HVAC DESIGN NOTE:

The Florida Building Code 2007, Chapter 28 and Florida Building Code, Mechanical and Fuel Gas shall govern the heating, air conditioning, refrigeration, mechanical ventilation and plenums and the design and construction of factory-built chimneys, fireplaces and barbecues in this building.

Plans and design for HVAC system in this building are to be furnished by the HVAC contractor to the engineer of record, the owner, and the building official for approval prior to construction or ordering any materials.

FBC 2007, 105.3.1.2 Does not require sealed engineering documents to be prepared by or under the direction of an engineer registered under chapter 471 Florida Statutes for heating, ventilation, and air-conditioning systems for any new building or addition which requires not more than a 15-ton-per-system capacity which is designed to accommodate less than 100 persons and for which the system costs not more than $50,000. An air-conditioning system may be designed by an installing air-conditioning contractor certified under Chapter 489, Florida Statutes to serve any building or addition which is designed to accommodate fewer than 100 persons and requires an air-conditioning system with value of $50,000 or less; and when a 15-ton-per system or less is designed for a singular space of a building and each 15-ton system or less has an independent duct system. Systems not complying with the above require design documents that are to be sealed by a professional engineer.

The mechanical plans should meet the following requirements:
1. Energy calculations
2. Exhaust systems:
Clothes dryer exhaust
Kitchen equipment exhaust
Specialty exhaust systems
3. Equipment
4. Equipment location
5. Make-up air
6. Roof-mounted equipment
7. Duct systems
8. Ventilation
9. Combustion air
10. Chimneys, fireplaces and vents
11. Appliances
12. Boilers
13. Refrigeration
14. Bathroom ventilation
15. Laboratory

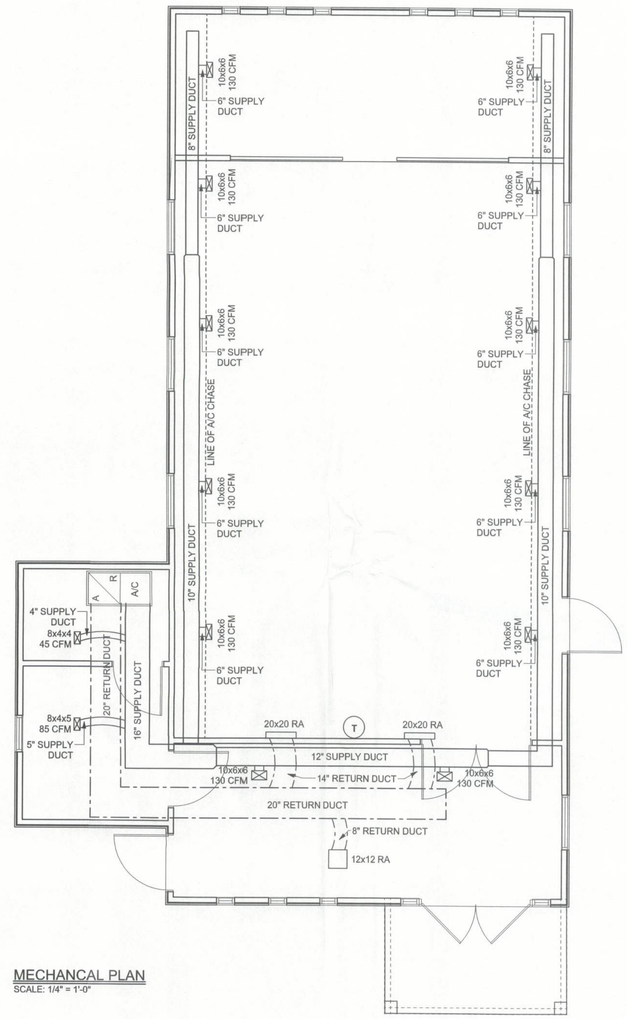
Gas plans should meet the following requirements:
1. Gas piping
2. Venting
3. Combustion air
4. Chimneys and vents
5. Appliances
6. Type of gas
7. Fireplaces
8. LP tank location
9. Riser diagram/shutoffs

Design of Heating, Ventilation and Air Conditioning Systems.
(1) Heating, Ventilating, and Air Conditioning (HVAC) Systems are those systems that control the temperature and/or humidity of a particular space or building. Items to be considered in the design and analysis of these systems are ambient dry and wet bulb temperatures, inside dry and wet bulb temperatures, inside design humidity, fresh air makeup, internal heat gains from any sources. Ventilation systems shall be designed to remove foul odors from a space or building, or to remove space heat from equipment rooms. All HVAC systems shall be designed in accordance with the ASHRAE Standards and Building Code as adopted by the authority having jurisdiction. The HVAC systems shall be designed and operated such that the entire building is under positive or neutral pressure when all primary HVAC systems are operating.
(2) "Design" documents applicable to HVAC systems shall, where applicable, include but are not limited to the following:
(a) Equipment selection schedule for each piece of mechanical equipment. All equipment shall have capacities listed including efficiencies, electrical or fuel requirements, static pressure and fan air quantities as applicable to the system, fluid flow and pressure head quantities as applicable to the system, and heat transfer capacities.
(b) Floor plans; site plans; and building and mechanical system elevations as appropriate.
(c) Outside (fresh) air make-up conditions.
(d) Cooling coil requirements based on sensible heat, latent heat and total heat gains.
(e) Heating equipment requirements.
(f) Outside and inside design dry and wet bulb conditions.
(g) Exhaust riser diagrams.
(h) Outside air riser diagrams.
(i) Process flow diagrams with pipe sizes and fluid flow quantities.
(j) Condensate discharge piping with pipe sizes.
(k) Instrumentation and Control System diagrams and sequence of operation.
(l) Ductwork layout and sizing; insulation, supply, return, and exhaust inlet and outlet sizes; and outside air intake sizes. Air quantities shall be specified for inlets and outlets.
(m) Florida Energy Code calculations as applicable.
(n) NFPA Standards and all required fire protection devices and systems.

ENERGY EFFICIENCY NOTE:

The Florida Building Code 2004, Chapter 13, "Florida Energy Efficiency Code For Building Construction", shall govern design of building envelopes for adequate thermal resistance and low air leakage and design and selection of mechanical, electrical, and illumination systems and equipment which will enable the effective use of energy in this building project.

Important Note: A sealed copy of Form 400 for this project is incorporated in these plans by reference. There are equipment and material requirements and specifications in Form 400 which do not appear anywhere else in the plans. Construction must comply with the sealed Form 400. Conflicts between Form 400 and any other construction or contract documents are to be resolved by the builder prior to construction or ordering of materials.



MECHANCAL PLAN
SCALE: 1/4" = 1'-0"

REVISIONS

SOFTPLAN ARCHITECTURAL DESIGN SOFTWARE

Milton Builders

Anglican Church Addition & Renovation

ADDRESS:
Lake City, Florida
Columbia County

PRINTED DATE:
July 19, 2011

DRAWN BY:
Evan Beamsley

CHECKED BY:

FINALES DATE:
2011-07-19

JOB NUMBER:
1106111

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M-1
OF 8 SHEETS