

CITY OF SACRAMENTO

Permit No: 9811070

1231 I Street, Sacramento, CA 95814

Insp Area: 2

Site Address: 4554 MACK RD SAC

Sub-Type: COM

Parcel No: 1170780001

Housing (Y/N): N

CONTRACTOR

AFS
PO BOX J
NOVATO 94948

OWNER

CHAU JOHN H C/MAGDALEN T
875 MATADERA CR
DANVILLE CA 94526

ARCHITECT

Nature of Work: KITCHEN HOOD FIRE EXTINGUISHING SYST

CONSTRUCTION LENDING AGENCY: I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C).

Lender's Name Lender's Address

LICENSED CONTRACTORS DECLARATION: I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 9 (commencing with section 7000) of Division 3 of the Business and Professions Code and my license is in full force and effect.

License Class C-16 License Number 647259 Date 11-5-98 Contractor Signature Guy R. McKay

OWNER-BUILDER DECLARATION: I hereby affirm under penalty of perjury that I am exempt from the contractors License Law for the following reason (Sec. 7031.5, Business and Professions Code; any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he or she is licensed pursuant to the provisions of the Contractors License Law (Chapter 9 (commencing with Section 7000) of Division 8 of the Business and Professions Code) or that he or she is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars (\$500.00);

I, as a owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professional Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or herself or through his/her own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he/she did not build or improve for the purpose of sale.)

I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractors License Law).

I am exempt under Sec. B & PC for this reason:

Date Owner Signature

IN ISSUING THIS BUILDING PERMIT, the applicant represents, and the city relies on the representation of the applicant, that the applicant verified all measurements and locations shown on the application or accompanying drawings and that the improvement to be constructed does not violate any law or private agreement relating to permissible or prohibited locations for such improvements. This building permit does not authorize any illegal location of any improvement or the violation of any private agreement relating to location of improvements.

I certify that I have read this application and state that all information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction and herby authorize representative(s) of this city to enter upon the abovementioned property for inspection purposes.

Date 11-5-98 Applicant/Agent Signature Guy R. McKay

WORKER'S COMPENSATION DECLARATION: I hereby affirm under penalty of perjury one of the following declarations:

I have and will maintain a certificate of consent to self-insure for workers' compensation as provided for by Section 3700 of the Labor Code, for the performance of work for which the permit is issued.

I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:

Carrier Policy Number Exp Date

(This section need not be completed if the permit is for \$100 or less) I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

Date 11-5-98 Applicant Signature Guy R. McKay

WARNING: FAILURE TO SECURE WORKER'S COMPENSATION COVERAGE IS UNLAWFUL AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS (\$100,000) IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST AND ATTORNEY'S FEE.

THIS PERMIT SHALL EXPIRE BY LIMITATION IF WORK IS NOT COMMENCED WITHIN 180 DAYS.

PYRO CHEM, INC.

ISSUED

NOV 15 1994

**PCL-240/350/550
RESTAURANT KITCHEN
FIRE SUPPRESSION SYSTEM**

TECHNICAL MANUAL

COMPONENTS

DESIGN

INSTALLATION

MAINTENANCE



SHALL BE
violation of City Ordinance or State Law



**UL EX3830
November 1, 1994
P/N 315-420904**

SECTION 2 Cylinder Sizing

After determining the number and type of nozzles required to protect the duct, plenum, and cooking appliances, the total number of system flow points can be determined. The sum of all required nozzles' flow points is used to determine the size and quantity of cylinders required.

MAXIMUM CYLINDER FLOW POINTS	
Flow Points	Cylinder
8	PCL-240
13	PCL-350
20	PCL-550

For systems requiring more than twenty (20) flow points, any combination of cylinders can be used provided the total flow point requirements are met.

EXAMPLE
If a system requires twenty-six (26) flow points, the following combinations of cylinders can be used:
1. 1 x PCL-550 and 1 x PCL-240 (28 FP total)
2. 2 x PCL-350 (26 FP total)

NOTE:
Cylinders cannot be manifolded together. Each cylinder must be piped separately.

SECTION 3 Piping Limitations

Pyro Chem Restaurant Fire Suppression System piping limitations are divided into two categories; *Main Supply Line Piping Limitations* and *Branch Line Piping Limitations*.

1. Main Supply Line Piping.

The main supply line is a run of pipe from the cylinder to the hazard area. In general, it is a straight run of pipe that runs through tees. Branch piping is connected to the side outlet of these tees.

The main supply line of the Pyro Chem Restaurant Fire Suppression System utilizes either straight line or split piping to simplify system installation.

Straight line piping is distinguished by the fact that the main supply line is a straight run of pipe that flows through tees. When straight line piping is used, the main supply line cannot run into the branch of a tee.

Split piping is distinguished by the fact that the main supply line runs into the branch of the first tee, splitting the main supply line in two. The main supply line can only be split once (as described above). When split piping is used, no branch piping can be connected to the main supply line before it is split. In split piping systems, the entire main supply line, including both sides of the split, cannot exceed the piping limitations outlined in this chapter. In addition, the equivalent lengths of the main

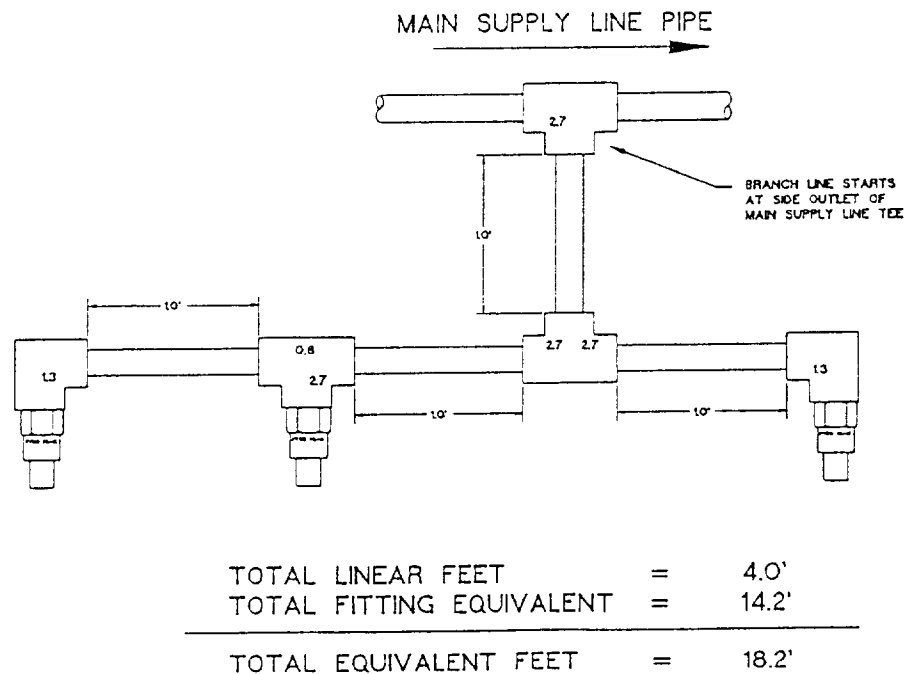
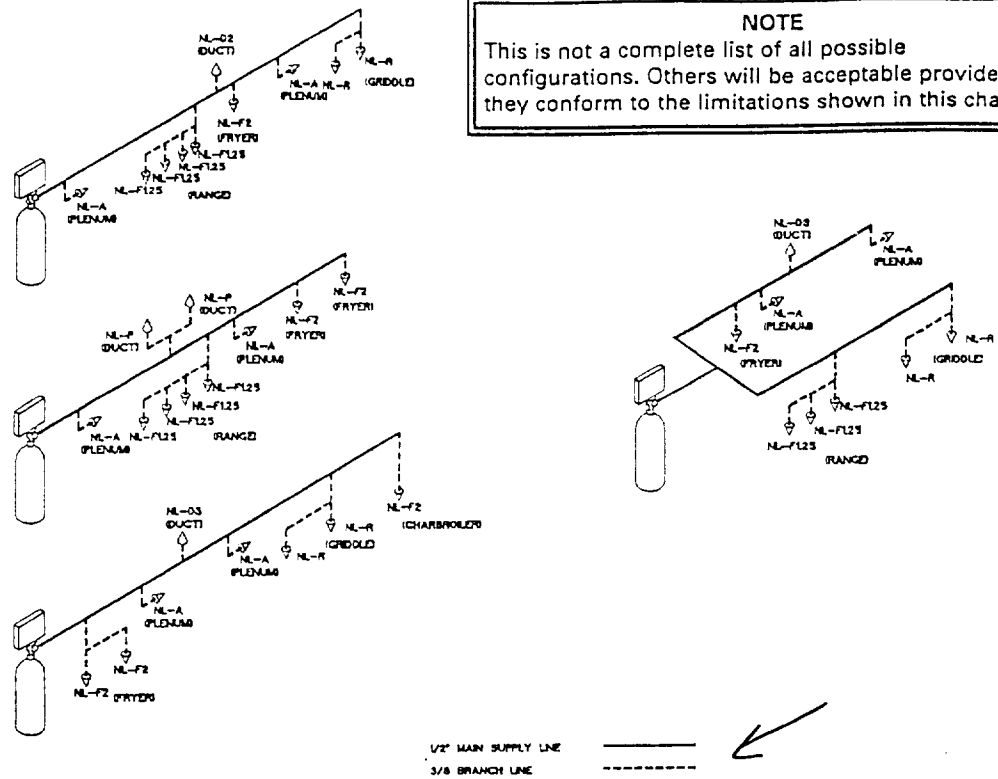
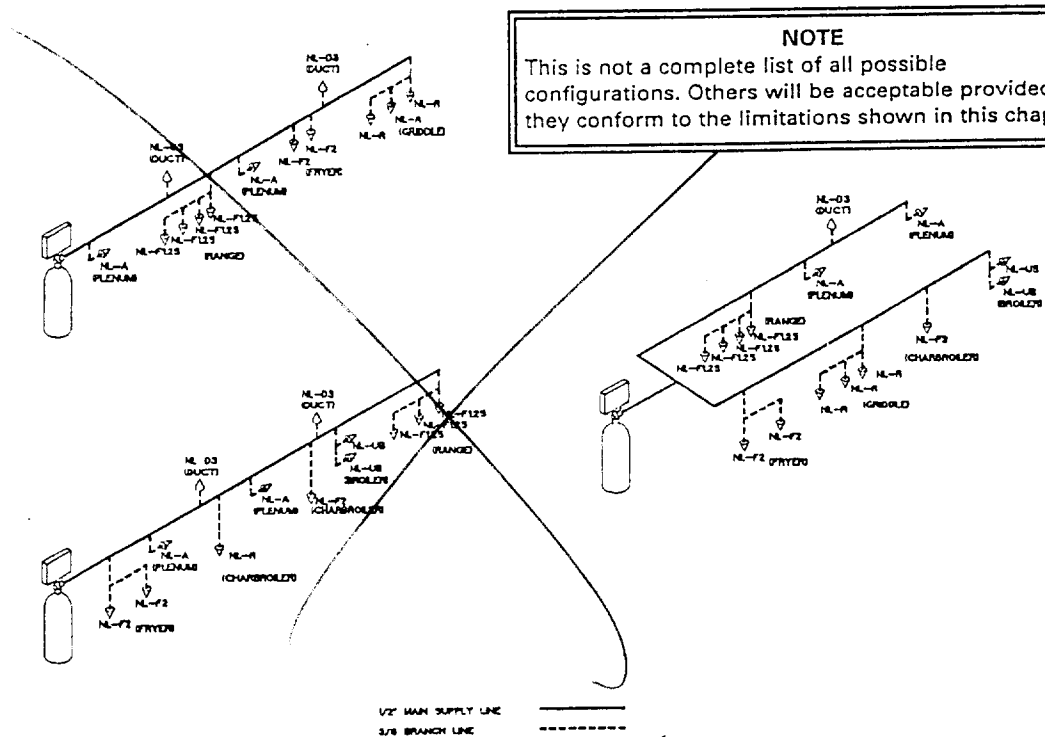


Figure 3-15. Example of Equivalent Piping.



NOTE
 This is not a complete list of all possible configurations. Others will be acceptable provided they conform to the limitations shown in this chapter.

Figure 3-17. Model PCL-350. Examples of Acceptable Piping Configurations.



NOTE
 This is not a complete list of all possible configurations. Others will be acceptable provided they conform to the limitations shown in this chapter.

Figure 3-18. Model PCL-550. Examples Of Acceptable Piping Configurations.

CHAPTER III System Design

This section will cover the proper design of the Pyro Chem Restaurant Fire Suppression System. It is divided into four (4) sections:

1. Nozzle Coverage and Placement.
2. Cylinder Sizing.
3. Piping Limitations.
4. Detector Requirements.

Each of these sections must be completed before attempting any installation.

SECTION 1

Nozzle Coverage and Placement

This section will provide guidelines for determining nozzle type, positioning, and quantity for duct, plenum, and appliance protection.

A. Duct Protection

The following three (3) nozzles have been developed for the protection of exhaust ducts:

1. Model NL-P.
2. Model NL-D2.
3. Model NL-D3.

Each nozzle is approved for use with the exhaust fan dampered, undampered with the fan on, or undampered with the fan off. It is not required that the fan be shut down or the exhaust duct be dampered for the system to operate properly. Each nozzle is approved to protect exhaust ducts of unlimited length.

1. Model NL-P.

The Model NL-P nozzle is a one (1) flow point nozzle designed for the protection of exhaust ducts. One (1) or two (2) Model NL-P nozzles can be used on a single duct branch.

A single Model NL-P exhaust duct nozzle can protect a square or rectangular duct with a maximum perimeter of 50 inches and a maximum one-side length of 17 inches. It can also protect a round duct with a maximum circumference of 50 inches and a maximum diameter of 16 inches (see Figure 3-1). The nozzle must be installed on the centerline of the duct and aimed directly into the duct opening (see Figure 3-2).

Two (2) Model NL-P exhaust duct nozzles can protect a square or rectangular duct with a maximum perimeter of 84 inches and a maximum one-side length of 34 inches. They can also protect a round duct with a maximum circumference of 84 inches and a maximum diameter of 26.5 inches. When two (2) Model NL-P nozzles are used to protect a single duct, the cross sectional area of the duct must be divided into two equal symmetrical areas. The nozzle must then be installed on the center line of the area it protects and aimed directly into the duct opening (see Figure 3-2.1).

2. Model NL-D2.

The Model NL-D2 nozzle is a two (2) flow point nozzle designed for the protection of exhaust ducts. Only one (1) Model NL-D2 nozzle can be used on a single duct branch.

A single Model NL-D2 exhaust duct nozzle can protect a square or rectangular duct with a maximum perimeter of 75.5 inches and a maximum one-side length of 25 inches. It can also protect a round duct with a maximum circumference of 75.5 inches and a maximum diameter of 24 inches (see Figure 3-1). The nozzle must be installed on the centerline of the duct and aimed directly into the duct opening (see Figure 3-2).

3. Model NL-D3.

The Model NL-D3 nozzle is a three (3) flow point nozzle designed for the protection of exhaust ducts. One (1) or two (2) Model NL-D3 nozzles can be used on a single duct branch.

A single Model NL-D3 exhaust duct nozzle can protect a square or rectangular duct with a maximum perimeter of 100 inches and a maximum one-side length of 33 inches. It can also protect a round duct with a maximum circumference of 100 inches and a maximum diameter of 31.75 inches (see Figure 3-1).

The nozzle must be installed on the centerline of the duct and aimed directly into the duct opening (see Figure 3-2).

Two (2) Model NL-D3 exhaust duct nozzles can protect a square or rectangular duct with a maximum perimeter of 150 inches and a maximum one-side length of 66 inches. They can also protect a round duct with a maximum circumference of 150 inches and a maximum diameter of 47.5 inches. When two (2) Model NL-D3 nozzles are used to protect a single duct, the cross sectional area of the duct must be divided into two equal symmetrical areas. The nozzle must then be installed on the centerline of the area it protects and aimed directly into the duct opening (see Figure 3-2.1).

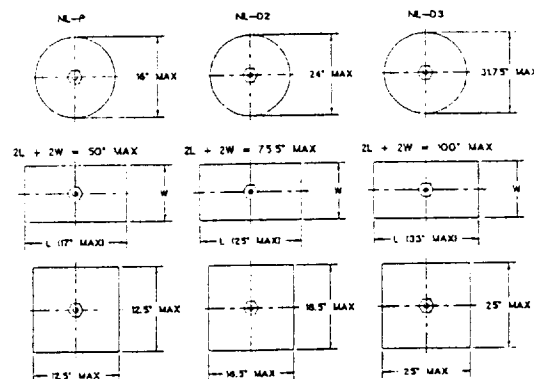


Figure 3-1. Duct Nozzle Coverage Limitations.

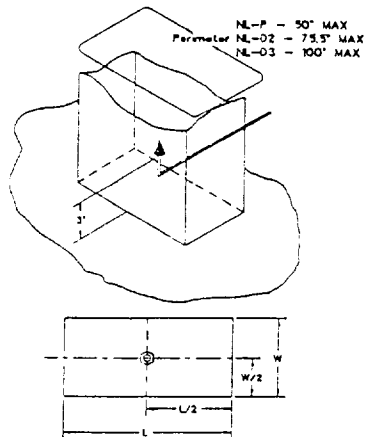


Figure 3-2. Single Nozzle Placement In Duct.

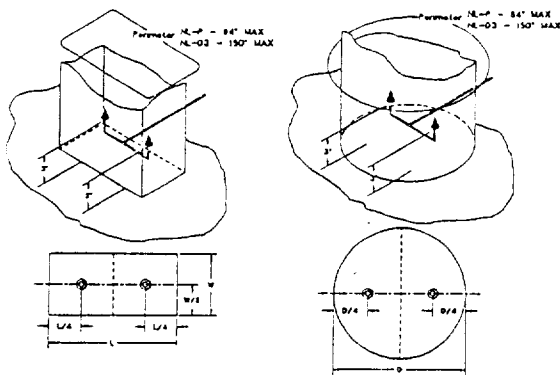


Figure 3-2.1. Dual Nozzle Placement In Duct.

Duct Nozzle Coverage Chart

NOZZLE	MAXIMUM SIDE	MAXIMUM PERIMETER	FLOW POINTS
NL-P	17"	50"	1
2 x NL-P	34"	84"	2
NL-D2	25"	75"	2
NL-D3	33"	100"	3
2 x NL-D3	66"	150"	6

NOTE: A SINGLE DUCT BRANCH CAN ONLY SUPPORT:
 1) A Single NL-P
 2) A Single NL-D2
 3) A Single NL-D3
 4) Two NL-P's
 5) Two NL-D3's

B. Plenum Protection

The Model NL-A nozzle is a one (1) flow point nozzle that has been developed to protect the plenum section of the exhaust hood. Only one (1) Model NL-A nozzle can be used on a single plenum branch. A single Model NL-A can protect a plenum (with single or V-Bank filters) with rectangular dimensions of 8' x 4' or less. Larger plenums can be protected by dividing the hazard area so that each nozzle protects an area of 8' x 4' or less (see Figure 3-3). The nozzle(s) must be located at the center of the V-Bank width or centered between the filter width when used with a single bank filter plenum. It must be within 4" of the wall it is mounted against (see Figure 3-4), or within 4" of the edge of the protected zone.

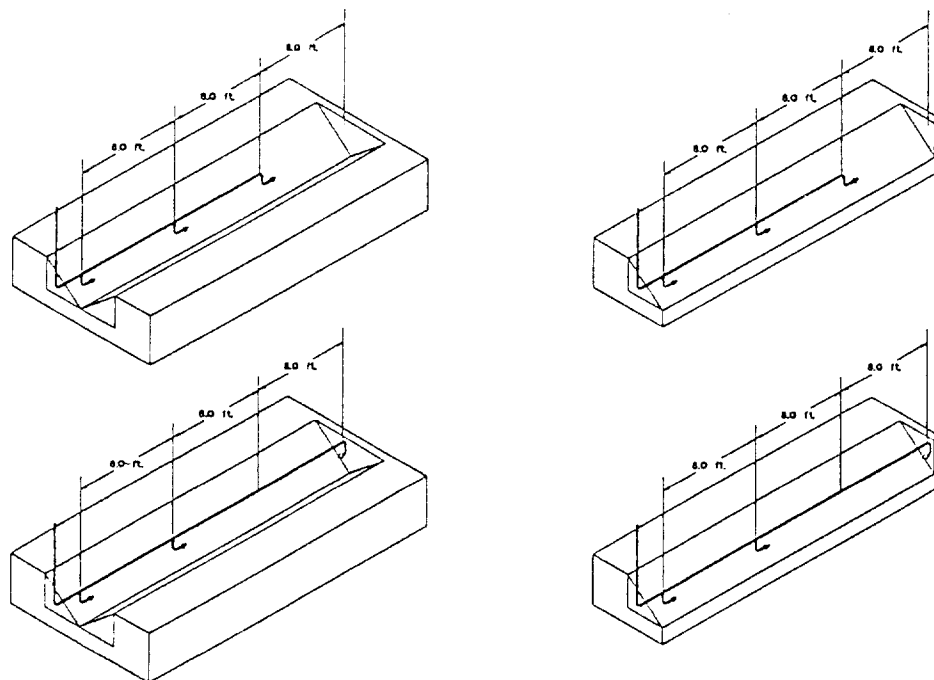


Figure 3-3. Plenum Coverage Limitations, Model NL-A Nozzle.

Nozzle Height:

The nozzle must be mounted 40' to 50' above the cooking surface.

b. Nozzle Aiming.

The tip of the Model NL-F1.25 nozzle has two flat areas designed to assist aiming. The nozzle must be positioned so that these flat areas are parallel to the longest side of the protected zone. See Figure 3-8.

2. Griddle Coverage.

The Model NL-R nozzle is a one (1) flow point nozzle that is used for griddle protection. The maximum griddle area that can be protected by a single NL-R nozzle is 30' x 30'.

The nozzle must be located over the griddle cooking surface, no more than six (6) inches from the edge of the protected zone. The nozzle must be aimed at the center of the protected zone. The nozzle must be mounted 24" to 50" above the cooking surface. See Figure 3-7.

NOTE
 Nozzle shall be located anywhere in the shaded area and aimed at the center of the protected zone.

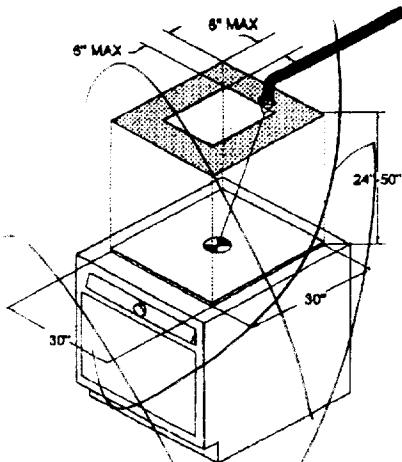


Figure 3-7. Model NL-R Nozzle Placement, Griddle.

3. Deep Fat Fryer Coverage.

The Model NL-F2 nozzle is a two (2) flow point nozzle that is used for the protection of a single vat of a deep fat fryer. The maximum area that can be protected by a single NL-F2 nozzle is:

- 1. Cooking Area: 14.75' x 14"
- 2. Integral Drip Board: 14.75' x 7.5"

The nozzle must be located over the cooking surface and aimed at the center of the protected zone. The nozzle must be mounted 30' to 50' above the top surface of the deep fat fryer (see Figure 3-8).

The tip of the Model NL-F2 nozzle has two flat areas designed to assist aiming. The nozzle must be positioned so that these flat areas are parallel to the longest side of the protected zone. See Figure 3-8.1.

NOTE
 Nozzle shall be located anywhere in the shaded area and aimed at the center of the protected zone.

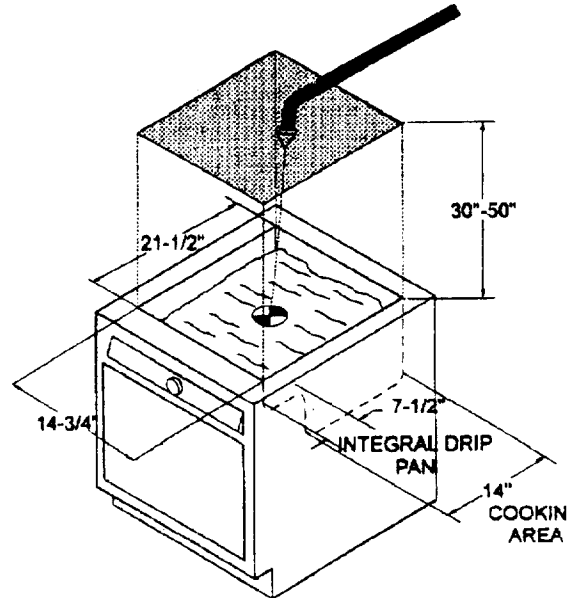


Figure 3-8. Model NL-F2 Nozzle Placement, Deep Fat Fryer.

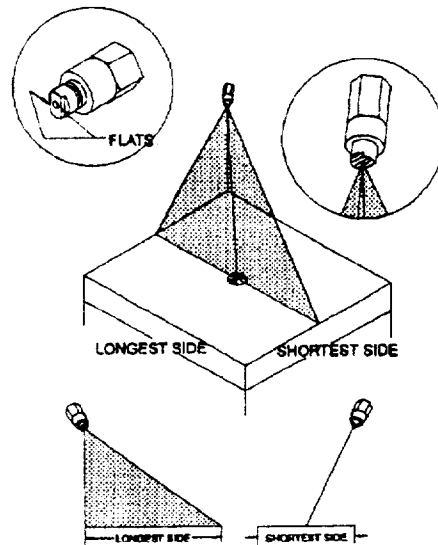


Figure 3-8.1. Model NL-F2 Nozzle Aiming.

9. Wok Coverage

The Model NL-R nozzle is a one (1) flow point nozzle that is used for wok protection. A single NL-R nozzle can cover a single wok of 14" to 24" in diameter, and 3.875" to 7.625" in depth.

The nozzle must be mounted 40" to 50" above the cooking surface at a radius of 12" from the center of the wok, regardless of wok diameter. The nozzle must be aimed at the center of the protected zone. See Figure 3-14.1.

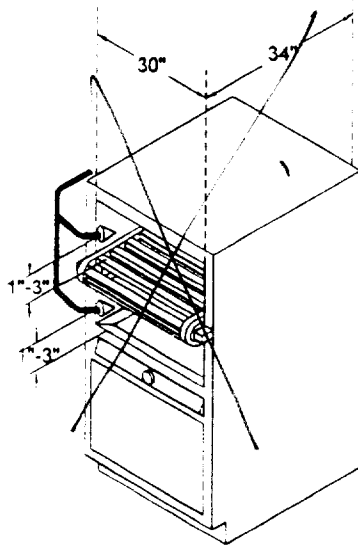


Figure 3-13. Model NL-UB Nozzle Placement, Closed Top Chain Broiler.

b. Open Top Chain Broiler Coverage.

The Model NL-A nozzle is a one (1) flow point nozzle that is used for open top chain broiler protection. The maximum area that can be protected by an NL-A nozzles is 32" x 34".

The nozzle must be located over the opening and aimed at the center of the protected zone. The nozzle must be mounted 10' to 22" above the cooking surface. See Figure 3-14.

NOTE

Nozzle shall be located anywhere in the shaded area and aimed at the center of the protected zone.

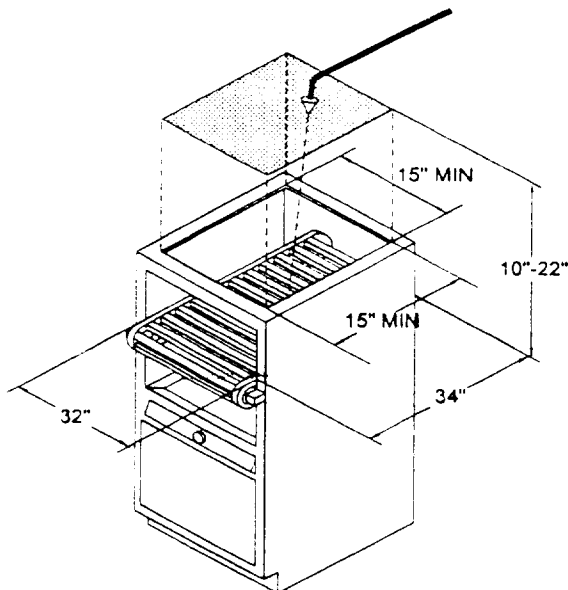


Figure 3-14. Model NL-A Nozzle Placement, Open Top Chain Broiler.

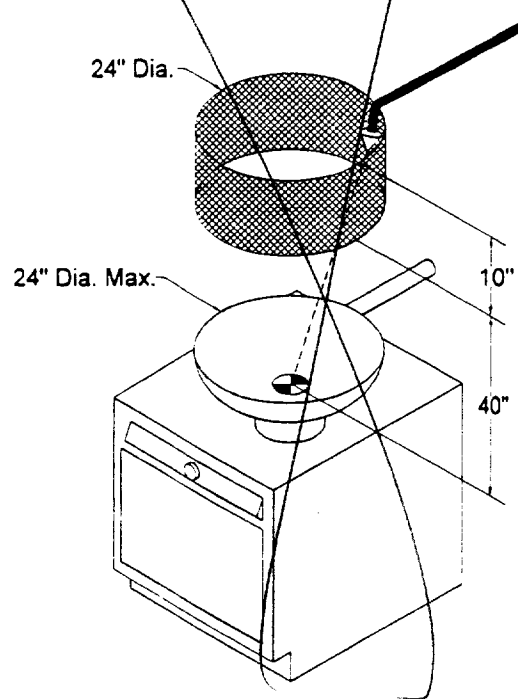
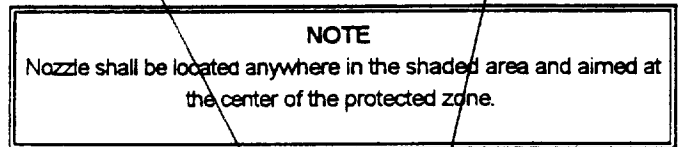
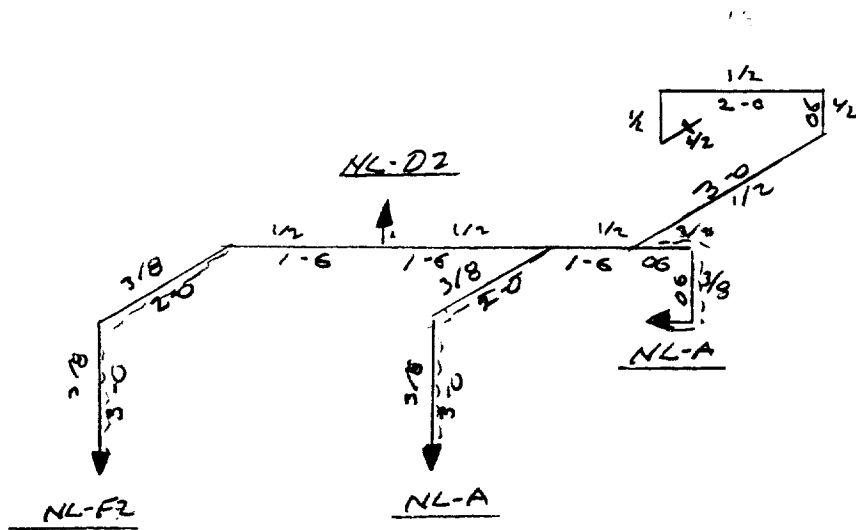


Figure 3-14.1. Model NL-R Placement, Wok.



Fryer
No Duct

————— 1/2" Sch. 40 Black
 - - - - - 3/8" Sch. 40 Black

WALK-IN

WALK-IN

Exit



INSTALLING

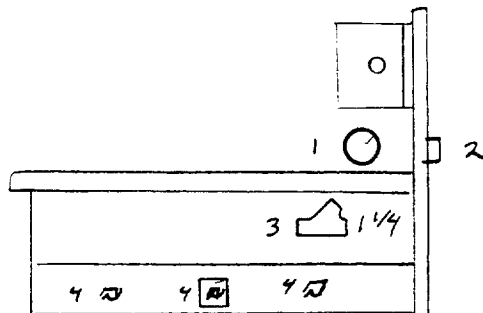
Auto.
P.O. Box
NOVATE

Contractors

STORAGE AREA

#	DESCRIPTION
1	PYRO C
2	REMOTE
3	Auto. Mex
4	DETECTI
5	DUCT NO
6	DUCT NO
7	PLENUM
8	
9	FRYER N
10	BROILER
11	UPRIGHT
12	GRIDDLE
13	WOK N
14	Range
15	OPEN TOP
TOTAL	

office



FRY (Good)

EXISTING



MEMORANDUM

C. G. 10
Sacramento Fire Department

To: BUILDING DEPARTMENT

Date: 11-9-98

From: Gordon Duncan,
Fire Marshal

Subject: **FIRE SYSTEM INSPECTION**

A final inspection of the newly installed fire system at:

4554 MACK Rd - Wimpy's

has been conducted by Inspector F. Johnson

on 11-6-98.

98-11070-C
Permit Number

N/A
Square Footage

KIT HOOD
Type Inspection

The system is acceptable by this department.

R. Woodman
By: Ross L. Woodman,
Fire Prevention Officer II

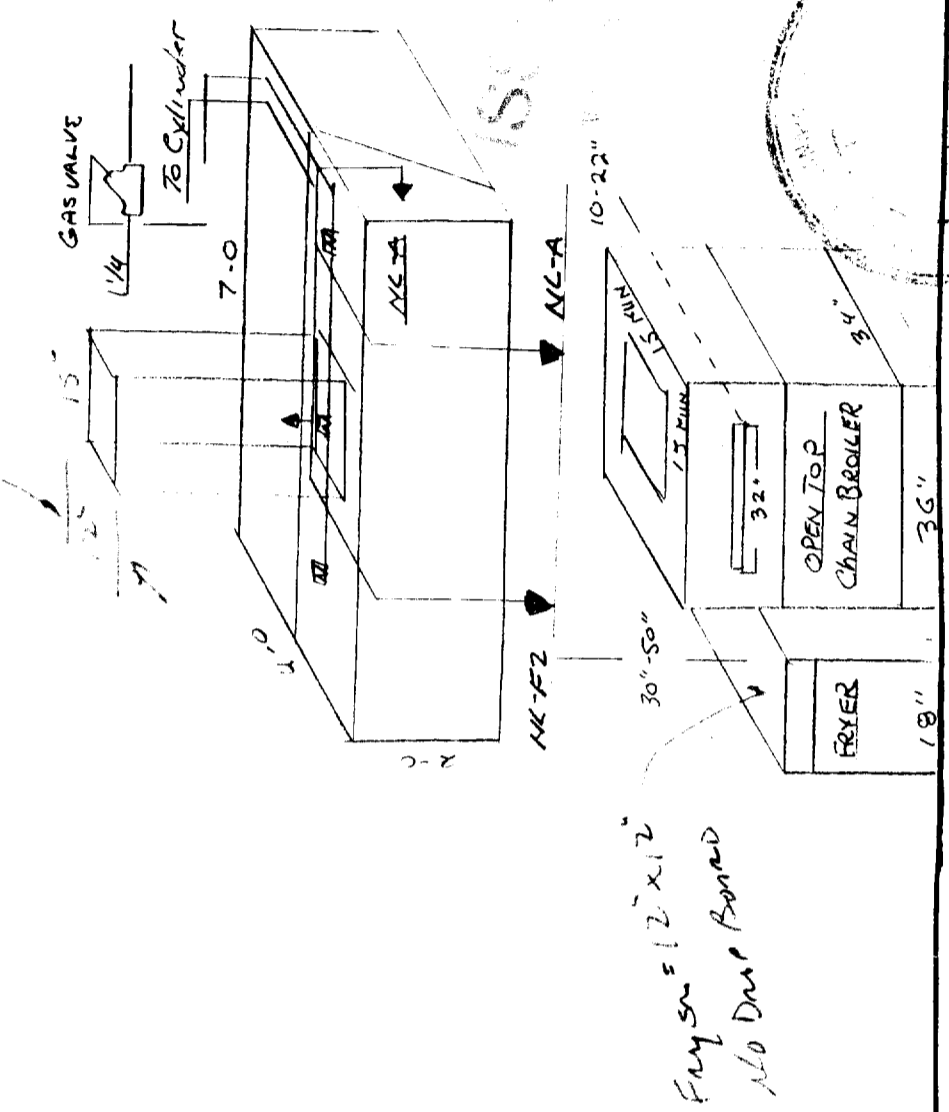
98-282
F. D. Reference Number

IF DUCT INSTALLED AT
 ON GROUND SPRINKLER
 PROTECTION IS REQUIRED

APPROVED
 11/14/98
 SACRAMENTO
 FIRE DEPARTMENT

SEE ATTACHED
 INFORMATION DETAILS
 FOR NOZZLES

Installation and specifications must be
 in accordance with NFPA 96 and it is unlawful
 to install any equipment from the
 above mentioned specifications from the
 above mentioned specifications from the



Fryer = 12' x 12"
 No Duct Board

JOB SITE

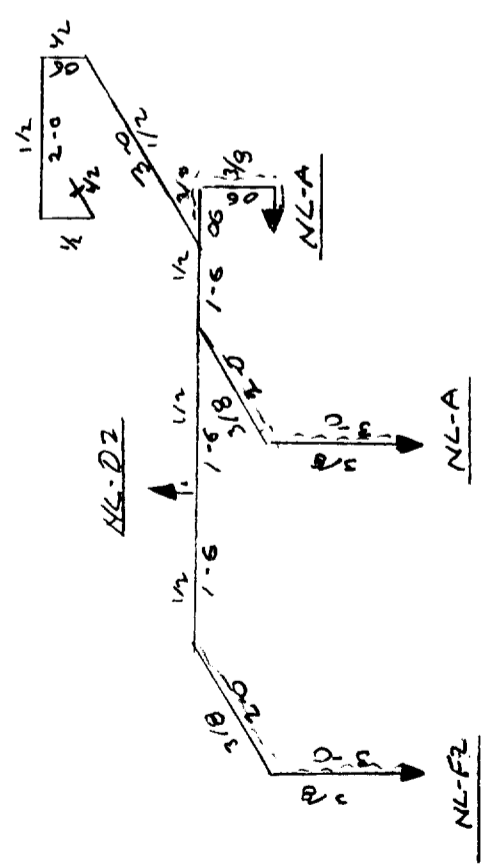
WIMPY'S RESTAURANT
 9855Y MACK ROAD
 SACRAMENTO CA

INSTALLING CONTRACTOR

AUTO-MATIC FIRE SAFETY
 P.O. BOX J
 NOVATO CALIF 94948

Contractors License # C-16 # 647259

#	DESCRIPTION	PART#	QUAN.	Flow Per	Total Flow	COMMENTS
1	PYRO CHEM SYSTEM	PER-300	1	1.3	6	A MAX ALLOWABLE FLOWS / 3 ACTUAL
2	REMOTE FULL	RPS-M				B 450 DEGREE FUSIBLE LINKS 3
3	Auto. Mech. Gas Valve	GVSO-1	1	1/14		C System to be installed per NEPA 96 & 17A all state & local codes & manufacturer's specifications.
4	DETECTORS	FLK-1	3	3-950°		
5	DUCT NOZZLE	NLD-2	1	2	2	D DRAWINGS NOT TO SCALE
6	DUCT NOZZLE	NLD-3	3	3		E DUCT(S) PARAMEJER(S) 5" x 12
7	PLENUM NOZZLE	NLA	1	1	1	F 70 SINGLE BANK FILTER PLENUM
8	RANGE NOZ.	NLE-25	1	1.25		G V-BANK FILTER PLENUM
9	RYER NOZZLE	NLE-2	1	2	2	H SYSTEM TO COMPLY WITH
10	BROILER NOZZLE	NLR	1	1		UL-300
11	UPRIGHT BROILER NOZ	NLUR	1	1		
12	GRIDDLE NOZZLE	NLR	1	1		
13	WOK NOZZLE	NLR	1	1		
14	Range Nozzle	NL-RH2	1	2		
15	OPEN TOP CHAIN BROILER	NL-A	1	1	1	
TOTAL Flow						



— 1/2" Sch. 40 BLACK
 - - - 3/8" Sch. 40 BLACK

STORAGE AREA

Exit

WALK-IN

WALK-IN

Office

