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ABBREVIATIONS

ABS	ABSOLUTE	DWH	ELECTRIC WATER HEATER	NL	NIGHT LIGHT
AC	ALTERNATING CURRENT	ENT	ENTERING WATER TEMPERATURE	N.O.	NORMALLY OPEN
AD	AREA DRAIN	EXP	EXPANSION	NO.	NUMBER
AF	ABOVE FINISHED FLOOR	EXT JT	EXPANSION JOINT	NTS	NOT TO SCALE
AGF	AIR GAP FITTING	EXT	EXTERIOR	OA	OUTSIDE AIR
AHU	AIR HANDLING UNIT	F	DEGREE FAHRENHEIT	OD	OUTSIDE DIAMETER
AMP	AMPERE	F	FIRE PROTECTION WATER SUPPLY	OD	OVERFLOW DRAIN
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	FOO	FLOOR CLEANOUT	OED	OPEN END DUCT
APP	APPROVED	FD	FLOOR DRAIN	%	PERCENT
APPROX	APPROXIMATE	FD	FIRE DEPARTMENT CONNECTION	PCR	PUMPED CONDENSATE RETURN
AV	ACID VENT	FHC	FIRE HOSE CABINET	PD	PUMPED DRAIN
AVG	AVERAGE	FMV	FIRE HOSE VALVE	POI	PLUMBING & DRAINAGE INSTITUTE
B.O.P.	BOTTOM OF PIPE	FF	FINISHED FLOOR	PG	PRESSURE GAUGE
BFP	BACKFLOW PREVENTION DEVICE	FLD	FUSIBLE LINK FIRE DAMPER	PH	PHASE-ELECTRICAL
BFV	BUTTERFLY VALVE	FLR	FLOOR	PV	POST INDICATOR VALVE
BHP	BRAKE HORSEPOWER	FO	FUEL OIL	PLB	PLUMBING
BLDG	BUILDING	FD	FUEL OIL	PP	POLYPROPYLENE PIPE
BLV	BALANCING VALVE	FS	FEET PER SECOND	PRV	PRESSURE REDUCING VALVE
BTU	BRITISH THERMAL UNIT	FPS	FEET PER SECOND	PSF	POUNDS PER SQUARE FOOT
BV	BALL VALVE	FS	FLOOR SWITCH	PSI	POUNDS PER SQUARE INCH
BWV	BACKWATER VALVE	FT	FEET	PVC	POLYVINYL CHLORIDE PIPE
CA	COMPRESSED AIR	FU	FIXTURE UNIT	QT	QUART
CA TO C	CENTER TO CENTER	FV	FLUSH VALVE	(R)	REMOVE EXISTING
C/O	CONDENSATE DRAIN	G	NATURAL GAS	(RE)	RELOCATE EXISTING
CFH	CUBIC FEET PER HOUR	GA	GAUGE	RA	RETURN AIR
CFM	CUBIC FEET PER MINUTE	GAL	GALLONS	RD	ROOF DRAIN
CHWR	CHILLED WATER RETURN	GALV	GALVANIZED	R&D	RESEARCH & DEVELOPMENT
CHWS	CHILLED WATER SUPPLY	GPD	GALLONS PER DAY	REQ	REQUIRED
CI	CAST IRON	GPH	GALLONS PER HOUR	RG	RETURN AIR GRILLE
CISP	CAST IRON SOIL PIPE	GPM	GALLONS PER MINUTE	RH	RELATIVE HUMIDITY
CISPI	CAST IRON SOIL PIPE INSTITUTE	GR	GRAINS OF MOISTURE	RM	ROOM
CKT	CIRCUIT	GRD	GROUND	RFM	REVOLUTIONS PER MINUTE
CLG	CEILING	GH	GAS WATER HEATER	RRC	RETURN AIR REGISTER
CO	CLEANOUT	H	ENTHALPY	RWC	RAINWATER CONDUCTOR
CO2	CARBON DIOXIDE	HB	HOSE BIBB	RZBP	REDUCED PRESSURE ZONE BFP
COL	COLUMN	HC	HANDICAP	SA	SHOCK ABSORBER
COND	CONDENSATE	HD	HEAD	SAN	SANITARY WASTE
CONN	CONNECTION	HP	HORSEPOWER	SCH	SCHEDULE
CONT	CONTINUED	HPCR	HIGH PRESSURE CONDENSATE RETURN	SD	SUPPLY AIR DIFFUSER
CONTR	CONTRACTOR	HPSG	HIGH PRESSURE STEAM SUPPLY	SF	SQUARE FEET
CP	CONTROL PANEL	HR	HOUR	SH	SHOWER
CR	CONDENSER RETURN	HS	HOSE STATION	SP	STANDPIPE
CS	CONDENSER SUPPLY	HT	HEIGHT	SPD	SURGE PROTECTION DEVICE
CU FT	CUBIC FEET	HR	HEATER	SPEC	SPECIFICATION
CU IN	CUBIC INCH	HWC	HEATING VENTILATION AIR CONDITIONING	SPR	SPRINKLER
CV	CHECK VALVE	HW	HOT WATER (DOMESTIC)	SQ	SQUARE
CW	COLD WATER (DOMESTIC)	HWR	HOT WATER RETURN (DOMESTIC)	SR	SUPPLY AIR REGISTER
DB	DECIBEL	HWS	HOT WATER RETURN	SS	STAINLESS STEEL
DB	DRY BULB	HWS	HOT WATER SUPPLY	STD	STANDARD
DCSP	DOUBLE CHECK BACKFLOW PREVENTER	HZ	FREQUENCY-ELECTRICAL	STL	STEEL
DD	DECK DRAIN	ID	INSIDE DIAMETER	STR	STRAINER
DEG	DEGREE	ID	INDIRECT DRAIN	STRUC	STRUCTURAL
DEG	DEGREE	IE	INVERT ELEVATION	SUCT	SUCTION
DFU	DRAINAGE FIXTURE UNIT	IW	INDIRECT WASTE	SV	SANITARY VENT
DI	DIONIZED WATER	KW	KILOWATT	SW	SANITARY WASTE VENT
DA	DIAMETER	KWH	KILOWATT HOUR	TAP	TEMPERATURE & PRESSURE RELIEF VALVE
DIS	DISTILLED WATER	LAT	LEAVING AIR TEMPERATURE	TEMP	TEMPERATURE
DISCH	DISCHARGE	LAV	LAVATORY	THERM	THERMOMETER
DN	DOWN	LBS	POUNDS	T.O.P.	TOP OF PIPE
DP	DEEP	LF	LINEAR FEET	TP	TAP PRIMER
DSP	DOWNSPOUT	LL	LOW LEVEL	TP	TRYP
DS	DRY STANDPIPE	LP	LIQUID PROPANE	UL	UNDERWRITER'S LABORATORY
DTR	DUAL TEMPERATURE RETURN	LPCR	LOW PRESSURE CONDENSATE RETURN	UTIL	UTILITY
DTS	DUAL TEMPERATURE SUPPLY	LPCS	LOW PRESSURE CONDENSATE SUPPLY	VAC	VACUUM
DTV	DOUBLE THICK TURNING VANES	LWT	LEAVING WATER TEMPERATURE	VAV	VARIABLE AIR VOLUME
DVC	DRY VACUUM CLEANING	MAU	MAKE-UP AIR UNIT	VB	VACUUM BREAKER
DWG	DRAWING	MAX	MAXIMUM	VD	VOLUME DAMPER
DWR	DOMESTIC WATER RISER	MCH	MECHANICAL	VEL	VELOCITY
(E)	EXISTING	MFR	MANUFACTURER	VERT	VERTICAL
EA	EXHAUST AIR	MH	MANHOLE	VFD	VARIABLE FREQUENCY DRIVE
EAT	ENTERING AIR TEMPERATURE	MIN	MINIMUM	VF	VERIFY IN FIELD
EFF	EFFICIENCY	MISC	MISCELLANEOUS	VOL	VOLUME
EFL	EFFLUENT	MISC	MISCELLANEOUS	VOL	VOLUME
EL	ELEVATION	MOPR	MOTOR OPERATED DAMPER	VPC	VIA PHOTOCELL
ELEC	ELECTRICAL	MPCR	MEDIUM PRESSURE CONDENSATE RETURN	VTC	VIA TIME CLOCK
EMF	ELECTROMOTIVE FORCE	MPH	MILES PER HOUR	VTR	VENT THROUGH ROOF
EQ	EQUAL	W/	WITH	W/	WITH
EQUIP	EQUIPMENT	(N)	NEW	WB	WET BULB TEMPERATURE
ES	EMERGENCY SHOWER	NA	NOT APPLICABLE	WCO	WALL CLEANOUT
ESP	EXTERNAL STATIC PRESSURE	NC	NOISE CRITERIA	WH	WALL HYDRANT
EW	EVAPORATOR	N.C.	NORMALLY CLOSED	WP	WEATHERPROOF
EW	EMERGENCY EYEWASH	NC	NOT IN CONTRACT	W/O	WITHOUT
EW	ELECTRIC WATER COOLER	WSFU	WATER SUPPLY FIXTURE UNITS	YR	YEAR

GENERAL NOTES

- ALL WORK IS TO BE IN COMPLIANCE WITH THE 2018 INTERNATIONAL MECHANICAL CODE. NOT ALL CODE REQUIREMENTS HAVE BEEN DESCRIBED IN THIS SPECIFICATION OR INDICATED ON THE DRAWINGS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BE FAMILIAR AND INSTALL THE WORK IN ACCORDANCE WITH CODES.
- OBTAIN AND PAY FOR BUILDING PERMITS, INSPECTIONS, CONNECTION CHARGES, AND FEES.
- CONTRACTOR IS TO BE ACCREDITED THROUGH ACCA'S QUALITY ASSURANCE CONTRACTOR PROGRAM.
- THE CONTRACTOR IS TO SURVEY AND VERIFY ALL EXISTING CONDITIONS PRIOR TO BID SUBMISSION AND BECOME AWARE OF ALL CONDITIONS WHICH MAY IMPACT THE ASSOCIATED COSTS (MATERIALS/LABOR) DURING THE COURSE OF CONSTRUCTION. CONTRACTOR IS TO BE CONSIDERED PROOF THAT THIS REQUIREMENT HAS BEEN MET.
- DRAWINGS AND SPECIFICATIONS ARE INTENDED TO BE TAKEN AS A WHOLE. IF A CONFLICT OR CONTRADICTION EXISTS BETWEEN THE DRAWINGS AND SPECIFICATIONS, THE MORE STRINGENT WILL APPLY. THE ARCHITECT'S AND ENGINEER'S INTERPRETATION OF THE DOCUMENTS ARE TO BE BINDING UPON THE CONTRACTOR.
- ALL WORK IS TO BE COORDINATED WITH AND APPROVED BY THE OWNER PRIOR TO ANY SHUT-DOWNS. ALL REQUESTS ARE TO BE SUBMITTED, IN WRITING, TO THE OWNER 24 TO 48 HOURS PRIOR TO REQUESTED TESTING.
- COORDINATE LOCATIONS AND ROUGH-IN REQUIREMENTS WITH ALL TRADES PRIOR TO INSTALLATION.
- COORDINATE ALL ELECTRICAL REQUIREMENTS WITH THE ELECTRICAL CONTRACTOR PRIOR TO PURCHASING EQUIPMENT. VERIFY ALL VOLTAGE AND AMPERE REQUIREMENTS FOR FLEXIBLES, AND MOOP DEVICES.
- ALL EXTERIOR WALL/ ROOF PENETRATIONS ARE TO BE SEALED, AIR AND WATER-TIGHT. ALL PIPING PASSING THROUGH WALL OR FLOOR PENETRATIONS IS TO HAVE SLEEVES. ALL WALL OR FLOOR-RATED PENETRATIONS ARE TO BE SEALED WITH FIRE-RATED SEALANT FORMED IN PLACE (BY 3M OR MILT).
- PROVIDE ALL ACCESS DOORS FOR ALL VALVES, DAMPERS, DEVICES, CONTROLLERS, ETC. WHICH MAY REQUIRE SERVICE. ALL ACCESS PANELS ARE TO BE 16 GAUGE STEEL FRAME, OR GAUGE HANDED DOOR, LOCKABLE, AND FIRE-RATED (WHEN INSTALLED IN RATED WALLS, ELECTRICAL, ETC. LABEL, 1-1/2 HOURS). FINISH AS SELECTED BY THE ARCHITECT.
- SUBMIT SHOP DRAWINGS FOR ALL EQUIPMENT TO BE REVIEWED BY THE ENGINEER PRIOR TO ORDERING. COORDINATE ALL ELECTRICAL REQUIREMENTS WITH ELECTRICAL CONTRACTOR, AND PHYSICAL DIMENSIONS PRIOR TO SHOP DRAWING SUBMISSION.
- SUBMIT SHOP DRAWINGS OF ALL SHEET METAL FOR REVIEW. DRAWINGS ARE TO BE NOT LESS THAN 1/4"X11"-0" SCALE AND ARE TO INDICATE ALL STEEL PIPING, CONDENSATE PIPING METHODS, LIGHTING FIXTURES, SPRINKLER EQUIPMENT, AND ARCHITECTURAL FEATURES. DUCTWORK IS TO BE INDICATED DOUBLE-LINE. INDICATE DETAIL OF FIRE DAMPER. SHEET METAL SHOP DRAWING WILL BE UTILIZED FOR CONTRACTOR'S COORDINATION DRAWINGS AND IS TO BE SUBMITTED FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION. IF SHEET METAL SHOP DRAWINGS ARE NOT SUBMITTED, OR IF THE CONTRACTOR INSTALLS THE DUCTWORK WITHOUT PRIOR APPROVALS, THE CONTRACTOR IS TO ASSUME ALL RESPONSIBILITIES AND FIELD COORDINATION, AND PAY ALL ASSOCIATED COSTS ASSOCIATED WITH DUCTWORK INSTALLATION DEFICIENCIES, AND FIELD COORDINATION ISSUES.
- AHRI CERTIFICATES FOR ALL AIR HVAC UNITS ARE REQUIRED TO BE PROVIDED FOR APPROVAL DURING THE EQUIPMENT SUBMITTAL PROCESS.
- ALL DUCTWORK IS TO COMPLY WITH NFPA PAMPHLET 90 A. ALL DUCTWORK SEAMS ARE TO BE SEALED WITH LOW V.O.C. DUCT SEALANT. ALL NEW DUCTWORK SECTIONS AND FITTINGS TO BE INSTALLED ON THE PROJECT ARE TO BE COVERED AND SEALED FROM DUST, DIRT, AND DEBRIS. FIBERGLASS DUCTBOARD IS NOT ACCEPTABLE. ALL DUCT SIZES ARE INTERNAL. AIRFLOW DIMENSIONS, WHERE LISTED, ARE TO BE USED. THE DUCT SHALL BE EXPANDED ACCORDINGLY.
- PROVIDE THIRD-PARTY TEST, BALANCE, AND ADJUST REPORT AT THE COMPLETION OF THE WORK. BALANCE AIR QUANTITIES AND FLOW RATES TO VALUES AS IDENTIFIED ON THE DRAWINGS. SET DAMPER AND VALVE POSITIONS. ALLOW FOR ONE SWEAT CHANGE PER EACH (SQR) OF THE HVAC SYSTEMS. PROVIDE TOTAL AND STATIC PRESSURE READINGS, TRAVELERS AT FAN INLETS AND OUTLETS, READ PUMP PRESSURE, AMPERAGE, CPMS, RPMs AND IDENTIFY OPERATING POINT ON THE IMPELLER CURVE. T.B.A. CONTRACTOR IS TO BE INDEPENDENT, AND ABC/ NEBB CERTIFIED.
- DUCT LEAKAGE TESTS ARE TO BE PERFORMED IN ACCORDANCE WITH THE PROJECT'S SPECIFIED ENERGY STAR REQUIREMENTS.
- AIR BALANCING, AND COMMISSIONING IS TO BE PERFORMED FOR EACH UNIT, AND SYSTEM. REPORTS ARE TO BE SUBMITTED PRIOR TO THE FINAL ACCEPTANCE OF ANY UNIT, OR SYSTEM.
- ALL WORK IS TO BE CONCEALED, UNLESS OTHERWISE INDICATED.
- NO PVC PIPING IS PERMITTED IN RETURN AIR PLENUMS. ALL EXISTING PVC PIPING LOCATED IN PLENUMS IS TO BE INSULATED WITH 1" PLENUM-RATED FIBERGLASS INSULATION WITH VAPOR BARRIER, AND IS TO COMPLY WITH FLAME SPREAD OF 25 AND SMOKE DEVELOPED RATING OF 50.
- HEATING AND COOLING SYSTEMS FOR THE PROJECT HAVE BEEN "RIGHT-SIZED" ACCORDING TO ENERGY-STAR, AND THE ACCA MANUAL "C" CALCULATION GUIDELINES AND PROCEDURES. TO MAINTAIN COMFORT, TEMPERATURE, AND HUMIDITY LEVELS, THE HEATING AND COOLING SYSTEMS ARE TO BE IN OPERATION AT ALL TIMES. SYSTEM "SET-BACK" IS PERMITTED. EQUIPMENT IS NOT TO BE SHUT-OFF, OR DE-ENERGIZED ON A DAILY BASIS. REGULAR SYSTEM SHUT-DOWNS, REQUIRE EXCESSIVE TIME TO REGAIN CONTROL OVER SET-POINT TEMPERATURE. ALL RESIDENTS ARE TO BE INSTRUCTED ON OPERATION, AND MAINTENANCE OF THESE SYSTEMS.
- PROVIDE ALL FUNCTIONAL TESTING REQUIRED BY ENERGY STAR MULTIFAMILY NEW CONSTRUCTION VERSION 1/1.1/12/ (REV.01). THIS INCLUDES FILLING OUT ALL REQUIRED DOCUMENTS, INCLUDING BUT NOT LIMITED TO:
 - REFRIGERANT CHARGE
 - INDOOR HVAC FAN ARIELOW
 - AIR BALANCING OF SUPPLY REGISTERS AND RETURN GRILLES
 - INDOOR/TERMINAL UNITS
 - VRF OUTDOOR UNIT
 - CENTRAL BOILERS
 - COOLING TOWERS
 - CHILLERS
- ALL RESIDENTIAL AIR HANDLERS ARE TO BE PROVIDED WITH ECM VARIABLE SPEED BLOWER MOTORS. AIR HANDLERS FOR NON-RESIDENTIAL AREAS MAY BE CONSTANT VOLUME IN ORDER TO SATISFY VENTILATION REQUIREMENTS (THIS EQUIPMENT IS TO BE PROVIDED WITH HAME ECM DIRECT DRIVE MOTORS, WHERE AVAILABLE). VENTILATION IS TO BE REDUCED TO MINIMUM CODE REQUIREMENTS FOR ENERGY CONSERVATION. VENTILATION IS TO BE CLOSED-OFF WITH MOTOR OPERATED DAMPERS WHEN IN "UNOCCUPIED" MODE.
- ALL CLOSED, GRADE-MOUNTED CONDENSING UNIT EQUIPMENT IS TO BE SUPPORTED ON EQUIPMENT WITH RAISED FEET THAT ELEVATE THE UNIT A MINIMUM OF 0'-4" ABOVE A 4"X4" PORTLAND CEMENT PAD WITH W/2 (WELDED WIRE FABRIC) REINFORCEMENT. THE PAD IS TO BE INSTALLED ON COMPACTED SOIL WITH A MINIMUM OF 0'-4", CRUSHED STONE SUB-BASE.
- CONTRACTOR IS TO MAINTAIN A MINIMUM OF 3" CLEARANCE IN FRONT OF ALL FURNACE/ COOLING COIL EQUIPMENT FOR SERVICING. COORDINATE WATER HEATER INSTALLATION WITH THE PLUMBING CONTRACTOR TO MAINTAIN ALL SERVICE CLEARANCES. FURNACE ASSEMBLY IS TO BE EASILY REMOVED WITHOUT IMPACTING THE WATER HEATER INSTALLATION. THIS APPLIES TO ALL WATER HEATER INSTALLATIONS.
- REFRIGERANT LINE-SETS ARE TO BE SIZED, AND EXTENDED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. LINE LENGTH AND HEIGHT RESTRICTIONS MUST BE OBEYED. CONTRACTOR IS TO SUBMIT MANUFACTURER'S GUIDELINES/ LIMITATIONS IN ORDER TO DEMONSTRATE THAT THE INSTALLATION IS IN COMPLIANCE.
- CONTRACTOR IS TO COORDINATE ALL EQUIPMENT LOCATIONS WITH STRUCTURAL DRAWINGS, AND FRAMING INSTALLER TO VERIFY THAT THE FRAMING SPACING ALLOWS SUPPLY, AND RETURN PLENUMS TO BE INSTALLED DIRECTLY ABOVE THE UNIT WITHOUT THE USE OF ELBOWS. THIS IS TO BE DONE PRIOR TO FRAMING.
- DUCTWORK IS NOT PERMITTED TO BE INSTALLED OVER ELECTRICAL EQUIPMENT (SWITCHGEAR, PANELBOARDS, PULL-BOXES, ETC.). CONTRACTOR IS TO COORDINATE WITH THE ELECTRICAL CONTRACTOR PRIOR TO ANY ROUGH-IN. COORDINATE RELOCATION OF ELECTRICAL EQUIPMENT WHEN DUCTWORK IS CONTROLLED BY STRUCTURE.
- ALL DUCTWORK IS TO BE INSTALLED IN CEILING SPACE OR SOFFIT UNLESS NOTED OTHERWISE. ALL DUCTWORK IS TO BE SEALED WITH LOW V.O.C. MASTIC. NO TAPES WILL BE ALLOWED. MASTIC ALL FINAL DUCT CONNECTIONS TO UNITS, SCREEN HOLES, CABINET, AND COIL SEAMS.
- WITHOUT EXCEPTION, ALL DUCTWORK IS TO BE INSTALLED ON THE INSIDE OF THERMAL ENVELOPE. DUCTWORK WILL NOT BE PERMITTED TO BE INSTALLED WITHIN CRAWLSPACE, ATTIC SPACE, EXTERIOR WALLS, EXTERIOR CEILING, OR FLOORS.
- HVAC SUPPLY MAIN DUCTWORK COMPONENTS ARE TO EXTEND THROUGH OPEN-WEB TRUSS, AND BETWEEN TRUSSES UNLESS OTHERWISE NOTED. CONTRACTOR IS TO COORDINATE ALL DUCTWORK INSTALLATIONS WITH STRUCTURAL DRAWINGS, SPECIFICATIONS, AND TRUSS MANUFACTURER REQUIREMENTS. CONTRACTOR IS NOT PERMITTED TO CUT ANY TRUSSES, OR ALTER ANY TRUSSES UNLESS AUTHORIZED BY THE MANUFACTURER. CONTRACTOR IS TO COORDINATE ALL WALL AND JOIST FRAMING TO ENSURE THAT DUCTWORK MAY PASS FREELY IN THE CEILING SPACE WITH MINIMAL TURNS. SOFFITS ARE TO BE CONSTRUCTED FOR ANY DUCTWORK REQUIRED BELOW AN UNCONDITIONED ATTIC SPACE SO DUCTWORK DOES NOT INTERFERE WITH THE THERMAL ENVELOPE, AND/ OR AIR BARRIERS. A DUAL (PRE-ROCKED) DRYWALL AIR BARRIER IS TO BE INSTALLED ABOVE ANY DUCTWORK WITHIN A SOFFIT PRIOR TO INSTALLATION.
- FLEXIBLE, INSULATED SUPPLY DUCT CONNECTIONS NOT EXCEEDING 10'-0" IN TOTAL LENGTH ARE TO BE ALLOWED FOR CONNECTING REGISTERS TO MAIN SUPPLY MAIN DUCTWORK COMPONENTS. FLEXIBLE DUCTWORK IS TO BE INSTALLED AS STRAIGHT AS POSSIBLE AND IS TO BE SUPPORTED TO PREVENT CRAMPING. NO FLEXIBLE DUCTWORK IS PERMITTED FOR RETURN-AIR, OR EXHAUST.
- NO DUCTWORK IS TO PENETRATE ANY FIRE-RATED ASSEMBLY UNLESS IDENTIFIED ON PLANS. WHERE DUCTWORK PASSES THROUGH FIRE-RATED FLOOR ASSEMBLIES, OR PARTY WALLS, CONTRACTOR IS TO PROVIDE FUSIBLE-LINK FIRE DAMPERS, OR RADIANE DEVICES AS REQUIRED TO MAINTAIN FIRE RATING. PROVIDE ACCESS PANELS FOR ALL DAMPER LOCATION.
- ALL SUPPLY DUCTWORK INSTALLED DIRECTLY OVER BATHROOM CEILING (WITH TUB, OR SHOWER) IS TO BE EXTERNALLY WRAPPED WITH DUCT-WRAP INSULATION TO PREVENT CONDENSATION. CONTRACTOR IS TO AVOID INSTALLING DUCTWORK IN THESE AREAS, OR USE PRE-INSULATED, FLEXIBLE DUCTWORK WHEREVER POSSIBLE.
- ZERO-RADIUS, THROAT ELBOWS ARE PROHIBITED. ALL DUCTWORK TRANSITIONS ARE TO BE GRADUAL, AND SMOOTH. ABRUPT ELBOWS ARE NOT PERMITTED UNLESS TURNING VANES ARE PROVIDED. ALL ELBOWS ARE TO HAVE AN INNER THROAT RADIUS, AND AN OUTER HELL RADIUS. ALL TAKE-OFFS ARE TO HAVE A 45° CNT. REFER TO DUCTWORK DETAILS FOR ADDITIONAL INFORMATION.
- ALL VOLUME DAMPERS ARE TO BE ACCESSIBLE. INSTALL ACCESS PANELS WHERE REQUIRED. LOCATE DUCTWORK SO ACCESS PANELS ARE ABOVE CLOSETS, OR OTHER DISCREET AREAS.
- DRYER DUCTWORK IS TO BE 4" O.D. RIGID-METAL, AND IS TO BE INSTALLED IN ACCORDANCE WITH DRYER MANUFACTURER'S REQUIREMENTS (PENROSE STANDARD IS MANDATORY). DRYER VENTS ARE TO BE 4" METAL-TYPE WITH 4" OPENING. PROVIDE BACKDRAFT DAMPER INSTALLED 1'-0" ABOVE FINISHED GRADE. MINIMUM DUCTWORK JOINTS ARE TO BE SEALED WITH METALLIC TAPE. DRYER VENT BACK-PRESSURE IS NOT TO EXCEED 3/4" WC. EACH DRYER DUCTWORK SYSTEM IS TO BE DEDICATED TO ONE DRYER (DO NOT COMBINE DUCTWORK SYSTEMS). DRYER DUCTWORK IS INSTALLED AS STRAIGHT AS POSSIBLE WITH MINIMAL ELBOWS. ELBOWS ARE TO BE LONG SWEEP WHEREVER POSSIBLE. PLASTIC DUCTWORK IS PROHIBITED.
- DRYER MAKE-UP AIR IS TO BE PROVIDED IN ALL DRYER ROOMS. FOR SPACES WITH MULTIPLE DRYERS, MAKE-UP AIR-SOURCE DUCTWORK IS TO BE PROVIDED AND IS TO BE LINKED WITH DRYER OPERATION. COORDINATE ALL REQUIREMENTS WITH THE EQUIPMENT MANUFACTURER.
- A KITCHEN HOOD WITH BACKDRAFT DAMPER IS TO BE PROVIDED OVER RANGES, AND/ OR COOK-TOPS. CONTRACTOR IS TO PROVIDE ALL DUCTWORK AND WALL OR ROOF CAP. REFER TO HOOD EQUIPMENT MANUFACTURER'S INSTRUCTIONS FOR ADDITIONAL REQUIREMENTS. DUCTWORK LENGTHS ARE NOT TO EXCEED THE MANUFACTURER'S RECOMMENDATIONS.
- ALL THERMOSTATS ARE TO HAVE CONDENSER START-UP DELAY CONTROL TO PREVENT DAMAGE TO CONDENSING UNIT FROM REPEATED START-UPS. THERMOSTATS IN COMMON AREAS ARE TO HAVE LOCKABLE, TAMPERPROOF COVERS, OR LOCK-OUT CODE. THERMOSTATS ARE TO BE 24-HOUR, 7-DAY PROGRAMMABLE. THERMOSTAT DISPLAYS IN RESIDENTIAL AREAS ARE TO BE EASY-TO-READ. THERMOSTAT OPERATION IS TO BE AS SIMPLE AS POSSIBLE FOR RESIDENTIAL DEVICES.
- ALL VOLUME DAMPERS ARE TO BE ACCESSIBLE. INSTALL ACCESS PANELS WHERE REQUIRED. LOCATE DUCTWORK SO ACCESS PANELS ARE ABOVE CLOSETS, OR OTHER DISCREET AREAS.
- ALL VISIBLE AIR DEVICES ARE TO BE CENTERED OVER WINDOWS, OR WALLS WHEREVER POSSIBLE. COORDINATE ALL FINAL LOCATIONS WITH ARCHITECTURAL DRAWINGS, AND ELEVATIONS.
- ALL RETURN REGISTERS ARE TO BE NON-CLOSING FILTER GRILLES (HART & COOLEY 673, OR APPROVED EQUAL). FILTERS ARE TO BE ACCESSIBLE. IF FILTERS ARE INSTALLED IN A FILTER RACK, THE RACK IS TO HAVE DASKED, AIRTIGHT ACCESS TO COMPLETELY SEAL THE SLIDE-IN FILTER SLOT. FAILURE TO SEAL FILTER SLOTS WILL RESULT IN SELECTED LEAKAGE TESTING RESULTS.
- ALL AIR DIFFUSER AND REGISTER EQUIPMENT IN DWELLING UNITS ARE TO BE READILY ADJUSTABLE BY OCCUPANT. ALL AIR DIFFUSER AND REGISTER EQUIPMENT IN COMMON, OR PUBLIC SPACES ARE TO NOT HAVE FACE VOLUME CONTROL (THEY ARE TO BE BALANCED VIA VOLUME DAMPER).

DESIGN NOTES

- DESIGN CONDITIONS

SIZING, DESIGN AND PERFORMANCE OF THE HEATING AND COOLING SYSTEMS ARE BASED ON THE FOLLOWING DESIGN CHARACTERISTICS. MODIFICATION OF ANY OF THESE CHARACTERISTICS MAY ADVERSELY AFFECT THE HEATING AND COOLING PERFORMANCE AND LEVEL OF COMFORT TO THE BUILDING OCCUPANTS.

WEATHER STATION LOCATIONS - NEW WINDSOR, NY
 HEATING DEGREE DAYS = 4589

OUTDOOR:
 WINTER DRY BULB 3.5F
 SUMMER DRY BULB 87.0F
 SUMMER WET BULB 71.3F

INDOOR:
 WINTER DRY BULB 70F
 SUMMER DRY BULB 75F

PROJECT DEDUCT/ADD ALTERNATES

- REFER TO FLOOR PLANS.

DRAWING LIST

MOUNT SAINT MARY COLLEGE- GUZMAN HALL		Issued for Permit	Issued for Bid Set	Issued for Addendum 1	Issued for Bid Revision #2
		07/19/21	08/27/2021	09/23/2021	11/22/2021
M0.1	COVER SHEET	●	●	●	●
DM1.1	GROUND FLOOR DEMO PLAN	●	●	●	●
DM1.2	FIRST FLOOR DEMO PLAN	●	●	●	●
M1.1	GROUND FLOOR PLAN	●	●	●	●
M1.2	FIRST FLOOR PLAN	●	●	●	●
M2.1	DETAILS & SCHEDULES	●	●	●	●
M2.2	DETAILS & SCHEDULES	●	●	●	●
M2.3	DETAILS & SCHEDULES	●	●	●	●
M2.4	DETAILS & SCHEDULES	●	●	●	●
M2.5	DETAILS & SCHEDULES	●	●	●	●
M2.6	DETAILS & SCHEDULES	●	●	●	●
M2.7	DETAILS & SCHEDULES	●	●	●	●

MOUNT SAINT MARY COLLEGE, GUZMAN HALL
COMMUNITY WELLNESS CENTER
 330 POWELL AVE.
 NEWBURGH, NY 12550

Construction Issue Date:
 Drawn By: AFMTZ/PR
 Progress Prints:
 Bid Set: 08/09/21
 Checked By:
 Scale: AS NOTED

COVER SHEET -
 MECHANICAL
 Revisions:
 1
 2
 3
 4

THE DELIVERY OF THIS DRAWING SHOULD NOT BE CONSTRUED TO PROVIDE AN EXPRESS WARRANTY OR GUARANTEE TO ANYONE THAT ALL THE DIMENSIONS AND DETAILS ARE EXACT OR TO INDICATE THAT THE USE OF THIS DRAWING IMPLIES THE REVIEW AND APPROVAL BY THE DESIGN PROFESSIONAL OF ANY FUTURE USE. ANY USE OF THIS INFORMATION WITHOUT THE WRITTEN APPROVAL BY THE DESIGN PROFESSIONAL IS AT THE SOLE RISK AND LIABILITY OF THE USER. THE DESIGN PROFESSIONAL RESERVES THE RIGHT TO REMOVE OUR PROFESSIONAL SEAL AND/OR TITLE BLOCK.

NOTICE
 THE SCHEDULES AND DRAWINGS REPRESENT ONLY CERTAIN REQUIREMENTS IN THE SPECIFICATIONS BOOKLET WHICH THE CONTRACTOR IS BOUND TO PROVIDE. A SUPPLIER OR CONTRACTOR'S PRICING, WHICH IS BASED ONLY ON DRAWINGS OR SCHEDULES, MAY LEAVE IMPORTANT COSTS UNACCOUNTED FOR WHICH WILL ULTIMATELY BE THE CONTRACTOR OR SUPPLIER'S RESPONSIBILITY TO PROVIDE.

M0.1