Harnett COUNTY NORTH CAROLINA

Emergency Services Department
www.harnett.org

Reviewed for Fire Code Compliance
Harnett COUNTY
Leslie Jackson
11/25/2025 8:10:09 AM

Application for Plan Review

Application # _____-_____

Date Received: _____ **Received By:** _____

Name of Project: McDonald's #10721

Physical Address of Project: 102 West Cornelius Harnett Blvd
Lillington, NC 27546-7853

Plans Submitted By: BFPE International

Project Phone:

Contact Person/Address: BECKY O'BRIEN @ BFPE
115 Bestwood Dr.
Clayton, NC 27520

Contact Email: BOBRIEN@BFPE.COM

Contact Phone: (919)-550-2699x119 (____)-____-____

Contractor's Name/Info: Stancell Construction
Kelly Thomas SC Supt
Dillon Brophy SC PM (727)-372-0781

Contractor's Phone: (864)-621-6994

- Plans that are submitted will be reviewed as quickly as possible with an average time of review between 7-10 working days.
- Status checks may be conducted on plan reviews by visiting the website http://hteweb.harnett.org/Click2GovBP/Index.jsp or by calling the Harnett County Central Permitting Office (910-893-7525, Option #2), or the Harnett County Fire Marshal's Office (910-893-7580).
- Approved plans must be picked up from the Central Permitting Office and all fees paid before any required inspections can be conducted.

ANSUL R-102 DETAILS

* DETECTOR TEMP PER ANSUL MANUAL PAGE 3-11 REV 11, 4-71 TO 4-72 REV 11
* ALL PIPING 3/8" SCH. 40 BLACK STEEL PER ANSUL MANUAL PAGE 4-67 TO 4-69, REV 11
* ALL FITINGS 3/8" 150# BLACK STEEL PER ANSUL MANUAL PAGE 4-67 TO 4-69, REV 11
* PULL STATION IN AISLE OF EGRESS. SEE SHEET K1.0 FOR EXACT LOCATION.
* PULL STATIONS AND HOODS TO BE LABELED WITH CORRESPONDING LABELS.
* GAS & ELECTRIC APPLIANCES WITH AUTOMATIC SHUT-OFF
* MICRO SWITCH FOR SHUT DOWNS AND/OR ALARM TIE IN

CERTIFICATE OF **TRAINING**

Johnson Controls

It is hereby certified that

Michael Edwards

of

BFPE INTERNATIONAL -CLAYTON

has successfully completed the training course for

ANSUL R-102 Restaurant Fire Suppression Systems - Recertification Training for Design, Installation, Service, Recharge, and Maintenance

Completed On 7/17/2025

This certificate is considered valid for a period of three years from completion date and linked to the attendee and the company mentioned above.

Training Hours: 8

ANSUL

Matt Boyle
Technical Training Manager – Fire Suppression

NOZZLE PLACEMENT REQUIREMENTS (Continued)

Transition Protection

Transitions are protected at a point in the transition where the perimeter or the diameter is equal to or less than the maximum size duct that can be protected. The nozzles must be located in the center of the area at that point, or center of the module protected when more than one duct nozzle is required. See Figure 4-4.

Note: Ducts with a transition that is more than 4 ft (1.2 m) in height require nozzles positioned 2 in. to 8 in. (51 mm to 203 mm) from the hood into the opening of the transition using standard duct nozzle design parameters.

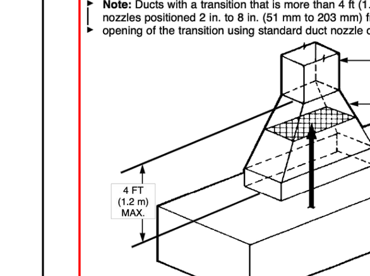


FIGURE 4-4

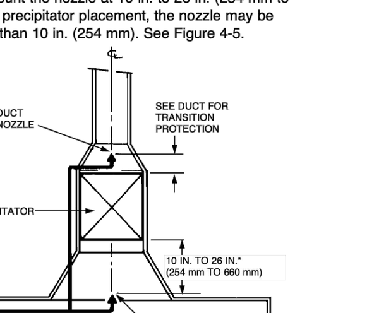
Electrostatic Precipitator Protection

Some restaurant ventilating ducts have an electrostatic precipitator installed at or near the base. These precipitators are generally small and are used to aid in the cleaning of exhaust air.

Ducts with precipitators located at or near the base can be protected using duct nozzles above the precipitator and 1/2N nozzles for the precipitator. One 1/2N nozzle must be used for each cell being protected. This nozzle is stamped with 1/2N, indicating that it is a 1/2-flow nozzle and must be counted as 1/2 flow number.

When protecting ducts equipped with precipitators, the duct nozzles must be installed above the precipitator and aimed to discharge downstream. If the area above the precipitator is a duct, the nozzles must be positioned according to duct protection guidelines. If the area above the precipitator is a transition, the transition guidelines must be followed.

The 1/2N nozzle must be centered 10 in. to 26 in. (254 mm to 660 mm) below the precipitator and aimed to discharge at the center of each precipitator cell. However, if it is physically impossible to mount the nozzle at 10 in. to 26 in. (254 mm to 660 mm) due to precipitator placement, the nozzle may be mounted closer than 10 in. (254 mm). See Figure 4-5.



* IF PHYSICALLY IMPOSSIBLE AT 10 IN. TO 26 IN. (254 mm TO 660 mm), NOZZLE MAY BE MOUNTED CLOSER THAN 10 IN. (254 mm).

FIGURE 4-5

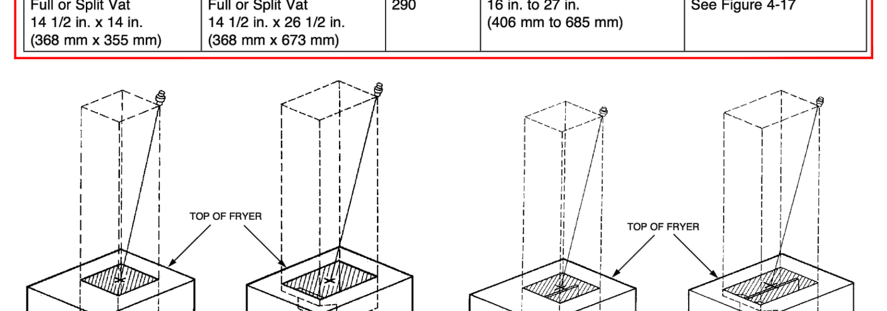
Note: For protection of Pollution Control Units (PCUs) or air scrubbers with or without ESPs, contact Technical Services for a non-UL Listed recommended application.

APPLIANCE PROTECTION (Continued)

Fryer – Single Nozzle Protection (Continued)

TABLE 4-2: MAXIMUM AREA DIMENSIONS – SINGLE NOZZLE FRYER PROTECTION

Max. Size Frypot Only	Max. Size Overall With Dripboard	Type of Nozzle	Nozzle Height Above Top of Fryer	Nozzle Location
Full or Split Vat 14 in. x 15 in. (355 mm x 381 mm)	Full or Split Vat 14 in. x 21 in. (355 mm x 533 mm)	230	27 in. to 47 in. (686 mm to 1,193 mm)	See Figure 4-15 and Figure 4-16
Full or Split Vat 14 in. x 15 in. (355 mm x 381 mm)	Full or Split Vat 14 in. x 21 in. (355 mm x 533 mm)	245	20 in. to 27 in. (508 mm to 685 mm)	See Figure 4-15 and Figure 4-16
Full or Split Vat 14 in. x 15 in. (355 mm x 381 mm)	Full or Split Vat 14 in. x 21 in. (355 mm x 533 mm)	290	13 in. to 16 in. (330 mm to 406 mm)	See Figure 4-17
Full or Split Vat 14 1/2 in. x 14 in. (368 mm x 355 mm)	Full or Split Vat 14 1/2 in. x 26 1/2 in. (368 mm x 673 mm)	290	16 in. to 27 in. (406 mm to 685 mm)	See Figure 4-17



NOZZLE TIP POSITIONED ANYWHERE ALONG OR WITHIN PERIMETER OF COOKING SURFACE AND AIMED TO THE CENTER OF THE COOKING AREA.

FIGURE 4-15

NOZZLE TIP POSITIONED ANYWHERE ALONG OR WITHIN PERIMETER OF COOKING SURFACE AND AIMED TO THE CENTER OF THE COOKING AREA.

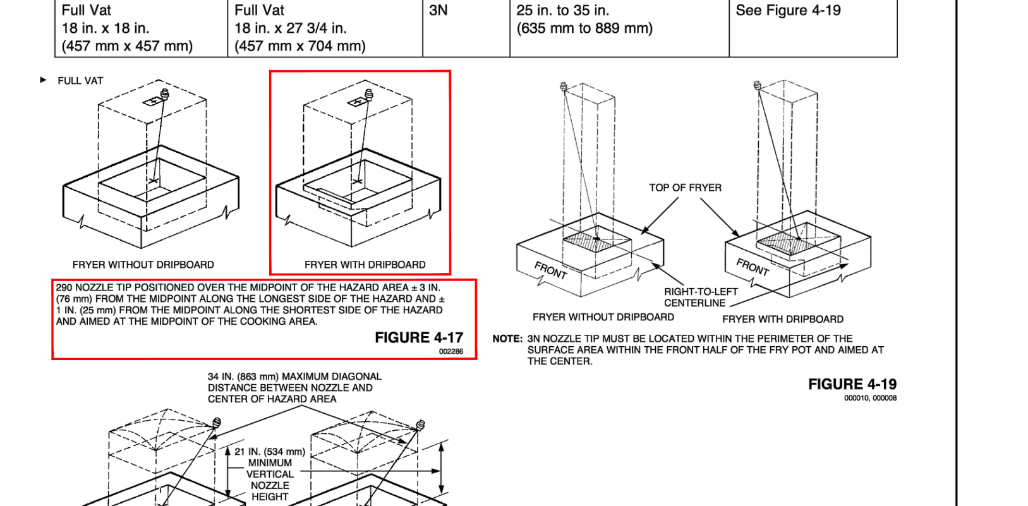
FIGURE 4-16

APPLIANCE PROTECTION (Continued)

Fryer – Single Nozzle Protection (Continued)

TABLE 4-2: MAXIMUM AREA DIMENSIONS – SINGLE NOZZLE FRYER PROTECTION (Continued)

Max. Size Frypot Only	Max. Size Overall With Dripboard	Type of Nozzle	Nozzle Height Above Top of Fryer	Nozzle Location
Full Vat 14 1/2 in. x 16 1/2 in. (368 mm x 419 mm)	Full Vat 14 1/2 in. x 26 1/2 in. (368 mm x 673 mm)	290	16 in. to 21 in. (406 mm to 533 mm)	See Figure 4-17
Full Vat 19 1/2 in. x 19 in. (495 mm x 482 mm)	Full Vat 19 1/2 in. x 25 3/8 in. (495 mm x 644 mm)	290	13 in. to 16 in. (330 mm to 406 mm)	See Figure 4-17
Full Vat 19 1/2 in. x 19 in. (495 mm x 482 mm)	Full Vat 19 1/2 in. x 25 3/8 in. (495 mm x 644 mm)	3N	See Figure 4-18	See Figure 4-18
Full Vat 18 in. x 18 in. (457 mm x 457 mm)	Full Vat 18 in. x 27 3/4 in. (457 mm x 704 mm)	3N	25 in. to 35 in. (635 mm to 889 mm)	See Figure 4-19



SPECIFIC APPLICATION BY MODEL (Continued)

Garland Three-platen Clamshell Grill ME/G-1P, ME/G-2P, ME/G-3PX

Nozzle Type: 1N

Nozzle Quantity: 4 (or 1 more nozzle than the number of total platens)*

Nozzle Height: 14 in. to 28 in. (356 mm to 711 mm)

Nozzle Location: 0 in. to 14 in. (356 mm) forward of back edge of cooking surface

Nozzles positioned 13 in. (330 mm) apart 0 in. to 1 in. (25 mm) right or left of side of cooking surface. See Figure 4-120.

Nozzle Aim Point: Front to back centerline of cooking surface

Upper platen size: 11 1/2 in x 17 1/2 in (292 mm x 445 mm) each

Lower cook surface size: ME/G-1P - 11 3/4 in. x 22 in. (298 mm x 559 mm)
ME/G-2P - 23 3/4 in. x 22 in. (603 mm x 559 mm)
ME/G-3PX - 23 3/4 in. x 22 in. (603 mm x 559 mm) and 11 3/4 in. x 22 in (298 mm x 559 mm)

Heat Output: ME/G-1P Electric - 7.8 kW, Gas - 24,000 btu
ME/G-2P Electric - 15.6 kW, Gas - 48,000 btu
ME/G-3PX Electric - 23.4 kW, Gas - 72,000 btu

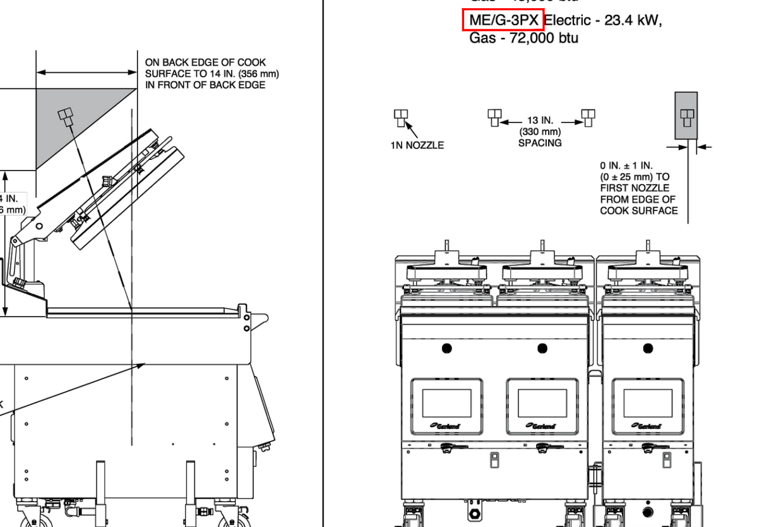


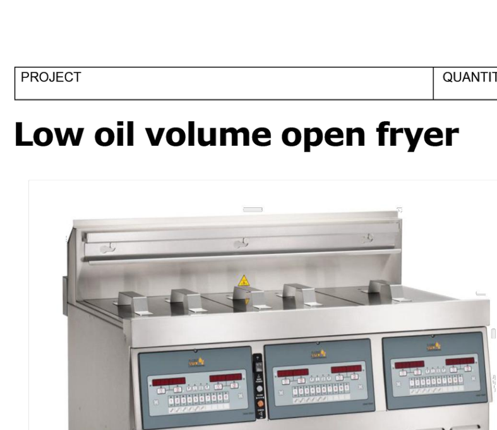
FIGURE 4-120

* This protection is a modular type for the listed models. In the case of 1, 2 or 3 platens, or multiple units installed directly adjacent to each other, one additional nozzle is required when compared to the number of total platens.
Example 1: A 2-platen grill will require 3 total nozzles.
Example 2: Two 3-platen grills installed directly adjacent to each other will require 7 total nozzles.

PROJECT	QUANTITY	ITEM NO

Low oil volume open fryer

MODEL **LVG-202** 2-vat gas
LVG-203 3-vat gas
LVG-204 4-vat gas



LVG-203 low oil volume gas open fryer with 3 split vats and one full vat

General Information

Henny Penny low oil volume open fryers represent innovative technology that enables McDonald's operators to significantly reduce frying oil consumption, extend its useful life and maintain or increase food quality and throughput while reducing direct oil and frying operation costs.

A lower volume vat allows the same amount of product to be cooked at temperature in *40% less oil*. Plus, oil level is automatically topped from the JIB inside the fryer cabinet, so you actually discard and refill manually less often than ever.

Filter any vat whenever you need to, in less than four minutes—other vats continue to cook uninterrupted. Choose from 2, 3 or 4 full or split vat configurations in a slim footprint with easy-to-use programmable controls, optimal energy efficiency and durable, round-the-clock operation.

Auto top-off system with convenient access to JIB or reservoir.

Standard Features

- Cooks the same amount of product with 40% lower oil volume than previous generation fryer.
- Automatic oil top off feature—sensors continually monitor oil level and adds fresh oil as needed.
- Automatic filtration on the fly:
  - One button activates filter request
  - Filter vats individually as needed
  - Hot filtered oil returned, ready for drop in less than 4 minutes
  - Rinse-wave action drains crumbs
- Computerized controls with highly customized features.
- Smart Kitchen compatible.
- Heavy-duty stainless steel vats, removable for easy serviceability.
- 4 burners per vat.
- Full or split vat configuration.
- Stainless steel construction for easy cleaning and long life.
- 4 heavy-duty casters, 2 locking.

Exclusive Extended Warranty

- 2-year parts and labor.
- Vats: 15 year warranty
  - Up to 10 years parts and labor
  - Up to 15 years parts only

Accessories shipped with unit

- Gas line
  - LVG-202: 3/4 in ID x 36 in
  - LVG-203/204: 1 in ID x 72 in
- Cleaning brush set
- Night covers for fryer vats
- Installation and operating manual

☐ APPROVED ☐ APPROVED AS NOTED ☐ RESUBMIT

AUTHORIZED SIGNATURE DATE

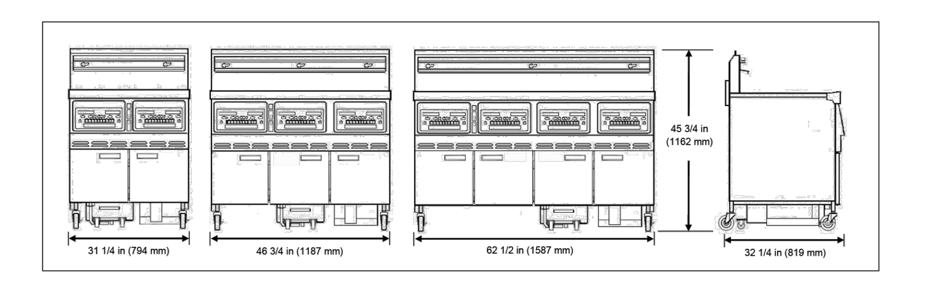
HENNY PENNY Engineered to Last

© 2012 Henny Penny Corporation, Eaton, OH 45320 USA Released 03/06/2012

PROJECT	ITEM NO

Low oil volume open fryer

MODEL **LVG-202** 2-vat gas
LVG-203 3-vat gas
LVG-204 4-vat gas



Dimensions

	LVG-202	LVG-203	LVG-204
Width	31 1/4 in (794 mm)	46 3/4 in (1187 mm)	62 1/2 in (1587 mm)
Depth	32 1/4 in (819 mm)	32 1/4 in (819 mm)	32 1/4 in (819 mm)
Height	45 3/4 in (1162 mm)	45 3/4 in (1162 mm)	45 3/4 in (1162 mm)

Required clearances
Sides 6 in (152 mm) air flow
Back 6 in (152 mm) air flow, connections
Front 30 in (762 mm) filter pan removal

Crated dimensions

	LVG-202	LVG-203	LVG-204
Length	38 in (965 mm)	53 1/2 in (1359 mm)	68 1/4 in (1734 mm)
Depth	38 1/2 in (978 mm)	38 1/2 in (978 mm)	38 1/2 in (978 mm)
Height	54 3/4 in (1391 mm)	54 3/4 in (1391 mm)	54 3/4 in (1391 mm)
Volume	46.3 cu ft (0.90 m³)	65.3 cu ft (1.85 m³)	83.3 cu ft (2.35 m³)

Crated weight

Vat	LVG-202	LVG-203	LVG-204
2 full	504 lb (229 kg)	669 lb (304 kg)	844 lb (383 kg)
2 split	557 lb (253 kg)	694 lb (315 kg)	844 lb (383 kg)
3 full		642 lb (292 kg)	822 lb (373 kg)
3 split		722 lb (328 kg)	871 lb (395 kg)
4 full			791 lb (359 kg)
4 split			898 lb (408 kg)

Floor space

LVG-202	LVG-203	LVG-204
7.0 sq ft (.65 m²)	10.5 sq ft (0.98 m²)	14.0 sq ft (1.30 m²)

Heating: Natural or liquid petroleum

LVG-202	LVG-203	LVG-204
8 burners	12 burners	16 burners
150,000 BTU/hr (44.1 kW)	225,000 BTU/hr (66.2 kW)	300,000 BTU/hr (88.2 kW)
3/4 in. connection	1 in. connection	1 in. connection

Oil capacity: 15 qt or 30 lb (14 l or 14 kg) per vat

LVG-202	LVG-203	LVG-204
30 qt or 60 lb (28 l or 27 kg)	45 qt or 90 lb (42 l or 41 kg)	60 qt or 120 lb (56 l or 55 kg)

Laboratory certifications

Electrical for gas units

Volts	Phase	Cycle/Hz	Watts	Amps per vat	Wire
120	1	60	N/A	12.2	2+G
230	1	50	N/A	7.0	1NG
220-240	1	50/60	N/A	7.0	1NG

Control and oil pump

Cord and plug for controls and oil pump wired specifically for McDonald's Hood Interlock Receptacle, only	USA, Canada NEMA L21-20P Plug configurations will vary according to geographic destination.

Continuing product improvement may subject specifications to change without notice.

Henny Penny Corporation
PO Box 60 Eaton OH 45320 USA
+1 937 456.8400 800 417.8417
+1 937 456.8434 Fax 800 417.8434 Fax
www.hennypenny.com

HENNY PENNY

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GARLAND

McDonald's APPROVED SUPPLIER

3-Platen Electric Clamshell Grill

Models:
☐ ME-3PX

Standard Features:

Flexibility
- Grill to be available in (90cm) 36" Platen
- The cook height of the new grill has increased to (5cm) 2", previous was (1.6cm) .65"
- Supports future menu and capacity needs – the smallest footprint next generation grill, with the largest capacity of Next Generation designs.

Ease of Use
- New touch-screen design, utilizing intuitive Press and Go interface
- Auto-levelling and calibration features
- USB interface
- Instinctual interface for user and service technician
- Auto Product Recognition

Ease of Cleaning
- Removable Teflon bar to allow easier access to the whole platen
- New single shaft platen lift assembly
- Easy to access from both sides

Temperature Control
- New PID (proportional–integral–derivative) control means the grill can now use continuous heat vs a basic on-off system. This allows for smart anticipation of needs vs basic on-off system
- Temperature overshoot and undershoot eliminated

Temperature Uniformity
- New design means each lane can be set to a different temperature
- Menu flexibility, e.g. all day breakfast

Energy Savings
- Individual lanes can be turned OFF when not required vs previous standby mode
- Annual savings realized in energy and HVAC

Reliability
- New stronger chassis design added to longer life components
- Lower life cycle costs and improved gap control

Specifications:

The grill's upper and lower grill plates cook both sides simultaneously. Upper grill plate is automatically raised and lowered by a lift system powered by a quiet actuator.

Lower griddle plate made of (19mm) 3/4" thick carbon steel, machine ground and highly polished.

Lower grill plate heated by 3 electric heating elements.

Upper platen heated by 2 electric heating elements.

Electric top heater provided with replaceable quick release Teflon sheets.

Available in three phase power for Delta or Wye electrical systems.

Includes built-in circuit breakers for over current circuit protection.

CSA models are approved for use on 50 amp circuit.

All have NSF, CSA and CE approvals.

Installation with zero clearance against non-combustible surfaces.

Two year Part and Labour Warranty

3-Platen Electric Clamshell Grill

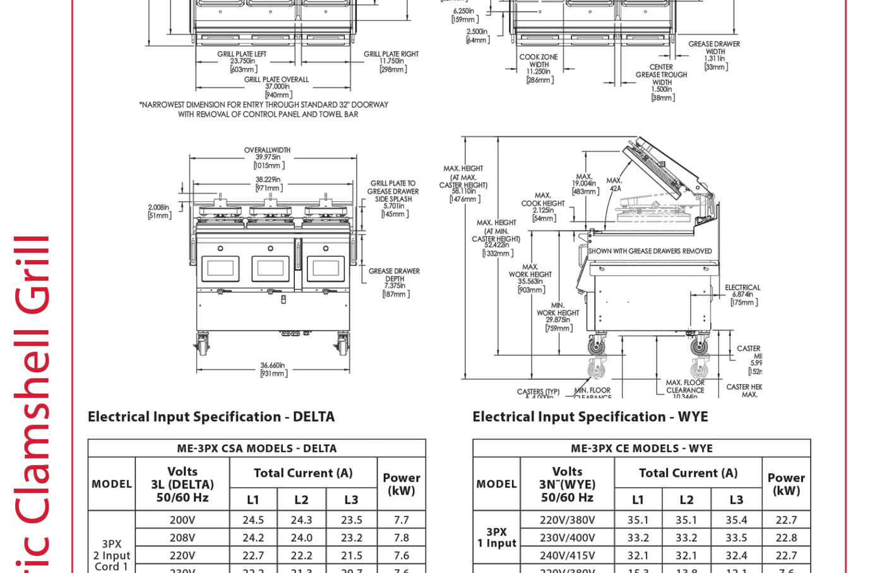
Garland Commercial Ranges Ltd.
1177 Kamato Road,
Mississauga, Ontario
L4W 1X4 CANADA

General Inquires 1-905-624-0260
USA Sales, Parts and Service 1-800-424-2411
Canadian Sales 1-888-442-7526
Canada or USA Parts/Service 1-800-427-6668

WELBILT

GARLAND

3-Platen Electric Clamshell Grill



Electrical Input Specification - DELTA

MODEL	Volts 3L (DELTA) 50/60 Hz	Total Current (A) L1	L2	L3	Power (kW)
3PX 2 Input Cord 1	200V	24.5	24.3	23.5	7.7
	208V	24.2	24.0	23.2	7.8
	220V	22.7	22.2	21.5	7.6
	230V	22.2	21.3	20.7	7.6
	240V	21.9	20.8	20.2	7.6
3PX 2 Input Cord 2	200V	46.9	46.6	46.6	15.6
	208V	45.7	45.4	45.4	15.6
	220V	41.1	41.2	41.2	15.1
	230V	38.1	38.9	38.9	15.2
	240V	37.0	37.9	37.9	15.1

ME-3PX CSA MODELS - DELTA

Interlock:
HVAC Hood / Fire Suppression Interlock Circuit
DELTA 3.6 Amp, WYE 1.9 Amp

When tested according to ASTM F1605 under heavy-load cooking conditions the average power consumption is 61% of maximum power

Electrical Input Specification - WYE

ME-3PX CE MODELS - WYE

MODEL	Volts 3N~(WYE) 50/60 Hz	Total Current (A) L1	L2	L3	Power (kW)
3PX 1 Input	220V/380V	35.1	35.1	35.4	22.7
	230V/400V	33.2	33.2	33.5	22.8
	240V/415V	32.1	32.1	32.4	22.7
3PX 2 Input Cord 1	220V/380V	15.3	13.8	12.1	7.6
	230V/400V	15.1	13.8	11.3	7.6
	240V/415V	14.7	13.8	11.3	7.6
3PX 2 Input Cord 2	220V/380V	24.3	25.5	24.0	15.1
	230V/400V	23.2	25.0	22.3	15.2
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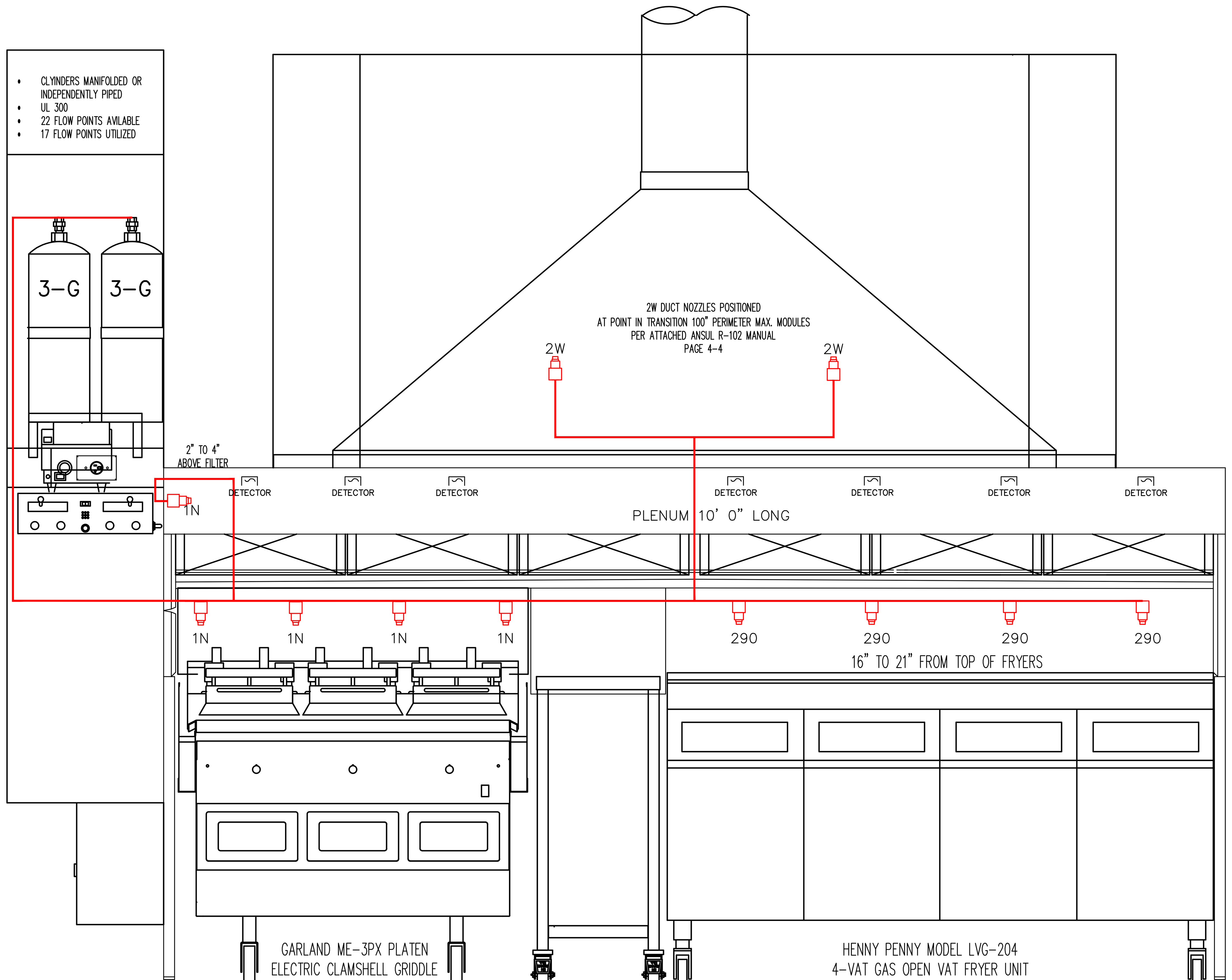
	230V/400V	15.1	13.8	11.3	7.6
	240V/415V	14.7	13.8	11.3	7.6
3PX 3 Input Cord 2	220V/380V	12.1	15.3	13.8	7.6
	230V/400V	11.3	15.1	13.8	7.6
	240V/415V	11.3	14.7	13.8	7.6
3PX 3 Input Cord 3	220V/380V	13.8	12.1	15.6	7.6
	230V/400V	13.8	11.3	15.4	7.6
	240V/415V	13.8	11.3	15.0	7.6

Form# ME-3PX (09/14/17)

Garland Commercial Ranges Ltd.
1177 Kamato Road,
Mississauga, Ontario
L4W 1X4 CANADA

General Inquires 1-905-624-0260
USA Sales, Parts and Service 1-800-424-2411
Canadian Sales 1-888-442-7526
Canada or USA Parts/Service 1-800-427-6668

WELBILT



MARK	REVISION	BY	DATE

REVISIONS:

Seal

Seal

Pre-engineered Fire System Seal Not Required

SHOP DRAWINGS

McDonald's #10721
102 West Cornelius Harnett Blvd
Lillington, NC 27546

BFPE INTERNATIONAL
FIRE, SAFETY & SECURITY
115 BESTWOOD DRIVE
CLAYTON, NORTH CAROLINA 27520
(919) 550 - 2699

DRAWN BY: MWE
CHECKED BY:
SCALE: N.T.S.
SHEET NO. 1 OF 4 SHEETS
DATE: NOVEMBER 6, 2025
PROJECT NO: N/A

Sheet Contents:
Ansul R-102 Fire System
Griddle – Fryer Combo Station

DRAWING NO.:
FS100

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* PULL STATIONS AND HOODS TO BE LABELED WITH CORRESPONDING LABELS.
* ELECTRIC APPLIANCES WITH AUTOMATIC SHUT-OFF
* MICRO SWITCH FOR SHUT DOWNS AND/OR ALARM TIE IN


CERTIFICATE OF TRAINING

Johnson Controls

It is hereby certified that

Michael Edwards

of

BFPE INTERNATIONAL -CLAYTON

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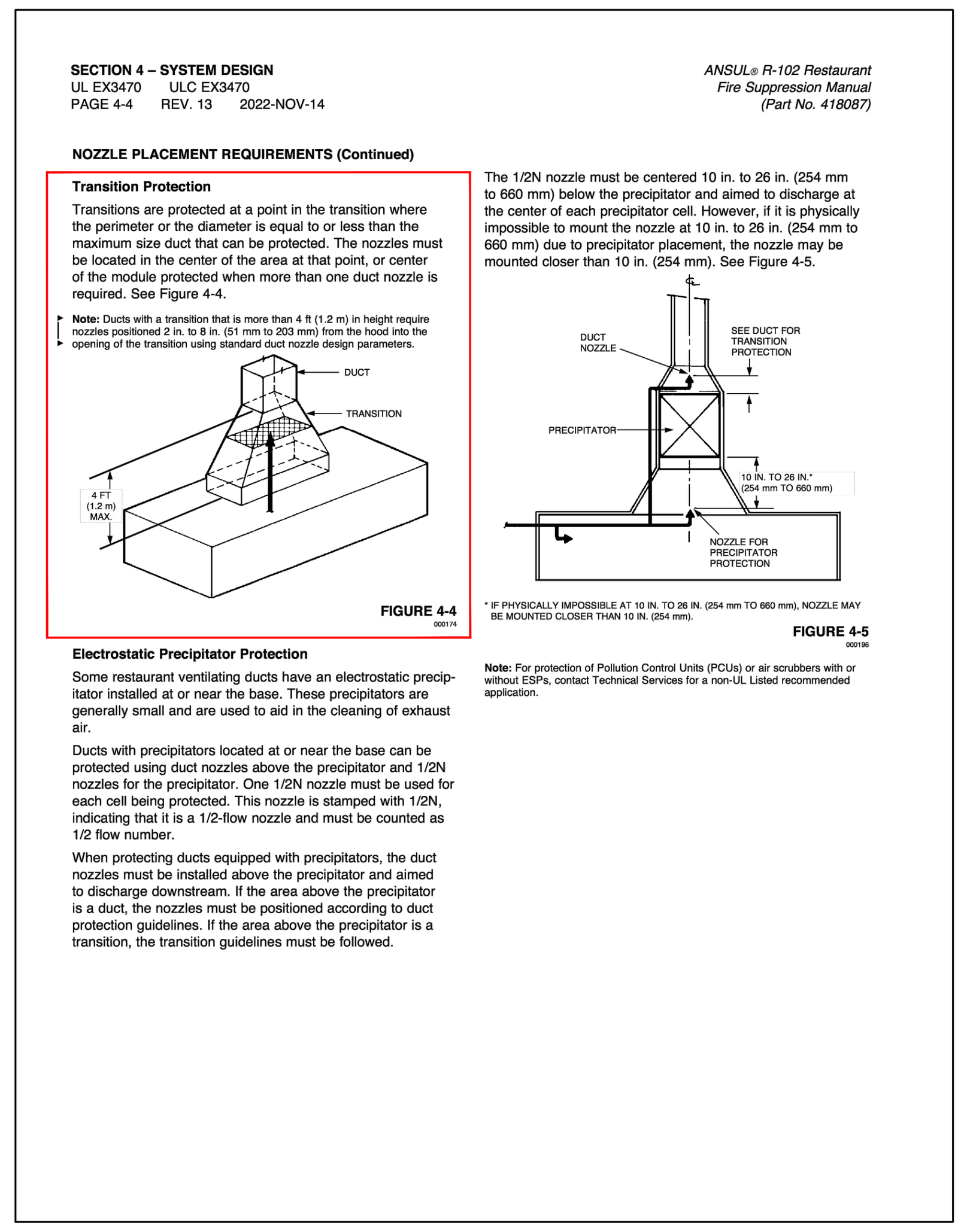
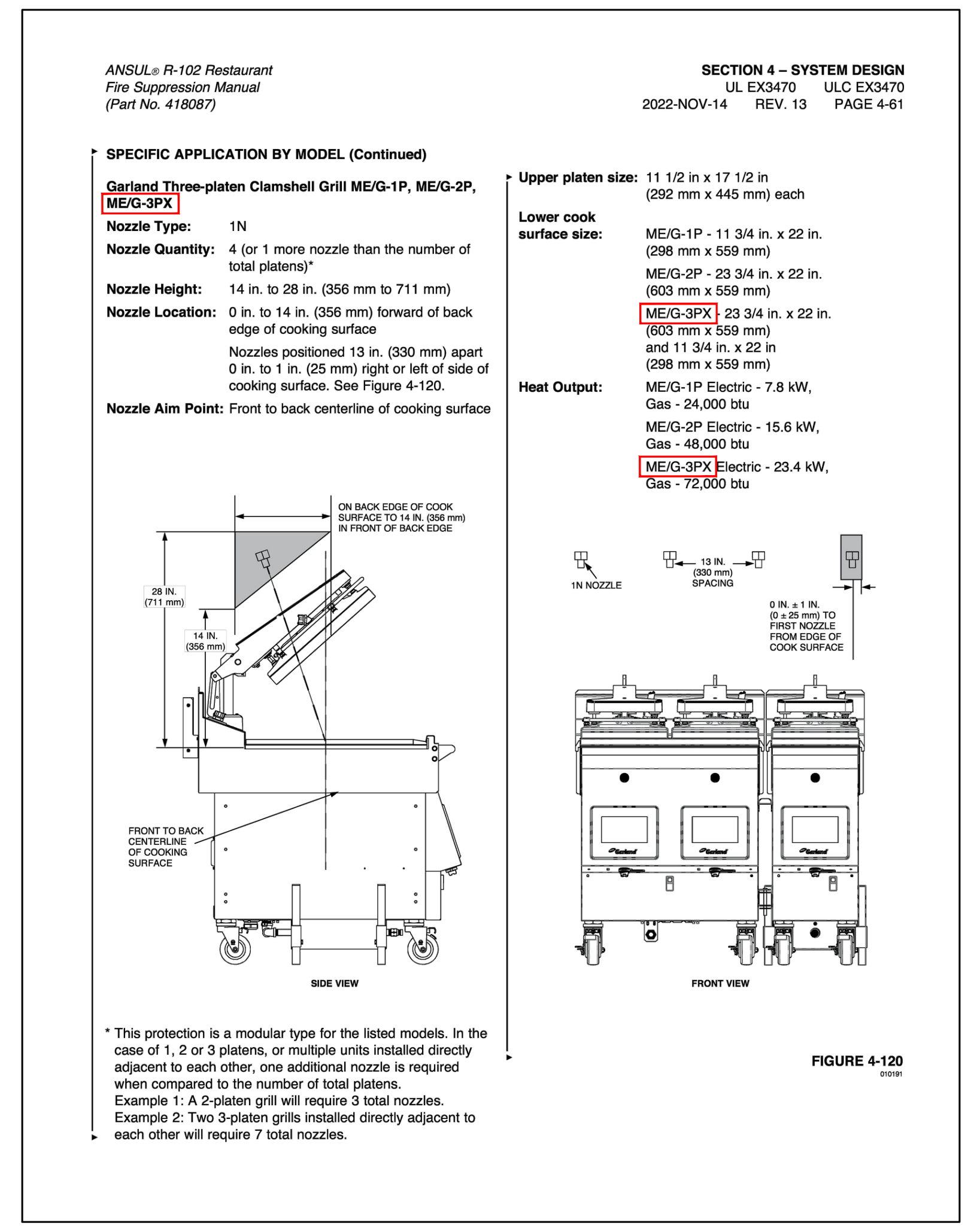
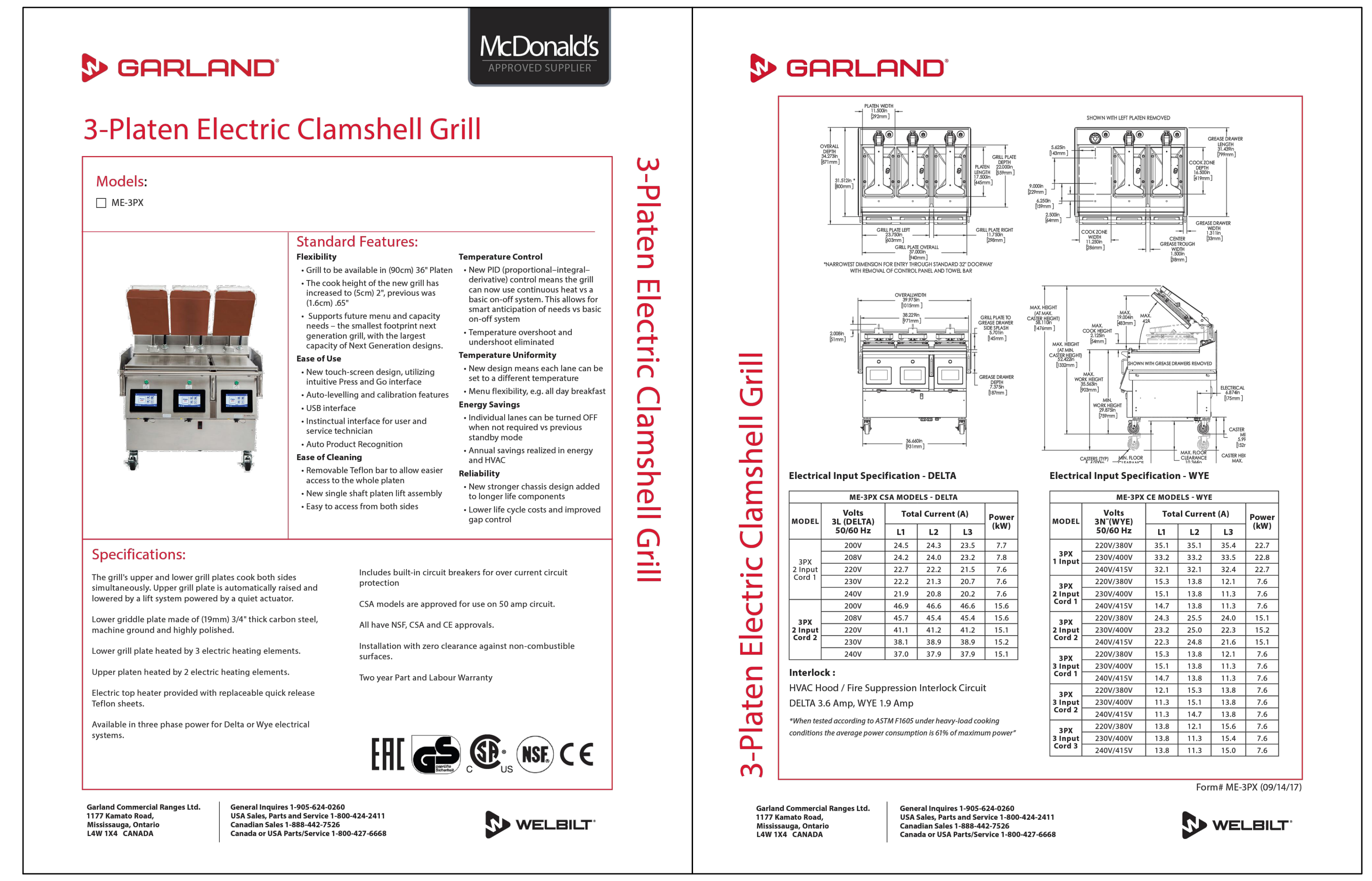
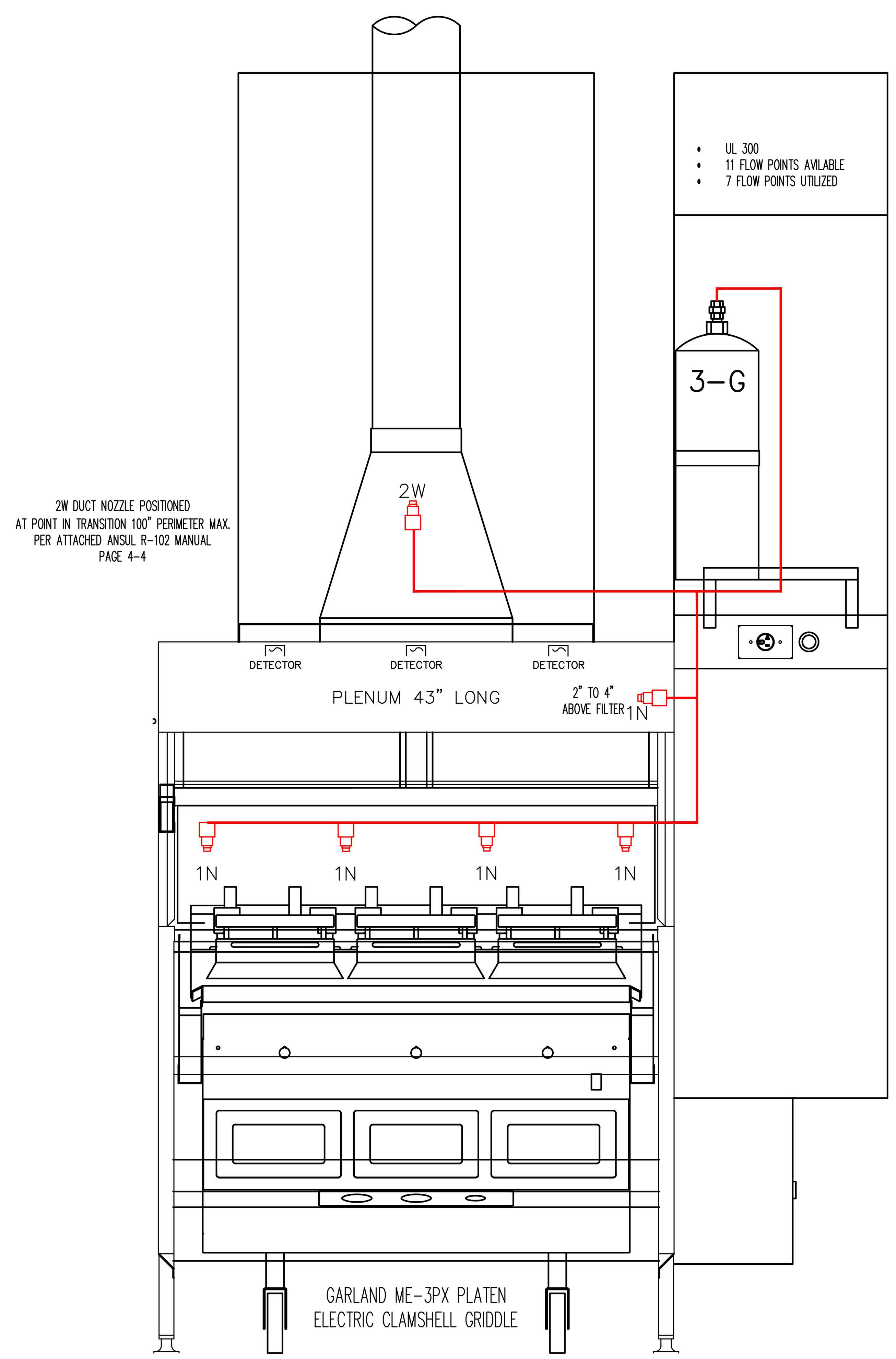
ANSUL

Matt Boyle
Technical Training Manager – Fire Suppression









APPLIANCE SPECIFIC NOZZLE COVERAGE PER ANSUL R-102 MANUAL PAGE 4-61

DATE | REV | REVISION | MARK

REVISIONS

Seal

Seal

Pre-engineered Fire System Seal Not Required

SHOP DRAWINGS

McDonald's #10721
102 West Cornelius Harnett Blvd
Lillington, NC 27546

BFPE INTERNATIONAL

DRAWN BY:	MWE
CHECKED BY:	
SCALE:	N.T.S.
SHEET NO.	2 OF 4 SHEETS
DATE:	NOVEMBER 6, 2025
PROJECT NO:	N/A

Sheet Contents:

Ansul R-102 Fire System

Griddle Station

DRAWING NO. :

FS200

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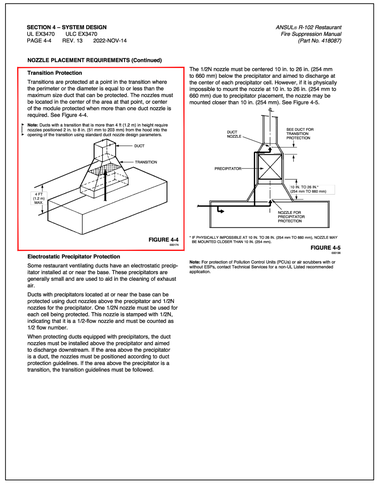
ANSUL R-102 DETAILS

* DETECTOR TEMP PER ANSUL MANUAL PAGE 3-11 REV 11, 4-71 TO 4-72 REV 11
* ALL PIPING 3/8" SCH. 40 BLACK STEEL PER ANSUL MANUAL PAGE 4-67 TO 4-69, REV 11
* ALL FITINGS 3/8" 150# BLACK STEEL PER ANSUL MANUAL PAGE 4-67 TO 4-69, REV 11
* PULL STATION IN AISLE OF EGRESS. SEE SHEET K1.0 FOR EXACT LOCATION.
* PULL STATIONS AND HOODS TO BE LABELED WITH CORRESPONDING LABELS.
* GAS APPLIANCES WITH AUTOMATIC SHUT-OFF
* MICRO SWITCH FOR SHUT DOWNS AND/OR ALARM TIE IN



SECTION 4 – SYSTEM DESIGN
UL EX3470 ULC EX3470
PAGE 4-4 REV. 13 2022-NOV-14

ANSUL® R-102 Restaurant Fire Suppression Manual (Part No. 418087)

NOZZLE PLACEMENT REQUIREMENTS (Continued)

Transition Protection

Transitions are protected at a point in the transition where the perimeter or the diameter is equal to or less than the maximum size duct that can be protected. The nozzles must be located in the center of the area at that point, or center of the module protected when more than one duct nozzle is required. See Figure 4-4.

Note: Ducts with a transition that is more than 4 ft (1.2 m) in height require nozzles positioned 2 in. to 8 in. (51 mm to 203 mm) from the hood into the opening of the transition using standard duct nozzle design parameters.

FIGURE 4-4
ansul

Electrostatic Precipitator Protection

Some restaurant ventilating ducts have an electrostatic precipitator installed at or near the base. These precipitators are generally small and are used to aid in the cleaning of exhaust air.

Ducts with precipitators located at or near the base can be protected using duct nozzles above the precipitator and 1/2N nozzles for the precipitator. The 1/2N nozzle must be used for each cell being protected. This nozzle is stamped with 1/2N, indicating that it is a 1/2-flow nozzle and must be counted as 1/2 flow number.

When protecting ducts equipped with precipitators, the duct nozzles must be installed above the precipitator and aimed to discharge downstream. If the precipitator is located in a duct, the nozzles must be positioned according to duct protection guidelines. If the area above the precipitator is a transition, the transition guidelines must be followed.

The 1/2N nozzle must be centered 10 in. to 26 in. (254 mm to 660 mm) below the precipitator and aimed to discharge at the center of each precipitator cell. However, if it is physically impossible to mount the nozzle at 10 in. to 26 in. (254 mm to 660 mm) due to precipitator placement, the nozzle may be mounted closer than 10 in. (254 mm). See Figure 4-5.

* IF PHYSICALLY IMPOSSIBLE AT 10 IN. TO 26 IN. (254 mm TO 660 mm), NOZZLE MAY BE MOUNTED CLOSER THAN 10 IN. (254 mm).

FIGURE 4-5
ansul

Note: For protection of Pollution Control Units (PCUs) or air scrubbers with or without ESPs, contact Technical Services for a non-UL Listed recommended application.

SECTION 4 – SYSTEM DESIGN
UL EX3470 ULC EX3470
PAGE 4-8 REV. 13 2022-NOV-14

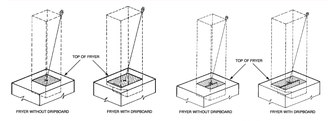
ANSUL® R-102 Restaurant Fire Suppression Manual (Part No. 418087)

APPLIANCE PROTECTION (Continued)

Fryer – Single Nozzle Protection (Continued)

TABLE 4-2: MAXIMUM AREA DIMENSIONS – SINGLE NOZZLE FRYER PROTECTION

Max. Size Frypot Only	Max. Size Overall With Dripboard	Type of Nozzle	Nozzle Height Above Top of Fryer	Nozzle Location
Full or Split Vat 14 in. x 15 in. (355 mm x 381 mm)	Full or Split Vat 14 in. x 21 in. (355 mm x 533 mm)	230	27 in. to 47 in. (686 mm to 1,193 mm)	See Figure 4-15 and Figure 4-16
Full or Split Vat 14 in. x 15 in. (355 mm x 381 mm)	Full or Split Vat 14 in. x 21 in. (355 mm x 533 mm)	245	20 in. to 27 in. (508 mm to 685 mm)	See Figure 4-15 and Figure 4-16
Full or Split Vat 14 in. x 15 in. (355 mm x 381 mm)	Full or Split Vat 14 in. x 21 in. (355 mm x 533 mm)	290	13 in. to 16 in. (330 mm to 406 mm)	See Figure 4-17
Full or Split Vat 14 1/2 in. x 14 in. (368 mm x 355 mm)	Full or Split Vat 14 1/2 in. x 26 1/2 in. (368 mm x 673 mm)	290	16 in. to 27 in. (406 mm to 685 mm)	See Figure 4-17



NOZZLE TIP POSITIONED ANYWHERE ALONG OR WITHIN PERIMETER OF COOKING SURFACE AND AIMED TO THE CENTER OF THE COOKING AREA.

FIGURE 4-15
ansul

NOZZLE TIP POSITIONED ANYWHERE ALONG OR WITHIN PERIMETER OF COOKING SURFACE AND AIMED TO THE CENTER OF THE COOKING AREA.

FIGURE 4-16
ansul

ANSUL® R-102 Restaurant Fire Suppression Manual (Part No. 418087)

SECTION 4 – SYSTEM DESIGN
UL EX3470 ULC EX3470
2022-NOV-14 REV. 13 PAGE 4-9

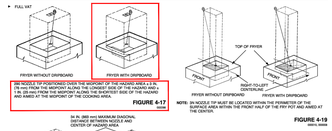
APPLIANCE PROTECTION (Continued)

Fryer – Single Nozzle Protection (Continued)

TABLE 4-2: MAXIMUM AREA DIMENSIONS – SINGLE NOZZLE FRYER PROTECTION (Continued)

Max. Size Frypot Only	Max. Size Overall With Dripboard	Type of Nozzle	Nozzle Height Above Top of Fryer	Nozzle Location
Full Vat 14 1/2 in. x 16 1/2 in. (368 mm x 419 mm)	Full Vat 14 1/2 in. x 26 1/2 in. (368 mm x 673 mm)	290	16 in. to 27 in. (406 mm to 533 mm)	See Figure 4-17
Full Vat 19 1/2 in. x 19 in. (495 mm x 482 mm)	Full Vat 19 1/2 in. x 25 3/8 in. (495 mm x 644 mm)	290	13 in. to 16 in. (330 mm to 406 mm)	See Figure 4-17
Full Vat 19 1/2 in. x 19 in. (495 mm x 482 mm)	Full Vat 19 1/2 in. x 25 3/8 in. (495 mm x 644 mm)	3N	See Figure 4-18	See Figure 4-18
Full Vat 18 in. x 18 in. (457 mm x 457 mm)	Full Vat 27 3/4 in. x 27 3/4 in. (457 mm x 704 mm)	3N	25 in. to 35 in. (635 mm to 889 mm)	See Figure 4-19

* FULL VAT

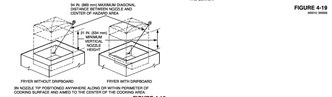


NB NOZZLE TIP POSITIONED OVER THE MIDPOINT OF THE HAZARD AREA 2 IN. (76 mm) FROM THE MIDPOINT ALONG THE LONGEST SIDE OF THE HAZARD AREA, OR 2 IN. (76 mm) FROM THE MIDPOINT ALONG THE SHORTEST SIDE OF THE HAZARD AND AIMED AT THE MIDPOINT OF THE COOKING AREA.

FIGURE 4-17
ansul

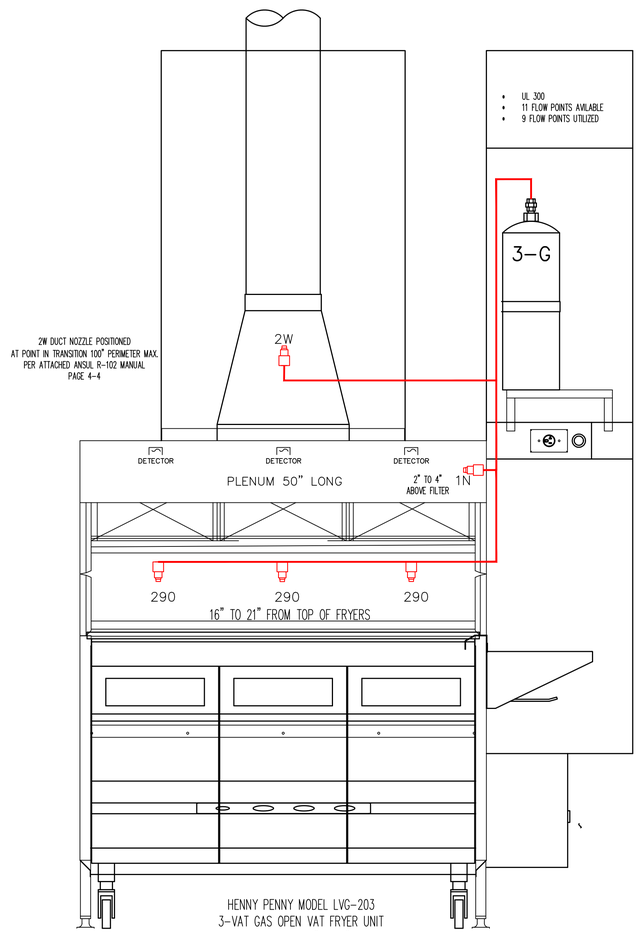
NOTE: IN NOZZLE TIP MUST BE LOCATED WITHIN THE PERIMETER OF THE SURFACE AREA WITHIN THE FRONT HALF OF THE FRY POT AND AIMED AT THE CENTER.

FIGURE 4-19
ansul



IN NOZZLE TIP POSITIONED ANYWHERE ALONG OR WITHIN PERIMETER OF COOKING SURFACE AND AIMED TO THE CENTER OF THE COOKING AREA.

FIGURE 4-18
ansul



PROJECT | QUANTITY | ITEM NO

Low oil volume open fryer

MODEL **LVG-202** 2-vat gas
LVG-203 3-vat gas
LVG-204 4-vat gas

LVG-203 low oil volume gas open fryer with 3 split vats and one full vat

General Information

Henry Penny low oil volume open fryers represent innovative technology that enables McDonald's operators to significantly reduce frying oil consumption, extend its useful life and maintain or increase food quality and throughput while reducing direct oil and frying operation costs.

A lower volume vat allows the same amount of product to be cooked at temperature in 40% less oil. Plus, oil level is automatically topped from the JIB inside the fryer cabinet, so you actually discard and refill manually less often than ever.

Filter any vat whenever you need to, in less than four minutes—other vats continue to cook uninterrupted. Choose from 2, 3 or 4 full or split vat configurations in a slim footprint with easy-to-use programmable controls, optimal energy efficiency and durable, round-the-clock operation.

Auto top-off system with convenient access to JIB or reservoir.

Standard Features

- Cooks the same amount of product with 40% lower oil volume than previous generation fryer.
- Automatic oil top off feature—sensors continually monitor oil level and adds fresh oil as needed.
- Automatic filtration on the fly
  - One button activates filter request
  - Filter vats individually as needed
  - Hot filtered oil returned, ready for drop in less than 4 minutes
- Rinse-wave action drains crumbs
- Computerized controls with highly customized features.
- Smart Kitchen compatible.
- Heavy-duty stainless steel vats, removable for easy serviceability.
- 4 burners per vat.
- Full or split vat configuration.
- Stainless steel construction for easy cleaning and long life.
- 4 heavy-duty casters, 2 locking.

Exclusive Extended Warranty

- 2-year parts and labor.
- Vats: 15 year warranty
  - Up to 10 years parts and labor
  - Up to 15 years parts only

Accessories shipped with unit

- Gas line
  - LVG-202: 3/4 in ID x 36 in
  - LVG-203/204: 1 in ID x 72 in
- Cleaning brush set
- Night covers for fryer vats
- Installation and operating manual

☐ APPROVED ☐ APPROVED AS NOTED ☐ RESUBMIT

AUTHORIZED SIGNATURE DATE

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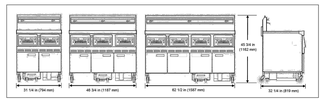
PROJECT | ITEM NO

Low oil volume open fryer

MODEL **LVG-202** 2-vat gas
LVG-203 3-vat gas
LVG-204 4-vat gas



Dimensions

	LVG-202	LVG-203	LVG-204
Width	31 1/4 in (794 mm)	40 3/4 in (1187 mm)	62 1/2 in (1587 mm)
Depth	32 1/4 in (819 mm)	32 1/4 in (819 mm)	32 1/4 in (819 mm)
Height	40 3/4 in (1192 mm)	40 3/4 in (1192 mm)	40 3/4 in (1192 mm)

Required clearances:
Sides: 6 in (152 mm) air flow
Back: 6 in (152 mm) air flow, connections
Front: 30 in (762 mm) filter pan removal

Crated dimensions

	LVG-202	LVG-203	LVG-204
Length	38 in (965 mm)	53 1/2 in (1359 mm)	68 1/4 in (1734 mm)
Depth	36 1/2 in (978 mm)	36 1/2 in (978 mm)	36 1/2 in (978 mm)
Height	54 3/4 in (1391 mm)	54 3/4 in (1391 mm)	54 3/4 in (1391 mm)
Volume	46.3 cu ft (0.90 m³)	65.3 cu ft (1.85 m³)	83.3 cu ft (2.35 m³)

Crated weight

Vat	LVG-202	LVG-203	LVG-204
2 full	504 lb (229 kg)	669 lb (304 kg)	844 lb (383 kg)
2 split	557 lb (253 kg)	694 lb (315 kg)	844 lb (383 kg)
3 full		642 lb (292 kg)	822 lb (373 kg)
3 split		722 lb (328 kg)	871 lb (395 kg)
4 full			791 lb (359 kg)
4 split			898 lb (408 kg)

Floor space

	LVG-202	LVG-203	LVG-204
	7.0 sq ft (.65 m²)	10.5 sq ft (0.98 m²)	14.0 sq ft (1.30 m²)

Heating: Natural or liquid petroleum

	LVG-202	LVG-203	LVG-204
	8 burners	12 burners	16 burners
	100,000 BTU/hr (44.1 kW)	225,000 BTU/hr (66.2 kW)	300,000 BTU/hr (88.2 kW)
	3/4 in. connection	1 in. connection	1 in. connection

Oil capacity: 15 qt or 30 lb (14 l or 14 kg) per vat

	LVG-202	LVG-203	LVG-204
	30 qt or 60 lb (28 l or 27 kg)	45 qt or 90 lb (43 l or 41 kg)	60 qt or 120 lb (56 l or 55 kg)

Laboratory certifications

Electrical for gas units

Volts	Phase	Cycle/Hz	Watts	Amps per vat	Wire
120	1	60	N/A	12.2	2+G
230	1	50	N/A	7.0	1N0
220-240	1	50/60	N/A	7.0	1N0

Control and oil pump

	USA Canada
Cord and plug for controls and oil pump wired specifically for McDonald's Hood Interlock Receptacle, only	NEMA L11-20P Plug configurations will vary according to geographic destination.

Continuing product improvement may subject specifications to change without notice.

Henny Penny Corporation
PO Box 60 Eaton OH 45320 USA
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+1 937 456-8429 Fax 800 417-8434 Fax
www.hennypenny.com

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NO.	DATE	BY	REVISION

REVISIONS:

Seal

Seal

Pre-engineered Fire System Seal Not Required

SHOP DRAWINGS

McDonald's #10721
102 West Cornelius Harnett Blvd
Lillington, NC 27546

BFPE INTERNATIONAL
FIRE SAFETY & SECURITY
115 NORTHWOOD DRIVE
CHAPEL HILL, NORTH CAROLINA 27520
(919) 550 – 2669

DRAWN BY: MWE
CHECKED BY:
SCALE: N.T.S.
SHEET NO. 3 OF 4 SHEETS
DATE: NOVEMBER 6, 2025
PROJECT NO: N/A

Sheet Contents:
Ansul R-102 Fire System
Fryer Station

DRAWING NO.:
FS300

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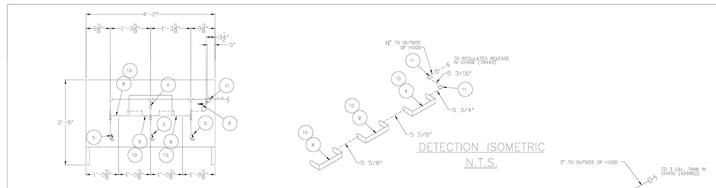

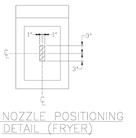

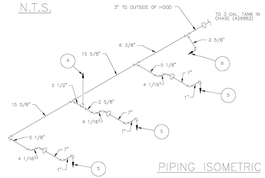

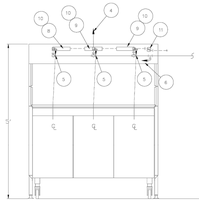

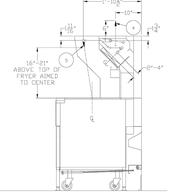

ITEM	QTY	ELEC GAS QTY	PART NO.	DESCRIPTION
* * 1	1	1	79493	OEM REG RELEASE/BRACKET ASSEMBLY
* 2	1	1	429862	3.0 GAL. TANK
* 3	1	1	79397	3.0 GAL. PARALLEL LOW pH
* 4	1	1	419337	2W NOZZLE
* 5	4	4	429834	2TW2 NOZZLE
* 6	5	5	443335/Obsolete	2TW2 NOZZLE
6	1	1	419335	3N NOZZLE
* * 7	1	1	79492/427345/335-2U	2xMTR3050
8	1	1	417368	TERMINAL DETECTOR PACKAGE
9	6	6	417369	SERVICE DETECTOR PACKAGE
* 10	2	3	435729	FUSIBLE LINK, TYPE M, 280°F
	1	4	435741	FUSIBLE LINK, TYPE K, 280°F HIGH EFFICIENCY 3 100K BTUH
* * * 11	1	3	417743	FUSIBLE LINK, TYPE K, 450°F (LOW EFFICIENCY 3 100K BTUH
* 11	1	2	429290	FUSIBLE LINK, TYPE K, 450°F (LOW EFFICIENCY
* * 12	1	1	79500	REMOTE PULL STATION ASSEMBLY
* * 13	1	1	429879	SNAP ACTION SWITCH - SPST
14	1	1	70565	1" ANGL MECHANICAL GAS VALVE
* 15	1	1	427929	PULLEY TEE
* 16	2	2	79507	HOSE ACTUATION

NOTE: THE FIRST NUMBER IN ANY NOZZLE DESIGNATION INDICATES THE FLOW NUMBER OF THE NOZZLE.

OPTIONAL REMOTE PULL STATION NOTES:
THE FOLLOWING SPECIFICATIONS ARE FOR ADDITIONAL REMOTE PULL STATIONS WHERE CODES APPLY.

1. WHEN PROVIDING INSTALLATION MATERIAL FOR EXTRA REMOTE PULL STATIONS, USE ONLY 1/2" EMT CONDUIT, COMPRESSION FITTINGS AND P/N 423350 PULLEY ELBOWS.
2. ALL EXISTING PULL STATIONS WILL REMAIN INSTALLED AND CONNECTED ON CHASE#1.
3. RIGIDLY FASTEN ALL CONDUIT. WHEN BRACKETING IN THE ATTIC SPACE, REGARD FUTURE SERVICE (BY OTHER TRADES) REQUIREMENTS. TAKE PRECAUTIONS THAT PREVENT THE CONDUIT FROM BEING SUBJECT TO DAMAGE.
4. ROUTE CONDUIT AS DIRECTLY AS POSSIBLE FROM THE REMOTE PULL STATION TO THE LOCATION ON CHASE#1.
5. CONDUIT IS TO BE ROUTED THROUGH THE EQUIPMENT TO THE AUTOMAN PER THE DETAILS ON THIS SHEET AND DRAWING 902-536-110.

GENERAL NOTES:

1. THIS INSTALLATION IS TO BE MADE IN ACCORDANCE WITH THE R-102, UL300 INSTALLATION MANUAL AND IN ACCORDANCE WITH ALL STATE AND LOCAL CODES.
2. ALL PIPE LENGTHS TO BE FIELD VERIFIED.
3. THESE DRAWINGS MAY BE USED TO SECURE APPROVAL FROM THE AUTHORITY HAVING JURISDICTION.
4. IT IS NECESSARY THAT ALL PIPE FITTINGS AND NOZZLES BE WRENCH TIGHTENED AND SECURELY SUPPORTED AND THAT ALL NOZZLES ARE PROPERLY AIMED AS INDICATED IN THE R-102 INSTALLATION MANUAL.
5. THE WIRE ROPE FOR THE DETECTOR AND REMOTE PULL STATION(S) AND MECHANICAL GAS VALVE IS TO BE INSTALLED BY AN AUTHORIZED AND FACTORY TRAINED DISTRIBUTOR OR SERVICE REPRESENTATIVE.
6. THIS INSTALLATION IS TO BE INSPECTED, PUT INTO OPERATION AND SERVICED BY AN AUTHORIZED AND FACTORY TRAINED DISTRIBUTOR OR SERVICE REPRESENTATIVE.
7. ELECTRICAL CONTACTS AND WIRING FOR APPLIANCE SHUT OFF TO BE PROVIDED BY THE ELECTRICAL CONTRACTOR.
8. PIPING AND CONDUIT HOOD PENETRATIONS TO BE WELDED
9. 165 DEG. F. FUSIBLE LINK TO BE USED ON ALL ELECTRIC FRYERS ONLY.
10. 280 DEG. F FUSIBLE LINKS TO BE USED ON ALL HIGH EFFICIENCY GAS FRYERS OF 100,000 BTU OR LESS, PER FULL VAT.
11. 450 DEG. F FUSIBLE LINKS TO BE USED ON ALL LOW EFFICIENCY GAS FRYERS OF OVER 100,000 BTU PER FULL VAT.
12. THIS DRAWING IS FOR USE WITH A RIGHT HANDED CHASE. FOR LEFT HANDED CHASE USE A MIRRORED IMAGE OF THIS DRAWING.
13. DIMENSIONS MAY VARY FROM SHOWN. ±1 INCH
14. GRILL DIVIDERS CAN NOT BE UTILIZED WITH THIS PROTECTION
15. THIS DRAWING IS UTILIZING A SWIVEL ADAPTOR HOWEVER, IF THE CENTER LINE CAN BE REACHED, THE SWIVEL ADAPTOR IS NOT REQUIRED

PIPING NOTES:

1. PIPE SHALL BE 3/8" SCHEDULE 40 BLACK IRON, CHROME PLATED OR STAINLESS STEEL.
2. ALL PIPE ENDS SHALL BE REAMED AND BLOWN CLEAR OF CHIPS AND SCALE BEFORE ASSEMBLY. INSIDE OF PIPE AND FITTINGS MUST BE FREE OF OIL AND DIRT.
3. ALL DIMENSIONS GIVEN ARE FROM CENTER TO CENTER OF FITTINGS.
4. FINAL NOZZLE LOCATION MAY NOT VARY FROM LOCATION SHOWN.
5. ADD UNIONS AS NEEDED.
6. AUTOMAN/TANK & INTEGRAL COMPONENTS IN MECHANICAL CHASE (NOT SHOWN).
7. ALL PIPE CONNECTIONS MUST USE TEFLON TAPE ON THE MALE THREADS ONLY.
8. MAKE CERTAIN THAT THERE IS A MINIMUM OF 6" DIA PIPE BETWEEN THE AGENT TANK AND ANY NOZZLE PROTECTING A FRYER.

CONDUIT NOTES:

1. CONDUIT RUNS ARE DIMENSIONED CENTER TO CENTER OF CONDUIT, EXCEPT:
   A) TO FACE(S) OF DETECTOR BRACKET(S).
   B) TO TOP SURFACE OF AUTOMAN.
   C) TO BACK OF MANUAL PULL PAN.
   D) TO SURFACE OF GAS VALVE BOX
2. ⓒ SHOWS LOCATION FOR PULLEY COVER SCREWS
   ⓒ SHOWS BACKSIDE OF PULLEY ELBOW
3. QUANTITY FOR DETECTION LINE IN HOOD ONLY.

THIS DESIGN IS IN COMPLIANCE WITH UL 300, NFPA 96, & NFPA 17A

NO.	DATE	BY	CHK	REVISIONS
1	2/22	DH	DH	Changed fryer protection to 290 nozzles
A	2/27	DH	DH	REMOVED HEIGHT FROM NOZZLE POSITIONING
A	5/10	ADW	ADW	CHANGED MODEL FROM 2002 TO 2008
A	5/10	ADW	ADW	

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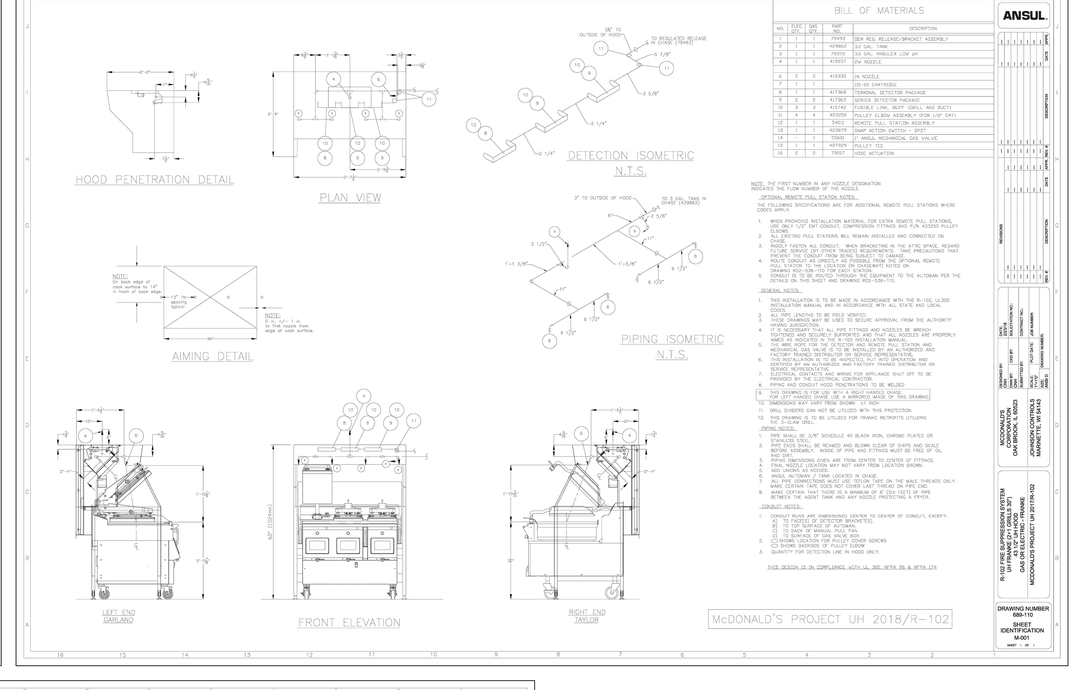
R-102 FIRE SUPPRESSION SYSTEM
3 WAT-FRY STATION - RH
59" UH 2008 HOOD
GAS OR ELECTRIC - FRANKE
McDONALD'S CORPORATION
OAK BROOK, IL

ANSUL ANSUL FIRE PROTECTION, MARINETTE, WI 54143-2542

DATE	6/22/22	SCALE	1"=10"	DRAWING NUMBER	REV.
DR.	AKS	DESIGN	JP	402-519-102	3
		APPR.		1 OF 1	

McDONALD'S PROJECT UH 2008/R-102



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2	1	1	429862	3.0 GAL. TANK
3	1	1	79397	3.0 GAL. PARALLEL LOW pH
4	1	1	419337	2W NOZZLE
5	4	4	429834	2TW2 NOZZLE
6	5	5	419335	3N NOZZLE
7	1	1		3S-3S DIRECKSIC
8	1	1	417368	TERMINAL DETECTOR PACKAGE
9	6	6	417369	SERIES DETECTOR PACKAGE
10	2	3	435741	FUSIBLE LINK, TYPE M, 280°F HIGH EFFICIENCY 3 100K BTUH
11	4	4	423050	PULLEY ELBOW ASSEMBLY (FOR 1/2" EMT)
12	1	1	79402	REMOTE PULL STATION ASSEMBLY
13	1	1	429879	SNAP ACTION SWITCH - SPST
14	1	1	70565	1" ANGL MECHANICAL GAS VALVE
15	1	1	427929	PULLEY TEE
16	2	2	79507	HOSE ACTUATION

NOTE: THE FIRST NUMBER IN ANY NOZZLE DESIGNATION INDICATES THE FLOW NUMBER OF THE NOZZLE.

OPTIONAL REMOTE PULL STATION NOTES:
THE FOLLOWING SPECIFICATIONS ARE FOR ADDITIONAL REMOTE PULL STATIONS WHERE CODES APPLY.

1. WHEN PROVIDING INSTALLATION MATERIAL FOR EXTRA REMOTE PULL STATIONS, USE ONLY 1/2" EMT CONDUIT, COMPRESSION FITTINGS AND P/N 423350 PULLEY ELBOWS.
2. ALL EXISTING PULL STATIONS WILL REMAIN INSTALLED AND CONNECTED ON CHASE#1.
3. RIGIDLY FASTEN ALL CONDUIT. WHEN BRACKETING IN THE ATTIC SPACE, REGARD FUTURE SERVICE (BY OTHER TRADES) REQUIREMENTS. TAKE PRECAUTIONS THAT PREVENT THE CONDUIT FROM BEING SUBJECT TO DAMAGE.
4. ROUTE CONDUIT AS DIRECTLY AS POSSIBLE FROM THE REMOTE PULL STATION TO THE LOCATION ON CHASE#1.
5. CONDUIT IS TO BE ROUTED THROUGH THE EQUIPMENT TO THE AUTOMAN PER THE DETAILS ON THIS SHEET AND DRAWING 902-536-110.

GENERAL NOTES:

1. THIS INSTALLATION IS TO BE MADE IN ACCORDANCE WITH THE R-102, UL300 INSTALLATION MANUAL AND IN ACCORDANCE WITH ALL STATE AND LOCAL CODES.
2. ALL PIPE LENGTHS TO BE FIELD VERIFIED.
3. THESE DRAWINGS MAY BE USED TO SECURE APPROVAL FROM THE AUTHORITY HAVING JURISDICTION.
4. IT IS NECESSARY THAT ALL PIPE FITTINGS AND NOZZLES BE WRENCH TIGHTENED AND SECURELY SUPPORTED AND THAT ALL NOZZLES ARE PROPERLY AIMED AS INDICATED IN THE R-102 INSTALLATION MANUAL.
5. THE WIRE ROPE FOR THE DETECTOR AND REMOTE PULL STATION(S) AND MECHANICAL GAS VALVE IS TO BE INSTALLED BY AN AUTHORIZED AND FACTORY TRAINED DISTRIBUTOR OR SERVICE REPRESENTATIVE.
6. THIS INSTALLATION IS TO BE INSPECTED, PUT INTO OPERATION AND SERVICED BY AN AUTHORIZED AND FACTORY TRAINED DISTRIBUTOR OR SERVICE REPRESENTATIVE.
7. ELECTRICAL CONTACTS AND WIRING FOR APPLIANCE SHUT OFF TO BE PROVIDED BY THE ELECTRICAL CONTRACTOR.
8. PIPING AND CONDUIT HOOD PENETRATIONS TO BE WELDED
9. 165 DEG. F. FUSIBLE LINK TO BE USED ON ALL ELECTRIC FRYERS ONLY.
10. 280 DEG. F FUSIBLE LINKS TO BE USED ON ALL HIGH EFFICIENCY GAS FRYERS OF 100,000 BTU OR LESS, PER FULL VAT.
11. 450 DEG. F FUSIBLE LINKS TO BE USED ON ALL LOW EFFICIENCY GAS FRYERS OF OVER 100,000 BTU PER FULL VAT.
12. THIS DRAWING IS FOR USE WITH A RIGHT HANDED CHASE. FOR LEFT HANDED CHASE USE A MIRRORED IMAGE OF THIS DRAWING.
13. DIMENSIONS MAY VARY FROM SHOWN. ±1 INCH
14. GRILL DIVIDERS CAN NOT BE UTILIZED WITH THIS PROTECTION
15. THIS DRAWING IS UTILIZING A SWIVEL ADAPTOR HOWEVER, IF THE CENTER LINE CAN BE REACHED, THE SWIVEL ADAPTOR IS NOT REQUIRED

PIPING NOTES:

1. PIPE SHALL BE 3/8" SCHEDULE 40 BLACK IRON, CHROME PLATED OR STAINLESS STEEL.
2. ALL PIPE ENDS SHALL BE REAMED AND BLOWN CLEAR OF CHIPS AND SCALE BEFORE ASSEMBLY. INSIDE OF PIPE AND FITTINGS MUST BE FREE OF OIL AND DIRT.
3. ALL DIMENSIONS GIVEN ARE FROM CENTER TO CENTER OF FITTINGS.
4. FINAL NOZZLE LOCATION MAY NOT VARY FROM LOCATION SHOWN.
5. ADD UNIONS AS NEEDED.
6. AUTOMAN/TANK & INTEGRAL COMPONENTS IN MECHANICAL CHASE (NOT SHOWN).
7. ALL PIPE CONNECTIONS MUST USE TEFLON TAPE ON THE MALE THREADS ONLY.
8. MAKE CERTAIN THAT THERE IS A MINIMUM OF 6" DIA PIPE BETWEEN THE AGENT TANK AND ANY NOZZLE PROTECTING A FRYER.

CONDUIT NOTES:

1. CONDUIT RUNS ARE DIMENSIONED CENTER TO CENTER OF CONDUIT, EXCEPT:
   A) TO FACE(S) OF DETECTOR BRACKET(S).
   B) TO TOP SURFACE OF AUTOMAN.
   C) TO BACK OF MANUAL PULL PAN.
   D) TO SURFACE OF GAS VALVE BOX
2. ⓒ SHOWS LOCATION FOR PULLEY COVER SCREWS
   ⓒ SHOWS BACKSIDE OF PULLEY ELBOW
3. QUANTITY FOR DETECTION LINE IN HOOD ONLY.

THIS DESIGN IS IN COMPLIANCE WITH UL 300, NFPA 96, & NFPA 17A

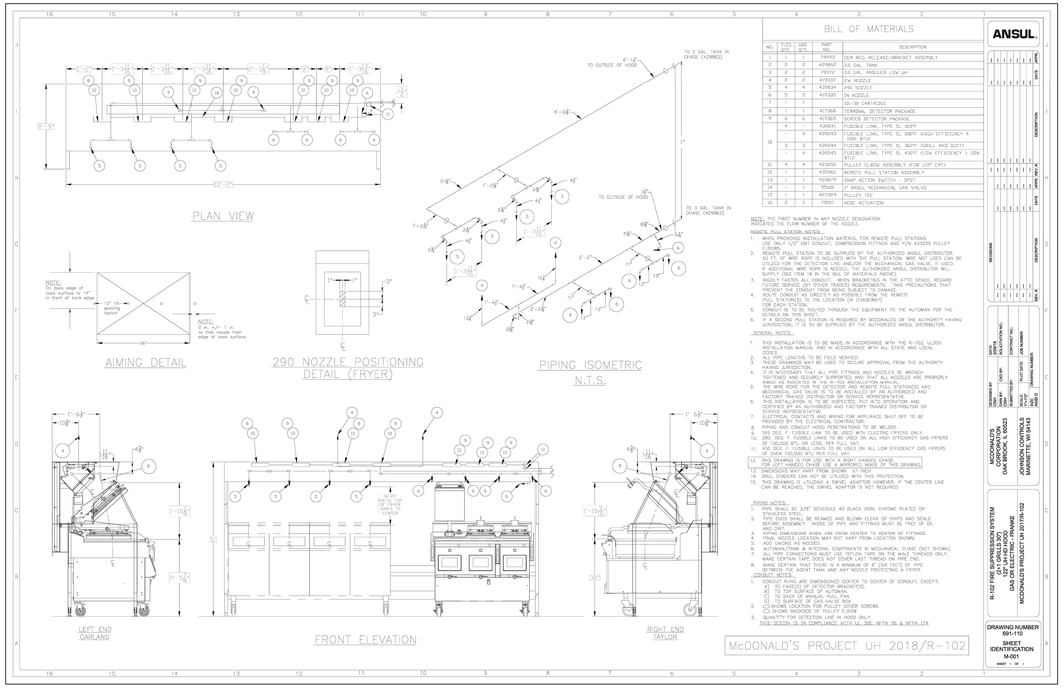
ANSUL

NO.	DATE	BY	CHK	REVISIONS
1	2/22	DH	DH	Changed fryer protection to 290 nozzles
A	2/27	DH	DH	REMOVED HEIGHT FROM NOZZLE POSITIONING
A	5/10	ADW	ADW	CHANGED MODEL FROM 2002 TO 2008
A	5/10	ADW	ADW	

R-102 FIRE SUPPRESSION SYSTEM
3 WAT-FRY STATION - RH
59" UH 2008 HOOD
GAS OR ELECTRIC - FRANKE
McDONALD'S PROJECT UH 2018/R-102

DRAWING NUMBER
690-110
SHEET IDENTIFICATION
M-001
SHEET 1 OF 1

McDONALD'S PROJECT UH 2018/R-102



DRAWN BY:	MWE
CHECKED BY:	
SCALE:	N.T.S.
SHEET NO.	4 OF 4 SHEETS
DATE:	NOVEMBER 6, 2025
PROJECT NO:	N/A

Sheet Contents:
Factory Provided Sheets

DRAWING NO.:
FS400

Seal

Seal

Pre-engineered
Fire System
Seal Not
Required

SHOP DRAWINGS

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