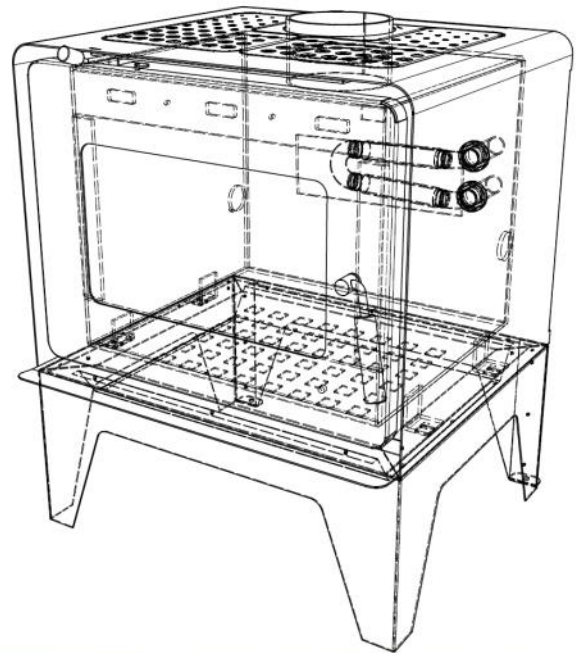
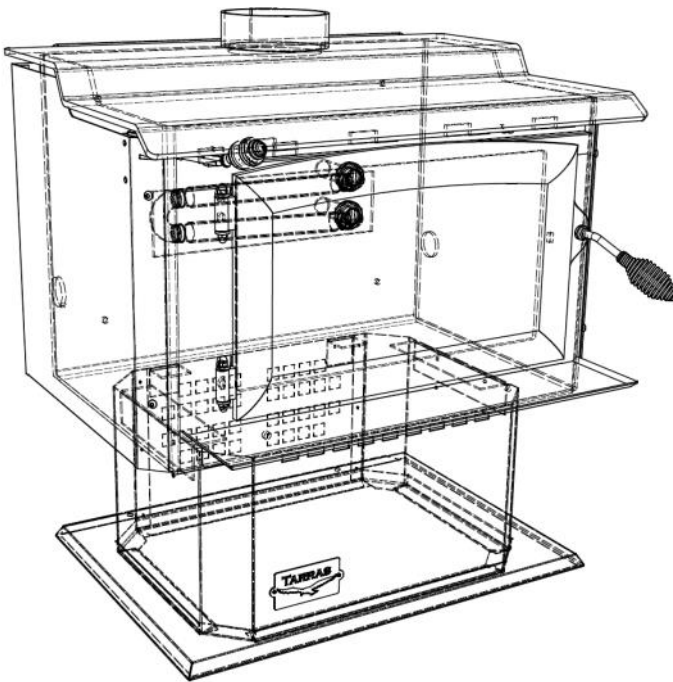




WOODSMAN

Warming kiwi homes since 1887.

Specifications and Installation Instructions for Woodsman Solid Fuel Burners



The installation of any Woodsman solid fuel burner requires a Building Consent prior to installation commencing. We recommend the installation of a Woodsman solid fuel burner or flue system be undertaken by the holder of a current SFAIT (Solid Fuel Appliance Installation Technician) qualification issued by the NZHHA (NZ Home Heating Association Inc.).

www.nzhha.co.nz

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Testing and Certification

| MODEL | AS/NZS 2918:2001, APP B | AS/NZ 2918:2001, APP E | AS/NZS 4012:1999 | AS/NZS 4013:1999 | ECan Cert Number |
|-----------------|-------------------------------|------------------------------|---------------------|---------------------|---------------------|
| ECR NoVo | Complies | N/A | 67% | 0.9g/kg | 153733 |
| ECR NoVo Wet | Complies | N/A | 65% | 0.9g/kg | 155148 |
| Totara | Complies | Complies | 67% | 0.9g/kg | 110220 |
| Matai ECR MkIII | Complies | N/A | 71% | 0.7g/kg | 102148 |
| Matai ECR MkV | Complies | N/A | 65% | 0.7g/kg | 102454 |
| IMF | Complies | Complies | N/A | 3.9g/kg | N/A |
| Flare - Wood | Complies | N/A | 68% | 0.97g/kg | 134775 |
| Flare - Wood WB | Complies | N/A | 65% | 0.89g/kg | 135021 |
| Flare - Multi | Complies | N/A | N/A | N/A | N/A |
| RMF | Complies | N/A | 83% | 3.9g/kg | N/A |
| Strongman | Complies | N/A | N/A | N/A | N/A |
| Aspen | Complies | N/A | 71% | 0.5g/kg | 111306 |
| Aspen WB | Complies | N/A | 65% | 0.5g/kg | 111307 |
| Brunner MKII | Complies | N/A | 71% | 0.5g/kg | 142896 |
| Brunner MKII WB | Complies | N/A | 65% | 0.5g/kg | 142897 |
| Tasman MKII | Complies | N/A | 71% | 0.5g/kg | 142898 |
| Tasman MKII WB | Complies | N/A | 65% | 0.5g/kg | 142899 |
| Tarras MKIII | Complies | N/A | 69% | 0.37g/kg | 143492 |
| Tarras MKIII WB | Complies | N/A | 65% | 0.5g/kg | 143494 |

Minimum Safe Installation Clearances to COMBUSTIBLE Materials

| | BRUNNER MKII & TASMAN MKII | BRUNNER MKII & TASMAN MKII With Rear Deflector Fitted (see Page 7) | FLARE-WOOD | FLARE-MULTI | TARRAS MKIII | TARRAS MKIII With Rear Deflector Fitted (see Page 7) |
|---------------------------------------|--|--|--|--|--|--|
| A | 200 | 120 | 100 | 100 | 230 | 160 |
| B | 450 | 450 | 320 | 350 | 480 | 460 |
| C | 300 | 300 | 300 | 300 | 300 | 300 |
| D | 118 | 118 | 110 | 110 | 67 | 67 |
| E | 230 | 240 | 120 | 150 | 250 | 220 |
| F | 345 | 265 | 281 | 281 | 372 | 302 |
| G | 758 | 758 | 635 | 665 | 863 | 843 |
| H | 535 | 545 | 449 | 479 | 611 | 581 |
| J | 850 | 850 | 850 | 850 | 898 | 898 |
| K | 1025 | 945 | 933 | 933 | 1052 | 982 |
| L | 1437 | 1451 | 1287 | 1329 | 1544 | 1500 |
| M | 1220 | 1230 | 1122 | 1152 | 1304 | 1274 |
| N | 680 | 680 | 652 | 652 | 680 | 680 |
| O | 615 | 615 | 600 | 600 | 600 | 600 |
| Flue Shield Requirements (See Page 6) | 1200 With flue shield deflector fitted | 1200 With flue shield deflector fitted | 1200 With flue shield deflector fitted | 1200 With flue shield deflector fitted | 1200 With flue shield deflector fitted | 1200 With flue shield deflector fitted |

Notes:

Dimensions **A, B & E** are taken from the combustible wall to the closest point of the appliance including panels.

Dimension **C** is measured from the edge of the hearth to the closest point of the firebox door frame as in AS/NZS 2918:2001 3.3.2

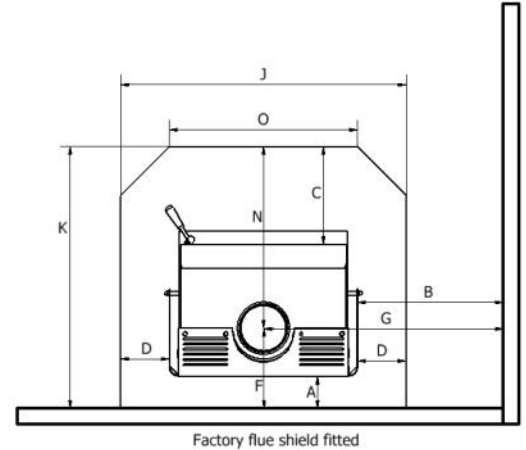
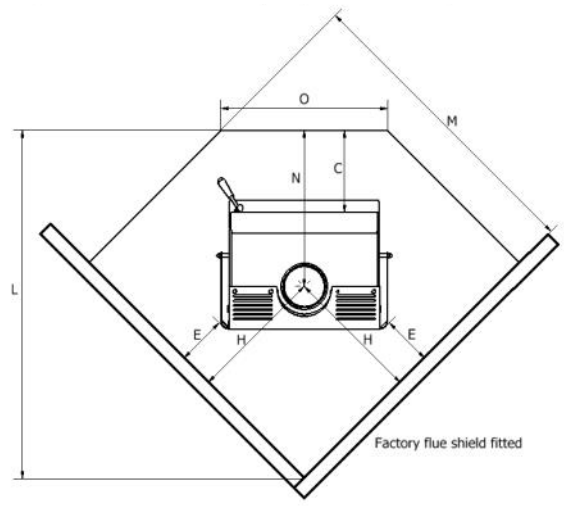
Dimensions **F, G & H** are not clearances that need to be adhered to. They are measurements for the purpose of locating the flue centre when the appliance is installed with the minimum safe clearances.

*610mm with firebox side panels fitted.

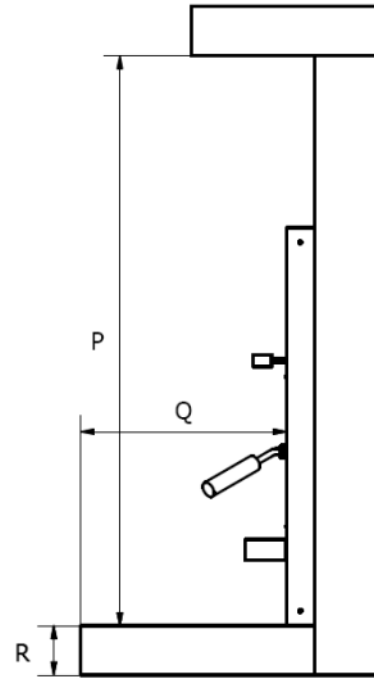
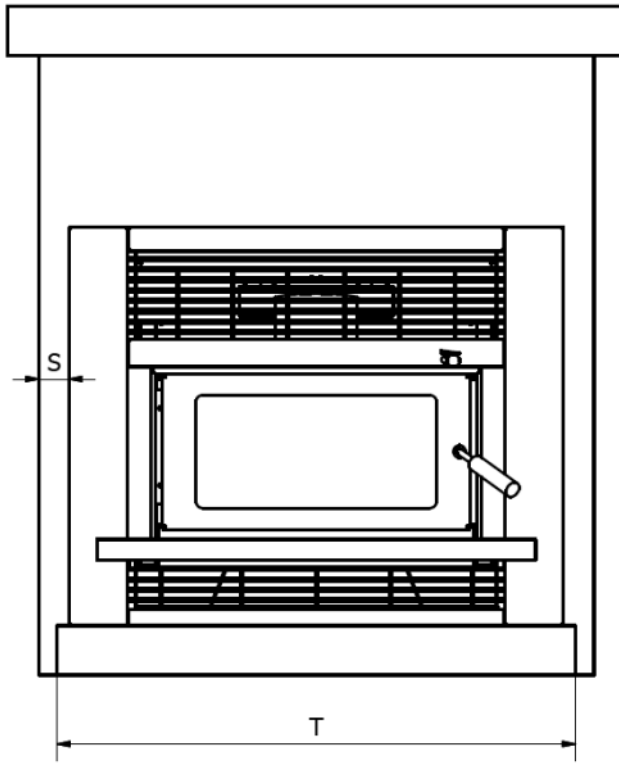
**968mm with firebox side panels fitted.

All dimensions are given in millimetres (mm).

| | ECR MkIII, MkIV, MkV | ECR NoVo With Rear Deflector Fitted (see Page 7) | ASPEN | RMF | STRONGMAN |
|---------------------------------------|----------------------|--|-------|------|-----------|
| A | 100 | 110 | 255 | 125 | 300 |
| B | 400 | 490 | 435 | 500 | 875* |
| C | 300 | 300 | 300 | 300 | GRAPH 1 |
| D | 150 | 115 | 118 | 150 | 150 |
| E | 200 | 200 | 230 | 180 | 380 |
| F | 251 | 265 | 404 | 276 | 441 |
| G | 690 | 800 | 743 | 790 | 1233** |
| H | 512 | 517 | 521 | 492 | 711 |
| J | 880 | 850 | 850 | 880 | 1015 |
| K | 807 | 792 | 1084 | 832 | 1364 |
| L | 1280 | 1259 | 1417 | 1252 | 1928 |
| M | 1110 | 1049 | 1219 | 1060 | 1616 |
| N | 556 | 527 | 680 | 556 | 923 |
| O | 580 | 450 | 615 | 580 | 715 |
| Flue Shield Requirements (See Page 6) | 900 | 1200 | 1200 | 900 | 1200 |



Minimum Safe Installation Clearances to COMBUSTIBLE Materials



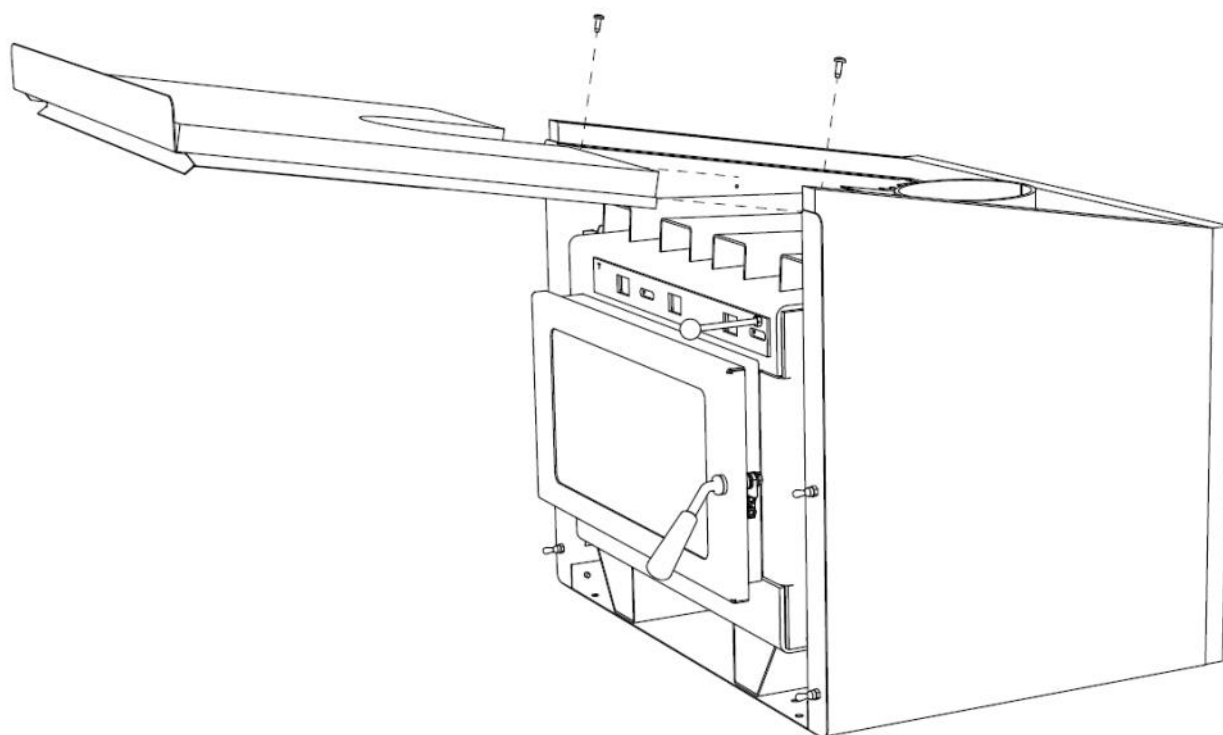
| | IMF | Totara |
|---|---------|---------|
| P | 980 | 1060* |
| Q | Graph 1 | Graph 1 |
| R | Graph 1 | Graph 1 |
| S | 50 | 50 |
| T | 840 | 840 |

* Dimension P can be 920mm with a factory supplied heat deflector fitted

Totara Insert Installation

When installing the Totara into a masonry situation, it is important to ensure that the flue is sealed and secured into the flue spigot.

In some tight situations, it may be very difficult to get access. In those cases, the top section of the cabinet is able to be removed by removing 2 screws and sliding it forward (as shown below). You then have access to the flue spigot to perform the task. Once completed, ensure that the top section of the cabinet is properly put back in its correct position, otherwise heat will escape into the cavity.



Additional Insulation in Cavity

In some installations, the cavity size leaves large open spaces around the insert cabinet. Even though the fascia may cover the opening, it is not air tight and there can be significant heat loss up the chimney.

This can reduce the effectiveness of the appliance and is likely to cause problems for the owner.

It is recommended that additional **non-combustible** insulation be used to pack around the cavity between the fire and the masonry to reduce (but not completely eliminate) air flow up the chimney and heat loss.

Ceiling Heights

All Woodsman free standing fires have been tested and approved to ASNZ 2918:2001 App B with a ceiling height of 2.4m and with the factory flue shield fitted in the below configurations. In some cases, the top of the flue shield terminates within 600mm of the ceiling height (refer to ASNZ 2918:2001 **4.5.2**) but all ceiling temperatures did not exceed the allowable limit in these cases and are therefore able to be installed. Reports are available on request for Councils.

If the ceiling height is less than 2.4m, then heat shielding is required as per AS/NZ 2918:2001 Table 3.2

Factory Flue Shields

Standard 900mm high flue shield:

ECR MKIII, ECR MKV & RMF

Standard 1200mm high flue shield:

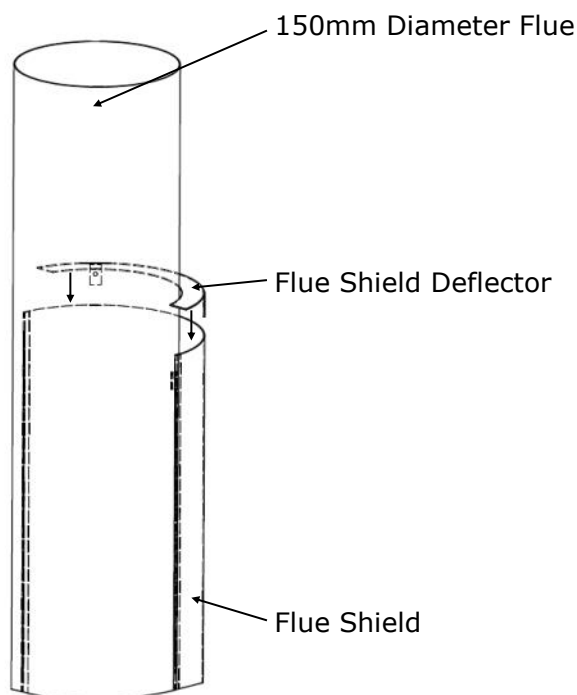
Brunner, Tasman, Aspen, ECR NoVo & Strongman

1200mm high flue shield with flue shield deflector (REQUIRED)

Tarras MKII, Tarras MKIII, Brunner/Tasman MKII & Flare (All Variants) - See Below

IMPORTANT - Flue shields should be no further than 10mm off the top of the fire box

Fitting the Flue Shield Deflector for Tarras MKII, Tarras MKIII, Brunner/Tasman MKII and Flare (All Variants)



To fit the heat shield deflector:

- Place the deflector on top of the heat shield and ensure no large gaps
- Fix in place by securing the tabs with rivets to the heat shield

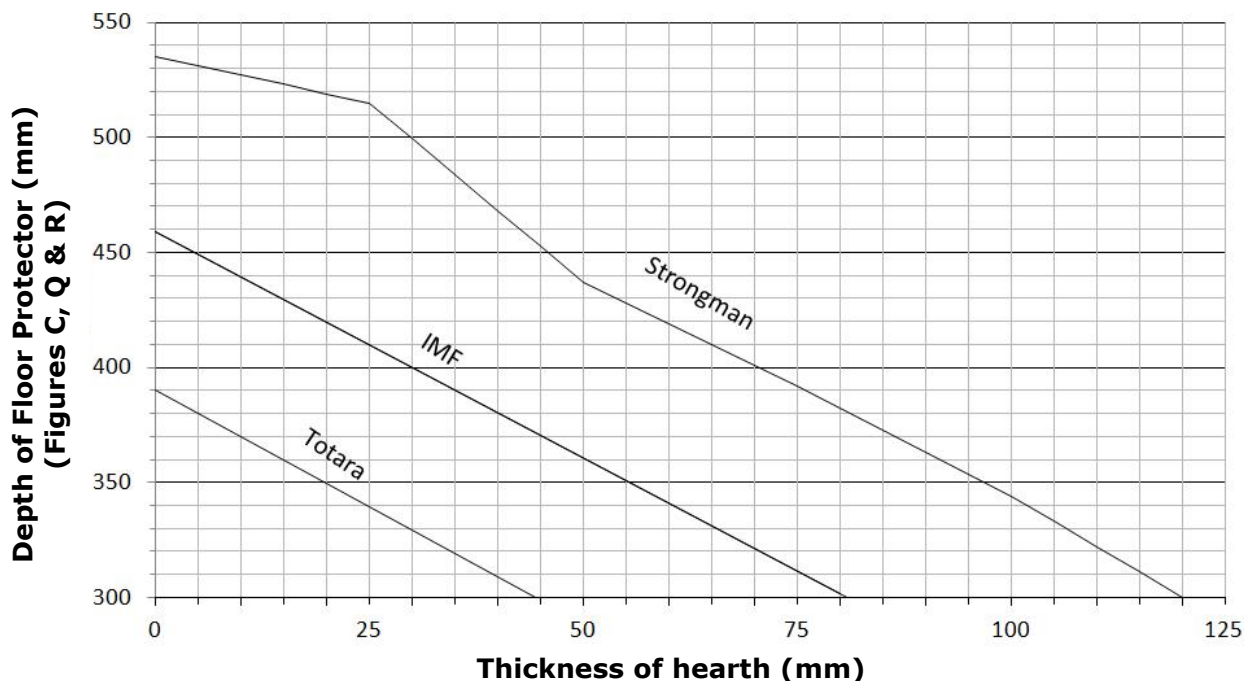
WARNING

This part is required to be installed on the listed models with ALL types of flue kits. Failure to do so, may cause the ceiling to over heat. The part is located in the fire itself and not the flue kit packaging.

Floor Protector Graph

Graph 1

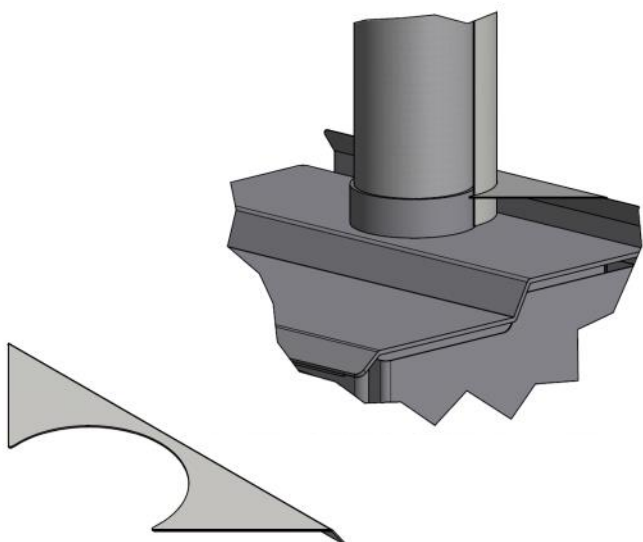
Floor Protector Sizes



This graph refers to Page 4 dimension C and Page 5 dimension Q & R.

The floor protector distance out in front of the fire (taken from the door), is dependent on the thickness of the floor protector. The thicker the floor protector is above the surrounding combustible floor, the less this distance is out in front of the fire.

Rear Deflector



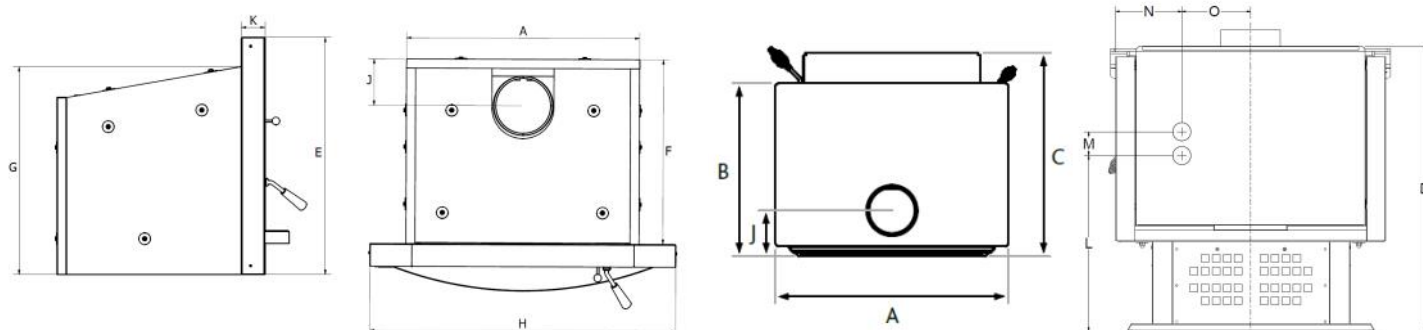
The rear deflector is used for reducing rear clearances for applicable fires (see page 4 for details). It is located loose in the firebox.

To fit the rear deflector, simply attach it to the rear shield of the fire using 2 rivets in the predrilled holes.

The rear deflector should be positioned tight up against the flue shield as shown.

Available for:
 Brunner MKII, Tasman MKII, ECR NoVo
 & Tarras MKIII

Dimensions



| | TOTARA | ECR MKIII, V | ECR NoVo | BRUNNER MKII & TASMAN MKII | ASPEN | TARRAS MKIII | FLARE WOOD | FLARE MULTI | RMF | STRONG- MAN | IMF Deluxe |
|---|--------|-----------------|-------------|-------------------------------------|-------|-----------------|---------------|----------------|-----|----------------|---------------|
| A Overall Stove Width | 642 | 580 | 620 | 615 | 615 | 765 | 630 | 630 | 580 | 715 | 590 |
| B Stove Depth Door Frame to Rear | | 390 | 382 | 525 | 520 | 522 | 540 | 540 | 390 | 521 | |
| C Overall Stove Depth Ledge to rear | | 450 | 466 | 630 | 633 | 640 | 602 | 602 | 450 | 590 | |
| D Overall Stove Height | | 620 | 705 | 757 | 730 | 772 | 764 | 764 | 620 | 695 | |
| E Insert Fascia Height | 650 | | | | | | | | | | 740 |
| F Insert Depth | 506 | | | | | | | | | | 480 |
| G Insert Maximum Height | 570 | | | | | | | | | | 590 |
| H Insert Fascia Width | 840 | | | | | | | | | | 850 |
| J Flue Centre to Back of Unit | 136 | 150 | 155 | 145 | 149 | 142 | 181 | 181 | 150 | 141 | 115 |
| K Insert Fascia Depth | 62 | | | | | | | | | | 120/6 5 |
| L Wetback Height | | 283 | 414 | 478 | 450 | 479 | 502 | 502 | | | |
| M Wetback Centres | | 130 | 65 | 65 | 65 | 65 | 65 | 65 | | | |
| N Wetback Position | | 290 | 108 | 107 | 106 | 180 | 133 | 133 | | | |
| O Flue Centre to Wet-back Centres | | | 192 | 182 | 182 | 188 | 182 | 182 | | | |

Disclaimer;

While every attempt is made to ensure this information is as accurate as possible, a tolerance of +/- 5mm should be allowed for in these dimensions

Reducing Clearances

The clearances that are provided on page 4 are to combustible materials. You can safely reduce those clearances by following the instructions located in AS/NZS 2918:2001 table 3.1 and 3.2

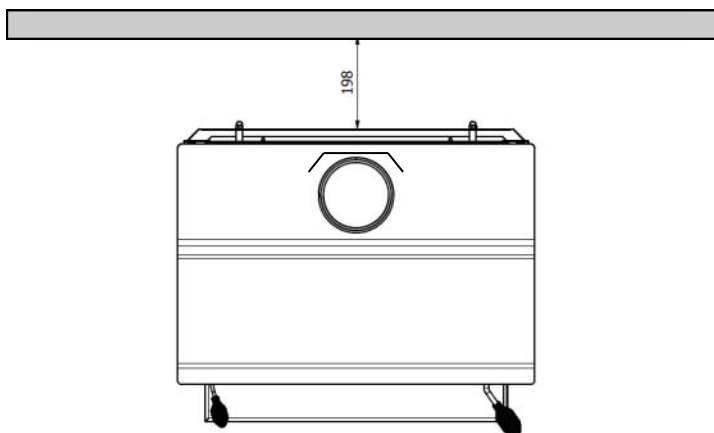
You can reduce the clearances by placing a non-combustible heat shield, with an air gap behind it and vented top and bottom, between the fire and the combustible wall. Masonry may be used as a heat shield material. The heat shield must extend a minimum of **450mm** beyond the top of the appliance and must be of appropriate width to ensure that the unshielded rear clearance is adhered to beyond the sides of the heat shield. See example below.

Clearance factors for heat shields which are within 45 degrees of the vertical

| Heat Shield Construction | Minimum Air Gap Dimension | Clearance Factor |
|--|---------------------------|------------------|
| Single layer of continuous material | 12mm | 0.4 |
| Single layer of continuous material | 25mm | 0.3 |
| Two spaced layers of continuous material | 12mm + 12mm | 0.2 |

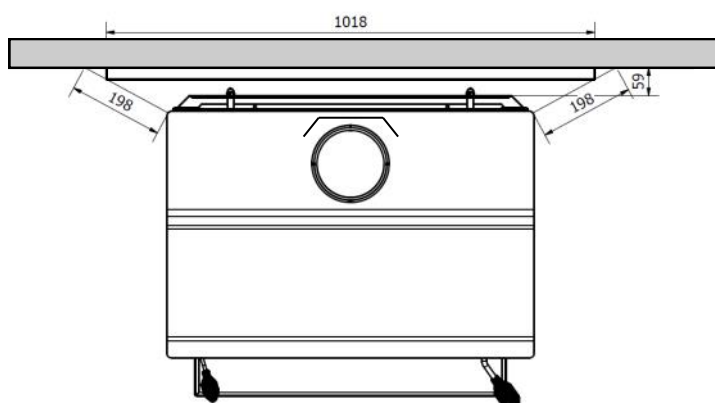
A non-combustible material in direct contact with a combustible material, with no air gap, is **NOT** considered a heat shield (unless the material has been tested in accordance with AS/NZS 2918:2001 Appendix A).

All clearance dimensions are taken from the combustible material to the appliance, ignoring the non-combustible in-between.



Unshielded Dimension for Woodsman Tarras MKII

Rear Clearance - 198mm (combustible to stove)



Heat shield with 25mm air gap with Woodsman Tarras MKII

Heat Shield - Single layer of continuous material with 25mm air gap.
Size 1018mm wide x 1222mm high

Reduced Rear Clearance - 59mm (combustible to stove)

Calculation: $198\text{mm} \times 0.3 = 59\text{mm}$

WARNING - This is only an example, you must refer to the full AS/NZS 2918:2001 document for more details and consult your local building inspector. Where heat shields are used to reduce appliance dimensions, additional flue shielding may be required (refer 4.5.2).

Installation Instructions

It is recommended this appliance should be installed by a trained and NZHHA qualified installer.

Warning: the appliance and flue system shall be installed in accordance with AS/NZS 2918 and the appropriate requirements of relevant building code/codes.

Warning: appliances installed in accordance with this standard shall comply with the requirements of AS/NZS 4013 where required by the regulatory authority, i.e. the appliance shall be identifiable by a compliance plate with the marking "Tested to AS/NZS 4013".

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 of components may result in hazardous conditions. Where such action is considered, the manufacturer should be consulted in the first instance.

Caution: cracked and broken components e.g. glass panels or ceramic tiles, may render the installation unsafe.

- Maintain a clearance of at least 1 metre between front of the appliance and building structure or any other substantial immovable object.
- If the appliance is installed on a heat sensitive floor, the floor should be protected with a floor protector, which shall extend entirely beneath the heater. For the correct floor protector sizes, refer to dimensions on page 4. For the minimum required material, see table below.
- Your appliance shall be seismically restrained, including the floor protector using the provided holes or brackets. The restraints should be sufficient enough to resist a seismic loading equal to 0.4 times the mass of the appliance. We recommend a minimum of 8mm dynabolts on concrete floors and 8mm coach screws for wooden floors of appropriate length.
- **Negative Pressure** - New homes are becoming more and more air tight and sometimes to the point where there is not enough air flow in the house to allow enough air for the fire to breath. This on its own, can cause the fire to become slower and slower as the oxygen and air that is available to the fire is depleted. However, in some cases the fire might be fine during normal use until an extractor fan is turn on. This can cause negative pressure inside the house and can immediately reverse the flow and suck smoke into the room. Any fan or device that extracts air from the home, can create negative pressure. If you have a situation where this is happening, temporarily cracking open a window in close proximity to the fan or the fire will equalise the pressure. As a more permanent fix, you may need to consider a venting solution to allow air into the home when required.

Minimum Material Specifications For Floor Protectors on a Floor of Combustible Material

| MODEL | SPECIFICATION |
|---|---|
| ASPEN | 9mm Eterpan LD + 8mm ceramic tiles (or equivalent) |
| FLARE (All Variants), ECR (MkIII, IV, V), RMF TOTARA* | 8mm ceramic tiles only (or equivalent) |
| STRONGMAN | 24mm Eterpan LD (or equivalent) |
| BRUNNER MKII, TASMAN MKII, TARRAS MKIII ECR NoVo | Ash Floor Protector. Any non-combustible material of any thickness |

*The Totara is also approved with 1mm sheet steel with a 10mm spacing above combustible material. For use when extending hearths.

Minimum Flue Height

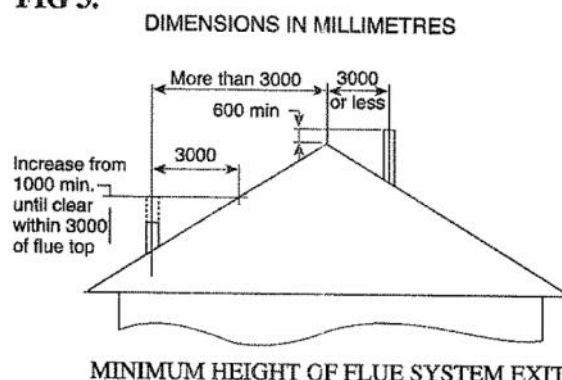
The top of the flue system should be at least 600mm above the highest point of the roof ridgeline, if the point of intersection of the flue system and the roofline is less than 3 metres from the ridgeline horizontally.

If the point of intersection of the flue system and the roofline is greater than 3 metres horizontally, the top of the flue system shall be at least 1 metre above the point of intersection with the roofline. (refer FIG 3)

The total flue height should be no less than 4.6m from the level of the hearth.

These are considered to be **minimum dimensions**, and depending on local conditions, **taller flue system heights may be required for satisfactory performance.**

FIG 3.



Flue Installation Detail

Your Woodsman appliance should be installed with a HeatSaver Flue System.

A HeatSaver Flue System is available from all authorised Woodsman dealers throughout New Zealand.

The HeatSaver Flue System contains a complete installation drawing and correct clearances from the ceiling level up. Minimum clearances from the appliance to nearby combustible surfaces are given in FIGS 1 & 2.

Use of a flue system other than a genuine HeatSaver Flue System may affect the safety of the installation, and may affect your Woodsman warranty.

Insist on a genuine HeatSaver Flue System.

Installation requirements for Woodsman fireplace inserts and flue system where timber framing is less than 50mm from the chimney structure.

Installation should be carried out by a qualified installer who will ensure:

- That the minimum clearances determined by tests in accordance with AS/NZS 2918:2001 are complied with to prevent overheating of nearby combustibles.
- That the minimum opening size of **600mm wide x 600mm high x 500mm deep** is available when firebricks are removed, and that extra provision also be made for plumbing where a hot water booster is fitted (where permitted).
- That any flue requirements specific to the model being installed are met in full - refer HeatSaver Flue System Instructions.
- Where the fireplace opening is in a heat sensitive wall, a non-metallic heat resistant material shall extend not less than 50mm beyond each side of the appliance and 150mm beyond the top of the appliance.
- Clearance of at least 1 metre between the front of the appliance and building structure, or any other substantial material object.
- That the insulating floor protector of non-combustible material is provided, extending not less than the dimensions shown in the chart. (Refer Table 2)
- A fireplace appliance shall not be connected to a flue common with an open fireplace.

Sealing Flue Joints

IMPORTANT

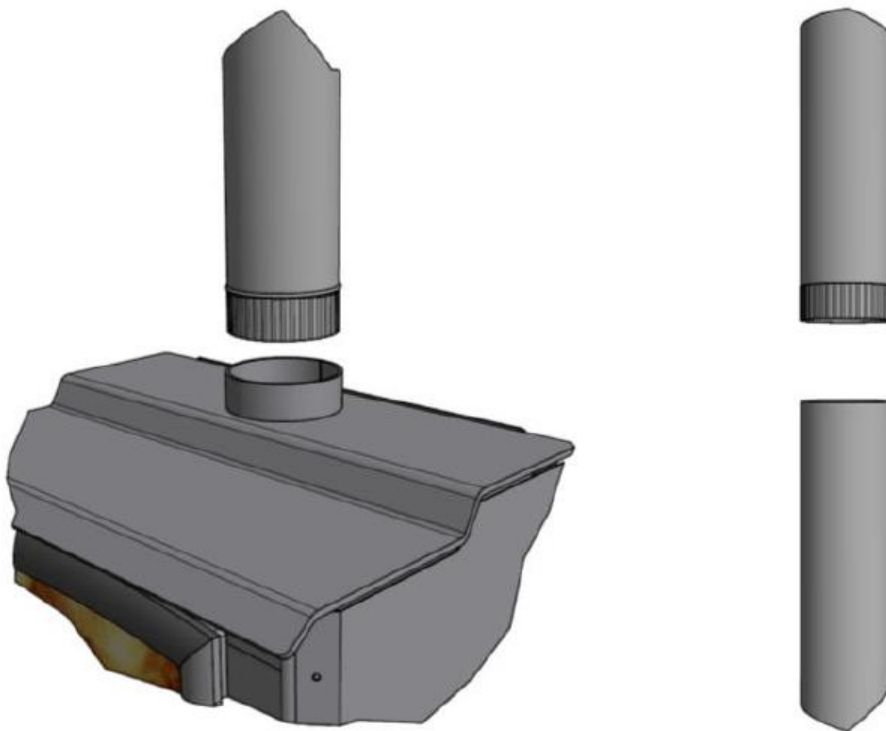
All Flue Joints Are Required To Be Sealed Using Flue Cement

It is extremely important that ALL flue joints are sealed at the time of installation using flue cement or a suitable exhaust cement.

If flue joints are not sealed properly, it can lead to performance issues with the fire such as;

- Lower heat output of the fire, due to decreased performance
- Blocked flue
- Smoke coming out the door when open, due to decreased suction
- Hard to light

The formation of soot and creosote will not seal the flues, especially on the lower lengths, as the high temperatures inhibit its formation.



Any issues that arise as a result of the flues not being sealed, are not covered by the warranty and are not the responsibility of the manufacturer.

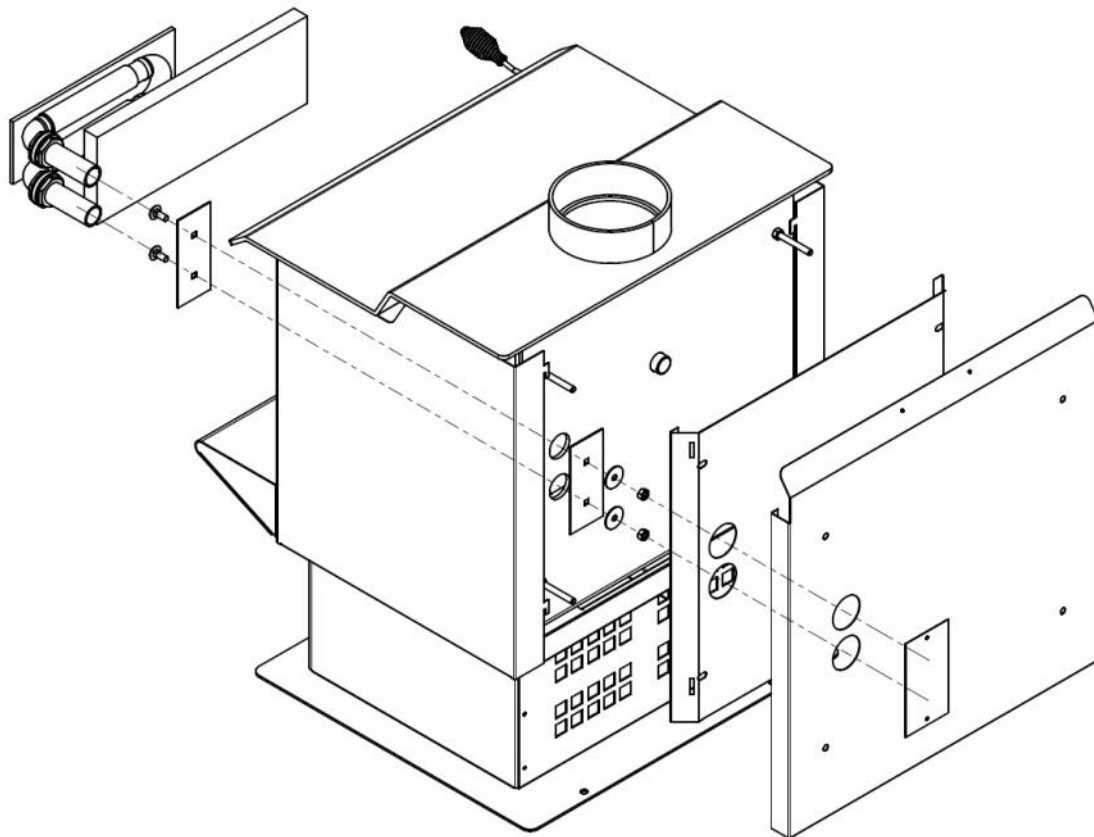
It is the installers responsibility to ensure that this is done at the time of installation.

Fitting the Wetback To The Firebox

Instructions for fitting a loose wetback to the firebox where the fire has been pre-punched with wetback holes.

- Remove knock-outs and cover plates in the rear panels
- Remove top rear firebrick
- Undo coach bolts on firebox plug to expose wetback holes
- Cut rear firebrick with a saw only enough to expose the wetback holes on the inside and to allow for the placement of the wetback in front of the brick
- Remove 1 nut off each wetback tube
- Place wetback into fire with firebrick behind it
- Replace nuts onto the rear of the wetback. Ensure the wetback is level before tightening using a 40mm tube socket

This task should be completed before the fire is positioned in place.



Note: Rear panels do not need to be removed if a tube socket is used for tightening

WETBACK WARNINGS:

- Do not connect to an unvented hot water system.
- **NEVER** burn the appliance without the wetback connected to the water system. This will immediately damage the wetback and void the warranty.
- AS/NZS 2918:2001 states; "all water connections to an appliance shall be in accordance with the appropriate requirements of AS 3500.4.1 or NZS 4603 and the regulatory authority, as appropriate".