

MECHANICAL SYMBOL LEGEND			
NOTES: 1. ALL SYMBOLS MAY NOT APPLY.			
	CODED PLAN NOTE		DETAIL # SHEET #
	EQUIPMENT DESIGNATION		REFERENCE TAG
	POINT OF CONNECTION		THERMOSTAT
	HUMIDISTAT		REMOTE SENSOR
	CO2 SENSOR		CO SENSOR
	RECTANGULAR SUPPLY DUCT RISER		DUCT MOUNTED SMOKE DETECTOR
	RECTANGULAR RETURN DUCT RISER		ROUND SUPPLY DUCT RISER
	RECTANGULAR EXHAUST DUCT RISER		ROUND RETURN DUCT RISER
	90 DEGREE TURNING VANE		ROUND EXHAUST DUCT RISER
	RECTANGULAR DUCT TRANSITION		45 DEGREE TURNING VANE
	DIRECTION OF AIR FLOW		ROUND DUCT TRANSITION
	VERTICAL FIRE DAMPER		FIRE DAMPER
	VOLUME DAMPER WITH BLADES		VOLUME DAMPER
	SMOKE DAMPER		FIRE SMOKE DAMPER
	VERTICAL FIRE SMOKE DAMPER		MOTORIZED DAMPER
	SUPPLY AIR DIFFUSER		RETURN AIR GRILLE / REGISTER
	EXHAUST AIR GRILLE / REGISTER		
SINGLE LINE DUCTWORK			
	NEW DUCTWORK		EXISTING DUCTWORK TO BE REMOVED
	RECTANGULAR RADIUS ELBOW		RECTANGULAR ELBOW WITH TURNING VANES
	ROUND RADIUS ELBOW		90 DEGREE SUPPLY AIR ELBOW UP/DOWN
	90 DEGREE RETURN AIR ELBOW UP/DOWN		90 DEGREE EXHAUST AIR ELBOW UP/DOWN
	90 DEGREE ROUND DUCT UP/DOWN		SHAPE TRANSITION
	SIZE TRANSITION		FLEXIBLE DUCT TAP
	TEE WITH SQUARE ELBOWS, TURNING VANES, AND SPLITTER DAMPER		ROUND DUCT TAKEOFF WITH DAMPER
	RECTANGULAR DUCT BEVELED TAP		
DOUBLE LINE DUCTWORK			
	NEW DUCTWORK		EXISTING DUCTWORK TO BE REMOVED
	RECTANGULAR RADIUS ELBOW		RECTANGULAR ELBOW WITH TURNING VANES
	ROUND RADIUS ELBOW		90 DEGREE SUPPLY AIR ELBOW UP/DOWN
	90 DEGREE RETURN AIR ELBOW UP/DOWN		90 DEGREE EXHAUST AIR ELBOW UP/DOWN
	90 DEGREE ROUND DUCT UP/DOWN		SHAPE TRANSITION
	SIZE TRANSITION		FLEXIBLE DUCT TAP
	TEE WITH SQUARE ELBOWS, TURNING VANES, AND SPLITTER DAMPER		ROUND DUCT TAKEOFF WITH DAMPER
	RECTANGULAR DUCT BEVELED TAP		

MECHANICAL NOTATIONS					
AC	AIR CONDITIONING	EG#	EXHAUST GRILLE	MIN	MINIMUM
ACCU	AIR COOLED CONDENSING UNIT	EL	ELEVATION	MISC	MISCELLANEOUS
ACU	AIR CONDITIONING UNIT	ELEC	ELECTRICAL	MPR	MEDIUM PRESSURE STEAM RETURN
AFF	ABOVE FINISHED FLOOR	ELEV	ELEVATOR	MPS	MEDIUM PRESSURE STEAM SUPPLY
AFG	ABOVE FINISHED GRADE	EM	EMERGENCY	NO / #	NUMBER
AHU	AIR HANDLING UNIT	ERU#	ENERGY RECOVERY UNIT	NTS	NOT TO SCALE
ALT	ALTERNATIVE	EQUIP	EQUIPMENT	OA	OUTSIDE AIR
AMB	AMBIENT	ETR	EXISTING TO REMAIN	OAU	OUTSIDE AIR UNIT
AP	ACCESS PANEL	EUH#	ELECTRIC UNIT HEATER	OC	ON CENTER
APPROX	APPROXIMATE	EXH	EXHAUST	OD	OUTSIDE DIAMETER
ARCH	ARCHITECTURAL	EXISTE	EXISTING	PC	PLUMBING CONTRACTOR
ARV	AIR RELIEF VALVE	EXP	EXPLOSION PROOF	PSI	POUNDS PER SQUARE INCH
ATV	AIR TURNING VANE	EXT	EXTERIOR	PVC	POLYVINYL CHLORIDE
AUTO	AUTOMATIC	F-#	FURNACE	R	RADIUS
B#	BOILER	FC#	FAN COIL UNIT	RA	RETURN AIR
BD	BAROMETRIC DAMPER	FD	FIRE DAMPER	RG-#	RETURN AIR GRILLE
BDD	BACK DRAFT DAMPER	FEV	FLUE EXHAUST VENT	REQD	REQUIRED
BHP	BRAKE HORSEPOWER	FLR	FLOOR	RL	REFRIGERANT LIQUID
BOP	BOTTOM OF PIPE	FFM	FEET PER MINUTE	RM	ROOM
BLDG	BUILDING	FIS	COMBINATION FIRE/SMOKE DAMPER	RPM	REVOLUTIONS PER MINUTE
CAB	CABINET	FS-#	FILTRATION SYSTEM	S	SMOKE DAMPER
CD-#	CEILING DIFFUSER	FSC	FIRE SUPPRESSION CONTRACTOR	SA	SUPPLY AIR
CIA	COMBUSTION INTAKE AIR	FT	FEET	SD-#	SUPPLY AIR DIFFUSER
CFM	CUBIC FEET PER MINUTE	GA	GAUGE	SG-#	SUPPLY AIR GRILLE
CHP	CHILLED WATER PUMP	GALV	GALVANIZE(D)	SP	STATIC PRESSURE
CHWR	CHILLED WATER RETURN	GAL	GALLON	SPEC(S)	SPECIFICATION(S)
CHWS	CHILLED WATER SUPPLY	GC	GENERAL CONTRACTOR	STD	STANDARD
CL	CENTERLINE	GPM	GALLONS PER MINUTE	SUC	SITE UTILITY CONTRACTOR
CLG	CEILING	H	HEIGHT / HIGH	TEMP	TEMPERATURE
COL	COLUMN	HC	HVAC CONTRACTOR	TYP	TYPICAL
COND	CONDENSATE	HP	HORSE POWER	UH-#	UNIT HEATER
CPSR	COMPRESSOR	HPR	HIGH PRESSURE STEAM RETURN	UNO	UNLESS NOTED OTHERWISE
CT-#	COOLING TOWER	HPS	HIGH PRESSURE STEAM SUPPLY	UV	UNIT VENTILATOR
CUH-#	CABINET UNIT HEATER	HVAC	HEATING / VENTING / AIR CONDITIONING	V	VENT
CWP	CONDENSER WATER PUMP	HWP	HOT WATER PUMP	VAV	VARIABLE AIR VOLUME
CWR	CONDENSER WATER RETURN	HWR	HOT WATER RETURN	VD	VOLUME DAMPER
CWS	CONDENSER WATER SUPPLY	HWS	HOT WATER SUPPLY	VEL	VELOCITY
D	DEPTH / DEEP	ID	INSIDE DIAMETER	VFD	VARIABLE FREQUENCY DRIVE
DB	DRY BULB TEMPERATURE	INSUL	INSULATION / INSULATE	VIF	VERIFY IN FIELD
DCW	DOMESTIC COLD WATER	KW	KILOWATTS	VTR	VENT THROUGH ROOF
DHW	DOMESTIC HOT WATER	L	LENGTH / LONG	VVB	VARIABLE VOLUME BOX
DIA / Ø	DIAMETER	LPR	LOW PRESSURE STEAM RETURN	VVF	VARIABLE VOLUME FAN POWERED
DIFF	DIFFUSER	LPS	LOW PRESSURE STEAM SUPPLY	VVR	VARIABLE VOLUME REHEAT
DISCH	DISCHARGE	LVR	LOUVER	W	WIDTH / WIDE
DWG	DRAWING	M	METER	WI	WITH
E	EXISTING	MAX	MAXIMUM	W/O	WITHOUT
EC	ELECTRICAL CONTRACTOR	MC	MECHANICAL CONTRACTOR	WB	WET BULB TEMPERATURE
EF-#	EXHAUST FAN	MECH	MECHANICAL	WCC	WATER COOLED CHILLER
EFF	EFFICIENCY	MFR	MANUFACTURER	WH-#	WATER HEATER

MECHANICAL LINETYPE LEGEND	
---	GENERAL DEMO
---	GENERAL EXISTING
---	CHILLED WATER RETURN
---	CHILLED WATER SUPPLY
---	COMPRESSED AIR
---	CONDENSATE DRAIN
---	CONDENSER WATER RETURN
---	CONDENSER WATER SUPPLY
---	HOT WATER HYDRONIC RETURN
---	HOT WATER HYDRONIC SUPPLY
---	LOW PRESSURE CONDENSATE
---	LOW PRESSURE STEAM
---	MEDIUM PRESSURE CONDENSATE
---	MEDIUM PRESSURE STEAM
---	NITROGEN
---	NITROUS
---	OXYGEN
---	REFRIGERANT LIQUID
---	REFRIGERANT SUCTION
---	VACUUM

ALL OTHER LINETYPES DENOTED WITH:  
(AB) = ABANDONED; (D) = DEMO; (E) = EXISTING

- GENERAL NOTES:**
- REFER TO MECHANICAL SCHEDULE FOR FLEX DUCT RUN OUT SIZING.
  - ROUTE TOILET EXHAUST AND OUTSIDE AIR DUCTWORK THROUGH IN ATTIC SPACE. CONTRACTOR SHALL COORDINATE WITH STRUCTURAL PRIOR TO INSTALLATION.
  - CONTRACTOR SHALL COORDINATE DUCTWORK ROUTING THROUGH ATTIC SPACE TO AVOID STRUCTURAL, ARCHITECTURAL, ELECTRICAL CONFLICT.
  - TOILET EXHAUST FANS SHALL HAVE INTEGRAL BACKDRAFT DAMPERS.
  - THE MECHANICAL CONTRACTOR SHALL COORDINATE THE SUPPLY DUCT DISCHARGE FLENUM AT EACH AIR HANDLER WITH STRUCTURE PRIOR TO INSTALLATION.
  - MAINTAIN A MINIMUM OF 3'-0" FROM EXHAUST TO ALL OPERABLE DOOR AND WINDOW OPENINGS.
  - LINE ALL SHEETMETAL DUCTWORK A MINIMUM OF 10'-0" (OR AS INDICATED) DOWNSTREAM OF ALL AIR HANDLING UNITS. DUCT LINER SHALL BE 1" THICK 3 LB/FT<sup>2</sup> DENSITY MINIMUM R VALUE = 4.0 OR AS REQUIRED BY APPLICABLE ENERGY CODES, CERTAINTED "TOUGHGUARD 2" OR EQUAL BY KNAUF OR JOHNS-MANVILLE. THE LEADING EDGE OF THE DUCT LINER SHALL HAVE A SHEETMETAL NOSING.
  - MOUNT TOP OF THERMOSTATS A MAXIMUM OF 4'-0" AFF UNLESS NOTED OTHERWISE. PROVIDE CLEAR LOCKING GUARD ASSEMBLIES FOR ALL PUBLIC AREA THERMOSTATS. COVER SHALL BE ADA COMPLIANT. COORDINATE THERMOSTAT LOCATIONS WITH OTHER TRADES. ALL THERMOSTAT LOCATIONS SHALL BE ADA COMPLIANT. ALL THERMOSTATS MUST HAVE AN ON/OFF BUTTON.
  - ALL WORK SHALL BE COORDINATED AND PERFORMED WITH PRIOR APPROVAL FROM THE OWNER TO SUIT HIS OPERATING CONDITIONS.
  - ALL PIPE AND DUCT PENETRATIONS OF FIRE AND/OR SMOKE-RATED ASSEMBLIES SHALL BE FIRE-STOPPED AS REQUIRED TO RESTORE THE ASSEMBLY TO ITS ORIGINAL INTEGRITY. FIRE BARRIER PRODUCTS SHALL BE AS MANUFACTURED BY TREMCO, HILTI, 3M OR APPROVED EQUAL.
  - PROVIDE ACCESS PANELS IN NON-ACCESSIBLE CEILING AND IN WALL STRUCTURE TO ALLOW ADEQUATE ROOM FOR MAINTENANCE OF EQUIPMENT AND BALANCING OF SYSTEMS. ACCESS PANELS IN CEILING AND WALLS SHALL BE PROVIDED WHERE SHOWN ON THE DRAWINGS OR NECESSARY TO ACCESS DAMPERS, VALVES, ETC. COORDINATE EXACT LOCATION OR ALL ACCESS PANELS WITH THE ARCHITECT DURING THE SHOP DRAWING PROCESS.
  - ALL MECHANICAL EQUIPMENT SHALL BE LABELED WITH A SEMI-RIGID PLASTIC LAMINATE NAMEPLATE WITH 2" HIGH WHITE LETTERS ON A BLACK BACKGROUND SECURELY AFFIXED TO THE EQUIPMENT. THE NAMEPLATE SHALL SHOW THE EQUIPMENT TAG USED ON THESE DRAWINGS. ON RESIDENTIAL PROJECTS, THE NAMEPLATE ON THE OUTDOOR EQUIPMENT SHALL INDICATE THE DWELLING UNIT NUMBER IT SERVES AS WELL AS THE EQUIPMENT ID TAG.
  - LOW SIDE WALL RAIGS SHALL HAVE RETURN AIR DUCT WORK THE FULL SIZE OF THE GRILLES FACE.
  - ROUTE ALL CONDENSATE FROM UNITS IN HVAC ROOMS TO FD LOCATED IN ROOM. REFERENCE PLUMBING FOR EXACT LOCATION.
  - FIRE DAMPERS IN KITCHEN AREA SHALL BE INSTALLED AT THE PENETRATION OF THE RATED STRUCTURE. REFERENCE ARCHITECTURAL FOR LOCATION OF THE RATED STRUCTURE.
  - CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF ALL AIR TERMINALS WITH ELECTRICAL LIGHTING PLAN. CONFIRM EXACT LOCATIONS OF ALL AIR TERMINALS WITH ARCHITECT PRIOR TO CONSTRUCTION.

MECHANICAL SHEET INDEX	
SHEET NO.	SHEET DESCRIPTION
M0.1	MECHANICAL COVER SHEET
M1.1.1	PARTIAL FIRST FLOOR MECH PLAN
M1.1.2	PARTIAL FIRST FLOOR MECH PLAN
M1.1.3	PARTIAL FIRST FLOOR MECH PLAN
M1.1.4	PARTIAL FIRST FLOOR MECH PLAN
M1.2.1	PARTIAL SECOND FLOOR MECH PLAN
M1.2.2	PARTIAL SECOND FLOOR MECH PLAN
M2.1.1	PARTIAL ROOF PLAN
M2.1.2	PARTIAL ROOF PLAN
M2.1.3	PARTIAL ROOF PLAN
M2.1.4	PARTIAL ROOF PLAN
M4.1	TYPICAL UNIT PLANS
M4.2	TYPICAL UNIT PLANS
M5.1	MECHANICAL DETAILS
M5.2	MECHANICAL DETAILS
M6.1	MECHANICAL SCHEDULES

**CONTRACTOR NOTE**

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ARCHITECT, LANDLORD AND TENANT OF ANY DISCREPANCIES ENCOUNTERED ON THE PLANS OR IN EXISTING SITE CONDITIONS PRIOR TO SUBMISSION OF BID.

BIDDERS ARE TO VISIT THE SITE AND FAMILIARIZE THEMSELVES WITH EXISTING CONDITIONS AND SATISFY THEMSELVES AS TO THE NATURE AND SCOPE OF THE WORK. THE BASE BID SHALL REFLECT MODIFICATIONS TO SYSTEMS AND DEVICES AS REQUIRED BY STATE, LOCAL AND FEDERAL CODES WHETHER INDICATED OR NOT ON CONTRACT DOCUMENTS. THE SUBMISSIONS OF A BID WILL BE EVIDENCE THAT SUCH AN EXAMINATION AND COMPLIANCE WITH GOVERNING CODES/REQUIREMENTS HAS BEEN MADE. LATER CLAIMS FOR LABOR, EQUIPMENT, OR MATERIALS REQUIRED, OR FOR DIFFICULTIES ENCOUNTERED WHICH COULD HAVE BEEN FORESEEN HAD AN EXAMINATION AND CODE/REQUIREMENTS REVIEW BEEN MADE, WILL NOT BE ALLOWED.

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**PE Services**  
REGISTERED PROFESSIONAL ENGINEER  
MECHANICAL ENGINEERING  
LICENSE NO. 39319

These plans have been properly examined by the undersigned. I have determined that they comply with existing local Louisiana codes, and have been properly site adapted to use in this area.

STATE OF LOUISIANA  
ROBERT J. BROWN  
LICENSE NO. 39319  
REGISTERED PROFESSIONAL ENGINEER  
MECHANICAL ENGINEERING

**WATERSTONE AT BATON ROUGE  
ASSISTED LIVING & MEMORY CARE**

SIEGEN LANE  
BATON ROUGE, LA 70810

ISSUE: PERMIT SET

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REVISIONS:

DATE: 03/31/2016  
PROJECT NUMBER: PES 15090  
SHEET TITLE: MECHANICAL COVER SHEET  
SHEET: MO.1