To: Authorized Buckeye *Kitchen Mister* Distributors

From: James Shea - Business Development Manager

Subject: Local System Start-up of *Kitchen Mister* Systems for Downdraft Recirculating Cooking Appliances:
EVent Model 10-0135-EVT, 10-0148-EVT, 10-0600-EVT

We are pleased to announce our partnership with Evo America for the protection of their downdraft recirculating flattop cooking tables with the *Kitchen Mister* Restaurant System. The *Kitchen Mister* System has been designed and tested by Underwriters Laboratories, Inc. in each of these appliances and is the only system approved for their protection.

These stand-alone appliances are UL Listed to the *UL-710B Standard for Recirculating Systems* exclusively with the *Kitchen Mister* System. Each appliance will be shipped with a *Kitchen Mister* Model BFR-5 System already installed, however, a final field service call will be required to place the system on-line.

As an authorized *Kitchen Mister* distributor you may have the opportunity to perform field start-up and service in your area. The initial start-up service shall be performed in accordance with the procedures set forth in this bulletin and comply with all applicable national, state, and local codes.

As always, we truly appreciate your continued support and look forward to working with you on this and future projects.

Field Start-Up Procedure

1. Where applicable, the fire equipment distributor is responsible for all permits, drawings, acceptance testing, and submittals required to obtain field approval. Payment for associated fees shall be approved by and charged to the end-user directly.
2. Examine all fire suppression system components carefully to assure they haven't been damaged during shipment.

3. Verify that the cylinder pressure is correct.

   Note: all appliance nozzles will be supplied with stainless steel nozzle caps.

4. Make sure the surface nozzles are aimed in accordance with Figure 3-19a (page 3-9) of the *Kitchen Mister* Technical Manual (P/N BFR-TM, January 1, 2013).
5. The system can now be set, tested, and placed into service in accordance with the *Kitchen Mister* Technical Manual (P/N BFR-TM, January 1, 2013).

   Note: When testing auxiliary devices by activating the micro-switch (as required) the table ventilation system will remain on but the heating elements will be de-energized. Heating element shut down must be verified on the appliance display panel.

6. Review the system's operation and Owner's Manual with the end user.
7. After service, have the Owner or AHJ sign the system start-up report. A signed system start-up report is required.
8. Submit system start-up report and the invoice customer for payment.

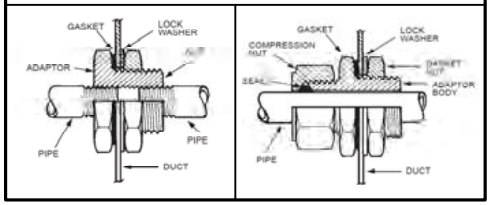
All completed paperwork must be returned (scan & email best way) to the below address:

Attention: James Auer
Evo, Inc.
20360 SW Avery Ct.
Tualatin, OR 97062
503-626-1802
jauer@evoamerica.com

Listing and Approval:

- Listed to UL 710B Standard for Recirculating Systems, Appliance with Safety Features and Fire System Included
- Listed to UL 300

ALL PENETRATIONS TO THE HOOD SHALL BE SEALED WITH AN APPROVED QUICK SEAL DEVICE



NOZZLE SPECIFICATIONS		
Model Number	Flow Points	Band Color
N-1HP	1	BLUE
N-1LP	1	RED
N-2LP	2	YELLOW
N-2HP	2	GREEN
N-2W	2	WHITE

BUCKEYE KITCHEN MISTER
BFR-5 FLOW POINT SYSTEM

THIS SYSTEM UTILIZES 5 of 5 POINTS

Legend

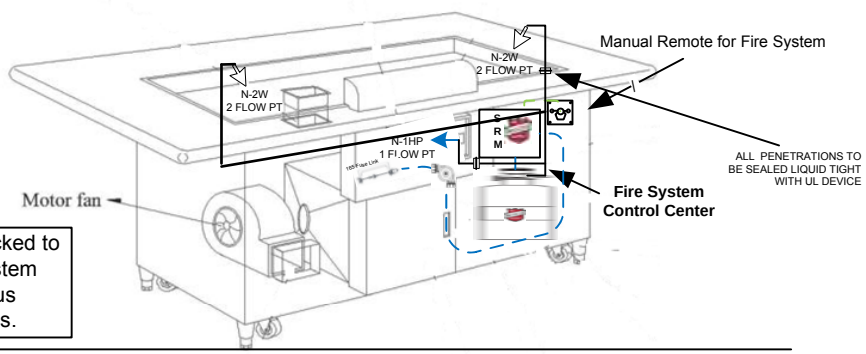
- Detection
- Electric Tie-Ins
- Shielded Cable to Pull

PIPING LIMITATIONS			
CYL SIZE	MAX FLOW PTS	MAX PIPE VOL (ml)	MAX PIPE VOL BET. TWO NOZ (ML)
BRF-5	5	1500	1000
BRF-10	10	2500	2000
BRF-15	15	2800*	2500
BRF-20	20	2800*	2500

* Total Volume of 3/8" pipeing allowed on BRF-15 or BRF-20 is 2500 ml

PIPING VOLUME CHART	
PIPE SIZE	VOLUME PER FOOT
3/8 in pipe	37.5 ml / ft
1/2 in pipe	59.8 ml/foot

Listed 710B, EVO Model 10-0135-EVT, 10-0148-EVT, 10-0600-EVT
Downdraft Recirculating Unit 42" X 30" Max. Cooking Surface per nozzle



Fire System Electric Tie-Ins

Exhaust system shall be interlocked to appliance controls. Exhaust system shall be configured for continuous operation during cooking process.

CLASS K WET CHEMICAL EXTINGUISHER

SHALL BE INSTALLED 42" - 48" ABOVE THE FINISHED FLOOR

PRE-ENGINEERED SYSTEM SHOP DRAWING ONLY – NOT TO SCALE

Piping Limitations:
- > 3/8" or 1/2" Sch. 40 black pipe.
- > Pipe sized largest to smallest only.
- > No "traps" allowed.
- > Straight or split line piping allowed. No nozzles before a split.
- > Max. number of elbows between any 2 nozzles: 5.
- > Max. vertical rise: 10 feet.
- > Max. vertical rise from nozzle to supply line: 2 feet.

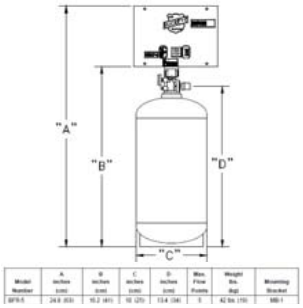
Minimum Piping Requirements (Wok, Range, & DFF only):
- > Min. # of elbows before closest nozzle: 5.
- > Min. pipe volume before closest nozzle: 360 mL.
- > Total system pipe volume: 600 mL.
- > Minimum number of flow points in system: 3.

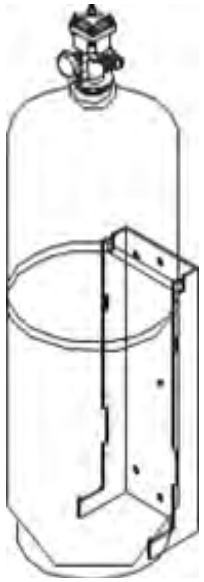
NO SCALE

EVO, Inc.
Model 10-0135-EVT, 10-0148-EVT,
10-0600-EVT Downdraft,
Recirculating Air Cooking System

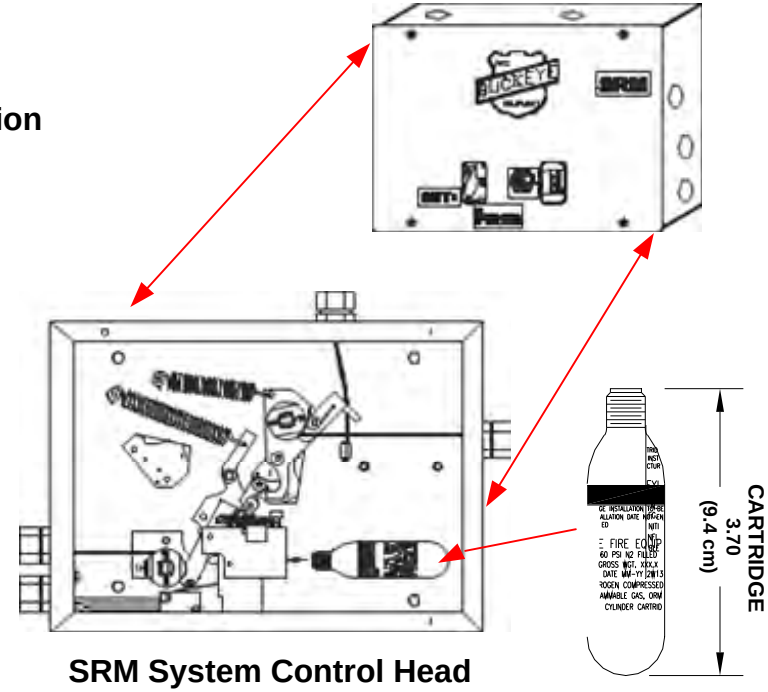
JMS
Buckeye Fire Equipment

Kitchen Mister Cylinder
BFR-5

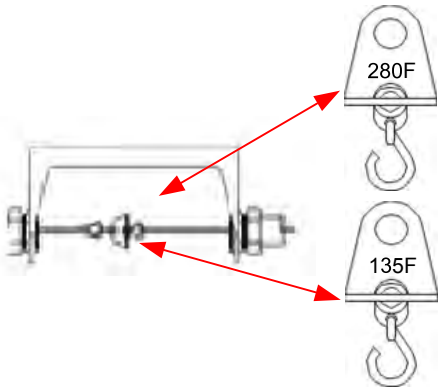




Recessed Manual Remote Pull Station



SRM System Control Head



Evo EVent Model 48E and 48E PLUS

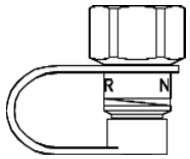
Fusible Link Model Number	Max. Ambient Temperature
FL-280	225° F. (107° C.)

OR

Evo EVent Model 35E

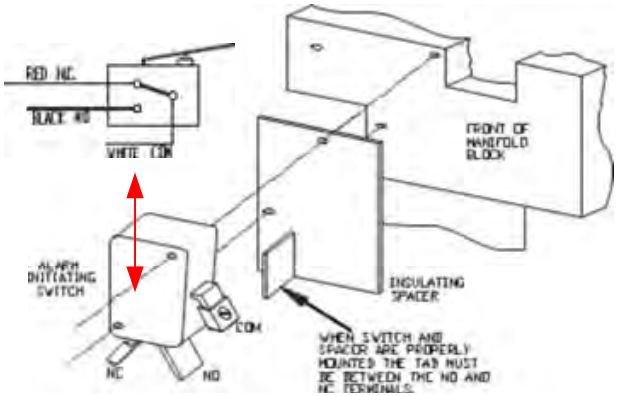
Fusible Link Model Number	Max. Ambient Temperature
FL-135	100° F (38° C)

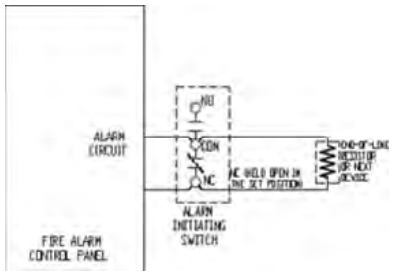
Typical Kitchen Mister Nozzle



NOZZLE SPECIFICATIONS		
Model Number	Flow Points	Band Color
N-1HP	1	BLUE
N-1LP	1	RED
N-2LP	2	GREEN
N-2HP	2	YELLOW
N-2W	2	WHITE

Alarm Switch Installation & Wire Diagram





Listing and Approval:

UL Listed to UL 710-B Appliance with Safety Features and Fire System Included.
Listed to UL 300

EVO, Inc.
Model 10-0135-EVT, 10-0148-EVT,
10-0600-EVT Downdraft,
Recirculating Air Cooking System

NO SCALE

JMS
Buckeye Fire Equipment

GENERAL NOTES:

1. System shall Pre-Engineered.
2. System shall be manufactured by Buckeye Fire Equipment of Kings Mountain, NC.
3. System shall be installed by Factory Authorized Distributor.
4. Buckeye Kitchen Mister Systems have the following Listings and Approvals
   a) Underwriters Laboratories Inc., UL300 / UL 1254, EX6885
   b) UL710B Appliance Specific
   c) New York City Approval #COA5550
   d) ISO-9001 Registered
5. System Temperature Limitations are 32F min. / 120F max.
6. Installation requirements, nozzle limitations and design criteria shall comply with the Buckeye Fire Equipment, Kitchen Mister Design Manual and all addendums as published by Buckeye Fire Equipment.
7. Pipe and fittings shall be Schedule 40 Black, Chrome Plated or Stainless. Galvanized Pipe SHALL NOT BE USED.
8. All required electrical work shall be performed by OTHERS and is NOT INCLUDED on this shop drawing.
9. All required plumbing work shall be performed by OTHERS and is NOT INCLUDED on this shop drawing.

ACCEPTANCE TEST:

Acceptance shall be as specified in the Buckeye Kitchen Mister Installation, Maintenance and Design Manual BFR-TM, EX6885. Complete all installation and connect to the system control head a system test cylinder filled with dry air or nitrogen. Upon cutting of an "S" hook or fuse link, discharge of dry air or nitrogen shall be discharged through all piping to assure all piping is connected and the nozzles are clear. Caps or seals as suitable for the nozzle shall be affixed to each nozzle prior to the discharge. After a discharge, all caps or seals should be blown free of the nozzle orifice. NO BALLOONS OR OTHER SUCH DEVICES SHALL BE USED IN LIUE OF NOZZLE CAPS OR SEALS. A second operation of the system shall be conducted to verify all accessories connected to the system will operate upon system operation. Gas shut off, alarm, appliance shut down, etc. shall all function when the system is operated by pulling the remote pull connected to the system.

Minimum Piping Requirements

Note: Minimum piping requirements **only** apply when protecting a wok, deep fat fryer or range.

1. Minimum number of elbows before the closest nozzle protecting a fryer, range or wok shall be five (5)
2. The minimum piping volume before the closest nozzle protecting a fryer, range or wok shall not be less than 360 ml.
3. The total system pipe volume shall not be less than 660 ml for all cylinder sizes.
4. A system shall have a minimum of three (3) flow points.

General Piping Requirements

1. All piping shall be 3/8" or 1/2"
2. Split piping and straight line piping are allowed on all system as long as the total piping parameters are not exceeded.

3 The maximum number of elbows allowed per system are:

BRF-5	20 elbows maximum
BRF-10/15/20	25 elbows maximum

4 The maximum number of elbows between any two nozzles is five(5)

5 The maximum vertical rise of the supply line is ten (10) feet; this is either the maximum elevation difference between tank outlet and the highest nozzle or tank outlet and the highest of lowest point in the piping systems.

6 The maximum vertical rise of any nozzle above the supply line is two (2) feet.

7 No traps are allowed in the piping system.

8 When different size piping is used in the same system, the largest diameter piping must be closest to the cylinder and sizes are to decrease as they reach the nozzle. So piping always runs from larger to smaller diameter

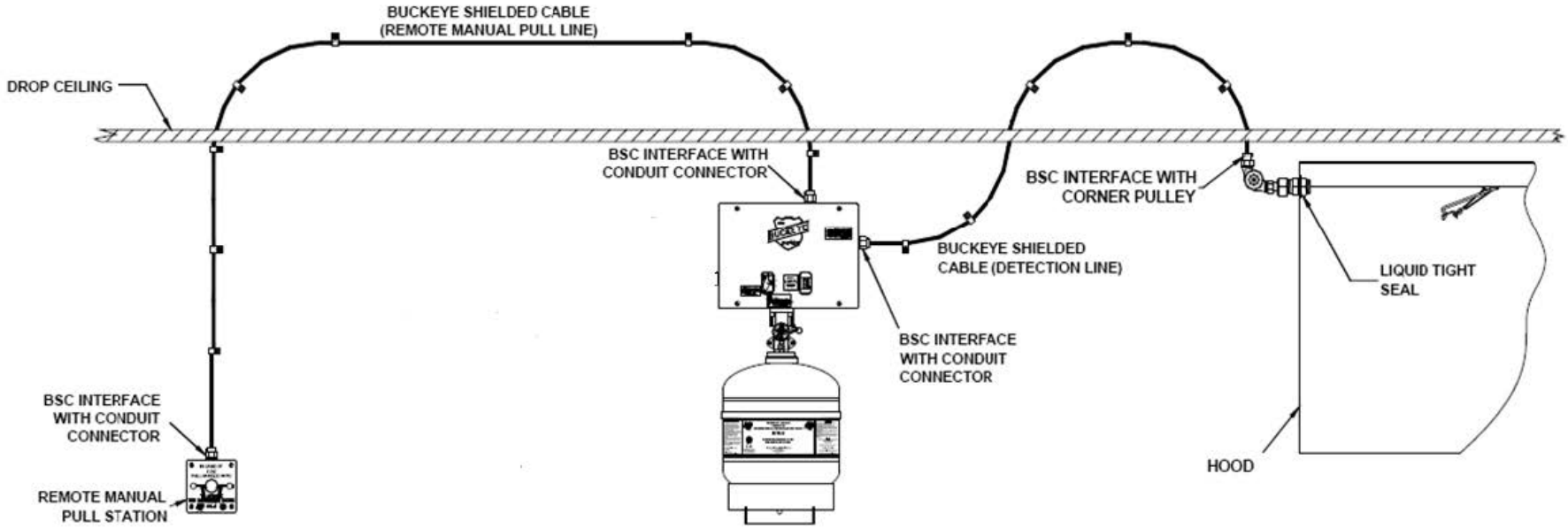
9 Elbows or swivel adaptors used at the nozzle for aiming DO NOT count toward the total elbows allowed per system or the number of elbows allowed between two (2) nozzles.

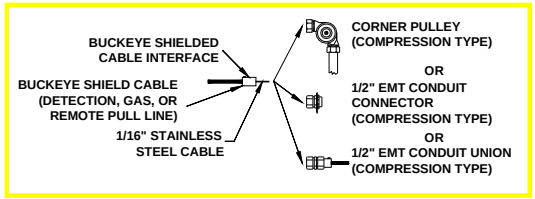
10 For the BRF-15 and BRF-20 only, the maximum volume of piping between the nozzle nearest the supply line from one branch to the closest nozzle from the next branch shall not exceed 500 ml.

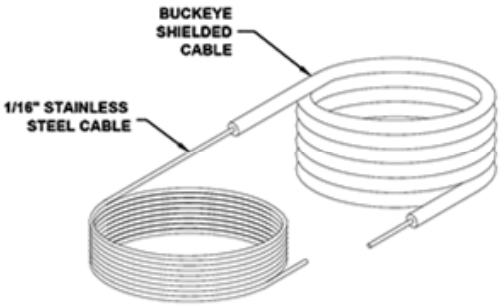
EVO, Inc.
Model 10-0135-EVT, 10-0148-EVT,
10-0600-EVT Downdraft,
Recirculating Air Cooking System

NO SCALE

JMS
Buckeye Fire Equipment







Buckeye Shielded Cable Installation
Typical Installation

CONDUIT AND BUCKEYE SHIELDED CABLE (BSC) LIMITATIONS						
FUNCTION	MAX. CONDUIT LENGTH (FT)	MAXIMUM NUMBER OF CORNER PULLEYS	MAX. LENGTH OF BSC (FT)	MAXIMUM NUMBER OF BENDS IN THE BSC (MIN. BEND RADIUS)	BSC TO CONDUIT TRANSITIONS (NUMBER OF BSC)	MAXIMUM NUMBER OF FUSIBLE LINKS AND HOLDERS
FUSIBLE LINK LINE; CONDUIT & BSC	25	8	35	6 (9")	6	10
GAS VALVE LINE; CONDUIT & BSC	25	8	35	6 (9")	6	NA
RPS-M LINE; CONDUIT & BSC	25	8	35	6 (9")	6	NA
FUSIBLE LINK LINE; CONDUIT ONLY	150	35	NA	NA	NA	20
GAS VALVE LINE; CONDUIT ONLY	150	35	NA	NA	NA	NA
RPS-M LINE; CONDUIT ONLY	150	35	NA	NA	NA	NA
FUSIBLE LINK LINE; BSC ONLY	NA	NA	35	6 (9")	6	10
GAS VALVE LINE; BSC ONLY	NA	NA	35	6 (9")	6	NA
RPS-M LINE; BSC ONLY	NA	NA	35	6 (9")	6	NA

> BSC CAN NOT be coiled or looped when installed.

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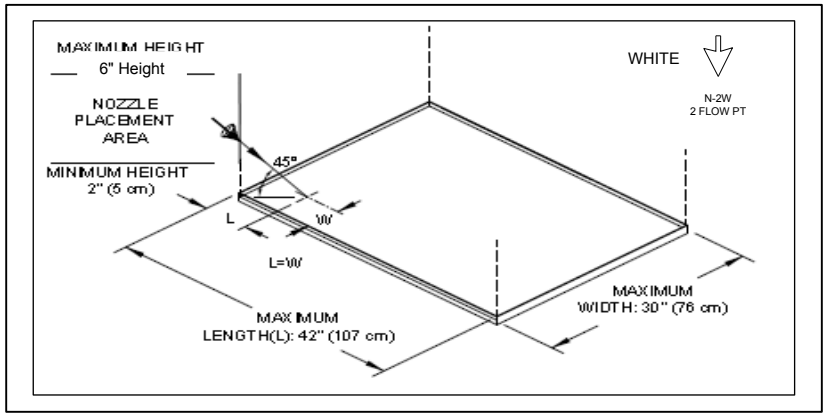
Model 10-0135-EVT, 10-0148-EVT,
10-0600-EVT Downdraft,
Recirculating Air Cooking System

NO SCALE

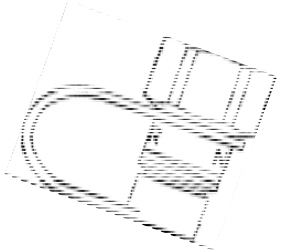
JMS
Buckeye Fire Equipment

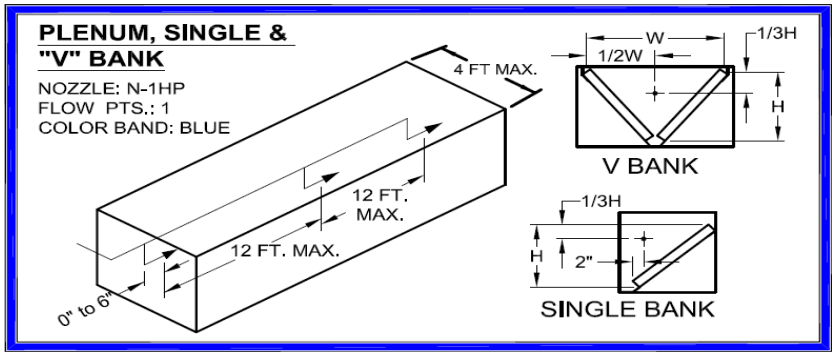
BUCKEYE FIRE SYSTEM NOZZLE COVERAGES

Griddle Nozzle Placement



NOZZLE SPECIFICATIONS		
Model Number	**Flow Points**	**Band Color**
N-1HP	1	BLUE
N-2W	2	WHITE





Nozzle coverage Listed to UL300

EVO, Inc.
Model 10-0135-EVT, 10-0148-EVT,
10-0600-EVT Downdraft,
Recirculating Air Cooking System

NO SCALE

JMS
Buckeye Fire Equipment

System shall be UL 300

5.1 General. Wet chemical fire-extinguishing systems for use in cooking operations shall comply with ANSI/UL 300, *Fire Testing of Fire Extinguishing Systems for Protection of Commercial Cooking Equipment*.

5.2.1 All systems shall have both automatic and manual methods of actuation.

5.4* System Location.

5.4.1 Wet chemical containers and expellant gas assemblies shall be located within the temperature range specified in the manufacturer's design, installation, and maintenance manual.
5.4.3 Wet chemical containers and expellant gas assemblies shall not be located where they could be subjected to mechanical, chemical, or other damage.
5.4.5 Wet chemical containers and expellant gas assemblies shall be accessible for inspection, maintenance, and recharge.

Nozzles

5.5 Discharge Nozzles. All discharge nozzles shall be located to minimize damage or misalignment and be within the limitations and constraints of the manufacturer's design, installation, and maintenance manual. *(See Section 4.3.)*

Review and Certification.

6.2 Design and installation of systems shall be performed only by persons properly trained and qualified to design and/or install the specific system being provided. The installer shall provide certification to the authority having jurisdiction that the installation complies with the terms of the listing and the manufacturer's instructions and/or approved design.

6.4 Approval of Installations.

6.4.1 General. It shall be verified that the appliances, hoods, and ducts are properly protected with nozzles and positioned in accordance with the manufacturer's design, installation, and maintenance manual.

6.4.2 Mechanical Components.

6.4.2.1 It shall be verified that nozzle sizes and pipe sizes are in accordance with the manufacturer's design, installation, and maintenance manual.
6.4.2.2 It shall be verified that piping supports are securely fastened.

6.4.4 Piping Integrity Test.

6.4.4.1 Prior to the test required by 6.4.4.2, piping shall be physically checked for tightness.
6.4.4.2* A test using nitrogen or dry air shall be performed on the piping network at a pressure not to exceed the normal operating pressure of the extinguishing system.
6.4.4.2.1 The test shall verify that nitrogen or dry air has discharged out of each nozzle in the system.

6.4.8 System Operational Tests.

6.4.8 System operational tests shall be performed in accordance with the manufacturer's design, installation, and maintenance manual and include functional tests of the automatic detection system, the manual release devices, the gas shutoff, the shutoff of makeup air supplied internally to a hood, and the electrical power shutdown.

Inspection, Maintenance, and Recharging

7.3.1* A service technician who performs maintenance on an extinguishing system shall be trained and shall have passed a written or online test that is acceptable to the authority having jurisdiction.
7.3.1.1 The service technician shall possess a certification document confirming the requirements in 7.3.1 and issued by the manufacturer or testing organization that is acceptable to the authority having jurisdiction.
7.3.2* A service technician who has the applicable manufacturer's design, installation, and maintenance manual and service bulletins shall service the wet chemical fire-extinguishing system at intervals of no more than 6 months as outlined in 7.3.3.
7.3.3* At least semiannually and after any system activation, maintenance shall be conducted in accordance with the manufacturer's design, installation, and maintenance manual.

NFPA 17A, Standard for Wet Chemical Extinguishing Systems

EVO, Inc.
Model 10-0135-EVT, 10-0148-EVT,
10-0600-EVT Downdraft,
Recirculating Air Cooking System

NO SCALE

JMS
Buckeye Fire Equipment

	Bill of Material	
Qty.	Part #	Description
1	BFR-Dak	Discharge Adapter Kit - in Cylinder Box
1	BFR-CAP	Valve Cap
1	MB-1	Cylinder Bracket
1	BFR-5	5 Flow Point Cylinder w/Valve
1	SRM	System Releasing Module
1	RPSM-RM	Recessed Pull Station
1	FLB1	Terminal Bracket
2	N2W	Nozzle Assy. - WHITE
1	N1HP	Nozzle Assy. - BLUE
1	BFR-UBC-1	Nozzle Cap - SS
1	ML-280 or ML-135	280° or 135° Fusible Link (Depending on Model#)
1	PMI10407	Tee Pulley
1	MS-AIS	Alarm Initiating Switch
2	BFR-SC3	3' Shielded Cable w/SS Cable
1	QS-38P	3/8" Quick Seal
1	QS-CPA	1/2" Quick Seal Corner Pulley
1	PHF10498825	Fitting, 90 Elbow 1/8-27 NPT - .25 Tube
1	PIS	System Drawing - piping isometric
1	CPCT-1	Compression Pulley