

INSTALLATION MANUAL

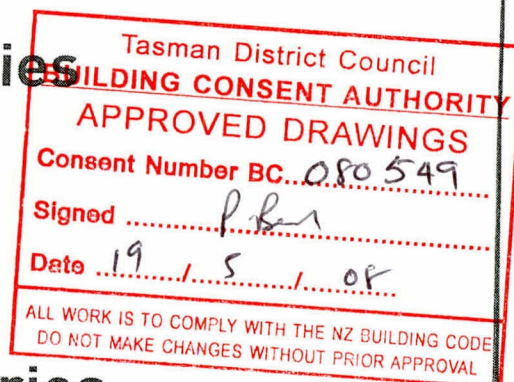
Radiant Series

ECO Tiny Rad

ECO Wee Rad

ECO Rad

ECO Euro Rad



Pedestal Series

ECO Tiny Ped

ECO Pioneer Ped

ECO Xtreme Ped

ECO Aspire Ped

Traditional Series

ECO Tiny Trad

ECO Pioneer Trad

ECO Aspire Trad

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**Refer to the other side of this manual for owners operation & warranty details*

METRO

IMPORTANT MESSAGE TO THE INSTALLER

This Metro woodfire has been tested to and complies with AS/NZS2918:2001 when installed in accordance with this manual. Please ensure you are fully conversant with this relevant standard and the contents of this manual. Correct installation is critical to the safe operation and performance of this woodfire.

Please take particular note of the following:

- ECO Metro's should be installed with a Metro ECO flue system which has been developed to enhance the performance of Metro woodfires. Any alternative flue system may invalidate the Metro's emission approvals as some councils within New Zealand have made installation of Metro ECO flue systems with ECO Metros mandatory.
- The 150mm active flue must be fully encased from the ceiling to the underside of the flashing cone at the top of the flue system, (i.e. there must not be any 150mm flue exposed).
- All flue joints must be sealed and riveted in 3 points with stainless steel or monel rivets; the bottom of the flue in particular MUST be fully sealed into the flue outlet of the Metro woodfire.
- In New Zealand, the Metro must be bolted through the floor protector into the floor to comply with the seismic restraint provisions of the Standard.
- All Metro's are extremely heavy varying in weight from 85kgs up. During the installation process do not lift the appliance by yourself, and take care not to damage the panel coating.
- If fitting a Pioneer double flueshield to the ECO Rad series or ECO Xtreme or ECO Aspire, make sure bracket 5B is fitted at the same time as you locate the 150mm flue pipe into the spigot of the fire.



WARNING

- THE APPLIANCE AND FLUE-SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH AS/NZS 2918 AND THE APPROPRIATE REQUIREMENTS OF THE RELEVANT BUILDING CODE OR CODES.
- ANY MODIFICATION OF THE APPLIANCE THAT HAS NOT BEEN APPROVED IN WRITING BY THE TESTING AUTHORITY IS CONSIDERED TO BE IN BREACH OF THE APPROVAL GRANTED FOR COMPLIANCE WITH AS/NZS 4013.



CAUTION

- MIXING OF APPLIANCE OR FLUE-SYSTEM COMPONENTS FROM DIFFERENT SOURCES OR MODIFYING THE DIMENSIONAL SPECIFICATION OR COMPONENTS MAY RESULT IN HAZARDOUS CONDITIONS. WHERE SUCH ACTION IS CONSIDERED, THE MANUFACTURER SHOULD BE CONSULTED IN THE FIRST INSTANCE.
- DO NOT INSTALL A METRO WITH ANY SIGNS OF VISIBLE DAMAGE.

ASSEMBLING THE METRO

All Metro woodfires are packed in a single heavy-duty carton, and bolted to a wooden pallet. Having removed the packaging and located this manual, familiarise yourself with the illustrations on the opposite Page, B, and proceed as detailed below.

Note: The Metro carton shows the model you are about to install, enabling you to select the appropriate model's assembly instructions.

Metro ECO Rad & ECO Trad Series

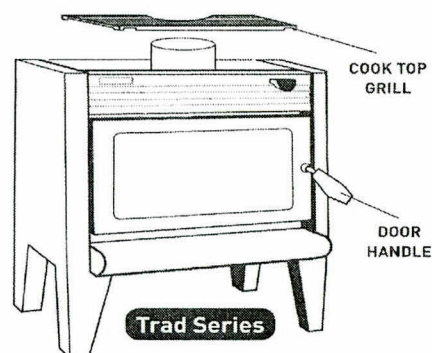
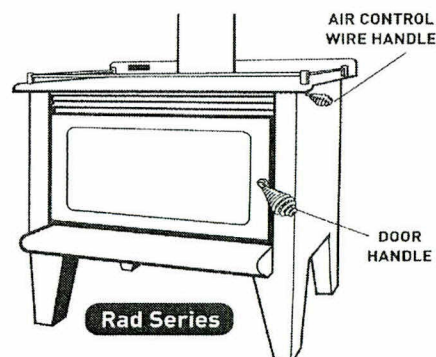
These Metros are supplied virtually fully assembled. Packed inside the firebox you will find bricks in a cardboard wrapper, a door handle and in the Rad Series Metro's, a wire handle for the air control.

- Open the door fully and fit the fire bricks to each side of the firebox, noting that they are retained in place behind two pins as illustrated in Diagram 2 on Page B.

Note: The ECO Wee Rad and ECO Pioneer Trad have an additional "3rd brick" which fits to the rear face of the firebox, locating under/into a bracket provided in the middle of the firebox's rear face, under the top baffle.

- Attach the door handle to the door latch assembly by screwing it on clockwise until all the thread on the door latch is covered.

Metro ECO Rad Series only: Attach the air control wire handle to the 6mm shaft protruding through the right hand side panel by screwing it on clockwise.



Metro ECO Ped Series

To minimise freight damage, the pedestal has not been attached but is packaged inside the firebox. Some assembly is required as illustrated in Diagram 1. Open the door of the Metro and remove the following:

- The pedestal packed in a cardboard tray
 - The pedestal mounting plate
 - The pedestal heat shield (*Xtreme & Aspire models only*)
 - Side bricks in a cardboard wrapper
 - Door handle and bolt bag.
- Remove the two securing bolts from the base of the firebox which secure the Metro to the wooden pallet, close and latch the door.
 - Remove the "cook top" grill and lay the collapsed Metro carton on the floor behind the Metro. Place one hand into and securely grip the flue outlet, place your other hand under the front of the pallet base and gently tip the Metro backwards until it is resting on its back.
 - Fully open the Metro's door, taking care that the door does not fall closed; take the four 6mm bolts from the bolt bag and insert them through holes provided in the firebox base. **Metro Xtreme & Aspire models only:** Fit the pedestal heat shield over the four bolts as shown in Diagram 1, with the open edge facing the front of the Metro (up).
 - Position the pedestal with its front facing up over the four bolts and fit the nuts and washers supplied. Check to ensure the pedestal is correctly aligned and securely tighten the nuts.
 - Close and latch the door. Gripping the flue outlet once more, gently raise the Metro until it is upright. Refit the "cook top" grill and attach the door handle to the door latch assembly by screwing it on clockwise.
 - Open the door fully and fit the fire bricks to each side of the firebox, noting that they are retained in place behind the two pins as illustrated in Diagram 2.

Note: The ECO Pioneer Ped has an additional 3rd brick which fits to the rear face of the firebox, locating under/into a bracket provided in the middle of firebox's rear face, under the top baffle.

Note: The ECO Tiny Ped model utilizes a slightly different pedestal to that detailed in diagram 1. The rear panel must be turned around with the return fold facing back the opposite way.

All ECO Metro's

Check to ensure the top baffle is in its correct position in the top chamber of the firebox; it should be resting on four support lugs (two on each side of the firebox). The baffle must be hard back against the rear of the firebox with the "promet extension" (white board) facing forward as illustrated in Diagram 2.

Diagram 1

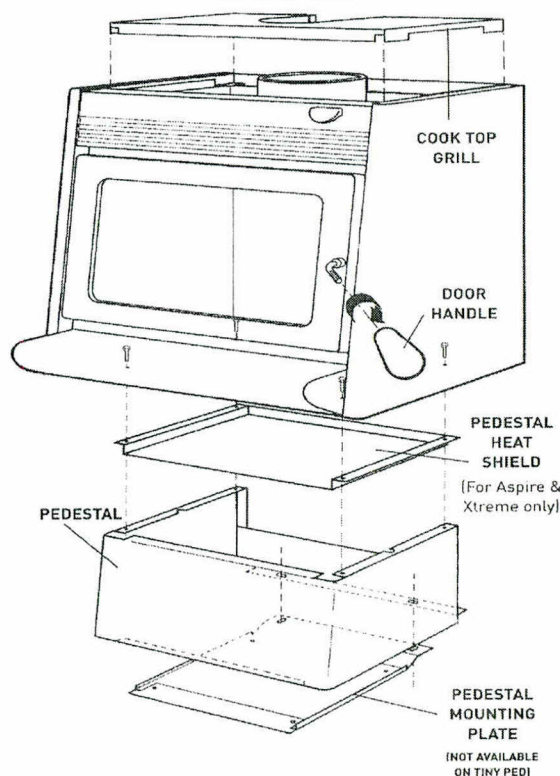
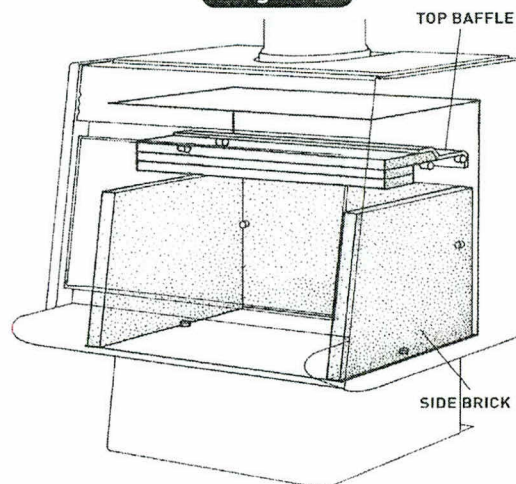


Diagram 2



DIRECT VENT OPTION

The ECO Xtreme, ECO Aspire, ECO Rad and ECO Euro Rad model Metros have the option to be installed as "Direct Vent" appliances, thereby drawing all primary and secondary combustion air from outside the home. Once connected, this direct venting option ensures the air that is heated within the home, stays in the home improving efficiency and reducing fuel usage.

Note: Connection of the Metro's direct vent inlet to outside the home is optional. If not connected these Direct Vent models still offer greatly improved performance and lower emissions due to the unique pre-heated air path for all primary and secondary combustion air that these models consume.

Direct Vent Options

Three "Direct Vent kits" are available to connect the ECO Metro to an air supply from outside the living environment of the home. The kits available include;

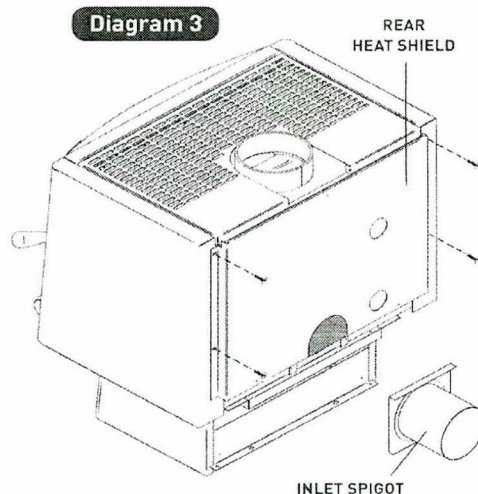
- DV WALL KIT – For installations when the Metro is installed against an outside wall.
- DV FLOOR KIT– For installations onto a floor which has a free air supply below it.
- DV CEILING KIT– For installations when the Metro is installed against an internal wall and on a concrete floor (Vent kit goes into the wall cavity, then up inside the wall into the ceiling cavity, where the air supply is drawn from)

Installing the Direct Vent Option

Remove the rear heatshield from the Metro woodfire by unscrewing the 4 self tapping screws illustrated in Diagram 3 and proceed as follows;

1. Remove the section of panel illustrated with a "hatch", from the mid/bottom section of the rear heatshield. This section to be removed has been pre-punched and only requires a few small tabs to be cut.
2. Take the "inlet spigot" supplied in the "Direct Vent Kit" and slide it fully down into position into the brackets provided on the rear of the firebox.
3. Replace the Metro's rear heatshield with the 4 screws previously removed.

The Metro Woodfire is now ready for installation once you have pre-fitted the Direct Vent Kit into the wall or floor. Full instructions for this procedure are supplied with the direct vent kits.



FLOOR PROTECTOR SIZE, CONSTRUCTION & FITTING

Pioneer manufacture an extensive range of what Pioneer term "Ash Floor Protectors" which comply with the minimum floor protector requirement of AS/NZS2918:2001, and can be installed with any freestanding Metro woodfire.

Metro freestanding woodfires DO NOT require an insulating floor protector as they comply with the minimum floor protector requirements of AS/NZS2918:2001. These minimum floor protector requirement are;

- They must be of adequate size to give appropriate wall, rear and front clearances/projections as detailed below and in the chart illustrated on Page "E". Note:
 - The floor protector must extend 200mm horizontally to the rear and each side directly below the door opening, and 300mm forward of the door opening.
 - The upper surface of the floor protector must be made of non combustible material.
- A suitable floor protector for a Metro freestanding woodfire is therefore any non-combustible material which could include;
 - Ceramic tiles with grouted joints fixed directly to timber flooring.
 - A sheet of toughened glass, panel steel etc. laid directly onto a wooden or other combustible floor.

Note: If being installed onto a concrete or non-combustible floor a floor protector is not required.

Fitting the Floor Protector

Once the floor protector is constructed and laid in final position, you are ready to locate the position where the Metro will sit on the floor protector. This procedure varies depending on the model.

Metro ECO Rad, ECO Trad and ECO Tiny Ped Series

Lift the Metro onto the floor protector and using a tape measure to ensure that the minimum wall clearances and front floor protector projections as detailed in the chart on Page E are met or exceeded. Once the Metro's location on the floor protector is established and if the installation is in New Zealand, seismic restraint is required.

Using masonry anchors if the floor protector is on a concrete floor or coach bolts if a wooden floor, secure through the holes provided, behind both rear legs, or for the Tiny Ped use the two holes provided on the rear panel of the pedestal base.

Note: The anchors must pass through the floor protector and securely anchor the Metro to the floor.

Metro ECO Ped Series

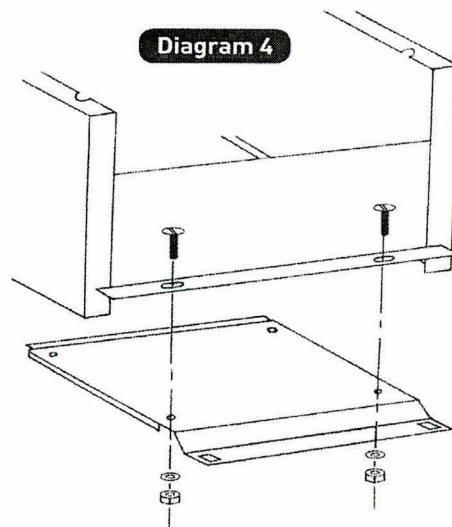
These models (excluding the ECO Tiny Ped) are supplied with a "pedestal mounting plate". Refer to Diagram 1 on Page B. Place the mounting plate on the floor protector with the two slots at the rear. A flue centre hole is marked on this plate and a chart is attached enabling you to locate the position of the Metro without placing the Metro onto the floor protector. Once the location of this mounting plate is established, secure it through the floor protector into the floor using a minimum of two of the four holes provided, diagonally opposite each other. Suitable anchors are as detailed for the Metro ECO Rad and ECO Trad above.

Alternative Metro mount plate installation

For installations when it is desirable to position the assembled Metro prior to bolting down, it is possible to "invert" the mounting plate and use it as a means of bolting the Metro direct to the floor, through the floor protector. Refer to Diagram 4 and note;

1. Rotate the mount plate 180 degrees so the label faces downwards.
2. Remove the two "slide nuts" from the rear face of the mount plate.
3. Secure the mount plate to the pedestal with 6mm bolts through holes provided as illustrated.

You can then bolt down the Metro through the two rectangular slots in the rear edge of the mount plate. These slots are more accessible than bolting direct through the pedestal, and it also eliminates the need for spacers.

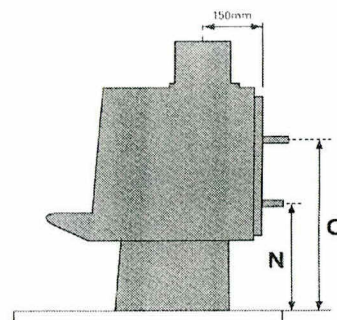
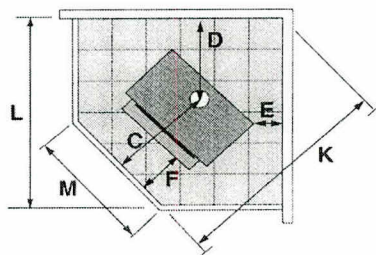
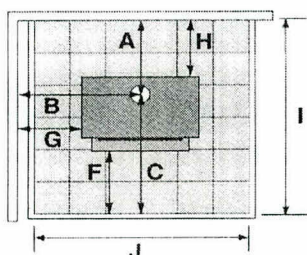


CLEARANCE CHART

Measurements listed below are the minimum required, stated in millimetres. Measurements are taken from the following reference points as illustrated:

- From the nearest combustable wall or surface (A, B, D, E, G, H)
- From the Metro's flue centre (A, B, C, D)
- From the outermost point of the Metro's cabinet/construction (E, F, G, H)
- To the edge of the ash Floor Protectors non-combustible surface (C, F, I, J, K, L, M)
- The ECO Aspire Ped, ECO Xtreme Ped and ECO Aspire Trad installed with a "Pioneer double flue mounted shield with side extensions fitted" reduces minimum corner clearance E from 170mm to 110mm. In this situation use the LTD Metro equivalent for measurements E, D, K & L. (i.e. use LTD Aspire Ped chart for ECO Aspire Ped for E, D, K & L).

Note: If you are installing an ECO Aspire, ECO Xtreme or ECO Rad onto a Pioneer 1150 corner floor protector the flue shield side extensions MUST be fitted.



METRO INSTALLATION CLEARANCES

Minimum clearances shown are in mm, with a Pioneer double flue mounted shield fitted.

Model	A	B	C	D	E	F	G	H	I	J	K	L	M
ECO Tiny Rad	225	552	580	420	150	200	300	75	805	650	1165	925	250
ECO Wee Rad	260	525	580	385	80	200	220	110	840	825	1125	950	425
ECO Rad	250	575	625	435	80	200	200	100	875	905	1240	1065	505
ECO Euro Rad	250	625	625	435	80	200	250	100	875	905	1240	1065	505
ECO Tiny Ped	210	430	580	290	25	200	185	60	790	650	990	875	250
ECO Pioneer Ped	260	595	580	385	85	200	300	110	840	825	1120	950	425
ECO Xtreme Ped	230	585	625	495	170	200	250	80	855	905	1325	1120	505
ECO Aspire Ped	230	585	625	495	170	200	250	80	855	905	1325	1120	505
ECO Tiny Trad	210	430	580	290	25	200	185	60	790	650	990	875	250
ECO Pioneer Trad	260	595	580	385	85	200	300	110	840	825	1120	950	425
ECO Aspire Trad	230	585	625	495	170	200	250	80	855	905	1325	1120	505

METRO SPECIFICATIONS

Measurements shown are in mm.

Model	WIDTH	DEPTH	HEIGHT	N	O
ECO Tiny Rad	505	530	665	280	470
ECO Wee Rad	607	530	665	295	485
ECO Rad	750	575	745	338	528
ECO Euro Rad	750	575	745	338	528
ECO Tiny Ped	490	530	665	280	470
ECO Pioneer Ped	590	530	665	295	485
ECO Xtreme Ped	670	575	715	325	515
ECO Aspire Ped	670	575	715	325	515
ECO Tiny Trad	490	530	665	280	470
ECO Pioneer Trad	590	530	665	295	485
ECO Aspire Trad	670	575	715	325	515

WETBACKS

If the home is in a classified "clean air zone", and dependant on requirements/restrictions which may be imposed by your local territorial authority (council) you may or may not be able to install a water heating device. If in doubt consult your local Metro retailer.

The 2.5kW, 3kW and 4kW wetback options are fitted to the inside rear of the firebox, with the connection pipe heights illustrated and detailed on the previous Page "D". Please note:-

- Wetback connections for the Tiny models are 92mm left of the flue centre, and all other Metro models are 140mm left of the flue centre facing the Metro/wall; the return pipe connection is directly above the inlet connection.
- Reduced height pedestals are available for certain models to reduce wetback connection heights.
- It is recommended the return pipe has a minimum rise of 1 in 12; performance will reduce as the distance to the storage cylinder increases.



WARNING

- **DO NOT CONNECT TO AN UNVENTED HOT WATER SYSTEM.**
- **INSTALL IN ACCORDANCE WITH AS 3500.4.1 OR NZS 4603 AND THE APPROPRIATE REQUIREMENTS OF THE RELEVANT BUILDING CODE OR CODES.**

To fit the Wetback proceed as follows:

1. Remove the rear heat shield of the Metro by removing the four pozi drive screws. Remove the two pre-punched knockouts from this panel.
2. Two further knockouts will be visible on the inner rear heatshield on some models while others have a removable plate, remove these also. Once these are removed 6mm nuts will be visible through the knockout holes.
3. Open the Metro's door and locate two bolts securing the pressed washers which are visible on the left hand side of the firebox for both inlet and outlet connection points.
4. A further three bolt heads will also be visible on the inside rear wall of the firebox; these are threaded into the 6mm thick firebox. Remove all three.
5. Using the tube of sealant supplied with the wetback, apply a liberal bead of sealant around both connection holes on the inside of the firebox. On the rear of the wetback casting apply the remaining contents of the tube equally around both connection pipes.
6. Fit the wetback into the firebox and carefully pass the connection pipes through the holes in the rear of the firebox. Securely attach the wetback using the three bolts and washers previously removed from the rear face of the firebox, fitting them through the slots provided in the wetback's jacket.
7. The wetback is now ready for connection to the storage cylinder by a registered plumber.

FLUE INSTALLATION

It is recommended that all Metro freestanding woodfires be installed with the energy efficient Metro ECO flue system which comes complete with detailed installation instructions. Any alternative flue system must comply with and be installed as detailed AS/NZS 2918:2001.

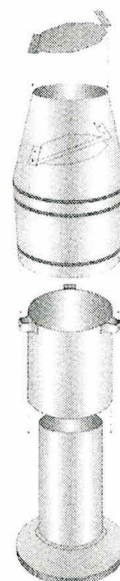
All Metro's require a 150mm diameter flue. Please note:

- All joints in the fluepipe must be sealed with Pioneer fire cement (or similar) and riveted.
- The base of the fluepipe must be sealed into the outlet of the Metro's flue stub.
- Refer "Important message to installer on Page A".
- The flue systems 150mm diameter fluepipe must terminate a minimum of 4.6 metres above the top surface of the floor protector.

Pioneer Flueshield

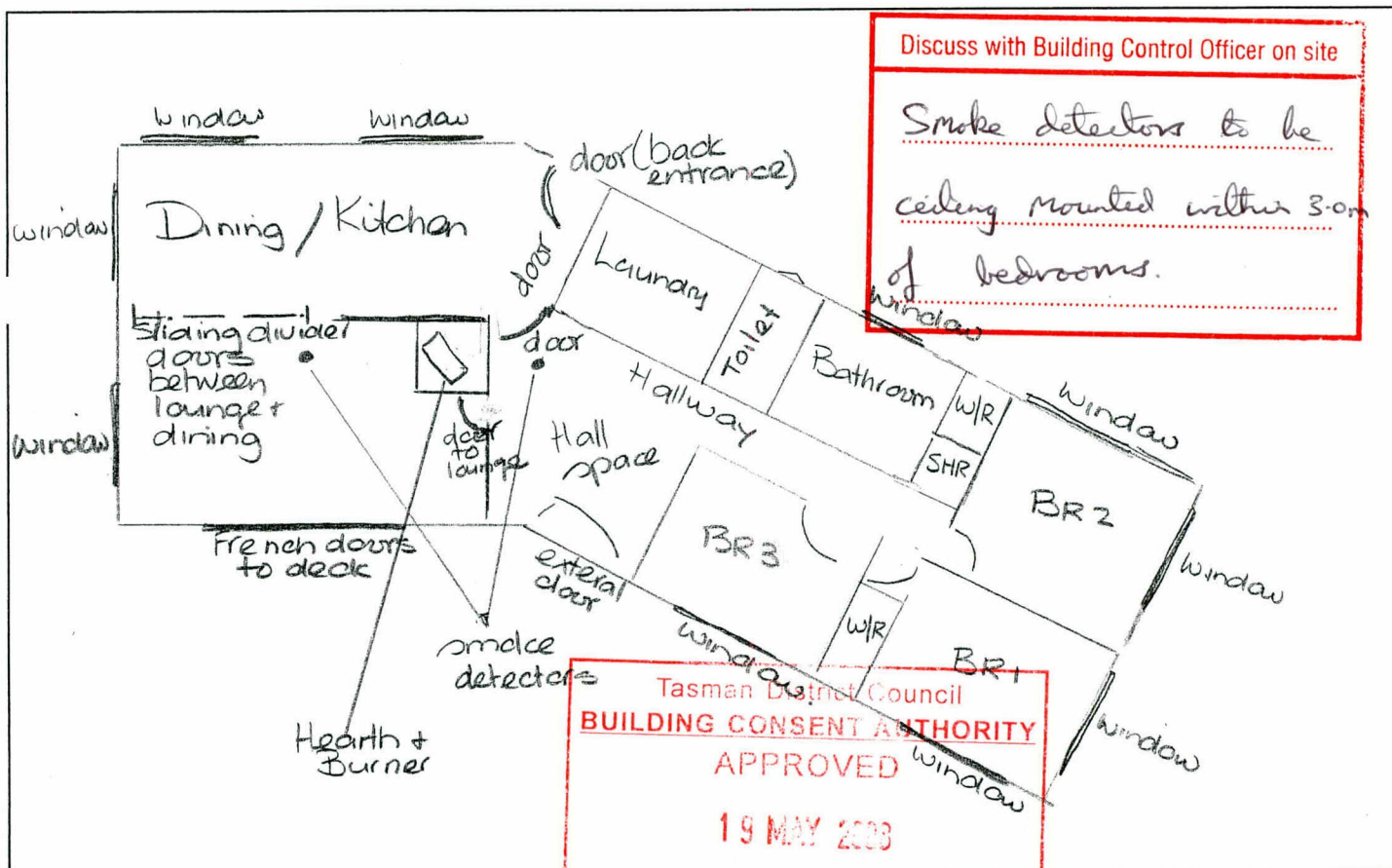
If the Metro requires a flueshield to be fitted to reduce wall clearances, only the Pioneer vented double flueshield is tested and approved to be fitted onto a Metro woodfire and only required to shield the first section of the flue. Do not extend the flueshield beyond this point as this will result in the ceiling temperature exceeding the allowed maximum.

If fitting a Pioneer double flue shield to the ECO Rad series or ECO Xtreme or ECO Aspire, make sure bracket 5B is fitted at the same time as you locate the 150mm flue pipe into the spigot of the fire.



A sketch of the proposed solid/liquid fuel heater is to be drawn into the box below. This sketch is to clearly and accurately record the following:

- location of the heater
- location of all walls, doors and windows in the building. Indicate which room appliance is located in
- location of existing/proposed smoke detectors that comply with the relevant standards must be marked. These will be inspected and tested prior to the issue of a Code Compliance Certificate
- location of the existing water cylinder if a wetback/hot water booster is to be fitted
- if liquid fuel, show size and location of the fuel storage tank related to the building and site boundaries. Wall openings (windows or doors) and wall cladding material within 1.8m of the storage tank vicinity should be shown



Building Consent (do not fill in this section if the application is for a Project Information Memorandum only)

Plans and specifications are to be attached to this application:

(all plans and specifications must meet the minimum requirements set out in the Regulations, or required by the Building Consent Authority (BCA) Please complete full list under attachments overleaf)

The building work will comply with the Building Code as follows:

(if you're not sure which clauses are applicable, talk to the BCA, or your architect)

Clause (tick relevant clause numbers of Building Code)	Means of compliance (refer to the relevant compliance document(s) or detail of alternative solution in the plans and specifications; if not applicable, put N/A)	Waiver/modification required (state nature of waiver or modification of Building Code required; if not applicable, put N/A)
☐ B1 Structure		
☐ B2 Durability		
☐ C1 Outbreak of fire		
☐ E2 External moisture		
☐ F7 Smoke alarms		



METRO WEE RAD

- Rustic appearance, with a radiant design
- Big on performance, offering over 14kW's of output
- Wetback option, capable of heating your water needs*
- Designed to last - 6mm carbon steel & fire brick lined
- Suitable for heating up to 150m2 (average 3 bedroom home)
- Optional gold, stainless steel or black trim

Tasman District Council
BUILDING CONSENT AUTHORITY
APPROVED
19 MAY 2008



METRO XTREME RAD

- Radiant styling, with a truly traditional look
- Cook top for heating and cooking family meals
- Wetback option, capable of heating your water needs*
- Built to last with a 5 year firebox warranty, 10 year option
- Big performance, with output to heat up to 220m2
- Direct vent option available with ECO DV model
- Standard in black trim, with upgrade trims available in either gold or stainless steel



METRO EURO RAD

- Wetback option, to heat your hot water needs*
- Finished in metallic black high temperature paint
- Designed to heat large open areas up to 220m2
- Standard 5 year firebox warranty, 10 year option
- Large cook top, for heating and cooking family meals
- 6mm carbon steel & fire brick lined firebox
- Direct vent option available with ECO DV model
- Optional gold, stainless steel or black trim including trim rail and handles



METRO MEGA RAD

- Finished in metallic black high temperature paint
- Mega cook top for heating and cooking family meals
- Massive output, over 23kW's of output to heat up to 280m2
- Wetback and Boiler options available up to 7.0kW's, designed to heat under floor and radiator systems.
- Standard in black trim, with upgrade trims available in either gold or stainless steel

*At time of printing wetback approvals for some regions were pending, refer to your Metro retailer.