



## Load Preview Report

Scope	Rec Ton	ft. <sup>2</sup> /Ton	Area	Sen Gain	Lat Gain	Net Gain	Sen Loss	Sys Htg CFM	Sys Clg CFM	Sys Act CFM	Duct Size
Building	7.15	375	2,686	50,138	21,463	71,601	56,787	535	1,595	1,595	
System 1	7.15	375	2,686	50,138	21,463	71,601	56,787	535	1,595	1,595	0"
Ventilation				6,269	12,646	18,916	11,878				
Supply Duct Latent					463	463					
Return Duct				8,791	4,353	13,145	3,737				
Zone 1			2,686	35,077	4,000	39,077	41,172	535	1,595	1,595	
1-#103 Conference Rm & Hall			383	6,508	1,600	8,108	6,527	85	296	296	3--0"
2-Lobby #100 & Closet			182	4,969	600	5,569	7,538	98	226	226	3--0"
3-Sec/rec #116			73	759	200	959	185	2	34	34	1--0"
4-Office #115			444	4,113	200	4,313	4,616	60	187	187	2--0"
5-Staff Rm #114			152	3,381	200	3,581	3,349	43	154	154	2--0"
6-Toilet #113			60	243	0	243	1,000	13	11	11	1--0"
7-Workroom #112			81	1,717	200	1,917	199	3	78	78	1--0"
8-Office #111 & Hall			227	2,252	200	2,452	4,473	58	102	102	1--0"
9-Office #110 & Hall			227	1,740	200	1,940	2,313	30	79	79	1--0"
10-Office #108			230	4,193	200	4,393	5,412	70	191	191	2--0"
11-Toilet #106			158	452	0	452	1,079	14	21	21	1--0"
12-Office #105 / Hall			234	2,375	200	2,575	2,241	29	108	108	1--0"
13-Office #104 / Hall			234	2,375	200	2,575	2,241	29	108	108	1--0"



# Mechanical Compliance Certificate

## Project Information

Energy Code: 90.1 (2007) Standard  
Project Title: New Office Building  
Location: Slidell, Louisiana  
Climate Zone: 2a  
Project Type: New Construction

Construction Site:  
2052 Gause Blvd.  
Slidell, LA 70461

Owner/Agent:  
Don McMath  
McMath Construction  
1125 N. Causeway Blvd.  
Ste. #2  
Mandeville, LA 70471  
985-624-9010  
don@mcmathconstruction.com

Designer/Contractor:  
David Dammon  
Dammon Engineering Inc.  
554 Old Spanish Trail  
Slidell, LA 70458  
985-649-5832  
david@dammonengineering.com

## Mechanical Systems List

### Quantity System Type & Description

- 1 HVAC System 1 (Single Zone):  
Heating: 1 each - Central Furnace, Electric, Capacity = 39943 kBtu/h  
No minimum efficiency requirement applies  
Cooling: 1 each - Split System, Capacity = 60000 kBtu/h, Air-Cooled Condenser  
Proposed Efficiency = 11.20 EER, Required Efficiency: 9.70 EER + 9.4 IPLV  
Fan System: None
  
- 1 HVAC System 2 (Single Zone):  
Heating: 1 each - Central Furnace, Electric, Capacity = 39943 kBtu/h  
No minimum efficiency requirement applies  
Cooling: 1 each - Split System, Capacity = 48000 kBtu/h, Air-Cooled Condenser  
Proposed Efficiency = 11.20 EER, Required Efficiency: 9.70 EER + 9.4 IPLV  
Fan System: None

## Mechanical 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 90.1 (2007) Standard requirements in COMcheck Version 4.1.0.0 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

\_\_\_\_\_  
Name - Title

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date



## COMcheck Software Version 4.1.0.0

# Inspection Checklist

Energy Code: 90.1 (2007) Standard

Requirements: 0.0% were addressed directly in the COMcheck software

Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
4.2.2, 6.4.2 [PR2] <sup>1</sup>	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the mechanical systems and equipment and document where exceptions to the standard are claimed. Load calculations per acceptable engineering standards and handbooks.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
4.2.2, 7.4.1 [PR3] <sup>1</sup>	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the service water heating systems and equipment and document where exceptions to the standard are claimed. Hot water system sized per manufacturer's sizing guide.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
6.7.2.4 [PR5] <sup>1</sup>	Detailed instructions for HVAC systems commissioning included on the plans or specifications for projects >=50,000 ft <sup>2</sup> .	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	

**Additional Comments/Assumptions:**

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)
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Section # & Req.ID	Footing / Foundation Inspection	Complies?	Comments/Assumptions
6.4.3.8 [FO9] <sup>3</sup>	Freeze protection and snow/ice melting system sensors for future connection to controls.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	

**Additional Comments/Assumptions:**

1 High Impact (Tier 1)	2 Medium Impact (Tier 2)	3 Low Impact (Tier 3)
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Section # & Req.ID	Mechanical Rough-In Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
6.4.1.4, 6.4.1.5 [ME1] <sup>2</sup>	HVAC equipment efficiency verified. Non-NAECA HVAC equipment labeled as meeting 90.1.	Efficiency: ____	Efficiency: ____	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	See the Mechanical Systems list for values.
6.4.3.4.1 [ME3] <sup>3</sup>	Stair and elevator shaft vents have motorized dampers that automatically close.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
6.4.3.4.5 [ME5] <sup>3</sup>	Ventilation fans >0.75 hp have automatic controls to shut off fan when not required.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
6.4.3.9 [ME6] <sup>1</sup>	Demand control ventilation provided for spaces >500 ft <sup>2</sup> and >40 people/1000 ft <sup>2</sup> occupant density and served by systems with air side economizer, auto modulating outside air damper control, or design airflow >3,000 cfm.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
6.4.4.1.1 [ME7] <sup>3</sup>	Insulation exposed to weather protected from damage. Insulation outside of the conditioned space and associated with cooling systems is vapor retardant.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
6.4.4.1.2 [ME8] <sup>2</sup>	HVAC ducts and plenums insulated.	R- ____	R- ____	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
6.4.4.1.3 [ME9] <sup>2</sup>	HVAC piping insulation thickness.	____ in.	____ in.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
6.4.4.2.1 [ME10] <sup>2</sup>	Ducts and plenums sealed based on static pressure and location.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
6.4.4.2.2 [ME11] <sup>3</sup>	Ductwork operating >3 in. water column requires air leakage testing.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
6.4.4.2.2 [ME11] <sup>3</sup>	Ductwork operating >3 in. water column requires air leakage testing.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
6.5.2.3 [ME19] <sup>3</sup>	Dehumidification controls provided to prevent reheating, recooling, mixing of hot and cold airstreams or concurrent heating and cooling of the same airstream.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
6.5.4.1 [ME25] <sup>3</sup>	HVAC pumping systems >10 hp designed for variable fluid flow.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	

1 High Impact (Tier 1)    2 Medium Impact (Tier 2)    3 Low Impact (Tier 3)

Section # & Req.ID	Mechanical Rough-In Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
6.5.6.1 [ME30] <sup>1</sup>	Exhaust air energy recovery on systems $\geq 5,000$ cfm and 70% of design supply air.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
6.5.7.1 [ME32] <sup>2</sup>	Kitchen hoods $> 5,000$ cfm have make up air $\geq 50\%$ of exhaust air volume.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
6.5.7.2 [ME33] <sup>1</sup>	Fume hoods exhaust systems $\geq 15,000$ cfm have VAV hood exhaust and supply systems, direct make-up air or heat recovery.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
6.5.8.1 [ME34] <sup>3</sup>	Unenclosed spaces that are heated use only radiant heat.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
6.5.9 [ME35] <sup>1</sup>	Hot gas bypass limited to: $\leq 240$ kBtu/h - 50% $> 240$ kBtu/h - 25%			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
6.5.9 [ME35] <sup>1</sup>	Hot gas bypass limited to: $\leq 240$ kBtu/h - 50% $> 240$ kBtu/h - 25%			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	

**Additional Comments/Assumptions:**

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)
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Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
10.4.1 [EL9] <sup>2</sup>	Electric motors meet requirements where applicable.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	

**Additional Comments/Assumptions:**

1 High Impact (Tier 1)	2 Medium Impact (Tier 2)	3 Low Impact (Tier 3)
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Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
6.4.3.1.1 [FI2] <sup>2</sup>	Heating and cooling to each zone is controlled by a thermostat control.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
6.4.3.1.2, 6.4.3.2, 6.4.3.3, 6.4.3.3.1, 6.4.3.3.2 [FI3] <sup>2</sup>	Thermostatic controls have a 5 °F deadband.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
6.4.3.7 [FI6] <sup>3</sup>	When humidification and dehumidification are provided to a zone, simultaneous operation is prohibited.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
6.7.2.1 [FI7] <sup>3</sup>	Furnished HVAC as-built drawings submitted within 90 days of system acceptance.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
6.7.2.2 [FI8] <sup>3</sup>	Furnished O&M manuals for HVAC systems within 90 days of system acceptance.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
6.7.2.3 [FI9] <sup>1</sup>	An air and/or hydronic system balancing report is provided for HVAC systems serving zones >5,000 ft <sup>2</sup> of conditioned area.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
6.7.2.4 [FI10] <sup>1</sup>	HVAC control systems have been tested to ensure proper operation, calibration and adjustment of controls.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
6.4.3.2 [FI20] <sup>1</sup>	Temperature controls have setpoint overlap restrictions.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
6.4.3.3.1 [FI21] <sup>1</sup>	HVAC systems equipped with at least one automatic shutdown control.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
6.4.3.3.2 [FI22] <sup>1</sup>	Setback controls allow automatic restart and temporary operation as required for maintenance.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	

**Additional Comments/Assumptions:**

1 High Impact (Tier 1)	2 Medium Impact (Tier 2)	3 Low Impact (Tier 3)
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