (LIGHT LINE WORK)		RETURN/TRANSFER/RELIEF AIR RECTANGULAR DUCT SECTION
	DUCT (SHOWN x HIDDEN)		EXHAUST AIR RECTANGULAR DUCT SECTION
	ROUND DUCT (DIAMETER)		SUPPLY/OUTDOOR/MAKE-UP AIR ROUND DUCT SECTION
	VOLUME CONTROL DAMPER		RETURN/TRANSFER/RELIEF AIR ROUND DUCT SECTION
	DUCT TRANSITION		EXHAUST AIR ROUND DUCT SECTION
	MOTOR OPERATED DAMPER		SMOKE DAMPER
	FIRE DAMPER		COMBINATION FIRE / SMOKE DAMPER
	SQUARE ELBOW WITH TURNING VANES		RADIUS ELBOW
	BELLMOUTH TAKEOFF CONNECTION		RECTANGULAR BOOT CONNECTION
	CONICAL TAKEOFF CONNECTION		CONICAL TAKEOFF CONNECTION
	STRAIGHT ROUND TAKEOFF CONNECTION		CONICAL "T" CONNECTION

MECHANICAL GENERAL NOTES :

1. THE HEATING CONTRACTOR SHALL COORDINATE WITH THE OTHER CONTRACTORS IN THE LOCATION OF DUCTWORK, PIPING, ETC.
2. THE HEATING CONTRACTOR SHALL VISIT AND THOROUGHLY ACQUAINT HIMSELF WITH THE EXISTING SYSTEM AND CONDITIONS IN THE AREAS HE WILL BE REQUIRED TO WORK BEFORE ISSUING HIS BID.
3. THE HEATING CONTRACTOR SHALL RELOCATE EXISTING SYSTEMS WHERE CONFLICTS WITH NEW WORK EXIST TO ACCOMMODATE NEW WORK.
4. ALL INTERRUPTIONS OF EXISTING SYSTEMS SHALL BE SCHEDULED IN ADVANCE WITH THE OWNER AND APPROVED BEFORE WORK COMMENCES.
5. ALL DUCTWORK AND PIPING SHALL BE INSTALLED AS HIGH AS POSSIBLE UNLESS NOTED OTHERWISE.
6. DO NOT SCALE DRAWINGS - ALL DIMENSIONS AND EXISTING CONDITIONS SHALL BE CHECKED AND VERIFIED BY THE CONTRACTOR AT THE SITE. NOTIFY ARCHITECT OF ANY DEVIATIONS FROM THE DRAWINGS.
7. THE DRAWINGS ARE DIAGRAMMATIC AND SHOW ONLY THE GENERAL ARRANGEMENTS OF ALL PIPING AND EQUIPMENT. BECAUSE OF THE SMALL SCALE OF THE DRAWINGS, IT IS NOT POSSIBLE TO SHOW OR INDICATE ALL OFFSETS, FITTINGS, AND ACCESSORIES WHICH MAY BE REQUIRED TO AVOID EXISTING PIPING OR STRUCTURAL FEATURES.
8. ALL PIPING, CONDUIT, DUCTWORK, ETC., SHALL BE INSTALLED IN A MANNER WHICH WILL NOT DEFACE OR ALTER ANY AREAS. ROUTING OF THE ABOVE EQUIPMENT SHALL BE APPROVED BY THE ARCHITECT PRIOR TO INSTALLATION.
9. ALL WORK PERFORMED ON THIS BUILDING SHALL BE IN COMPLIANCE WITH ALL PERTIENT CODES, RULES, ORDINANCES, AND REGULATIONS OF THE LOCAL, STATE, AND NATIONAL GOVERNING AUTHORITIES.
10. ALL WORK PERFORMED UNDER AND IN CONNECTION WITH THESE DRAWINGS AND SPECIFICATIONS SHALL BE IN STRICT COMPLIANCE WITH THE LATEST SAFETY AND HEALTH STANDARDS.
11. REPORT ANY DISCREPANCIES FOUND IN THE DRAWINGS AND/OR IN THE SPECIFICATIONS DURING THE BIDDING PROCESS FOR CLARIFICATION BY THE ARCHITECT.
12. HEATING CONTRACTOR SHALL PROVIDE AND INSTALL ACCESS PANELS AS REQUIRED FOR ACCESS TO VALVE, TRAPS, CLEAN-OUTS, CONTROLS, FIRE DAMPERS, ETC. THE CONTRACTOR SHALL COORDINATE INSTALLATION OF ACCESS PANELS WITH FINISH WORK AND ALL OTHER TRADES.
13. THE HEATING CONTRACTOR SHALL FURNISH SHOP DRAWINGS OF ANY RELOCATED PIPING, DUCTWORK, EQUIPMENT, ETC. FOR APPROVAL PRIOR TO RELOCATION OF ITEM.
14. ALL PIPING AND DUCTWORK TO BE LOCATED AND COORDINATED WITH ARCHITECTURAL PLANS. ALL PIPING AND DUCTWORK SHALL BE CONCEALED IN FINISHED AREA.
15. ALL PIPE PENETRATIONS THROUGH CHASES, WALLS, OR FLOORS WHICH ARE FIRE RATED, SHALL BE PROPERLY SEALED TO MAINTAIN FIRE PROTECTION. HEATING CONTRACTOR SHALL SUBMIT PROPOSED UL SYSTEM FOR REVIEW.
16. ALL DUCTS THAT PENETRATE CHASES, WALLS, OR FLOORS WHICH ARE FIRE RATED, SHALL BE INSTALLED WITH FIRE DAMPERS IN ACCORDANCE WITH NFPA 90A. THIS APPLIES EVEN IF THEY ARE NOT SPECIFICALLY SHOWN ON THE DRAWING.
17. ANY PHYSICAL INSTALLATION MODIFICATIONS, DUE TO FIELD CONDITIONS, SHALL BE RESOLVED BY THE HEATING CONTRACTOR IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE MECHANICAL ENGINEER.
18. THE HEATING CONTRACTOR SHALL PAY FOR ALL FEES AND PERMITS AS NECESSARY TO COMPLETE THE INSTALLATION.
19. THE HEATING CONTRACTOR SHALL COORDINATE THE LOCATION OF DUCTWORK WITH ALL EXISTING PIPING AND NEW PIPING BEING INSTALLED.
20. ALL PIPING AND DUCTS IN FINISHED ROOMS OR SPACES SHALL BE CONCEALED IN FURRED CHASES OR ABOVE SUSPENDED CEILING.
21. FIRST FIGURE OF DUCT SIZE INDICATES DIMENSION OF FACE SHOWN OR INDICATED.
22. ALL LIGHT LINES SHOWN ON DRAWINGS INDICATE EXISTING EQUIPMENT CONSTRUCTION OR EQUIPMENT TO REMAIN. ALL HEAVY LINES INDICATE EXISTING CONSTRUCTION OR EQUIPMENT. ALL CROSS-HATCHED LINES INDICATE REMOVAL OF EXISTING CONSTRUCTION OR EQUIPMENT.

MECHANICAL DUCTWORK NOTES :

1. ALL DUCTWORK SIZES NOTED ARE FREE AREA SIZES.
2. RADIUS ELBOWS SHALL BE PROVIDED. TURNING VANES SHALL NOT BE PROVIDED UNLESS APPROVED BY CONTRACTOR.
3. ALL DUCT JUNCTIONS SHALL BE CONSTRUCTED OF STANDARD 45 DEGREES ENTRY BRANCHES WITH BALANCING DAMPERS DOWNSTREAM OF DUCT BRANCH ENTRY.
4. MAXIMUM LENGTH OF FLEXIBLE DUCTWORK SHALL CONTAIN IN ANY ONE SUPPLY BRANCH SHALL BE THREE (3) FEET.
5. NO RUN OF FLEXIBLE DUCTWORK SHALL CONTAIN MORE THAN A TOTAL OF 90 DEGREES OF TURN. INSULATED RIGID SHALL BE USED WHERE MORE THAN 90 DEGREES IS REQUIRED.
6. TOTAL STATIC PRESSURE NOTED IN SCHEDULES INCLUDES DUCT SYSTEM, TERMINAL UNITS, FILTERS, COILS, ETC.
7. CEILING DIFFUSER SIZES SHOWN ON FLOOR PLANS ARE NECK SIZES.
8. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF CEILING DIFFUSERS, REGISTERS AND GRILLES.
9. PROVIDE FLEXIBLE DUCT CONNECTION BETWEEN AHU/EXH FAN AND DUCTWORK.
10. FIRE DAMPERS SHALL BE TYPE 'C'.
11. DUE TO THE SMALL SCALE OF THE DRAWINGS, RISERS, AND DROPS ARE NOT ALL SHOWN. PROVIDE RISERS AND DROPS FOR COORDINATION.
12. FIRST FIGURE OF DUCT SIZE INDICATES DIMENSIONS OF FACE SHOWN OR INDICATED.

H.F. LENZ
COMPANY

ENGINEERING

1407 Scalp Avenue
Johnstown, PA 15904-3329
Phone: 814-269-9300
FAX: 814-269-9301
www.hflenzen.com

Seal:

Seal:



Project Identification:

COSHOCTON
PUBLIC LIBRARY

655 MAIN STREET
COSHOCTON, OHIO 43812

BID DOCUMENTS

ISSUES

REVISIONS

Sheet Title:
SYMBOLS, ABBREVIATIONS,
AND NOTES

Project Number: 2022-0204.01

Drawn By: BSH

Checked By: LES

Date: 12/23/22

Copyright: © 2022 H. F. LENZ COMPANY

Drawing Number

M001