Form # P 04 DISPLAY THIS CA	ARD ON PRINCIPAL FRON	TAGE OF WORK
Please Read Application And Notes, if Any, Attached	BERMIT	Permit Number: 070920
This is to certify thatM W_SEWALL & CO /	Henc Design design design	PERMIT ISSUED
has permission to       Install type 1 hood system         AT		Ab01001
provided that the person or perso of the provisions of the Statutes the construction, maintenance an this department.	of N ne and of the nances o	this permit shall comply with all f the City of Portland regulating , and of the application on file in
Apply to Public Works for street line and grade if nature of work requires such information.	N ication inspection must git and wron permision procu bute this toding or at thereo land or concerned tosed-in. H R NOTICE IS REQUIRED.	A certificate of occupancy must be procured by owner before this build- ing or part thereof is occupied.
OTHER REQUIRED APPROVALS Fire Dept Health Dept Appeal Board Other Department Name	Qa	Mil Bounde 9/7/87 Director - Building & Inspection Services

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PENALTY FOR REMOVING THIS CARD

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City of Portland, Mai		0			1	rmit No:	Issue Date:		CBL:	
389 Congress Street, 041	101 Tel: (		, Fax:	(207) 874-871		07-0920			078 A0	<u></u>
Location of Construction:				r Address:			Phone:			
1199 CONGRESS ST		M W SEWAL		)		FRONT ST				
Business Name:		Contractor Name				actor Address:			Phone	
		Henckel Desig	gn and F	Fabrication		Hartley Street	Portland		20731826	
Lessee/Buyer's Name		Phone:				t Type: od Systems, Co	ommerical			Zone: B – 1
Past Use:		Proposed Use:		Permit Fee: Cost of Work:			O District:	]		
Commercial Gas Station w	ith retail	Commercial (	Gas Station with retail				\$4,100.0	00	3	
		ıt - "Mr Bigs" Install /stem		FIRE DEPT: Approved INSPECTION: Denied Use Group: M Ty			Type: 11×			
Proposed Project Description:				<u> </u>	'`	10111	· • •  -	In	Λ	
Install type 1 hood system					Signature: Cres Crass Signature: MB9/7/ PEDESTRIAN ACTIVITIES DISTRICT (PAD.)			<u>                                     </u>		
					Actio	n: Approve	d Approv	red w/Cor	nditions	Denied
					Signa	ture:		Da	ite:	
Permit Taken By: Date Applied For:						Zoning	Approval			
Idobson	08/0	1/2007								
1. This permit applicatio	n does not	preclude the	Spe	cial Zone or Revie	ws	Zoning	Appeal		Historic Prese	ervation
Applicant(s) from mee Federal Rules.			∐ Sh	oreland		Variance		10	Not in Distric	t or Landma <b>r</b>
2. Building permits do not include plumbing, septic or electrical work.		Wetland					Does Not Req	uire Review		
3. Building permits are v within six (6) months	oid if wor		Flood Zone			Conditional Use			Requires Review	
False information may invalidate a building permit and stop all work		Subdivision		Interpretation		ر ا بىد	, Approved			
			Si	te Plan		Approved		i ļ	Approved w/0	Conditions
FERMIT IS	SSUED		Maj OK	Minor MM	its	Denied			Denied (	3
CRY SEL	2007 Social		Date.	<del>&gt; 8 7 </del> (	7	Date:		Date:		<u>/</u>

### **CERTIFICATION**

I hereby certify that I am the owner of record of the named property, or that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his authorized agent and I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in the application is issued, I certify that the code official's authorized representative shall have the authority to enter all areas covered by such permit at any reasonable hour to enforce the provision of the code(s) applicable to such permit.

SIGNATURE OF APPLICANT	ADDRESS	DATE	PHONE
RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE		DATE	PHONE

# TTLAND PT

# **General Building Permit Application**

If you or the property owner owes real estate or personal property taxes or user charges on any property within the City, payment arrangements must be made before permits of any kind are accepted.

Location/Address of Construction:	a congress ST Pe	Ma me					
Total Square Footage of Proposed Structure	A Congress ST /2 Square Footage of Lot						
Tax Assessor's Chart, Block & Lot Chart# Block# Lot#	Owner: MR Bigs Pizza	Telephone:					
$\frac{76}{76} \qquad 4 \qquad 1$	Owner: MR Bigs Pizza	939-0048 www.jf					
Lessee/Buyer's Name (If Applicable)	Applicant name, address & telephone: Pata Hanchal	Cost Of Work: <b>\$</b>					
	134 Hatley ST Portiwe Me	Fee: \$					
·		C of O Fee: \$					
Current legal use (i.e. single family)							
If vacant, what was the previous use? Proposed Specific use:	Zo Kestoriut TAKa	CUN					
Is property part of a subdivision?							
Project description:							
Type I Hood System.							
Contractor's name, address & telephone:							
Who should we contact when the permit is read	Para Haurtal						
Who should we contact when the permit is read Mailing address:	Phone: 3/X-2623						
<u> </u>							
	ined in the Commercial Application (						

Please submit all of the information outlined in the Commercial Application Checklist. Failure to do so will result in the automatic denial of your permit.

In order to be sure the City fully understands the full scope of the project, the Planning and Development Department may request additional information prior to the issuance of a permit. For further information visit us on-line at <u>www.portlandmaine.gov</u>, stop by the Building Inspections office, room 315 City Hall or call 874-8703.

I hereby certify that I am the Owner of record of the named property, or that the owner of record authorizes the proposed work and that I have been authorized by the owner to make this application as his/her authorized agent. I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in this application is issued, I certify that the Code Official's authorized representative shall have the authority to enter all areas covered by this permit at any reasonable hour to enforce the provisions of the codes applicable to this permit.

	$\frown$		
Signature of applicant:	Ø	, da	Date: $08 - 01 - 07$

This is not a permit; you may not commence ANY work until the permit is issued.

City of Portland, Maine - Build	0	Permit No: 07-0920	Date Applied For: 08/01/2007	CBL: 078 A001001		
389 Congress Street, 04101 Tel: (2			0/8 A001001			
Location of Construction:	Owner Name:		Owner Address:		Phone:	
1199 CONGRESS ST	M W SEWALL & CO		259 FRONT ST			
Business Name:	Contractor Name:	- 19	Contractor Address:		Phone	
	Henckel Design and Fabrication	n	134 Hartley Street Portland		(207) 318-2623	
Lessee/Buyer's Name	Phone:	- 1	Permit Type:			
			Hood Systems, Cor	mmerical		
Proposed Use:		Propose	l Project Description:			
Commercial Gas Station with retail P Install type 1 hood system	izza Take out - "Mr Bigs"	Install	type 1 hood system			
Dept:ZoningStatus:ANote:1)1)This property shall remain a minor and approval.2)This pizza take-out is considered t3)This permit is being approved on t work.4)Separate permits shall be required	r auto service station. Any chang o be retail. There shall be no mo the basis of plans submitted. Any	ge of use ore than	nine (9) seats availa	arate permit applicat	Ok to Issue: 🗹 ion for review	
Dept: Building Status: A	pproved with Conditions <b>Rev</b>	viowor	Jeanine Bourke	Approval Da	te: 09/07/2007	
Note:	pproved with Conditions <b>Rev</b>				Ok to Issue:	
<ul> <li>Note: Ok to issue: In Correct to issue</li></ul>						
Dept: Fire Status: A	pproved with Conditions Rev	viewer:	Capt Greg Cass	Approval Da	te: 08/15/2007	
Note:					Ok to Issue: 🗹	
1) Install shall comply with NFPA 96 A compliance letter is required	ń.					

#### **Comments:**

8/6/2007-mes: the application implies that this is a new use - I left a message with the number for Mr. Bigs asking them to call me back. This used to be a gas station - no change of use is on file. It was the wrong # on file. So I called the installer Pete Henckel.

8/7/2007-mes: heard from Pete - this is a gas station - I did a site inspection - this is NOT a restaurant use - the area is already set up from a previous occupant

9/7/2007-jmb: Contacted Peter to confirm 1 story structure and duct is interior to roof. Also over 18" to ceiling, ok to issue



Phone: 1-207-318-2623 Fax: 1-207-772-8952 E-mail: petehenckel@maine.rr.com

i ا ۹۹ Site location #1999 Congress St Business name Mr. Biggs Subject hood installation type one

1 story structure Duct July 17, 2007 Tenterior Duct

Kostas here is the scope of work to be provided to the city of Portland with this scope of work a basic layout of your equipment under the hood will be required as well as the cut sheets for the exhaust fan/hood/intake fan and fire suppression the permit will be contingent on this information as well as the structural information provided by H/D/F. If you have any questions after you review this please feel free to call.

#1.One steel stud wall will be installed per code once installed the town will inspect it before work proceeds.

#2.5/8" fire rated sheetrock will be installed over the steel studs.

#3.stainless steel will be installed over the 5/8" fire rated sheetrock.

#4.one type one exhaust hood will be installed per code.

#5.one new roofing curb will be installed per code for the make up air fan.

#6.the existing duct will be removed and fire rated and than reinstalled per code.

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#7.one exhaust fan will be installed on the existing roof curb.

The total quote for the work listed above is \$4100.00 a deposit of 50% is required with the balance paid upon the completion of the work listed above this quote includes no electrical work and no fire suppression.

A permit for the installation will be obtained on your behalf the fire suppression for your store will be arranged by H/D/F and billed directly to you.

Deposit received \$2050 balance due \$2050



Phone: 1-207-318-2623 Fax: 1-207-772-8952 E-mail: petehenckel@maine.rr.com

July 25, 2007

Attn;Jeanie Bourke From;Pete Henckel Subject;1099 Congress St

The hanging structure for the hood are 2x12 16 on center with a span of 20' the Sammy anchor to be used are UL Listed 9R21 to be used to hold 3/8" threaded rod with a max load rating of 1200LBS per anchor the hood will be hung at six points as well as being anchored to the fire rated wall the hoods max LBS is 381LBS hung at six points with each point holding 63.6LBS

The ducting will be wrapped with 15A fire barrier from the fan to the hood and banded with stainless steel worm clamps.

The roofing curb for the exhaust will 10' from any intake system with the fan installed at 43" above the flat roof.

The joist elevation is 12' so the only space to be fire rated is where the hood come in contact with the wall which will be made of steel studs covered by 5/8" fire rated sheet rock and 24ga stainless steel.

over 18" to ceiling

•Restaurant Hoods•Boiler Breaching•HVAC Design•Curb Adapters and Unit Installations• •Welded Ducting•Custom Welding Fabrication•



Strengthening a Remarkable City, Building a Community for Life . mmm.portlandmaine.gov

Lee Urban - Director of Planning and Development Jeanie Bourke - Inspection Division Services Director

# Kitchen Exhaust System Checklist and code Provisions

Dear Applicant,

The following is a checklist to assist you in filing for a permit for a Kitchen Exhaust system. The applicable Mechanical Code provisions have also been attached. Please complete this and submit job specific construction documents that demonstrate compliance with the attached information.

# **Type of System:**



Type I systems are systems that vent fryers, grills, broilers, ovens or woks. Type II systems are systems that vent steamers and other non grease producing appliances.

## **Type of Materials:**

Is the hood Stainless steel or other type of steel?
Type? Type I
Is the duct work Stainless steel or other type of steel? $N \sigma$ If Other, what type? $16 Ga$ Block inou
Thickness of the steel for the hood <u>18GA</u>
Thickness of the duct for the hood <u>16 Ga</u>
Type of Hood and Duct Supports
UL Rated SAMMY UL CIST 9R21
with 3/8" Rod and 13/8" anistrat
Type of seams and Joints <u>All welded</u>

Grease Gutters provided? \_\_\_\_\_\_ yas Hood Clearance reduction to Combustibles design /specs: STELL STUDS / 5/8" Fire rated steet Rack/ 24G SS Duct Clearance reduction to Combustibles design /specs: OL Rated 15A Fine Barris Vibration Isolation System: Air Velocity within the duct system  $M_{ii}$  1500 FPM. Grease accumulation prevention system: \_\_\_\_\_Yas Cleanouts yes par Code Grease Duct enclosure \_\_\_\_\_\_ Exhaust Termination Roof \_\_\_\_\_ Wall \_\_\_\_\_ Fire Suppression System \_\_\_\_\_\_ Exhaust fan mounting and clearance from the roof / wall or Combustibles: per coda. Exhaust fan distance from other vents or openings  $10^{\circ}$   $M_{\odot}$ Exhaust fan distance from adjacent buildings <u>40'</u> Exhaust fan height above adjoining grade <u>10' MIN</u> **Hood Specs** Style of Hood Type Z Type of Filter NOMinum Bafflas Height of filter above nearest cooking surface MAX 48" Min 35" per Code Capacity of hood CFM 2500 CFM Make up Air system description and capacity n i in **C** ۸ . .

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Planur	٨				

#### SECTION 506 COMMERCIAL KITCHEN HOOD VENTILATION SYSTEM DUCTS AND EXHAUST EQUIPMENT

**506.1 General.** Commercial kitchen hood ventilation ducts and exhaust equipment shall comply with the requirements of this section. Commercial kitchen grease ducts shall be designed for the type of cooking appliance and hood served.

**506.2 Corrosion protection.** Ducts exposed to the outside atmosphere or subject to a corrosive environment shall be protected against corrosion in an approved manner.

**506.3 Ducts serving Type I hoods.** Type I exhaust ducts shall be independent of all other exhaust systems except as provided in Section 506.3.5. Commercial kitchen duct systems serving Type I hoods shall be designed, constructed and installed in accordance with Sections 506.3.1 through 506.3.12.3.

**506.3.1 Duct materials.** Ducts serving Type I hoods shall be constructed of materials in accordance with Sections 506.3.1.1 and 506.3.1.2.

**506.3.1.1 Grease duct materials.** Grease ducts serving Type I hoods shall be constructed of steel not less than 0.055 inch (1.4 mm) (No. 16 Gage) in thickness or stainless steel not less than 0.044 inch (1.1 mm) (No. 18 Gage) in thickness.

**Exception:** Listed and labeled factory-built commercial kitchen grease ducts shall be installed in accordance with Section 304.1.

**506.3.1.2 Makeup air ducts.** Make up air ducts connecting to or within 18 inches (457 mm) of a Type I hood shall be constructed and installed in accordance with Sections 603.1, 603.3, 603.4, 603.9, 603.10 and 603.12. Duct insulation installed within 18 inches (457 mm) of a Type I hood shall be noncombustible or shall be listed for the application.

**506.3.2 Joints, seams and penetrations of grease ducts.** Joints, seams and penetrations of grease ducts shall be made with a continuous liquid-tight weld or braze made on the external surface of the duct system.

#### **Exceptions:**

- 1. Penetrations shall not be required to be welded or brazed where sealed by devices that are listed for the application.
- 2. Internal welding or brazing shall not be prohibited provided that the joint is formed or ground smooth and is provided with ready access for inspection.
- 3. Listed and labeled factory-built commercial kitchen grease ducts installed in accordance with Section 304.1.

**506.3.2.1 Duct joint types.** Duct joints shall be butt joints or overlapping duct joints of either the telescoping or bell type. Overlapping joints shall be installed to prevent ledges and obstructions from collecting grease or interfering with gravity drainage to the intended collection point. The difference between the inside cross-sectional dimensions of overlapping sections of duct shall not exceed 0.25 inch (6 mm). The length of overlap for overlapping duct joints shall not exceed 2 inches (51 mm).

**506.3.2.2 Duct-to-hood joints.** Duct-to-hood joints shall be made with continuous internal or external liquid-tight welded or brazed joints. Such joints shall be smooth, accessible for inspection, and without grease traps.

Exceptions: This section shall not apply to:

- 1. A vertical duct-to-hood collar connection made in the top plane of the hood in accordance with all of the following:
  - 1.1. The hood duct opening shall have a 1-inch-deep (25 mm), full perimeter, welded flange turned down into the hood interior at an angle of 90 degrees from the plane of the opening.
  - 1.2. The duct shall have a 1-inch-deep (25 mm) flange made by a 1-inch by 1-inch (25 mm by 25 mm) angle iron welded to the full perimeter of the duct not less than 1 inch (25 mm) above the bottom end of the duct.
  - 1.3. A gasket rated for use at not less than 1,500°F (815°C) is installed between the duct flange and the top of the hood.
  - 1.4. The duct-to-hood joint shall be secured by stud bolts not less than 0.25 inch (6.4 mm) in diameter welded to the hood with a spacing not greater than 4 inches (102 mm) on center for the full perimeter of the opening. All bolts and nuts are to be secured with lockwashers.
- 2. Listed and labeled duct-to-hood collar connections installed in accordance with Section 304.1.

**506.3.2.3 Duct-to-exhaust fan connections.** Duct-to-exhaust fan connections shall be flanged and gasketed at the base of the fan for vertical discharge fans; shall be flanged, gasketed and bolted to the inlet of the fan for side-inlet utility fans; and shall be flanged, gasketed and bolted to the inlet and outlet of the fan for in-line fans.

**506.3.2.4 Vibration isolation.** A vibration isolation connector for connecting a duct to a fan shall consist of noncombustible packing in a metal sleeve joint of approved design or shall be a coated-fabric flexible duct connector listed and labeled for the application. Vibration isolation connectors shall be installed only at the connection of a duct to a fan inlet or outlet.

**506.3.3 Grease duct supports.** Grease duct bracing and supports shall be of noncombustible material securely attached to the structure and designed to carry gravity and seismic loads within the stress limitations of the *International Building Code*. Bolts, screws, rivets and other mechanical fasteners shall not penetrate duct walls.

**506.3.4 Air velocity.** Grease duct systems serving a Type I hood shall be designed and installed to provide an air velocity within the duct system of not less than 1,500 feet per minute (7.6 m/s).

**Exception:** The velocity limitations shall not apply within duct transitions utilized to connect ducts to differently