

OUTSIDE AIR CALCULATIONS								
(BASED ON ASHRAE 62.1-04, TABLE 6.1)								
AREA SERVED OR UNIT TAG	NET OCCUPIABLE AREA SQ.FT.	VENTILATION RATE O/A CFM/SQ.FT.	MAX. OCCUPANCY P/1000 SQ.FT.	ACTUAL OCCUP. NO. OF PEOPLE	VENTILATION RATE O/A CFM/PERSON	COMBINED TOTAL CFM O/A REQ'D	COMBINED TOTAL CFM O/A PROV'D	NOTES
OFFICE AREA	3000	0.06	—	42	5	3000 X 0.06= 180 CFM 42 X 5 = 210	390 CFM 390 CFM	1,2
TOTAL	3300			5		390	390 CFM	
NOTES:								
1. CALCULATIONS ARE BASED ON ESTIMATED MAX. OCCUPANCY RATES PER ARCHITECTURAL PLANS AND ASHRAE 62.1-04; VENTILATION RATES PER ASHRAE 62.1-04								
2. FOR OFFICE AND OTHER SIMILAR AREAS CALCULATIONS ARE BASED ON CONTINUOUS OCCUPANCY								

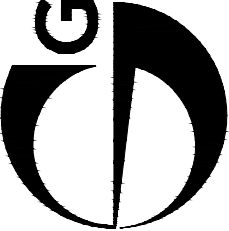
MECHANICAL NOTES
1. THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY FOR THE INSTALLATION OF A COMPLETE SYSTEM IN ACCORDANCE WITH THESE DRAWINGS, THE FLORIDA BUILDING CODE 2010 AND ALL OTHER APPLICABLE STATE, COUNTY AND LOCAL ORDINANCES AND THE LATEST ADDITION OF THE FOLLOWING PUBLICATIONS; SMACNA-85, 92, 95; ASHRAE 15-01, 34-01, 62-04; NFPA 70-02, 72-02, 90A-02, 90B-02, 91-99, 96-01; ANSI Z10.1-98, Z10.3-98, Z21.8-94, Z21.83-98.
2. THE CONTRACTOR SHALL PAY ALL COSTS OF PERMIT, INSPECTIONS AND ALL OTHER COSTS INCIDENTAL TO THE COMPLETION AND TESTING OF THIS WORK.
3. THE CONTRACTOR SHALL VISIT THE SITE AND COORDINATE WORK WITH OTHER TRADES.
4. THE CONTRACTOR SHALL SUPPLY THE ARCHITECT WITH "AS-BUILT" DRAWINGS.
5. CONTRACTOR SHALL SUBMIT, FOR APPROVAL FIVE (5) COPIES OF MANUFACTURER'S DRAWINGS FOR EACH PIECE OF EQUIPMENT AND CONTROLS INCLUDED IN CONTRACT.
6. ALL MATERIAL SHALL BE NEW OF U.S. MANUFACTURER OF GOOD QUALITY. ALL WORK SHALL BE PERFORMED AT INDUSTRY STANDARD QUALITY LEVEL BY CERTIFIED PROFESSIONALS. ALL EQUIPMENT SHALL BE UL OR ETL LISTED.
ALL INSTALLATIONS SHALL COMPLY WITH FMC 2010, CH. 3, GENERAL REGULATIONS, BUILDINGS LOCATED WITHIN 3,000 FT FROM THE OCEAN SHALL UTILIZE NON-FERROUS MATERIALS FOR ALL OUTDOOR EXPOSED SUPPORTS, STANDS, FASTENERS, ETC.
7. DUCT SIZES SHOWN ARE INSIDE DIMENSIONS.
8. ALL AIR DISTRIBUTION DEVICES SHALL MATCH BASE BUILDING STANDARD.
9. TEMPERATURE SENSOR AS RECOMMENDED BY MANUFACTURE FOR CORE AREA VAV BOXES. MECHANICAL CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR ALL REQUIREMENTS FOR JUNCTION BOXES, CONDUITS, CONTROL WIRING, POWER, ETC. AND DEFINE RESPONSIBILITIES AND SCOPE OF WORK FOR EACH TRADE PRIOR TO ANY PURCHASING OR INSTALLATION.
10. THERMOSTAT LOCATION SHALL BE APPROVED BY OWNER AND ENGINEER BEFORE INSTALLATION. INSTALL THERMOSTAT 48" TO 54" A.F.F. PER A.D.A REQUIREMENTS WHERE APPLICABLE. MECHANICAL CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR ALL REQUIREMENTS FOR JUNCTION BOXES, CONDUITS, CONTROL WIRING, POWER, ETC. AND DEFINE RESPONSIBILITIES AND SCOPE OF WORK FOR EACH TRADE PRIOR TO ANY PURCHASING OR INSTALLATION.
11. PROVIDE NEW FILTERS FOR ALL AIR CONDITIONING EQUIPMENT BEFORE START-UP, REPLACE PRIOR TO FINAL ACCEPTANCE BY OWNER.
12. HVAC CONTRACTOR SHALL PROVIDE A T & B REPORT PER F.B.C. 2010, CH. 13, 410.1.ABCD.4 (THE T & B REPORT SHALL BE INDEPENDENT FOR SYSTEMS OVER 15 TONS) FOR ALL MECHANICAL EQUIPMENT, AIR DEVICES, DAMPERS, AHU'S AND FANS. THE TEST AND BALANCE REPORT SHALL BE IN ACCORDANCE WITH THE AIR BALANCE COUNCIL STANDARDS AND SHALL INCLUDE AIR QUANTITIES FOR ALL SUPPLY GRILLES, RETURN GRILLES AND EXHAUST GRILLES AND THE LEAVING AND ENTERING AIR TEMPERATURE (°F) FROM SUPPLY GRILLES AND EVAPORATORS.
FOR (EXISTING) SMOKE EVACUATION SYSTEMS HVAC CONTRACTOR SHALL PROVIDE A T & B REPORT PRIOR TO ANY NEW WORK, PROVING THAT THE SMOKE EVACUATION SYSTEM PERFORMS PER ORIGINAL DESIGN DOCUMENTS AND IS COMPLIANT WITH LOCAL CODE REQUIREMENTS.
13. ALL INSULATION WILL HAVE FIRE/SMOKE RATING LESS THAN 25/50.
14. PROVIDE A MIN. OF 36" CLEARANCE IN FRONT OF ALL 120-208 VOLT PANELS AND MIN. 42" CLEARANCE IN FRONT OF ANY 240-480 VOLT PANEL. PROVIDE ADEQUATE SIDE CLEARANCE PER NEC.
15. MECHANICAL PLANS IN GENERAL, ARE DIAGRAMMATIC IN NATURE, AND ARE TO BE READ IN CONJUNCTION WITH ARCHITECTURAL, PLUMBING, ELECTRICAL, FIRE SPRINKLER, AND STRUCTURAL PLANS AND SHALL BE CONSIDERED AS ONE SET OF DOCUMENTS. DUCT AND PIPING OFFSETS, BENDS AND TRANSITIONS SHALL BE REQUIRED TO PROVIDE AND INSTALL A COMPLETE FUNCTIONAL SYSTEM AND SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. CHANGES IN DUCTWORK SIZE AND ROUTE WILL BE REQUIRED TO AVOID STRUCTURAL, PLUMBING, FIRE SPRINKLER AND ARCHITECTURAL BUILDING FEATURES. DUCTWORK CHANGES MAY BE MADE BY CONTRACTOR USING EQUIVALENT SIZED DUCT; CONTACT ENGINEER IF DUCT AREA WILL NOT FIT.
16. THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO BIDDING, ORDERING, FABRICATION OR INSTALLATION OF MATERIALS OR EQUIPMENT, IN ORDER TO PROVIDE A FULLY INTEGRATED MECHANICAL AND CONTROLS SYSTEMS WITH THE EXISTING ONES. ANY DISCREPANCY BETWEEN EXISTING CONDITIONS AND PLANS, OR ADDITIONAL CLARIFICATION REQ'D SHALL BE BROUGHT TO THE ATTENTION OF ENGINEER PRIOR TO FINAL BIDDING AND WORK.
17. NO COMBUSTIBLE MATERIALS ARE ALLOWED IN RETURN AIR PLENUMS OR ABOVE CEILINGS USED AS RETURN AIR PLENUM. IF SPACE WITH RETURN AIR PLENUM HAS ANY DECK TO DECK PARTITIONS, AIR TRANSFER DUCTS MUST BE INSTALLED. WHEN CPVC PIPING IS USED FOR FIRE SPRINKLER SYSTEMS, THE R/A GRILLES LAYOUT SHALL BE (FIELD) COORDINATED WITH SUCH PIPING SO THAT NO PORTION OF THE GRILLES WILL BE DIRECTLY BELOW THE CPVC PIPING.
18. CONDENSATE DRAIN PIPING TO BE AS SPECIFIED PER PLUMBING PLANS, IF NOT SPECIFIED TO BE TYPE "L" COPPER OR PVC WHERE ALLOWED BY CODE WITH 1/2" ARMAFLEX INSULATION. PROVIDE APPROVED WATER LEVEL DETECTOR OR FLOAT SWITCH TO AUTOMATICALLY SHUT DOWN THE AIR COND. UNIT, AS A SECONDARY DRAIN SYSTEM TO COMPLY WITH FMC 2007, SEC. 307 SUPPLY CONDENSATE PUMP WHERE NECESSARY AS IMPOSED BY FIELD CONDITIONS OR INSTALLATION CHANGES AND PIPE TO CONDENSATE DRAIN PER PLUMBING PLANS.
19. MANUFACTURER'S WARRANTY: CONTRACTOR SHALL PROVIDE WARRANTY FOR A PERIOD OF (1) ONE YEAR AFTER BUILDING C.O. FOR ALL MECHANICAL SYSTEMS, DUCTWORK, CONTROLS ACCESSORIES AND ALL OTHER EQUIPMENT, PARTS AND LABOR UNDER THESE DRAWINGS AND AND SPECIFICATIONS. CONTRACTOR SHALL PROVIDE WARRANTY FOR COMPRESSORS FOR (5) FIVE YEARS. ANY REPAIRS REQUIRING SYSTEM SHUTDOWN WILL BE DONE DURING NON-OPERATIONAL PERIODS OR AS AGREED WITH OWNER.
20. THIS IS A REMODEL OF AN EXISTING SPACE. CONTRACTOR TO VISIT SITE PRIOR TO BID. CONTRACTOR SHALL INSPECT ALL EXISTING AND NEW COMPONENTS OF THE MECHANICAL SYSTEMS AND ENSURE THAT ALL ARE OPERATIONAL AND WORKING AS SHOWN ON THE APPROVED CD PLANS AT THE TIME OF C.O.

MECHANICAL SHEET INDEX	
SHEET#	DESCRIPTION
M0.1	MECHANICAL NOTES, LEGEND & INDEX
M2.1	MECHANICAL PLAN -- UNDER FLOOR DISTRIBUTION
M2.2	MECHANICAL PLAN -- RETURN AIR

ISSUED FOR PERMIT	
KAMM CONSULTING PROJECT #: 2013-0919	
PROJECT MANAGER: DUANE MILLAR	
<div><div><input checked="" type="checkbox"/>KAMM</div><div>Consulting</div></div>	
PRINCIPAL	1408 Orange Avenue Fort Pierce, Florida 34950 Phone 772.595.1744 Fax 772.595.1745 engineering@kammconsulting.com Certification of Authorization #8189
Bradly L. Brown	Florida License #58232
	date
	signed

Tenant Improvements for:  
**NOVATIONS**  
@ECOPLEX  
1641 Worthington Road  
West Palm Beach, Florida

GLIDDENSPINA  
+ PARTNERS



1401 FORUM WAY, SUITE #100  
WEST PALM BEACH, FLORIDA 33401  
561.684.6844 • Fax: 561.684.5594  
gliddenspina.com  
FL Lic. # AA2602399

Architecture • Interior Design  
John Gliddens #A6639 • Keith M. Spina # AR13419

Sheet title: **MECHANICAL NOTES**

file name:

project no:

date:

drawn by:

checked by:

revisions:

M0.1

© COPYRIGHT 2010  
THESE DRAWINGS ARE FOR THE  
EXCLUSIVE USE OF GLIDDEN SPINA  
& PARTNERS, INC. AND MAY NOT BE  
REPLICATED, REPRODUCED OR USED  
IN ANY MANNER WITHOUT THE  
PRESS- WRITTEN CONSENT OF  
GLIDDEN SPINA & PARTNERS, INC.  
ALL RIGHTS RESERVED