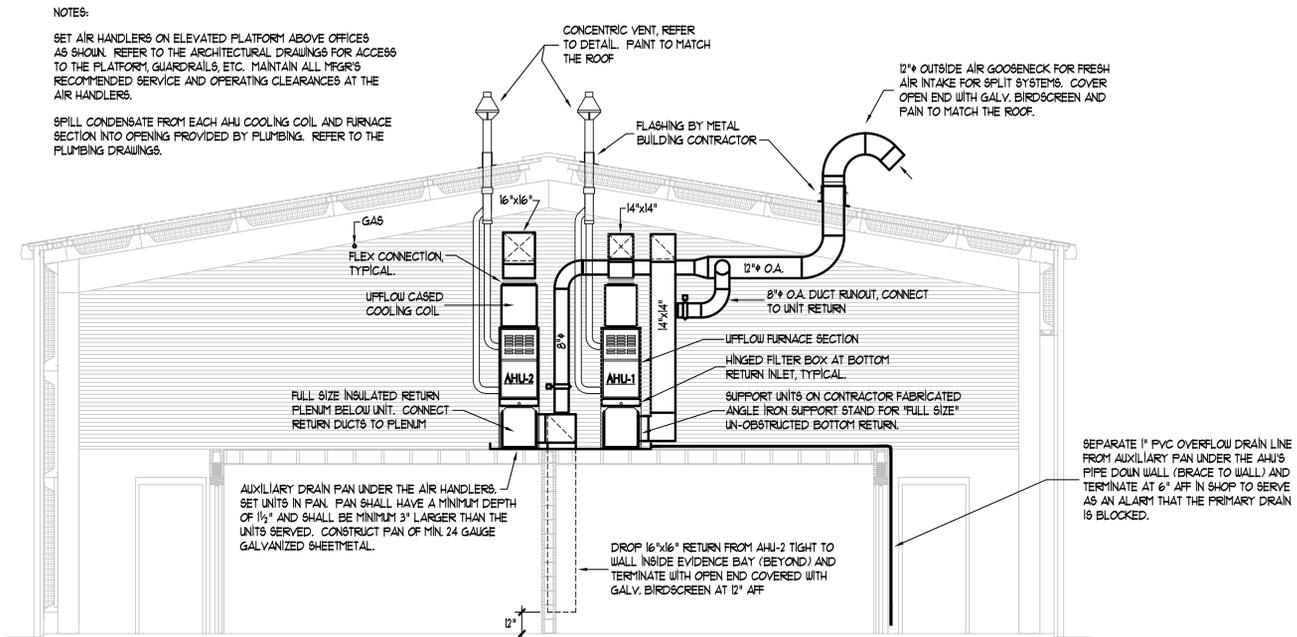


SECTION A-A AT FINGERPRINT PROCESSING
NO SCALE



SECTION B-B FACING AIR HANDLERS ON PLATFORM
NO SCALE

MECHANICAL COMcheck



COMcheck Software Version 3.9.3
Mechanical Compliance Certificate

2009 IECC

Section 1: Project Information

Project Type: **New Construction**
Project Title: Shelby County Sheriff's Department
Construction Site: Equipment Storage Building
889 Dovecrest Road
Memphis, TN 38134
Owner/Agent: _____
Designer/Contractor: _____

Section 2: General Information

Building Location (for weather data): **Memphis, Tennessee**
Climate Zone: **3a**

Section 3: Mechanical Systems List

Quantity System Type & Description

- 1 AHU-1 / CU-1 (Single Zone):
Heating: 1 each - Central Furnace, Gas, Capacity = 60 kBtu/h
Proposed Efficiency = 80.00% Et, Required Efficiency = 80.00% Et
Cooling: 1 each - Split System, Capacity = 29 kBtu/h, Air-Cooled Condenser
Proposed Efficiency = 13.00 SEER, Required Efficiency = 13.00 SEER
Fan System: AHU-1 - Compliance (Motor nameplate HP method) : Passes
Fans:
FAN 1 Supply, Constant Volume, 800 CFM, 0.5 motor nameplate hp
- 1 AHU-2 / CU-2 (Single Zone):
Heating: 1 each - Central Furnace, Gas, Capacity = 60 kBtu/h
Proposed Efficiency = 80.00% Et, Required Efficiency = 80.00% Et
Cooling: 1 each - Split System, Capacity = 39 kBtu/h, Air-Cooled Condenser
Proposed Efficiency = 13.00 SEER, Required Efficiency = 13.00 SEER
Fan System: AHU-2 - Compliance (Motor nameplate HP method) : Passes
Fans:
FAN 2 Supply, Constant Volume, 1250 CFM, 0.8 motor nameplate hp

Section 4: Requirements Checklist

- Requirements Specific To: AHU-1 / CU-1 :**
- 1. Equipment minimum efficiency: Central Furnace (Gas): 80.00 % Et (or 78% AFUE)
 - 2. Equipment minimum efficiency: Split System: 13.00 SEER
- Requirements Specific To: AHU-2 / CU-2 :**
- 1. Equipment minimum efficiency: Central Furnace (Gas): 80.00 % Et (or 78% AFUE)
 - 2. Equipment minimum efficiency: Split System: 13.00 SEER

Generic Requirements: Must be met by all systems to which the requirement is applicable:

- 1. Plant equipment and system capacity no greater than needed to meet loads
Exception(s): _____
- Standby equipment automatically off when primary system is operating
- Multiple units controlled to sequence operation as a function of load

Project Title: Shelby County Sheriff's Department
Data filename: C:\Users\Terry\Documents\COMcheck\Sheriff Dept Storage Building.ccd
Report date: 04/17/14
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Section 5: Compliance Statement

Compliance Statement: The proposed mechanical design represented in this document is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed mechanical systems have been designed to meet the 2009 IECC requirements in COMcheck Version 3.9.3 and to comply with the mandatory requirements in the Requirements Checklist.

Shelby County Sheriff's Department
Name - Title: *Terry* - *MECHANICAL ENGINEER*
Signature: _____ Date: *4/17/14*

Section 6: Post Construction Compliance Statement

HVAC record drawings of the actual installation, system capacities, calibration information, and performance data for each equipment provided to the owner.
 HVAC O&M documents for all mechanical equipment and systems provided to the owner by the mechanical contractor.
 Written HVAC balancing and operations report provided to the owner.

The above post construction requirements have been completed.

Principal Mechanical Designer-Name: _____ Signature: _____ Date: _____

Project Title: Shelby County Sheriff's Department
Data filename: C:\Users\Terry\Documents\COMcheck\Sheriff Dept Storage Building.ccd
Report date: 04/17/14
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SEISMIC BRACING & VIBRATION ISOLATION SCHEDULE

EQUIPMENT TYPE	VIBRATION ISOLATION	SEISMIC BRACING
SUSPENDED UNIT HEATERS	RUBBER ISOLATORS	SEISMIC CABLE BRACING USING MASON 'SCB' SUIVEL ANCHORS & AIRCRAFT CABLE.
NATURAL GAS PIPING INSIDE THE BUILDING	NONE	SEISMIC CABLE BRACING USING MASON 'SCB' SUIVEL ANCHORS & AIRCRAFT CABLE.
HVAC DUCTWORK	NONE	PROVIDE SEISMIC BRACING WHERE REQ'D. BY THE IBC (DUCTS 6" Ø AND LARGER) BRACE PER DETAILS IN SMACNA. SEISMIC RESTRAINT MANUAL AND PER BRACING COMPONENT MFG'S RECOMMENDATIONS.

NOTES:
REFER TO THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
THE SEISMIC BRACING MANUFACTURER'S SHOP DRAWINGS SHALL INCLUDE A GAS PIPING PLAN SHOWING THE TYPES OF SEISMIC RESTRAINTS TO BE USED AS WELL AS THE LOCATION OF EACH TRANSVERSE AND LONGITUDINAL RESTRAINT. THIS GAS PIPING PLAN AND ALL SEISMIC CALCULATIONS SHALL BE SEALED BY AN ENGINEER LICENSED IN TENNESSEE. A COPY OF THIS PLAN AND ALL SEISMIC BRACING PRODUCT DATA, ATTACHMENT METHODS AND CALCULATIONS SHALL BE SUBMITTED TO LOCAL CODE FOR REVIEW AND FILE.
THE INSTALLATION OF THE SEISMIC BRACING COMPONENTS SHALL BE REVIEWED BY THE COMPONENT MFG'S REPRESENTATIVE. THE MANUFACTURER'S REPRESENTATIVE SHALL VISIT THE SITE AND OBSERVE THE INSTALLATION OF THE SEISMIC BRACING COMPONENTS AND SHALL SUBMIT A LETTER TO LOCAL CODE ENFORCEMENT ASSURING THE DEVICES HAVE BEEN INSTALLED PROPERLY. THIS REVIEW LETTER MUST BE SUBMITTED TO LOCAL CODE PRIOR TO THE FIRST MECHANICAL INSPECTION AND EACH SUBSEQUENT INSPECTION AS REQUIRED BY LOCAL CODE. IN ADDITION, A SIGNED AND SEALED LETTER FROM THE ENGINEER OF RECORD FOR THE GAS PIPING PLAN SHALL BE SUBMITTED TO LOCAL CODE PRIOR TO THE FINAL INSPECTION ASSURING THE PROPER INSTALLATION OF THE DEVICES AND INDICATING HIS ACCEPTANCE OF THE INSTALLATION.

Project Title: Shelby County Sheriff's Department
Data filename: C:\Users\Terry\Documents\COMcheck\Sheriff Dept Storage Building.ccd
Report date: 04/17/14
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revisions	
no.	date

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Shelby County Sheriff's Department
EQUIPMENT STORAGE BUILDING
989 Dovecrest Road, Memphis, TN 38134

sheet name
HVAC SECTIONS AND COMcheck

date
April 29, 2014

M4

BCM
BARHAM/CAIN/MYNNATT
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Cordova, Tennessee 38018
Phone: (901) 685-2371 Fax: (901) 682-0233