

DAMMON ENGINEERING, INC.

CHIEF ENGINEER
EMMETT
DAMMON, P.E.

CHIEF ARCHITECT
ROBERT
WILTSE

1095 FLORIDA AVENUE
SLIDELL, LA. 70458
OFFICE: 985-649-5832
FAX: 985-641-5950

WEBSITE:
WWW.DAMMONENGINEERING.COM

EMAIL:
DAMMONENG@BELLSOUTH.NET

ARCHITECTURE

ENGINEERING

STUDIES

PLANNING

INVESTIGATION

EXPERT WITNESS

NEW FACILITY

STANDARD MATERIALS
1601 NORTH LANE
MANDEVILLE, LA

SHOP QC LAB
MECHANICAL PLAN

REV:

SCALE: AS NOTED

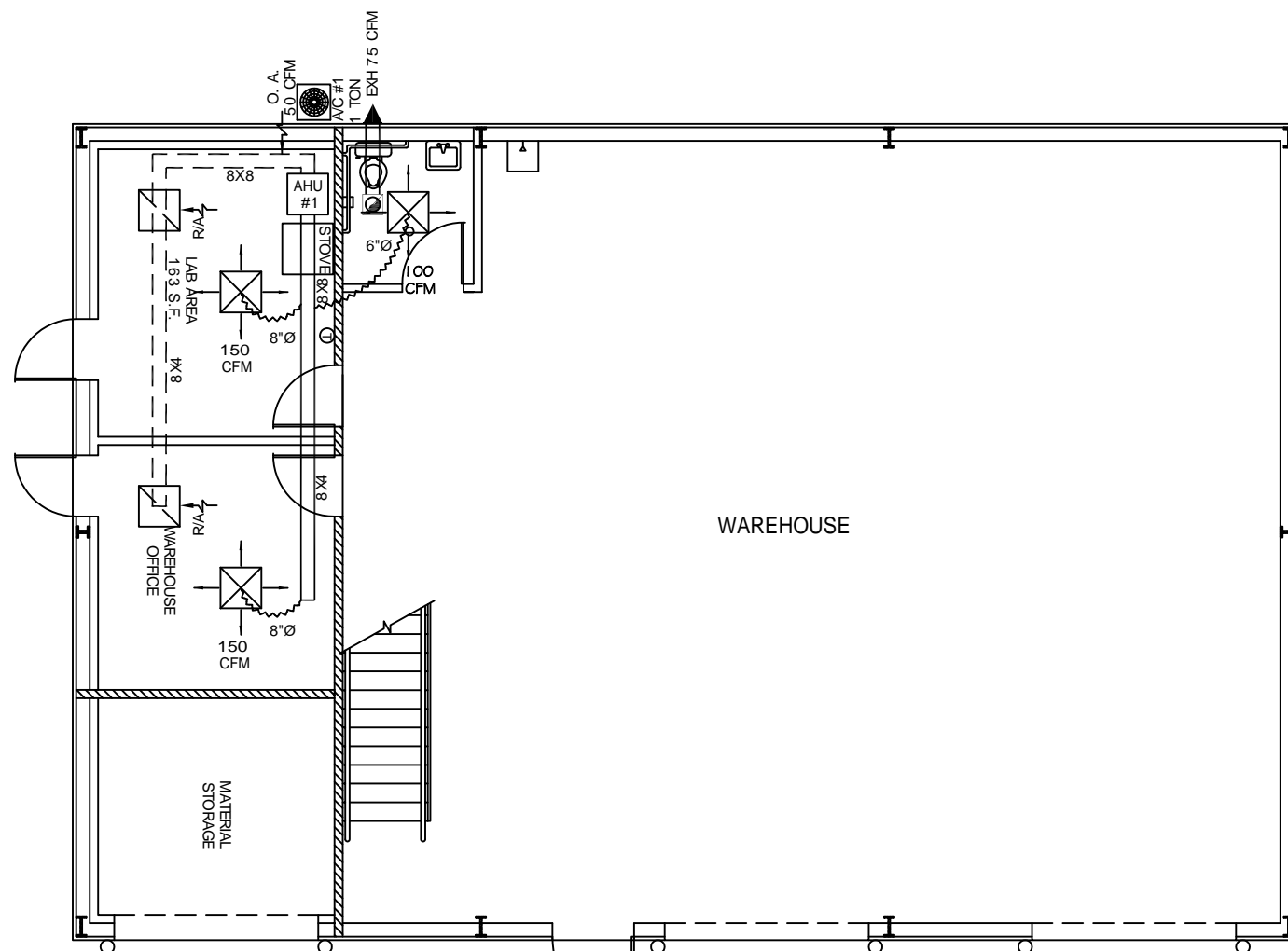
JOB#: 1906

DATE: 01-09-09

SHEET

M-1

OF



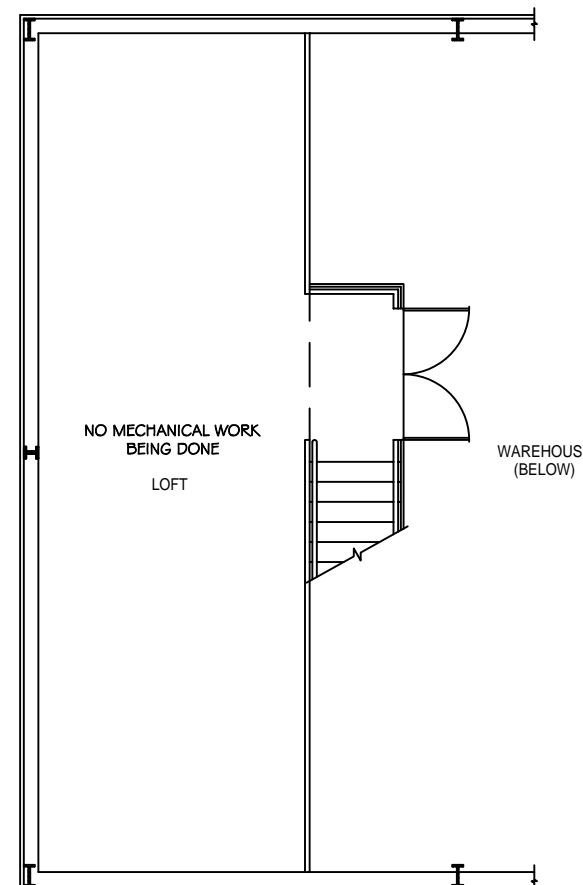
FIRST FLOOR MECHANICAL PLAN
SCALE: 1/4"=1'-0"



EXHAUST FAN SCHEDULE				
LOC	CFM	VOLTAGE	TYPE	MFR.
TOILETS	75	120	VENT/LIGHT	-

A/C SPLIT UNIT SCHEDULE							
UNIT	TOTAL BTU	CFM	O.A.	HEAT (KW)	ELECTRICAL		COMMENTS
					VOLTAGE	MCA/CKT BRKR	
AHU #1	12,000 1 TON	400	50	5	208V, 3Ø	-	SEE SCH. CARRIER

NOTE:
FRESH AIR INTAKES ARE REQUIRED TO HAVE MOTORIZED OR GRAVITY DAMPERS TO SHUT OFF WHEN SYSTEM IS NOT RUNNING. ALL THERMOSTATS MUST BE PROGRAMMABLE. SEE SECTIONS 502.4.4 OR 503.2.4.3 2006 INTERNATIONAL ENERGY CODE.



LOFT MECHANICAL PLAN
SCALE: 1/4"=1'-0"



--- FIRE BARRIER CONSTRUCTION

Project Standard Materials HVAC Calculations
Wed Nov 12 11:18:21 EST 2008

There is no calculation for North & Shaded Glass
There is no calculation for NorthEast and NorthWest Glass
There is no calculation for East and West Glass
There is no calculation for SouthEast and SouthWest Glass
There is no calculation for South Glass
There is no calculation for Skylights
There is no calculation for Windows in Doors

The Btuh Gain for 224 SqFt of Wood No Insulation 1/2" Gypsum Wall Number 1 = 1747.2
The Btuh Gain for 101 SqFt of Wood No Insulation 1/2" Gypsum Wall Number 2 = 787.8
The Btuh Gain for 224 SqFt of Wood R-19 & 1/2" Gypsum Wall Number 3 = 380.8
The Btuh Gain for 101 SqFt of Wood R-19 & 1/2" Gypsum Wall Number 4 = 171.7

The Btuh Gain for 354 SqFt of Ceiling and Roof Combo No Insulation; Ceiling Number 1 = 9912

There is no calculation for Ceiling Number 2
There is no calculation for Floor Number 1
There is no calculation for Floor Number 2

The Btuh Gain for 1 People = 10
There is no calculation for Motor HP
There is no calculation for Ducts Out of Conditioned Spaces
The Btuh Gain for 354 SqFt of Area Lighting in an Office = 1062

There is no calculation for Coffee Machines
There is no calculation for Electric Food Warmers
There is no calculation for Gas Food Warmers
There is no calculation for Electric Fry Kettle
There is no calculation for Gas Fry Kettle
There is no calculation for Electric Griddle
There is no calculation for Gas Griddle
There is no calculation for Hair Dryer Helmets
There is no calculation for 4-Slice Toaster
There is no calculation for other appliances of known wattages

The Office Space Outside Fresh Air #1 = 49.56 cfm
The Btuh Gain for Outside Fresh Air #1 = 1486.8
There is no calculation for Outside Fresh Air #2
There is no calculation for Outside Fresh Air #3
There is no calculation for Outside Fresh Air #4
There is no calculation for Outside Fresh Air #5
There is no calculation for Outside Fresh Air #6

The Total Outside Fresh Air CFM = 49.56
This is in accordance with International Mechanical Code 2003

The Total BTUh Gain = 15558.3
The Total Tons of HVAC needed = 1.296525

LEGEND

- INDICATES NEW CEILING DIFFUSER - CFM AS NOTED - 24x24 UNLESS OTHERWISE NOTED. SIZE INDICATES NECK SIZE
- INDICATES NEW RETURN AIR CEILING TRANSFER GRILLE OF SIZE INDICATED. TRANSFER DUCT TO BE FLEX OR RECTANGULAR AS INDICATED.
- EXHAUST FAN
- A/C COMPRESSOR UNIT
- THERMOSTAT
- INDICATES NEW SHEET METAL DUCTWORK, SIZES INDICATED ARE SHEET METAL DIMENSIONS. REFER TO SPECIFICATIONS FOR TYPE OF INSULATION.
- INDICATES NEW NEW PRE-INSULATED FLEXIBLE DUCT - MAX LENGTH 12'-0"