

# CITY OF CHRISTCHURCH

CITY ENGINEER'S DEPARTMENT

P.O. BOX 237, CHRISTCHURCH, NEW ZEALAND

Mr W.J. Brydon,  
125 Harris Cres,  
CHRISTCHURCH

5 July 1977

re Building Application No. 333

BU/1/2  
B6/7

Mr Hicken

Dear Sir/Madam, your application for permission to

install console heater at 125 Harris Cres

has now been approved. Before work is commenced the undermentioned fees must be paid and a building permit uplifted from this office.

Vehicle Crossing .....	\$
Builders Water Supply .....	
Water Connection Charge .....	
Building Permit Fee .....	3.00
Building Research Levy .....	
Street Damage Deposit .....	
	<hr/>
	3.00
	<hr/>



The Building Permit Application is approved subject to the following conditions:

If the permit is not uplifted within three months of this date the application will be cancelled and the plans disposed of.

Yours faithfully

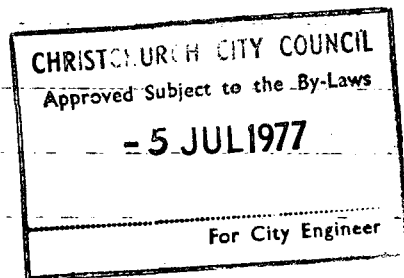
*R. Beattie*  
for Deputy General Manager and City Engineer

PAP 77 - 9/5

Space heater to be placed  
on a concrete slab where original  
wet back fireplace was located.  
Wall covered from floor to ceiling  
with pebble coated Hardytherm 10 MM.  
Flue Kitset to be fitted as instructed  
Method 1 Refer attached Leaflet.  
Hearth extended 300 MM forward  
from ash removal opening

W. J. Brydon

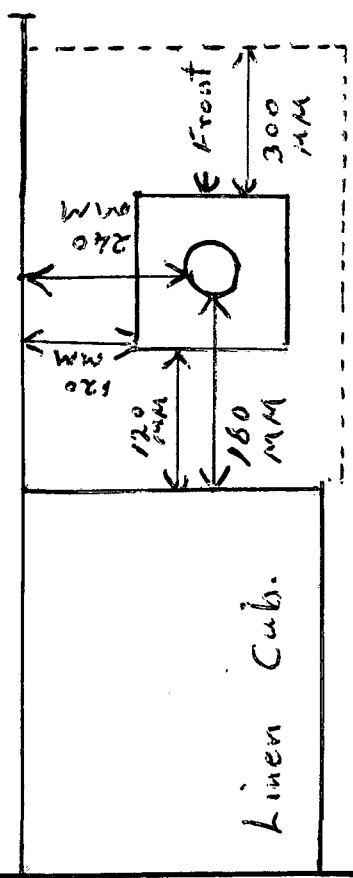
125 Harris Cres.



W.S. Bryden  
125 Morris Cres



Range



Linen Cab.

Kitchen Dinette

CHRISTCHURCH CITY COUNCIL  
 Approved Subject to the By-Laws  
 - 5 JUL 1977  
*J. H. Saunders*  
 For City Engineer



ESTABLISHED 1870

N.Z. Distributors for:  
Aga Cookers and Boilers  
Rayburn Cookers  
Doric Cookers  
Spares and Service  
Builders Supplies  
Continuous Metal Products Ltd.  
South Island Distributors for:  
"Sunpower" Solar Heaters

Showroom & Office  
83 Victoria Street  
Christchurch 1 New Zealand

Workshop & Store  
39-45 Peterborough Street  
Christchurch 1 New Zealand

Telephones: 3 Lines.  
~~7X99X X00X X99~~ 65788

INSTALLATION INSTRUCTIONS & SPECIFICATIONS

FOR SOLID FUEL APPLIANCES AND METAL FLUE

N.Z. Standard 7421: 1972.

1. HEARTH ref. (301.4)

Material:

- A. Asbestos millboard not less than 8 mm thick and covered with sheet metal (minimum .6 mm thick).
- B. Ceramic tiles 12 mm ( $\frac{1}{2}$ " (Winstone quarry tiles) on concrete or cement mortar.
- C. Poured concrete or pumice slab of 50 mm (2"), (can have a ceramic tile inlay).
- D. Brick or other approved uncombustible material can be used (ref. 302.4).

Important: If the stove is the type that has the firebowl or box exposed to the room on a minimum of three faces (i.e. pot belly stove etc.), use C or possibly D only.

Ref. 302.4:

The hearth is required to support without damage. Take the appliance and flue weight plus 100 kg, then we would recommend the use of reinforcing in the hearth. The hearth is to extend forward 300 mm (12") from vertically under the fire or ash removal opening.

Note: Special sub floor framing or foundation for under the floor below the hearth is required if requested by your local building inspector.

2. APPLIANCE FRONT (Access Clearance, Ref. 303):

To be installed so there is at least 1,000 mm (40") clearance between the front of the appliance and any permanent fixture or building structure.

3. APPLIANCE BACK Ref. 304:

A protective screen of approved non combustable material (sheet metal, asbestos millboard, hardytherm, asbestolux) or approved hearth material (brick, concrete, pumice etc.) to be spaced out 25 mm from combustable wall (i.e. timber, gib. board etc.) on non combustable spacers vertically placed. The air space between the wall and screen is to be well ventilated (vents at bottom and top of the screen). The screen is to extend from the floor or hearth to at least approximately 400 mm (16") above the height of the appliance.

Ref. 306:

Without using the protective screen the minimum clearance permitted from the back of the appliance to the wall is 500 mm.

Important No. 3 & No. 4: If the solid fuel stove is of the type that has the firebowl or box exposed to the room (i.e. pot belly stove etc.), double the clearance mentioned from the stove to combustable wall.

4. APPLIANCE SIDES:

If closer than 500 mm to any combustable material (fixture or wall etc.) follow instruction as for 'Appliance Back' (No. 3).

5. FLUE (From appliance nozzle to ceiling):

Ref. 310.1: Made of .6 mm 24 g. stainless steel recommended, or 18 g. 1.2 mm mild steel.

Ref. 315.1: Spaced at least 225 mm (9") from combustable material (Table 1.).

Space reduced to 4 $\frac{1}{2}$ " (113 mm) if asbestos millboard (Hardytherm) 12mm ( $\frac{1}{2}$ " thick and sheet metal or other approved non combustable material is fastened to the combustable material at the back of the flue (wood, plaster board etc.).

Alternatively a protective screen as specified in No. 3 Ref. 304, extending from say the top of the appliance screen to the ceiling. Then the flue clearance from the combustable wall can be reduced to a minimum of 68 mm (2 $\frac{1}{2}$ ").

6. FLUE AND LINER (From Ceiling to flue top):

Method 1. Insulating between the flue and the outer metal liner with Vermiculite grade 3.

Ref. 315.2: The outer liner spaced at least 125 mm (5") from all combustable material (ceiling, timber etc.).

Table 1. The above 125 mm (5") spacing can be reduced to 63 mm (2 $\frac{1}{2}$ ") if asbestos millboard (Hardytherm) is not less than  $\frac{1}{2}$ " (12 mm) thick. Then sheet metal is fastened to combustable material in front of the liner.

Note: Metal brackets can then be fastened to the face of the sheet metal and asbestos and to the liner to give the liner extra support.

Note: It is sometimes necessary to combine Method 1 and Method 2.

Important: The liner should extend to the top of the flue as in the diagram.

7. FLUE AND LINER (From ceiling to flue top)

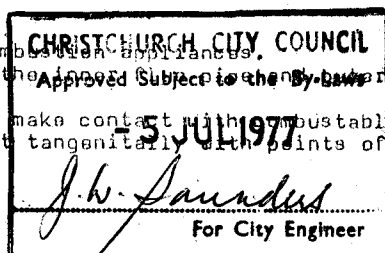
Method 2. This flue system is not recommended for most slow combustion appliances.

Ref. 316: Cooling the flue by air flow; i.e. air flow between the inner and outer liner, ref. 310.1 (with minimum 50 mm (2") clearance in between).

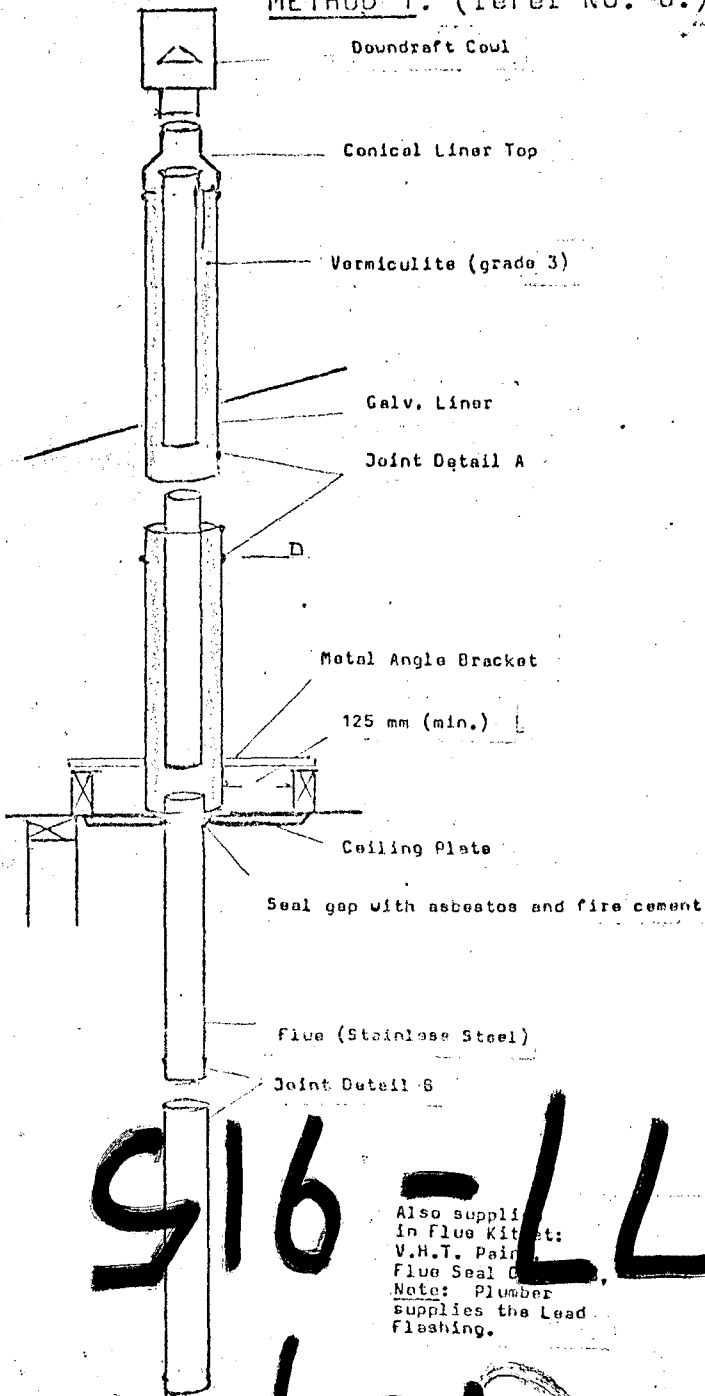
With this method the outside of the liner can be fastened to or make contact with combustable material (i.e. wood etc.) with a packing of asbestos only when meeting it tangentially with points of contact no less than at 90 degrees.

INFORMATION REQUIRED WHEN ORDERING A FLUE KITSET

- 1. State appliance type and which diagram method used.
- 2. (a) Floor to ceiling measurement. (b) Ceiling to ridge measurement.
- 3. Note: Flue and liner are required to extend a minimum of 450 mm (1' 6") above the ridge of the house.

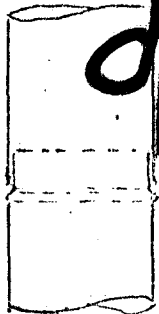


**METHOD 1. (refer No. 6.)**



Also supplied in Flue Kit set:  
V.H.T. Pair  
Flue Seal  
Note: Plumber supplies the Lead Flashing.

**DETAIL A**



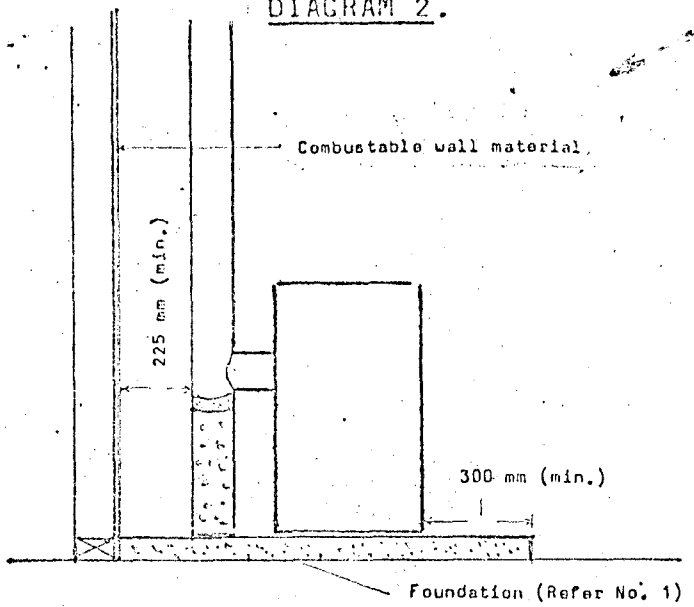
Fasten Liner Joints with Pop Rivets

**DETAIL B**

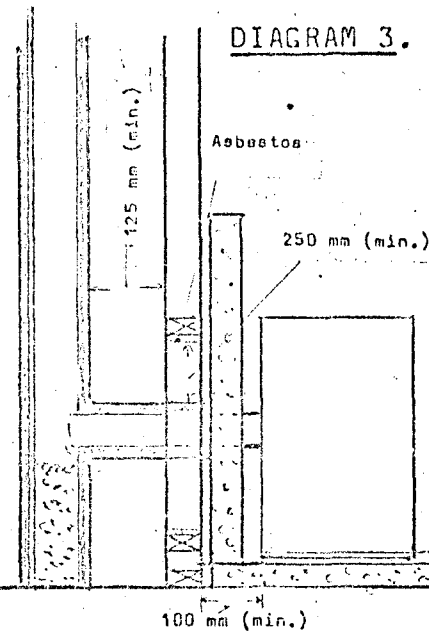


Use Flue Sealing Compound

**DIAGRAM 2.**



**DIAGRAM 3.**



**DIAGRAM 4.**



Protective Screen (Hearth Material)

Air space vented

For Flue Detail Coal Range (Rayburn) as detailed, or Space Heater.

516-77-915

PPR. JHP

125 mm is

HEATER INSTALL

**INSTALLATION PROCEDURE:** (Plumber) (A) Locate a position for the appliance (refer to No. 1,2,3, & 4) if possible where there are no valleys, beams or rafters in the way of the flue. (For hole size refer to No. 6 or 7). (B) Mark out the flue centre on the ceiling and plumb bob and measure off to locate hearth position. (No. 1). (C) Cut a hole in the ceiling then the roof for the liner (No. 6 or 7). (D) Securely fasten metal angle bracket to ceiling timber and liner. (No. 6). Repeat the same under the roof. (Use spirit level on liner). (E) Lead flash the liner to the roof. (F) Screw ceiling plate to the ceiling. (G) Fit hearth in position. (If wetbacked, instal pipe work). (H) fix protective screen material behind and beside the appliance and flue if required. (I) Place appliance on hearth. (If wetbacked connect to water pipes). (J) Fit flue pipe until just through the ceiling. (Important: use sealing compound on all flue joints. With No. 6, seal the gap between ceiling plate and flue). (K) Fill completely between the liner and flue with grade 3 vermiculite (recomend first added with a dry water mix 1 by 4 of cement and vermiculite). (L) Rivet all liner joints together. (M) With all lengths of flue and liner in place slide flashing cone over flue and liner then fit cowl.

DEPT.	APPLICATION NO. 333	PERMIT NO.	Initial
TOWN PLANNING	Zoning		
	Siting (ordinances)		
	Coverage		
	Density		
	Height		
	Outbuildings (height area)		
	Signs		
SURVEYOR	Building Restrictions		
	C.D.B. Widening		
	C.D.B. Clearance		
	Cash in lieu of Reserve		
	D.P. or Title Amalgamation		
	Unit Title		
TRAFFIC ENGINEERS	Access		
	Off Street Loading		
	Off Street Parking		
	Turning Space		
	Motorway		
	Street Works		
STREET- WORKS	Vehicle Barriers		
	Sealing of Areas		
	Location of Gully Traps etc.		
	Culverts and Accesses		
	Drainage		
BUILDING INSPECTORS	Fire Zone and Resistance		
	Siting (By laws)		
	Light and Ventilation		
	Room Sizes and Stud Ht.		
	Heating and Storage		
	Toilet and Laundry Accommod.		
	Mezzanine Floors		
	Storm Water and Section Levels		
	Entrance Levels		
	Projections over Street		
	Verandahs		
	Hoardings		
	Street Numbers		
	Insulation		
Access for Handicapped			
Unit Title			
STRUCTURAL ENGINEERS	Fire Resistance Requ.		
	Projections over Street		
	Structural Stability		
EGRESS OFFICER	Egress and Exit Signs		
	Fire Fighting Equipment		
	Alarm Systems		
	Emergency Lighting		
	Fire Stops		
	Wall Linings		
HEALTH INSPECTORS			
[REDACTED]			