DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK



CITY OF PORTLAND BUILDING PERMIT



This is to certify that JAMES R OHANNES

Job ID: 2012-10-5296-HVAC

Located At 20 THOMAS ST

CBL: 062- E-013-001

has permission to Beckett Heating System

provided that the person or persons, firm or corporation accepting this permit shall comply with all of the provisions of the Statues of Maine and of the Ordinances of the City of Portland regulating the construction, maintenance and use of the buildings and structures, and of the application on file in the department.

Notification of inspection and written permission procured before this building or part thereof is lathed or otherwise closed-in. 48 HOUR NOTICE IS REQUIRED.

A final inspection must be completed by owner before this building or part thereof is occupied. If a certificate of occupancy is required, it must be

Fire Prevention Officer

Code Enforcement Officer / Plan Reviewer

THIS CARD MUST BE POSTED ON THE STREET SIDE OF THE PROPERTY PENALTY FOR REMOVING THIS CARD

BUILDING PERMIT INSPECTION PROCEDURES

Please call 874-8703 or 874-8693 (ONLY)

or email: buildinginspections@portlandmaine.gov

With the issuance of this permit, the owner, builder or their designee is required to provide adequate notice to the city of Portland Inspections Services for the following inspections. Appointments must be requested 48 to 72 hours in advance of the required inspection. The inspection date will need to be confirmed by this office.

- Please read the conditions of approval that is attached to this permit!! Contact this
 office if you have any questions.
- Permits expire in 6 months. If the project is not started or ceases for 6 months.
- If the inspection requirements are not followed as stated below additional fees may be incurred due to the issuance of a "Stop Work Order" and subsequent release to continue.

The project cannot move to the next phase prior to the required inspection and approval to continue, REGARDLESS OF THE NOTICE OF CIRCUMSTANCES.

IF THE PERMIT REQUIRES A CERTIFICATE OF OCCUPANCY, IT MUST BE PAID FOR AND ISSUED TO THE OWNER OR DESIGNEE BEFORE THE SPACE MAY BE OCCUPIED.



PORTLAND MAINE

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

Director of Planning and Urban Development Jeff Levine

Job ID: 2012-10-5296-HVAC

Located At: 20 THOMAS ST

CBL: 062- E-013-001

Conditions of Approval:

Zoning

- 1. This permit is being approved on the basis of plans submitted. Any deviations shall require a separate approval before starting that work.
- 2. ANY exterior work requires a separate review and approval thru Historic Preservation. This property is located within an Historic District.
- 3. This property shall remain a two family dwelling. Any change of use shall require a separate permit application for review and approval.

Building

The installation must comply with the State of Maine gas regulations.

City of Portland, Maine - Building or Use Permit Application 389 Congress Street, 04101 Tel: (207) 874-8703, FAX: (207) 8716

Job No: 2012-10-5296-HVAC	Date Applied: 10/29/2012		CBL: 062- E-013-001			
Location of Construction: 20 THOMAS ST	Owner Name: JAMES OHANNES & E McGRADY	LIZABETH	Owner Address 20 THOMAS ST PORTLAND, ME	Phone:		
Business Name:	Contractor Name: Northeast Mechanical		Contractor Address: 170 Riverside St., Portland ME 04103			Phone: (207) 400-8300
Lessee/Buyer's Name:	Phone:		Permit Type: HVAC - HVAC		Zone:	
Past Use: Two family	Proposed Use: Same – Two family – gas burner	install a	Cost of Work: 15000.00 Fire Dept:	Approved Denigd		CEO District: Inspection: Use Group: Type: Type:
Proposed Project Description install a gas burner	n:		Signature: Pedestrian Activ	vities District (P.A.D.)		Signature:
Permit Taken By: Gayle			<u> </u>	Zoning Approva	1	
1. This permit application of Applicant(s) from meeting Federal Rules. 2. Building Permits do not septic or electrial work. 3. Building permits are voing within six (6) months of False informatin may interpret and stop all work the entereby certify that I am the owner of the owner to make this application as he application is issued, I certify that the enforce the provision of the code(s).	include plumbing, id if work is not started ithe date of issuance. validate a building increased of the named property, it is authorized agent and I agree	Shorelar Wetland Flood Zo Subdivis Site Plar Maj Date: CERTIF or that the prope to conform to	one sion MinMM ICATION posed work is authorized all applicable laws of	this jurisdiction. In addition	Does not land a permit for word a permit for wor	w/Conditions W/Conditions W/Conditions
GNATURE OF APPLICAN	T AI	DDRESS		DATE		PHONE
ESPONSIBLE PERSON IN (CWARGE OF WORK T	NOT D		DATE		PHONE

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

Receipts Details:

Tender Information: Check, BusinessName: mastercard, Check Number: 119202

Tender Amount: 170.00

Receipt Header:

Cashier Id: gguertin

Receipt Date: 10/29/2012 Receipt Number: 49766

Receipt Details:

Referance ID:	8573	Fee Type:	BP-Constr
Receipt Number:	0	Payment Date:	
Transaction Amount:	170.00	Charge Amount:	170.00

Job ID: Job ID: 2012-10-5296-HVAC - Beckett Heating System

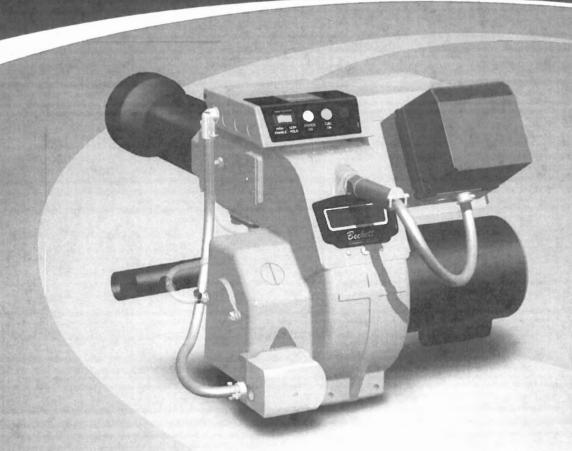
Additional Comments: 20 Thomas St., Northeast Mechanical

Thank You for your Payment!

Beckett

COMMERCIAL PRODUCTS

Models: CG10(A) · CG15 · CG25 · CG50



OEM Setup Guide

COMMERCIAL GAS BURNERS

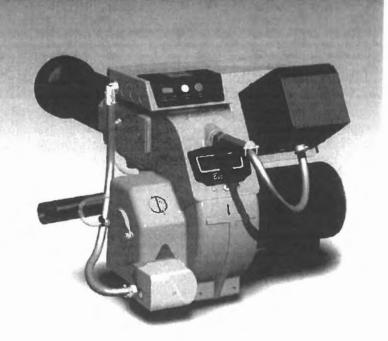
Specifications for commercial and industrial gas-fired heating appliances.



Commercial Gas Burners

R.W. Beckett manufactures a complete line of high-quality commercial gas burners. They provide the same industry leading levels of performance, reliability, energy efficiency and ease of installation and service as our world-famous oil burners. And like our oil burners, our gas burners will be backed by our 70-plus years of tradition of uncompromising excellence in product quality, customer service and technical support.

Our four natural gas burner models cover a firing range of 300,000 - 5,000,000 BTU/hr. All burners have an option for propane conversion.

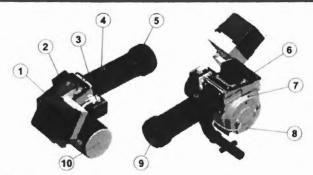


CG10	CG15	CG25	CG50
Rate: 300 to 1,200 MBH (Thousand BTU/hr)	Rate: 800 to 1,400 MBH	Rate: 1,300 to 2,700 MBH	m Rate: 2,000 to 5,000 MBH
Modes of operation: On/Off with low fire start	 Modes of operation: On/Off with low fire start Low/High/Low Modulation 	Modes of operation:Low/High/LowModulation	Modes of operation: Low/High/Low Modulation

Commercial Gas Burner Features

- Quick delivery and response time
- Exceptional performance even at low fire
- Easy service (Simple adjustment and overall design)
- Easy installation (Burners preconfigured to OEM appliance)
- Flexibility to offer standard features with the opportunity to upgrade to advanced technology
- Low Gas pressure operation
- New electrical box provides labeled and color coded terminal strips for quick and easy installation.
- Standard Power On and Fuel On indicator lights (CG15 through CG50)

Standard Equipment and Features	Beckett Burner Model					
S - Standard O - Optional N/A - Not Available	CG10	CG15	CG25	CG50		
On/Off with Low Fire Start	S	N/A	N/A	N/A		
Propane Restrictor ¹	0	0	0	0		
Linkageless Low/High/Low or Low/High/Off	N/A	S	S	S		
Modulation with Pressure/Temperature Modulating Controller	N/A	0	0	0		
Right or Left Side Gas Train Connection	S	S	S	S		
Air Pressure Switch	S	S	S	S		
Low Gas Pressure Switch	S	S	S	S		
High Gas Pressure Switch	S	S	S	S		
Main Shutoff Cock, Leak Test Cock, Test Connections, and Test Cocks	S	S	S	S		
Direct Spark Ignition of Main Flame	S	S	S	S		
Flame Safeguard with Flame Rod	S	S	N/A	N/A		
Flame Safeguard with UV Sensor	0	0	S	S		
Customized Electrical Cabinet 2	0	0	0	0		
UL/CUL - CSD1 - Swiss Re ³	S	S	S	S		
FM	0	0	0	S		
IRI (old standard)	0	0	0	0		
Power On - Fuel On, Indicator Light	0	S	S	S		



Major Components:

1. Primary Control

2. UV Sensor

5. Air Tube

6. Transformer

7. Air Band

3. Air Proving Switch 4. Jacking Screw

8. Shutter

9. Gas Gun 10. Motor

Major Components:

4. Air Tube

7. Damper Motor

1. Air Proving Switch 2. Transformer

5. UV Sensor

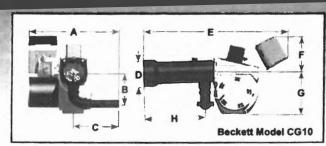
8. Gas Gun

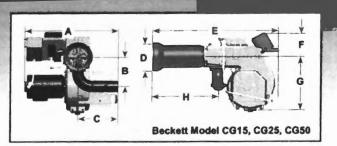
3. Jacking Screw

6. Primary Control

9. Motor

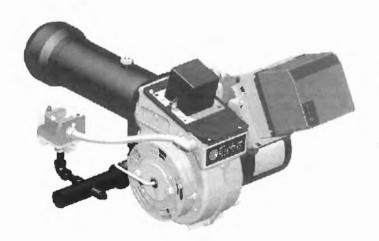
(5)



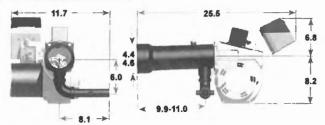


	Dimensions, in inches						Rating and Specifications						
Burner Model	A	В	С	D	E	F	G	н	Natural Gas & Pro- pane Min. MBH	Natural Gas & Pro- pane Max. MBH	Motor Size (H.P.)	Standard Motor Voltage	Typical Gas Train (in.)
CG10	11.7	6.0	8.1	4.4 - 4.6	25.5	6.8	8.2	9.9 - 11.0	300	1,200	1/3	120/60/1	1.0
CG15	20.8	5.2	9.4	5.6	32.7	6.2	10.8	18.4	800	1,400	1/2	120/60/1	1.0 - 1.25
CG25	20.9	6.8	9.3	6.9	33.2	6.7	12.6	17.8	1,300	2,700	3/4	120/60/1	1.25 - 1.50
CG50	24.4	7.5	10.5	7.7	33.6	6.7	14.6	17.4	2,000	5,000	2	230/60/1	1.50 - 2.50

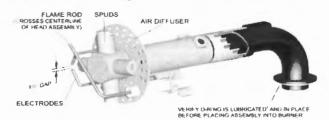
BECKETT CG10



Overall Dimensions



Gas Gun Assembly



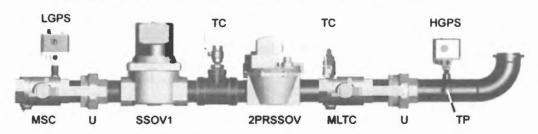
Specifications

Input firing range	300 to 1200 MBh
Fuel	Natural gas - 0.6 specific gravity typical
Gas train	Standard: UL listed/CSD-1 Configuration Options: IRI and FM
Manifold pressure	1.0 to 4.6 inches W.C. typical
Firing mode	On/Off or On/Off with Low Fire Start
Flame safeguard	RM7895A Standard (Options available)
Flame detection	Standard: Flame rod rectification Optional: Ultraviolet scanner
Air proving switch	Standard
Gas pressure switches	Standard high and low
ignition	Direct spark main flame
Motor	Standard: 1/3 HP; 3450 RPM; 120 volt/60 hz, single phase Optional motor: 50 or 60 hz (see notice for 50 hz), 240 volt single phase
Weight	55 lbs.

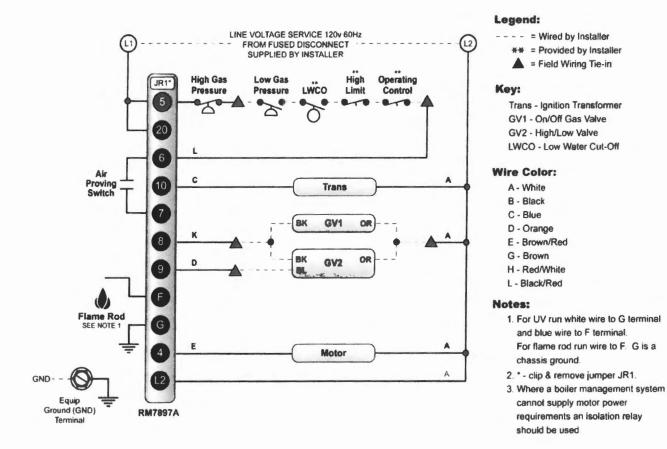
Features

S - Standard O - Optional N/A - Not Available	
On/Off with Low Fire Start	S
Propane Restrictor	0
Linkageless Low/High/Low or Low/High/Off	N/A
Modulation with Pressure/Temperature Modulating Controller	N/A
Right or Left Side Gas Train Connection	S
Air Pressure Switch	S
Low Gas Pressure Switch	S
High Gas Pressure Switch	S
Main Shutoff Cock, Leak Test Cock, Test Connections, and Test Cocks	S
Direct Spark Ignition of Main Flame	S
Flame Safeguard with Flame Rod	0
Flame Safeguard with UV Sensor	S
Customized Electrical Cabinet	0
UL/CUL - CSD1 - Swiss Re	S
FM	0
IRI (old standard)	0
Power On - Fuel On, Indicator Light	0

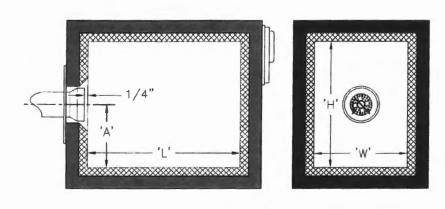
Gas Train Assembly (Typical Gas Train, other configurations are available)



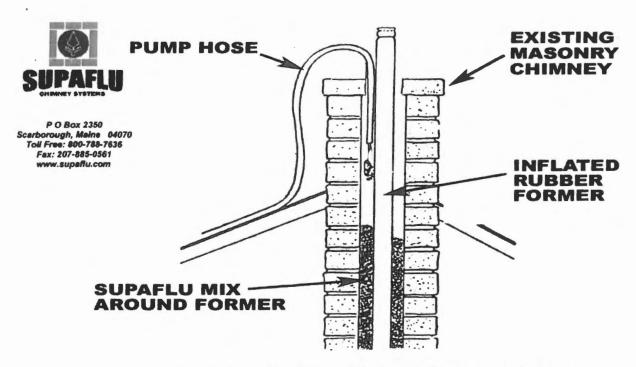
Typical Wiring (Honeywell RM7897A - for reference only)



Combustion Chamber Dimensions



MBH Firing Rate in MBH William Rate in Minit				
300-400	18	12	12	6
400-600	22	14	14	7
600-900	26	16	16	8
900-1200	30	18	18	9



The Supaflu Lining Mixture Penetrates & Seals While Improving Structural Stability & Safety

Supaflu offers you many benefits including: improved structural stability, ease of maintenance, and sultability to all fuel types. However, Supaflu's most important benefits are improved efficiency and added safety.

Supaffu is designed to insulate your chimney while providing an effective barrier between the flue gases and your living quarters. Because of its' liquid consistency, Supaffu fills all cracks and pores, greatly reducing the chance of your exposure to toxic gases.

As an insulator, Supaflu is superior. In fact the R-value is 500% greater than clay tile liners. This insulation ensures that flue gases remain hotter and more buoyant, thus improving overall venting efficiency and reducing buildup within the flue. Additionally, your chimneys' exterior surface temperature will be lowered, reducing the chance combustible materials surrounding your chimney may ignite. Supaflu is non-corrosive and is free of asbestos. Also, when subjected to alternate freeze-thaw cycles, Supaflu showed no signs of surface degradation.



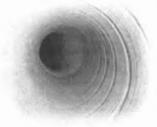
Prior to installation, the chimney is inspected, cleaned, and prepared using industry recognized procedures & equipment. Should the flue already be lined, the existing liner is removed.

All openings such as clean-outs, thimbles, and fireplace openings are sealed and secured.



The proper size Flu-former, an inflatable rubber former, is calculated for your heating application. It is then lowered into the flue, inflated, and centered.

The Supaffu mix is prepared (adding water) then pumped into the chimney from the top. All voids, cracks, and holes are filled with the slurry.



After the new Supaflu liner has fully cured, the Flu-former is deflated and removed from the flue, leaving a smooth, round, one-piece

The Supaflu Authorized Installer Network features the most knowledgeable and experienced in the industry. Every Installer has undergone extensive classroom, laboratory and practical training in the complexity of chimney repair and restoration. Seminars, technical builetins, and updates from Supaflu's Engineering department provide frequent communications to our Supaflu Installer Network. You can have confidence that your Supaflu Installer will provide the highest level of professionalism in every aspect of your Supaflu installation.

Your new chimney liner is backed by our Lifetime Warranty. Supaflu is the first cast-in-place chimney lining system to back its products with your home. Even if you sell your home, Supaflu will honor the warranty for a period of ten (10) years from the date of installation, so that even the buyer of your home will benefit from any years remaining on the warranty at the time you sell your home.

The Product Safety Listings (right) mean that representative samples of the Supaflu product have been evaluated and determined that they meet established requirements for safety and/or performance. These requirements are based primarily on Underwriter's Laboratories published Standards for Safety. Supaflu is in compliance with major building codes currently applicable in the US and Canada. ULC denotes Canadian Standard.



UL 1777 Standard for Masonry Chimneys

Tested & Listed for installation in chimneys with Zero-Clearance to com-



ULC-S635-M90 Lining Sylems for Existing Mesonry of Factory-Built Chimneys

ULC-S640-M91 Lining Systems for New Masonry Chimneys



Why Choose Supaflu Chimney Restoration?

- ✓ We'll be here for you. Supaflu Chimney Restoration has been providing superior products and service to residents of Maine since its establishment in 1978, making us the oldest and most experienced chimney restoration company in the area. While other companies may come and go, rest assured that Supaflu will be there to provide you with all the necessary services you require.
- ✓ We are not chimney sweeps. Supaflu Chimney Restoration offers a full line of chimney restoration products and services. Our focus is on chimney and fireplace restoration. Period. Our services include full masonry repair and restoration, tuck pointing, fireplace restoration, brick work, hearth work, and tear down and rebuild. Our Authorized Installers are the most knowledgeable and experienced in the industry. Our reputation for quality workmanship and service has no peer.
- ✓ Guaranteed Pricing. The attached proposal details the work recommended to ensure that your chimney project is completed to your specifications. The price quoted is the price you will pay. Period. You will never be required to pay for any unforeseen work that may arise.
- ✓ **Product and Performance Warranties.** The products used exclusively by Supaflu are backed by the manufacturer with a **Lifetime** Warranty against product defects for as long as you own you property. Our **WorkRite®** performance warranty provides you with the peace of mind that all work performed on your project is to your satisfaction.
- ✓ Follow-Up Services. Although Supaflu is not a chimney sweeping company, periodic maintenance is required to insure the proper operation of your chimney and heating system. Follow-up services and service contracts are available for all Supaflu customers.
- ✓ Code Compliance / UL Listed Products. The products used in your restoration project have been evaluated and determined that they meet established requirements for safety and/or performance by Underwriter's Laboratories, Inc. and are based on UL's published Standards of Safety. The procedures followed are in accordance to the National Fire Protection Association and applicable state and local codes. Supaflu is in compliance with major building codes currently applicable in the United States.
- ✓ Trade Associations. Supaflu is a member National Fire Protection Association, The National Trust for Historic Preservation, as well as Building Officials and Code Administrators International.

DDZR.MH26624 Liners

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Liners

See General Information for Liners

NORTH AMERICAN SUPAFLU SYSTEMS INC

MH26624

UNIT 203 15 HOLLY ST PO BOX 2350 SCARBOROUGH, ME 04070 USA

Supaflu Type "HT", Cementitious Chimney Lining System. In sizes 4 thru 16 in. I.D. For use as an alternate lining system for fire-clay flue linings in masonry chimneys intended for use with gas, liquid and solid fuel-fired residential and building heating appliances intended for use with Type B vents. Clearance between combustible construction and outer chimney surfaces is zero (0) in. Minimum chimney liner thickness from I.D. of chimney liner to masonry chimney is 5/8 in. For maximum chimney height of 80 ft.

Last Updated on 2000-04-27

Ouestions?

Notice of Disclaimer

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An independent organization working for a safer world with integrity precision and knowledge



DDZR.GuideInfo Liners

View Listings

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[Chimneys, Fireplaces, Vents and Solid-fuel-burning Appliances] (Chimneys) Liners

See General Information for Chimneys, Fireplaces, Vents and Solid-fuel-burning Appliances

The chimney liners covered in this category are intended for installation, (1) as alternate lining systems for fire clay flue linings (as described in ASTM C315) or (2) in the fire clay flue linings in masonry chimneys constructed in accordance with the Standard of the National Fire Protection Association for Chimneys, Fireplaces, Vents and Solid Fuel-Burning Appliances, NFPA 211, or applicable model building code requirements.

Separate chimney liner parts required for installation of chimney liners are specified in the installation instructions provided with the chimney liners. Unless specified in the Individual Listings, these chimney liners are intended for use with gas, liquid and solid-fuel-fired, residential-type and building-heating appliances specified in the Chimney Selection Chart of the National Fire Protection Association Standard NFPA 211.

The basic standard used to investigate products in this category is Ui. 1777, "Chimney Liners".

The Listing Mark of Underwriters Laboratories Inc. on the product is the only method provided by Underwriters Laboratories Inc. to identify products produced under its Listing and Follow-Up Service.

The Listing Mark on these products includes the name and/or symbol of Underwriters Laboratories Inc. (as Illustrated in the Introduction of this Directory) together with the word "LISTED", a control number, and one of the following product names as appropriate: (A) "Chimney Liner," (B) "Chimney Liner Part Intended For Use With (Company Name) Listed Chimney Liner Parts", (C) "Chimney Liner Material Intended For Use With (Company Name) Listed Chimney Liner Parts", or (D) "Chimney Liner Part." Each Listed Chimney Liner section bears a Listing Mark with a product name similar to (A); when a combination of proprietary parts or materials are required to complete the chimney liner installation, the part or material bears a Listing Mark similar to (B) or (C); and each additional part bears a Listing Mark with a product name similar to (D).

Last Updated on 1988-08-11

Ouestions?

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LISTING INFORMATION OF North American Supaflu Systems Chimney Liner

SPEC ID: 21825

North American Supaflu Systems, Inc. 15 Holly Street U203 Scarborough, ME 04074

This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.

Product Covered:

Supaflu Chimney Liner

Product Description:

Supaflu liners are installed only by qualified technicians who have been trained by the manufacturer. The technicians are provided with a training manual, which gives thorough instructions for proper installation of the Supaflu liner. The Supaflu mix is a cementitious material with light weight aggregates manufactured in dry powder form and sold to factory trained dealers in 60 pound bags. The powder is mixed at the job site with water, approximately 5 1/2 U.S. gallons per 60 pound bag. The wet mix is pumped around an inflateable tubular from within the chimney and allowed to cure. The formulation is proprietory and the exact formula is in the custody of the manufacturer.

Attribute Value

CSI Code 10 30 00 Fireplaces and Stoves

Listed or Inspected LISTED

3096271, J97018322.1, 652-0353.01, 694-0198.0, 694-Report Number

0198.1

Criteria UL 1777 (2004)

CAN / ULC S635 (2000) Criteria

ULC S640 (1991) Criteria

Criteria UL 1777 Rev 1 (2009)

Solid Fuel - Wood **Fuel Type**

Intertek Services Certification

CHIMNEY LINERS Listing Section



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0198.1

Criteria UL 1777 (2004)

Criteria CAN / ULC S635 (2000)

Criteria ULC S640 (1991)

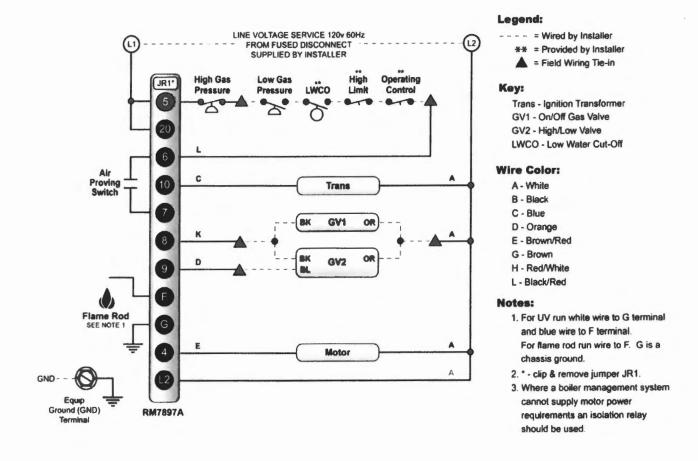
Criteria UL 1777 Rev 1 (2009)

Fuel Type Solid Fuel - Wood

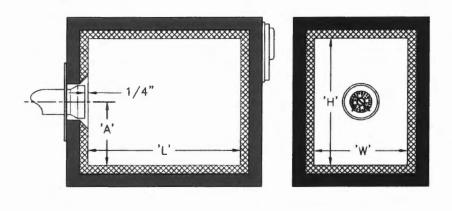
Intertek Services Certification

Listing Section CHIMNEY LINERS

Typical Wiring (Honeywell RM7897A - for reference only)



Combustion Chamber Dimensions



Minir	num C Dime			
Input Firing Rate in MBH	'L' (Length)	'W' (Width)	'H' (Height)	Burner Head Centerline to floor 'A'
300-400	18	12	12	6
400-600	22	14	14	7
600-900	26	16	16	8
900-1200	30	18	18	9