



Application Completes: Sections I, II, III (optional), IV, VI, and VII

I. IDENTIFICATION

1. Proposed Work Site at: 741 BRICK BOULEVARD BRICK NEW JERSEY
2. Name of Owner in Fee: FRIENDLY'S ICE CREAM Tel. (800) 576-8088
Address 1855 BOSTON ROAD, WILBRANTON MA 01095
street municipality zip code
3. Ownership in Fee: Public _____ Private _____
4. Principal Contractor: FRANKLIN SHEET METAL Tel. (732) 988-08
Address 122 SOUTH MAIN STREET DEER PARK NJ 0775
License No. OR, if new home, Builder Reg. No. _____ Exp. Date _____
Federal Employee No. 22-2481923 FAX: (732) 774-4285
5. Architect or Engineer _____ Tel. (_____) _____
Address _____
6. Responsible Person in Charge of Work _____
Tel (_____) _____ FAX (_____) _____

V. FEE SUMMARY (for office use only)

		Update	Update
1. Building	\$		
2. Electrical			
3. Plumbing			
4. Fire Protection			
5. Elevator Devices			
6. Subtotal	\$		
7. Less 20% for State Plan Review			
8. Subtotal	\$		
9. DCA Training Fee			
10. Subtotal			
11. Cert. of Occupancy			
12. Other			
13. TOTAL			

VI. BUILDING/SITE CHARACTERISTICS

1. Number of Stories _____
2. Height of Structure _____ ft.
3. Area — Largest Floor _____ sq. ft.
4. New Building Area _____ sq. ft.
5. Volume of New Structure _____ cu. ft.
6. Construction Classification _____
7. Total Land Area Disturbed _____ sq. ft.
8. Flood Hazard Zone _____
9. Base Flood Elevation _____ ft.
10. Wetlands yes _____
 no _____
11. Max. Live Load _____
12. Max. Occupancy Load _____

(office use only)

COMMERCE

II. PROPOSED WORK

1. ☐ Minor Work
2. ☐ New Building
3. ☐ Addition
4. ☐ Alteration
5. ☐ Fire Protection
6. ☐ Plumbing
7. ☐ Electrical
8. ☐ Elevator Devices
9. ☐ Asbestos Abat. Subch. 8
10. ☐ Lead Hazard Abatement
11. ☐ Demolition

TOTAL COSTS

Est. Cost

OPTIONAL (for office use only)

[illegible]

IV. DOES OR WILL YOUR BUILDING CONTAIN ANY OF THE FOLLOWING?

1. ☐ Elevators/Escalators/Lifts/
Dumbwaiters/Moving Walks
2. ☐ High Pressure Boilers
3. ☐ Pressure Vessels
4. ☐ Refrigeration Systems
5. ☐ Cross-Connections/Backflow Preventers
6. ☐ Hazardous Uses/Places of Assembly
7. ☐ Sprinklers
8. ☐ Smoke Control Systems in Open Wells
9. ☐ Underground Storage Tanks

VII. DESCRIPTION OF BUILDING USE

A. RESIDENTIAL

1. ☐ Hotels (R-1)
2. ☐ Multi-Family (R-2)
3. ☐ Two-Family (R-3) BOCA
4. ☐ Two-Family (R-4) CABO
5. ☐ One-Family (R-3) BOCA
6. ☐ One-Family (R-4) CABO

No. of dwelling units:

Before Construction

After Construction

Net Gain or Loss

B. NON-RESIDENTIAL

- ### 1. State Specific Use:

- ## 2. Use Group:

3. Change in Use Group. Indicate Former:

III. DO YOU WANT: (optional)

- ☐ Partial Releases
- ☐ Prototype Processing

CERTIFICATION IN LIEU OF OATH

I. OWNER SECTION (to be completed if the applicant is the owner in fee)

I hereby certify that I am the owner in fee of the property listed on Page 1.

Mark the following applicable boxes:

A. ☐ I further certify that a new home (private residence) will be constructed on this property for my own use and occupancy. This dwelling is to be occupied by myself and is not to be used for any purpose other than single family residential use. I attest that all construction, plumbing, or electrical work will be done, in whole or in part, by me or by subcontractors under my supervision, in accordance with all applicable laws; and, I further acknowledge that said new home is not covered under the New Home Warranty and Builders Registration Act (N.J.S.A. 46:3B-1 et seq.) and that such fact shall be disclosed to any person purchasing this property within ten years of the date of issuance of a certificate of occupancy.

I UNDERSTAND THAT IN MARKING BOX A, I ACKNOWLEDGE THAT I AM ASSUMING RESPONSIBILITY FOR THE WORK DONE ON SAID PROPERTY, THE CONDITION OF THE PROPERTY PRIOR TO, DURING, AND AFTER ANY WORK PERFORMED, AND FOR THE PERFORMANCE OF THE SUBCONTRACTORS I HIRE, EMPLOY, OR OTHERWISE CONTRACT OR WITH WHOM I MAKE AGREEMENTS TO PERFORM WORK. I AM VOLUNTARILY AND KNOWINGLY ASSUMING THIS RESPONSIBILITY.

B. ☐ I further certify the following as required by the New Jersey Uniform Construction Code, N.J.A.C. 5:23-2.15(e)1.vii:

I personally prepared the plans submitted for: 1) the new home referred to in A., or, 2) an addition, alteration, renovation, or repair to an existing single family residence owned and occupied by myself and located on the property listed on Page 1; or, 3) a new structure that will be physically separate from, but that will be deemed part of, an existing single family residence that is owned and occupied by myself and located on the property listed on Page 1.

C. ☐ I further certify that I will perform or supervise the following work:

C.1. ☐ Building C.2. ☐ Fire Protection

I further certify that I will perform the following work:

C.3. ☐ Electrical C.4. ☐ Plumbing

D. ☐ I agree to advise all contractors on this project that they are required to be registered with the New Jersey Division of Taxation and to comply with all New Jersey tax laws.

I further certify the following as required by the Uniform Construction Code, N.J.A.C. 5:23-2.15(a)5: All required State, county, and local prior approvals have been given, including such certification as the construction official may require.

I understand that if any of the above statements are willfully false, I am subject to punishment.

Signature _____

Date _____

II. AGENT SECTION (to be completed if the applicant is not the owner in fee)

I hereby certify the following as required by the Uniform Construction Code, N.J.A.C. 5:32-2.15(d): the proposed work is authorized by the owner in fee; and I have been authorized by the owner in fee to make this application as his agent.

I further certify the following as required by the Uniform Construction Code, N.J.A.C. 5:23-2.15(a)5: All required State, county, and local prior approvals have been given, including such certification as the construction official may require.

I agree to advise all contractors on this project that they are required to be registered with the New Jersey Division of Taxation and to comply with all New Jersey tax laws.

I understand that if any of the above statements are willfully false, I am subject to punishment.

☒ Check if contractor.

Agent Name STEVEN F. SMITH

Address 122 South Main Street

DEAN GARDEN, DEAL JERSEY 07756

Telephone (973) 988-0808

Signature Steven F. Smith

III. ☐ LEAD HAZARD ABATEMENT: Include Homeowner or Building Owner Affidavit as per N.J.A.C. 5:17.

OFFICE DATE RECEIVED: _____

VIII. PRIOR APPROVALS CHECKLIST (office use only)	LOCAL APPROVAL		COUNTY APPROVAL		REGIONAL APPROVAL		STATE APPROVAL		COMMENTS
	Prelimin. Initial	Final Date	Prelimin. Initial	Final Date	Prelimin. Initial	Final Date	Prelimin. Initial	Final Date	
☐ Zoning Officer									
☐ Planning Board									
☐ Zoning Board									
☐ Sewer Authority									
☐ Water Authority									
☐ Police Department									
☐ Health Department									
☐ Soil Conservation									
☐ N.J. Department of Community Affairs									
☐ N.J. Department of Transportation									
☐ N.J. Department of Environmental Protection									
☐ Utility Dig No.									
☐									
☐									

IX. SUBCODES AND SPECIAL REGULATIONS APPLICABLE (office use only—optional)

Name of Code & Edition

Name of Code & Edition

Building _____
 Electrical _____
 Plumbing _____
 Fire Protection _____
 Mechanical _____

Energy _____
 Barrier Free _____
 Flood Hazard _____
 As Built Elevation Cert. _____
 Other _____

Other _____

X. CERTIFICATES ISSUED (office use only)

	No.	DATE ISSUED	DATE EXPIRED	DATE REISSUED	DATE EXPIRED
☐ Temporary Certificate of Occupancy	_____	_____	_____	_____	_____
☐ Temporary Certificate of Compliance	_____	_____	_____	_____	_____
☐ Continued Certificate of Occupancy	_____	_____	_____	_____	_____
☐ Certificate of Compliance	_____	_____	_____	_____	_____
☐ Certificate of Occupancy	_____	_____	_____	_____	_____
☐ Certificate of Approval	_____	_____	_____	_____	_____
☐ Lead Abatement Clearance Certificate	_____	_____	_____	_____	_____



CONSTRUCTION PERMIT

Date Issued

Permit #

IDENTIFICATION Block

673

Lot

13

Qualification Code

Work Site Location

741 BRICK BOULEVARD

Contractor

FRANKLIN SHEET METAL CO

Address

122 SOUTH MAIN STREET

Owner in Fee

FRIENDLY ICE CREAM CORPORATION OCEAN GROVE NEW JERSEY 07061

Address

1855 BOSTON ROAD

Tel.

(732) 988-0808

Wilbraham

MA

01095

Lic. No. or Bldrs. Reg. No.

Tel. (800) 556-8088 Ext: 33026

22-2481923

Is hereby granted permission to perform the following work:

☐ BUILDING☐ PLUMBING☐ LEAD HAZARD ABATEMENT☐ ELECTRICAL☒ FIRE PROTECTION☐ DEMOLITION☐ ELEVATOR DEVICES☐ ASBESTOS ABATEMENT☒ OTHER Kitchen Hood

(Subchapter 8 only)

DESCRIPTION OF WORK:

INSTALL CUSTOMER'S UL LISTED HOOD AND
FIRE SYSTEM.NOTE: If construction does not commence within one (1) year of date of issuance, or
if construction ceases for a period of six (6) months, this permit is void.

Estimated Cost of Work \$

Construction Official

Date

PAYMENTS (Office Use Only)

Building

Electrical

Plumbing

Fire Protection

Elevator Devices

Other

DCA State Permit Fee

Cert. of Occupancy

Other

Total

Check No.

Cash

Collected by

(see reverse side)

REQUIRED INSPECTIONS

Construction work must be inspected in accordance with the State Uniform Construction Code Regulations N.J.A.C. 5:23-2.18. This agency will carry out such periodic inspections during the progress of work as are necessary to insure that work installed conforms with the requirements of the Uniform Construction Code.

The owner or other responsible person in charge of work must notify this agency when work is ready for any required inspections specified below. Requests for inspections must be made at least 24 hours prior to the time the inspection is desired. Inspections will be performed within three business days of the time for which they are requested. The work must not proceed in a manner which will preclude the inspection until it has been made and approval given.

☐ Required inspections for all subcodes for one- and two-family dwellings are as follows:

1. The bottom of footing trenches before placement of footings, except that in the case of pile foundations, inspections shall be made in accordance with the requirements of the building subcode.
2. Foundations and all walls up to grade level prior to back filling.
3. Utility services, including septic.
4. All structural framing, connections, wall and roof sheathing and insulation; electrical rough wiring, panel and service installation; rough plumbing. The framing inspection shall take place after the rough electrical and plumbing inspections and after the installation of the heating, ventilation and/or air conditioning duct system. The insulation inspection shall be performed after all other subcode rough inspections and prior to the installation of any interior finish material.

☐ Additional required inspections for all subcodes of construction, for other than one- and two-family dwellings, are fire suppression systems, heat producing devices and Barrier Free subcode accessibility, if applicable.

☐ Required special inspections. The applicant by accepting the permit will be deemed to have consented to these requirements:

☐ A final inspection is required for each applicable subcode area before a final Certificate of Occupancy or Approval may be issued. The final inspections include the installation of all interior and exterior finish materials, sealing of exterior joints, mechanical system and other required equipment; electrical wiring, devices and fixtures; plumbing pipes, trim and fixtures; tests required by any provision of the adopted subcodes, Barrier Free accessibility, if applicable; and verification of compliance with NJAC 5:23-3.5, "Posting structures".

☐ A complete copy of released plans must be kept on the job site.



CONSTRUCTION PERMIT

Date Issued
Control #
Permit #

02/22/2006
C-06-0851
06-0494

IDENTIFICATION Block: 673 Lot: 13
Work Site Location: 741 BRICK BLVD. Brick Township, NJ
Owner in Fee REALTY INCOME CORP
Address 1855 BOSTON ROAD WILBRAHAM MA 01095
Telephone: (800) 576-8088

Qualifier
Contractor Address FRANKLEN SHEET METEAL CO
122 S MAIN ST OCEAN GROVE NJ 07756-
Telephone: 732/988-0808
Lic. No. or Bldrs. Reg. No.
Federal Employee No. 22-2481923

I am hereby granted permission to perform the following work:

- ☐ BUILDING ☐ PLUMBING ☐ LEAD HAZARD ABATEMENT
☐ ELECTRICAL ☒ FIRE PROTECTION ☐ DEMOLITION
☐ ELEVATOR DEVICES ☐ ASBESTOS ABATEMENT ☐ OTHER
(Subchapter 8 only)

DESCRIPTION OF WORK:

FIRE ALTERATIONS

Note: If construction does not commence within one (1) year of date of issuance, or if construction ceases for a period of six (6) months, this permit is void.

Estimated Cost of Work \$10,000

Construction Official

02/22/2006
Date

U.C.C. F170
equival (rev 8/03)

1 WHITE - INSPECTOR 2 CANARY - OFFICE 3 PINK - TAX ASSESSOR 4 GOLD - APPLICANT

REQUIRED INSPECTIONS

Construction work must be inspected in accordance with the State Uniform Construction Code Regulations N.J.A.C. 5:23-2.18. This agency will carry out such periodic inspections during the progress of work as are necessary to insure that the work installed conforms with the requirements of the Uniform Construction Code.

The owner or other responsible person in charge of work must notify this agency when work is ready for any required inspections specified below. Requests for inspections must be made at least 24 hours prior to the time the inspection is desired. Inspections will be performed within three business days of the time for which they are requested. The work must not proceed in a manner which will preclude the inspection until it has been made and approval granted.

☐ Required inspections for all subcodes for one- and two-family dwellings are as follows:

1. The bottom of footing trenches before placement of footings, except that in cases of pile foundations, inspections shall be made in accordance with the requirements of the building subcode.
2. Foundations and all walls up to grade level prior to back filling.
3. All structural framing, connections, wall and roof sheathing and insulation; electrical rough wiring, panel and service installation; rough plumbing. The framing inspection shall take place after the rough electrical and plumbing inspections and after the installation of the heating, ventilation and /or air conditioning duct system. The insulation inspection shall be performed after all other subcode rough inspections and prior to the installation of any interior finish material.
4. Installation of all finished materials, sealings of exterior joints, plumbing piping, trim and fixtures; electrical wiring, devices and fixtures; mechanical systems equipment.

Additional required inspections for all subcodes of construction, for other than one- and two-family dwellings, are fire suppression systems, heat producing devices and Barrier Free subcode accessibility, if applicable.

- ☐ Required special inspections. The applicant by accepting the permit will be deemed to have consented to these requirements:
- ☐ A final inspection is required for each applicable subcode area before a final Certificate of Occupancy or Approval may be issued. The final inspections include the installation of all interior and exterior finish materials, sealing of exterior joints, mechanical system and other required equipment; electrical wiring, devices and fixtures; plumbing pipes, trim and fixtures; tests required by any provision of the adopted subcodes, Barrier Free accessibility, if applicable; and verification of compliance with NJAC 5:23-3.5, "Posting structures".
- ☐ A complete copy of released plans must be kept on the job site.
- If you do not understand any of this information, please ask.

PAYMENTS (Office Use Only)	
Building	\$0
Electrical	\$0
Plumbing	\$0
Fire Protection	\$150
Elevator Devices	\$0
Other	\$0.00
DCA Training Fee	\$14
CO Fee	
Other	\$0
Total	\$164
Check No.	9876
Cash	\$0
Credit	\$0
Collected By	Ann Marie Hanlon

Franklen Sheet Metal Co., Inc.
Heating, Cooling & Ventilations
Commercial Kitchen Hoods

122 South Main Street

Ocean Grove, New Jersey 07756

PH. 732-988-0808

Job: *FRIENDLY'S*

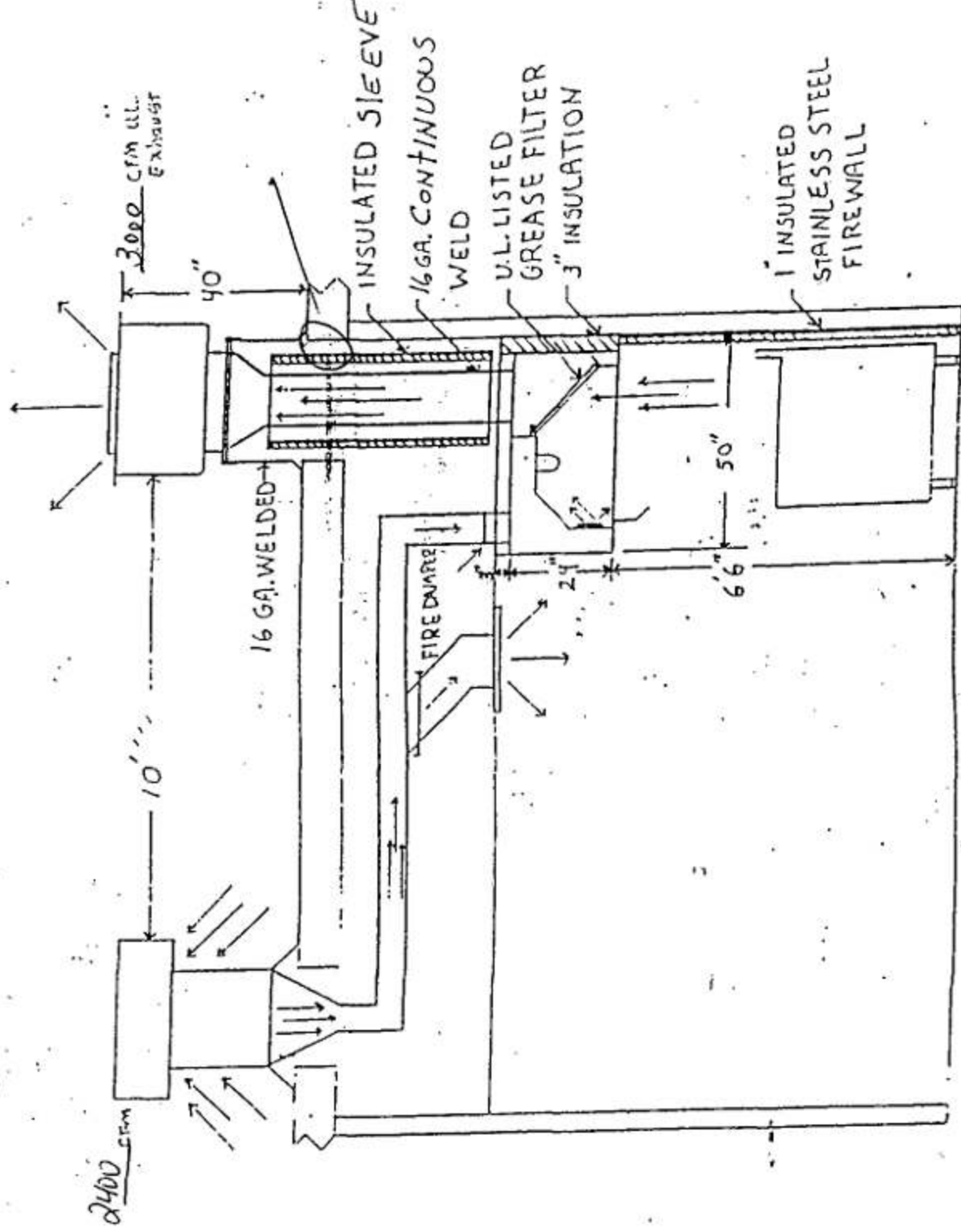
Location: *741 BRICK BOULEVARD*

BRICK, N.J.

Date: *2-13-2006*

Hood Dimension: *10' x 48" x 24"*

COMPENSATING CANOPY



The make-up air fan supplies the make-up air into hood and room.
A fusible link fire damper is installed to the requirements of:

The Boca Mechanical Code

STEVE

Exhaust hood
10' x 48"

#NLD2
Duct
nozzle w/
2 flow pts

Duct opening
16' x 16'

360 degree
fusible links

#NLP
Plenum
nozzle w/ 1
flow pt

#NLP
Plenum
nozzle w/ 1
flow pt

#NLF2
Fryer
nozzle w/ 2
flow pts

#NLF2
Fryer
nozzle w/ 2
flow pts

#NLH griddle
nozzle w/ 1
flow pts

#NLR griddle
nozzle w/ 1
flow pts

#NLR grill
nozzle w/
1 flow pt

Pyro Chem model
#PCL4.60 liquid fire
system w/ 10 flow
pts.
UL 300 approved.

existing
automatic
gas valve

Remote manual pull
station min 10' from hood

Deep Fat
Fryer
16" x 20"

Deep Fat
Fryer
16" x 20"

Griddle
36" x 27"

Flat Griddle
24" x 24"

Customer:
Friendly's Restaurant
741 Brick Blvd
Brick, NJ 08723

Drawn: 2/14/06 adf

Contractor:
Jersey Coast Fire Equipment
377 Asbury Road
Farmingdale, N.J. 07727
(732) 938-2020

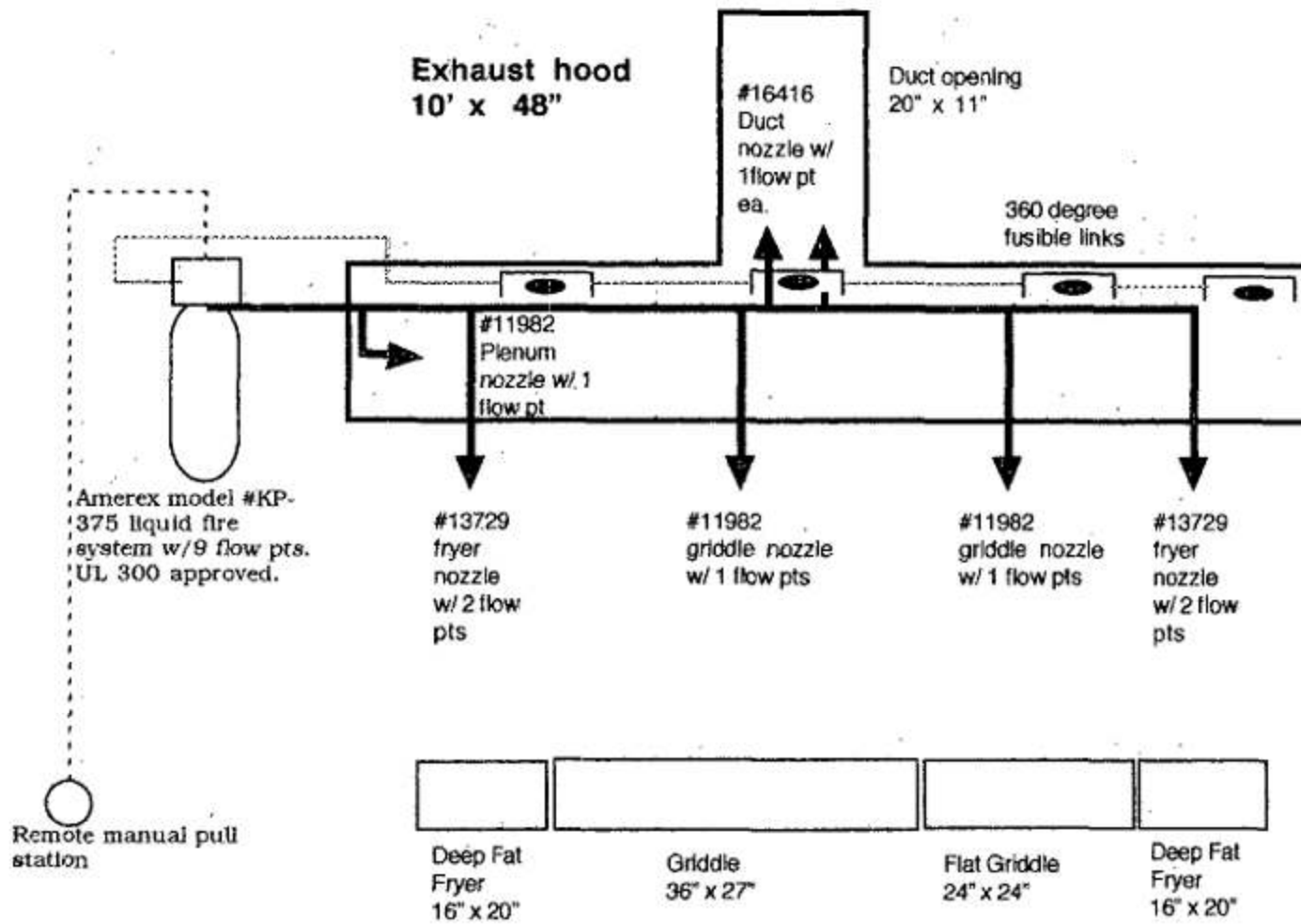
NJ License # P00206

Notes:

1) All cooking equipment is electric
and will shutdown thru a
microswitch supplied in the fire
system control head.

*See
As built*

new



Customer :
Friendly's Restaurant
741 Brick Blvd
Brick, NJ 08723

Drawn: 2/14/06 adf
As Built: 2/24/06 By J.R.

Contractor :
Jersey Coast Fire Equipment
377 Asbury Road
Farmingdale, N.J. 07727
(732) 938-2020

NJ License # P00206

Notes:
1) All cooking equipment is electric
and will shutdown thru a
microswitch supplied in the fire
system control head.



Work Order - Preengineered System

Jersey Coast Fire Equipment Inc.
377 Asbury Road
Farmingdale, NJ 07727
(732) 938-2020

FRIENDLY'S RESTAURANT - BRICK

CUSTOMER FRIENDLY'S RESTAURANT - BRICK

ADDRESS 741 BRICK BLVD

BRICK NJ 08723

PHONE 732-477-7139

CONTACT MANAGER - LISA

ROUTE SOUTH

TERMS NET 10

LAST INSPECTION February 24, 2006

NEXT INSPECTION February 24, 2006

SCHEDULED APPOINTMENT

NOTES

SYSTEM TYPE/SIZE KP375-SYS1 AMEREX KP375 FIRE SYSTEM INSPECTION

HOOD SIZE 10' X 48"

DUCT SIZE 20" X 11"

LINK QTY/DEGREES 4 @ 450

ALARM ON ☒

ALARM COMPANY INSIDE ONLY

ACCOUNT NUMBER INSIDE ONLY

NOZZLES

02 DUCT	01 PLENUM
SALAMANDER	HOTTOP
CANDY POT STOVE	GRILL
2 BURNER STOVE	4 BURNER STOVE

WOKS	02 FRYER
CHEESE MELTER	UPRIGHT BROILER
CHARBROILER	8 BURNER STOVE
6 BURNER STOVE	10 BURNER STOVE

1. All appliances properly covered w/correct nozzles
2. Check for correct duct & plenum nozzles
3. Check for correct piping size and limitations
4. Hood / duct penetrations sealed w/weld or U.I. device
5. Piping & conduit securely bracketed
6. Proper separation between fryers and flame
7. Check if seals intact, evidence of tampering
8. If system has been discharged, report same
9. Pressure gauge in proper range (if gauged)
10. Check cartridge WT (if applicable)
11. Hydrostatic test date
12. 6 year maintenance date
13. Inspect cylinder & mount
14. Check fuse links
15. Replace fuse links
16. System installed in accordance w/mfg U.L. listing

17. Test for proper operation from remote
18. Check operation of micro switch
19. Check operation of gas valve
20. Clean nozzles
21. Proper nozzle covers in place
22. All filters replaced
23. Fuel shut-off in on position
24. Replace system covers
25. Check exhaust fan in operating order
26. System operational & seals in place
27. Fan warning sign on hood
28. Proper hand portable extinguishers
29. Portable extinguishers properly serviced
30. Service & certification tag on system
31. Hood condition: clean
32. Hood condition: greasy - needs cleaning

This system (is / is not) in compliance with applicable fires codes and regulations.

EXPLANATION AND COMMENTS

Technician - REILLY, JOSEPH

Permit Number:

Date: 2/24/06

Customer:

X Lisa Kurn

FRANKLEN SHEET METAL CO., INC.
122 South Main Street
Ocean Grove, New Jersey 07756

PHONE 732-988-0808
FAX 732-774-4285

DATE: FEBRUARY 28, 2006

TO: BRICK TOWNSHIP BUILDING DEPT

ATTENTION: KEVIN

RE: FRIENDLY'S ICE CREAM
CUT SHEETS FOR DUCT WRAP

FROM: MINDY

WE ARE TRANSMITTING 20 PAGES INCLUDING THIS
TRANSMITTAL LETTER- IF TRANSMISSION IS INCOMPLETE-
PLEASE CONTACT OUR OFFICE.



Fire Barrier Duct Wrap 15A

Commercial Kitchen Grease Duct Fire Protection System

Product Data and Installation Instructions



Meets all
requirements
of NFPA 96

Complies with
International
Building Code

Complies with
International
Building Code

Material and Equipment

- 3M Fire Barrier Dust Wrap 15A Blanket, 1-1/2 in. (38 mm) thick, 24 in. (609 mm) or 48 in. (1219 mm) wide, 20 ft. (6096 mm) standard length. The 48 in. (1219 mm) wide blanket helps to minimize waste.
- Aluminum foil tape
- Minimum 3/4 in. (19 mm) wide filament tape
- Carbon steel or stainless steel banding material, minimum 1/2 in. (12.7 mm) wide, minimum 0.015 in. (0.38 mm) thick, with steel banding clips
- Hand banding material, stripping tool, and banding cutter
- Minimum 12 gauge copper coated steel insulation pins, galvanized steel coated clips, minimum 1-1/2 in. (38 mm) square or 1-1/2 in. (38 mm) dia. round, or equivalent sized insulated cup-head pins, for positive discharge end gum
- Access door hardware: four galvanized steel tripod rods, 1/4 in. (6 mm) diameter by 4-1/2 in. to 5 in. long (114 mm to 127 mm) with 3/4 in. (6 mm) wing nuts and 1/4 in. (6 mm) washers, 4 in. (102 mm) long steel hollow tubing to fit threaded rods.
- Minimum 4.0 lb. (1.8 kg) density mineral wool or scrap pieces of 3M Fire Barrier Dust Wrap 15A blanket
- 3M Fire Barrier 1000 NUB, 1003 3/4" or 2000+ Silicone Sealant

Storage

The 3M Fire Barrier Dust Wrap 15A and 3M Fire Barrier 1000 NUB, 1003 3/4" and 2000+ Silicone Sealant must be stored in a dry warehouse environment. Pallets should not be stacked.

Preparatory Work: 3M Fire Barrier Dust Wrap 15A is installed with common tools, such as knives, banding and capacitor discharge pins for applying insulation pins. In order to install the dust freetop system, the surfaces of all the openings and penetrating items need to be clean, dry, free of grease and free of dust.

Method: To minimize waste, 3M Fire Barrier Dust Wrap 15A material should be rolled out fairly before measuring. General instructions for installing the 3M Fire Barrier Dust Wrap 15A include a one-layer wrap construction applied directly to the duct. The 3M Fire Barrier Dust Wrap 15A blanket is wrapped around the perimeter of the duct and is cut to a length to overlap least not less than 3 in. (76 mm). The overlap made by adjacent blankets forms the "longitudinal" overlap. Aluminum foil tape is used to seal all cut edges of the blanket and any tears in the foil action.

There are three (3) approved installation techniques for installing the 3M Fire Barrier Dust Wrap 15A (See Figures 1A-1D and Figures 2A-2D).

1. Telescoping 3 in. (76 mm) Overlap Wrap
With the telescoping overlap wrap method, each blanket overlaps one adjacent blanket, and each blanket has one edge exposed and one edge covered by the next blanket as shown in Figure 1A and 1B. The visible edges of the perimeter overlaps all point in the same direction.

2. Checkerboard 3 in. (76 mm) Overlap Wrap
With the 3 in. (76 mm) checkerboard overlap wrap method, blankets with both edges exposed are placed with blankets with covered edges, as shown in Figure 1C. The visible edges of the perimeter overlaps alternate their directions and appear on every other blanket.

3. Butt Joint With Collar
With the butt joint and collar method, adjacent blankets are butted tightly together and 6 in. (152 mm) wide collar of 3M Fire Barrier Dust Wrap is centered over the joint, overlapping each blanket by 3 in. (76 mm) minimum as shown in Figure 1D.

In all three overlap techniques the perimeter overlaps can occur at any location on the duct.

The blanket is mechanically attached to the duct by steel banding or by welded fastening pins and clips for all three installation methods listed above.

For Sealing Only (See Figures 1A to 1D)

Flamant tape can be used to temporarily hold the blanket in place until the banding is applied. The steel banding is applied around the duct 1-1/2 in. (38 mm) from each edge of the blanket, and maximum 10-1/2 in. (267 mm) centers. The banding is placed around the material and tightened so as to sufficiently hold the 3M Fire Barrier Dust Wrap 15A in place against the duct, compressing the foil but not cutting the foil.

Additional Pinning to Prevent Sagging of the Wrap

For Ducts 24 in. (609 mm) and larger in width, additional pins are needed to support the blanket on the bottom horizontal surfaces and on the outside face of a vertical duct run. Space pins a maximum of 10-1/2 in. (267 mm) apart in the direction of the blanket width, and a maximum of 12 in. (30 cm) apart in the direction of the blanket length. Refer to paragraph below for more information on Mechanical Fastening with Pins.

For Mechanical Fastening with Pins Only

(See Figure 2A to 2D)

Insulation pins are welded to the duct in the centers of the overlaps a minimum of 1-1/2 in. (38 mm) from each edge of the blanket, and spaced a maximum of 10-1/2 in. (267 mm) on center along perimeter overlap, and a maximum of 10-1/2 in. (267 mm) on center along longitudinal overlaps. The blanket is

insulated cover the joints and held in place by galvanized spaced clips. Installation pins are fastened beyond the blanket wrap shall be turned down to eliminate sharp points. Insulated cup-head pins can be used at the same spacing requirements of the installation pins.

3.3.3.3.3. Support Hanger System: No need to be wrapped provided the hanger pins are at least a minimum of 3/8 in. (9.53 mm) diameter and spaced a maximum of 60 in. (152 cm) on center along the length of the duct. Use a minimum 2 in. x 2 in. x 1/8 in. (50 mm x 50 mm x 3.25 mm) steel angle steel support channel or SMACNA approved support system.

Access Door Installation (See Figure 3)

Four galvanized steel insulated rods, 1/4 in. diameter (6.35 mm) by 4-1/2 in. to 5 in. long (114 mm to 127 mm) are welded to the duct at the corners of the door opening. Four steel tubes (each 3/4 in. (19 mm) long) are placed over the rods to act as protection for the 3M Fire Barrier Duct Wrap. The tubes are fastened to the door. Four insulation pins are welded to the door panel for installation of the blanket. One layer of 3M Fire Barrier Duct Wrap 15A is cut approximately the same size as the access panel and employed over the insulation pins on the panel. It is essential that this layer fit tightly against the wrap surrounding the access door opening with no through openings. A second layer of 3M Fire Barrier Duct Wrap 15A is cut 30 lbs to overlap the first layer by a minimum of 1 in. (25.4 mm). The second layer is placed over the pins and both layers are locked in place with galvanized spaced clips. Pins that extend beyond the outer layer of 3M Fire Barrier Duct Wrap 15A shall be turned down to avoid sharp points on the door.

The insulated door panel is placed over the threaded rods and held in place with washers and wing nuts. The details are shown in Figure 3.

Penetrations (See Figures 4A to 4D)

When the duct penetrates a fire-rated wall, ceiling or floor, an approved firestop system must be employed. Figures 4A to 4D illustrate typical conditions.

To finish up the wrapped duct, follow the installation parameters detailed in the following Omega Point Laboratories, Inc. systems:

FS 357 W, FS 558 F, FS 559 W, FS 560 F, FS 561 F, FS 562 W, FS 563 W.

Other Applications

Refer to Figures 5, 6, 7, 8 and 9 for additional typical conditions.

7. Maintenance

No maintenance is required when installed in accordance with the 3M Installation Instructions. Once installed, if any section of the 3M Fire Barrier Duct Wrap 15A is damaged so that the blanket is damaged, the following procedures will apply:

- The damaged section should be removed by cutting the steel banding or removing the clips holding it in place.
- A new section of the same dimensions should be cut from a roll of 3M Fire Barrier Duct Wrap 15A, either 24 in. (60.9 cm) or 48 in. (121 cm) wide.
- The new section should be placed and fitted ensuring the seams overlap that existed previously.
- The steel banding should be placed around the material and fastened so as to sufficiently hold the 3M Fire Barrier Duct Wrap 15A in place.
- If the blanket has not been damaged but the foil has ripped, seal the rips with aluminum foil tape.

8. Purchase Information

3M Fire Barrier products are available through a network of nationwide distributors. For information on where to buy, go to www.3m.com/3mstop.

9. Safe Handling Information

Consult Material Safety Data Sheet prior to handling and disposing of 3M Fire Barrier Duct Wrap 15A.

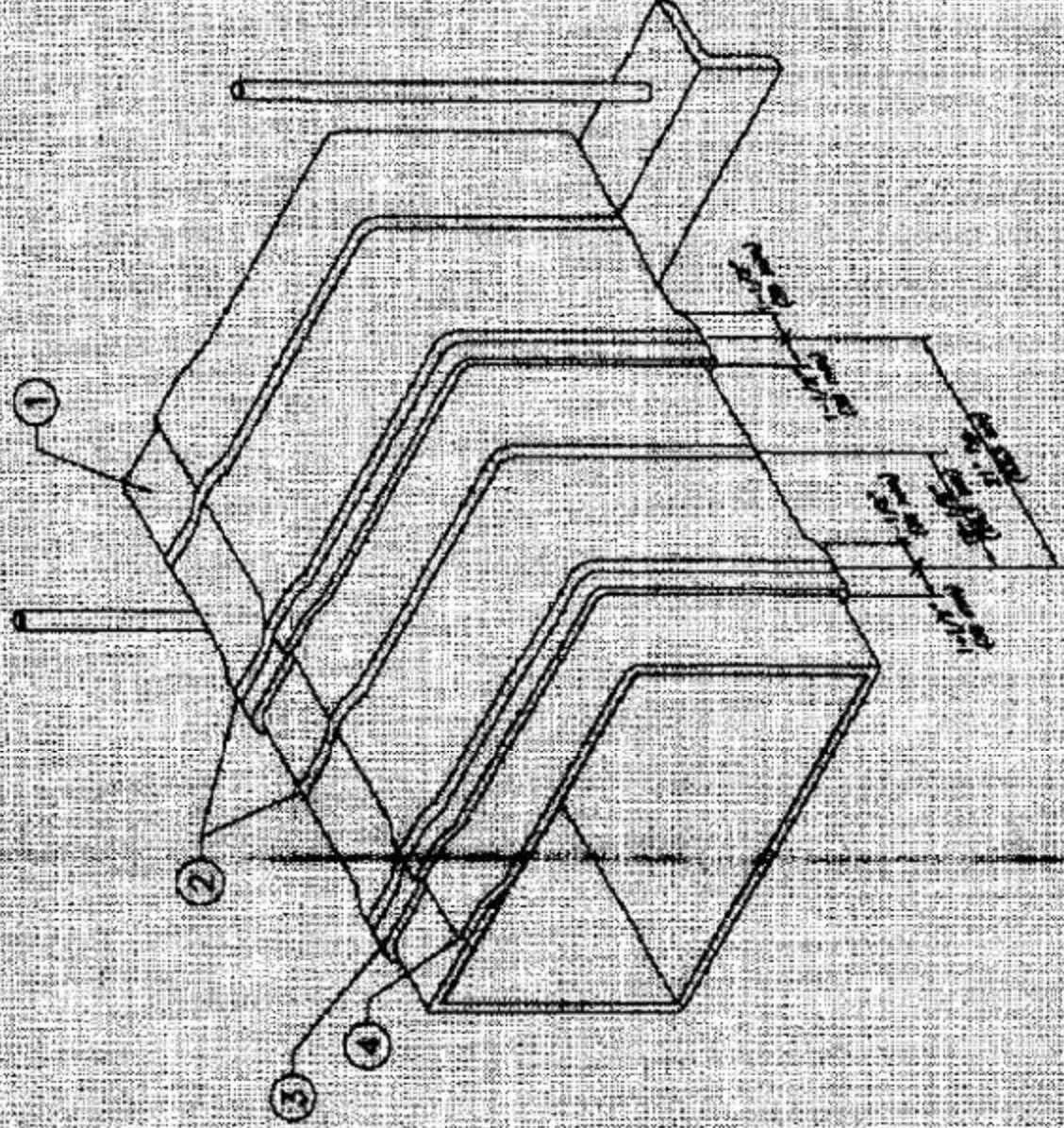
Figure 1A

200 Fire Barrier Duct Wrap 15A

Commercial Kitchen Grease Duct Systems

1 or 2 Hour Shield Alternative Zero Clearance to Combustibles

Telescoping Wrap Technique With Banding For Ducts 24 inches (60.9 cm) or Less



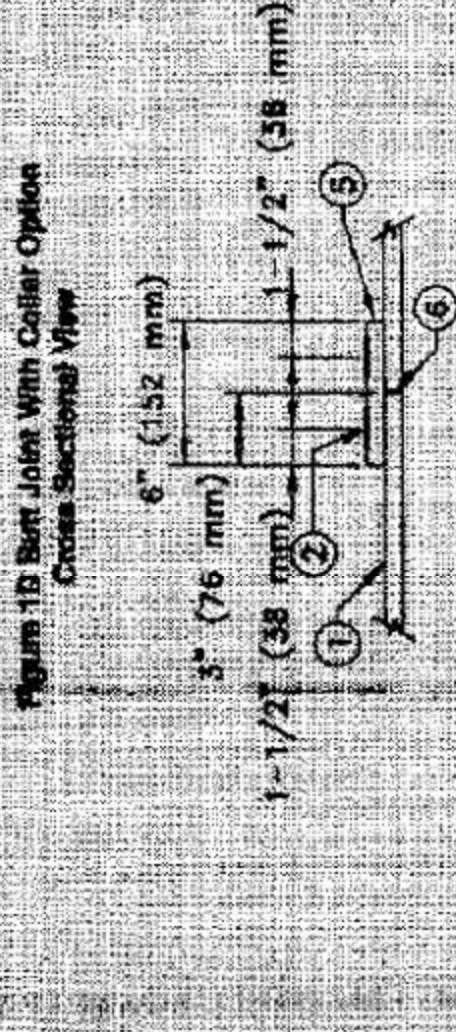
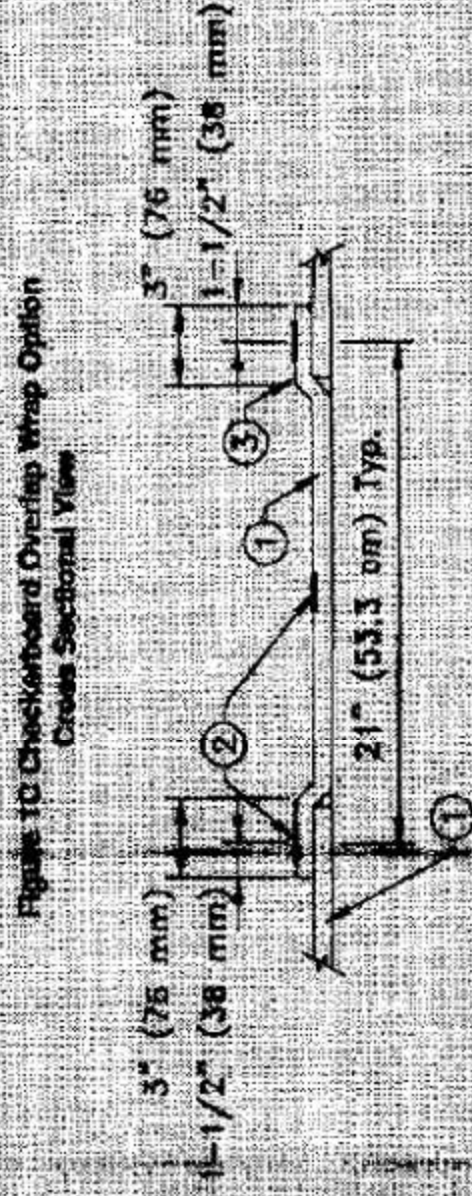
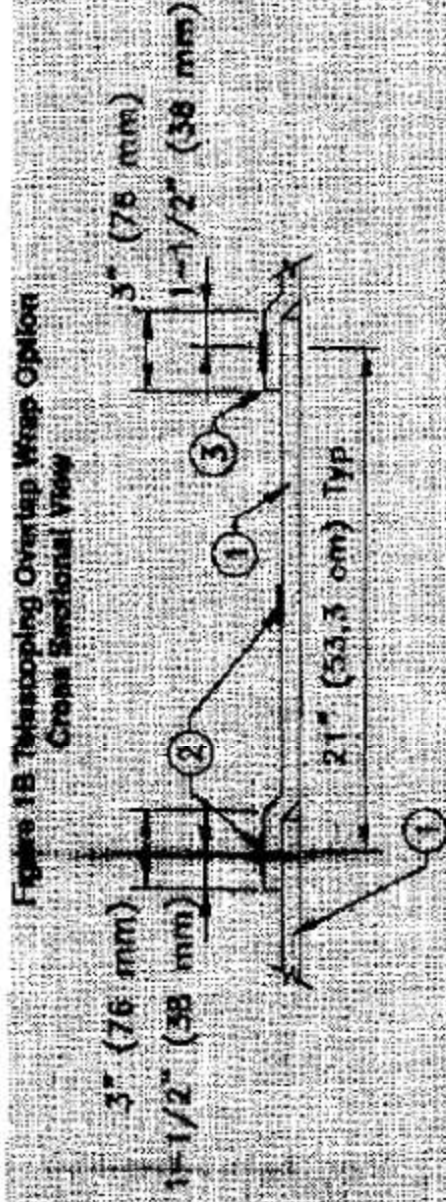
1. One Layer 200 Fire Barrier Duct Wrap 15A

2. Shield Banding 1/2 in. (13 mm) Wide Min. Typical

3. 3 in. (76 mm) Min. Laps/Seal Overlap

4. 3 in. (76 mm) Min. P. Linear Overlap

Sealing/Overlap is limited by strength of combustible



- | | |
|---|---|
| 1 | One Layer 90A Fire Barrier Duct Wrap 15A |
| 2 | Steel Banding 1/2 in. (13 mm) Wide Min. Typical |
| 3 | 2 in. (76 mm) Min. Longitudinal Overlap |
| 4 | 5 in. (76 mm) Min. Radial Overlap |
| 5 | 6 in. (152 mm) Wide Collar Made From 90A Fire Barrier Duct Wrap 15A |
| 6 | Alternative Collar: Prefabricated 90A Fire Barrier 20A Collar |
| 7 | Fireproof Joint |

System integrity is limited by quality of installation.

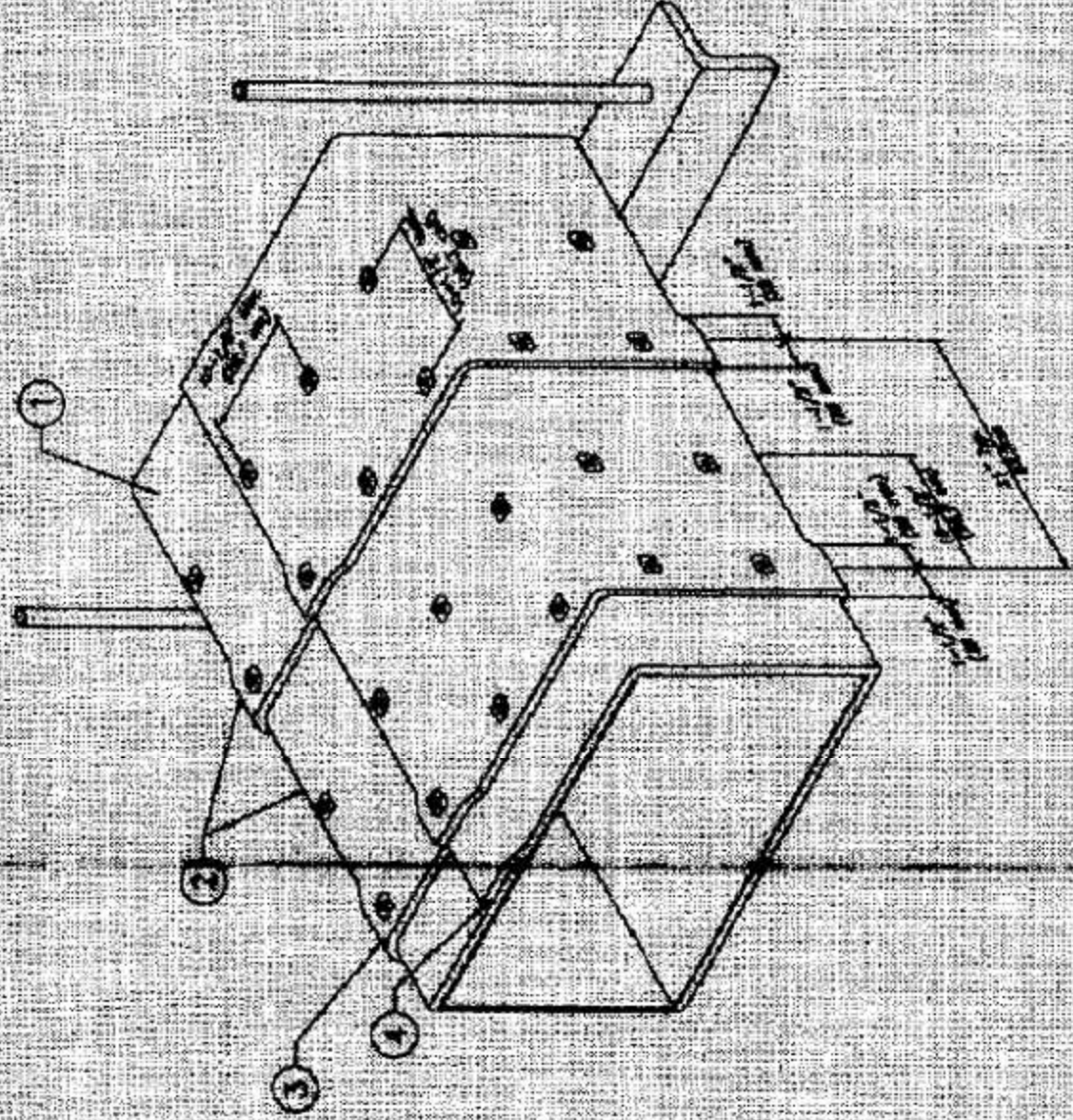
Figure 2A

3M Fire Barrier Duct Wrap 15A

Commercial Kitchen Grease Duct Systems

1 or 2 Hour Shut Alternative Zero Clearance to Combustibles

Trussing Wrap Technique With Weld Pins Only



1.	One Layer 2M Fire Barrier Duct Wrap 15A
2.	1 1/2 in. Square (38 mm) or 1 1/2 Dia. (38 mm) Galvanized Steel Clips
3.	3 in. (76 mm) Min. Longitudinal Overlap
4.	3 in. (76 mm) Min. Polymer Ducting

System integrity is subject to quality of installation.

Figure 2B Telescoping Overlap Wrap Option
Cross Sectional View

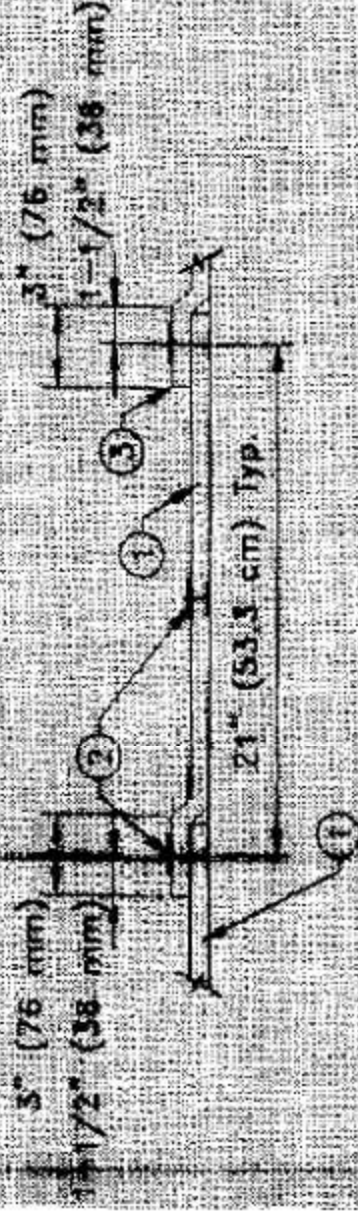


Figure 2C Gumboard Overlap Wrap Option
Cross Sectional View

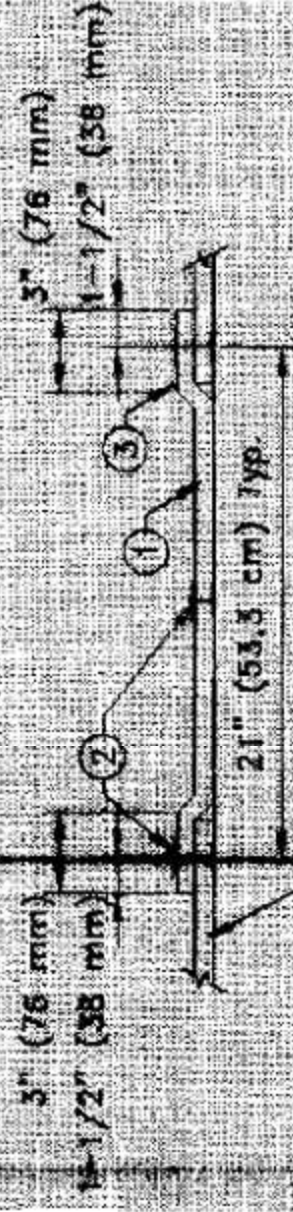
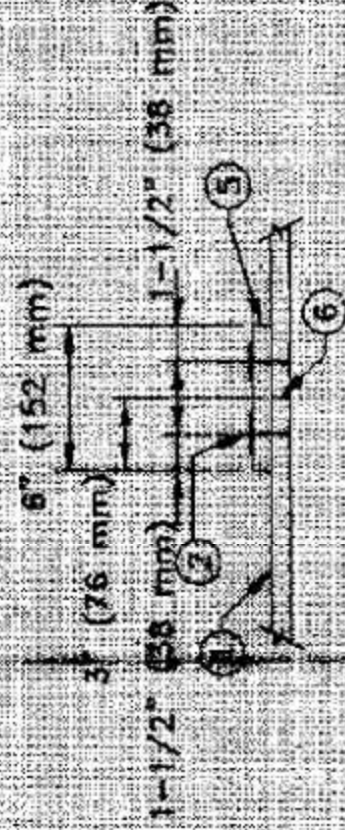


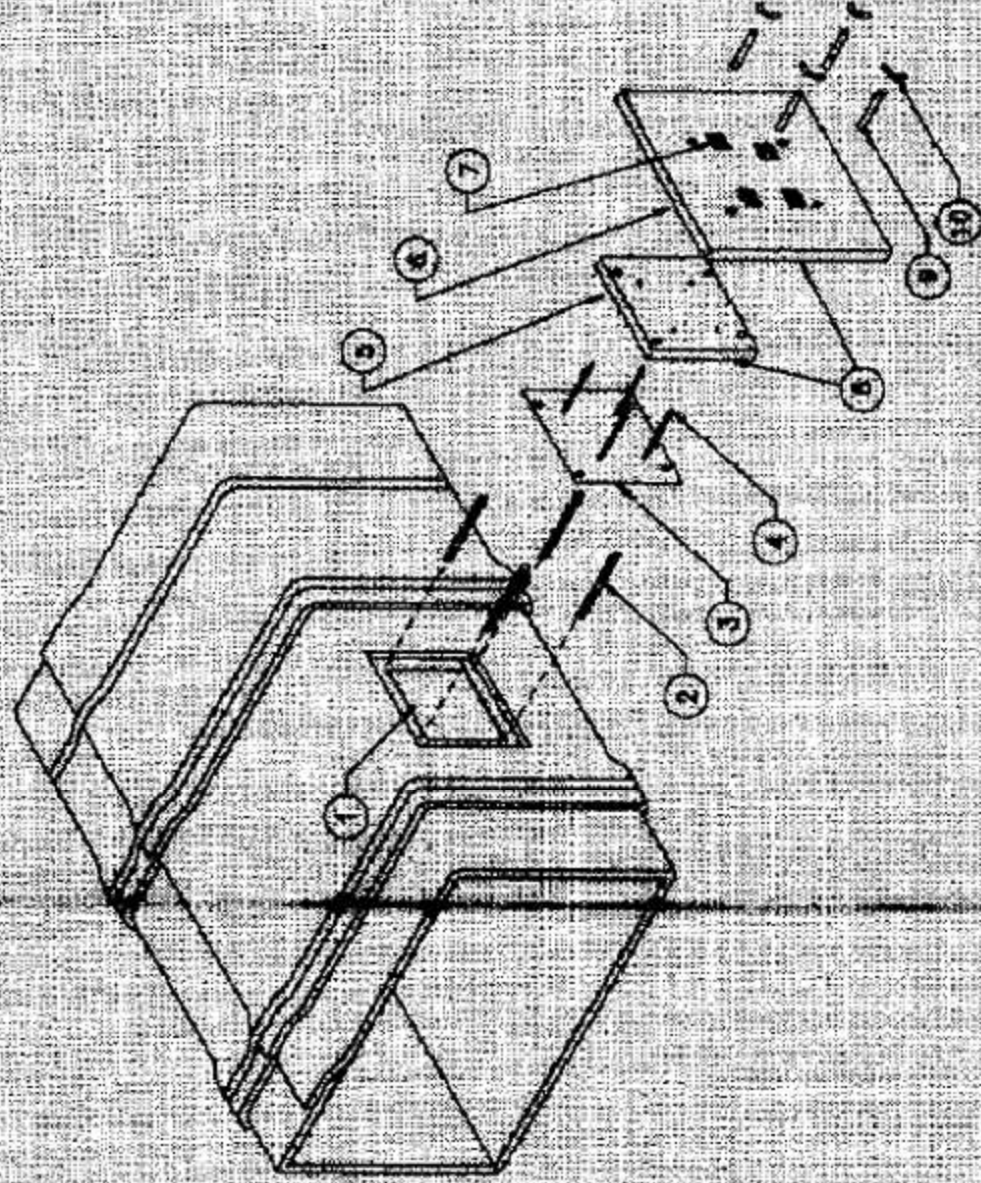
Figure 2D Butt Joint With Collar Option
Cross Sectional View



1	One Layer 30 Mil Barrier Duct Wrap 15A
2	1-1/2 in. Square (38 mm) x 1-1/2 Dia. (38 mm) Galvanized Speed Clip
3	3 in. (76 mm) 80% Longitudinal Overlap
4	3 in. (76 mm) 80% Perforated Overlap
5	3 in. (76 mm) Wide Collar Made From 30 Mil Barrier Duct Wrap 15A
6	Aluminum Collar, Preformed and 30 Mil Barrier 20A Collar
7	Primary Structural Joint

System Integrity is ensured by quality construction.

Figure 3
3M Fire Barrier Duct Wrap 15A
Commercial Kitchen Grease Duct Systems
1 or 2 Hour Access Door System

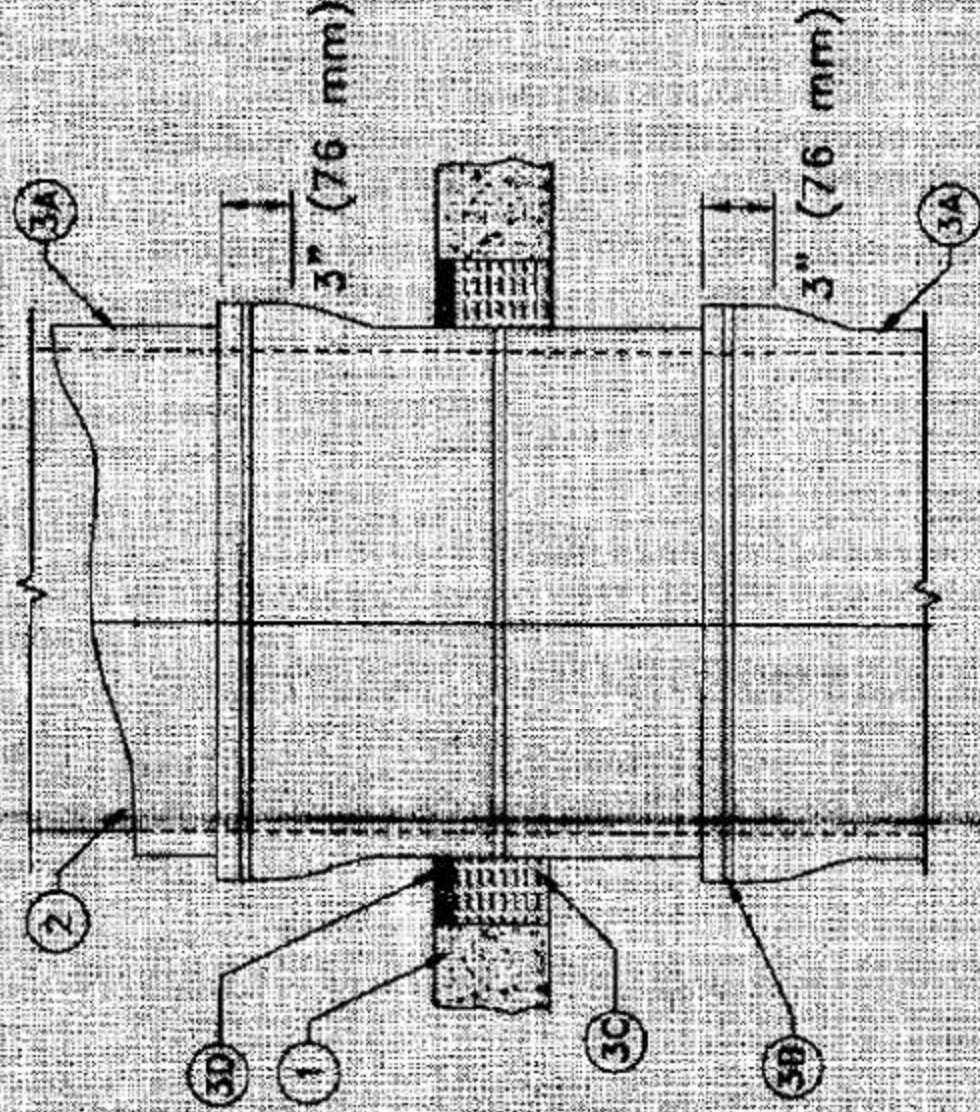


1.	Access Hole
2.	1/4 in. (6 mm) Dia. A Threaded Rod
3.	Access Cover - 16 Gauge
4.	Insulation Pins - Welded
5.	First Layer 3M Fire Barrier Duct Wrap 15A Cut Same Size As Cover
6.	Second Layer 3M Fire Barrier Duct Wrap 15A with 1 in. (25mm) Overlap On All Sides
7.	Board Clips
8.	Aluminum Tape Covering All Exposed Edges
9.	Spacers For Threaded Rods
10.	1/4 in. (6mm) Diameter Wing Nuts

System Integrity is Assured by Quality of Installation

Figure 4A

3M Fire Barrier Duct Wrap 15A
 Commercial Kitchen Grease Duct Systems
 1 & 2 Hour Through Penetration Systems
 2-1/2 inch (11.4 cm) Concrete Floor or Wall



Floor/Ceiling or Wall Assembly

2.1 Duct

3A One Layer 3M Fire Barrier Duct Wrap 15A

3B Building or Floor/Ceiling

3C Packing Material

3D 3M Fire Barrier 1000 NPS 1000 3A or 1000-3A Silicone Sealant
 For Wall Assembly Apply Sealant To Both Sides of Wall

System integrity is tested by quality of installation

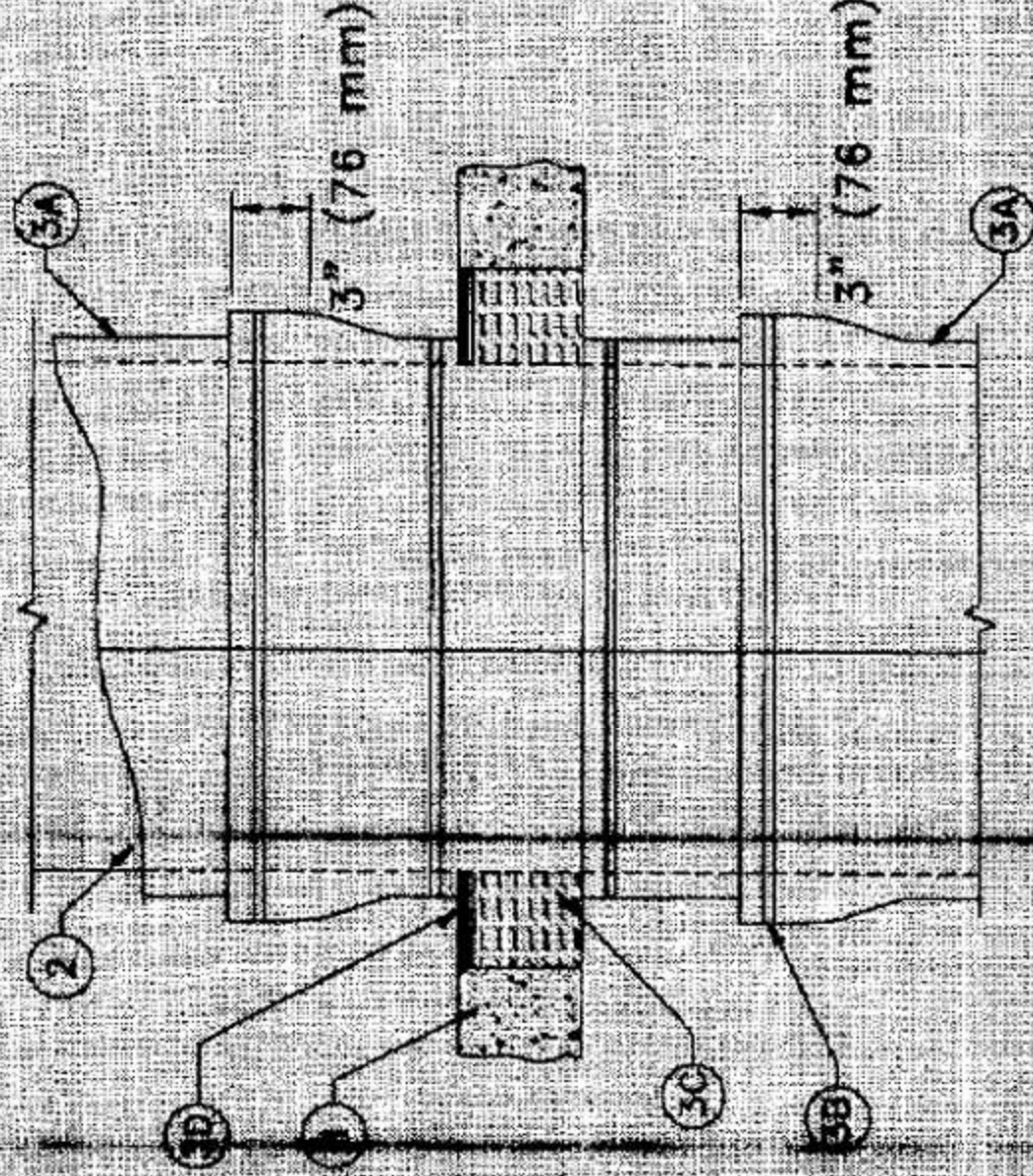
Page 10

Onegre Point Laboratories, Inc.
 Through Penetration Systems

FS 560 F
 FS 302 W

Figure 4C

5M Fibre Barrier Duro Wrap 15A
Commercial Kitchen Grease Duro Systems
1" x 2" Tear Through Penetration Systems
3-4" inch (11.4 cm) Concrete Floor or wall



- | | | |
|----|---|--------------------------------------|
| 1 | Shower/Cooling or Well Assembly | |
| 2 | Duct | |
| 3A | One Layer 3M Fire Barrier | 3000 Wingo 35A - Terminated on Earth |
| 3B | Bole of Floor of Well Panel | uniform |
| 3C | Boarding or Finishing | |
| 4C | Painting Material | |
| 5E | 3M Fire Barrier 1000 N45 | 3000 5M or 20000 Silicone Sealant |
| 6 | For What Assembly Apply Sealant To Both Sides of Wall | |

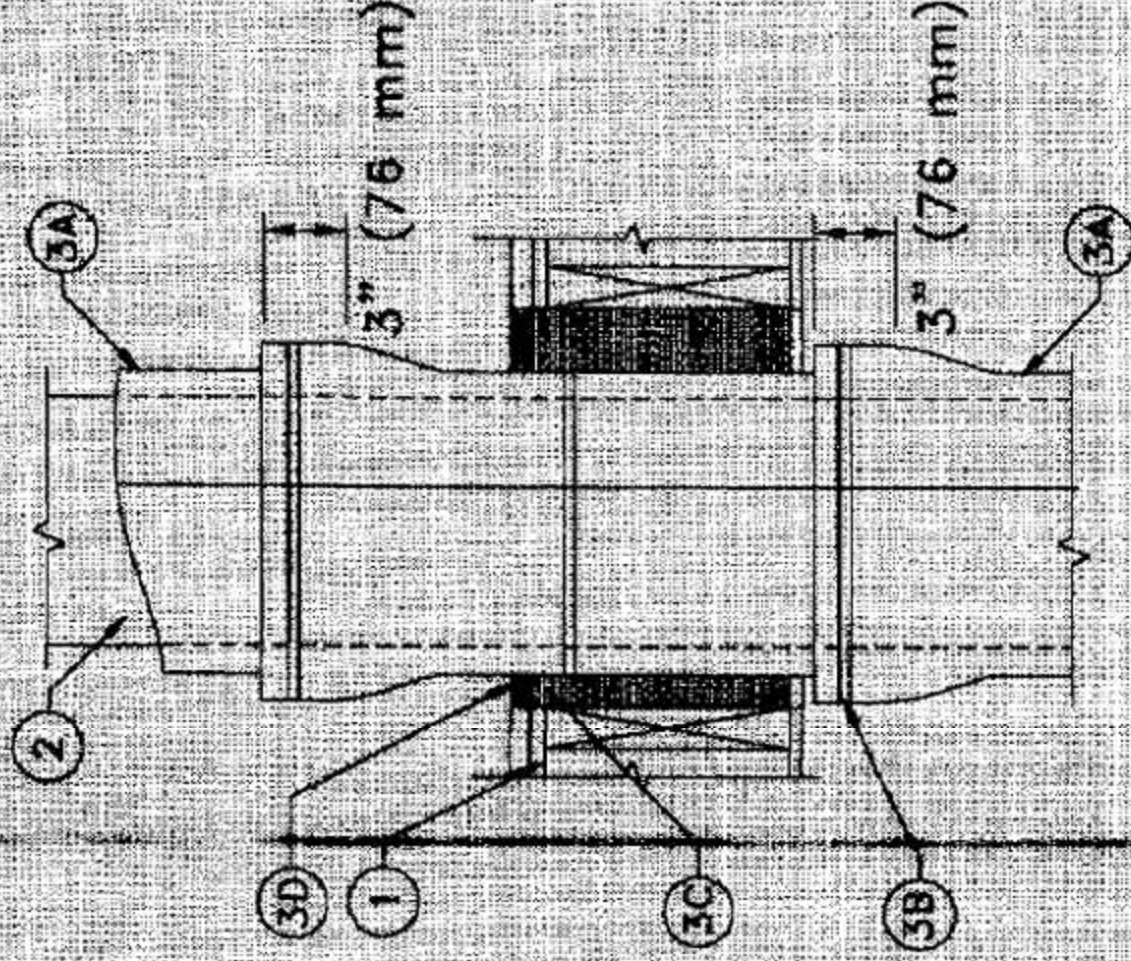
Omega Point Laboratories, Inc.
Thruway Permeation Systems

1985-86

Spigum integrity is tested by quality of education

Figure 4D

3M Fire Barrier Duct Wrap 15A
Commercial Kitchen Greases Duct Systems
1 Hour Through Penetration Systems
Pre-Finished Wood Gypsum - Floor/Ceiling Assembly



1.	Fire Barrier Duct Assembly
2.	Duct
3A.	Outer Layer 3M Fire Barrier Duct Wrap 15A
3B.	Reinforcing or Flanking
3C.	Reinforcing Material
3D.	3M Fire Barrier 1000, 1005, 1005 SA or 2000+ Silicone Sealant

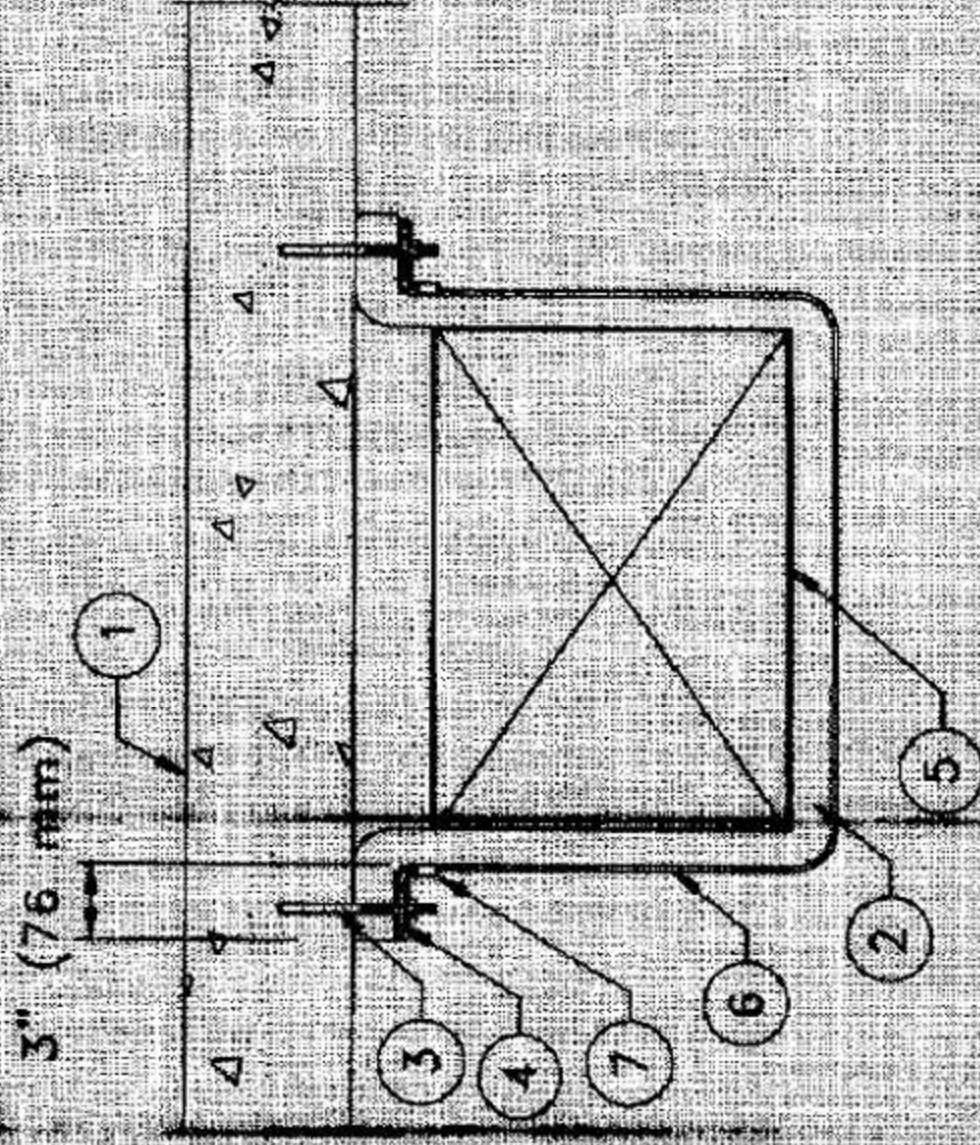
System Integrity is limited by quality of installation.

Omega Point Laboratories, Inc.
Through Penetration Systems

File 506 F

Figure 5

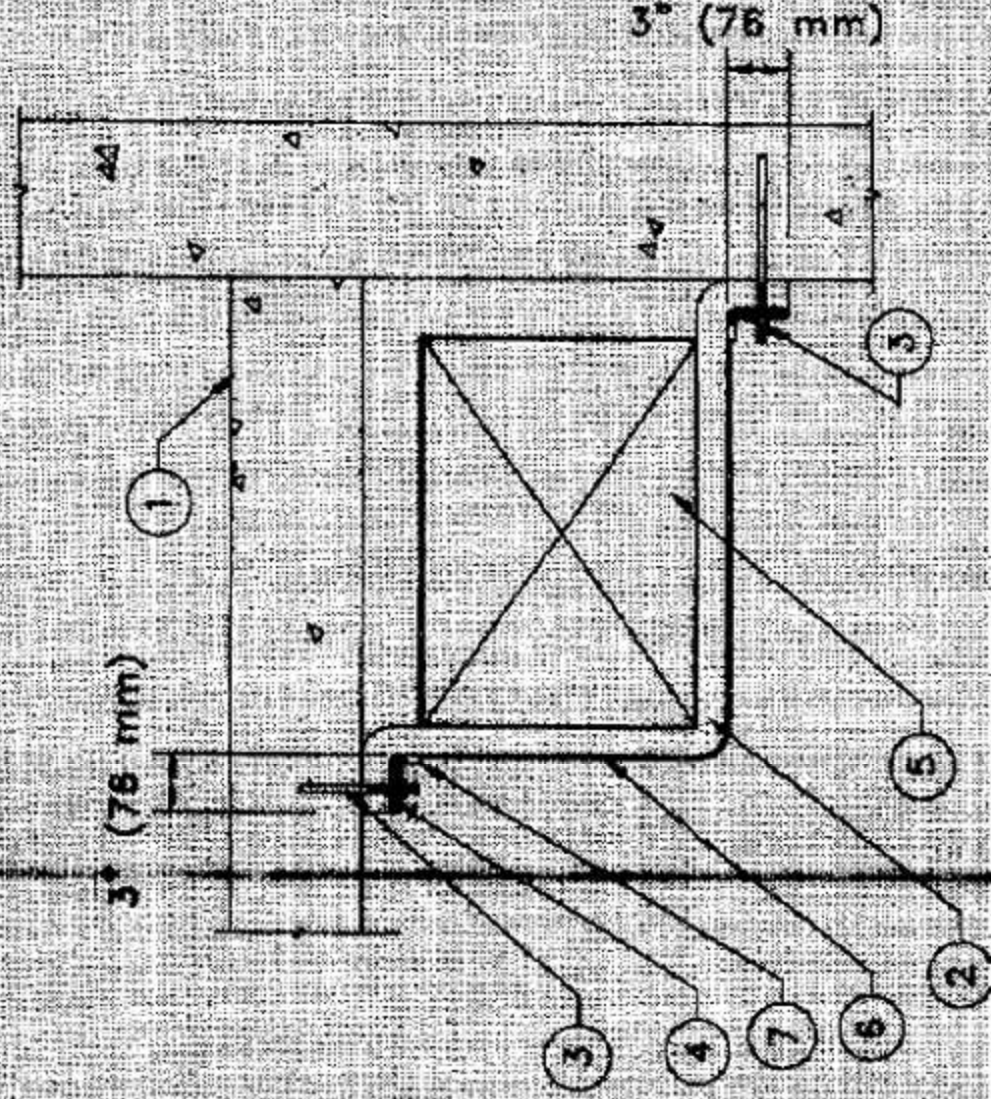
300 Fire Barrier Door Wrap 18A
Commercial Kitchen Grease Duct Systems
Suggested 1 or 2 Hour Three Sided Wrap



1	Concrete Slab
2	One Layer 304 Fire Barrier Door Wrap 18A
3	Concrete Fasteners - Min. diam. 1/4 in. (6 mm) Dia. Steel Concrete Anchors
4	1/8 in. (3mm) Thick x 2 in. (50mm - 70mm) Wide Bar Stock Plywood 12 in. (30 cm)
5	Duct
6	Sealing
7	Exterior Clap

Figure 6

SM Fire Barrier Duct Wrap 15A
Commercial Kitchen Grease Duct Systems
Suggested 1 of 2 Two Hour Two Sided Wrap



1	Concrete Slab
2	One Layer SM Fire Barrier Duct Wrap 15A
3	Concrete Foundation
4	1/8 in. (3 mm) Thick
5	Duct
6	Barreling
7	Barreling Clips

System integrity is tested by quality of installation

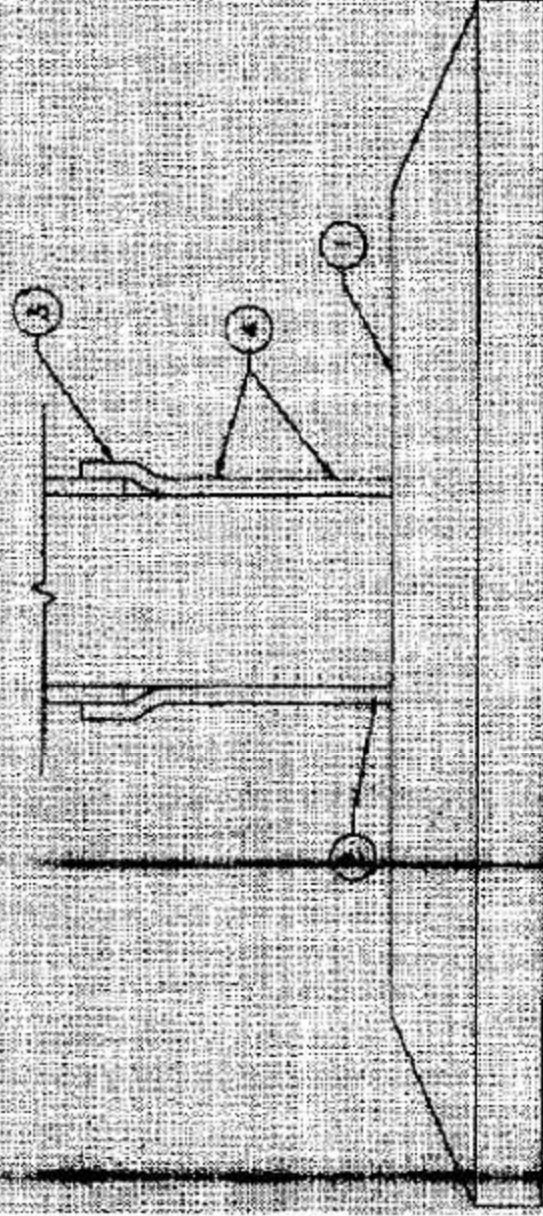
Figure 7

3M Fire Barrier Duct Wrap 15A

Commercial Kitchen Grease Duct Systems

1 of 2 Hour - Craft Alternative Zero Clearance to Combustibles

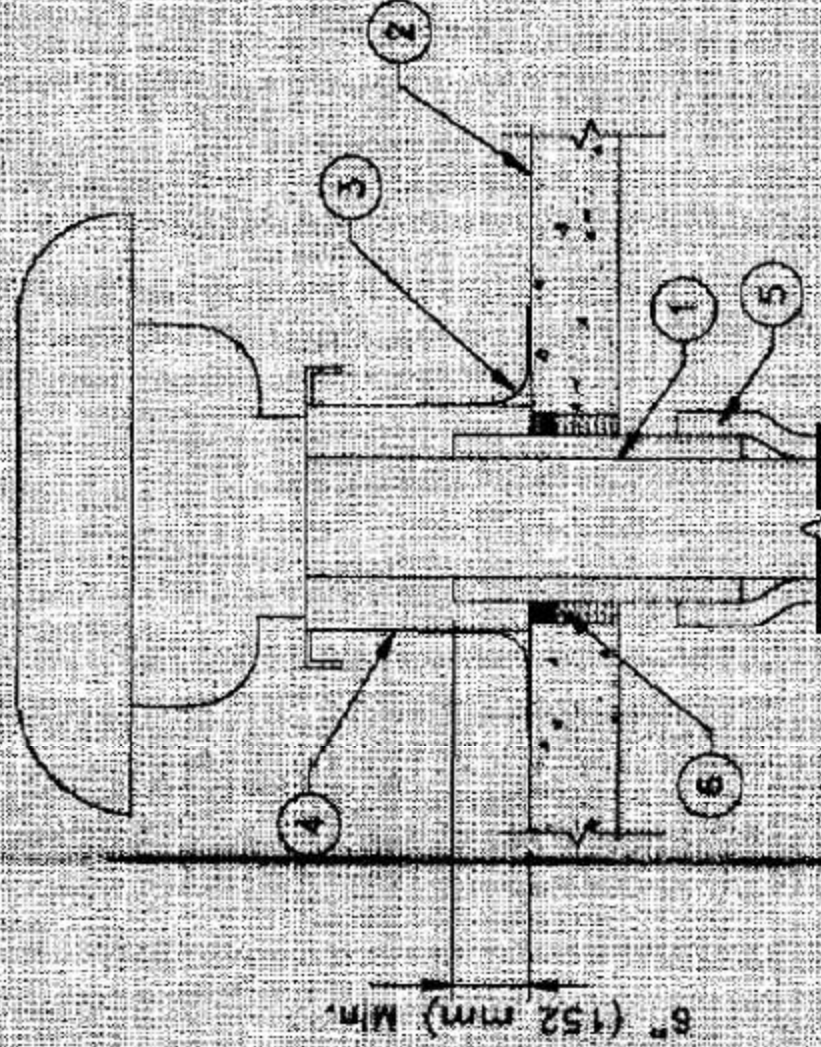
Suggested Exhaust Hood



1	Hood
2	Duct Layer 3M Fire Barrier Duct Wrap 15A
3	1/2" (12" max) Minimum Spacing
4	Bracing

Figure 9

36 Fire Barrier Duct Wrap 18A
Commercial Kitchen Grease Duct Systems
1 of 2 Hour Shell Alternative Zero Clearance to Combustibles
Suggested Roof Vent



1	Duct
2	Roof Assembly
3	Roof Flashing
4	Vent Flashing
5	One Layer 36 Fire Barrier Duct Wrap 18A
6	Firestopping System for Raked Roof Assemblies Only

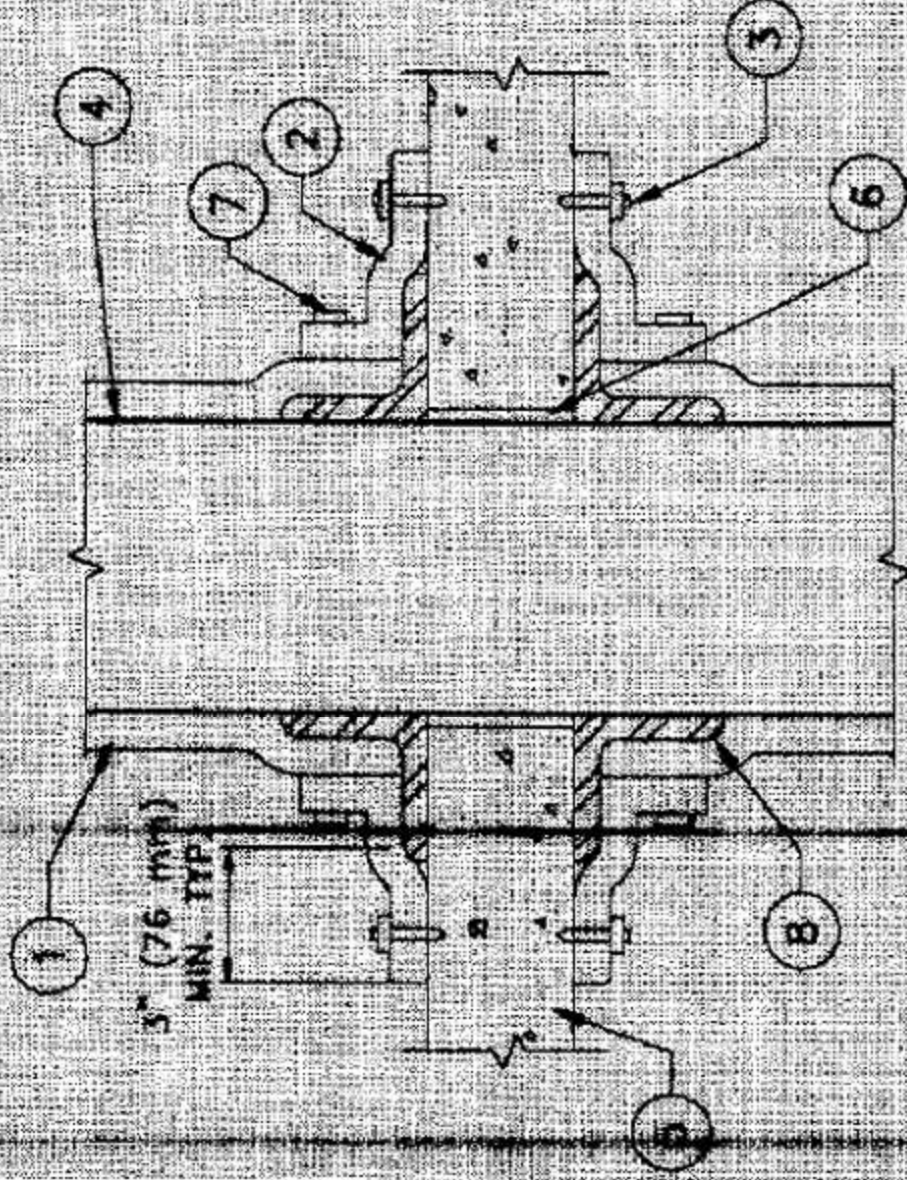
Figure 8

3M Fire Barrier Duct Wrap 15A

Commercial Kitchen Exhaust Duct Systems

1 or 2 Hour Fire Alternative Zero Clearance to Combustibles

Suggested Vertical Support



1	3M Fire Barrier Duct Wrap 15A
2	3M Fire Barrier Duct Wrap 15A Overlapped At Joint
3	Mechanical Fasteners and Washers
4	Duct
5	Rated Floor/Ceiling
6	Fireproofing System
7	Blending
8	Support Channel

Franklen Sheet Metal Co., Inc.
Heating, Cooling & Ventilations
Commercial Kitchen Hoods

122 South Main Street

Ocean Grove, New Jersey 07756

PH. 732-988-0808

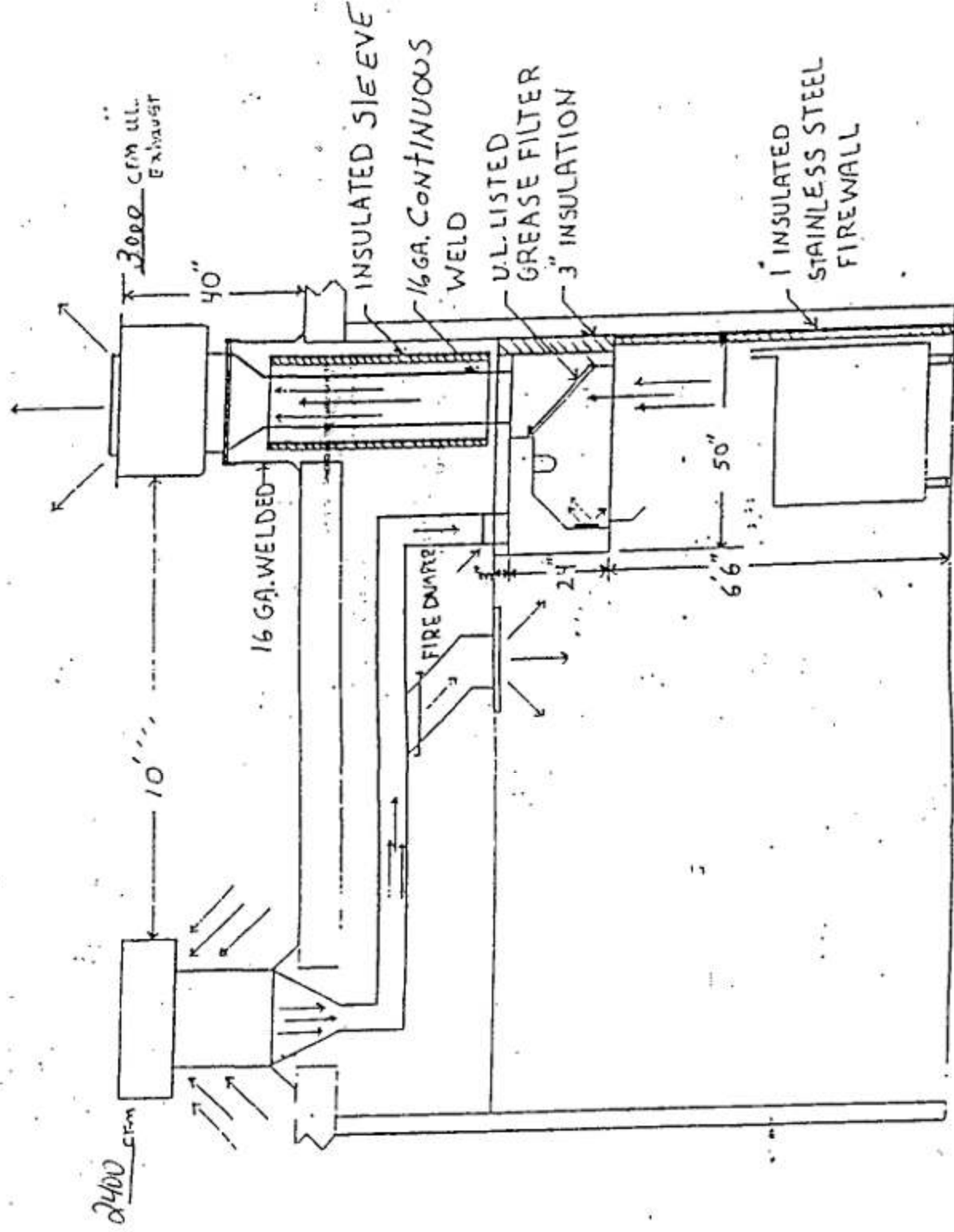
Job: *FRIENDLY'S*

Location: *741 BEICK BOULEVARD
BEICK, N.J.*

Date: *2-13-2006*

Hood Dimension: *10' x 48" x 24"*

COMPENSATING CANOPY



The make-up air fan supplies the make-up air into hood and room.

A fusible link fire damper is installed to the requirements of:

The Boca Mechanical Code

2-13-06

Exhaust hood
10' x 48"

Duct opening
16" x 16"

#NLD2
Duct
nozzle w/
2 flow pts

360 degree
fusible links

#NLP
Plenum
nozzle w/ 1
flow pt

#NLP
Plenum
nozzle w/ 1
flow pt

#NLF2
 Fryer
 nozzle
 w/ 2 flow
 pts

#NLF2
 Fryer
 nozzle
 w/ 2 flow
 pts

#NLH griddle
 nozzle w/ 1
 flow pts

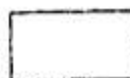
#NLR griddle
 nozzle w/ 1
 flow pts

#NLR grill
 nozzle w/
 1 flow pt

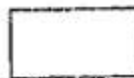
Pyro Chem model
#PCL4.60 liquid fire
system w/ 10 flow
pts.
UL 300 approved.

existing
automatic
gas valve

Remote manual pull
station min 10' from hood



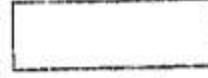
Deep Fat
Fryer
16" x 20"



Deep Fat
Fryer
16" x 20"



Griddle
36" x 27"



Flat Griddle
24" x 24"

Customer:
Friendly's Restaurant
741 Brick Blvd
Brick, NJ 08723

Drawn: 2/14/06 adf

Contractor:
Jersey Coast Fire Equipment
377 Asbury Road
Farmingdale, N.J. 07727
(732) 938-2020

NJ License # P00206

Notes:

1) All cooking equipment is electric
and will shutdown thru a
microswitch supplied in the fire
system control head.

803018-1