

MECHANICAL DEMO

01 SCALE: 3/16"=1'-0" REF:

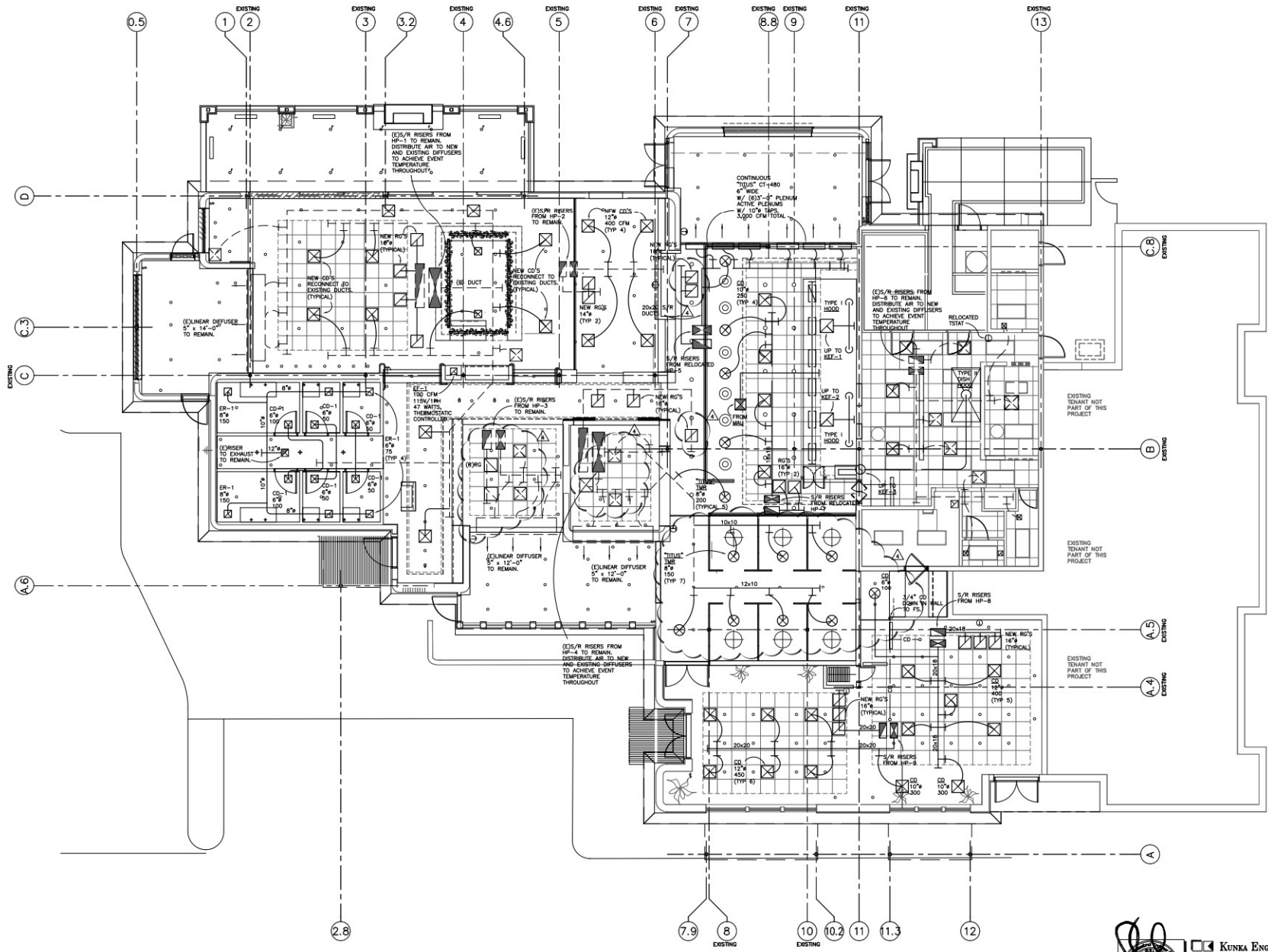


KUNKA ENGINEERING
INCORPORATED
2550 East Camelback Road, Suite 400E
Phoenix, Arizona 85016
Phone: (602) 840-1793
Fax: (602) 840-1792
Mobile: (602) 539-0476
EIN: 83-1000000
EIN: 83-1000000



Steak 44
5101 NORTH 44 TH STREET
PHOENIX, ARIZONA 85018

Date
June 28, 2013
Revisions
CITY 7.12.13
COORDINATION 7.31.13

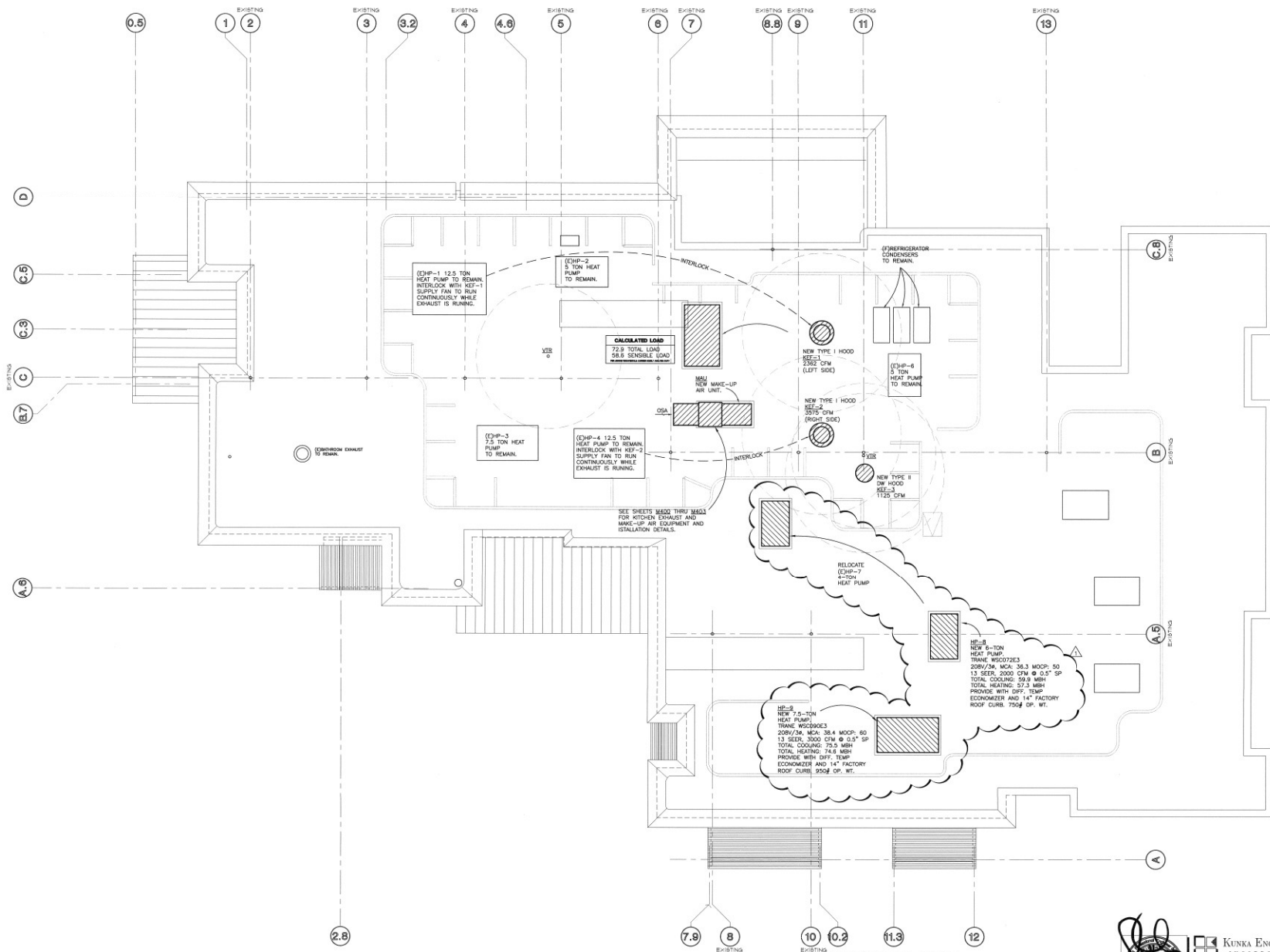


Steak 44
 5101 NORTH 44 TH STREET
 PHOENIX, ARIZONA 85018



KUNKA ENGINEERING
 INCORPORATED
 4801 West Camelback Road, Suite 400
 Phoenix, Arizona 85018
 Phone: 602.998.1234
 Fax: 602.998.1235
 WWW.KUNKAENGINEERING.COM
 EIR PROJECT NUMBER: LA-000

© 2013 NEISEN PARTNERS, INC.
 Project No. 31281
M200
 MECHANICAL PLAN



CALCULATED LOAD
 72.9 TOTAL LOAD
 48.6 SENSIBLE LOAD

HP-8
 NEW 7.5-TON
 HEAT PUMP
 TRANS WSC90E3
 209V/3W MCA 38.4 MSCP: 60
 13 SEER, 3000 CFM @ 0.5" SP
 TOTAL COOLING: 75.5 MBH
 TOTAL HEATING: 74.8 MBH
 PROVIDE WITH DIFF. TEMP.
 ECONOMIZER AND 14" FACTORY
 ROOF CURB, 750# CP. WT.

HP-6
 NEW 6-TON
 HEAT PUMP
 TRANS WSC07E3
 209V/3W MCA 36.3 MSCP: 50
 13 SEER, 2000 CFM @ 0.5" SP
 TOTAL COOLING: 59.9 MBH
 TOTAL HEATING: 57.3 MBH
 PROVIDE WITH DIFF. TEMP.
 ECONOMIZER AND 14" FACTORY
 ROOF CURB, 750# CP. WT.

EHP-4
 12.5 TON
 HEAT PUMP TO REMAIN.
 INTERLOCK WITH REF-2
 SUPPLY FAN TO RUN
 CONTINUOUSLY WHILE
 EXHAUST IS RUNNING.

EHP-1
 12.5 TON
 HEAT PUMP TO REMAIN.
 INTERLOCK WITH REF-1
 SUPPLY FAN TO RUN
 CONTINUOUSLY WHILE
 EXHAUST IS RUNNING.

EHP-3
 7.5 TON HEAT
 PUMP TO REMAIN.

EHP-2
 5 TON HEAT
 PUMP TO REMAIN.

EHP-6
 5 TON
 HEAT PUMP
 TO REMAIN.

**REFRIGERATOR
 CONDENSERS
 TO REMAIN.**

NEW TYPE I HOOD
 REF-2
 2362 CFM
 (LEFT SIDE)

NEW TYPE I HOOD
 REF-2
 5575 CFM
 (RIGHT SIDE)

**NEW TYPE II
 DIF HOOD**
 REF-2
 1120 CFM

**NEW MAKE-UP
 AIR UNIT**

**RELOCATE
 (EHP-7)
 4-TON
 HEAT PUMP**

**SEE SHEETS B500 THRU B503
 FOR KITCHEN EXHAUST AND
 MAKE-UP AIR EQUIPMENT AND
 INSTALLATION DETAILS.**

MECHANICAL ROOF

SCALE: 3/16"=1'-0"

REF:



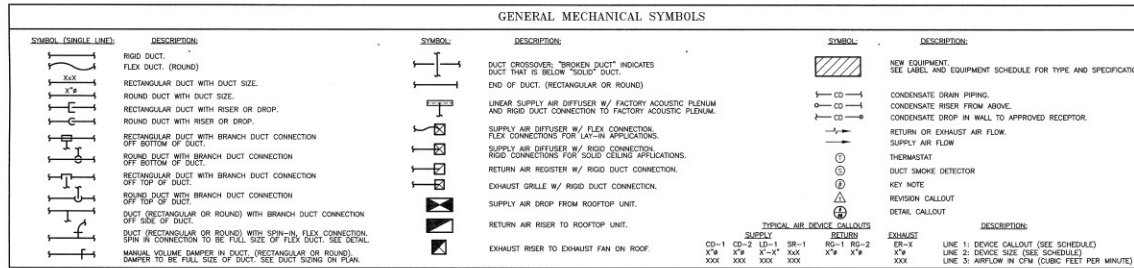
KUNKA ENGINEERING
 ARCHITECTS PLANNERS INTERIORS
 2224 East Camelback Road, Suite 400E
 Phoenix, Arizona 85016
 Phone: (602) 944-1700
 Fax: (602) 944-1702
 Website: (602) 725-6176
 © 2008 NELSEN PARTNERS, INC.
 EXP. 02/20/2015



Steak 44
 5101 NORTH 44 TH STREET
 PHOENIX, ARIZONA 85018

Date
 June 28, 2013
 Revisions
 CITY 77.12-13
 COORDINATION 7.31.13

Drawings and written material appearing
 hereon constitute a contract and are to be read
 and interpreted in accordance with the
 conditions, specifications and notes
 contained in the contract.
 © 2008 NELSEN PARTNERS, INC.
 Project No.
 31281
M201
 MECHANICAL ROOF



ABBREVIATIONS

A/C/L	ABOVE CEILING
AC	AIR CONDITIONING UNIT
ACC/U	AIR COOLED CONDENSER/UNIT
AD	ACCESS DOOR
AFF	ABOVE FINISHED FLOOR
AFV	AIR FLOW CONTROL VALVE
AHU	AIR HANDLER UNIT
AP	ACCESS PANEL
B/F.F/L	BELOW FINISHED FLOOR
B/D	BACKDRIFT DAMPER
BS/FLYTR	BACKFLOW PREVENTER
BTU	GAS BTU PER HOUR
CC	COILING COIL
CD-1	CEILING DIFFUSER
CFM	GAS CUBIC FEET PER HOUR
CFM	CUBIC FEET PER MIN. (ACTUAL AIR FLOW)
CL	CLEAN OUT
COMP.	COMPRESSOR UNIT
CONT.	CONTINUATION, CONTINUOUS, CONTINUED
CP	CIRCULATING PUMP
CU	CONDENSING UNIT
CT	COILING TOWER
D	DRAIN
DB	DRY BULB TEMPERATURE, °F
DC	DOMESTIC COLD WATER
DHW	DOMESTIC HOT WATER
DHWR	DOMESTIC HOT WATER RETURN
DL	DRAIN LINE
(E)/EXIST/ST	EXISTING
EA	EXHAUST AIR
EVAP/COOL	EVAPORATIVE COOLER
EDF	ELECTRIC DRINKING FOUNTAIN
EF	EXHAUST FAN
EG-1	EXHAUST GRILLE
EMCS	ENVIRONMENTAL MANAGEMENT CONTROL SYSTEM
EQU	EQUIPMENT
ET	EXPANSION TANK
EH	ELECTRIC UNIT HEATER
EMC	EVAPORATIVE WATER COOLER
FCU/U	FAN COIL/UNIT
F/D	FIRE DAMPER
FD	FLOOR DRAIN
FDC	FIRE DEPT. CONNECTION
FL	FLEX LINE
FLR	FLOOR
FS	FLOOR SINK
G-LP	GAS-LOW PRESSURE
G-MED	GAS-MED. PRESSURE
G-HP	GAS-HIGH PRESSURE
(H)	HANDSHAPED ACCESSIBLE
HB	HOSE BIBB
HD	HEATING COIL
HD	HOOD
HP	HORSE POWER
HV	HEATING & VENTILATING UNIT
HW	HOT WATER
HXR	HOT WATER RETURN
HE	HEAT EXCHANGER
HK	HEAT EXCHANGER
IC	IN-LINE CENTRIFUGAL FAN
IEV	INDUSTRIAL EXHAUST FAN
IND	INDUCTION UNIT
LA	LAUNDRY
LBS.	POUNDS
LD	LINEAR DIFFUSER
MANUF.	MANUFACTURER
MAX.	MAXIMUM
MB	MIRING BOX
MBD	MANUAL BALANCING DAMPER
MIN	MINIMUM
MS	MCP SINK
(N)	NOT IN SCOPE
N/L.S.	NON-SCALE
NTS	NOT TO SCALE
OD	OVERFLOW DRAIN LINE
O.F.C.L.	OWNER FURNISHED CONTRACTOR INSTALLED
P	PUMP
P.O.C.	POINT OF CONNECTION
PD	PRESSURE DROP
PR	PRESSURE REGULATOR
PRV	PRESSURE REDUCING VALVE
RA	RETURN AIR
RCU	RECYCLATING CHILLER UNIT
RD	ROOF DRAIN
RSL	ROOF DRAIN LINE
RD	RETURN DRILLE
RF	RETURN FAN
SH	SHUTTER
SK	REVERSE PRESSURE BACKFLOW PREVENTER
RR	RETURN REGISTER
SA	SUPPLY AIR
S.D.	SMOKE DAMPER
SF	SUPPLY FAN
S, SK	SINK
TYP.	TYPICAL
UC	UNIT COOLER
U.G.	UNDERGROUND
UH	UNIT HEATER
U.N.O.	UNLESS NOTED OTHERWISE
UR	UNRAIL
V	VOLUME DAMPER
VTR	VENT THRU ROOF
W	WASTE
WC	WATER CLOSET
WH	WATER HEATER

MECHANICAL NOTES

ALL MECHANICAL WORK SHALL COMPLY WITH:
MCC-2006 & MEC-2006
 -SMARNA STANDARDS
 -MANUFACTURER'S INSTALLATION RECOMMENDATIONS
 -MANUFACTURER'S CLEARANCE REQUIREMENTS
 -OWNER/ARCHITECT WRITTEN SPECIFICATION
 -WRITTEN SPECIFICATIONS FOR THIS PROJECT

*CONTACT ENGINEER IMMEDIATELY W/ DISCREPANCIES BETWEEN ANY OF THE ABOVE.

MATERIAL:
 RECTANGULAR & ROUND DUCTWORK:
 DUCTS SHALL BE MINIMUM 26 GAUGE GALV. SHEETMETAL (SUPPLY AND RETURN).
 INSTALLED PER IMC & EICC WITH MINIMUM 1" ACOUSTIC LINING.
 INSULATE ALL SUPPLY AND RETURN AIR DUCTS PER I.E.C.C. (SEE NOTES BELOW).
 CONDENSATE DRAIN: BY PLUMBING CONTRACTOR.

NOTES:

- ALL WORK SHALL COMPLY W/ APPLICABLE CITY CODES INCLUDING U.L. LABELS & LISTINGS, AS REQUIRED.
- CONSTRUCT AND INSTALL ALL DUCTS ETC. TO SMARNA STANDARDS FOR LOW PRESSURE SYSTEMS AND IN COMPLIANCE W/ ALL IMC AND EICC CODES.
- UNITS TO BE MIN 10.0 SEER PER I.E.C.C. TABLE 603.2.3(2) FOR UNITARY AIR CONDITIONERS (ELECTRICALLY OPERATED).
(CONTRACTOR TO PROVIDE MINIMUM 13 SEER UNITS AS SCHEDULED.)
- ALL INTERIOR SUPPLY AND RETURN AIR DUCTS SHALL BE INSULATED WITH MINIMUM R-5 INSULATION. EXTERIOR DUCTS SHALL BE INSULATED WITH MINIMUM R-8 INSULATION. (SEE I.E.C.C. SECTION 603.2.2)
- ALL LONGITUDINAL AND TRANSVERSE JOINTS, SEAMS AND CONNECTIONS OF SUPPLY AND RETURN DUCTS SHALL BE SECURELY FASTENED AND SEALED WITH WELDS, GASKETS, MASTICS (KNOWNS), MASTIC-PLUS-EMBEDDED-FABRIC SYSTEMS OR TAPES INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. (SEE I.E.C.C. SECTION 603.2.1.2) FOR LOW-PRESSURE DUCT SYSTEMS.
- ALL PIPING SERVING AS PART OF A HEATING OR COOLING SYSTEM SHALL BE THERMALLY INSULATED IN ACCORDANCE WITH SECTION 603.2.2 OF THE I.E.C.C., REGISTERS AND DIFFUSERS.
- ADJUST DAMPERS FOR AIRFLOWS INDICATED ON PLAN AND TO ACHIEVE EVEN TEMPERATURE THROUGHOUT.
- PROVIDE INDEPENDENT AIR BALANCE REPORT TO DOCUMENT FINAL AIR FLOW QUANTITIES.
- PROVIDE 3RD PARTY VERIFICATION OF INSTALLATION AND OPERATION OF ALL DUCT SMOKE DETECTORS, FIRE DAMPERS, SMOKE DAMPERS, COMBINATION FIRE SMOKE DAMPERS, AS WELL AS OUTSIDE AIR BALANCE REPORT AS REFERENCED ON THESE PLANS TO CITY MECHANICAL INSPECTOR AT FINAL MECHANICAL INSPECTION.
- ALL MECHANICAL EQUIPMENT SHALL BE PERMANENTLY IDENTIFIED AND LABELED AS TO THE AREA OR SPACE SERVED BY THE EQUIPMENT. (IMC 301.6)
- ALL MATERIALS EXPOSED WITHIN DUCTS OR FLENUMS SHALL HAVE A FLAME-SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE-DEVELOPED RATING OF NOT MORE THAN 50 WHEN TESTED IN ACCORDANCE WITH ASTM E-84. (IMC 603.2.1)

GRILLE, REGISTER & DIFFUSER SCHEDULE

ALL SUBSTITUTIONS MUST HAVE WRITTEN APPROVAL BY OWNER.

MARK	MANUFACTURER	DESCRIPTION	MODEL #	SIZE	FRAME TYPE	MATERIAL	QBD	REMARKS
CD-1	MATCH EXISTING	CEILING DIFFUSER	MATCH EX	SEE PLAN	SURFACE MOUNTED	STEEL	YES	SEE PLAN FOR NECK SIZE.
SR-1	MATCH EXISTING	SUPPLY REGISTER	MATCH FX	SEE PLAN	FRI-D COORDINATE	STYR	YES	W/ ACOUSTIC FLENUM
RG-1	MATCH EXISTING	RETURN GRILLE	MATCH EX	SEE PLAN	SURFACE MOUNTED	STEEL	NO	SEE PLAN FOR NECK SIZE.
ER-1	MATCH EXISTING	EXHAUST REGISTER	MATCH EX	SEE PLAN	SURFACE MOUNTED	STEEL	NO	SEE PLAN FOR NECK SIZE.

(C) VERIFY ALL COLORS WITH ARCHITECT.

OUTSIDE AIR & AIR BALANCE INFORMATION

OUTSIDE AIR CALCULATIONS (ASHRAE 62.1 2004)				AIR BALANCE SUMMARY	
OCCUPANCY	R_a	R_p	P_p	CFM	
BAR (HP-1)	1000 SF	X 0.18 CFM/SF	+ 7.5 CFM/ PERSON X 100 PEOPLE/ 1000 SF	330	1,190 CFM OUTSIDE AIR PROVIDED VIA HEAT PUMPS
DINING (HP-2)	375 SF	X 0.18 CFM/SF	+ 7.5 CFM/ PERSON X 70 PEOPLE/ 1000 SF	264	4,795 CFM MAKE-UP AIR PROVIDED VIA MALL.
DINING (HP-3)	375 SF	X 0.18 CFM/SF	+ 7.5 CFM/ PERSON X 70 PEOPLE/ 1000 SF	264	
DINING (HP-4)	700 SF	X 0.18 CFM/SF	+ 7.5 CFM/ PERSON X 70 PEOPLE/ 1000 SF	494	7,985 CFM OF TOTAL INTAKE.
KITCHEN (HP-5)	375 SF	X 0.18 CFM/SF	+ 7.5 CFM/ PERSON X 20 PEOPLE/ 1000 SF	124	600 CFM EXHAUST FROM (E) RESTROOM EXHAUST.
DINING (HP-6)	400 SF	X 0.18 CFM/SF	+ 7.5 CFM/ PERSON X 20 PEOPLE/ 1000 SF	282	6,000 CFM EXHAUSTED VIA TYPE 1 HOOD SEE-1 & SEE-2
KITCHEN (HP-7)	250 SF	X 0.18 CFM/SF	+ 7.5 CFM/ PERSON X 20 PEOPLE/ 1000 SF	82	1,125 CFM EXHAUST VIA TYPE II DISHWASHER HOOD SEE-3
KITCHEN (HP-8)	775 SF	X 0.18 CFM/SF	+ 7.5 CFM/ PERSON X 20 PEOPLE/ 1000 SF	256	254 CFM OF POSITIVE BUILDING PRESSURIZATION.
DINING (HP-9)	300 SF	X 0.18 CFM/SF	+ 7.5 CFM/ PERSON X 70 PEOPLE/ 1000 SF	212	INTERLOCK HP-1 WITH KEF-1 AND HP-4 WITH KEF-2
DINING (HP-8)	400 SF	X 0.18 CFM/SF	+ 7.5 CFM/ PERSON X 70 PEOPLE/ 1000 SF	282	TO PROVIDE CONTINUOUS OUTSIDE AIR WHILE EXHAUST FANS ARE RUNNING.
A_z = zone floor areas, R_o = outdoor airflow rate per unit area (Table 6-1)					
P_p = zone population, P_p = outdoor airflow rate per person (Table 6-1)					
TOTAL REQUIRED OUTSIDE AIR				3190	

NelsenPartners
 Nelsen Partners, Inc.
 Architecture Planning Interiors
 Austin - Scottsdale



Steak 44
 5401 NORTH 44TH STREET
 PHOENIX, ARIZONA 85018

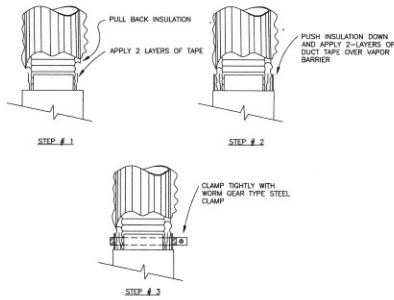
Date
 June 28, 2013
 Revisions
 CITY 7-12-13

Drawings and written material containing trade secrets, confidential information and/or proprietary information shall remain the property of NelsenPartners, Inc. unless otherwise noted in writing.

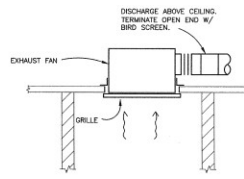
© 2008 NELSEN PARTNERS, INC.
 Project No.
 31201
M300
 MECH SCHEDULES

KUNKA ENGINEERING
 INCORPORATED
 4825 East Camelback Road, Suite 402
 Phoenix, AZ 85018
 Phone: (602) 944-1776
 Fax: (602) 944-1766
 Mobile: (602) 519-1479

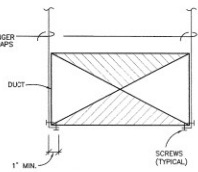
Expires 07/30/2015



FLEX DUCT TAPE AND CLAMP DETAIL (M301)

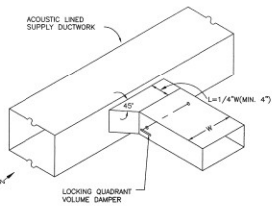


A/V EXHAUST FAN DETAIL (M301)

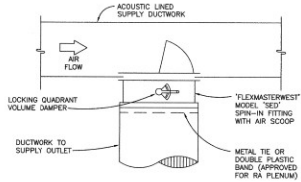


RECTANGULAR DUCT HANGERS		
DUCT SIZE	STRAP/ANGLE	SPACING
UP TO 36"	1"x1/8 GA. STRAP	10'-0"
36" TO 60"	1 1/2"x1/8 ANGLE	10'-0"

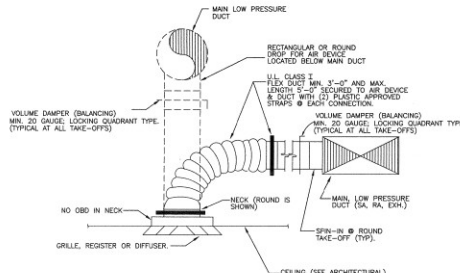
CONCEALED RECTANGULAR DUCT STRAP HANGER DETAIL (M301)



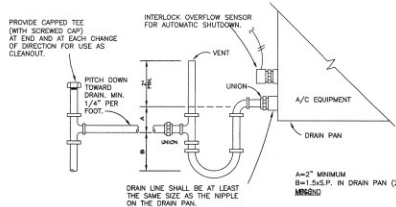
RECTANGULAR BRANCH DUCT TAKE-OFF DETAIL (M301)



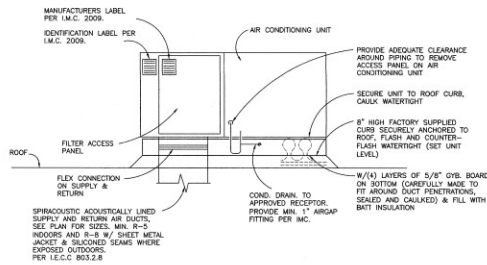
ROUND BRANCH DUCT TAKE-OFF DETAIL (M301)



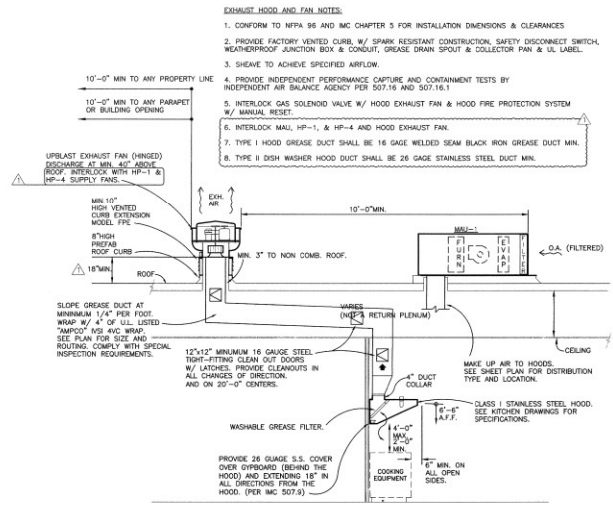
TYPICAL LOW PRESSURE DUCT TAKE-OFF CONNECTION (M301)



TYPICAL CONDENSATE DRAIN W/ AUTOMATIC SHUT OFF DETAIL (M301)



TYPICAL ROOFTOP UNIT DETAIL (M301)



TYPICAL KITCHEN HOOD AND MAKEUP AIR DETAIL (M301)



Steak 44

5101 NORTH 44 TH STREET
PHOENIX, ARIZONA 85018

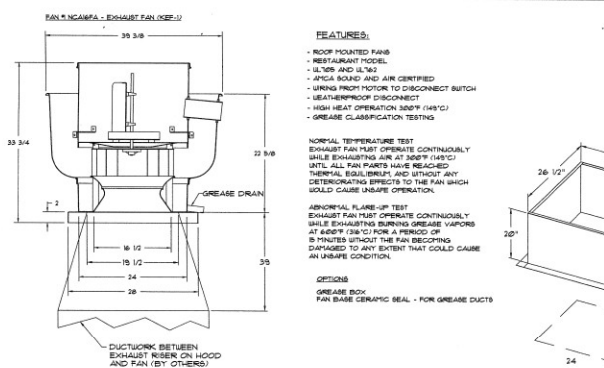
Date
June 28, 2013
Revisions
QTY 7-12-13

Drawings and written material appearing herein constitute original and copyrighted work of the architect and may not be duplicated, used, or disclosed without written consent of the architect.
© 2008 NELSEN PARTNERS, INC.
Project No.
31281
M401
CAPTIVE AIR

CAPTIVE
 AIR
 PHOENIX, AZ
 STEAK 44
 1101 E. McDowell Road, Suite 110, Phoenix, AZ 85006
 480.949.6800
 480.949.6801
 www.nelsenpartners.com

PHOENIX, AZ
 STEAK 44

DATE: 4/17/2013
 DWG. NO.: 1760652
 DRAWN BY: [Signature]
 SCALE: 3/4" = 1'-0"
 MASTER DRAWING
 SHEET NO. 3



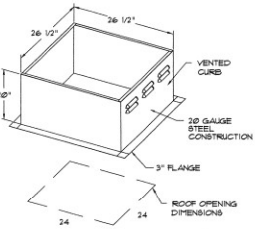
FEATURES:

- ROOF MOUNTED FAN
- RESTAURANT MODEL
- UL759 AND UL752
- APICA SOUND AND AIR CERTIFIED
- WIRING FROM MOTOR TO DISCONNECT SWITCH
- LEATHER-PROOF DISCONNECT
- HIGH HEAT OPERATION 300°F (149°C)
- GREASE CLARIFICATION TESTING

NORMAL TEMPERATURE TEST
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING AIR AT 300°F (149°C) UNTIL ALL FAN PARTS HAVE REACHED THERMAL EQUILIBRIUM AND WITHOUT ANY DETRIMENTARY EFFECTS TO THE FAN WHICH WOULD CAUSE UNSAFE OPERATION.

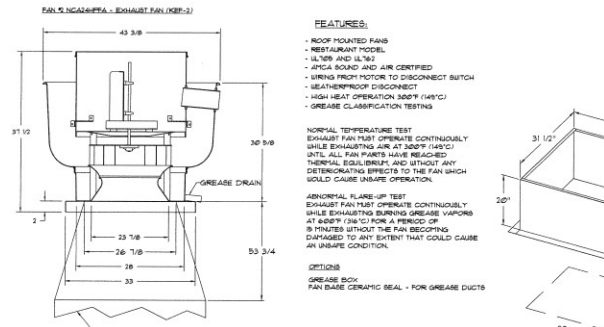
ABNORMAL FLARE-UP TEST
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING BURNING GREASE VAPORS AT 450°F (232°C) FOR A PERIOD OF 5 MINUTES WITHOUT THE FAN BECOMING DAMAGED TO ANY EXTENT THAT COULD CAUSE AN UNSAFE CONDITION.

OPTIONS
GREASE BOX
FAN BASE CERAMIC SEAL - FOR GREASE DUCTS



EXHAUST FAN INFORMATION (TYPE 1) - Job#1760652

FAN UNIT NO.	FAN UNIT MODEL *	MODEL TAG	CFM	ESP.	RPM	HP.	Ø	VOLT	FLA	WEIGHT (LBS.)	SONES
1	NCA16FA	NCA16FA-KEP-1	2362	1.000"	975	1.000"	3	208	3.3	142	11.6
2	NCA24HFA	NCA24HFA-KEP-2	3644	1.250"	987	1.500"	3	208	4.1	203	11



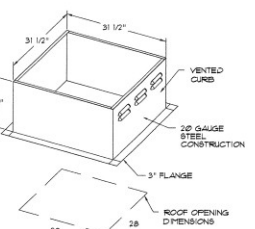
FEATURES:

- ROOF MOUNTED FAN
- RESTAURANT MODEL
- UL759 AND UL752
- APICA SOUND AND AIR CERTIFIED
- WIRING FROM MOTOR TO DISCONNECT SWITCH
- LEATHER-PROOF DISCONNECT
- HIGH HEAT OPERATION 300°F (149°C)
- GREASE CLARIFICATION TESTING

NORMAL TEMPERATURE TEST
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING AIR AT 300°F (149°C) UNTIL ALL FAN PARTS HAVE REACHED THERMAL EQUILIBRIUM AND WITHOUT ANY DETRIMENTARY EFFECTS TO THE FAN WHICH WOULD CAUSE UNSAFE OPERATION.

ABNORMAL FLARE-UP TEST
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING BURNING GREASE VAPORS AT 450°F (232°C) FOR A PERIOD OF 5 MINUTES WITHOUT THE FAN BECOMING DAMAGED TO ANY EXTENT THAT COULD CAUSE AN UNSAFE CONDITION.

OPTIONS
GREASE BOX
FAN BASE CERAMIC SEAL - FOR GREASE DUCTS



CURB ASSEMBLIES

NO.	ON FAN	WEIGHT	ITEM	SIZE
1	#1	41 LBS	Curb	26.500"U x 26.500"D x 26.000"H Vented Hinged
2	#2	48 LBS	Curb	31.000"U x 31.000"D x 30.000"H Vented Hinged
4	#4	42 LBS	Curb	31.000"U x 31.000"D x 15.000"H
	#4		Rail	4.000"U x 4.000"D x 36.000"H along with

VERIFY FITCH CURB
 1/2" x 1/2" x 1/2" : 1/2" x 1/2" x 1/2"
 Curb Flange Required in order to manufacture the curb to specification.

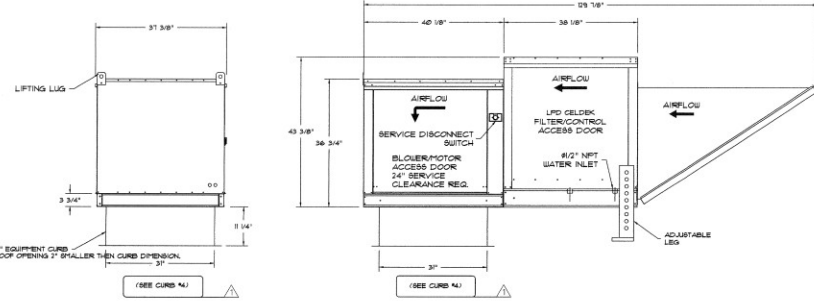
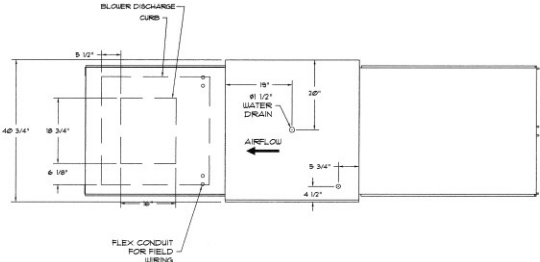
FAN OPTIONS

FAN UNIT NO.	OPTION (Qty. - Descr.)
1	1 - Grease Box
1	1 - Fan Base Ceramic Seal - For Grease Ducts
2	1 - Grease Box
1	1 - Fan Base Ceramic Seal - For Grease Ducts
3	1 - Evaporative Cooler Wiring Harness
1	1 - Separate 120V Wiring Package (Required and used only for EHS or Pressure with VFD) - Three Phase Only

FAN ACCESSORIES

FAN UNIT NO.	FAN UNIT TAG	EXHAUST GREASE GRAVITY CUP	WALL DAMPER	WALL MOUNT DISCHARGE	SIDE GRAVITY MOTORIZED DAMPER	SUPPLY WALL MOUNT
1		YES				
2		YES				

FAN # A2-G5 - SUPPLY FAN
 1. INTERFERED SUPPLY UNIT WITH 18" BLOWER IN SIZE #3 HOUSING
 2. BLOW COOLER LIFT CEILING - HANGING HOOD USE FILTERS
 3. DOWN DISCHARGE AIR FLOW MUST BE LEFT
 4. DRY WIRING CONNECTION TO ENERGIZE EVAPORATIVE COOLERS FROM INTERFERED SUPPLY FAN.
 5. SEPARATE 120V WIRING PACKAGE FOR MAKE-UP AIR UNIT. OPTION MUST BE SELECTED WHEN HOATING VFD IN PRESSURE PANEL OR WITH EHS PACKAGE. PROVIDES SEPARATE 120VAC INPUT TO SUPPLY FAN. THIS 120V SIGNAL MUST BE RUN BY ELECTRICIAN FROM EHS TO FAN SWITCH.



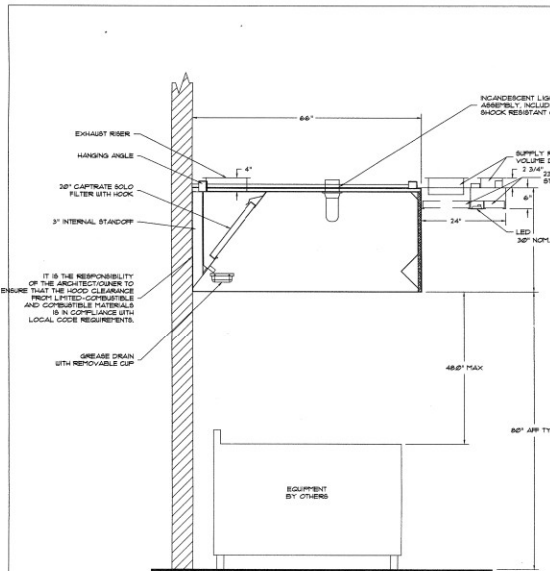
MUA FAN INFORMATION - Job#1760652

FAN UNIT NO.	FAN UNIT MODEL *	BLOWER HOUSING	TAG	CFM	ESP.	RPM	HP.	Ø	VOLT	FLA	EVAP COOLER ENTERING DB TEMP	EVAP COOLER ENTERING WB TEMP	EVAP COOLER LEAVING DB TEMP	EVAP COOLER LEAVING WB TEMP	WEIGHT (LBS.)	SONES
3	A2-G5	G5-PB	A2	4709	0.500"	840	3.000"	3	208	9.5	110.0°F	65.0°F	86.0°F	65.0°F	650	10

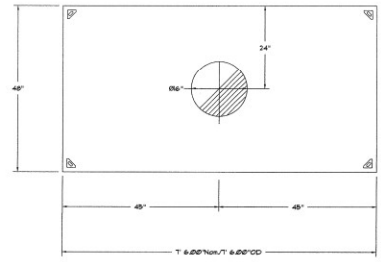
THIS DRAWING WAS PREPARED BY OTHERS AND REVIEWED FOR USE ON THIS JOB BY KUNKA ENGINEERING, INC.



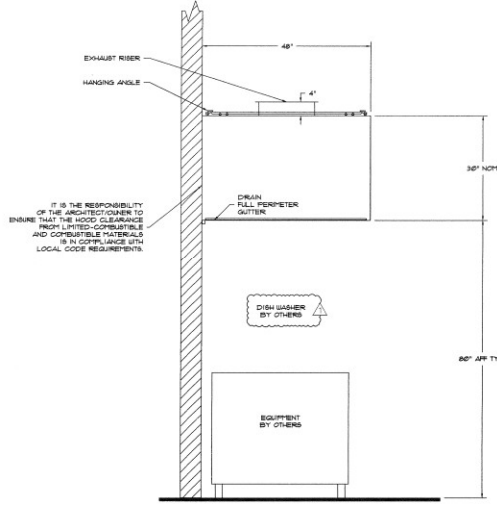
KUNKA ENGINEERING
 INCORPORATED
 4201 East Camelback Road, Suite 4015
 Phoenix, Arizona 85018
 Phone: (602) 949-1762
 Fax: (602) 949-1764
 Email: info@kunkaeng.com
 Expires: 06/30/2015



SECTION VIEW - MODEL 6630ND-2-ACSP-P

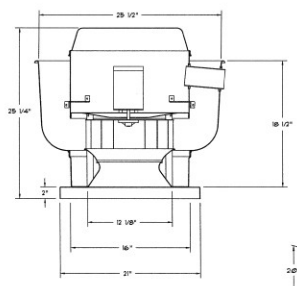


PLAN VIEW - Hood #3
7" 6.00" LONG 4830VHB-G
(DISHWASHER)



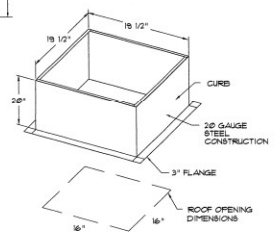
SECTION VIEW - MODEL 4830VHB-G

FAN #3 DU33HFA - EXHAUST FAN (DISHWASHER)



- FEATURES:**
- ROOF MOUNTED FAN
 - UL-508
 - VARIABLE SPEED CONTROL
 - INTERNAL WIRING
 - WEATHERHOOD DISCONNECT
 - THERMAL OVERLOAD PROTECTION (SINGLE PHASE)

- OPTIONS:**
- 1 1/2\"/>



EXHAUST FAN INFORMATION (TYPE II) - Job#1787944

FAN UNIT NO.	FAN UNIT MODEL #	MODEL TAG	CFM	ESR	RPM	HP.	#	VOLT	FLA	WEIGHT (LBS.)	SCREWS
3	DU33HFA	KEF-3	125	0.300	1607	0.333	1	115	4.1	57	118

CURB ASSEMBLIES

NO.	QTY	WEIGHT	ITEM	SIZE
3	* 3	27 LBS	Curb	19.500\"/>

REVISIONS

NO.	DESCRIPTION	DATE

CAPTIVE AIR

PHOENIX, OFFICE
1800 N. CENTRAL AVENUE, SUITE 100
PHOENIX, ARIZONA 85004
TEL: 480.949.6800
WWW.NELSENPARTNERS.COM

Steak 44
PHOENIX, AZ

DATE: 4/17/2013
DWG.#: 160052
SCALE: 3/4" = 1'-0"
MASTER DRAWING

SHEET NO. 2

NelsenPartners
Nelsen Partners, Inc.
Architecture Planning Interiors
Austin - Scottsdale
15210 N. Scottsdale Road, Suite 300
Scottsdale, Arizona 85254
tel: 480.949.6800
tel: 480.949.6801
www.nelsenpartners.com



Steak 44
5101 NORTH 44 TH STREET
PHOENIX, ARIZONA 85018

Date: June 28, 2013
Revisions: CITY 7-12-13

THIS DRAWING WAS PREPARED BY OTHERS AND REVIEWED FOR USE ON THIS JOB BY KUNKA ENGINEERING, INC.

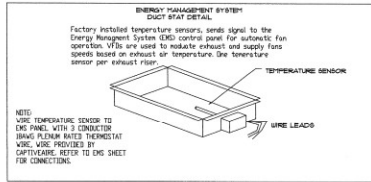


KUNKA ENGINEERING
INCORPORATED
2550 East Camelback Road, Suite 4510
Phoenix, Arizona 85016
Phone: (602) 944-1761
Fax: (602) 944-1762
Mobile: (602) 319-9429
Engine: 08/26/2013

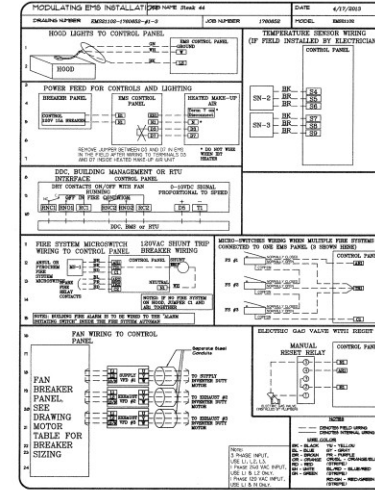
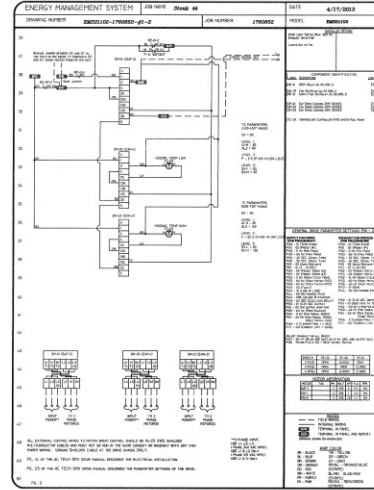
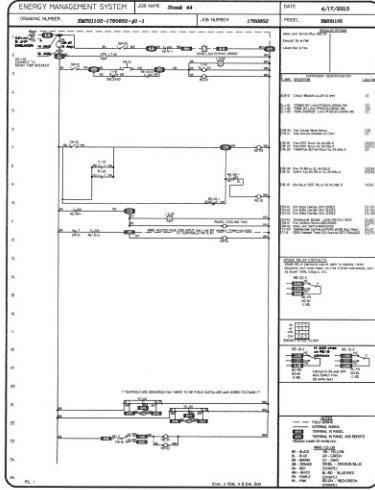
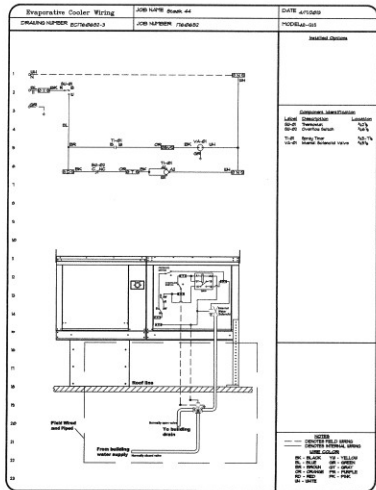
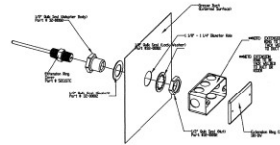
© 2008 NELSEN PARTNERS, INC.
Project No. 31281
M402
CAPTIVE AIR

ELECTRICAL PACKAGES - Job#1780652

NO.	TAG	PACKAGE #	LOCATION	SWITCHES		OPTION	FANS CONTROLLED				
				LOCATION	QUANTITY		TYPE	#	HP.	VOLT	FLA
1		EM102102	Utility Cabinet Right	Utility Cabinet Right	1 Light	EM102 Exhaust in Fire, Lights out in Fire	Exhaust	3	10000	200	3.3
				Hood # 2	1 Fan 1 Other		Exhaust	3	10000	200	4.7
							Supply	3	30000	200	9.9



RTD SENSOR/DUCT STAT INSTALLATION



CAPTIVE ARE

PHOENIX, AZ

DATE: 4/17/2013
DWG#: 1780652
DRAWN BY:
SCALE: 3/4" = 1'-0"
MASTER DRAWING

SHEET NO. 4

NelsenPartners
Nelsen Partners, Inc.
Architecture Planning Interiors
Austin - Scottsdale
15230 N. Scottsdale Road, Suite 300
Scottsdale, Arizona 85254
tel 480.949.6900
fax 480.949.6901
www.nelsenpartners.com



Steak 44
5101 NORTH 44 TH STREET
PHOENIX, ARIZONA 85018

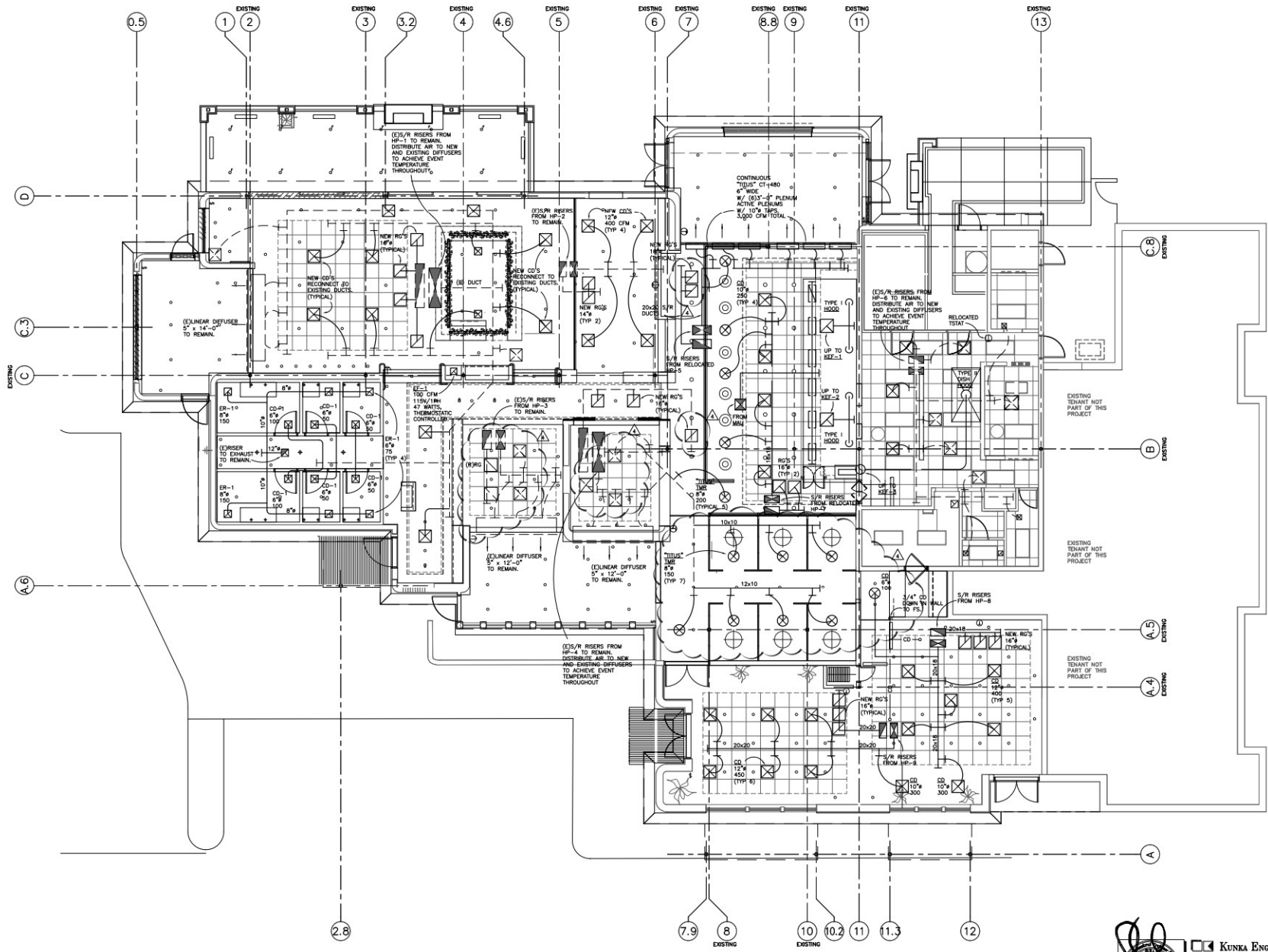
Date: June 28, 2013
Revisions:

THIS DRAWING WAS PREPARED BY OTHERS AND REVIEWED FOR USE ON THIS JOB BY KUNKA ENGINEERING, INC.



KUNKA ENGINEERING INCORPORATED
4838 East Chandler Road, Suite 4838
Phoenix, AZ 85044
Phone: (602) 944-7741
Fax: (602) 944-6474

© 2008 NELSEN PARTNERS, INC.
Project No. 31281
M403
CAPTIVE ARE



Steak 44
 5101 NORTH 44 TH STREET
 PHOENIX, ARIZONA 85018



KUNKA ENGINEERING
 INCORPORATED
 4800 West Camelback Road, Suite 400
 Phoenix, Arizona 85018
 Phone: 602.998.1234
 Fax: 602.998.1235
 WWW.KUNKAENGINEERING.COM
 EIR PROJECT NUMBER: LA-000

© 2013 NEISEN PARTNERS, INC.
 Project No. 31281
M200
 MECHANICAL PLAN