Building Division
Community Development Services
225 S Emerson Avenue
Greenwood, IN 46143
(317) 881-8698
(317) 887-5616 fax
building@greenwood.in.gov

APPLICATION FOR BUILDING PERMIT

PERMIT NO.: 2014-152

Application is hereby made for a permit to improve premises as described herein as shown in the accompanying **plans and specifications**, which improvement is to be located as shown on the accompanying **plot plan**. The information which follows and the accompanying plans, specifications and other information with the representations therein contained, are made a part of this application in reliance upon which the Planning Commission of the City of Greenwood is requested to issue a location improvement permit and any applicable sewer permits.

It is understood and agreed by this Applicant that any error, misstatement or misrepresentation of material fact, either with or without intention on the part of this Applicant, such as might or would operate to cause refusal of this application, or conditional approval thereof, or any material alteration or change in the accompanying plans, specifications or improvements subsequent to the issuance of a permit in accordance with the application, without the approval of the Planning Commission shall constitute sufficient ground for the revocation of this permit.

All building construction work, alterations, repairs, or mechanical installations and appliances connected therewith and other work necessary to complete the following improvement, shall comply with the State Building Rules and Regulations, local ordinances and such other statutory provisions pertaining to this class of work, and such rules, regulations, ordinances and provisions shall be considered a part of specifications, whether specified herein or not.

1) Date of Application 2-14-2014 Date Approved 3/20/14 Date Issued 4-14-14

2) Name of Applicant Mike Huang Phone 317-373-9827

3) Business at Location to be Improved RED SUN (CHINESE TAKE-OUT)

4) Address of Location to be Improved 3100 Meridian Parke Dr. Suite P/Q, Greenwood, IN 46142
Lot, Block, Section, Suite _____ in MERIDIAN PARKE Subdivision

5) Kind of Building Permit (circle one)
COMMN – New
COMMR – Remodel/Tenant Finish
COMMA – Addition

Staff Use
PERMIT FEE $ 843.00
TECH FEE (2) $15.00
TOTAL FEE $ 858.00

6) Size If **new**: Total Sq. Ft. of Building _____ Total Acreage of Project _____
If **remodel/tenant finish**: Total Sq. Ft. of area affected 2160 sqft
If **addition**: Total Sq. Ft. to be added _____

7) Approximate Price of Project $ 40,000

8) Number of Water Meters to be Installed and Size _____

9) Name and address of building contractor: RON WILDER@BEAMAN 783-2343 EXT. 19
TBD

On-Site Contact Person: _____ Phone: _____

The undersigned represents that such work shall start within 90 days and will be completed without delay; that said improvements will be finished in a good workmanlike manner. Should said work not start in good faith within 90 days, the undersigned understands this application will be void and of no force or effect whatever. The above information, to my knowledge and belief, is true and correct:

RECEIVED BY PLANNING DIVISION FEB 14 2014

SIGNATURE OF APPLICANT/OWNER: _____

SIGNATURE OF BUILDING COMMISSIONER: _____
(or designated representative)

CITY OF GREENWOOD DEPARTMENT OF COMMUNITY DEVELOPMENT SERVICES

TO BE COMPLETED BY BUILDING DIVISION STAFF

Airspace Zone?	___ Yes	✓ No	Is Property in Floodway?	___ Yes	✓ No
Eastside TIF Area?	___ Yes	✓ No	Is Property in Floodway Fringe?	___ Yes	✓ No
US 31/Fry TIF Area?	___ Yes	✓ No	Is Building in Floodway/Fringe?	___ Yes	✓ No

If yes, please provide:

Parcel No. 41-03-35-011-098.000-041

Applicable Flood Protection Grade: _____

School: CC Library: JC WRTFD: ✓

Proposed Finished Floor Elevation: _____

Building Division
Department of Community Development Services
225 S Emerson Avenue
Greenwood, IN 46143
(317) 881-8698
(317) 887-5616 fax

PLAN AUTHENTICATION AGREEMENT

Project Name: Red Sun

Project Address: 3100 Meridian Parke Dr. Suite P/Q, Greenwood, IN 46142

As the person eligible and responsible for obtaining a permit or permits as required in Section 10-130 of the City of Greenwood Municipal Code, and based upon information contained within these plans, I certify that these plans are identical to those released for construction by the Indiana Department of Homeland Security, Division of Fire Safety/Plan Review. I also understand that if it is determined that these plans are not identical, all permits obtained from the City of Greenwood as a result of their submittal will be considered to be in violation of Section 10-130 of the City of Greenwood Municipal Code.

Authorized Signature

2-14-2014
Date

Mike Huang
Printed Name

12585

T 29

OFFICE USE ONLY

Approved by
State Board of Accounts
For City of Greenwood 1997

SEWER AVAILABILITY FEE (SAF)

NAME RED SUN CHINESE RESTAURANT CODE 3

CONTACT PERSON/PHONE MIKE HUANG, 317-373-9827

SUBJECT PROPERTY 3100 MERIDIAN PARKE DRIVE, SUITES P & Q

GREENWOOD, INDIANA 46142

SUBDIVISION MERIDIAN PARKE SHOPPING CENTER SECTION LOT BLOCK

TOWNSHIP WHITE RIVER

TYPE OF CONNECTION COMMERCIAL CODE 2

PRELIMINARY FEE CALCULATION

MAXIMUM POTENTIAL USAGE: Proposed Dining Area = 748 sft / 15 sft per person = 50 persons. So, 50 persons x 35 gpd per person = 1750 gpd. So, 1750 gpd / 310 gpd per edu = 5.65 edu's.

EDU 5.65

OTHER DOCUMENTATION FOR CALCULATION ATTACHED? YES

TOTAL PROJECTED FEE 5.65 EDU x $ 2,073.00/EDU $11,712.45

FEE DUE (x 0.333333) $3,904.15

CHECK RECEIVED FROM

DATE 4/14/2014 CALCULATED BY PDP ACCEPTED BY

NAME RED SUN CHINESE RESTAURANT, MIKE HUANG, 317-373-9827 CODE 3

FINAL FEE CALCULATION

1750 gpd (this SAF) - 1435 gpd (partial of SAF #388) = 315 gpd extra usage. So, 315 gpd / 310 gpd per edu = 1.02 edu's.

PAID
Payment received on
APR 14 2014
By
CITY OF GREENWOOD, IN
COMMUNITY DEVELOPMENT SERVICES

EDU 1.02

FINAL FEE DUE 1.02 EDU x $ 2,073.00/EDU $2,114.46

(-) FEE PAID = $0.00

BALANCE FEE DUE = $2,114.46

CHECK RECEIVED FROM Jun Yu Huang

DATE 4/14/2014 CALCULATED BY PDP ACCEPTED BY

Copies To: Applicant Engineering Division Planning Division Finance Department

Would you like to reduce your turnaround time?
ELECTRONICALLY FILE YOUR PROJECT WITH STATE OF INDIANA at http://www.in.gov/dhs/2650.htm.
This on-line filing is through a secure site, you can use it to submit your project information, pay the fees and upload your project plans.
Use Internet Browser to View this report, other browsers are not compatible to view this report

CONSTRUCTION DESIGN RELEASE

State Form 41191 (R9/5-98)

Report Printed on: February 13, 2014

Indiana Department of Homeland Security
DIVISION OF FIRE & BUILDING SAFETY
PLAN REVIEW DIVISION
402 W. Washington St., Room E245
Indianapolis, IN 46204



Available At Your Local Licence Branch
SUPPORT HOOSIER SAFETY

To: Owner / Architect / Engineer
R. Beaman Associates
ROBERT BEAMAN AR00033778
5110 Madison Avenue
Indianapolis IN 46227

Fax & e-mail: 3177845100, rbeaman@beamanassociates.com

Project number	Release date
369382	02/13/14
Construction type	**Occupancy classification**
II-B	A-2, REM
Scope of release	
ARCH ELEC MECH PLUM	
Type of release	
Standard	
Project name	
Chinese Take-Out	
Street address	
3100 Meridian park Drive	
City	**County**
Greenwood	JOHNSON

The plans, specifications and application submitted for the above referenced project have been reviewed for compliance with the applicable rules of the Fire Prevention and Building Safety Commission. The project is released for construction subject to, but not necessarily limited to, the conditions listed below. THIS IS NOT A BUILDING PERMIT. All required local permits and licenses must be obtained prior to beginning construction work. All construction work must be in full compliance with all applicable State rules. Any changes in the released plans and/or specifications must be filed with and released by this Office before any work is altered. This release may be suspended or revoked if it is determined to be issued in error, in violation of any rules of the Commission or if it is based on incorrect or insufficient information. This release shall expire by limitation, and become null and void, if the work authorized is not commenced within one (1) year from the above date.

CONDITIONS:

Note :(A1A & A1B): In accordance with the affidavit sworn under penalties of perjury in the application for construction design release the plans and specifications filed in conjunction with this project shall comply with all of the applicable rules and laws of Fire Prevention and Building Safety Commission. Providing false information constitutes an act of perjury, which is a Class D felony punishable by a prison term and a fine up to $10,000.

In accordance with Section 19 of the General Administrative Rules (675 IAC 12-6-19) a complete set of plans and specifications that conform exactly to the design that was released by the office of the state building commissioner shall be maintained on the construction jobsite as well as a copy of the design release.

Building elements of type II-B construction shall be designed as specified in Chapters 5, 6, and Table 601, IBC (675 IAC 13-2.5).

Please be advised that if an administrative review of this action is desired, a written petition for review must be filed at the above address with the Fire Prevention and Building Safety Commission identifying the matter for which a review is sought no later than eighteen (18) days from the above - stated date, unless the eighteenth day falls on a Saturday, a Sunday, a legal holiday under State statute, or a day in which the Department of Fire and Building Services is closed during normal business hours. In the latter case, the filing deadline will be the first working day thereafter. If you choose to petition, and the before-mentioned procedures are followed, your petition for review will be granted, and an administrative proceeding will be conducted by an administrative law judge of the Fire Prevention and Building Safety Commission. If a petition for review is not filed, this Order will be final, and you must comply with its requirements.

Filed By	Code review official DENISE FITZPATRICK
Address (name,title of local official,street,city,state and ZIP code BUILDING COMMISSIONER Lowell Weber 225 S Emerson Ave Suite C Greenwood, IN 46143 Fax & e-mail: 3178875616, weberl@greenwood.in.gov	

State Building Commissioner

State Fire Marshal

滙基爐頭廚具公司

A.A. INTERNATIONAL TRADING, INC

171 Bowery, New York, NY 10002 Tel: (212) 226-9828 Fax: (212) 226-9810

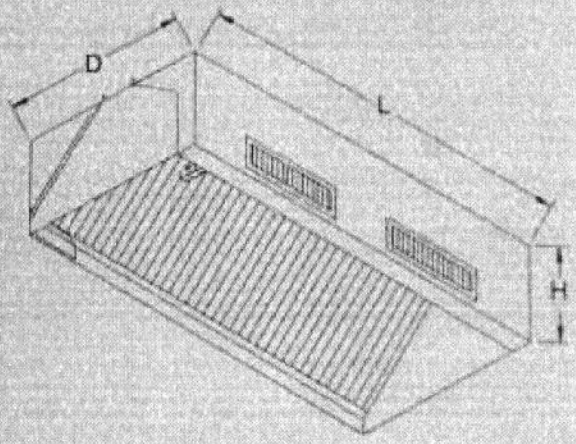
Front Discharge Make-Up Air Exhaust Vent Hoods

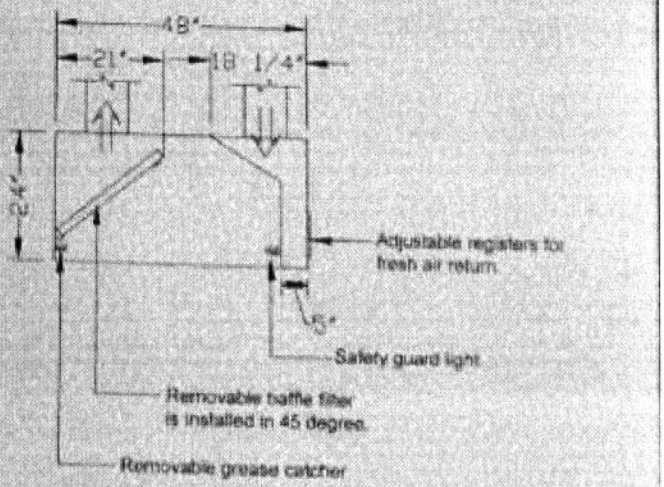
Standard Features:

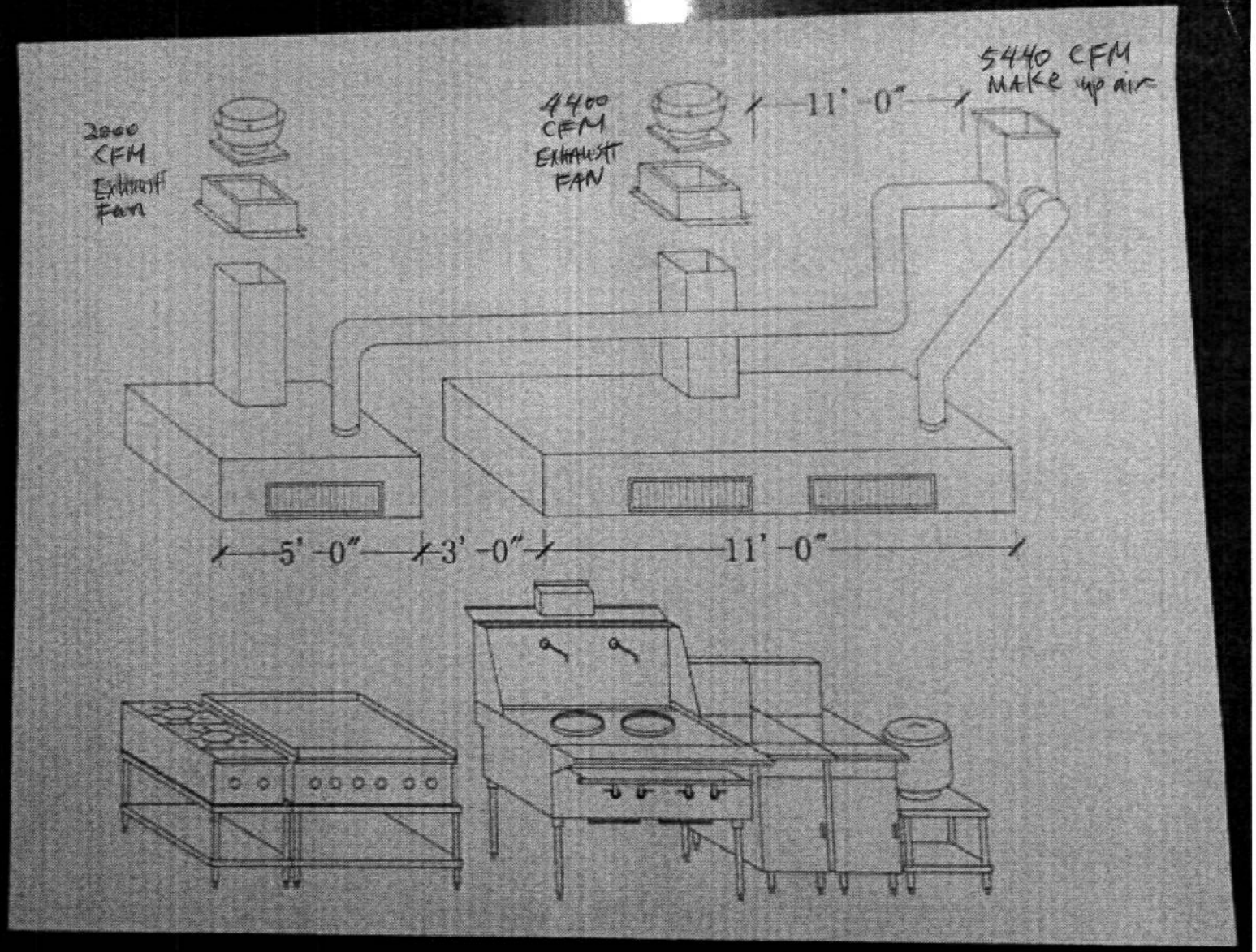
- The hood is constructed not less than (No. 20 MSG) in thickness with stainless steel (NFPA 2-1.1)
- All seam, joints and penetrations of the hood enclosure that direct to and capture grease-laden
- Vapors and exhaust gases shall have liquid tight continuous external weld to the hood's lower outermost perimeter.
- UL-classified aluminum filters are installed in 45 degree & removable for easy cleaning.
- Adjustable registers for fresh air return.
- Full-length grease trough.
- Removable grease container.
- Exhaust and supply collars.
- Front and rear hanging brackets.
- Regular and short front models.
- NSF, and UL listed under NFPA 96.
- 3" air space at rear
- UL listed vapor proof light with wire safety guard.

NCA14FA 7'
NCA16FA 11'

Model NO.	Size of Dimension			Exhaust CFM	Supply CFM	# of Light	# of Filters	Weight (LB)
	L	H	D					
AAMAH-4	48"	24"	48"	1600	1360	1	2	120
AAMAH-5	60"	24"	48"	2000	1700	2	2	150
AAMAH-6	72"	24"	48"	2400	2040	2	3	160
AAMAH-7	84"	24"	48"	2800	2380	2	3	210
AAMAH-8	96"	24"	48"	3200	2720	2	4	240
AAMAH-9	108"	24"	48"	3600	3060	3	5	270
AAMAH-10	120"	24"	48"	4000	3400	3	5	300
AAMAH-11	132"	24"	48"	4400	3740	3	6	330
AAMAH-12	144"	24"	48"	4800	4080	3	6	360
AAMAH-13	156"	24"	48"	5200	4420	4	7	390
AAMAH-14	168"	24"	48"	5600	4760	4	8	420
AAMAH-15	180"	24"	48"	6000	5100	4	8	450
AAMAH-16	192"	24"	48"	6400	5440	4	9	480
AAMAH-17	204"	24"	48"	6800	5780	5	9	510
AAMAH-18	216"	24"	48"	7200	6120	5	10	540
AAMAH-19	228"	24"	48"	7600	6460	5	11	570
AAMAH-20	240"	24"	48"	8000	6800	5	11	600
AAMAH-21	252"	24"	48"	8400	7140	6	12	630
AAMAH-22	264"	24"	48"	8800	7480	6	12	660
AAMAH-23	276"	24"	48"	9200	7820	6	13	690
AAMAH-24	288"	24"	48"	9600	8160	6	14	720
AAMAH-25	300"	24"	48"	10000	8500	7	14	750
AAMAH-26	312"	24"	48"	10400	8840	7	15	780
AAMAH-27	324"	24"	48"	10800	9180	7	15	810
AAMAH-28	336"	24"	48"	11200	9520	7	16	840
AAMAH-29	348"	24"	48"	11600	9860	8	17	870
AAMAH-30	360"	24"	48"	12000	10200	8	17	900
AAMAH-31	372"	24"	48"	12400	10540	8	18	930
AAMAH-32	384"	24"	48"	12800	10880	8	18	960
AAMAH-33	396"	24"	48"	13200	11220	9	19	990
AAMAH-34	408"	24"	48"	13600	11560	9	20	1020
AAMAH-35	420"	24"	48"	14000	11900	9	20	1050
AAMAH-36	432"	24"	48"	14400	12240	9	21	1080
AAMAH-37	444"	24"	48"	14800	12580	10	21	1110






2000 CFM Exhaust Fan
4400 CFM EXHAUST FAN
11' 0"
5440 CFM MAKE up air
5' -0"
3' -0"
11' -0"

107 in

24 in

RED SUN

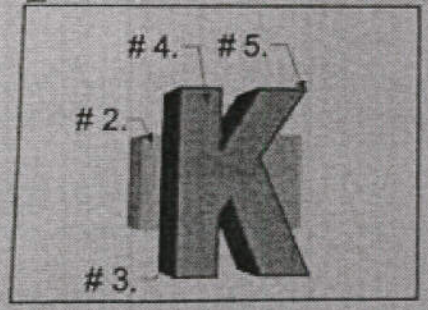
107 in

12 in

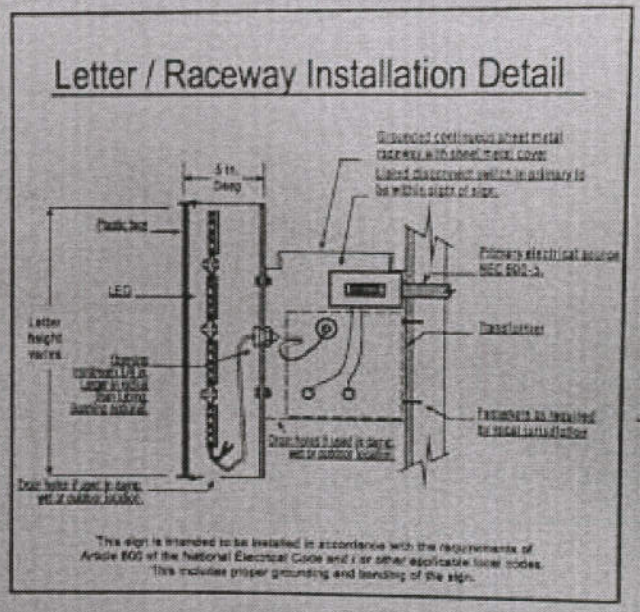
Chinese / Japanese Cuisine Dine In / Carry Out

24" ILLUMINATED CHANNEL LETTER SIGNAGE DETAILS

1. 24" INDIVIDUAL CHANNEL LETTER W/ U/L LISTED
2. MOUNTED ON 8"X8" BRONZE COLOR RACEWAY
3. 0.04 BRONZE COLOR ALLUMINUM RETURN
4. 1/8" RED ACRYLIC FACE
5. 1" GOLDEN PLASTIC TRIM-CAP
6. RED LED SET



Letter / Raceway Installation Detail



This sign is intended to be installed in accordance with the requirements of Article 600 of the National Electrical Code and / or other applicable local codes. This includes proper grounding and bonding of the sign.

AE 01381

RED SUN — 黃太吉

RED SUN CHINESE / Japanese

[347] 363 5124

滙基集團

A.A. Restaurant Planning & Supplies, Inc.

171 BOWERY NEW YORK, NY 10002
Tel: 212-226-9828 Fax: 212-226-9810

Please Sign Here To Approve This Design and Fax it Back To Us Thank You!

Client Acceptance

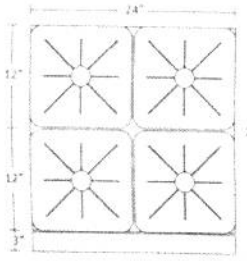
X 黃太吉

Date: 2014-3-24 | Salesperson: | Designed By:

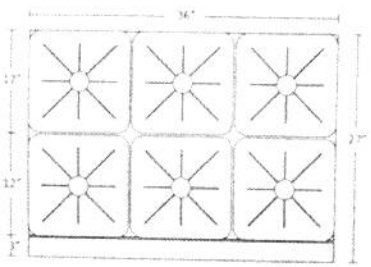
STAINLESS STEEL POT STOVE (NSF)

STANDARS FEATURES

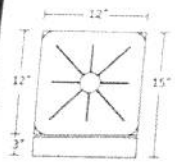
1. Stainless steel front and sides
2. Heavy gauge chassis
3. Individual S/S non clog pilots for instant ignition for each burner
4. 12"x12" sectional cast Iron top grates
5. Manual gas control valve for each burner
6. Countertop models come with 4" Legs
7. Removable drip pan for easy cleaning
8. Compact design for counter top use
9. NSF Listed



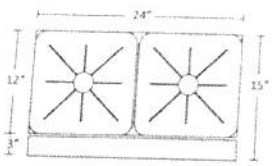
OWST-019-4



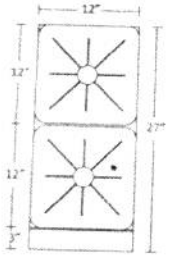
OWST-019-6



OWST-019-1

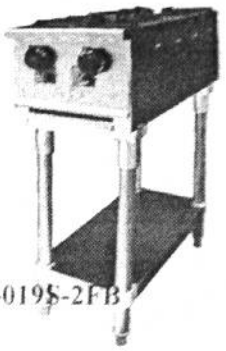


OWST-019-2LR



OWST-019-2FB

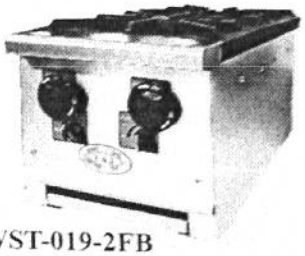
MODEL NO.	BURNER	W	L	H	BTU	WEIGHT
COUNTERTOP MODEL						
OWST-019-1	1	15"	12"	14 ¼"	28 K	lbs
OWST-019-2FB	2	27"	12"	14 ¼"	56 K	lbs
OWST-019-2LR	2	15"	24"	14 ¼"	56 K	lbs
OWST-019-4	4	27"	24"	14 ¼"	112 K	lbs
OWST-019-6	6	27"	36"	14 ¼"	168 K	lbs
WITH 25" H STAND FOR CUSTOM-MADE ONLY						
OWST-019S-1	1	15"	12"	30"	28 K	lbs
OWST-019S-2FB	2	27"	12"	30"	56 K	lbs
OWST-019S-2LR	2	15"	24"	30"	56 K	lbs
OWST-019S-4	4	27"	24"	30"	112 K	lbs
OWST-019S-6	6	27"	36"	30"	168 K	lbs



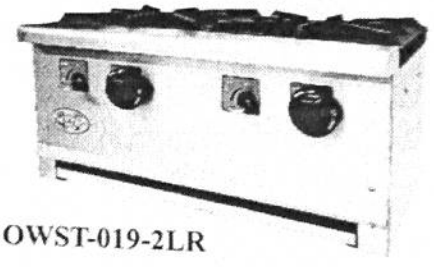
OWST-019S-2FB



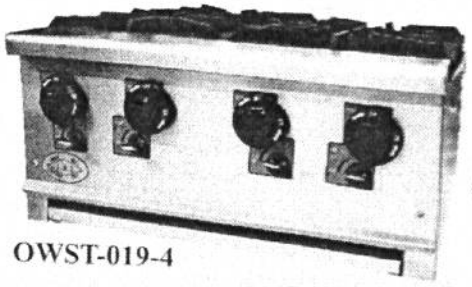
OWST-019-1



OWST-019-2FB



OWST-019-2LR



OWST-019-4

滬基爐頭廚具公司

AMERICAN RESTAURANT EQUIPMENT, INC

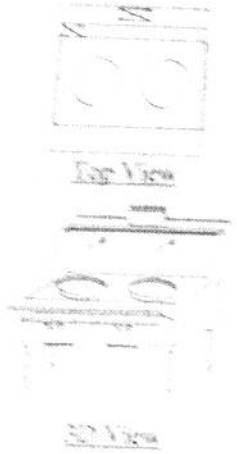
[illegible] Bowery New York, NY 10002 Tel: (212) 226-9828 Fax: (212) 226-9810

Chinese Wok Stove

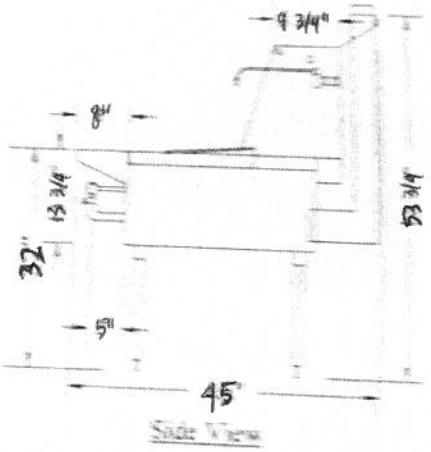
Standard Features:

- Heavy-duty construction ensures durability.
- Easy access manually controlled swing faucet.
- Water-cooled top help control stove top temperature.
- Stainless steel front, pipe rack, and splash.
- Standard models are available with up to 8 chambers.
- Front gas 1-1/2 manifold to each burner.
- AGA certified, NSF, MEA listed.
- All models may have 13", 16", 18", 20" and 22" DIAMETER CHAMBER.
- Three burner types are available: ring-burner, cumular jet-burner, and duck jet-burner.
- Four waste drain styles are available: surface, traditional, a drawer and channel style.
- Natural or Propane gas.

Model	Burners	W x H	BTU/hr.	Weight (lbs)
AACW-2	2	45" x 53-3/4"	220,000	500



Top View



Side View



Top View

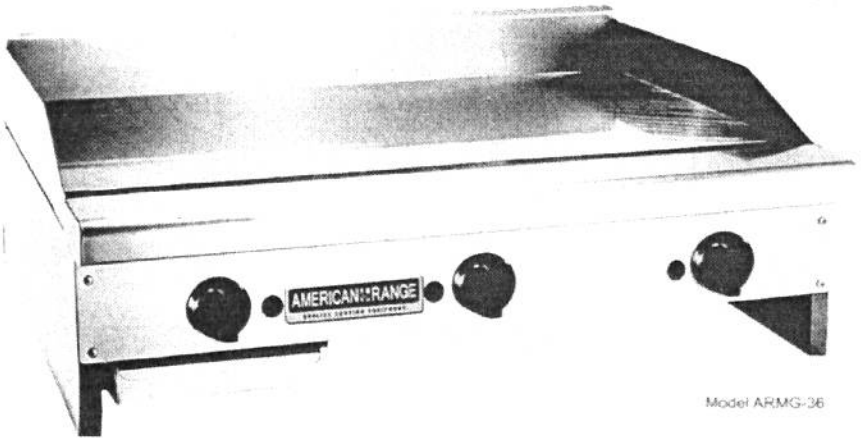
Three Ring Burner | 23 Tip Jet | 32 Tip Jet | 18 Tip Vertical shield

Three King Burner | 23 Tip Jet | 32 Tip Jet | 18 Tip Vertical shield

MANUAL & THERMOSTATIC GRIDDLES

- Stainless steel rugged exterior body.
- Highly polished steel griddle plates in 3/4" & 1" thicknesses.
- "U" shaped burners for every 12" of griddle surface for even cooking.
- 21" cooking depth, standard.
- 3" splash guard standard.
- Stainless steel pilots for instant ignition on each 30,000 BTU burner.
- 3½" wide S/S grease trough and a large grease pan.
- Limited one year parts and labor warranty.





Model ARMG-36



MANUAL		THERMOSTATIC		3/4" THICK GRIDDLE PLATE						S/S STANDS		
MODEL	LIST PRICE	MODEL	LIST PRICE	W	D	H	BURNERS	BTU (KW)	Ship Wt Lbs (Kg)	MODEL	Lbs. (kg)	LIST PRICE
ARMG-12	**$1630**	ARTG-12	**$2350**	12"	30"	10½"	1	30K (9)	100 (45)	■ ESS-12	35 (15)	**$400**
ARMG-24	**1730**	ARTG-24	**2465**	24"	30"	10½"	2	60K (18)	220 (100)	■ ESS-24	47 (21)	**675**
ARMG-36	**2480**	ARTG-36	**3395**	36"	30"	10½"	3	90K (26)	300 (136)	■ ESS-36	54 (25)	**895**
ARMG-48	**3250**	ARTG-48	**4325**	48"	30"	10½"	4	120K (35)	365 (166)	■ ESS-48	72 (33)	**1085**
ARMG-60	**4180**	ARTG-60	**5698**	60"	30"	10½"	5	150K (44)	500 (227)	■ ESS-60	99 (45)	**1295**
ARMG-72	**5480**	ARTG-72	**6575**	72"	30"	10½"	6	180K (53)	600 (273)	■ ESS-72	110 (50)	**1550**

■ Casters for stands (set of 4) A35104 **$120**
■ Casters for stands (set of 6) A35105 **$180**

MANUAL		THERMOSTATIC		1" THICK GRIDDLE PLATE								
MODEL	LIST PRICE	MODEL	LIST PRICE	W	D	H	BURNERS	BTU (KW)	Ship Wt Lbs (Kg)	MODEL	Lbs. (kg)	LIST PRICE
ARMG-112	**$1880**	ARTG-112	**$2575**	12"	30"	10½"	1	30K (9)	114 (52)	■ ESS-12	35 (15)	**$400**
ARMG-124	**2050**	ARTG-124	**3368**	24"	30"	10½"	2	60K (18)	254 (115)	■ ESS-24	47 (21)	**675**
ARMG-136	**2795**	ARTG-136	**3925**	36"	30"	10½"	3	90K (26)	343 (156)	■ ESS-36	54 (25)	**895**
ARMG-148	**3665**	ARTG-148	**5045**	48"	30"	10½"	4	120K (35)	438 (199)	■ ESS-48	72 (33)	**1085**
ARMG-160	**4500**	ARTG-160	**6190**	60"	30"	10½"	5	150K (44)	600 (273)	■ ESS-60	99 (45)	**1295**
ARMG-172	**5578**	ARTG-172	**7390**	72"	30"	10½"	6	180K (53)	700 (318)	■ ESS-72	110 (50)	**1550**

■ 4" legs set of 4 **$165**. 60" & 72" models require set of 6 legs. **$250**.
■ For 24" deep cooking surface (griddle plate) add **20%** to the list price.

■ Casters for stands (set of 4) A35104 **$120**
■ Casters for stands (set of 6) A35105 **$180**

CRATED DIMENSIONS: Height 20" (508) x Depth 36" (914) x Width add 5" (127) to width.

MADE IN USA

*Must specify type of gas and elevation if over 2000 ft. when ordering.

TRI-STAR ★★★

Value • Performance • Quality

FLOOR MODEL FRYERS

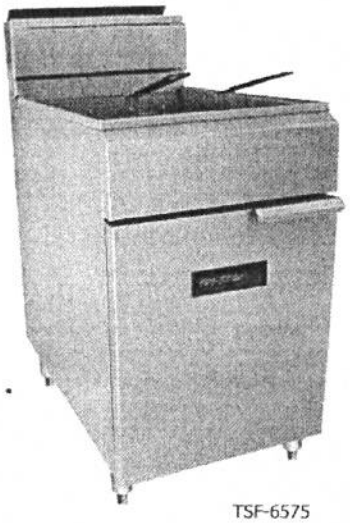
Design Features

- Fryers are capable of high capacity and high production cooking.
- High performance burners allows for quick recovery at extreme peak periods of production.
- Front sloping vessel bottom traps food particles and prevents carbonization in the fry zone.
- Reduces flavor transfer and extends oil life.
- Deeper vessel allows for extra oil level depth for frying larger products.
- Vessel has precision welded edges and seams for strength, durability and no-leak joints.
- Tube-fired heating design. Oil rapidly heats to the set temperature due to the extra heat transfer around the tubes.
- Superior to the open pot design.

Options & Accessories

- Gas Conversion kits
- Casters – Set of 4 front two locking
- Quick Disconnect and Flexible Gas Hose
- Stainless steel tank cover.
- Joiner Strip: to connect two fryers and prevent oil seepage between the fryers or drain station.
- Full and Twin size baskets.
- Stainless steel oil drain pan.
- Stainless steel spreader/Work Top 12", 18", 24" wide
- ¾" NPT x 48" Length
- ¾" NPT x 60" Length
- Side drain board
- 12" x 12" pan for dump station

Certifications



TSF-6575

Standard Features

- Fryer vessel tank: All stainless steel high quality construction, 16 gauge # 304 material.
- Durable double layer access door.
- Stainless steel front, door and basket hanger/flue riser. Aluminized sides.
- Twin chrome plated fryer baskets with cool grip plastic coated handles.
- Thermostatic controls adjust from 200° to 400°F.
- Millivolt control system: No electrical hook up required.
- Combination Gas Valve includes pressure regulator and pilot ignition system. Hermetically sealed for operating stability. ¾" NPT gas inlet in rear.
- Safety Shut Off System which shuts off 100% gas when temperature reaches the hi-limit.
- Large chrome plated removable crumb screen made of tight mesh under fryer baskets.
- Drain Valve: 1 ¼" diameter for easy draining of oil.
- Legs are 6" high chrome plated adjustable legs.

Tri-Star Manufacturing • 729 Third Ave., Dallas, TX 75226 • (866) 782.7462
www.tri-starmfg.com

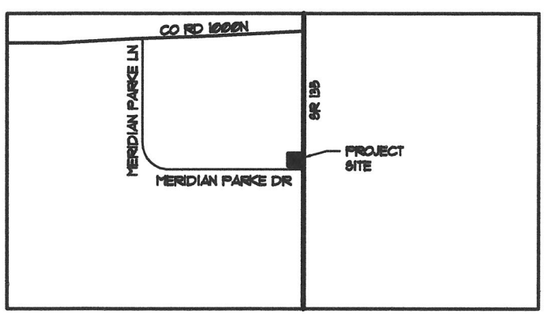
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CHINESE TAKE-OUT RESTAURANT

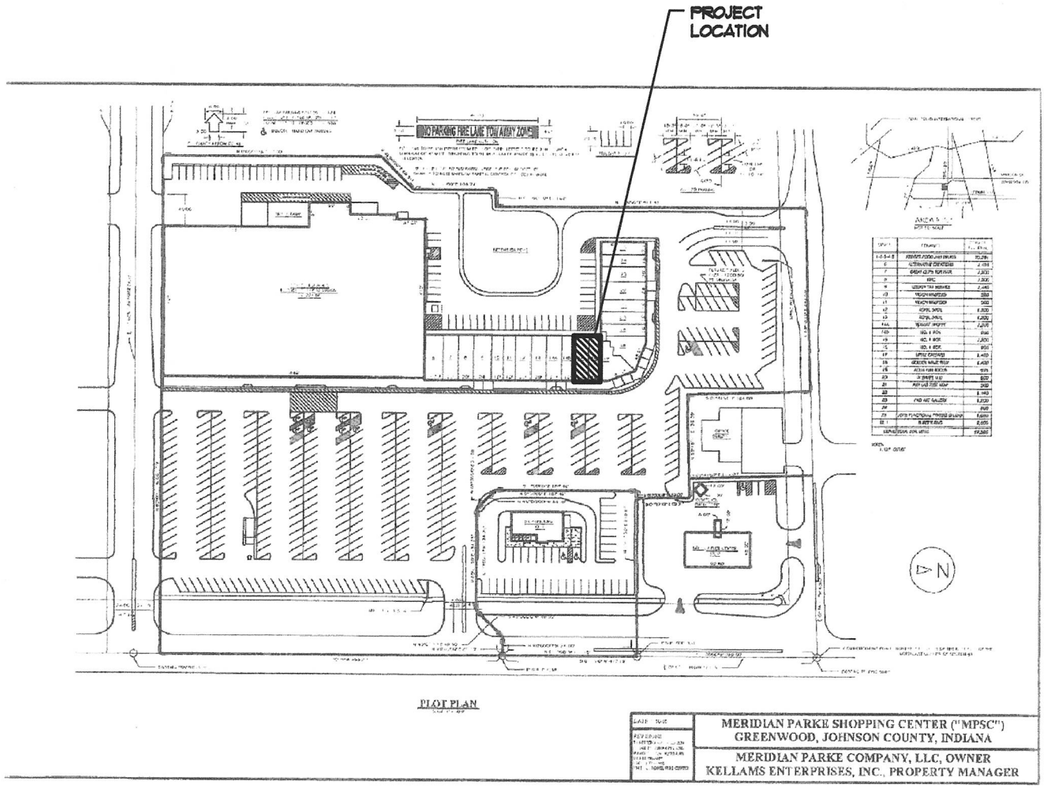
MERIDIAN PARKE SHOPPING CENTER
3100 MERIDIAN PARKE DRIVE, SUITE P/Q,
GREENWOOD, INDIANA 46142

DRAWING INDEX

C-1	COVER SHEET AND EXISTING SITE PLAN
A-1	FLOOR PLAN - REFLECTED CEILING PLAN
M-1	H.V.A.C. PLAN, SCHEDULES AND NOTES
M-2	H.V.A.C. SCHEDULES, NOTES AND DETAILS
E-1	POWER PLAN - LIGHTING PLAN
E-2	ELECTRICAL NOTES
E-3	LIGHTING FIXTURE SCHEDULE - PANEL SCHEDULE
P-1	PLUMBING PLAN
P-2	PLUMBING NOTES



VICINITY MAP
NOT TO SCALE
NORTH



EXISTING SITE PLAN
NOT TO SCALE
NORTH

LEGAL DESCRIPTION

MERIDIAN PARKE SHOPPING CENTER
GREENWOOD, INDIANA
JOHNSON COUNTY
PARCEL NO. 41-03-35-011-018.000-041

bai
Beaman Associates, Inc
Architects & Engineers
5110 Madison Avenue
Indianapolis, IN 46227
(317) 783-2343

ROBERT E. BEAMAN # AR00033778

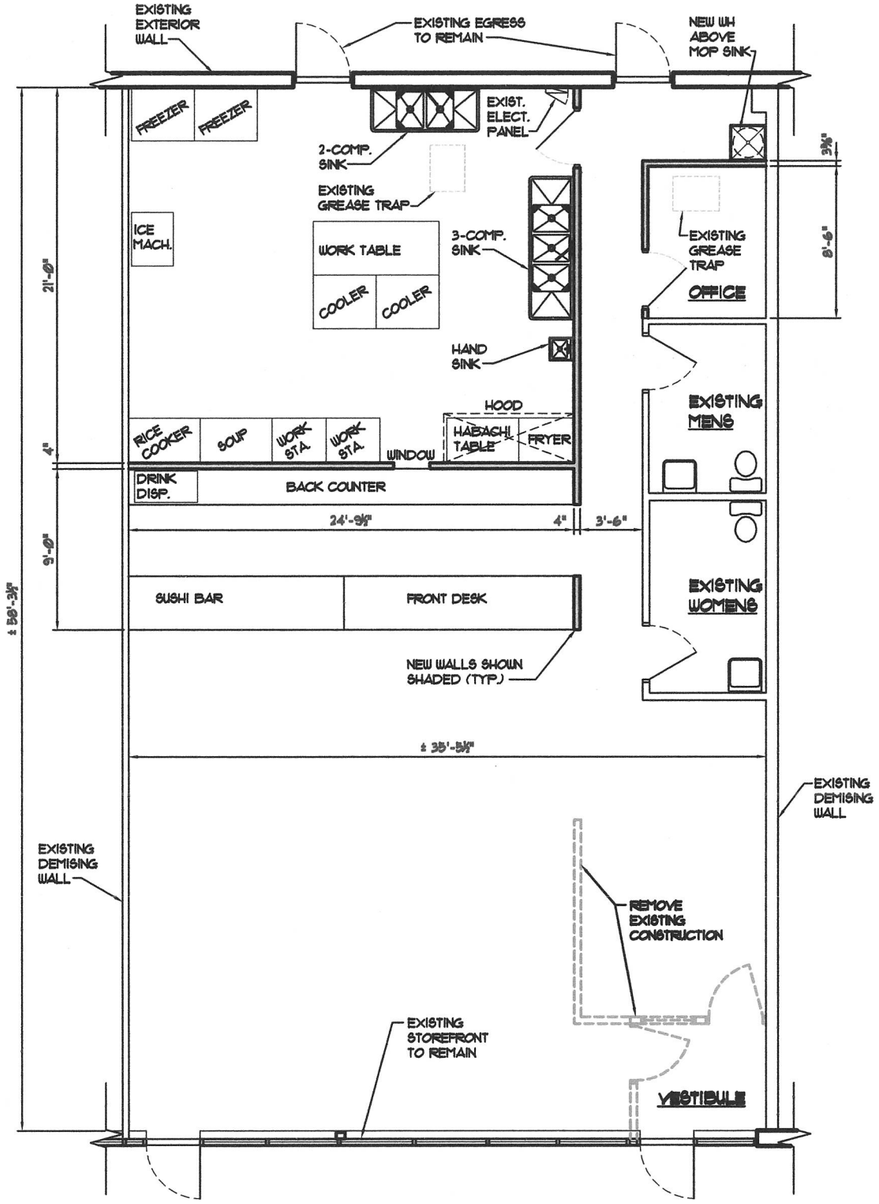
PROJECT NO.:	1347
DRAWN BY:	bai
CHK. BY:	
DATE:	JANUARY 10, 2014
REVISIONS:	

CHINESE TAKE-OUT RESTAURANT
MERIDIAN PARKE SHOPPING CENTER
3100 MERIDIAN PARKE DRIVE, SUITE P/Q, GREENWOOD, INDIANA 46142

COVER SHEET AND EXISTING SITE PLAN

C-1

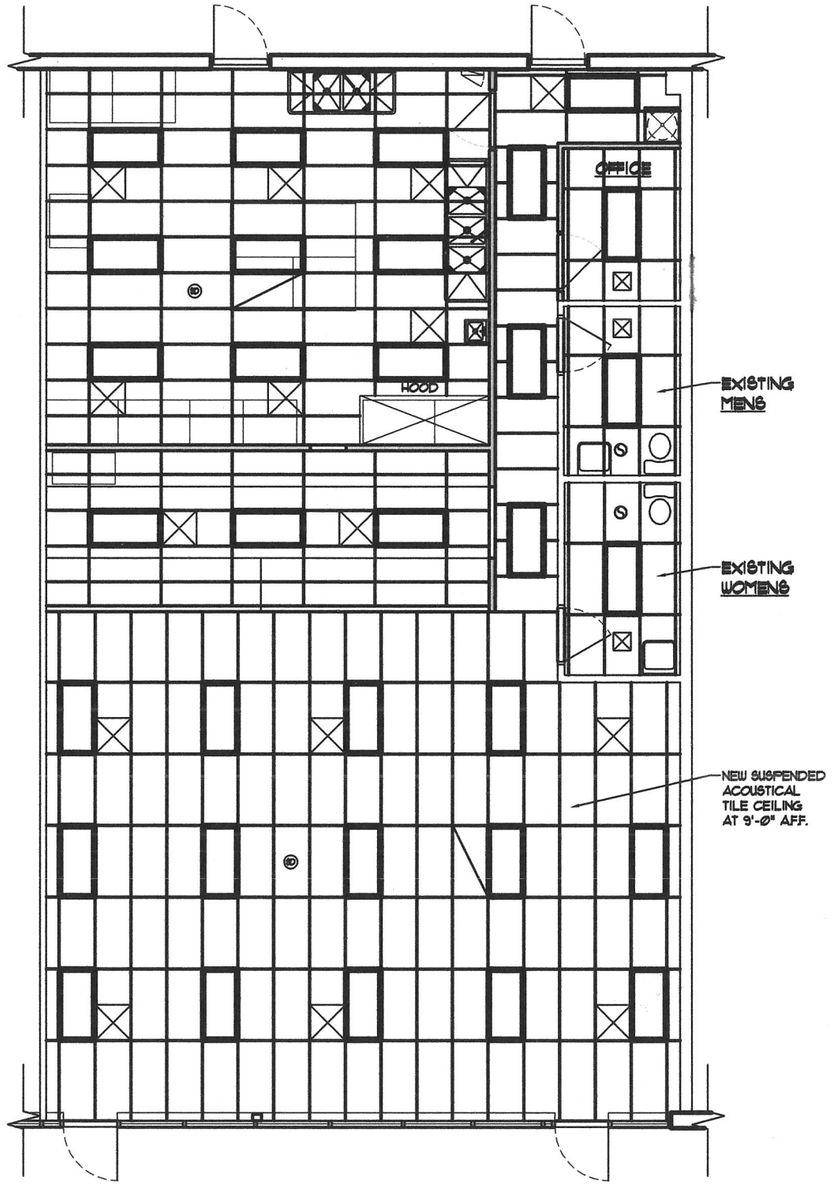
T:\2013 Jobs\1347 Chinese Take-Out Restaurant\RBai\Drawings\Current\C-1 Cover Sheet and Existing Site plan.dwg, 2/4/2014 2:40:31 PM, Plotted By:: jes, Brother MFC-J6910DW.pc3, 1:2.12267



FLOOR PLAN

½" 0 1' 2' 4'

NORTH



REFLECTED CEILING PLAN

½" 0 1' 2' 4'

NORTH

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ROBERT E. BEAMAN # AR00033778

PROJECT NO.:	1347
DRAWN BY:	baj
CHK. BY:	
DATE:	JANUARY 10, 2014
REVISIONS:	

CHINESE TAKE-OUT RESTAURANT

MERIDIAN PARKE SHOPPING CENTER

300 MERIDIAN PARKE DRIVE, SUITE P/Q, GREENWOOD, INDIANA 46142

FLOOR PLAN / REFLECTED CEILING PLAN

A-1

T:\2013 Jobs\1347 Chinese Take-Out Restaurant\RBai\Drawings\Current\A-1 Floor Plan - Reflected Ceiling Plan.dwg, 2/4/2014 2:40:08 PM, Plotted By: jes, Brother MFC-J6910DW.pc3, 1:101.891

RETURN / SUPPLY AIR DIFFUSER SCHEDULE:

ITEM	MFR.	TYPE	MODEL	SIZE	NECK SIZE
A	TITUS	SUPPLY	300RL	10"x6"	REF. DRAWING
B	TITUS	SUPPLY	TMS	24"x24"	8"ø
C	TITUS	SUPPLY	TMS	24"x24"	10"ø
D	TITUS	SUPPLY	TMS	24"x24"	12"ø
E	TITUS	SUPPLY	PAS-AA	24"x24"	14"ø
F	TITUS	SUPPLY	25D	16"x12"	REF. DRAWING
G	TITUS	SUPPLY	8F	24"x24"	REF DRAWING
1	TITUS	RETURN	50F-A	12"x12"	-
2	TITUS	RETURN	50F-A	24"x12"	-
3	TITUS	RETURN	50F-A	24"x24"	-
4	TITUS	RETURN	50F-A	24"x36"	-
5	TITUS	RETURN	50F-A	24"x48"	-

NOTE:

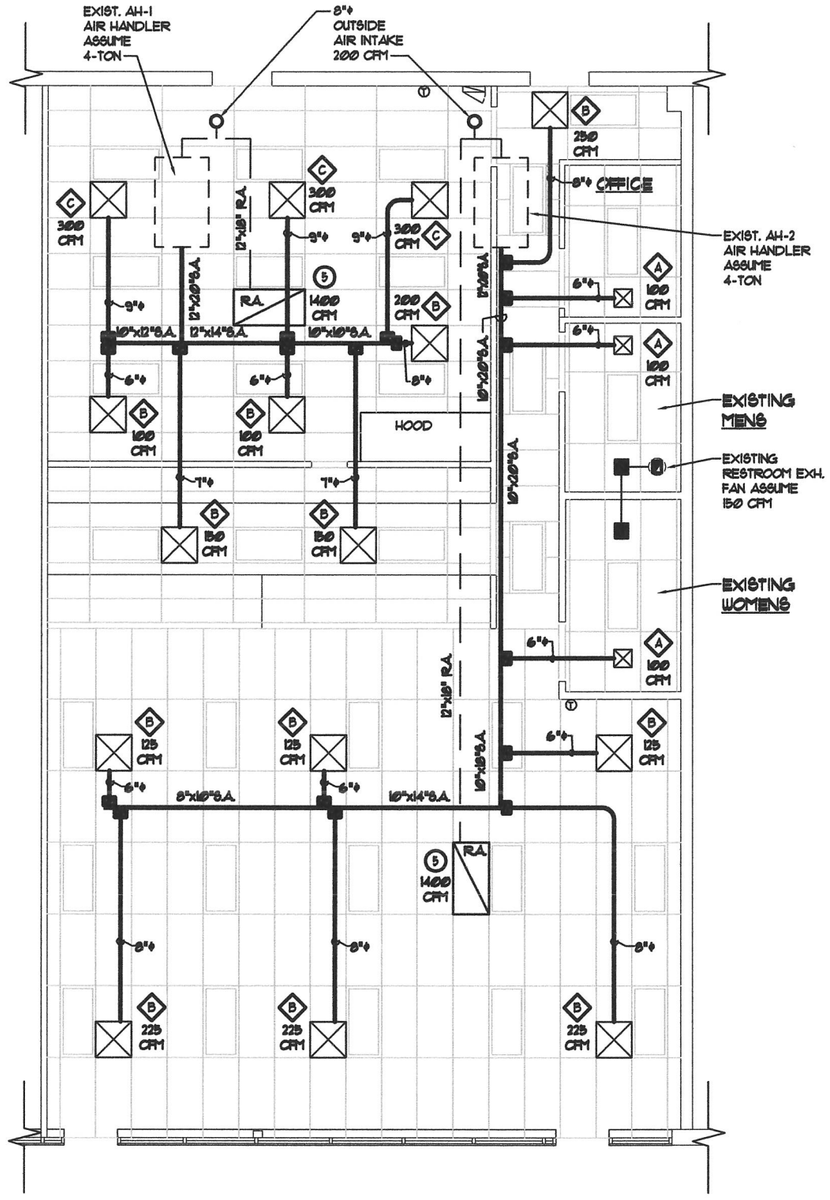
1. DIFFUSERS SHALL HAVE OPPOSED BLADE DAMPERS.
2. DIFFUSERS SHALL FIT 24"x24" LAY - IN CEILING GRID.
3. DIFFUSERS SHALL BE LOUVER FACE TYPE. WITH BAKED ENAMEL FINISH EXCEPT FOR PERFORATED DIFFUSERS IN KITCHEN AREA.
4. DIFFUSERS/ GRILLES SHALL BE EQUAL TO ANEMOSTAT, CARNES, METALAIRE, TITUS.
5. RA GRILLES TO BE ALUMINUM, EGG-CRATE TYPE, 1/2"x1/2" SPACING WITH WHITE FINISH.

H.V.A.C. SYMBOLS LEGEND

- T - THERMOSTAT.
- - PIPING UP.
- - PIPING DOWN.
- - FLEXIBLE DUCT CONNECTION. TYPICAL ON ALL INLET AND OUTLETS OF FANS & H.V.A.C. UNITS.
- SD - SPLITTER DAMPER IN RECTANGULAR DUCT. PROVIDE TURNING VANES (INSTALL PER SMACNA).
- - EXHAUST / RETURN / COMBUSTION / OUTSIDE AIR UP.
- - SUPPLY AIR DUCT UP.
- - SUPPLY AIR DUCT DOWN.
- - INDICATES TRANSITION FROM RIGID TO FLEXIBLE DUCTWORK.
- - INDICATES SPIN-IN FITTING WITH MANUAL DAMPER.
- - EXHAUST / RETURN / COMBUSTION / OUTSIDE AIR DUCT DOWN.
- MD - RECTANGULAR BRANCH DUCT CONNECTION WITH MANUAL DAMPER. PROVIDE AIR EXTRACTORS.
- - CEILING AIR DIFFUSER (ROUND OR SQUARE NECK) WITH DIRECTION OF AIR FLOW INDICATED.
- - DUCT TEE / ELL FITTINGS WITH SMACNA TURNING VANES. PLACE IN ACCORDANCE WITH SMACNA.
- - INDICATES SIZE/TYPE OF SA DIFFUSER.
- - INDICATES SIZE/TYPE OF RA REGISTER.

0 H.V.A.C. KEY NOTES

1. PROVIDE RETURN AIR FILTER GRILLES IN CEILING, PROVIDE DUCT TRANSITION FROM R.A. AT RTU TO SHEET METAL R.A. PLENUM.
2. CONDENSING UNIT ON ROOF FOR H.V.A.C.
3. INTAKE TO BE A MINIMUM OF 10'-0" FROM EXHAUST.
4. H.V.A.C. CONTRACTOR SHALL COORDINATE THERMOSTAT MOUNTING LOCATION WITH CONTRACTOR INSTALLING EQUIPMENT IN THIS AREA. THERMOSTAT SHALL NOT BE LOCATED NEAR EQUIPMENT WHICH PRODUCES HEAT OR HUMIDITY. TYPICAL FOR ALL. ALL THERMOSTATS TO BE MOUNTED 48" A.F.F.
5. H.V.A.C. CONTRACTOR SHALL INSTALL ALL CONDENSATE DRAIN LINE CONNECTIONS. H.V.A.C. CONTRACTOR SHALL INSTALL COMPRESSOR AND EVAPORATOR AND MAKE FINAL CONNECTIONS.
6. ALL ROOF MOUNTED H.V.A.C. EQUIPMENT SHALL BE HELD A MINIMUM OF 10'-0" FROM THE EDGE OF ROOF, UNLESS BUILDING HAS 42" PARAPET WALL OR 42" GUARD RAILS. H.V.A.C. CONTRACTOR SHALL PROVIDE GUARD RAILS AROUND EQUIPMENT IF ABOVE CONDITIONS ARE NOT MET.
7. THERMOSTATS SHALL BE HONEYWELL T-7300/GT300 B1008 OR EQUAL WITH SHIELDED CABLE. ALL THERMOSTATS AND LOW VOLTAGE WIRING SHALL BE FURNISHED AND INSTALLED BY H.V.A.C. CONTRACTOR.



H.V.A.C. PLAN

½" 0 1' 2' 4'

NORTH

Robert E. Beaman Architect
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Indianapolis, IN 46227
(317) 783-2343

ROBERT E. BEAMAN # AR00033778

PROJECT NO.:	1347
DRAWN BY:	bai
CHK. BY:	
DATE:	JANUARY 10, 2014
REVISIONS:	

CHINESE TAKE-OUT RESTAURANT

MERIDIAN PARKE SHOPPING CENTER

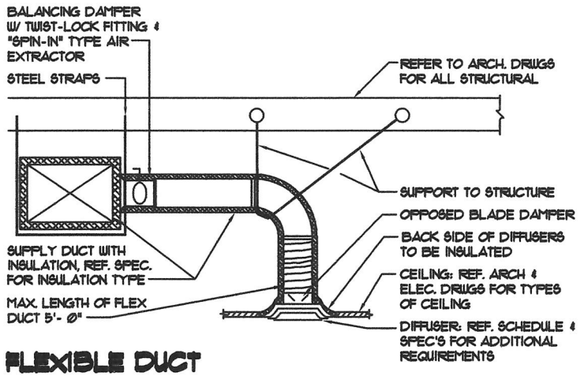
300 MERIDIAN PARKE DRIVE, SUITE F/O, GREENWOOD, INDIANA 4642

H.V.A.C. PLAN, SCHEDULE, & NOTES

M-1

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FLEXIBLE DUCT CONNECTION DETAIL

1 / M-2

NO SCALE

NOTE:

ALL RECTANGULAR DUCTWORK UP TO AND INCLUDING 30"x12" SHALL BE SUPPORTED WITH 1"x22GA GALVANIZED STEEL STRAPS OR 1/4" GALVANIZED STEEL ROD.

ALL ROUND DUCTWORK UP TO AND INCLUDING 18" DIA. SHALL BE SUPPORTED WITH 1"x22GA GALVANIZED STEEL STRAPS OR 1/4" GALVANIZED STEEL.

SUPPORT SIZES ARE REFERENCED FROM SMACNA HVAC DUCT CONSTRUCTION STANDARDS METAL AND FLEXIBLE: LATEST EDITION.

SECURE TO STRUCTURE AS FOLLOWS:
METAL JOIST: CLAMPS
WOOD JOIST: 5/8" BOLTS

ROOFTOP H.V.A.C. UNIT SCHEDULE

	AH-1	AH-2
MANUFACTURER	EXISTING	EXISTING
MODEL NO.	------	------
BTUH INPUT(HEAT)	100,000	100,000
BTUH OUTPUT(HEAT)	80,000	80,000
TOTAL COOLING CAPACITY	4 TON (ASSUMED)	4 TON (ASSUMED)
LINE VOLTAGE	208/3ø/60	208/3ø/60
SUPPLY AIR CFM	1600	1600
RETURN AIR CFM	1400	1400
OUTSIDE AIR CFM	200	200
E.S.P.	.05"	.05"

NOTE:

1. REFERENCE ELECTRICAL DRAWINGS FOR DUCT MOUNTED SMOKE DETECTOR LOCATIONS.
2. NEW HVAC UNITS TO HAVE A MINIMUM 10.3 E.E.R.
3. HVAC UNITS TO HAVE AN ECONOMIZER.
4. UNITS WILL BE SUPPLIED WITH 14" HIGH ROOF CURBS AND PROGRAMMABLE THERMOSTATS.

AIR BALANCE SCHEDULE

ITEM	O.A.	R.A.	S.A.	E.A.	PRESSURE
AH-1	200	1400	1600	----	+200
AH-2	200	1400	1600	----	+200
EF-1	----	----	----	-150	-150
TOTALS	400	2800	3200	-150	+250

H.V.A.C. GENERAL NOTES :

A. ALL SUPPLY, RETURN DUCTS AND OUTSIDE AIR DUCTS INSIDE BUILDING SHALL BE INSULATED EXTERNALLY WITH 1 1/2" THICK FIBERGLASS WITH A DENSITY OF 1.5 POUNDS PER CUBIC FOOT AND BE COMPLETE WITH VAPOR BARRIER JACKET. ALL DUCT INSULATION, TAPE COVERINGS, AND FLEXIBLE CONNECTORS SHALL HAVE A FLAME SPREAD RATING OF 25 OR LESS AND A SMOKE DEVELOPED RATING OF 50 OR LESS IN ACCORDANCE WITH ASTM E84. ALL SA/RA/OA DUCT INSULATION SHALL HAVE A MINIMUM "R" VALUE EQUAL OR GREATER THAN "R-5". ALL INSULATION SHALL MEET REQUIREMENT'S OF STATE AND LOCAL CODES AND MECHANICAL CODES.

B. ALL FLEXIBLE DUCTS SHALL BE METAL FLEX CLASS 1 TYPE 500 AIR DUCT AND SHALL BE U.L. LISTED AND HAVE 1" THICK FIBERGLASS INSULATION ENCASED IN A VAPOR BARRIER OF SEAMLESS, NON-COMBUSTIBLE, CO-POLYMER PLASTIC. ALL FLEX DUCT INSULATION SHALL BE EQUAL TO R-5 OR GREATER.

C. ALL FLEXIBLE DUCTS SHALL BE CONNECTED TO TRUNK OR BRANCH DUCTS WITH A MINIMUM OF THREE SHEET METAL SCREWS AT EACH CONNECTION AND BE TAPED TO PROVIDE AN AIR TIGHT SEAL. MAXIMUM LENGTH OF FLEXIBLE DUCT SHALL BE 5'-0". REFER TO DETAIL.

D. FLEXIBLE DUCT HANGER STRIPS SHALL BE MINIMUM 2" WIDE BY 22 GAUGE GALVANIZED METAL.

E. ALL DUCTWORK SHALL BE INSTALLED IN ACCORDANCE WITH THE MOST RECENT PUBLISHED SMACNA STANDARDS FOR LOW-VELOCITY, LOW-PRESSURE DUCTS.

F. ALL CONTROL WIRING SHALL BE FURNISHED AND INSTALLED BY H.V.A.C. CONTRACTOR.

G. PROVIDE NEOPRENE FLEXIBLE CONNECTIONS AT SUPPLY AND RETURN DUCT CONNECTIONS ON H.V.A.C. UNITS.

H. H.V.A.C. CONTRACTOR SHALL BALANCE H.V.A.C. SYSTEM TO AIR QUANTITIES INDICATED. PROVIDE TYPED WRITTEN REPORT TO OWNER UPON COMPLETION.

I. H.V.A.C. CONTRACTOR SHALL VISIT SITE PRIOR TO SUBMITTING BID TO VERIFY ALL EXISTING CONDITIONS.

J. H.V.A.C. CONTRACTOR SHALL FIELD VERIFY DUCT CLEARANCE/ SPACE FOR ROUTING DUCTS PRIOR TO SUBMITTING BID. CONTRACTOR MAY ALTER DUCT SIZING TO ACCOMODATE CLEARANCES ABOVE CEILINGS, BUT MUST MAINTAIN SAME EFFECTIVE DUCT AREA.

K. ALL WORK SHALL BE FURNISHED AND INSTALLED TO COMPLY WITH ALL STATE AND LOCAL CODES.

L. H.V.A.C. CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS TO GENERAL CONTRACTOR PRIOR TO FINAL PAYMENT.

M. SHEET METAL SA/RA/OA/EA DUCTWORK SHALL COMPLY WITH THE FOLLOWING GAUGES:

DIMENSION OF LONGEST SIDE	DUCT DIAMETER	SHEET METAL GAUGES STEEL
THRU 12"	ø"-12"	26
13" TO 30"	13" TO 18"	24

N. ALL JOINTS, LONGITUDINAL AND TRANSVERSE SEAMS, AND CONNECTIONS IN DUCTWORK MUST BE SECURELY SEALED USING WELDMENTS: MECHANICAL FASTENERS WITH SEALS, GASKETS, OR MASTICS: MESH AND MASTIC SEALING SYSTEMS: OR TAPES. TAPES AND MASTICS MUST BE LISTED AND LABELED IN ACCORDANCE WITH UL 181A OR UL 181B.

O. MECHANICAL FASTENERS AND SEALS, MASTICS, OR GASKETS MUST BE USED WHEN CONNECTING DUCTS TO FANS OR OTHER AIR DISTRIBUTION EQUIPMENT, INCLUDING MULTIPLE-ZONE.

P. EACH SUPPLY AIR OUTLET OR DIFFUSER MUST HAVE ITS OWN BALANCING DEVICE. ACCEPTABLE BALANCING DEVICES INCLUDE ADJUSTABLE DAMPERS LOCATED WITHIN THE DUCTWORK, TERMINAL DEVICES, AND SUPPLY AIR DIFFUSERS.

Q. THE BACK SIDE OF ALL DIFFUSERS SHALL BE INSULATED BY H.V.A.C. CONTRACTOR.

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PROJECT NO.:	1347
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CHK. BY:	
DATE:	JANUARY 10, 2014
REVISIONS:	

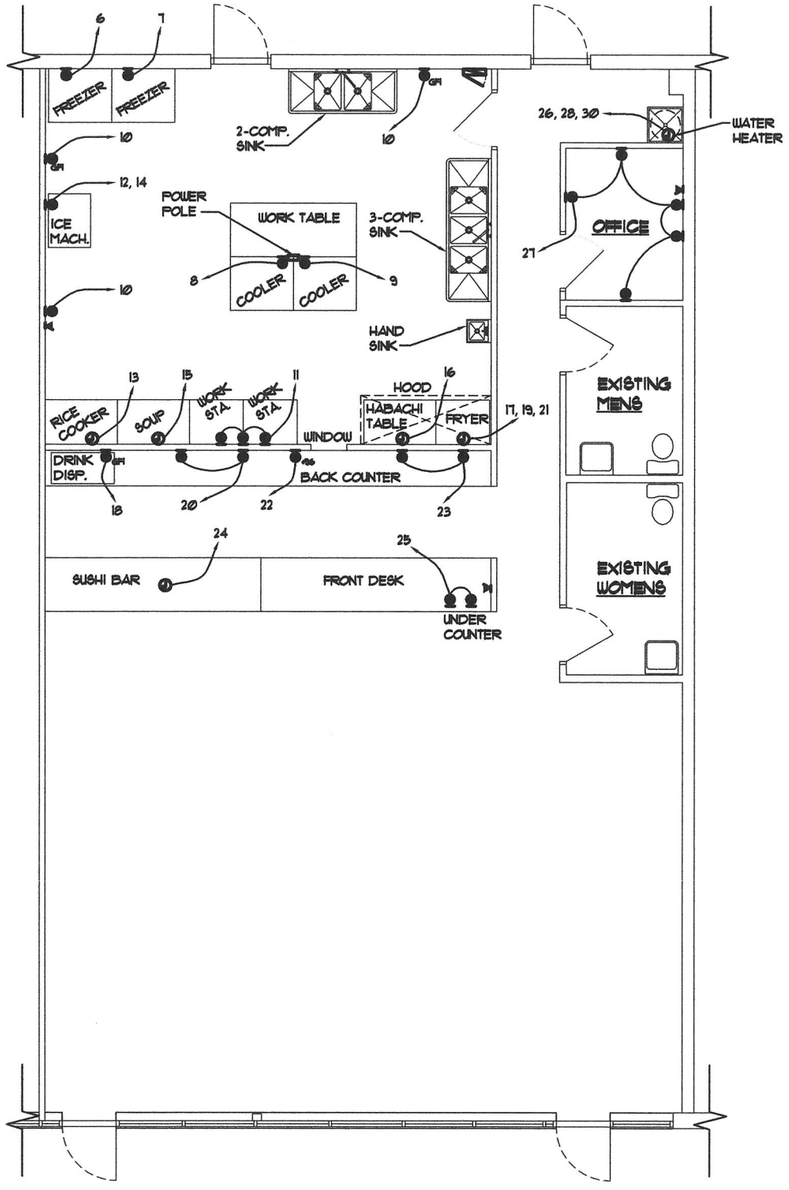
CHINESE TAKE-OUT RESTAURANT

MERIDIAN PARKE SHOPPING CENTER

300 MERIDIAN PARKE DRIVE, SUITE F/G, GREENWOOD, INDIANA 46142

H.V.A.C. SCHEDULES, NOTES, AND DETAILS

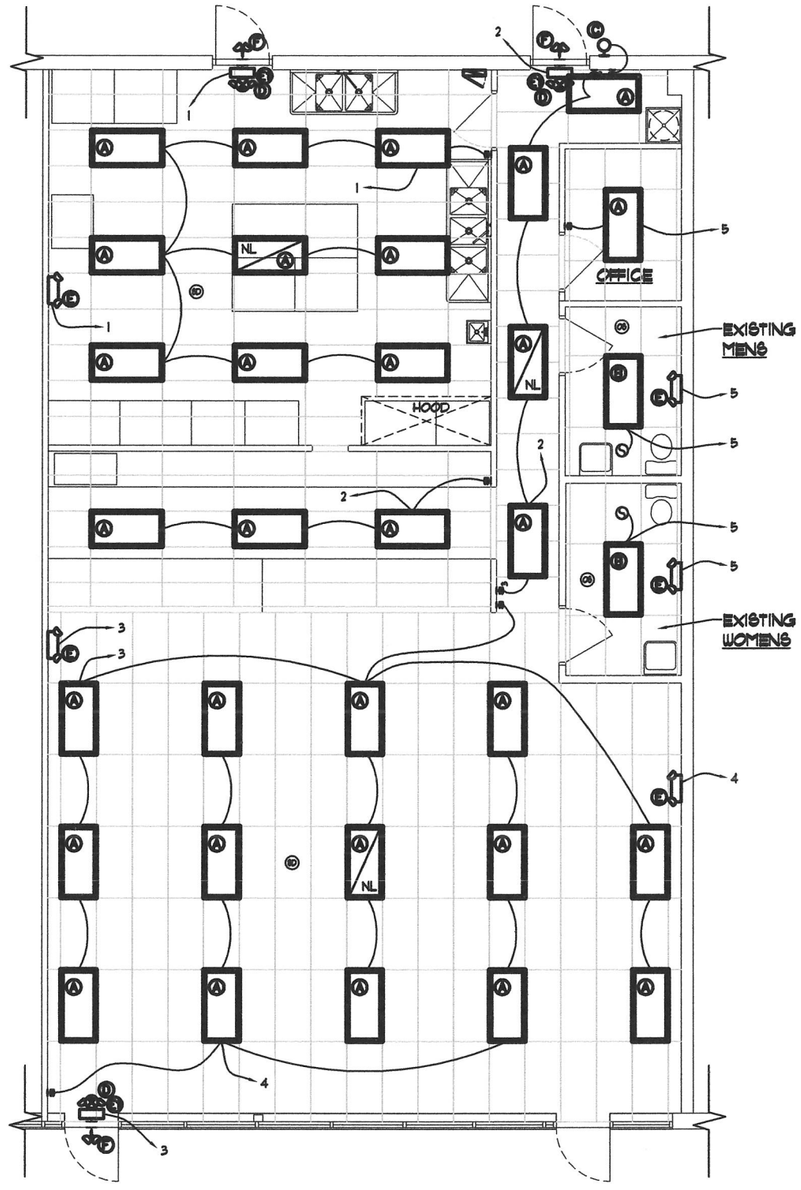
M-2



POWER PLAN

1/4" 0 1' 2' 4'

NORTH



LIGHTING PLAN

1/4" 0 1' 2' 4'

NORTH

(OS) = OCCUPANCY SENSOR

ELECTRICAL SHEET NOTES:

1. VERIFY WITH OWNER EXACT LOCATION AND MOUNTING HEIGHT OF EMERGENCY EGRESS LIGHTING ABOVE DOOR AND PLATE GLASS.
2. TELEPHONE SYSTEM FURNISHED BY PHONE CONTRACTOR MOUNT ON 24"x24"x3/4" PLYWOOD BACKBOARD. BOTTOM OF BACKBOARD AT 72" AFF. BACKBOARD BY ELECTRICAL CONTRACTOR.

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PROJECT NO.:	1347
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CHINESE TAKE-OUT RESTAURANT

MERIDIAN PARKE SHOPPING CENTER

3100 MERIDIAN PARKE DRIVE, SUITE P/Q, GREENWOOD, INDIANA 46142

POWER PLAN / LIGHTING PLAN

E-1

T:\2013 Jobs\1347 Chinese Take-Out Restaurant\RBai\Drawings\Current\E-1 Power Plan - Lighting Plan.dwg, 2/4/2014 2:38:40 PM, Plotted By:: jes, Brother MFC-J6910DW.pc3, 1:101.892

GENERAL NOTES:

GENERAL REQUIREMENTS:

A. ELECTRICAL CONTRACTOR SHALL COORDINATE FULLY WITH OTHER CONTRACTORS ASSOCIATED WITH THIS PROJECT TO VERIFY ALL EQUIPMENT LOCATIONS, CONNECTION REQUIREMENTS, ELEVATIONS AND LOCATIONS OF PIPES, CONDUITS AND DUCTS TO PREVENT CONFLICTS DURING CONSTRUCTION. ANY RELOCATION OR REROUTING OF EQUIPMENT, PIPES, CONDUITS, DUCTS OR MATERIALS RESULTING FROM A LACK OF COORDINATION BETWEEN CONTRACTORS WILL BE AT THE CONTRACTORS EXPENSE.

B. EQUIPMENT ROUGH-INS SHOWN ARE ACCURATE TO THE BEST OF DESIGNER'S KNOWLEDGE. HOWEVER, IN SOME INSTANCES, THE OWNER OR SUPPLIER MAY SUBSTITUTE, OR THE EQUIPMENT ITEM MAY VARY FROM WHAT IS SHOWN. THEREFORE, THE CONTRACTOR SHALL VERIFY ALL CRITICAL DIMENSIONS WITH THE OWNER PRIOR TO CONSTRUCTION. FAILURE OF THE ELECTRICAL CONTRACTOR TO VERIFY THESE DIMENSIONS SHALL PLACE THE RESPONSIBILITY FOR ANY SUBSEQUENT RELOCATION DIRECTLY UPON THE CONTRACTOR.

C. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL REQUIRED DISCONNECT SWITCHES AND MOTOR STARTERS TO ALL EQUIPMENT.

D. ELECTRICAL CONTRACTOR SHALL REVIEW WITH OWNER AND SIGNAGE MANUFACTURER, REQUIREMENTS AND LOCATION OF BUILDING SIGNAGE PRIOR TO CONSTRUCTION AND PROVIDE 120VAC CONNECTION AS REQUIRED.

E. ELECTRICAL CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS AT JOB COMPLETION.

F. ALL WORK SHALL BE INSTALLED PER ALL GOVERNING CODES.

G. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL PLUGS, HUBBELL PLUGS (TWIST LOCKS)/RECEPTACLES COMPLETE. REFER TO INSTRUCTION MANUAL FOR DETAILS.

H. ALL LIGHTING AND SIGN CIRCUIT BREAKERS TO BE "SWITCH GRADE".

I. ALL JUNCTION BOXES INSTALLED ABOVE OR DIRECTLY BELOW THE SUSPENDED CEILING SHALL BE SUPPORTED IN ACCORDANCE WITH THE NEC.

J. COMPUTER AND PHONE WIRING SHALL BE ROUTED IN 3/4" CONDUIT TO PHONE BOARD FROM DEVICE LOCATION.

K. ALL ISOLATED GROUND RECEPTACLE CIRCUITS SHALL BE EQUIPPED WITH INSULATED GROUND CONDUCTOR AND SEPARATE NEUTRAL WIRE.

L. NEUTRAL WIRES FOR ISOLATED GROUND CIRCUITS SHALL NOT BE SHARED WITH OTHER BRANCH CIRCUITS. PROVIDE SEPARATE NEUTRAL WIRE FOR EACH ISOLATED GROUND CIRCUIT.

M. ISOLATED GROUND CIRCUITS SHALL NOT BE ROUTED WITHIN SAME CONDUIT AS GENERAL BRANCH CIRCUIT WIRING. PROVIDE SEPARATE CONDUIT FOR SERVICE TO ISOLATED GROUND CIRCUITS.

N. ISOLATED GROUND RECEPTACLES SHALL UNDER NO CIRCUMSTANCE BE INSTALLED IN COMMON JUNCTION BOX WITH NON-ISOLATED GROUND TYPE RECEPTACLE.

O. ELECTRICAL CONTRACTOR SHALL USE THE PORCELAIN WIRE NUTS PROVIDED WITH THE HEAT STRIP UNITS. THE USE OF PLASTIC WIRE NUTS WILL VOID THE MANUFACTURERS' WARRANTY. ELECTRICAL CONTRACTOR SHALL USE 90°C WIRE FOR CONNECTION TO HEAT STRIP UNITS PER MANUFACTURER'S RECOMMENDATION.

P. USE CIRCUIT BREAKERS U.L. LISTED AS HACR TYPE FOR USE WITH REFRIGERATING EQUIPMENT HAVING MOTOR GROUP COMBINATIONS AND MARKED FOR USE WITH HACR TYPE CIRCUIT BREAKERS.

Q. FLUORESCENT LAMPS IN FOOD PREP, COOK AND FOOD STORAGE AREAS SHALL BE PROVIDED WITH SHATTER PROTECTIVE COVERS. GENERAL ELECTRIC "COVRGUARD" LAMPS OR APPROVED EQUAL.

R. ALL EXIT SIGNS, EMERGENCY EGRESS LIGHTS AND NIGHT LIGHT FIXTURES SHALL BE CONNECTED TO THE BRANCH CIRCUITS INDICATED AHEAD OF RESPECTIVE CONTROL SWITCH, IN ORDER TO PROVIDE UNSWITCHED SOURCE TO FIXTURES.

S. ALL 125 VOLT, SINGLE PHASE, 15 OR 20 AMP RECEPTACLES LOCATED IN THE KITCHEN AREA SHALL HAVE GROUND-FAULT CIRCUIT-INTERRUPTER PROTECTION AS REQUIRED BY THE NEC.

RACEWAY SYSTEMS:

A. ALL BRANCH CIRCUIT WIRING SHALL BE ROUTED IN EMT, ELECTRICAL METALLIC TUBING. USE STEEL SET SCREW TYPE FITTINGS ON ALL EMT.

B. CONDUIT SHALL BE SUPPORTED AT INTERVALS PER NEC REQUIREMENTS AND SHALL BE SECURELY FASTENED TO BUILDING WITH AN APPROVED FASTENING SYSTEM.

WIRING, WIRING DEVICES, PLATES AND GROUNDING:

A. ALL WIRING SHALL CONSIST OF COPPER CONDUCTORS WITH THERMOPLASTIC INSULATION RATED FOR SIX HUNDRED (600) VOLTS. ALL WIRING INSULATION SHALL BE HEAT AND MOISTURE RESISTANT TYPES THW, THWN, OR THHN FOR INTERNAL AND DRIVE LOCATIONS.

B. MINIMUM CONDUCTOR SIZE SHALL BE NO. 12 AWG FOR ALL POWER CIRCUITS (I.E. RECEPTACLES, LIGHTING, EQUIPMENT POWER, ETC.). NUMBER 14 AWG SHALL BE MINIMUM SIZE PERMITTED FOR EQUIPMENT CONTROL CIRCUIT WIRING.

C. ALL SPLICES AND CONNECTIONS SHALL BE MADE IN OUTLET BOXES, JUNCTION BOXES OR EQUIPMENT WHERE ACCESSIBLE.

D. CONDUCTORS SHALL BE PULLED WITHOUT THE USE OF OIL OR GREASE. WIRE PULLING LUBRICANTS WHICH ARE APPROVED FOR USE WITH CONDUCTOR INSULATION MAY BE USED. CARE SHALL BE TAKEN IN PULLING WIRE TO ASSURE THAT MAXIMUM ALLOWABLE PULLING TENSION OF WIRE IS NOT EXCEEDED. WIRING WITH DAMAGED CONDUCTORS OR INSULATION WILL NOT BE ACCEPTED.

E. ALL PLUG-IN DEVICES SHALL BE GROUNDED TYPE. A GROUNDING JUMPER FROM RECEPTACLE TO OUTLET BOX SHALL BE INSTALLED WHERE CONDUIT SYSTEM IS USED FOR GROUND.

F. INSTALL INSULATED GREEN GROUNDING CONDUCTOR (NO. 12 AWG MINIMUM) IN RACEWAYS AS INDICATED ON DRAWINGS AND IN ALL NON-METALLIC RACEWAYS PER NEC.

G. SWITCHES FOR LIGHTING CONTROL SHALL BE INDUSTRIAL GRADE. IVORY COLOR, SIDE WIRED ONLY, TWENTY (20) AMP, ONE HUNDRED TWENTY/TWO HUNDRED SEVENTY-SEVEN (120/277) VOLT.

H. DUPLEX RECEPTACLES SHALL BE INDUSTRIAL GRADE, THREE (3) WIRE GROUNDING, IVORY COLOR, FINDER GROOVE, TWENTY (20) AMP, NEMA 5-20R 125 VAC. RECEPTACLE COLOR SHALL BE WHITE WHEN MOUNTED IN CEILING.

I. PLATES SHALL BE FURNISHED AND INSTALLED FOR ALL WIRING DEVICES, TELEPHONE OUTLETS, JUNCTION BOXES, ETC.

J. PLATES FOR FLUSH MOUNTED DEVICES SHALL BE STAINLESS STEEL. PLATES FOR SURFACE MOUNTED BOXES SHALL BE GALVANIZED STEEL. PLATE COLOR SHALL BE WHITE WHEN MOUNTED IN CEILING.

LIGHTING FIXTURES:

A. PROVIDE LIGHTING FIXTURES, OF SIZES, TYPES AND RATINGS INDICATED-COMPLETE WITH, BUT NOT LIMITED TO, HOUSINGS, ENERGY-EFFICIENT LAMPS, LAMP HOLDERS, REFLECTORS, ENERGY EFFICIENT BALLASTS, STARTERS AND WIRING. SHIP FIXTURES FACTORY ASSEMBLED, WITH THOSE COMPONENTS REQUIRED FOR A COMPLETE INSTALLATION. DESIGN FIXTURES WITH CONCEALED HINGES AND CATCHES, WITH METAL PARTS GROUNDED AS COMMON UNIT, AND SO CONSTRUCTED AS TO DAMPEN BALLAST GENERATED NOISE.

B. ALL LIGHT FIXTURES SHALL BE U.L. LISTED.

C. INSTALL INTERIOR LIGHTING FIXTURES AT LOCATIONS AS INDICATED, IN ACCORDANCE WITH FIXTURE MANUFACTURER'S WRITTEN INSTRUCTIONS, APPLICABLE REQUIREMENTS OF NEC, NECA'S "STANDARD OF INSTALLATION", NEMA STANDARDS, AND WITH RECOGNIZED INDUSTRY PRACTICES TO ENSURE THAT LIGHTING FIXTURES FULFILL REQUIREMENTS.

D. PROVIDE AND INSTALL ALL LIGHT FIXTURES INDICATED COMPLETE WITH SPECIFIED LAMPS. FLUORESCENT LAMPS SHALL BE 48" 32W. T-8, RAPID START WITH NOMINAL OPERATING TEMPERATURES OF 3,500 K - MINIMUM INITIAL LIGHT OUTPUT OF 2850 LUMENS. COMPACT FLUORESCENT LAMPS SHALL BE 26 WATT COMPACT FLUORESCENT LAMPS SHALL BE HIGH COLOR RENDERING, HIGH EFFICIENCY LAMPS WITH NOMINAL OPERATING TEMPERATURE OF 3,500 K.

E. FASTEN LIGHTING FIXTURES SECURELY TO STRUCTURAL SUPPORTS, AND ENSURE THAT FIXTURES ARE PLUMB AND LEVEL.

F. FLUORESCENT FIXTURES INSTALLED IN LAY-IN CEILINGS SHALL BE SUPPORTED BY ADDITIONAL WIRE SUPPORT AT TWO CORNERS. ATTACHED TO CEILING GRID, AND ANCHORED TO STRUCTURAL MEMBER. THIS ADDITIONAL WIRE SUPPORT SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR AND IS NOT CONSIDERED PART OF GENERAL GRID LAYOUT.

G. PROVIDE EQUIPMENT GROUNDING CONNECTIONS FOR INTERIOR LIGHTING FIXTURES AS INDICATED. TIGHTEN CONNECTION TO COMPLY WITH TIGHTENING TORQUES SPECIFIED IN UL STD 486A TO ASSURE PERMANENT AND EFFECTIVE GROUNDS.

FIRE RATED WALL PENETRATIONS:

A. PROVIDE U.L. LISTED FIRESTOP SYSTEM SEALANTS AROUND ALL CONDUITS PASSING THROUGH ALL RATED WALLS OR FLOORS IN ACCORDANCE WITH THE U.L. FIRE RESISTANCE DIRECTORY.

B. THE SELECTED SYSTEM MUST BEAR AN APPROVED U.L. PENETRATION SYSTEM NUMBER AND BE INSTALLED IN ACCORDANCE WITH THE SELECTED SYSTEM TAKING INTO ACCOUNT THE CONSTRUCTION AND THE RATING OF THE RATED ASSEMBLY BEING PENETRATED AND THE TYPE OF PENETRATION BEING MADE.

C. THE ELECTRICAL CONTRACTOR SHALL REVIEW ARCHITECTURAL DRAWINGS TO CONFIRM NUMBER AND EXTENT OF ALL FIRE RATED PARTITIONS IN THE FACILITY.

D. APPROVED PRODUCTS:

(1) HILTI CS240
(2) TERMCO FYRESHIELD
(3) 3M CP-25

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ROBERT E. BEAMAN # AR00033778

PROJECT NO.:	1347
DRAWN BY:	bai
CHK. BY:	
DATE:	JANUARY 10, 2014
REVISIONS:	

CHINESE TAKE-OUT RESTAURANT
MERIDIAN PARKE SHOPPING CENTER
300 MERIDIAN PARKES DRIVE, SUITE P/Q, GREENWOOD, INDIANA 46142

ELECTRICAL NOTES

E-2

T:\2013 Jobs\1347 Chinese Take-Out Restaurant\RBai\Drawings\Current\E-2 Electrical Notes.dwg, 2/4/2014 2:38:14 PM, Plotted By: jes, Brother MFC-J6910DW.pc3, 1:101.892

T:\2013 Jobs\1347 Chinese Take-Out Restaurant\RBai\Drawings\Current\E-3 Lighting Fixture Schedule - Panel Schedule.dwg, 2/4/2014 2:31:40 PM, Plotted By:: jes, Brother MFC-J6910DW.pc3, 1:101.894

ELECTRICAL LEGEND

- LIGHTING AND/OR APPLIANCE PANELBOARD - RECESS MOUNTED.
- FLUORESCENT LIGHTING FIXTURE - LETTER REFERS TO FIXTURE TYPE REFER TO LIGHT FIXTURE SCHEDULE.
- DISCONNECT SWITCH
- MOTOR OUTLET
- JUNCTION BOX OR OUTLET BOX CONCEALED ABOVE CEILING
- WALL OR CEILING MOUNTED EMERGENCY EXIT LIGHT
- WALL MOUNTED EMERGENCY EXIT LIGHT W/DUAL LAMP
- WALL MOUNTED EMERGENCY BATTERY PACK W/NO LAMPS
- WALL MOUNTED DUAL LAMP EMERGENCY LIGHT W/BATTERY PACK
- ELECTRIC SMOKE DETECTOR
- DUCT MOUNTED PHOTOELECTRIC SMOKE DETECTOR, 120 VAC.
- DUPLEX OUTLET 20 A. 125 VOLT RECEPTACLE. MOUNT AT 18" A.F.F. TO CENTER, UNLESS NOTED OTHERWISE.
- DOUBLE DUPLEX OUTLET.
- TELEPHONE OUTLET
- COMPUTER DATA CONNECTION. E.C. SHALL VERIFY NUMBER OF DATA DROPS AND EXACT LOCATION OF DATA DROPS WITH OWNER PRIOR TO ROUGH-IN.

- BELL AND TRANSFORMER
- DOOR BELL BUTTON
- NUMBER IN HEX SYMBOL REFERS TO EQUIPMENT SPECIFIED IN EQUIPMENT SCHEDULE - SEE SHEET A-2.
- 1P, 20AMP 125 VOLT MOTOR RATED TOGGLE SWITCH WITH WEATHER PROOF ENCLOSURE.
- SINGLE POLE SWITCH
- SPECIAL RECEPTACLE
- WEATHERPROOF
- GFI GROUND FAULT INTERRUPTOR
- ISOLATED GROUND
- 42" MOUNTING HEIGHT ABOVE FINISH FLOOR
- NL NIGHT LIGHT
- K.E.S. KITCHEN EQUIPMENT SUPPLIER
- F.V.N.R. FULL VOLTAGE NON REVERSING

INDICATES CONDUIT RUN CONCEALED IN WALLS OR ABOVE CEILING. TICK MARKS INDICATE WIRES - LONG LINES INDICATE PHASE CONDUCTORS. WIRE SIZES ARE #12 AWG UNLESS NOTED OTHERWISE.

CONDUIT BARS INDICATE CONDUCTORS

- PHASE (HOT)
- NEUTRAL (GROUND)
- EQUIPMENT GROUNDING

PANEL 'A'

AMPERE BUS : 200 A **AMPERE MAIN LUG ONLY :** 200 A **VOLTAGE :** 120/208V, 3Φ

LOAD DESIGNATION	CKT BKR	CKT NO	CONNECTED LOAD (KW) PHASE A	PHASE B	PHASE C	CKT NO	CKT BKR	LOAD DESIGNATION
LIGHTS	20	1	1.0 .80			2	20	LIGHTS
LIGHTS	20	3		.80 .60		4	20	LIGHTS
LIGHTS	20	5			.50 1.20	6	20	FREEZER
FREEZER	20	7	1.20 .30			8	20	REFRIG.
REFRIG.	20	9		.90 .50		10	20	GFI RECEPTS.
RECEPTS.	20	11			1.0 1.9	12	30	ICE MACH.
RICE COOKER	20	13	1.0 1.9			14		
SOUP	20	15		1.0 1.9		16	20	HABACHI
		17			3.8 .90	18	20	SODA DISP.
FRYER	60	19	3.8 1.0			20	20	RECEPTS.
		21		3.8 .80		22	20	MENU RECEPT.
RECEPTS.	20	23			1.0 1.9	24	20	SUSHI
RECEPTS.	20	25	1.0 3.6			26		
OFFICE RECEPTS.	20	27		1.0 3.6		28	30	WATER HEATER
		29			3.6	30		
		31				32		
		33				34		
		35				36		
		37				38		
		39				40		
		41				42		
TOTAL CONNECTED LOAD :			10.2	16.9	17.8			52.90 KW

ELECTRICAL SERVICE RISER NOTES

1. THREE PHASE METERBASE SERVING SPACE. E.C. SHALL VERIFY EXACT METERBASE USED.
2. BUILDING SERVICE GROUNDING ELECTRODE CONDUCTOR TO REMAIN.
3. EXISTING SERVICE TRANSFORMER SERVING BUILDING.
4. TENANT SPACE FEEDER.
5. 3P, 200 AMP DISCONNECT.

BRANCH CIRCUIT CONDUCTOR SIZES

15 AMP CIRCUITS #14 AWG w/GROUND
20 AMP CIRCUITS #12 AWG w/GROUND
30 AMP CIRCUITS #10 AWG w/GROUND
40 AMP CIRCUITS #8 AWG w/GROUND
50 AMP CIRCUITS #8 AWG w/GROUND
60 AMP CIRCUITS #6 AWG w/GROUND
70 AMP CIRCUITS #4 AWG w/GROUND
80 AMP CIRCUITS #4 AWG w/GROUND
90 AMP CIRCUITS #3 AWG w/GROUND
100 AMP CIRCUITS #3 AWG w/GROUND

NOTE:

AIC RATING FOR PANEL AND ALL BRANCH CIRCUIT BREAKERS: CONTRACTOR SHALL OBTAIN THE AVAILABLE FAULT CURRENT AT THE SERVICE POINT FROM THE LOCAL UTILITY. UPGRADE THE AIC RATING OF THE PANEL AS NECESSARY.

NOTE:

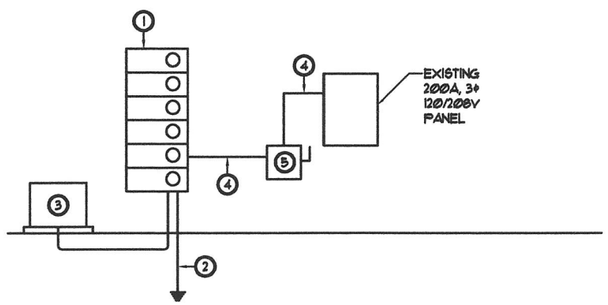
ELECTRICAL SERVICE AND SYSTEM DETAILED IS DESIGNED BASED ON 120 / 208 VOLT THREE PHASE SERVICE. ELECTRICAL CONTRACTOR TO VERIFY AVAILABLE SERVICE. MAKE NECESSARY MODIFICATIONS AS REQUIRED.

LIGHT FIXTURE SCHEDULE

MARK	DESCRIPTION	LAMP	MODEL NO.	MANUF.
A	2X4 LAY-IN FLUORESCENT WITH ELECTRONIC BALLAST	(3) F32-T8, 3500K GE #48718	2SP-G-3-32-RW-A12125-120-GEB	LITHONIA
B	2X4 FLANGED FLUORESCENT WITH ELECTRONIC BALLAST	(2) F32-T8, 3500K GE #48718	2SP-F-2-32-RW-A12125-120-GEB	LITHONIA
C	WALL MOUNTED BRACKET	(1) 28W DTT	WPCW2DTT-120	LITHONIA
D	EMERGENCY DUAL LAMP EXIT LIGHT WITH BATTERY BACK-UP	(2) 5.4W AC, 6V DC	LHQM6WIR120/277	LITHONIA
E	EMERGENCY DUAL LAMP WITH BATTERY BACK-UP, INSTALL 84" A.F.F.	HIT 5.4W	ELM2	LITHONIA
EI	EMERGENCY BATTERY BACKUP, REMOTE	N/A	ELM618RO	LITHONIA
F	EMERGENCY EGRESS OUTDOOR REMOTE HEAD. MOUNT ABOVE DOOR.	(2) 8W HIT	ELAWTNX408006	LITHONIA

NOTE:

THERE SHALL BE NO PARABOLIC LENSES.



SERVICE RISER DIAGRAM (1 / E-3)
NO SCALE

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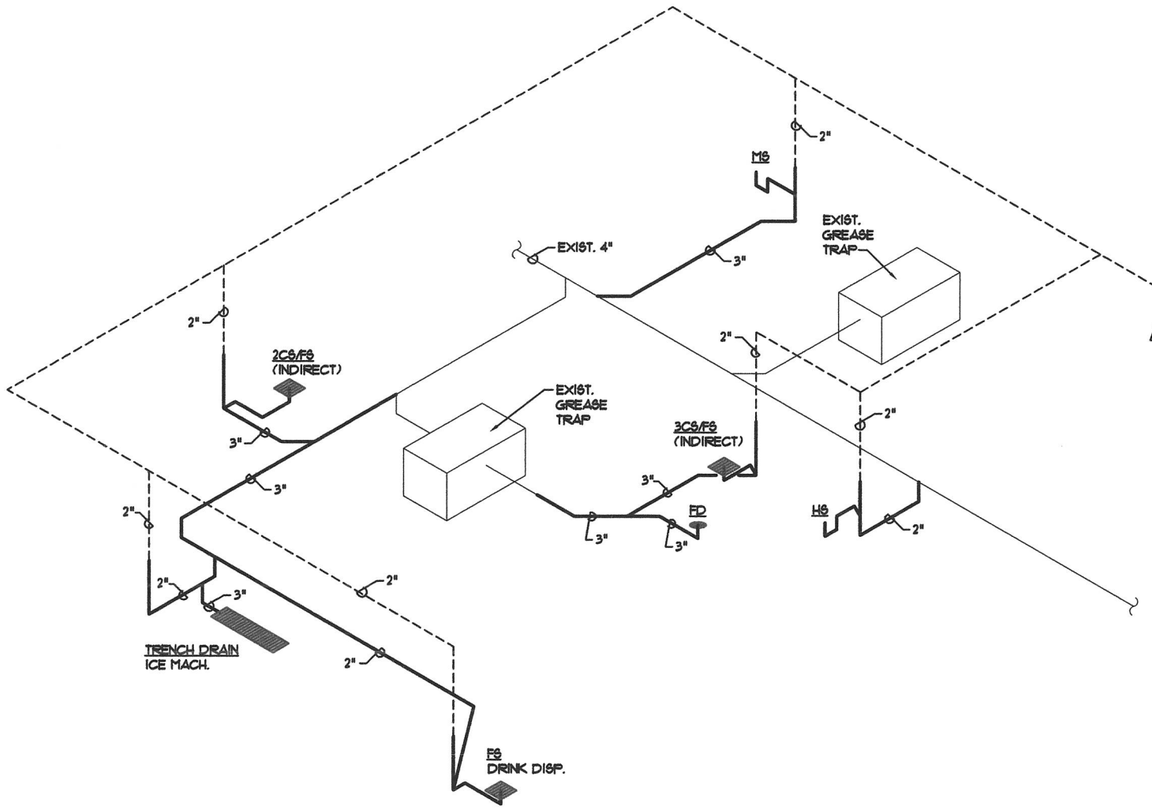
ROBERT E. BEAMAN # AR00033778

PROJECT NO.:	1347
DRAWN BY:	bai
CHK. BY:	
DATE:	JANUARY 10, 2014
REVISIONS:	

CHINESE TAKE-OUT RESTAURANT
MERIDIAN PARKE SHOPPING CENTER
300 MERIDIAN PARKE DRIVE, SUITE F/G, GREENWOOD, INDIANA 46142

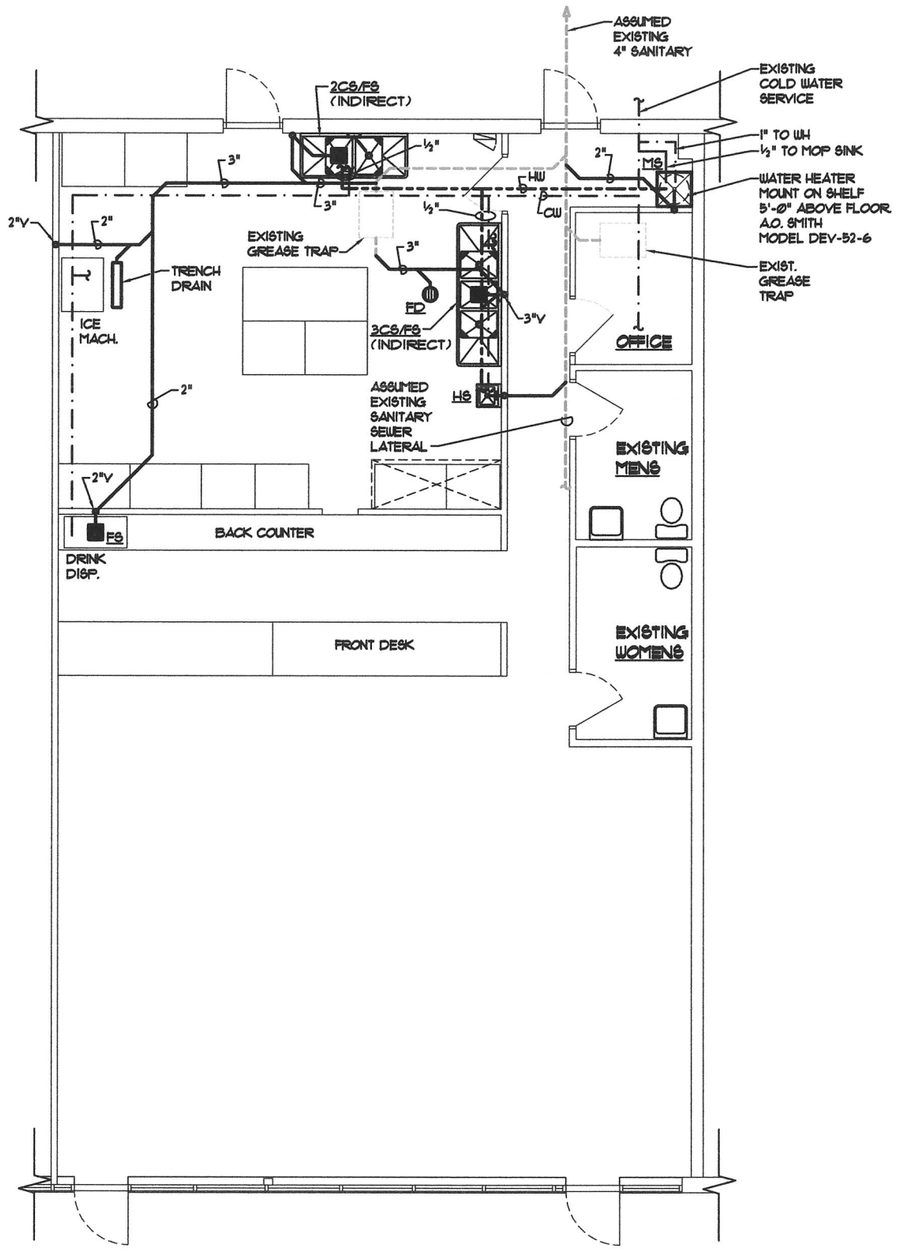
LIGHTING FIXT. SCHEDULE, PANEL SCHEDULE

E-3



WASTE AND VENT RISER

NOT TO SCALE



PLUMBING PLAN

½" 0 1' 2' 4'

NORTH

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PLUMBING PLAN

P-1

T:\2013 Jobs\1347 Chinese Take-Out Restaurant\RBai\Drawings\Current\P-1 Plumbing Plan.dwg, 2/4/2014 2:31:14 PM, Plotted By: jes, Brother MFC-J6910DW.pc3, 1:101.888

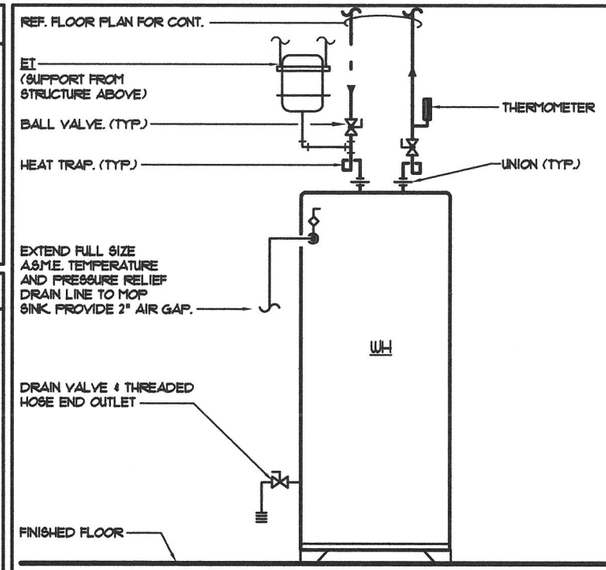
PLUMBING KEY NOTES

1. EXTEND CW,HW LINES DOWN IN WALL TO FIXTURE(S) AND CONNECT. REFERENCE DOMESTIC WATER RISER DIAGRAM FOR ADDITIONAL INFORMATION AND CONTINUATION. (TYP.).
2. NEW 1" WATER LINE. PLUMBING CONTRACTOR SHALL FIELD VERIFY EXACT LOCATION PRIOR TO ROUGH-IN.
3. PROVIDE NEW MAIN COLD WATER SHUT-OFF VALVE AND BACKFLOW PREVENTER IN AN ACCESSIBLE LOCATION.
4. T & P RELIEF VALVE AND DRAIN LINE. EXTEND DRAIN LINE TO MOP SINK AND SPILL. DRAIN LINE TO BE A MIN. OF 2" ABOVE RIM.
5. NEW WASTE TO EXISTING SEWER. PLUMBING CONTRACTOR SHALL FIELD VERIFY EXACT LOCATION PRIOR TO ROUGH-IN.
6. REFERENCE RISER DIAGRAMS FOR WATER AND WASTE PIPE SIZES.

PLUMBING FIXTURE SCHEDULE

(BY PLUMBING CONTRACTOR)

FIXTURE	DESCRIPTION
HAND SINK - "HS"	15-1/2"x16"x6"D STAINLESS STEEL HANDSINK PROVIDED BY QUALSERV.
MOP SINK - "MS"	FIAT MODEL MSB 2424 OR EQUAL, 24"x24"x10" FIBERGLASS BASIN WITH MODEL #830-AA FAUCET WITH VACUUM BREAKER AND PAIL HOOK, AND MODEL #899-CC OR EQUAL MOP HANGER.
TWO COMPARTMENT SINK - "2CS"	18"x54" STAINLESS STEEL WITH 2) 18"x18"x12" DEEP SINK AND ONE LEFT SIDE DRAIN BOARD - CUSTOM FABRICATED. PROVIDED BY QUALSERV.
THREE COMPARTMENT SINK - "3CS"	24"x94" STAINLESS STEEL WITH 3) 18"x18"x12" DEEP SINKS AND DOUBLE DRAIN BOARDS - CUSTOM FABRICATED. PROVIDED BY QUALSERV.
GREASE TRAP - "GT"	EXISTING.
WATER HEATER - "WH"	A.O. SMITH DEV-52-6 w/PRESSURE RELIEF AND OTHER ACCESSORIES. 50 GAL. CAP.
BACKFLOW PREVENTER	EQUAL TO WATTS NO. 909QT, CONFIRM MODEL NUMBER IS APPROVED BY LOCAL AUTHORITY PRIOR TO INSTALLATION. ASSE 1013 VERTICAL INSTALLATION APPROVED REDUCED PRESSURE ZONE BACKFLOW PREVENTER. PROVIDE WITH STRAINER.
FLOOR DRAIN - "FD"	EQUAL TO ZURN MODEL ZN-415, WITH Z-1023 TRAP PRIMER CONNECTION WHERE TRAP PRIMERS ARE NOTED.
FLOOR SINK - "FS"	EQUAL TO ZURN MODEL Z-1900-3
EXPANSION TANK - "ET"	AMTROL ST-12 4.4 GALLON



WATER HEATER PIPING DIAGRAM

1 / P-2

NO SCALE

NOTES:

1. WATER HEATER TO BE SET AT 140°F.
2. HEAT TRAPS SHALL BE INSTALLED ON INLET AND OUTLET OF WATER HEATER PER IECC SECTION 504.

PLUMBING NOTES

GENERAL NOTES

A. PLUMBING CONTRACTOR IS TO FURNISH AND INSTALL ALL PLUMBING FIXTURES COMPLETE AS LISTED IN "PLUMBING FIXTURE SCHEDULE".

B. ALL HANDICAP PLUMBING FIXTURES SHALL BE INSTALLED TO COMPLY WITH STATE AND LOCAL CODES. PLUMBING CONTRACTOR SHALL FURNISH AND INSTALL CODE COMPLIANT TRAP WRAP ON ALL EXPOSED WATER & WASTE LINES FOR ALL HANDICAP ACCESSIBLE LAVATORIES.

C. WHERE A RENOVATION IS TO OCCUR, THE PLUMBING CONTRACTOR SHALL VISIT THE SITE TO DETERMINE THE EXTENT OF DEMOLITION REQUIRED, PRIOR TO SUBMITTING BID.

D. PLUMBING CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS TO THE GENERAL CONTRACTOR PRIOR TO FINAL PAYMENT.

E. ALL WORK SHALL BE INSTALLED TO COMPLY WITH LOCAL AND STATE PLUMBING CODE REQUIREMENTS, AND PER LOCAL HEALTH DEPARTMENT REQUIREMENTS.

F. ALL PIPE PENETRATIONS IN EXTERIOR WALLS SHALL BE SEALED WATER-TIGHT WITH SILICONE CAULK.

G. PROVIDE FIRE STOPPING IN ALL PENETRATIONS OF FIRE RATED WALLS.

H. PLUMBING CONTRACTOR SHALL COORDINATE ROUTING OF PLUMBING PIPING WITH MECHANICAL CONTRACTOR AND MECHANICAL DRAWINGS TO AVOID CONFLICT.

WASTE AND VENT PIPING

A. PLUMBING CONTRACTOR SHALL USE SCHEDULE 40 POLYVINYL CHLORIDE PIPE FOR ALL SOIL, WASTE AND VENT PIPING WHERE PERMITTED BY LOCAL CODES. WHERE PVC PIPING IS NOT PERMITTED BY LOCAL CODES, USE STANDARD WEIGHT CAST IRON PIPING. ALL PIPING ABOVE GRADE MAY HAVE HUBLESS FITTINGS. PLASTIC PIPING SHALL NOT BE USED IN RETURN AIR PLENUM. COORDINATE THIS REQUIREMENT WITH HVAC CONTRACTOR PRIOR TO INSTALLATION.

B. CONTRACTOR SHALL FIELD VERIFY INVERT ELEVATIONS OF ALL NEW AND EXISTING SANITARY SEWERS PRIOR TO ROUGH-IN.

C. ELEVATION OF ALL FLOOR DRAINS SHALL BE HELD 1/2" BELOW FINISH FLOOR TILE.

D. ALL CLEANOUTS SHALL BE INSTALLED FLUSH WITH FINISHED GRADE/FINISHED FLOORS.

E. HOLD ALL PLUMBING VENTS A MINIMUM OF 10'-0" FROM OUTSIDE AIR INTAKES. WHERE STATE OR LOCAL CODES REQUIRE MORE SEPARATION, PLUMBING CONTRACTOR SHALL OFFSET TO MEET THE MORE STRINGENT CODE ON HVAC EQUIPMENT. COORDINATE LOCATION WITH H.V.A.C. CONTRACTOR.

F. WHERE HVAC UNITS ARE LOCATED IN MECHANICAL CLOSETS, P.C SHALL COORDINATE PLACEMENT OF DRAINS WITH H.V.A.C. CONTRACTOR & HVAC EQUIPMENT PRIOR TO ROUGH-IN OF UNDERGROUND PLUMBING.

WATER PIPING

A. ALL WATER PIPING BELOW GRADE SHALL BE TYPE "L" SOFT TEMPERED COPPER AND ALL WATER PIPING ABOVE GRADE SHALL BE TYPE "L" HARD TEMPERED COPPER.

B. INSTALL 1" FOAM RUBBER INSULATION ON ALL HOT AND COLD WATER PIPING BELOW AND ABOVE GRADE. ALL JOINTS IN INSULATION ARE TO BE TAPED.

C. ALL DOMESTIC WATER PIPING SHALL BE DISINFECTED PRIOR TO USE BY BUILDING OCCUPANT. PLUMBING CONTRACTOR SHALL DISINFECT PER REQUIREMENTS OF LOCAL HEALTH DEPT., STATE/LOCAL PLUMBING CODE.

D. ALL PLUMBING HOSE BIBBS OR VALVES WITH THREADED CONNECTIONS SHALL BE PROVIDED WITH VACUUM BREAKERS AND APPROVED MEANS OF BACKFLOW PREVENTION AS REQUIRED BY STATE AND LOCAL CODES.

E. PROVIDE SHUT-OFF VALVES ON ALL EQUIPMENT AND STOP COCKS IN HOT AND COLD WATER PIPING TO ALL PLUMBING FIXTURES.

F. PLUMBING CONTRACTOR SHALL PROVIDE DIELECTRIC UNIONS AT ALL PIPING CONNECTIONS WHERE DISSIMILAR PIPING IS JOINED.

G. ALL HOT AND COLD WATER, WASTE, AND VENT PIPING TO BE SUPPORTED PER LOCAL PLUMBING CODE.

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PLUMBING NOTES

P-2

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Peggy Deer

From: Lowell Weber
Sent: Monday, April 07, 2014 4:04 PM
To: Peggy Deer
Subject: FW: Chinese Take out
Attachments: A-1 Floor Plan - Reflected Ceiling Plan - 4-7-2014.pdf; ATT2876716.htm

---

From: Mikey Huang [mailto:mhuang2333@yahoo.com]
Sent: Monday, April 07, 2014 2:55 PM
To: Lowell Weber
Subject: Fwd: Chinese Take out

This is our revised floor plan. I'll send another one to Paul so he can do recalculations on our sewer availability fee. Get back with me if you have any questions. Thanks.

Sent from my iPhone

Begin forwarded message:

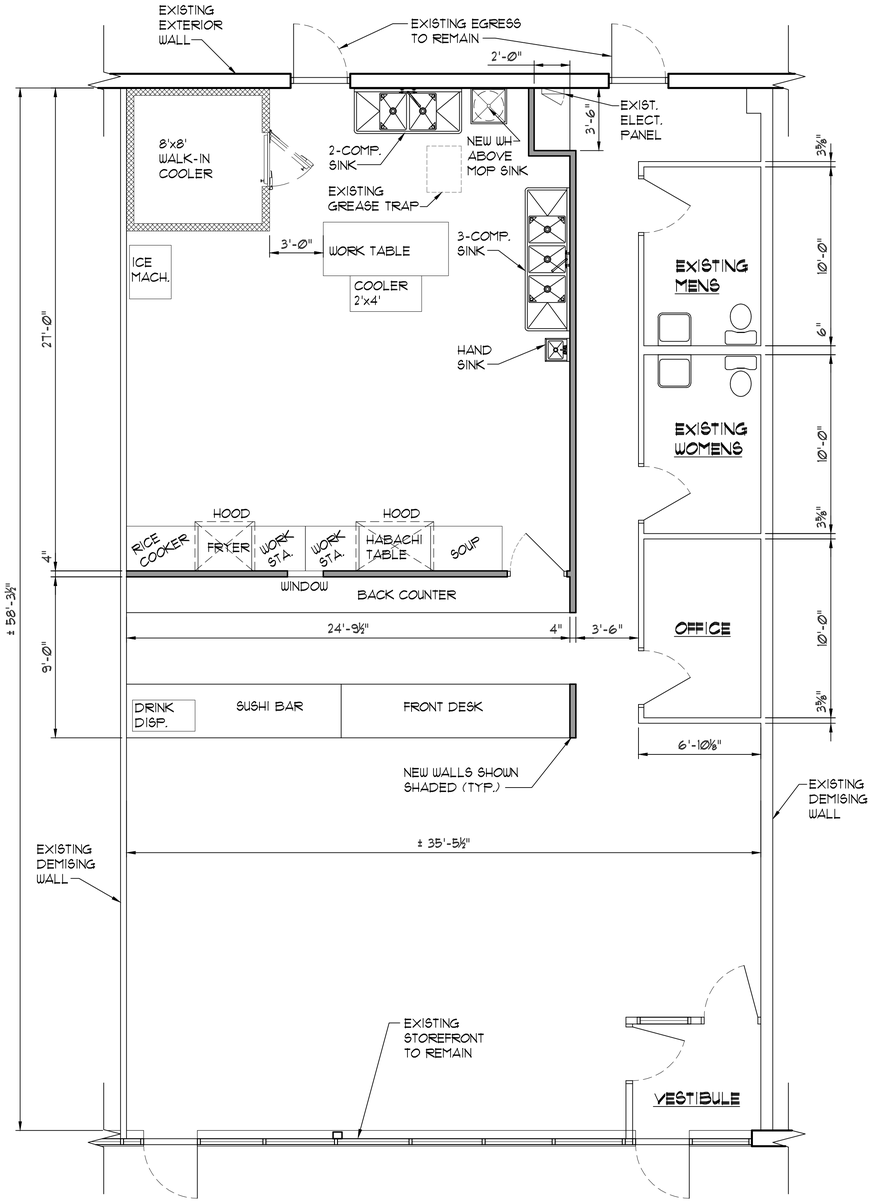
> **From:** "Ron Wilder" <rwilder@beamanassociates.com>
> **Date:** April 7, 2014 at 1:26:06 PM EDT
> **To:** "'Mikey Huang'" <mhuang2333@yahoo.com>
> **Cc:** <rbeaman@beamanassociates.com>
> **Subject: RE: Chinese Take out**
> **Reply-To:** <rwilder@beamanassociates.com>
>
> Mike
> Attached is the revised floor plan.
>
> Ron Wilder
> Beaman Associates, Inc.
> 317-783-2343 Ex. 19
> rwilder@beamanassociates.com
>
> ---
>
> **From:** Mikey Huang [mailto:mhuang2333@yahoo.com]
> **Sent:** Monday, April 07, 2014 12:55 PM
> **To:** <rwilder@beamanassociates.com>
> **Subject:** Re: Chinese Take out
>
> Ron, will you have the blueprint completed by 3 today?
>
> Sent from my iPhone
>
> On Apr 7, 2014, at 8:57 AM, "Ron Wilder" <rwilder@beamanassociates.com> wrote:
>
> > Mikey
> > Attached please find revised floor plan.
> > #1 I removed the note and wall at the front entry.

#2 Removed the note in the restroom about the existing grease trap.
#3 The grease trap in the kitchen was already shown.
#4 I have left the kitchen wall alone. I feel it works best in this location.
#5 I have changed the door swing on the kitchen door.

If you have any questions please call.

Ron Wilder
Beaman Associates, Inc.
317-783-2343 Ex. 19
rwilder@beamanassociates.com

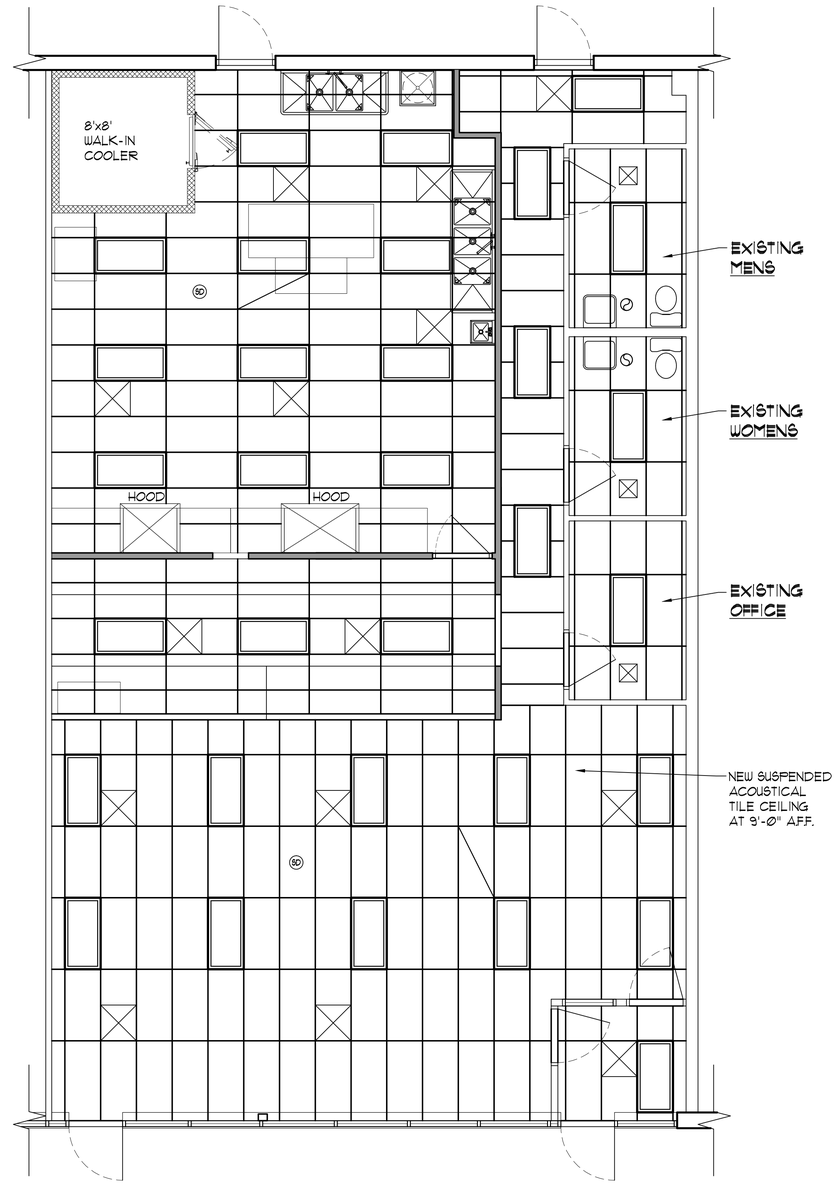
<A-1 Floor Plan - Reflected Ceiling Plan-Model.pdf>



FLOOR PLAN

¼" Ø 1' 2' 4'

NORTH



REFLECTED CEILING PLAN

¼" Ø 1' 2' 4'

NORTH

Robert E. Beaman
Architect
5110 Madison Avenue
Indianapolis, IN 46227
(317) 783-2343

ROBERT E. BEAMAN # AR00033778

PROJECT NO.:	1347
DRAWN BY:	bai
CHK. BY:	
DATE:	JANUARY 10, 2014
REVISIONS:	

CHINESE TAKE-OUT RESTAURANT

MERIDIAN PARKE SHOPPING CENTER

300 MERIDIAN PARKE DRIVE, SUITE P/Q, GREENWOOD, INDIANA 4642

FLOOR PLAN / REFLECTED CEILING PLAN

A-1

滙基炉头厨具公司
A.A. INTERNATIONAL TRADING, INC
171 BOWERY, NEW YORK, NY 10002 (TEL) 212-226-9828, (FAX) 212-226-9810

Front Discharge Make-up Air Exhaust Vent Hoods

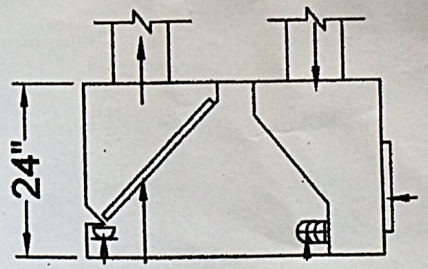
Standard feature:

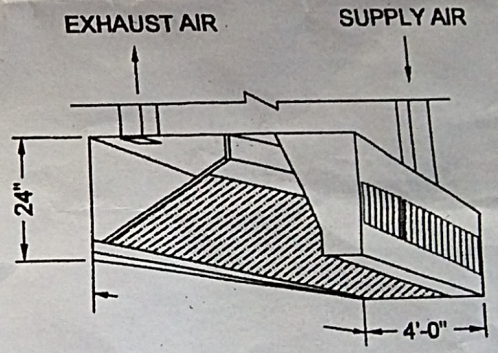
- The hood is constructed not less than (No. 20 MSG) in thickness with stainless steel (NFPA 2-1.1)
- All seam, joints and penetrations of the hood enclosure that direct to and capture grease-laden.
- Vapors and exhaust gases shall have liquid tight continuous external weld to the hood's lower outermost perimeter
- UL-classified aluminum filters are installed in 45 degree & removable for easy cleaning.
- Adjustable registers for fresh air return.
- Full-length grease trough.
- Removable grease container.
- Exhaust and supply collars.
- Front and rear hanging brackets.
- Regular and short front models.

Options:

- NSF, and UL listed under NFPA 96
- 3" air space at rear
- UL listed vapor proof light with wire safety guard

All models are 48" front-to-back and 24" high





Would you like to reduce your turnaround time?
ELECTRONICALLY FILE YOUR PROJECT WITH STATE OF INDIANA at http://www.in.gov/dhs/2650.htm.
This on-line filing is through a secure site, you can use it to submit your project information, pay the fees and upload your project plans.
Use Internet Browser to View this report, other browsers are not compatible to view this report

CONSTRUCTION DESIGN RELEASE

State Form 41191 (R9/5-98)

Report Printed on: May 19, 2014

Indiana Department of Homeland Security
DIVISION OF FIRE & BUILDING SAFETY
PLAN REVIEW DIVISION
402 W. Washington St., Room E245
Indianapolis, IN 46204

INDIANA 02
Available At Your Local Licence Branch
SUPPORT HOOSIER SAFETY

To: Owner / Architect / Engineer
xiong lin hkang
Xiong Hkang
3100 meridian park drive
greenwood IN 46142

Fax & e-mail: 3173739827, mhuang2333@yahoo.com

Project number	Release date
371536	05/19/14
Construction type	**Occupancy classification**
*SEE BELOW	*SEE BELOW
Scope of release	
HOOD	
Type of release	
Standard	
Project name	
Red Sun	
Street address	
3100 Meridian parke drive	
City	**County**
Greenwood	JOHNSON

The plans, specifications and application submitted for the above referenced project have been reviewed for compliance with the applicable rules of the Fire Prevention and Building Safety Commission. The project is released for construction subject to, but not necessarily limited to, the conditions listed below. THIS IS NOT A BUILDING PERMIT. All required local permits and licenses must be obtained prior to beginning construction work. All construction work must be in full compliance with all applicable State rules. Any changes in the released plans and/or specifications must be filed with and released by this Office before any work is altered. This release may be suspended or revoked if it is determined to be issued in error, in violation of any rules of the Commission or if it is based on incorrect or insufficient information. This release shall expire by limitation, and become null and void, if the work authorized is not commenced within one (1) year from the above date.
CONDITIONS:

Note :(A1A & A1B): In accordance with the affidavit sworn under penalties of perjury in the application for construction design release the plans and specifications filed in conjunction with this project shall comply with all of the applicable rules and laws of Fire Prevention and Building Safety Commission. Providing false information constitutes an act of perjury, which is a Class D felony punishable by a prison term and a fine up to $10,000.

In accordance with Section 19 of the General Administrative Rules (675 IAC 12-6-19) a complete set of plans and specifications that conform exactly to the design that was released by the office of the state building commissioner shall be maintained on the construction jobsite as well as a copy of the design release.

*Hood and hood fire suppression system

8M050709 The complete installation of the kitchen exhaust hood and hood suppression system shall be in accordance with Sections 507 and 509, IMC (675 IAC 18-1.5). (Hood A and Hood B)

Please be advised that if an administrative review of this action is desired, a written petition for review must be filed at the above address with the Fire Prevention and Building Safety Commission identifying the matter for which a review is sought no later than eighteen (18) days from the above - stated date, unless the eighteenth day falls on a Saturday, a Sunday, a legal holiday under State statute, or a day in which the Department of Fire and Building Services is closed during normal business hours. In the latter case, the filing deadline will be the first working day thereafter. If you choose to petition, and the before-mentioned procedures are followed, your petition for review will be granted, and an administrative proceeding will be conducted by an administrative law judge of the Fire Prevention and Building Safety Commission. If a petition for review is not filed, this Order will be final, and you must comply with its requirements.

Code review official TONY BRADSHAW
tbradshaw@dhs.in.gov

Address (name,title of local official,street,city,state and ZIP code
BUILDING COMMISSIONER
Lowell Weber
225 S Emerson Ave
Suite C
Greenwood, IN 46143
Fax & e-mail: 3178875616, weberl@greenwood.in.gov

State Building Commissioner

State Fire Marshal

BADGER

Certificate of Completion

This is to certify that

Tim Glennon

An employee of

Brown's Service, Indianapolis, IN, USA

an AUTHORIZED BADGER DISTRIBUTOR

has successfully completed a certification training session covering design, installation, operation and maintenance and has demonstrated a practical knowledge of following Badger systems/products:

Range Guard Wet Chemical Fire Suppression System

Chris M. Hopwood

Chris M. Hopwood, Technical Training Manager

Credit:

Issue Date: 05/06/2014

Expiration Date: 05/05/2017

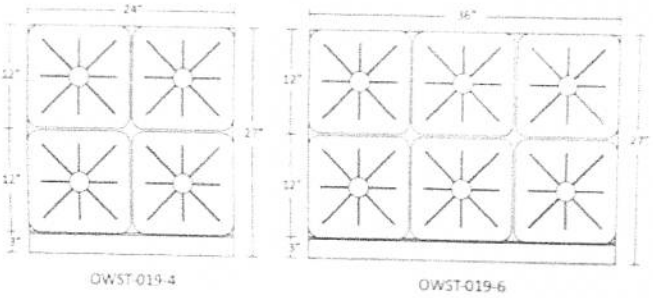
Certificate No: 53131

This certificate is non-transferable. Certificate is only valid as long as the above named company employs the certified individual. Acceptance of this certificate implies agreement to abide by the terms of distributor agreement by the above named company and individual. Any violation or alteration of this certificate will result in the immediate voiding of this certificate.

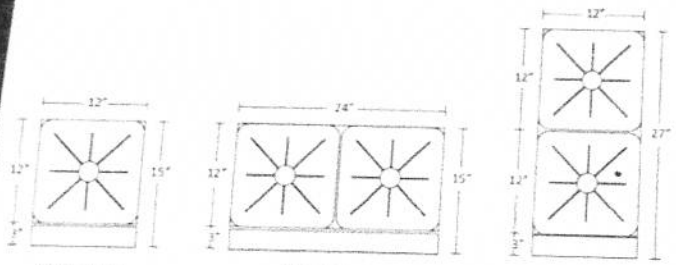
STAINLESS STEEL POT STOVE NSF

STANDARS FEATURES

1. Stainless steel front and sides
2. Heavy gauge chassis
3. Individual 5/8 non clog pilots for instant ignition for each burner
4. 12"x12" sectional cast Iron top grates
5. Manual gas control valve for each burner
6. Countertop models come with 4" Legs
7. Removable drip pan for easy cleaning
8. Compact design for counter top use
9. NSF Listed

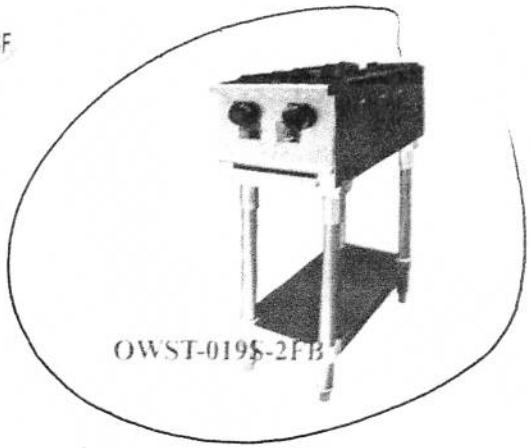


OWST-019-4 OWST-019-6



OWST-019-1 OWST-019-2LR OWST-019-2FB

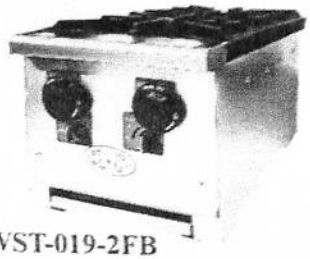
MODEL NO.	BURNER	W	L	H	BTU	WEIGHT
COUNTERTOP MODEL						
OWST-019-1	1	15"	12"	14 ¼"	28 K	lbs
OWST-019-2FB	2	27"	12"	14 ¼"	56 K	lbs
OWST-019-2LR	2	15"	24"	14 ¼"	56 K	lbs
OWST-019-4	4	27"	24"	14 ¼"	112 K	lbs
OWST-019-6	6	27"	36"	14 ¼"	168 K	lbs
WITH 25" H STAND FOR CUSTOM-MADE ONLY						
OWST-019S-1	1	15"	12"	30"	28 K	lbs
OWST-019S-2FB	2	27"	12"	30"	56 K	lbs
OWST-019S-2LR	2	15"	24"	30"	56 K	lbs
OWST-019S-4	4	27"	24"	30"	112 K	lbs
OWST-019S-6	6	27"	36"	30"	168 K	lbs



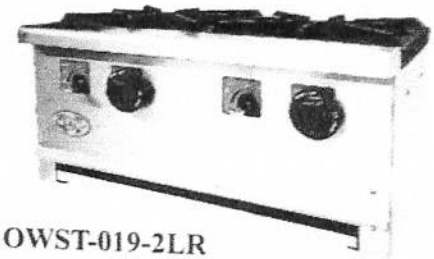
OWST-019S-2FB



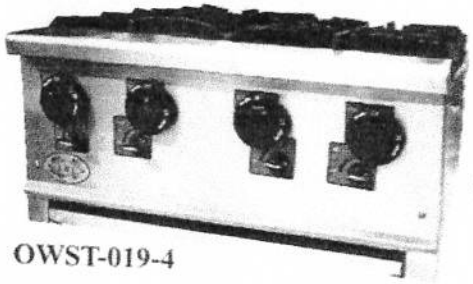
OWST-019-1



OWST-019-2FB



OWST-019-2LR



OWST-019-4

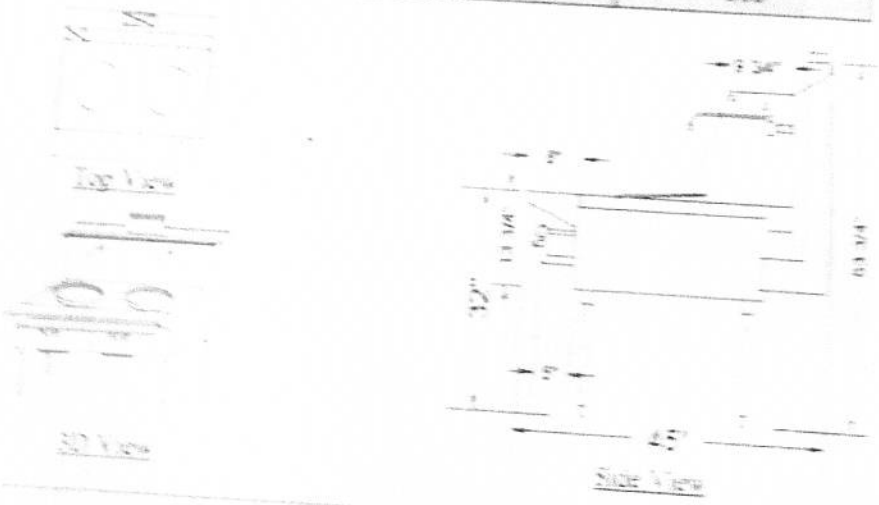
NSF 潤基婕頭廚具公司 UL MEA
AMERICAN RESTAURANT EQUIPMENT, INC
Bronx, New York NY 10462 Tel: 212 226-6828 Fax: 212 226-6872

Chinese Wok Stove

Standard Features

- Heavy duty construction ensures durability
- Easy access manually control oil swing faucet
- Water saving top heat evenly stove top temperature
- Stainless steel front, side trim, and splash
- Standard models are available with up to 3 chambers
- Open gas [illegible] burner
- ETL certified, NSF, MEA listed
- All models may have 15", 18", 20" and 22" DIAMETER CHAMBER.
- New Natural types are available: ring-burner, cervalet jet-burner, and duck jet-burner
- Old water drain styles are available: surface, traditional, a drawer and chamber style
- Natural & Propane gas

Model	Burners	W x H	BTU/hr.	Weight (lbs)
AACW-2	2	45" x 53-3/4"	220,000	500



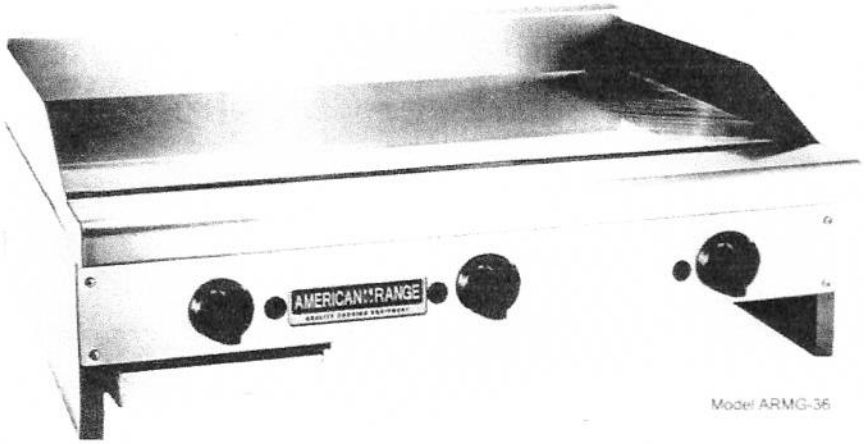


New Ring Burner | 22" Top Jet | 22" Top Jet | 18" Top Vertical stove

MANUAL & THERMOSTATIC GRIDDLES

- Stainless steel rugged exterior body
- Highly polished steel griddle plates in 3/4" & 1" thicknesses
- "U" shaped burners for every 12" of griddle surface for even cooking
- 21" cooking depth, standard
- 3" splash guard standard
- Stainless steel pilots for instant ignition on each 30,000 BTU burner
- 3½" wide S/S grease trough and a large grease pan
- Limited one year parts and labor warranty





Model ARMG-36



3/4" THICK GRIDDLE PLATE

MANUAL MODEL	LIST PRICE	THERMOSTATIC MODEL	LIST PRICE	W	D	H	BURNERS	BTU (KW)	Ship Wt. Lbs. (Kg)
ARMG-12	$1630	ARTG-12	$2350	12"	30"	10½"	1	30K (9)	100 (45)
ARMG-24	1730	ARTG-24	2465	24"	30"	10½"	2	60K (18)	220 (100)
ARMG-36	2480	ARTG-36	3395	36"	30"	10½"	3	90K (26)	300 (136)
ARMG-48	3250	ARTG-48	4325	48"	30"	10½"	4	120K (35)	365 (166)
ARMG-60	4180	ARTG-60	5698	60"	30"	10½"	5	150K (44)	500 (227)
ARMG-72	5480	ARTG-72	6575	72"	30"	10½"	6	180K (53)	600 (273)

S/S STANDS

MODEL	Lbs. (kg)	LIST PRICE
■ ESS-12	35 (16)	$400
■ ESS-24	47 (21)	675
■ ESS-36	54 (25)	895
■ ESS-48	72 (33)	1085
■ ESS-60	99 (45)	1295
■ ESS-72	110 (50)	1550

■ Casters for stands set of 4 A35124 $[illegible]
■ Casters for stands set of 6 A35125 $[illegible]

1" THICK GRIDDLE PLATE

MANUAL MODEL	LIST PRICE	THERMOSTATIC MODEL	LIST PRICE	W	D	H	BURNERS	BTU (KW)	Ship Wt. Lbs. (Kg)
ARMG-112	$1880	ARTG-112	$2575	12"	30"	10½"	1	30K (9)	114 (52)
ARMG-124	2050	ARTG-124	3368	24"	30"	10½"	2	60K (18)	254 (115)
ARMG-136	2795	ARTG-136	3925	36"	30"	10½"	3	90K (26)	343 (156)
ARMG-148	3665	ARTG-148	5045	48"	30"	10½"	4	120K (35)	438 (199)
ARMG-160	4500	ARTG-160	6190	60"	30"	10½"	5	150K (44)	600 (273)
ARMG-172	5578	ARTG-172	7390	72"	30"	10½"	6	180K (53)	700 (318)

MODEL	Lbs. (kg)	LIST PRICE
■ ESS-12	35 (16)	$400
■ ESS-24	47 (21)	675
■ ESS-36	54 (25)	895
■ ESS-48	72 (33)	1085
■ ESS-60	99 (45)	1295
■ ESS-72	110 (50)	1550

■ Casters for stands set of 4 A35124 $[illegible]
■ Casters for stands set of 6 A35125 $[illegible]

■ 4" legs set of 4 **$185**, 60" & 72" models require set of 6 legs, **$250**
■ For 24" deep cooking surface (griddle plate) add **20%** to the list price

CRATED DIMENSIONS: Height 20" (508) x Depth 36" (914) x Width add 5" (127) to width

MADE IN USA
DESIGNED & BUILT

*Must specify type of gas and elevation if over 2000 ft. when ordering

TRI-STAR

Value • Performance • Quality

FLOOR MODEL FRYERS

Design Features

- Fryers are capable of high capacity and high production cooking.
- High performance burners allows for quick recovery at extreme peak periods of production.
- Front sloping vessel bottom traps food particles and prevents carbonization in the fry zone.
- Reduces flavor transfer and extends oil life.
- Deeper vessel allows for extra oil level depth for frying larger products.
- Vessel has precision welded edges and seams for strength, durability and no-leak joints.
- Tube-fired heating design. Oil rapidly heats to the set temperature due to the extra heat transfer around the tubes.
- Superior to the open pot design.



TSF-6575

Options & Accessories

- Gas Conversion kits
- Casters – Set of 4 front two locking
- Quick Disconnect and Flexible Gas Hose
- Stainless steel tank cover.
- Joiner Strip: to connect two fryers and prevent oil seepage between the fryers or drain station.
- Full and Twin size baskets.
- Stainless steel oil drain pan.
- Stainless steel spreader/Work Top 12", 18", 24" wide
- ¾" NPT x 48" Length
- ¾" NPT x 60" Length
- Side drain board
- 12" x 12" pan for dump station

Standard Features

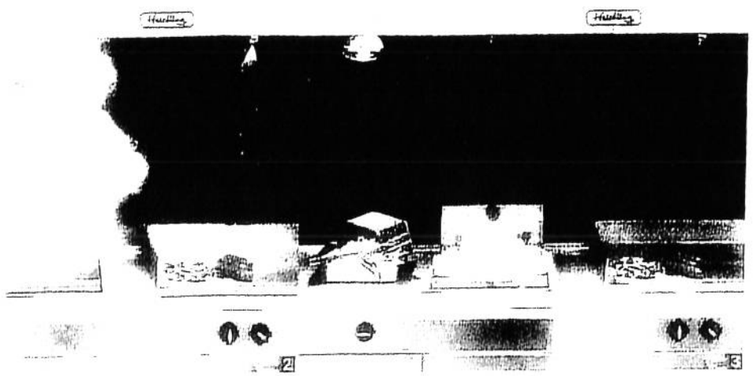
- Fryer vessel tank: All stainless steel high quality construction, 16 gauge # 304 material.
- Durable double layer access door.
- Stainless steel front, door and basket hanger/flue riser. Aluminized sides.
- Twin chrome plated fryer baskets with cool grip plastic coated handles.
- Thermostatic controls adjust from 200° to 400°F.
- Millivolt control system: No electrical hook up required.
- Combination Gas Valve includes pressure regulator and pilot ignition system. Hermetically sealed for operating stability. ¾" NPT gas inlet in rear.
- Safety Shut Off System which shuts off 100% gas when temperature reaches the hi-limit.
- Large chrome plated removable crumb screen made of tight mesh under fryer baskets.
- Drain Valve: 1 ¼" diameter for easy draining of oil.
- Legs are 6" high chrome plated adjustable legs.

Certifications

Tri-Star Manufacturing • 729 Third Ave., Dallas, TX 75226 • (866) 782.7462
www.tri-starmfg.com

Revised 062712bd

nge Gui



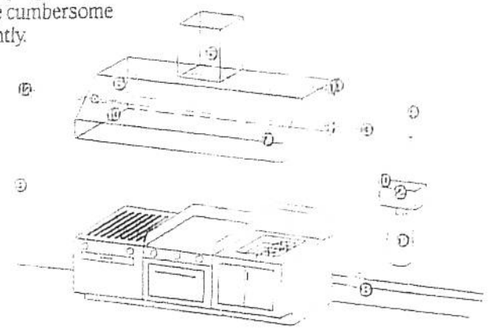
Range Guard offers important advantages in the way it is activated.

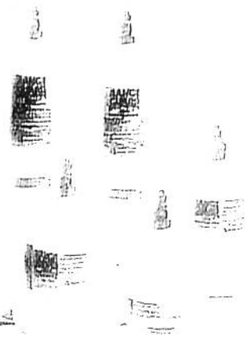
Cartridge Systems Can Be Unreliable.
Some other systems utilize a cartridge to activate the system. This may present a major problem: The cartridge can lose pressure without warning or identification and fail to operate when a fire occurs.

The Range Guard System is Reliable
Range Guard is mechanically activated by a spring loaded mechanism which is triggered by a fusible element. When a fire occurs, the element melts and separates at 360°F – causing the system to activate. No worrying about cartridges losing pressure. The mechanical actuator, properly installed, works every time – and so does Range Guard!
This total reliability is an important reason to insist on a genuine Range Guard system.

Other systems require "balanced piping." This increases the amount of pipe and fittings needed for the system. It takes longer to install. Labor and material costs are increased. Balanced piping configurations can also be cumbersome and unsightly.

Range Guard utilizes straight line piping. This reduces cost and installation time. Piping configurations are designed for maximum efficiency and are aesthetically pleasing.





Choose From Five Cylinder Sizes for System Efficiency and Flexibility
Range Guard system cylinders are available in 1-1/4 gallon to 6 gallon sizes – with a choice of cylinder shapes in some sizes. This provides outstanding design flexibility, and allows you to custom design the system which fits your needs exactly.

⑩ System Cylinder with Mounting Bracket
④ Mechanical Control Head
④ Detection Line Enclosed in Conduit
⑫ System Discharge Piping
⑤ Duct Nozzle
③ Plenum Nozzle
⑦ Appliance Nozzle
⑤ Automatic Gas Shutoff
⑨ Remote Manual (Optional)
⑩ Electric Micro Switches (Optional)
⑤ Liquid Seal Device For Hood & Duct Penetrations
⑫ Corner Pulley for Change in Directions
⑪ Detector with Fusible Element

BROWN'S SERVICE EQUIPMENT
7243 WEST LAKE RD.
INDIANAPOLIS, IN 46214
317-487-0142

Range Guard, the first wet chemical fire suppression system, was developed over 20 years ago. Today, it's still the standard of the industry, proven by performance.

BROWN'S SERVICE EQUIPMENT
7243 WEST LAKE RD.
INDIANAPOLIS, IN 46214
317-487-0142

RED SUN REST
3100 MERIDIAN PARKE DR
GREENWOOD IN

The Right Choice for Restaurant Chains

RANGE GUARD®
FIRE SUPPRESSION SYSTEM
FIRST... WITH THE BEST

BROWN SERVICE EQUIPMENT
7243 WEST LAKE RD.
INDIANAPOLIS, IN 46214
317-487-0142

BROWN SERVICE EQUIPMENT
7243 WEST LAKE RD.
INDIANAPOLIS, IN 46214
317-487-0142

Range Guard® is a product of ASCOA® Fire Systems, the company that engineered the first wet chemical fire suppression system over 20 years ago. As a division of Figgie International, one of the world's largest fire protection suppliers, ASCOA is on the leading edge of technological innovation in fire suppression. And that expertise is painstakingly built into every Range Guard system.

Quality Is Our Top Priority

That is why we design, engineer and manufacture every major component of every system we sell. We use high quality materials and workmanship and create our systems entirely in our own facilities.
This commitment to quality has made us the supplier for many restaurant chains across the U.S. They have come to depend on Range Guard.

Unsurpassed System Efficiency and Reliability

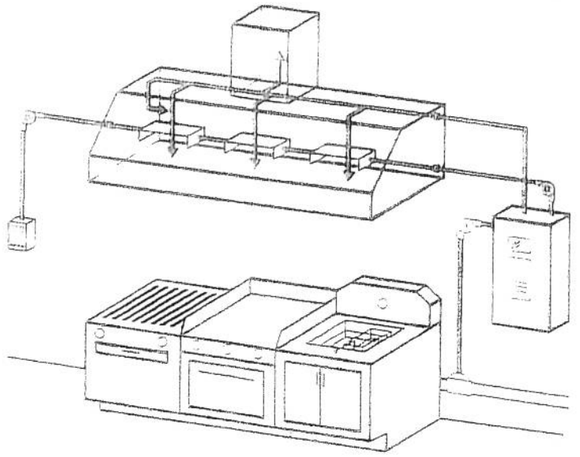
Restaurant operators know that wet chemical systems are the only real solution to their fire suppression needs. And Range Guard, with mechanical actuation and advanced chemical delivery, is the most efficient and reliable system available. A fully mechanical system assures dependability. There are fewer parts and fewer steps in the actuation process, greatly reducing the possibility of system failure. Range Guard is dependable.

A Commitment to Service

Range Guard is backed by a national distribution network. System installation and service are available whenever and wherever you and your customers need it.
In addition, all Range Guard products are backed by ASCOA Fire Systems. Technical support is as close as the phone. Call us at 1-800-272-6287 In Ohio 216-526-8980

Special Features

- 5 Cylinder Sizes (1-1/4 gallon to 6 gallon) – Allow you to design a system that meets your needs exactly.
- Pressure Gauge – Visual inspection determines system readiness.
- Straight Line Piping – More efficient. Eliminates piping restrictions.
- Unique Manifolding – Discharge through common piping with no backfill.
- Nozzle Seals – Pure tin (no rubber caps). Prevents nozzle contamination.
- Nozzle Location – Installed high, avoiding interruption of cooking process.
- Expandability – System can easily be expanded to protect larger areas.
- Recessed Remote – Minimizes chance of accidental discharge.
- Electrical Systems – A readily available option.
- Certified Cylinders – Factory-filled and fully charged.
- Chrome Nozzles – Visually pleasing, very functional.
- Choice of Piping – Stainless steel pipe or tubing, brass, or black steel piping.



Aesthetically Pleasing

Range Guard is designed to integrate into your kitchen designs. Piping is kept to a minimum. And the new TRC™ enclosure houses the cylinder and actuating mechanism in an attractive metal cabinet, complementing kitchen surroundings.

Listed by Underwriters' Laboratories.

Listed by Canadian Underwriters' Laboratories.

Meets requirements of National Fire Protection Association.

Building Officials and Code Administrators
See BOCA Research Report #80-3

Meets the standards of NFPA (complies 16 and ...
the City of New York Board of Standards

Truly an Outstanding Value

Range Guard's efficient design and engineering provide for quick, easy installation. This cost savings, coupled with the unsurpassed quality of the system, makes Range Guard a true value.
Consult the complete Range Guard brochure for system details. You'll find even more reasons why the Range Guard Fire Suppression System should be your choice.

ASCOA® Fire Systems
A FIGGIE INTERNATIONAL COMPANY
1000 S. Edgerton Road
P.O. Box 418012
Cleveland, Ohio 44141-3012
(216) 526-8980 1-800-272-6287
Fax (216) 838-5137

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C-11

BROWN SERVICE EQUIPMENT
7243 WEST LAKE RD.
INDIANAPOLIS, IN 46214
317-487-0142

Surface Mounted Remote Manual Controls

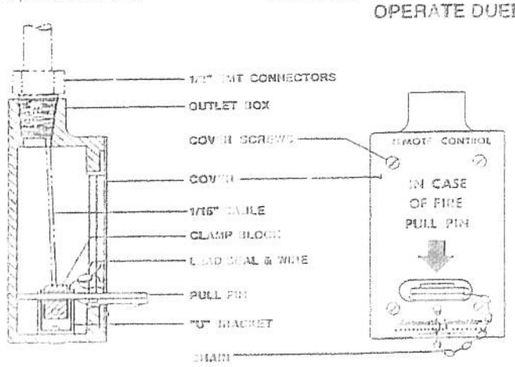
Remote Manual Controls

Surface Mounted: The surface mounted remote manual control (P/N 97027) provides a means to operate the system manually from a remote location. It is operated by removing a pull pin.

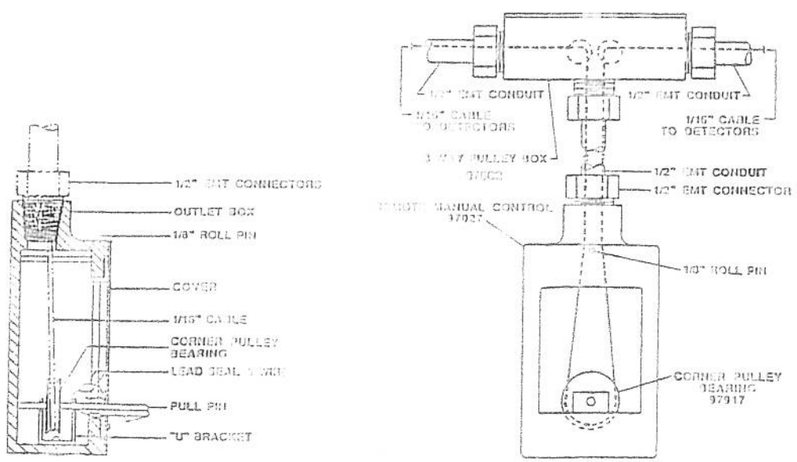
The remote manual control can be installed in either the vertical-up (from the floor up) or the vertical-down position (from the ceiling down). An optional inverted cover plate (P/N 97448) is available for vertical-up installations.

Two types of surface mounted remote manual controls are available. The End-of-Line Remote Manual Control (P/N 97463) is designed for use at the end of the detection line (see figure 15c). A FFPS approved tee pulley is included with the In-line Kit (97464) and when coupled with the Remote Manual Control (97463) the resultant is an in-line configuration. (see figure 16c).

CAUTION: TEE PULLEYS CAN NOT BE USED TO OPERATE DUEL GAS VALVES.



(END-OF-LINE 97463)
FIGURE 15c



(IN-LINE CONFIGURATION)
FIGURE 16c

C-10

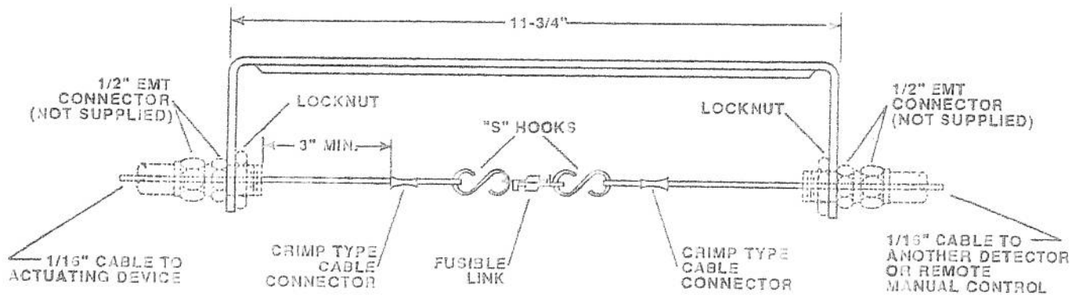
Detector

T. F. S FIRE EQUIPMENT, INC.
7243 W West Lake Road
INDIANAPOLIS, INDIANA 46214
(317) 243-2555

BROWN SERVICE EQUIPMENT
7243 WEST LAKE RD.
INDIANAPOLIS, IN 46214
317-487-0142

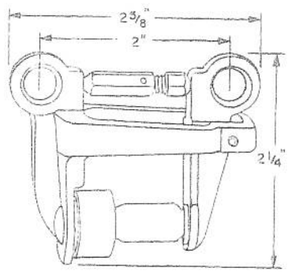
Detector

The detector consists of a plated steel bracket 11-3/4" long, a fusible link, 2 cable crimps and 2 "S" Hooks to connect the fusible link to the detection system cable.



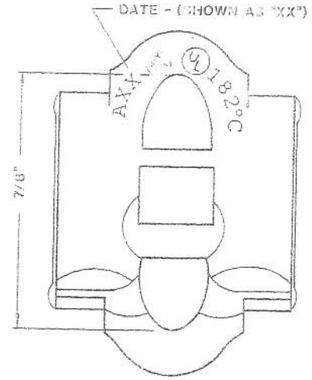
DETECTOR 97024
FIGURE 12c

BROWN'S SERVICE EQUIPMENT
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317-487-0142



Rating	Part No.	Maximum Ambient Temperature
400°	57643	375° F
500°	57644	475° F

GLASS BULB
(QUARTZOID) LINK
FIGURE 13c



300° F maximum ambient temperature.

ASCO A 360° FUSIBLE LINK 96903
FIGURE 14c

U.L EX 2458

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Badger® Heat Detector Links and Housing Kits

Effective: August 2012
B-87-012

FEATURES

- *For Use in:*
  - *Range Guard® Commercial Cooking Fire Suppression Systems*
  - *Industry Guard™ Industrial Fire Suppression Systems*
- *For Use with Universal Control Head and A+ Control Box*
- *Wide Selection of Link Types and Temperature Ratings*
- *Rapid Response Links Available for Increased Spacing on Industry Guard Systems*
- *Low Cost, Reliable Detection*

DESCRIPTION

Heat Detector Links

There are two types of mechanical heat detector links available for use with Badger Range Guard and Industry Guard fire suppression systems:

- Thermo Bulb links, available in Standard Response (BTBS) and Rapid Response (BTBR) (Figure 1)
- Fusible metal alloy links, Model ML (Figure 2) and Model RGA (Figure 3)

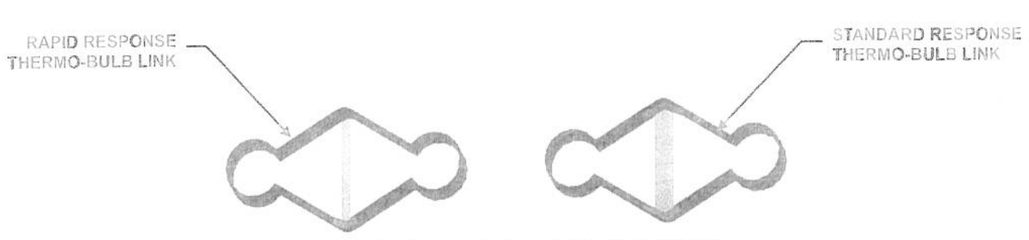


Figure 1. Thermo Bulb, P/N 87-12009*X-XXX*



Figure 2. ML Heat Detector Links, P/N WK-282661-*XXX*

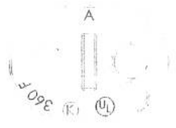


Figure 3. RGA Heat Detector Link, P/N 87-120060-001

Microswitch Kit, Quick Connect for Universal Control Head

BROWN'S SERVICE EQUIPMENT
7243 WEST LAKE RD.
INDIANAPOLIS, IN 46214
317-487-0142

P/Ns: 87-120039-001, 87-120039-501

Effective: August 2012
B-87-030

FEATURES

- *For Use in:*
  - *Range Guard® Commercial Cooking Fire Suppression System*
  - *Industry Guard™ Industrial Fire Suppression System*
- *For Use with Universal Control Head (UCH)*
- *Stackable with Alarm/Release Terminal Type Universal Control Head Microswitch*

DESCRIPTION

The Quick Connect Microswitch used with the Universal Control Head is a single pole, double-throw switch (Figure 1). Included in the microswitch kit is the microswitch, pigtail assembly, mounting screws, and wiring diagram label. Microswitch Kit P/N 87-120039-001 includes a pigtail assembly with solid color leads. Microswitch Kit P/N 87-120039-501 includes a pigtail assembly with striped leads. All wire leads are 24 inches (610 mm) in length.

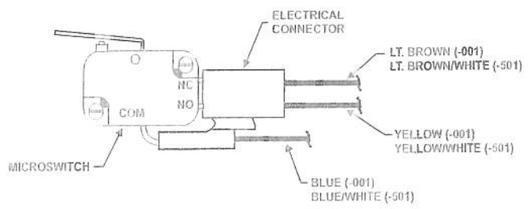


Figure 1. Quick Connect Microswitch

Quick Connect Microswitches are used to open or close electrical circuits, including, but not limited to:

- Electric appliance shutdown
- Make-up air shutdown
- Electric gas valve shutdown
- Shuntbreaker/relay

Electrical appliances typically have higher amp ratings than those of the microswitches (Table 1).

Table 1. Electrical Ratings

125/250 Vac	20-1/2 Amps
250 Vac	1-1/2 HP
125 Vac	1/2 HP

In this case, appliances shall not be wired directly to the microswitch. A magnetic contactor or relay must be used. For wiring the microswitch with the Universal Control Head, refer to Figure 2.

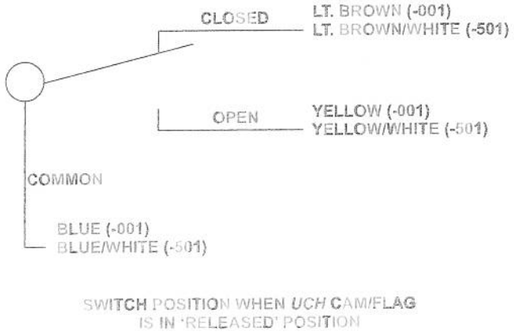


Figure 2. Microswitch in Released Position

Quick Connect Microswitch Kits are not for alarm initiation or solenoid release. A separate Alarm/Release Terminal Type Microswitch (P/N 87-120047-001) is available.

The Universal Control Head has two separate microswitch mounting locations to support up to four (4) microswitches (any combination of Quick Connect and/or Alarm/Release type). Each of the two mounting locations has a corresponding EMT port for wire leads, allowing the use of two electrical junction boxes for separation of signal lines and AC lines.

Table 1: Nozzle Application Information (Continued)

Nozzle Type	Part Number	Flow	Reference in Range Guard Wet Chemical DIOM Manual (P/N 60-9127100-000)	Application
LPF	87-120022-001  1 & 4 Grooves	2	Paragraph 3-4.7	**Deep Fat Fryer (Low Proximity)** Max. Hazard Area: 14 in. x 15-1/2 in. (356 mm x 394 mm) Max Appliance Area: 14 in. x 23-1/4 in. (356 mm x 591 mm)
LPR	87-120024-001  Disc & Core	1	Paragraph 3-4.12	**Four-Burner Range (Low Proximity)** Max. Hazard Area: 24 in. x 24 in. (610 mm x 610 mm)

ORDERING INFORMATION

Description	Part Number
ADP Nozzle	87-120016-001 (10-pack of 87-120011-001)
F Nozzle	87-120017-001 (10-pack of 87-120012-001)
GRW Nozzle	87-120018-001 (10-pack of 87-120013-001)
R Nozzle	87-120019-001 (10-pack of 87-120014-001)
DM Nozzle	87-120020-001 (10-pack of 87-120015-001)
LPF Nozzle	87-120023-001 (10-pack of 87-120022-001)
LPR Nozzle	87-120025-001 (10-pack of 87-120024-001)
Swivel Adapter	87-120021-001 (each)
Foil Seals	60-9197054-000 (10-pack)
Disc Cap	60-9197290-001 (10-pack, not for LPR nozzle)
Disc Cap, LPR	87-120026-001 (each, for LPR nozzle only)

BROWN'S SERVICE EQUIPMENT
7243 WEST LAKE RD.
INDIANAPOLIS, IN 46214
317-487-0142

Badger is a registered trademark of Kidde-Fenwal, Inc.
Range Guard is a registered trademark of Badger Fire Protection.

This literature is provided for informational purposes only. BADGER FIRE PROTECTION assumes no responsibility for the product's suitability for a particular application. The product must be properly applied to work correctly.

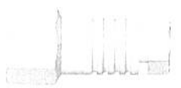
B-87-011 Rev AB

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340 Four Valley Drive
Vaughan, Ontario L4K 5Z1
Ph: (905) 695-6060
Toll Free: (800) 565-1976

Table 1: Nozzle Application Information (Continued)

Nozzle Type	Part Number	Flow	Reference in Range Guard Wet Chemical DIOM Manual (P/N 60-9127100-000)	Application
F	87-120012-001  2 Grooves	2	Paragraph 3-4.1	**Single Vat Deep Fryer** Max. Hazard Area: 18 in. x 18 in. (457 mm x 457 mm) Max. Appliance Area: 18 in. x 23 in. (457 mm x 584 mm)
			Paragraph 3-4.2	**18-1/2 in. x 24-1/2 in. (470 mm x 622 mm) Deep Fat Fryer** (2) F Nozzles Required, 4 Total Flows Max. Hazard Area: 18-1/2 in. x 18 in. (470 mm x 457 mm) Max. Appliance Area: 18-1/2 in. x 24-1/2 in. (470 mm x 622 mm)
			Paragraph 3-4.3	**Split Vat Deep Fat Fryer** Max. Hazard Area: 14 in. x 15 in. (356 mm x 381 mm) Max. Appliance Area: 14 in. x 21 in. (356 mm x 533 mm)
			Paragraph 3-4.4	**14 in. x 14 in. (356 mm x 356 mm) Deep Fat Fryer** Max. Hazard Area: 14 in. x 14 in. (356 mm x 356 mm) Max. Appliance Area: 14 in. x 24-1/2 in. (356 mm x 622 mm)
			Paragraph 3-4.5	**Single Vat Deep Fryer with Drip Board less than 1 in. (25 mm)** Max. Hazard Area: 24 in. x 24 in. (610 mm x 610 mm) Max. Appliance Area: 24 in. x 25 in. (610 mm x 635 mm)
			Paragraph 3-4.14	**Charbroiler (Lava, Pumice, Ceramic, or Synthetic Rock)** Max. Appliance Area: 22 in. x 23 in. (559 mm x 584 mm)
			Paragraph 3-4.22	**Tilt Skillet (Braising Pan)** Max. Hazard Area: 24 in. x 24 in. (610 mm x 610 mm)
R	87-120014-001  4 Grooves	1	Paragraph 3-4.9	**Four-Burner Range** Max. Hazard Area: 28 in. x 28 in. (711 mm x 711 mm) Shape of Burner Not Important
			Paragraph 3-4.10	**Two-Burner Range** Max. Hazard Length: 28 in. (711 mm) Shape of Burner Not Important
			Paragraph 3-4.11	**Single-Burner Range** Shape of Burner Not Important
DM	87-120015-001  0 Grooves	3	Paragraph 3-4.17	**Mesquite Log Charbroiler** Max Cooking Surface: 30 in. x 24 in. (762 mm x 610 mm) Max. Fuel Depth: 10 in. (254 mm) May Use Wood Chips, Chunks, Logs or any Combination

TECHNICAL DATA

Table 1: Nozzle Application Information

Nozzle Type	Part Number	Flow	Reference in Range Guard Wet Chemical DIOM Manual (P/N 60-9127100-000)	Application
ADP	87-120012-001  1 Groove	1	Paragraph 3-4.6	**Split Vat Deep Fat Fryer (Low Proximity)** Max. Hazard Area: 14 in. x 15 in. (356 mm x 381 mm) Max. Appliance Area: 14 in. x 21 in. (356 mm x 533 mm)
			Paragraph 3-4.8	**Krispy Kreme Model 270 d/h Doughnut Fryer** 8 ADP Nozzles Required, 8 Total Flows, Dedicated RG-6G Cylinder Max. Depth (front-to-back): 33 in. (840 mm) Max. Length (left-to-right): 93 in. (2362 mm)
			Paragraph 3-4.13	**Upright Broiler** Max. Internal Broiler Compartment: 30-1/4 in. x 34 in. (768 mm x 864 mm)
			Paragraph 3-4.16	**Natural or Mesquite Charcoal Charbroiler** Max. Cooking Surface: 24 in. x 24 in. (610 mm x 610 mm) Max Fuel Depth: 6 in. (152 mm)
			Paragraph 3-4.18	**Chain Broiler (Closed-Top)** Max. Internal Hazard Area: 28 in x 29 in. (711 mm x 737 mm)
			Paragraph 3-4.19	**Chain Broiler (Open-Top)** Max. Internal Hazard Area.: 28 in x 29 in. (711 mm x 737 mm)
			Paragraph 3-4.20	**Griddle - Flat Cooking Surface With or Without Raised Ribs** Max. Hazard Area: 30 in. x 42 in. (762 mm x 1067 mm)
			Paragraph 3-6.1	**Plenum** No Filter: 10 ft. x 4 ft. (3 m x 1.2 m) Max. "V" Filter: 10 ft. x 4 ft. (3 m x 1.2 m) Max. Per Nozzle Single Bank Filter: 10 ft. x 4 ft. (3 m x 1.2 m) Max. Per Nozzle
			Paragraph 3-6.1.1.1	**Duct** Up to 50 in. (1270 mm) perimeter per nozzle Max. Throw: 11.78 in. (300 mm) Unlimited duct length
GRW	87-120013-001  3 Grooves	1	Paragraph 3-4.15	**Gas Radiant/Electric Charbroiler** Max. Cooking Surface: 21 in. x 24 in. (533 mm x 610 mm)
			Paragraph 3-4.21	**Wok** Diameter: 14 in. to 28 in. (356 mm to 711 mm) Depth: 3 in. to 8 in. (76 mm to 203 mm)

Badger® Range Guard® Agent Discharge Nozzles

BROWN'S SERVICE EQUIPMENT
7243 WEST LAKE RD.
INDIANAPOLIS, IN 46214
317-487-0142

Effective: August 2012
B-87-011

FEATURES

- *For Use in Range Guard Commercial Cooking Fire Suppression Systems*
- *Stainless Steel Internal Strainer*
- *Nickel-Chrome Plated Brass Body*
- *Grooved Rings for Easy Identification*
- *Foil Seal Prevents Clogging from Grease*
- *Available Swivel Adapter for Easy Aim Adjustment*

DESCRIPTION

There are seven agent discharge nozzles available for use with the Badger Range Guard Wet Chemical Suppression System. Each nozzle has a specific flow number which is an indication of the discharge rate. Nozzle types are selected based upon the specific hazard being protected. All nozzles have a 3/8-in. NPT female thread and are stamped with the nozzle type (see Figure 1).

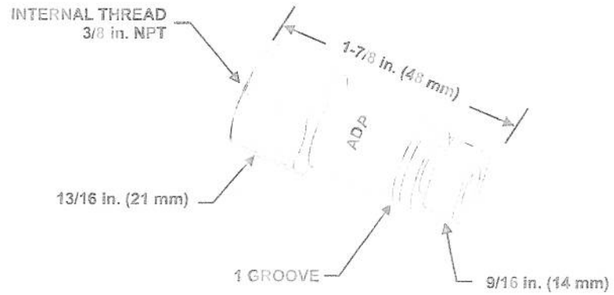


Figure 1. ADP Nozzle

A swivel adapter (P/N 87-120021-001) may be used with each nozzle to facilitate proper aim (see Figure 2).

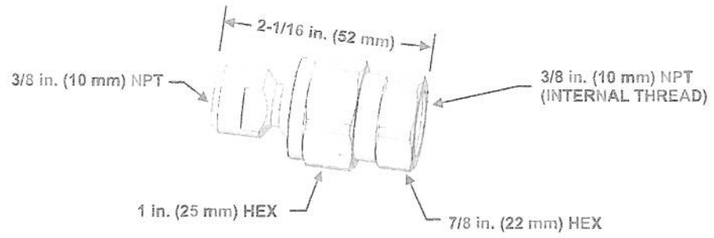


Figure 2. Nozzle Swivel Adapter

Combination Remote Manual Release

P/N: 60-120110-001

Effective: August 2012
B-87-032

FEATURES

- *For Use in:*
  - *Range Guard® Commercial Cooking Fire Suppression Systems*
  - *Industry Guard™ Industrial Fire Suppression Systems*
- *For Use with Badger® Universal Control Head or A+ Control Box*
- *Versatile—Surface- or Recess-Mount in any Orientation*
- *Multilingual Labels*

DESCRIPTION

The Combination Remote Manual Release (RMR) Pull Station (Figure 1) is provided as a means of manually actuating the Range Guard or Industry Guard fire suppression system from a remote location. The RMR is attached to the Badger Universal Control Head (UCH), P/N 60-120099-001, or A+ Control Box, P/N 60-120010-001, with 1/16-in. Badger Control Cable, P/N WK-219649-000. The RMR is available for use on both 'un-tensioned' Pull-to-Trip (PTT) and 'tensioned' Release-to-Trip (RTT) control cable lines.

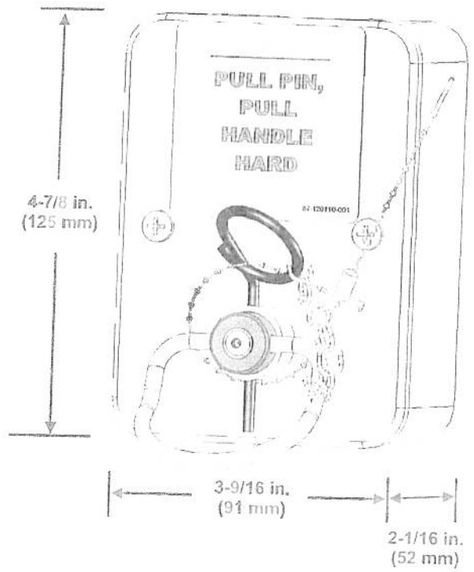


Figure 1. Combination Remote Manual Release Pull Station

Mechanical Gas Valves

BROWN'S SERVICE EQUIPMENT
7243 WEST LAKE RD.
INDIANAPOLIS, IN 46214
317-487-0142

P/N: 60-12007X-001

Effective: August 2012
B-87-022

FEATURES

- *For Use in:*
  - *Range Guard® Commercial Cooking Fire Suppression Systems*
  - *Industry Guard™ Industrial Fire Suppression Systems*
- *For Use with Universal Control Head and A+ Control Box*
- *UL & ULC Listed*
- *FM Approved for Industry Guard Systems*

DESCRIPTION

A Mechanical Gas Valve (Figure 1) is required on systems used to protect gas-fueled equipment (e.g., appliances). Upon system actuation, tension on the control stem is released, closing the valve and stopping gas flow to the equipment.

All Mechanical Gas Valves include an optional cable block (see Figure 2) which can be used to prevent over-extending the valve stem in the open position.

Note: Only Mechanical Gas Valves that are specifically UL listed and identified by part number in this data sheet may be used with the Badger® system.

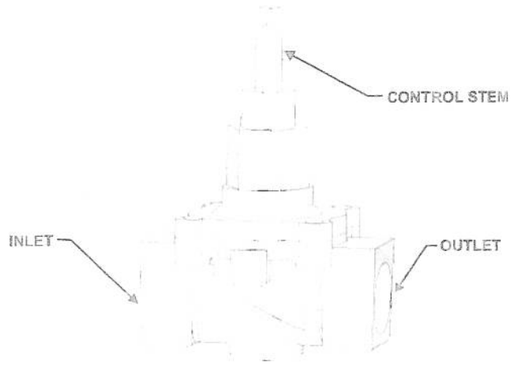


Figure 1. Mechanical Gas Valve, P/N 60-12007X-001

ORDERING INFORMATION

Gas Valves:	
Valve Size	**Part Number**
3/4 in. (19 mm)	60-120071-001
1 in. (25.4 mm)	60-120072-001
1-1/4 in. (32 mm)	60-120073-001
1-1/2 in. (38 mm)	60-120074-001
2 in. (51 mm)	60-120075-001
2-1/2 in. (64 mm)	60-120076-001
3 in. (76 mm)	60-120077-001
Pulley:	
Double Tee Pulley	83-843792-000

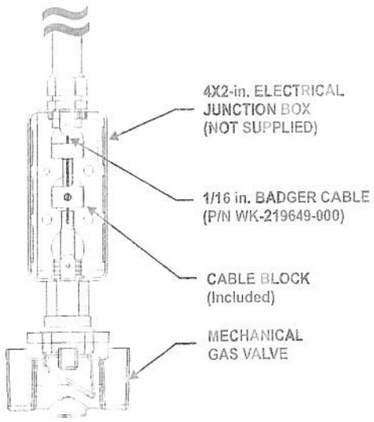


Figure 2. Typical Mechanical Gas Valve Installation

RED SUN REST 3100 MERIDIAN PARK DR. GREENWOOD IN

OUTLINE SPECIFICATIONS

GENERAL NOTES:

GN-1 THE TYPE OF CONSTRUCTION CHAPTER 6 OBC 2007 (VERIFY WITH ORIGINAL PERMIT OF RECORD).

GN-2 IT IS THE OWNERS RESPONSIBILITY THAT THE EXISTING, RENOVATED, OR NEW FACILITY MEET THE STANDARDS SET FORTH BY THE THE MOST CURRENT OBC.

FIRE SUPPRESSION SYSTEM (ICC INTERNATIONAL BUILDING CODE & OBC SECTION 904 & NFPA 17A)

PYRO-CHEM FIRE SYSTEMS MANUFACTURED BY:
PYRO-CHEM
ONE STATION STREET, MARINETTE, WI 54143
(CERTIFIED TO ISO 9001, UL300)

FS-1 FIRE SUPPRESSION SYSTEM TO BE INSTALLED BY OHIO, OR GIVEN STATE CERTIFIED TECHNICIANS FOR PORTABLE PRE-ENGINEERED OTW FIRE EXTINGUISHERS, IN ACCORDANCE WITH THE PYRO-CHEM SYSTEM MANUAL. MANUAL # PN55124 (4) ULEX 3830 REV. MARCH 1, 2006

FS-2 ACTUAL LOCATIONS OF PULL STATION (OBC 5093) FIRE TANK, GAS SHUT OFF VALVE, AND AUDIBLE/VISUAL ALARM MAY VARY FROM THAT OF DRAWING DUE TO BUILDING CONSTRAINTS, BUT ARE TO BE INSTALLED ACCORDING TO THE CODE SET FORTH IN OBC.

FS-3 THE PORTABLE "K" TYPE EXTINGUISHER IS THE RESPONSIBILITY OF THE OWNER AND IS TO BE PROVIDED/INSTALLED BY THEM ACCORDING TO CODE SET FORTH IN OBC.

FS-4 WARNING SIGNS SHALL BE POSTED WHEN THE ALARM SOUNDS PER THE CODES SET FORTH IN THE OBC.

FS-5 MANUAL PULL STATION IS TO BE LOCATED A MINIMUM OF 10' FROM THE HAZARD AREA IN THE PATH OF EXIT AND EGRESS.

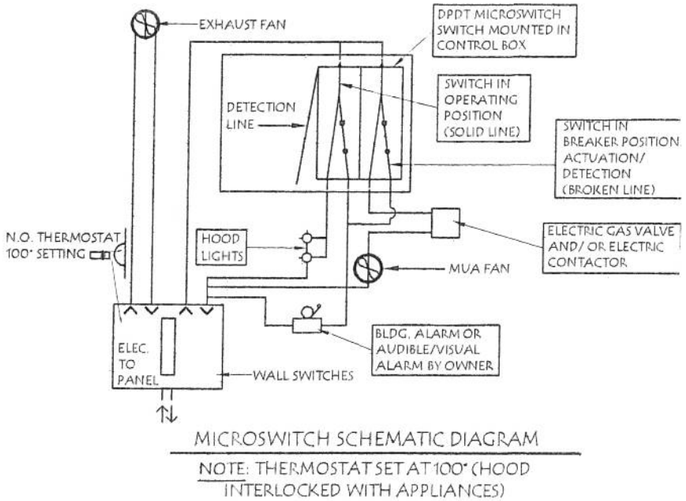
FS-6 UPON ACTIVATION OF THE SUPPRESSION SYSTEM ALL COOKING EQUIPMENT (GAS OR ELECTRIC) WILL BE AUTOMATICALLY SHUT DOWN.

FS-7 ALL INSPECTIONS AND ACCEPTANCE TESTS SHALL BE WITNESSED AND APPROVED BY THE LOCAL BUILDING AND FIRE DEPARTMENT OFFICIALS.

SPRINKLER NOZZLE FLOW POINT LEGEND

TYPE	EQUIPMENT TYPE	COVERAGE/ HEIGHT	NO. HEADS	FLOW POINTS
2D	---	DUCT/PLENUM COVERAGE	2	4
1H	---	PLENUM	2	2
2H	RICE OVEN	18" x 27" / 24" to 48"	1	2
2H	GRILL + HOT BOX	18" x 27" / 24" to 48"	3	6
2L	WOK	28" x 28" / 34" to 48"	1	2
1H	FRY	12" x 28" / 40" to 50"	1	1
1H	FRY	18" x 18" / 40" to 50"	2	2
TOTALS			12	19
AMOUNT OF WET CHEMICAL (GALLONS)				6.0

RAN Grill Unit 300

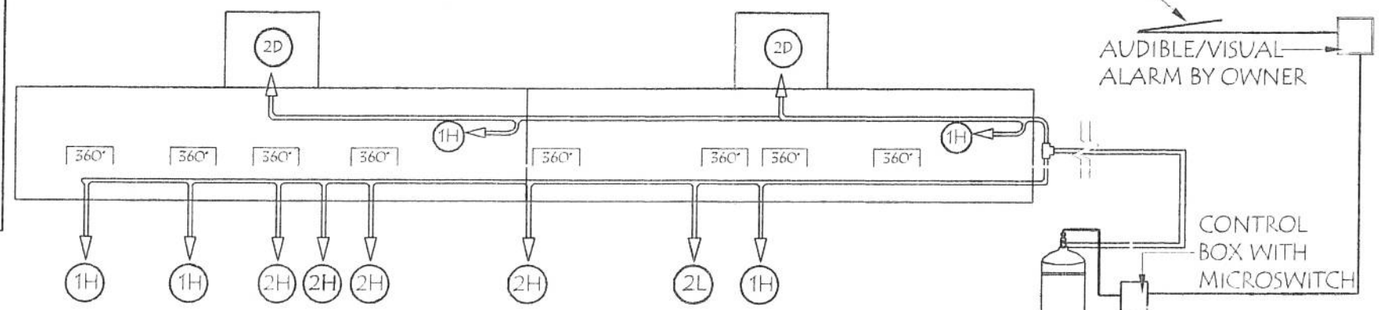


MICROSWITCH SCHEMATIC DIAGRAM

NOTE: THERMOSTAT SET AT 100° (HOOD INTERLOCKED WITH APPLIANCES)

BROWN'S SRV EQUIPMENT INC
8270279725

AUTOMATIC SHUT-OFF FOR UNDER HOOD ELECTRICAL (LIGHTS, APPLIANCES, ETC.)& MUA FAN: REF. NFPA 96, 8-2.3.1



BROWN'S SERVICE EQUIPMENT
7243 WEST LAKE RD.
INDIANAPOLIS, IN 46214
317-487-0142

GENERAL NOTES

ALL EQUIPMENT MUST BE WITHIN 6" MIN. FROM EACH END OF THE HOOD

SYMBOL	DESCRIPTION
———	AUTO SHUT-OFF (LIGHTS,APPLIANCES, FANS) ACTIVATION OF AUDIBLE/VISUAL ALARM.
	DETECTION LINE
	GAS VALVE AUTO. SHUT-OFF
360°	FUSIBLE LINK W/ 360° TEMP. RATING
450°	FUSIBLE LINK W/450° TEMP. RATING
500°	FUSIBLE LINK W/ 500° TEMP. RATING

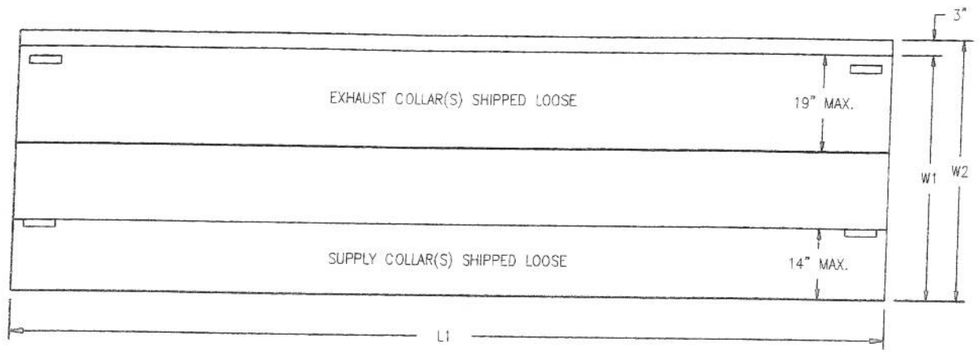
1½" GAS VALVE

HOODS + FANS = BAY OWNER

PLAN VIEW

Model: SC
(SHORT CIRCUIT)

Date....:
Ref. #.:
Job Name:

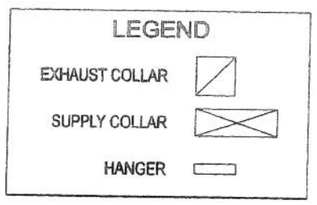


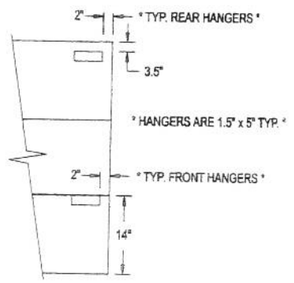
HOOD SIZE & CONFIGURATION

HOOD 1 15' 0" x 48" x 24" WALL STYLE - HOOD IS 1 SECTION, STAND ALONE

DIMENSION DATA
L1 - 15' 0"
W1- 48" W2- 51"

SECTION 1 15' 0" x 48 " x 24 "
2- 18X18 - Exhaust Collars Shipped Loose
2 - 24X10 - Supply Collars Shipped Loose





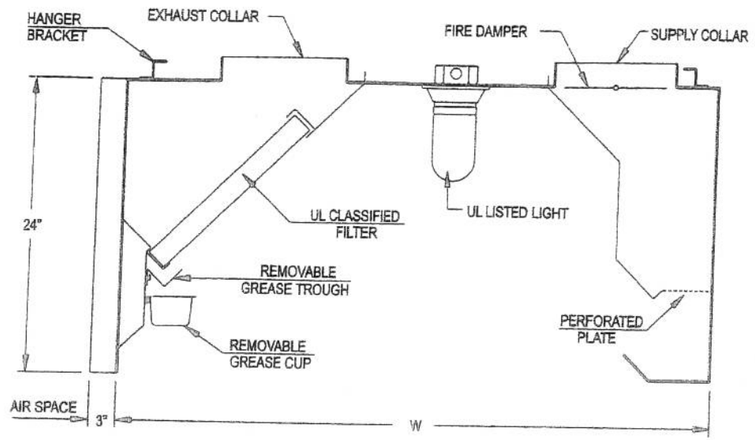
NOTES:

REO SUN REST
3100 MERIDIAN PARK DR.
GREENWOOD, IN

SECTION VIEW

Model: SC
(SHORT CIRCUIT)

Date....:
Ref. #.:
Job Name:



Manufactured in Accordance with NFPA-96, IMC, and NSF Listed Standard 2. ETL-ANSI/UL710 Report # 541477.

HOOD SIZE & CONFIGURATION
HOOD 1
L x W x H
15' x 48" x 24" WALL STYLE - HOOD IS 1 SECTION, STAND ALONE

MATERIAL
430 STAINLESS STEEL Where Exposed

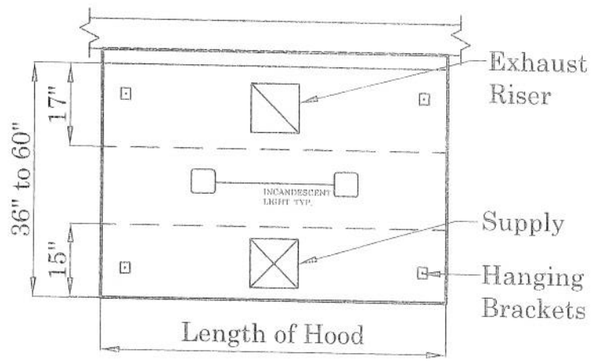
FILTERS
Aluminum Baffle

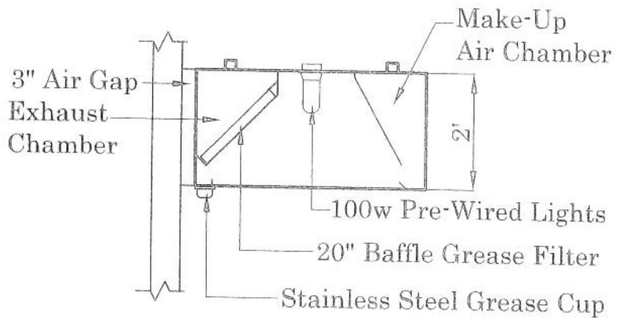
LIGHTS
5 Prewired Incandescent Light(s)

SECTION 1 15' 0" x 48" x 24"
WEIGHT: 850lbs 450 Degree ETL Label (no charbroiler) (Conforms to ANSI/UL-710)
COLLARS (See Plan View for Size & Location)
Front Panel Insulation
Back Stand-Off Mounted (Stand-Off Adds to Width of Hood)

CFM REQUIRMENT:
EXHAUST: CFMS @ .500 S.P. 3500 PER FAN
NOTE.....: S.P. Calculations Include Hood, Filters, and up to 8' of Straight Exhaust Duct.
SUPPLY: CFMS @ .125 S.P. 5250
NOTE.....: S.P. Calculations Include Hood and up to 20' of Straight Supply Duct.

NOTES:





ETL LISTED EXHAUST HOODS FOR COMMERCIAL COOKING EQUIPMENT CONFORMS TO UL STD 710

NSF

NFPA

BOCA MEMBER

177 REASER CT. P.O. BOX 1377
ELYRIA, OH 44035 ELYRIA, OH 44036
PH: 440-365-4567 FAX: 440-365-2100
TOLL FREE: 800-854-3267
www.americanhood.com
sales@americanhood.com

BOX MAKE-UP AIR CANOPY

General Specifications:

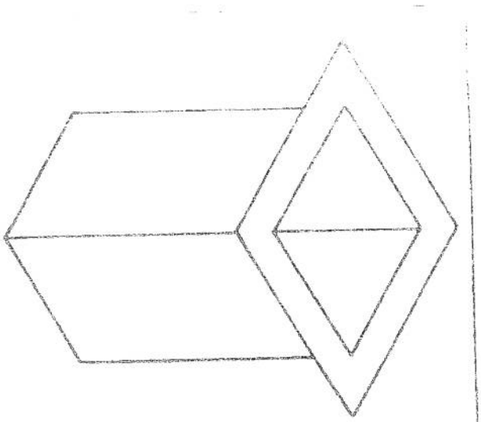
- Constructed of 18 gauge steel
- All joints are welded liquid tight, without seams by an automatic mig welder
- Hoods are built in accordance with NFPA 96, NSF specifications, and conform to U.L. 710 standards
- Grease trough is made to receive grease extracted by the filters
- Grease filters are 20" baffle type, they carry a U.L. listing and are constructed of a light weight aluminum steel
- Each grease trough is equipped with a stainless steel cup
- Note: Factory does not cut holes in hood

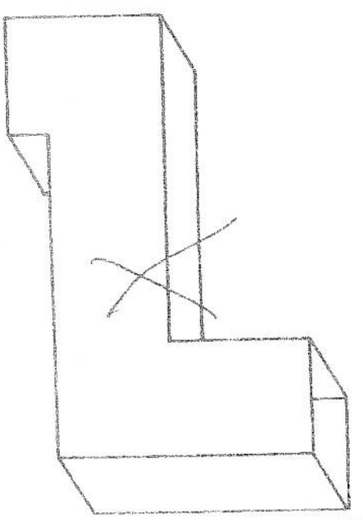
Available In:

- Deluxe: All Stainless Steel
- Hybrid: Front and Sides are Stainless Steel and Top and Back are Aluminized
- Economy: All Aluminized

DUCTS

BROWN SERVICE EQUIPMENT
72 WEST
INDIANAPOLIS
317-487-0184





JOB Rear Sink Area

SHIP TO

EXHAUST CFM 3-Tier Area DUCT SIZE 36" x 16" x 8"

MUA CFM Above DUCT SIZE 36" x 16" Deep

DATE NO

VIA

SPECIFICATIONS

EXHAUST DUCT

Material - 16 - gage black iron.
Construction continous external welds at all seams. Sections to be field assembled will have weld flanges turned out 1/2" all sides. Bottom edge of duct (hood connection) is a raw edge Top of duct (fan connection) is a raw edge Duct length up to 10'-0" will be one piece unless otherwise specified. Pan for top of curb is square dimension of curb and does not include hole for duct connection. Other accessories available include offsets, elbows,

SPECIFICATIONS

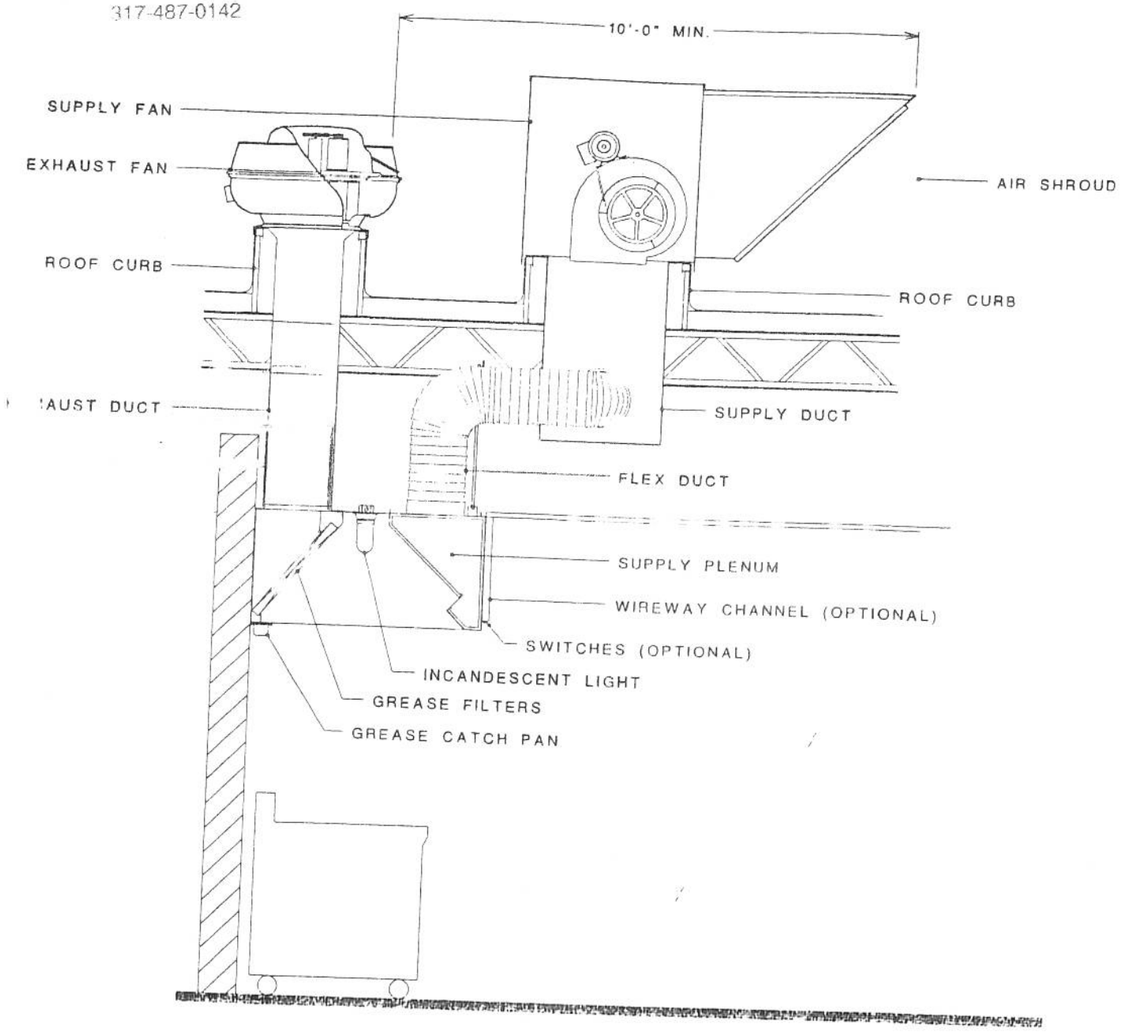
MAKE-UP AIR DUCT

Material gage per SMACNA standards for low pressure ducts. Slip and drive construction. Amount of duct furnished is sufficient to provide 10'-0" separation between exhaust outlet and mua intake on roof unless otherwise specified. Duct can be internally lined when untempered outside air is used in cold climates. Lining is 1/2" fiberglass with fabric liner. Accessories include turning vanes, volume dampers and fire dampers.

(HOODS + FANS Bay Dunne)

UNTEMPERED MAKE UP AIR SYSTEM

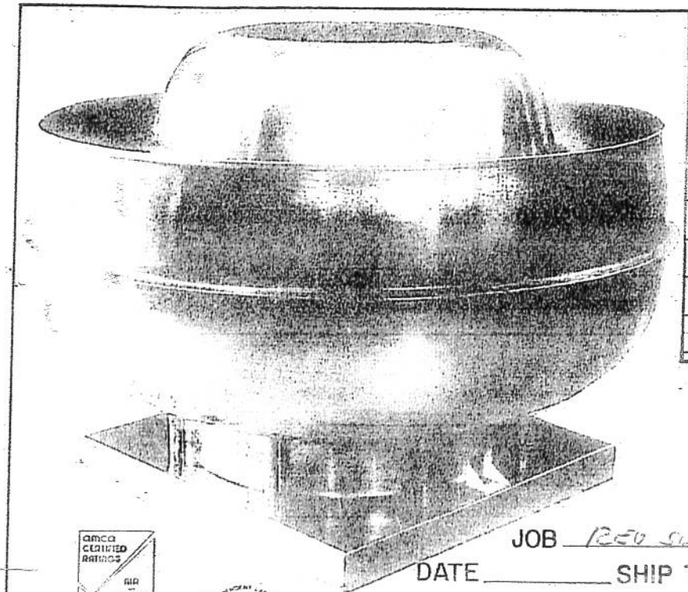
BROWN SERVICE EQUIPMENT
7243 WEST LAKE RD.
INDIANAPOLIS, IN 46214
317-487-0142



VENT CA.

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INDIANAPOLIS, IN 46214
317-487-0142

EXHAUST FANS



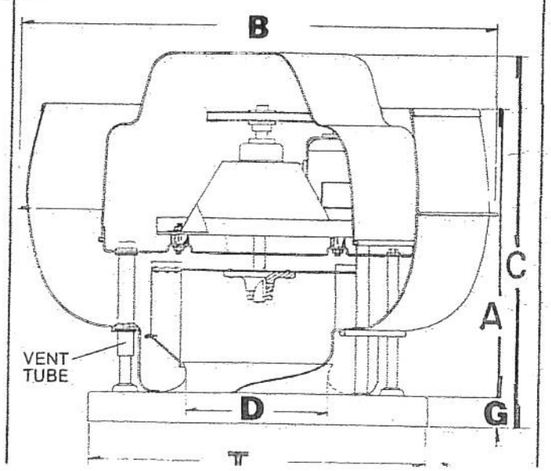
ITEM	HP	CFM.	SP	VOLT	PH
2	1.-	per 350	1	220	1

JOB RED SUN REST NO

DATE SHIP TO 3200 METROPLEX DRIVE DEN

CONTRACTOR BROWN'S SERVICE EQ PO NO

SECTION



SPECIFICATIONS

Aluminum upblast roof exhausters. Ventilated sealed motor housing. Bearings include vibration isolators. Adjustable drive and base plate.

DIMENSIONS

4', 5' AND 6' HOODS

A= 19-3/8 B= 35-1/8 C= 28-13/16

D= 10 G= 2 T sq.= 24 Wgt 72 lbs.

7' thru 12'

A= 22-7/8 B= 40-1/8 C= 32-1/2

D= 13 G= 2 T sq.= 24 Wgt 98 lbs.

DETECT-A-FIRE®

Detection and Release Devices

BROWN[illegible]ICE EQUIPMENT
[illegible] WEST LAKE RD.
INDIANAPOLIS, IN 46214
317-487-0142

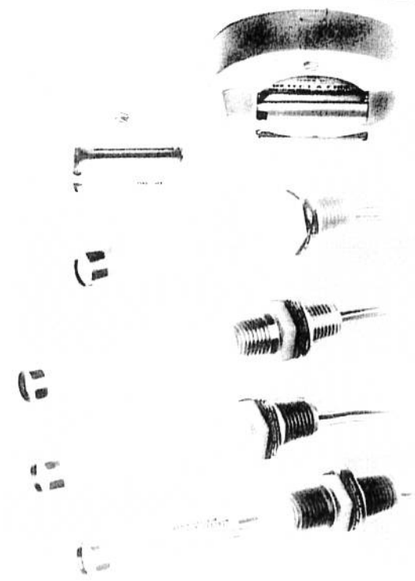
Fenwal

FEATURES

- *Repeatable - resets itself, nothing to replace, testable*
- *Rugged - withstands shock and vibration*
- *Versatile - offers various temperature settings*
- *Durable - long lasting stainless steel shell*
- *Economical - wide spacing, reduces installation cost*
- *Factory set and the internal contact area is hermetically sealed in stainless steel*

APPLICATIONS

- *Protection of schools, factories, offices, libraries, etc.*
- *Paint spray booths*
- *Range hoods*



DESCRIPTION

DETECT-A-FIRE units are the "heart" of many Fire Protection Systems. These highly reliable devices have been a standard of the industry for over 45 years. Many thousands of these units are now in use controlling the release of extinguishants such as clean agents, C02, water, or dry chemicals. In some systems the device is used as an ALARM device, to sense overheat or fire, and alert personnel. In other systems, it is used as a RELEASE device, to sense fire and actuate fire attack systems.

DETECT-A-FIRE units have met with wide acceptance because they are designed with RATE COMPENSATION. This provides a unique advantage over both fixed temperature and rate-of-rise types of detectors because only the DETECT-A-FIRE unit accurately senses the surrounding air temperature regardless of the fire growth rate. At precisely the predetermined danger point, the system is activated.

Fixed temperature detectors must be **completely** heated to alarm temperature and therefore a disastrous lag in time may occur with a fast rate fire. Rate-of-rise devices, on the other hand, are triggered by the rate of increase in ambient temperature and are subject to false alarms caused by harmless, transient thermal gradients such as the rush of warm air from process ovens.

The secret of the unit's sensitivity is in the design (Figure 1). The outer shell is made of a rapidly expanding alloy which closely follows changes in surrounding air temperature. The inner struts are made of a lower expanding alloy. Designed to resist thermal energy absorption and sealed inside the shell, the struts follow temperature changes more slowly.

A slow rate fire (Figure 2) will heat the shell and struts together. At the "set point," the unit will trigger, actuating the alarm or releasing the extinguishant.

A transient rush of warm air up to 40F°/min. may expand the shell, but not enough to trigger the unit. By ignoring transient warm air excursions, the DETECT-A-FIRE unit virtually eliminates false alarms prevalent with rate-of-rise devices.

If a fast rate fire (Figure 3) starts, the shell will expand rapidly. The struts will close, actuating the alarm or releasing the agent. The faster the fire rate of growth, the sooner the DETECT-A-FIRE unit will react.

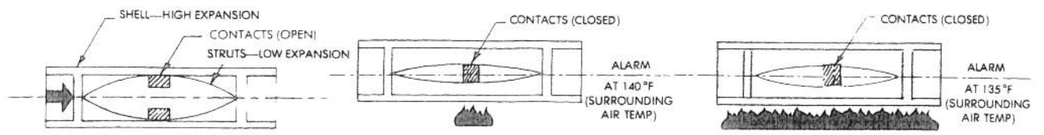
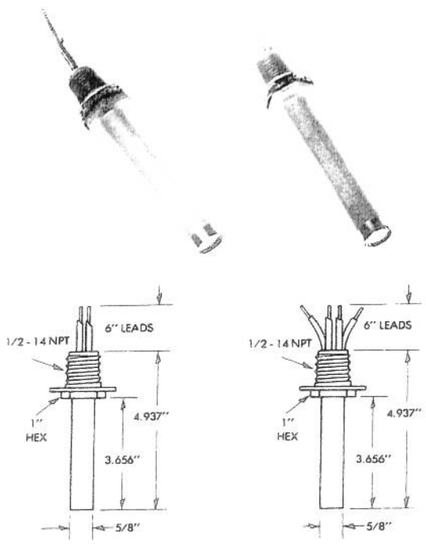


FIGURE 1 READY — FIGURE 2 SLOW FIRE — FIGURE 3 FAST FIRE

VERTICAL DETECT-A-FIRE-UNITS

For Concealed and Exposed Wiring (Hexagonal Head)



12-X27120-000
12-X27120-022

12-X27121-000
12-X27121-020

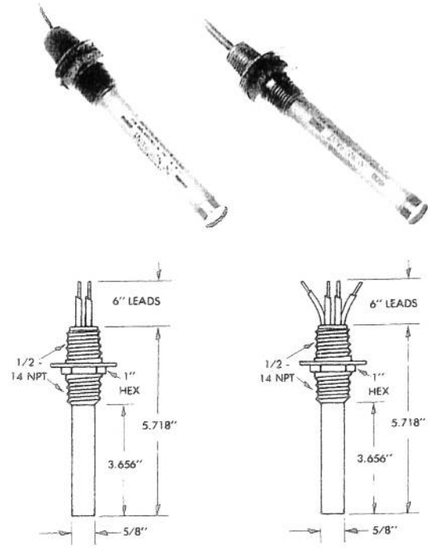
Model No.	Contact Operation on Temperature Rise	Approx. Weight Per Unit	Electrical Rating (Resistive Only)
12-X27120-000 12-X27120-022	Opens (450°F Max)	5 oz.	5.0 Amps 125 VAC 0.5 Amps 125 VDC
12-X27121-000 12-X27121-020	Closes	5 oz.	5.0 Amps 125 VAC 0.5 Amps 125 VDC 2.0 Amps 24 VDC 1.0 Amps 48 VDC

CONSTRUCTION

-000 units have a stainless steel sensing shell and a brass mounting head. -002 and -020 units are all Type 300 stainless steel.

VERTICAL DETECT-A-FIRE-UNITS

For Concealed and Exposed Wiring (Coupling Head)



12-X28020-003

12-X28021-000
12-X28021-005

Model No.	Contact Operation on Temperature Rise	Approx. Weight Per Unit	Electrical Rating (Resistive Only)
12-X28020-003	Opens (450°F Max)	5 oz.	5.0 Amps 125 VAC 0.5 Amps 125 VDC
12-X28021-001 12-X28021-005	Closes	5 oz.	5.0 Amps 125 VAC 0.5 Amps 125 VDC 2.0 Amps 24 VDC 1.0 Amps 48 VDC

CONSTRUCTION

-000 units have a stainless steel sensing shell and a brass mounting head. -003 and -005 units are all Type 300 stainless steel.

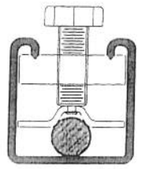
STOCKED MODELS AND TEMPERATURE SETTINGS

(Suggested setting a minimum of 100F° above ambient)

[X] Indicates a stock unit

Model	Temperature Setting (°F)									
	140	160	190	225	275	325	360	450	600	725
12-X27020-000	X		X							
12-X27020-001	X									
12-X27021-000	X		X							
12-X27021-001	X		X							
12-X27120-000		X	X	X		X				
12-X27121-000	X	X	X	X	X	X	X	X	X	X
12-X28021-005				X				X		

SC228
HANGER ROD STIFFENER
- For 3/8" thru 5/8" ATR
- Strut ordered separately
- Standard finish: ZN
- Wt./C 21 Lbs. (9.5 kg)



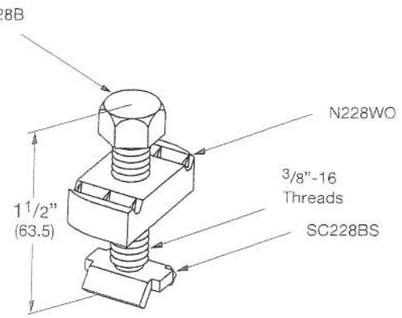


Fig. 98
ROD STIFFENER
- For 3/8" thru 7/8" ATR
- Use with 12 ga. strut only, ordered separately
- Secures channel to hanger rod for vertical seismic bracing
- Standard finish: ZN
- Wt./C 11 Lbs. (5.0 kg)

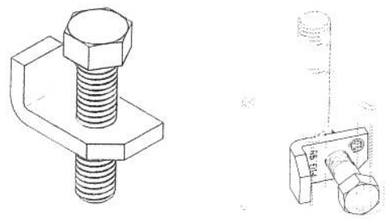
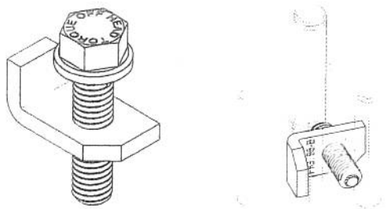
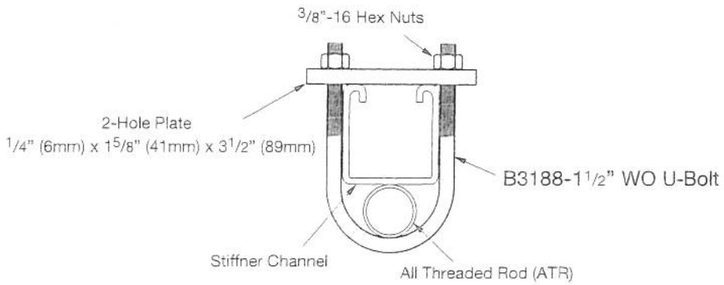


Fig. 98B
ROD STIFFENER w/BREAK-OFF BOLT HEAD
- For 3/8" thru 7/8" ATR
- Use with 12 ga. strut only, ordered separately
- Secures channel to hanger rod for vertical seismic bracing
- Uses a snap-off bolt head
- Standard finish: ZN
- Wt./C 13 Lbs. (5.9 kg)



SC-UB
HANGER ROD STIFFENER
- For 3/4" thru 7/8" ATR
- Strut ordered separately
- Includes: (1) B3188-1 1/2WO U-Bolt
  (2) 3/8"-16 Hex Nuts
  (1) 2-Hole Plate
- Standard finish: ZN
- Wt./C 50 Lbs. (22.7 kg)



Reference page 44 for general fitting and standard finish specifications.

Hardware

ATR
ALL THREADED ROD
- Available in 36" (91.4 cm), 72" (182.9 cm), 120" (304.8 cm), 144" (365.7 cm) lengths
- Safety Factor of 5 on recommended load
- Standard finish: Zinc-Plated, Stainless Steel Type 304

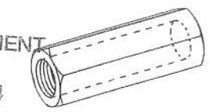
Part No. & Size	Threads Per Inch	Recommended Load Lbs.	kN	Wt./C Ft. (3048.0 cm) Lbs.	kg
ATR 1/4"	20	240	(1.07)	12	(5.44)
ATR 5/16"	18	400	(1.78)	19	(8.62)
ATR 3/8"	16	730	(3.24)	29	(13.15)
ATR 1/2"	13	1350	(6.00)	53	(24.04)
ATR 5/8"	11	2160	(9.60)	89	(40.37)
ATR 3/4"	10	3230	(14.37)	123	(55.79)
ATR 7/8"	9	4480	(19.93)	170	(77.11)
ATR 1"	8	5900	(26.24)	225	(102.06)

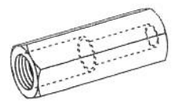


B655 ROD COUPLING
B656 REDUCER ROD COUPLING
- Load rating for each coupler meets All Threaded Rod value
- Standard finish: Zinc-Plated, Stainless Steel Type 304

Part No.	Size	Recommended Load Lbs.	kN	Length		Wt./C Lbs.	kg
B655-1/4	1/4"-20	240	(1.07)	7/8"	(22.2)	1.9	(.86)
B655-5/16	5/16"-18	380	(1.69)	7/8"	(22.2)	1.8	(.81)
B655-3/8	3/8"-16	730	(3.24)	1 1/8"	(28.6)	3.6	(1.63)
B655-1/2	1/2"-13	1350	(6.00)	1 3/4"	(44.4)	11.3	(5.12)
B655-5/8	5/8"-11	1810	(8.05)	2 1/8"	(54.0)	17.6	(7.98)
B655-3/4	3/4"-10	2710	(12.05)	2 1/4"	(57.1)	28.1	(12.74)
B655-7/8	7/8"-9	3770	(16.77)	2 1/2"	(63.5)	57.2	(25.94)
B655-1	1"-8	4960	(22.06)	2 3/4"	(69.8)	73.7	(33.43)

BROWN'S SERVICE EQUIPMENT
7243 WEST LAKE RD.
INDIANAPOLIS, IN 46214
317-487-0142





Part No.	Size	Recommended Load Lbs.	kN	Length		Wt./C Lbs.	kg
B656-3/8 x 1/4	3/8"-16 & 1/4"-20	240	(1.07)	1"	(25.4)	3.7	(1.68)
B656-1/2 x 3/8	1/2"-13 & 3/8"-16	730	(3.24)	1 1/4"	(31.7)	6.6	(2.99)
B656-5/8 x 1/2	5/8"-11 & 1/2"-13	1350	(6.00)	1 1/4"	(31.7)	11.6	(5.26)
B656-3/4 x 5/8	3/4"-10 & 5/8"-11	1810	(8.05)	1 1/2"	(38.1)	20.6	(9.34)
B656-7/8 x 3/4	7/8"-9 & 3/4"-10	2710	(12.05)	1 3/4"	(44.4)	39.4	(17.87)

BHR SERIES
HOT RODS FOR TRAPEZE HANGERS
- 12" length of threaded rod completely assembled with rod coupling, locking hex nuts, square washer, and channel nut.
- Standard finish: Zinc-Plated

Part No.	Rod Size	Recommended Load Lbs.	kN	Wt./C Lbs.	kg
BHR1225ZN	1/4"-20	240	(1.07)	41	(18.6)
BHR1238ZN	3/8"-16	730	(3.24)	63	(28.6)
BHR1250ZN	1/2"-13	1350	(6.00)	98	(44.4)
BHR1262ZN	5/8"-11	1500	(6.67)	148	(67.1)

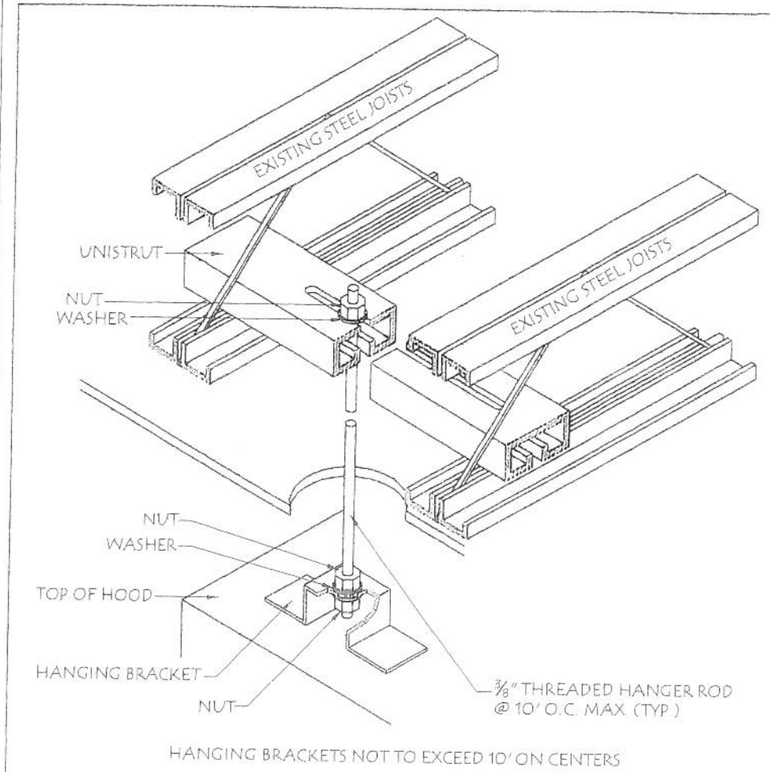


Note: Based on use with 12 ga. channel.

(BHR1225, BHR1238, and BHR1250 use combo nut washers instead of square washers and channel nuts)

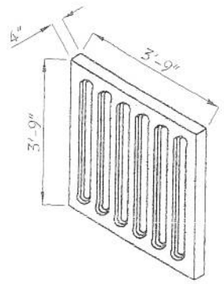
Reference page 44 for general fitting and standard finish specifications.

BROWN SERVICE EQUIPMENT
7243 WEST LAKE RD.
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HANGING BRACKETS NOT TO EXCEED 10' ON CENTERS

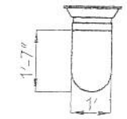
HANGING BRACKET DETAIL
NOT TO SCALE



DIMENSIONAL DATA

MATERIAL	STAINLESS STEEL, ALUMINUM OR GALVANIZED STEEL
HANDLES	2 STAINLESS STEEL SNAP-IN HANDLES SUPPLIED
MAX. TEMP.	450° FARENHEIT
CLASSIFIED	UL & NFPA 96

FILTER ASSEMBLY
NOT TO SCALE

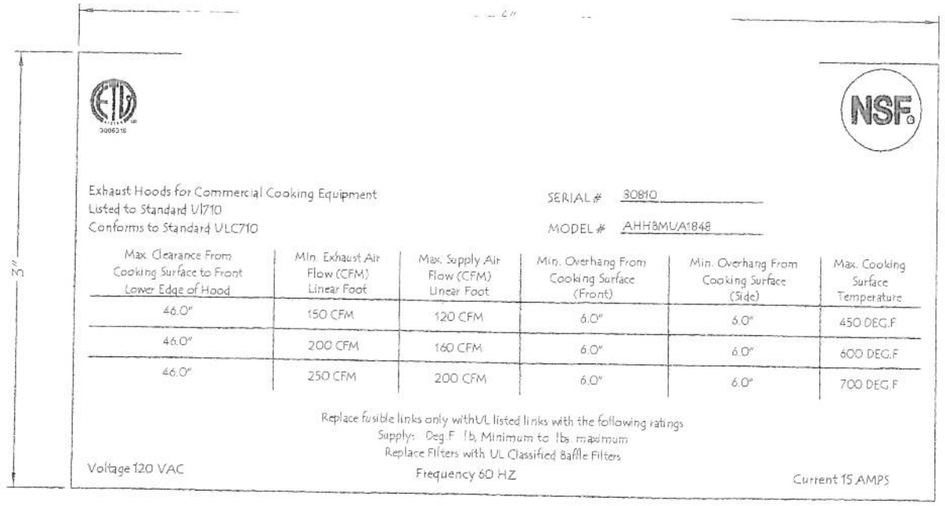


DIMENSIONAL DATA

BODY	DIE CAST ALUMINUM ALLOY, BRUSHED FINISH
GLOBE	SILICONE RUBBER COATED TEMPERED GLASS
SOCKET	PORCELAIN BODY, NICKEL-PLATED COPPER SHELL
LAMP	ACCEPTS 100W BULB MAX.
GASKETS	SILICONE
WIRE LEADS	6" LONG
MOUNTING	TO STANDARD 3 1/2" OR 4" JUNCTION BOX

- SANITARY RUST-PROOF CAST ALUMINUM FIXTURE.
- IMPACT & THERMAL SHOCK-RESISTANT, COATED TEMPERED GLASS GLOBE
- EASY MOUNTING TO STANDARD JUNCTION BOX.
- MEETS REQUIREMENTS FOR NFPA CODE 96 & NEC 410.

VAPOR PROOF LIGHT
NOT TO SCALE



Exhaust Hoods for Commercial Cooking Equipment
Listed to Standard UL710
Conforms to Standard ULC710

SERIAL # 30810

MODEL # AHH8MUA1848

Max. Clearance From Cooking Surface to Front Lower Edge of Hood	Min. Exhaust Air Flow (CFM) Linear Foot	Max. Supply Air Flow (CFM) Linear Foot	Min. Overhang From Cooking Surface (Front)	Min. Overhang From Cooking Surface (Side)	Max. Cooking Surface Temperature
46.0"	150 CFM	120 CFM	6.0"	6.0"	450 DEG.F
46.0"	200 CFM	160 CFM	6.0"	6.0"	600 DEG.F
46.0"	250 CFM	200 CFM	6.0"	6.0"	700 DEG.F

Replace fusible links only with UL listed links with the following ratings
Supply: Deg.F 1b, Minimum to 1b. maximum
Replace Filters with UL Classified Baffle Filters

Voltage 120 VAC
Frequency 60 HZ
Current 15 AMPS

HOOD DECAL DETAIL

BROWN'S SERVICE EQUIPMENT
7243 WEST LAKE RD.
INDIANAPOLIS, IN 46214
317-487-0142

PAY TO THE ORDER OF
REGIONS BANK
FOR DEPOSIT ONLY
BROWN'S SRV EQUIPMENT INC
8270279725

RED SUN REST

LARKIN INDUSTRIES, INC.

BIRMINGHAM, AL. U.S.A.
CONFORMS TO ANSI/UL-710 STANDARD
FOR EXHAUST HOODS WITHOUT DAMPERS
MODEL # SC 12048
JOB # 58880

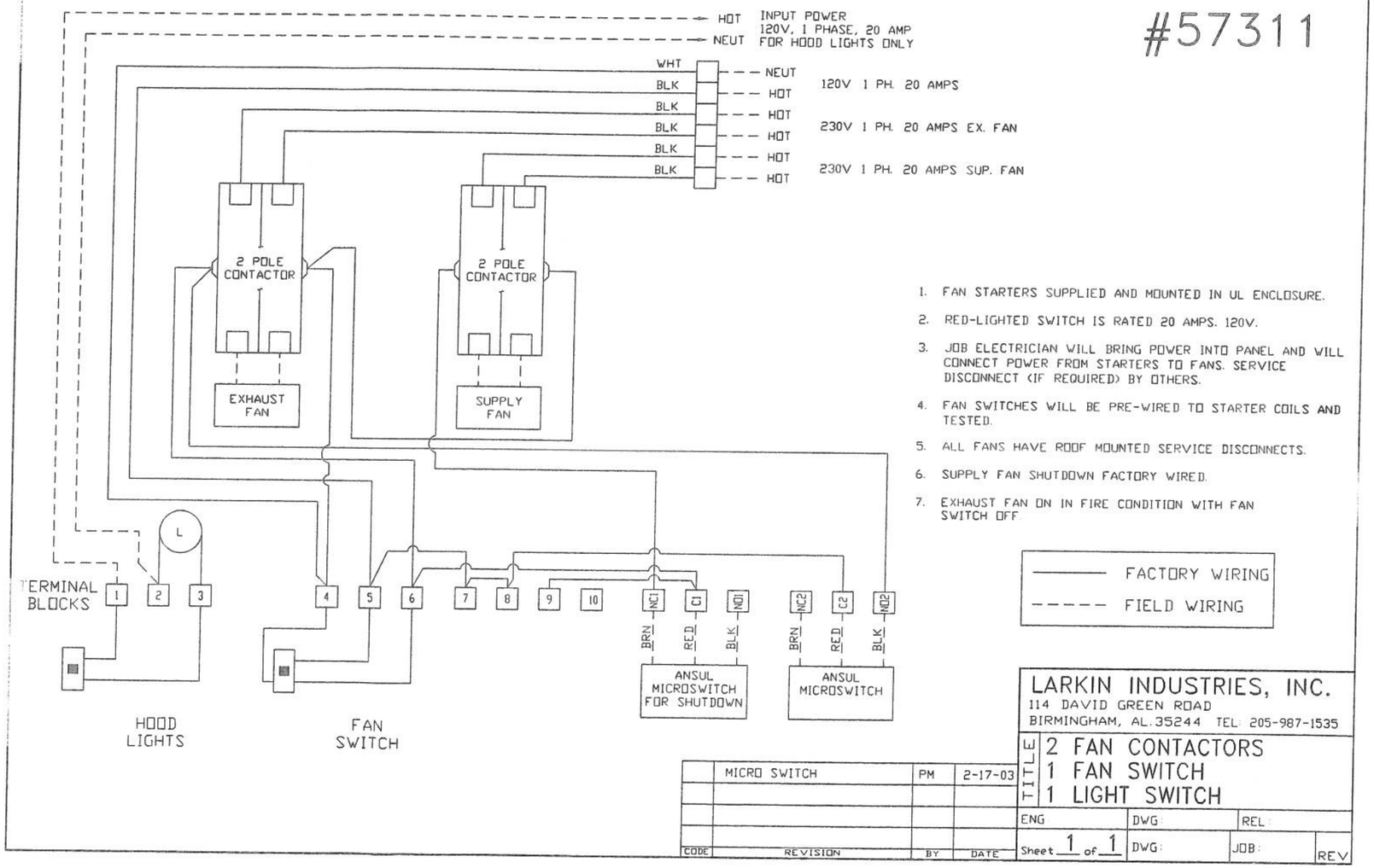
VOLTAGE 120 VAC FREQUENCY 60HZ CURRENT 0-20 AMPS

MIN/MAX CLEARANCE FROM COOKING SURFACE TO FRONT	MIN. EXHAUST AIR FLOW (CFM) LINEAR FOOT	MAX. SUPPLY AIR FLOW (CFM) LINEAR FOOT	MIN. OVERHANG FROM COOKING SURFACE (FRONT)	MIN. OVERHANG FROM COOKING SURFACE (SIDE)	MAX. COOKING SURFACE TEMPERATURE
24" 43"	354	238	10"	8"	600 DEG F

SUPPLY AIR DAMPER IS REQUIRED
REPLACE FUSIBLE LINK ON SUPPLY DAMPER WITH LISTED 285 DEGREE F MAX. AND LOAD
RATING OF ORIGINAL LINK
REPLACE GREASE FILTER ONLY WITH UL CLASSIFIED BAFFLE TYPE
AIR FLOW RATES ARE ESTABLISHED UNDER DRAFT FREE LABORATORY CONDITIONS AT
SPECIFIC OVERHANGS AND CLEARANCES TO OBTAIN COMPLETE VAPOR AND SMOKE REMOVAL
AND SYSTEM BALANCE GREATER AND/OR LESSER EXHAUST AND SUPPLY AIR FLOW RATES
OVERHANGS OR CLEARANCES MAY BE REQUIRED FOR EACH SPECIFIC DESIGN AND INSTALLATION.
MANUFACTURED IN ACCORDANCE WITH THE FOLLOWING TEST AND CODE AUTHORITIES: N.F.P.A.
IMC, ETL-ANSI/UL-710 AND NSF

Intertek
91557

#57311



1. FAN STARTERS SUPPLIED AND MOUNTED IN UL ENCLOSURE.
2. RED-LIGHTED SWITCH IS RATED 20 AMPS. 120V.
3. JOB ELECTRICIAN WILL BRING POWER INTO PANEL AND WILL CONNECT POWER FROM STARTERS TO FANS. SERVICE DISCONNECT (IF REQUIRED) BY OTHERS.
4. FAN SWITCHES WILL BE PRE-WIRED TO STARTER COILS AND TESTED.
5. ALL FANS HAVE ROOF MOUNTED SERVICE DISCONNECTS.
6. SUPPLY FAN SHUTDOWN FACTORY WIRED.
7. EXHAUST FAN ON IN FIRE CONDITION WITH FAN SWITCH OFF.

——— FACTORY WIRING
- - - - - FIELD WIRING

CODE	REVISION	BY	DATE
	MICRO SWITCH	PM	2-17-03

LARKIN INDUSTRIES, INC.
114 DAVID GREEN ROAD
BIRMINGHAM, AL. 35244 TEL: 205-987-1535

TITLE
2 FAN CONTACTORS
1 FAN SWITCH
1 LIGHT SWITCH

ENG | DWG: | REL:
Sheet 1 of 1 | DWG: | JOB: | REV

Effective Feb 2002

Series 27100, 28000

Vertical DETECT-A-FIRE® Units
Installation Instructions
12.01.E

DESCRIPTION

DETECT-A-FIRE® thermal detectors are UL Listed, UL of Canada available upon request, and FM Approved detection and release devices used with fire detection systems to activate alarms and actuate extinguishing systems. This Rate Compensated device combines the best features of both fixed temperature and rate-of-rise detectors.

ELECTRICAL RATING

Model Number	Contact Operation on Temperature Rise	Electrical Rating* (Resistive Only)
27120	Opens (450˚F Max.)	5.0 Amps 125 VAC 0.5 Amps 125 VDC
28020		
27121	Closes	5.0 Amps 125 VAC 0.5 Amps 125 VDC 2.0 Amps 24 VDC 1.0 Amps 48 VDC
28021		

**Although incandescent lamps are considered resistive, their inrush current is 10 - 15 times their steady current. Do not exceed ratings.*

LOCATION

DETECT-A-FIRE detectors are precision temperature sensors. They must be mounted in an area (normally a ceiling) so that:

1. The detector spacing complies with both system requirements and requirements of the agency having local jurisdiction.
2. The thermal air path to the shell is not obstructed.

Spacing per UL, FM, and UL of Canada is shown in Table 1. Distances given are for between units on smooth ceilings. Distances from partitions or walls are half that shown. To assure that all spacing requirements are met, consult the authority having local jurisdiction.

MOUNTING

Detect-A-Fire units are not position sensitive. Horizontal and vertical detectors refer to the most common mounting configuration for that unit. However, each type can be mounted either horizontally or vertically depending on the application and installation requirements.

Table 1

˚F Setting	˚F Tolerance	SPACINGS (in feet) UL	ULC	FM	Color Coding
140	+7/-8	50	50	25	Black
160	+7/-8	25	25	25	Black
190	+7/-8	50	50	25	White
210	+7/-8	25	50	25	White
225	+7/-8	25	50	25	White
275	±10	25	50	25	Blue
325	±10	50	50	25	Red
360	±10	25	50	25	Red
450	±15	25	50	25	Green
500	±15	50	50	25	Orange
600	±20	N/A	50	25	Orange
725	±25	N/A	50	25	Orange

Note: *For clean agents and CO_2 suppression systems, ceiling spacing 20 ft. (6.1 meters) apart unless otherwise specified.*

Not all units are suitable for all hazard location applications. Refer to Table 2 and markings on the detector for hazardous location suitability.

Table 2

Hazardous Location	Model Number	Fitting Required For UL, ULC Listings and FM Approval
Class I*, Groups A, B, C and D; Class II*, Groups E, F and G	27120-22 27121-20 28020-3 28021-5	Mount detector to a suitably-listed fitting in accordance with National Electric Code and/or local authority having jurisdiction.
Class I*, Groups B, C and D; Class II*, Groups E, F and G	27120-0 27121-0 28021-0	

**Division 1 and 2.*

INSTALLATION

Series 27120 and 27121

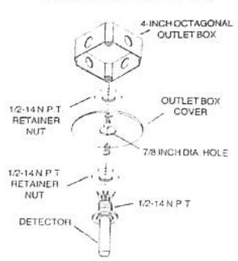


Figure 1

Series 28020 and 28021

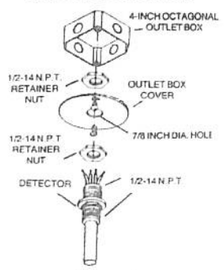


Figure 2

1. Kidde-Fenwal recommends that standard 4-inch octagonal outlet boxes be used to mount detectors.
2. Attach detector to outlet box cover through a 0.875 inch diameter hole and using two 1/2-14NPT retainer nuts as indicated.
3. Connect system wiring to detector per Figure 3 and applicable electrical codes.
4. Ordinary Locations: The DETECT-A-FIRE Units are to be installed in grounded metallic junction boxes only. They are to be secured to the boxes using two lock nuts, one on either side of the mounting plate. DETECT-A-FIRE Units are not to be installed in non-metallic junction boxes.
5. Hazardous Locations: For Class I, Division 1 and 2 locations install the DETECT-A-FIRE Unit in a listed explosion-proof enclosure with a minimum thread engagement of five full turns. No non-conductive material is to be placed on the threaded joint of the DETECT-A-FIRE Unit or in the listed explosion-proof enclosure. For Division 2 locations assure that a protective ground terminal is provided in the listed explosion-proof enclosure when flexible metal conduit is used.
6. Non-Hazardous Outdoor Locations: Mount the DETECT-A-FIRE in a Listed NEMA Type 3 outlet box, cover and conduit, with 1/2 - 14 NPT threads and a minimum thread engagement of 5 full turns. Use of pipe plugs with RTV silicone rubber sealant, a rubber gasket and self-sealing screws to attach the cover, and PTFE thread seal tape on the DETECT-A FIRE threads should be appropriate for out door applications and in accordance with the National Electric Code and/or local authority have jurisdiction.
7. Do not exceed a maximum torque without thread lubricant of 20 foot-pounds (27.1 Newton Meters).

Series 28000 units are similar to Series 27100 units except they have two 1/2-14 NPT threads for mounting.

The unit may be mounted as described above or may be threaded into a 1/2-14 NPT tapped hole in the vessel wall or threaded into a coupling brazed or welded to the vessel wall.

Field Wiring Requirement

Field wiring must be capable of withstanding the maximum anticipated ambient temperature in the application.

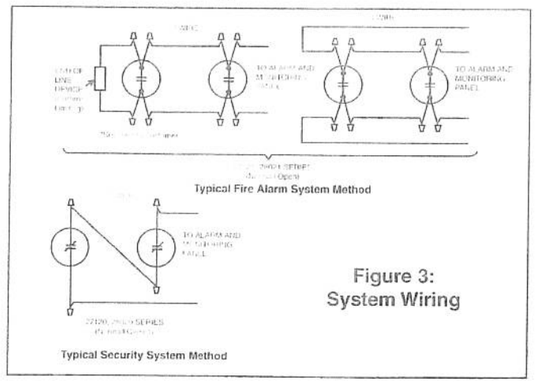
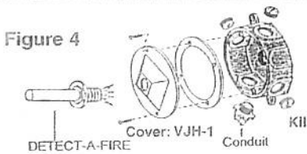


Figure 3:
System Wiring

Figure 4



Killark Outlet Box: VLJX-1

Table 3

Non-Hazardous Outdoor Locations		
Model Number	˚F Temperature Settings	Fittings Required for UL Listings and FM Approval
27120-0 27120-22 27121-0 27121-20	140, 160, 190, 225	Mount detector to a fitting suitable for outside use, (NEMA Type 3), in accordance with National Electric Code and/or local authority having juridiction.

FUNCTIONAL TEST

When used with automatic fire extinguishing systems first disconnect the initiator/solenoid leads from the panel and connect a 24 VDC bulb to initiator terminals in the control unit. Heat the D-A-F units with a heat lamp or other convenient source. When the bulb in the control unit changes state, remove heat source and allow D-A-F unit to cool. Reset control unit. Test lamp must change state and stay changed after system is reset. Do not reconnect initiator/ solenoid leads until all D-A-F units have cooled below set point as indicated by test lamp. When D-A-F units are used in other types of systems, disconnect them from the system, connect a 24 VDC lamp and power source in series with the D-A-F units and test with heat source as above. Make sure that contacts have reset to normal condition before reconnecting to system circuit.

⚠ WARNINGS

*1. In order to function properly, the sensing shell of the unit must remain free from paint, grease, oil, etc. Should such a build up occur, do not, **under any circumstances**, attempt to remove it. Replace the unit.*

2. Detectors mounted in an area subject to physical abuse or damage, other than above, must be suitably protected without obstructing the thermal airpath to the unit.

3. Do not install the unit where the shell would be physically damaged by sand, grain, rocks, etc.

4. Do not overtorque the unit when installing.

5. Any detector that has been abused or damaged must be replaced.

6. Consult the factory for special precautions necessary for outdoor use or moist environments.

ANY OF THE ABOVE COULD CHANGE THE FACTORY TEMPERATURE SETTING, WHICH MAY RESULT IN PROPERTY DAMAGE AND/ OR PERSONAL INJURY OR DEATH.

IT IS POSSIBLE FOR A UNIT TO HAVE BEEN ABUSED OR DAMAGED AND NOT DISPLAY ANY OUTWARD INDICATION OF THE DAMAGE. ALL UNITS SHOULD BE TESTED PERIODICALLY IN ACCORDANCE WITH NATIONAL FIRE PROTECTION ASSOCIATION REQUIREMENTS (72E) OR THE AGENCY HAVING LOCAL JURISDICTION.

A Kidde Company

KIDDE-FENWAL, INC.
400 MAIN STREET, ASHLAND, MA 01721
TEL: (508) 881-2000 FAX: (508) 881-6729
www.fenwalcontrols.com

The literature is provided for informational purposes only. KIDDE-FENWAL, INC. assumes no responsibility for the products suitability for a particular application.
The product must be properly applied to perform as described herein.
If you need more information on this product, or if you have a question, contact KIDDE-FENWAL, INC., Ashland, MA 01721 (508) 881-2000.

06-L04103-000 07/02 1M ©1999 Kidde-Fenwal, Inc. Printed in U.S.A. CP

CERTIFICATE OF OCCUPANCY

City of Greenwood, Indiana - Office of Building Commissioner

Improvement Location Permit No. 2014-52

CERTIFICATE OF OCCUPANCY ISSUED: June 12, 20 14

Issued to: Red Sun.

This certifies that the action or work for which an Improvement Location Permit was issued for the premises as identified as

Lot No. _____ in _____ Addition,

Address 3100 Meridian Parke Drive

has been inspected and found to be in compliance with the applicable laws of the State of Indiana and Ordinances of this city.

_____, Building Commissioner

_____, Fire Inspector

(when applicable)

Conditions:

- Air ballone sheet required

Community Development Services
Division of Planning and Zoning
225 S Emerson Avenue
Greenwood, IN 46143
(317) 881-8698
(317) 887-5616 fax

COMMR

Permit Number **2014-0152** Address: **3100 Meridian Parke Drive** Suite **P-Q** Block Section
Issue Date: **4/14/2014** Lot Subdivision **Meridian Parke** Project **Red Sun Chinese Take-Out**
Contractor Contact 1 **Mike Huang** Contact 2
Comments Phone # **(317) 373-9827** Phone #

FOOTING INSPECTION(S)	Date

UNDERSLAB INSPECTION(S	Date
OK AWM	3-17-14

ABOVE CEILING INSPECTION(S	Date

ROUGH INSPECTION(S)	Date
HOOD TEST AWM	6-11-14

FINAL INSPECTION(S)	Date
AWM	6-12-14

designed and installed to be cleaned in place and the system is equipped for such cleaning in place. Removable filter units shall be of a size that will allow them to be cleaned in a dishwashing machine or pot sink. Filter units shall be arranged in place or provided with drip-intercepting devices to prevent grease or other condensate from dripping into food or on food preparation surfaces.

507.11.2 Mounting position. Filters shall be installed at an angle of not less than 45 degrees (0.79 rad) from the horizontal and shall be equipped with a drip tray beneath the lower edge of the filters.

507.12 Canopy size and location. The inside lower edge of canopy-type Type I and II commercial hoods shall overhang or extend a horizontal distance of not less than 6 inches (152 mm) beyond the edge of the top horizontal surface of the appliance on all open sides. The vertical distance between the front lower lip of the hood and such surface shall not exceed 4 feet (1219 mm).

Exception: The hood shall be permitted to be flush with the outer edge of the cooking surface where the hood is closed to the appliance side by a noncombustible wall or panel.

507.13. Capacity of hoods. Commercial food service hoods shall exhaust a minimum net quantity of air determined in accordance with this section and Sections 507.13.1 through 507.13.4. The net quantity of exhaust air shall be calculated by subtracting any airflow supplied directly to a hood cavity from the total exhaust flow rate of a hood. Where any combination of heavy-dutyv, medium-duty and light-duty cooking appliances are utilized under a single hood, the exhaust rate required by this section for the heaviest duty appliance covered by the hood shall be used for the entire hood.

507.13.1 Extra-heavy-duty cooking appliances. The minimum net airflow for Type I hoods used for heavy-duty cooking appliances shall be determined as follows:

Type of Hood	CFM per linear foot of hood
Backshelf/pass-over	Not allowed
Double island canopy (per side)	550
Eyebrow	Not allowed
Single island canopy	700
Wall-mounted canopy	550

For SI: 1 cfm per linear foot = 1.55 L/s per linear meter.

507.13.2 Heavy-duty cooking appliances. The minimum net airflow for Type I hoods used for heavy-duty cooking appliances shall be determined as follows:

Type of Hood	CFM per linear foot of hood
Backshelf/pass-over	400
Double island canopy (per side)	400
Eyebrow	Not allowed
Single island canopy	600
Wall-mounted canopy	400

For SI: 1 cfm per linear foot = 1.55 L/s per linear meter.

507.13.3 Medium-duty cooking appliances. The minimum net airflow for Type I hoods used for medium-duty cooking appliances shall be determined as follows:

Type of Hood	CFM per linear foot of hood
Backshelf/pass-over	300
Double island canopy (per side)	300
Eyebrow	250
Single island canopy	500
Wall-mounted canopy	300

For SI: 1 cfm per linear foot = 1.55 L/s per linear meter.

507.13.4 Light-duty cooking appliances. The minimum net airflow for Type I hoods used for light duty cooking appliances and food service preparation and cooking operations approved for use under a Type II hood shall be determined as follows:

Type of Hood	CFM per linear foot of hood
Backshelf/pass-over	250
Double island canopy (per side)	250
Eyebrow	250
Single island canopy	400
Wall-mounted canopy	200

For SI: 1 cfm per linear foot = 1.55 L/s per linear meter.

507.13.5 Dishwashing appliances. The minimum net airflow for Type II hoods used for dishwashing appliances shall be 100 CFM per linear foot of hood length.

Exception: Dishwashing appliances and equipment installed in accordance with Section 507.2.2, Exception 2.

507.14 Noncanopy size and location. Noncanopy-type hoods shall be located a maximum of 3 feet (914 mm) above the cooking surface. The edge of the hood shall be set back a maximum of 1 foot (305 mm) from the edge of the cooking surface.

507.15 Exhaust outlets. Exhaust outlets located within the hood shall be located so as to optimize the capture of particulate matter. Each outlet shall serve not more than a 12-foot (3658 mm) section of hood.

507.16 Performance test. A performance test shall be conducted upon completion and before final approval of the installation of a ventilation system serving commercial cooking appliances. The test shall verify the rate of exhaust airflow required by Section 507.13, makeup airflow required by Section 508, and proper operation as specified in this chapter. The permit holder shall furnish the necessary test equipment and devices required to perform the tests.

507.16.1 Capture and containment test. The permit holder shall verify capture and containment performance of the exhaust system. This field test shall be conducted with all appliances under the hood at operating temperatures, with all sources of outdoor air providing makeup air for the hood operating and with all sources of recirculated air providing conditioning for the space in which the hood is located operating. Capture and containment shall be verified visually by observing smoke or steam produced by