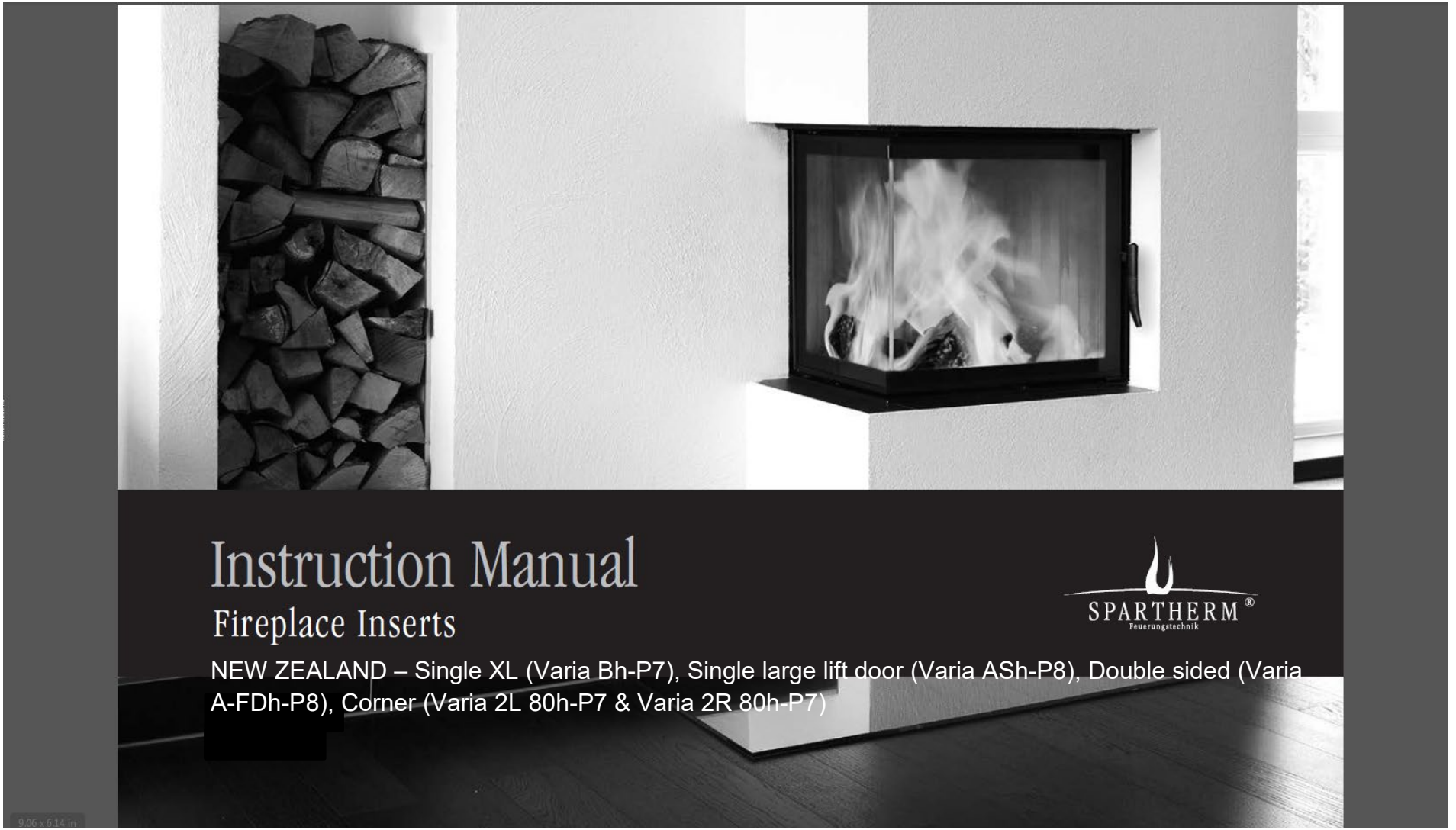


Instruction Manual

Fireplace Inserts

SPARTHERM®
Feuerungstechnik

NEW ZEALAND – Single XL (Varia Bh-P7), Single large lift door (Varia ASh-P8), Double sided (Varia A-FDh-P8), Corner (Varia 2L 80h-P7 & Varia 2R 80h-P7)

9.06 x 6.14 in

Table of Contents

630359_5

1.0 SAFETY INFORMATION

NOTICE

DO NOT DISCARD THIS MANUAL
• IMPORTANT OPERATING AND MAINTENANCE INSTRUCTIONS INCLUDED.
• READ, UNDERSTAND AND FOLLOW THESE INSTRUCTIONS FOR SAFE INSTALLATION AND OPERATION.
• LEAVE THIS MANUAL WITH PARTY RESPONSIBLE FOR USE AND OPERATION.

WARNING

IF THE INFORMATION IN THESE INSTRUCTIONS IS NOT FOLLOWED EXACTLY, A FIRE OR EXPLOSION MAY RESULT CAUSING PROPERTY DAMAGE, PERSONAL INJURY OR DEATH. IMPROPER INSTALLATION, ADJUSTMENT, AERATION, SERVICE OR MAINTENANCE CAN CAUSE INJURY OR PROPERTY DAMAGE, BODILY INJURY OR EVEN DEATH. PLEASE READ ENTIRE MANUAL BEFORE YOU INSTALL AND USE YOUR APPLIANCE.

• This appliance and flue system must be installed in accordance with *AS/NZS 2918:2001* and the appropriate requirements of any relevant building codes.
• The data plate for the appliance is located either on the side of the tilt door, on the underside of the swing door or on the surface adjacent the door runner mechanism (model dependent). A duplicate data plate has been supplied loose. This should be adhered to this instruction manual in section 9 and retained by the owner.
• Any modification of the appliance that has not been approved in writing by the testing authority is considered to be in breach of any approval granted for compliance with *AS/NZS 4012:2014 & AS/NZS 4013:2014*.
• This appliance must be installed by a Spartherm trained and approved installer.
• The appliance should be turned off and cooled before servicing.
• Do not operate without fully assembling all components.
• Risk of cuts and abrasions. Wear protective gloves and safety glasses during installation. Sheet metal edges may be sharp.
• Do not operate appliance before reading and understanding operating instructions. Failure to operate appliance according to operating instructions could cause fire or injury.
• 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 DISTRIBUTOR: ESCEA LTD SHOULD BE CONSULTED AT THE FIRST INSTANCE.
• CAUTION – CRACKED AND BROKEN COMPONENTS, E.G. GLASS PANELS OR CERAMIC TILES, MAY RENDER THIS INSTALLATION UNSAFE.
• This appliance can be very hot when burning.
• Combustible materials such as firewood, wet clothing, etc. placed too close can catch fire.

• Young children and elderly people should be carefully supervised when they are in the same room as the appliance. Toddlers, young children and others may be susceptible to accidental contact burns. A physical barrier is recommended if there are at risk individuals in the house. To restrict access to an appliance or fire, install an adjustable safety gate to keep toddlers, young children and other at risk individuals out of the room and away from hot surfaces.
• Children and pets must be prevented from touching the appliance when it is hot.
• Clothing or other flammable material should not be placed on or near the appliance.
• Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.
• Ensure you have incorporated adequate safety measures to protect infants/toddlers from touching hot surfaces.
• Even after the appliance is out, the glass and/or screen will remain hot for an extended period of time.
• Keep the packaging material out of reach of children and dispose of the material in a safe manner. As with all plastic bags, these are not toys and should be kept away from children and infants.
• Operate only with the door tightly closed unless instructed otherwise.
• Do not strike or slam shut the appliance glass door.
• At least 175 cm^2 (cross sectional opening) of outside air must be admitted to the room when taking combustion air internally; either by means of a dedicated vent, adventitious venting or directly to the unit through a 150mm diameter pipe (recommended method). Failure to provide this may starve other fuel burning appliances from an adequate air supply or impede the performance of this unit.
• Make sure not to create negative pressure in the installation room, e.g. by means of an exhaust fan or similar mechanical blower, as this could affect the combustion of the fireplace or increase the possibility of smoke spillage.
• This appliance is designed to burn natural softwood only.
• Do not burn green or freshly cut wood.
• Your appliance requires periodic maintenance and cleaning. Failure to maintain your appliance may lead to smoke spillage into your home.
• Do not start a fire with chemicals or fluids such as gasoline, engine oil, etc.
• Do not burn treated wood, coal, charcoal, coloured paper, cardboard, solvents or garbage.
• Do not let the appliance become hot enough for any part to glow red.
• Do not overload or over fire the appliance.
• Ashes must be disposed in a metal container with a tight lid and placed on a non-combustible surface well away from the home or structure until completely cool.
• Ensure clearances to combustibles are maintained when building a mantel or shelves above the appliance. Elevated temperatures on the wall or in the air above the appliance can cause melting, discolouration or damage to decorations, a T.V. or other electronic components.
• The appliance must be installed using only the building materials as approved by the manufacturer.

⚠ WARNING

HOT GLASS WILL CAUSE BURNS.
DO NOT TOUCH GLASS UNTIL COOLED.
NEVER ALLOW CHILDREN TO TOUCH GLASS.

2.0 PRODUCT DIMENSIONS

2.1

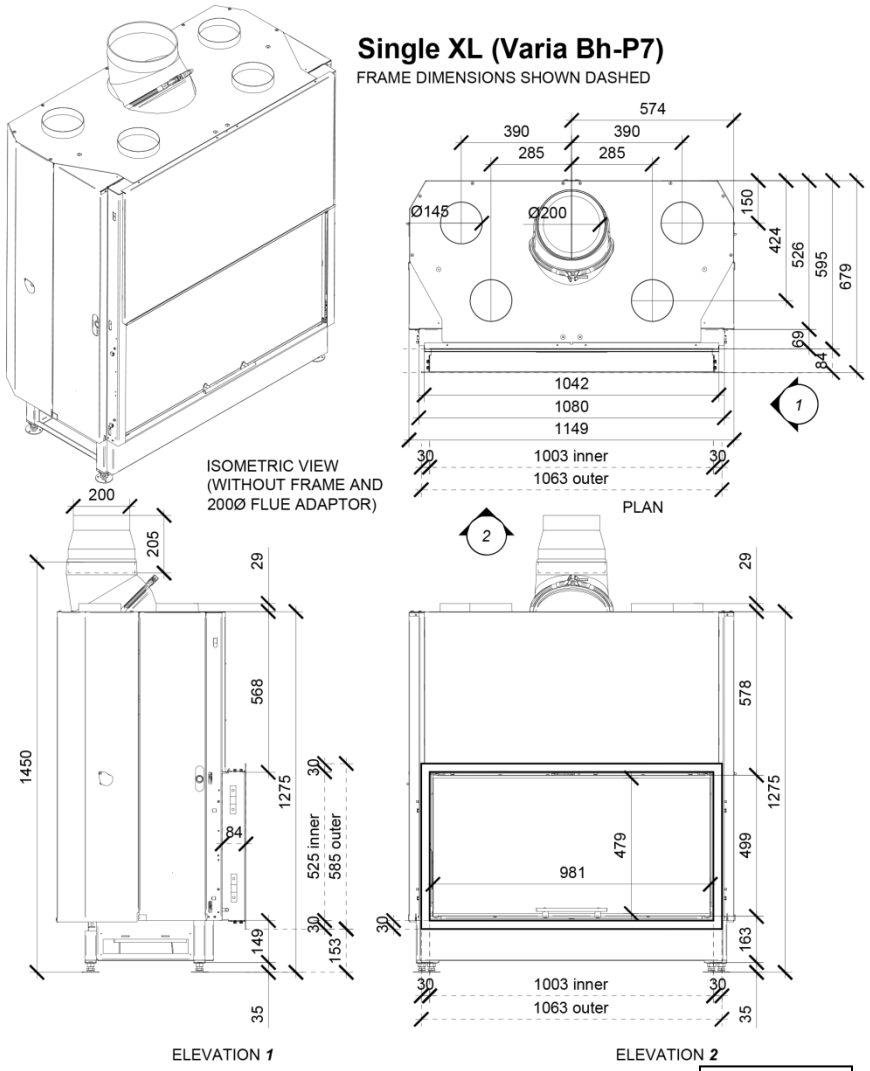


Figure 1

2.2

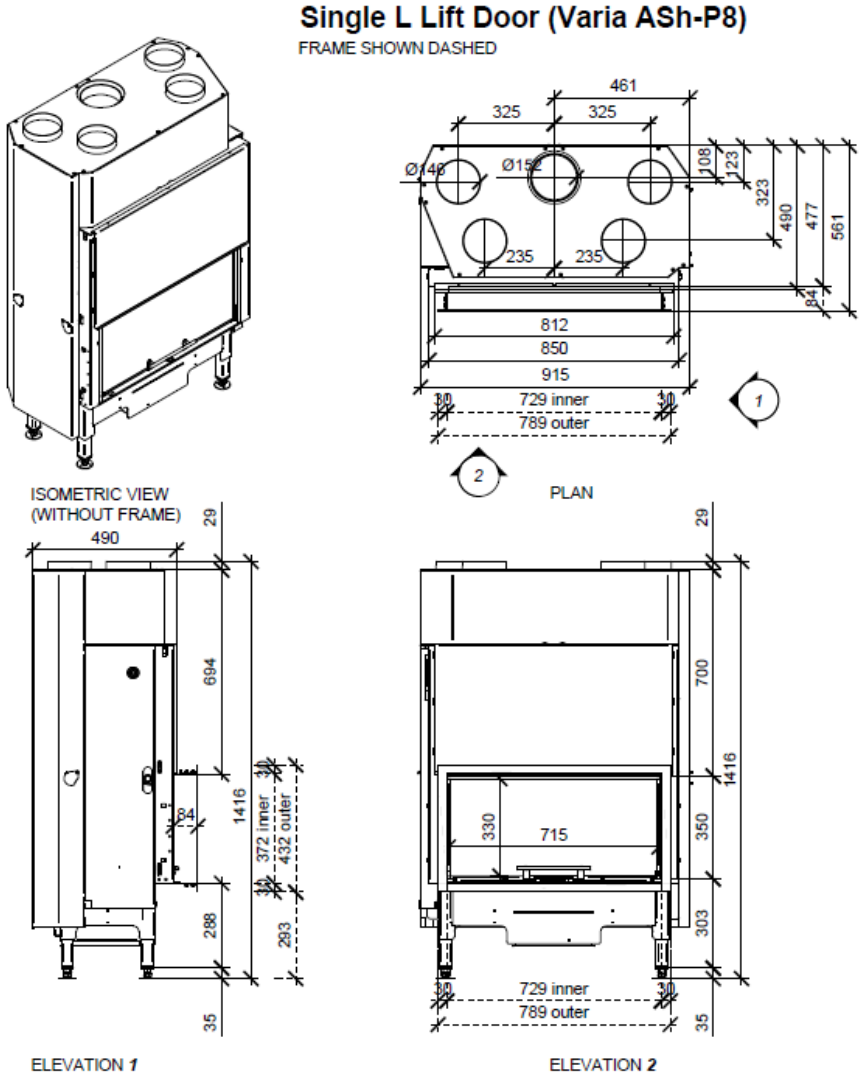
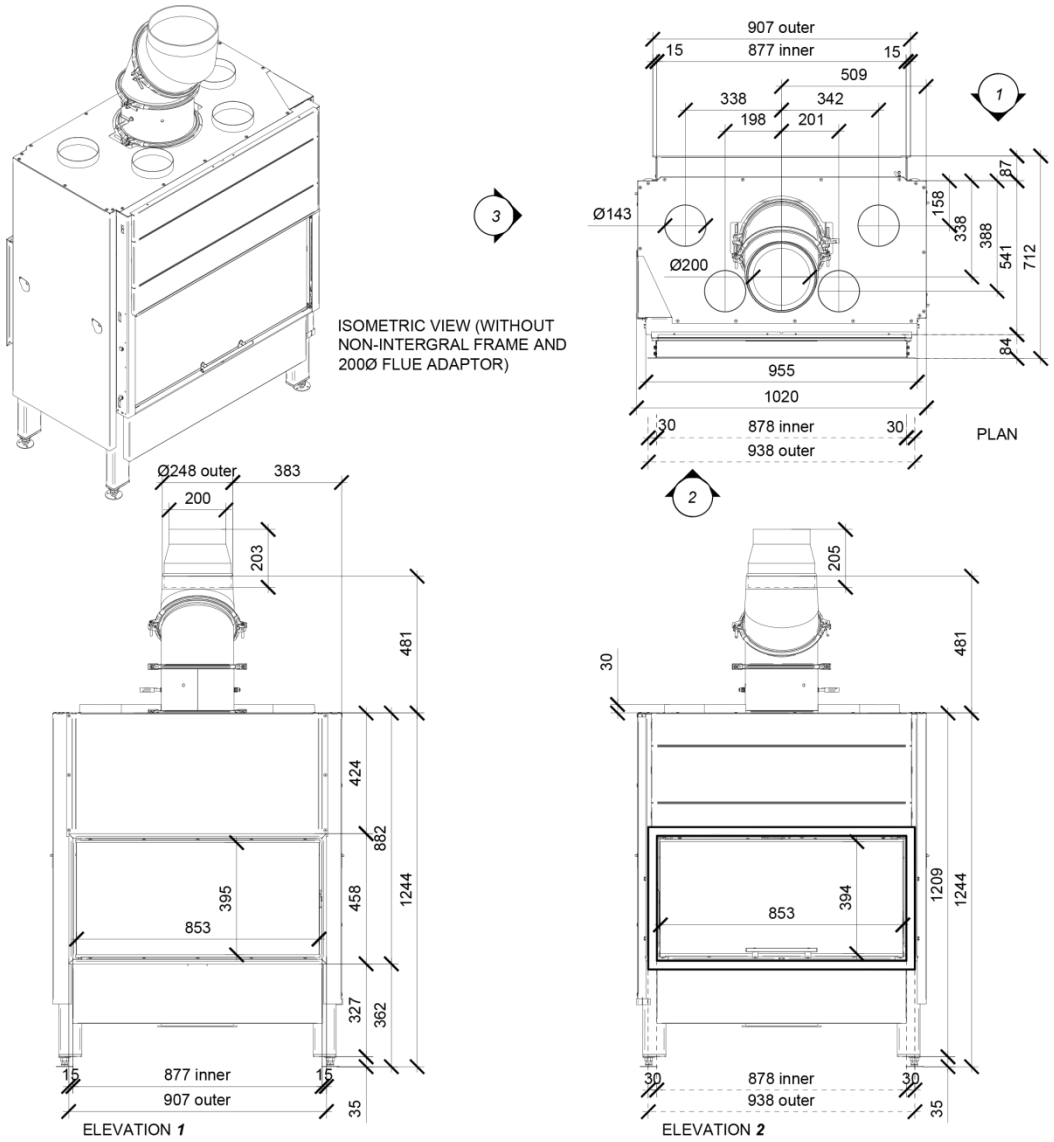


Figure 2

2.3

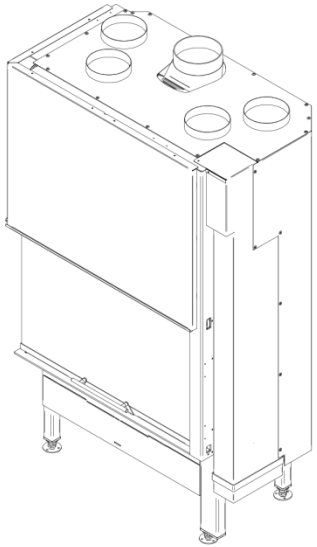


Double Sided (Varia A-FDh-P8)

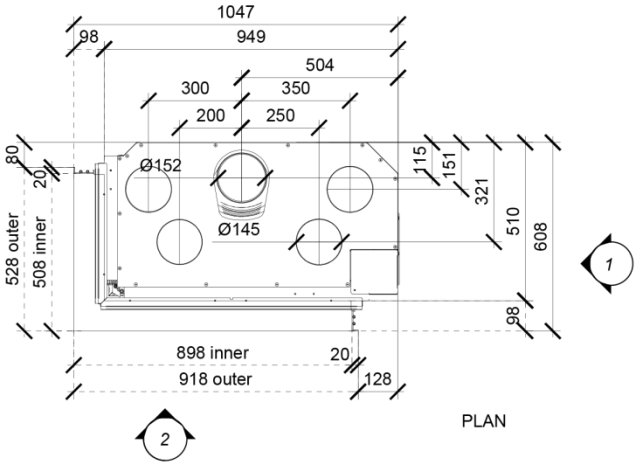
WITH 1x ***INTEGRAL*** FRAME
1x ***NON-INTEGRAL*** FRAME SHOWN DASHED

Figure 3

2.4



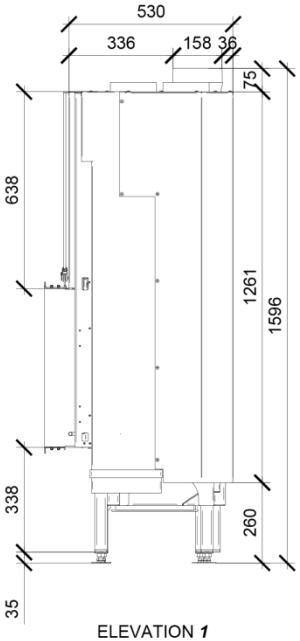
ISOMETRIC VIEW
(WITHOUT FRAME)



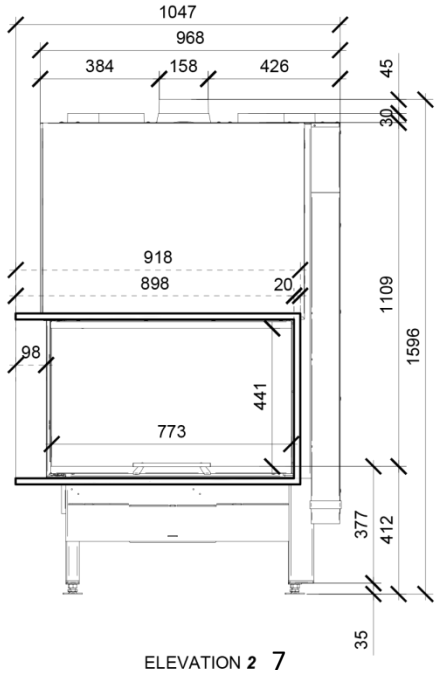
PLAN

Corner Fireplace Left (Varia 2L80h-P7)

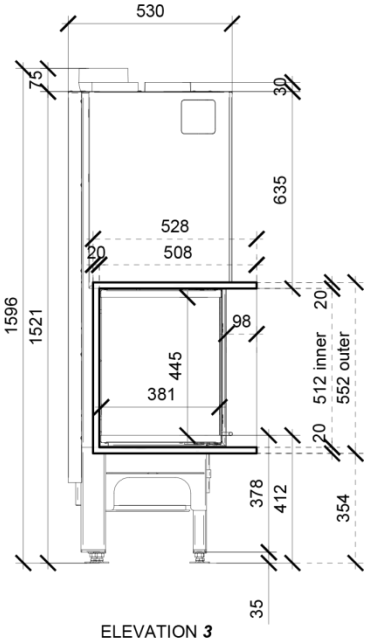
FRAME SHOWN DASHED



ELEVATION *1*



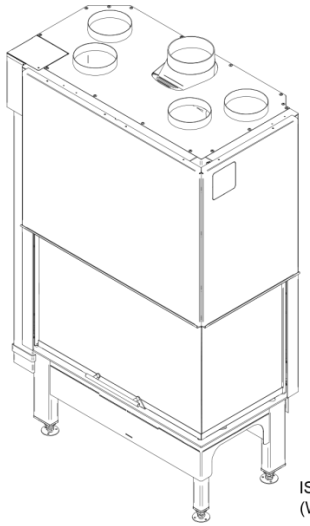
ELEVATION *2*



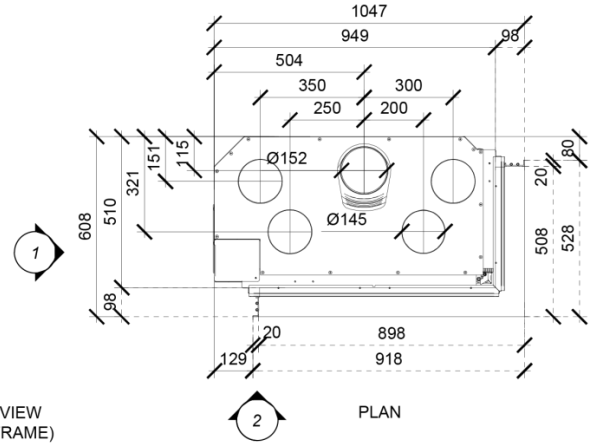
ELEVATION *3*

Figure 4

2.5



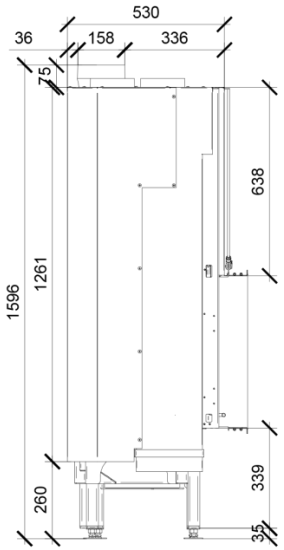
ISOMETRIC VIEW
(WITHOUT FRAME)



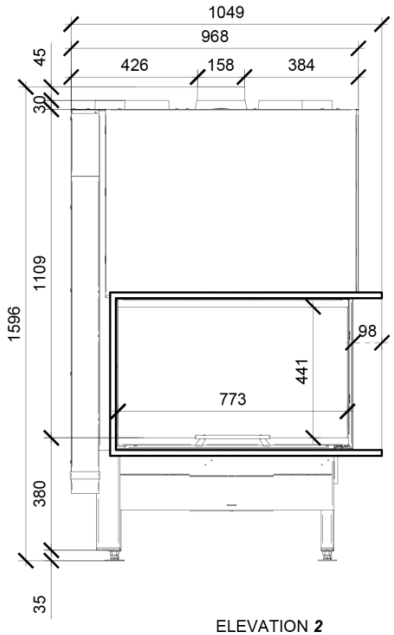
PLAN

Corner Fireplace Right
(Varia 2R80h-P7)

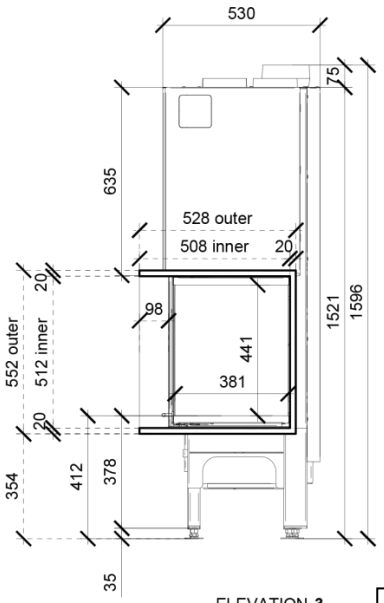
FRAME SHOWN DASHED



ELEVATION ***1***



ELEVATION ***2***



ELEVATION ***3***

Figure 5

2.6 FRAME DETAILS

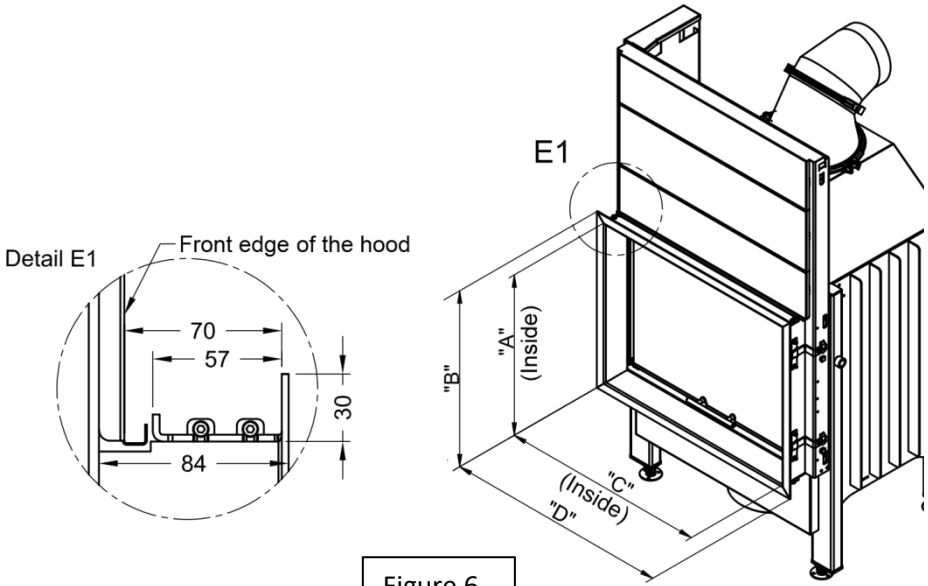


Figure 6

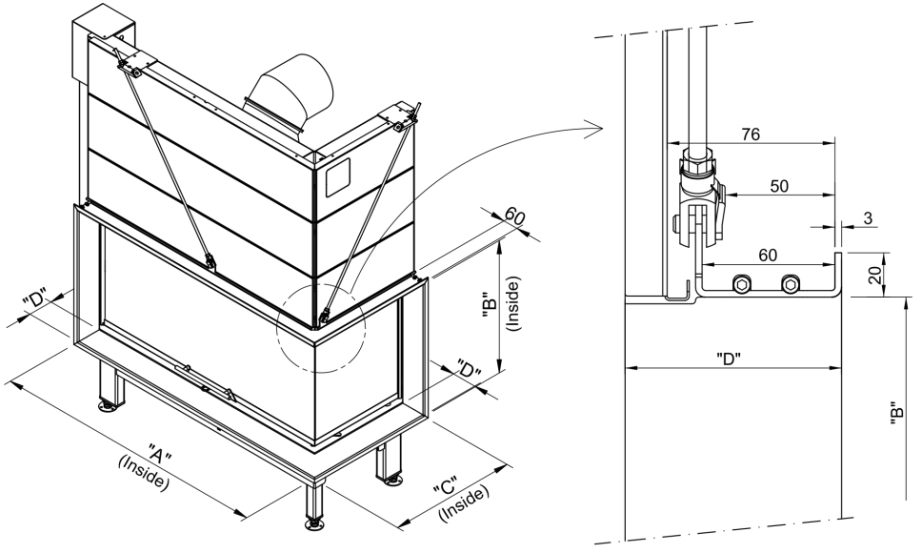


Figure 7

Model	Door Height	"A"	"B"	"C"	"D"
Varia ASh-P8	370	372	432	729	789
Varia Bh-P7	523	525	585	1003	1063
Varia A-FDh-P8	438	440	500	878	938

Model	Door Height	"A"	"B"	"C"	"D"
Varia 2L 80h-P7	512	1098	514	508	98
Varia 2R 80h-P7	512	898	514	508	98

2.7 SPECIFICATIONS TABLE

Product	Type	Flue Damper	Separate Frame Required	Fixed or variable Aeration	Average Min power* (kW)	Average Peak power* (kW)	Average Efficiency** (%)	Flue diameter (mm)	Average Emission factor (g/kg)	Unit weight (Kgs)
Single XL (Varia Bh-P7)	Lift Door	Yes	Yes	Fixed	N/A	16.0	65.3	200	0.92	398
Single Large Lift Door (Varia ASh-P8)	Lift Door	Yes	Yes	Variable	8.3	14.1	67.6	150	0.99	264
Double Sided (Varia A-FDh-P8)	1 Swing Door 1 Lift Door	Yes	Yes – one side only	Variable	15.5	19.6	65.6	200	1.41	365
Corner L/H (Varia 2L 80h-P7)	Lift Door	Yes	Yes	Fixed	N/A	14.5	65.9	150	0.96	312
Corner R/H (Varia 2R 80h-P7)	Lift Door	Yes	Yes	Fixed	N/A	14.5	65.9	150	0.96	312

* Dependent on fuel loading
** Tested in accordance with AS/NZS 4012:2014 and dependent on fuel loading

3.0 INSTALLATION

WARNING

THE INSTALLATION OF THIS FIREPLACE, CONSTRUCTION OF THE FIREPLACE ENCLOSURE AND THE FINISHING AND COMMISSIONING OF THE INSTALLATION IS A HIGHLY SPECIALIST TASK. ONLY ESCEA TRAINED AND APPROVED INSTALLERS SHOULD BE USED. FAILURE TO FOLLOW THESE REQUIREMENTS WILL VOID ALL WARRANTY TERMS.

3.1 INSTALLATION - GENERAL

THIS APPLIANCE AND ITS COMPONENTS ARE DESIGNED TO BE INSTALLED AND OPERATED AS A SYSTEM. ANY ALTERATION TO OR SUBSTITUTION FOR ITEMS IN THIS SYSTEM, UNLESS ALLOWED BY THESE INSTALLATION INSTRUCTIONS, WILL VOID THE LISTING AND MAY VOID THE PRODUCT WARRANTY. IT MAY ALSO CREATE A HAZARDOUS INSTALLATION. READ THROUGH THESE INSTRUCTIONS THROUGHLY BEFORE STARTING YOUR INSTALLATION AND FOLLOW THEM CAREFULLY THROUGHOUT YOUR PROJECT.

BEFORE BEGINNING YOUR INSTALLATION, CONSULT YOUR LOCAL BUILDING CODE TO ENSURE COMPLIANCE.

• Non-toxic smoke will be emitted during the paint curing process, to help dissipate the smoke open a window near the appliance.
• Remove any dust or debris off the top of the appliance before firing the appliance as the paint will become soft as the appliance heats up and will harden as the appliance cures. To cure the paint on your appliance burn your appliance moderately hot during the first few fires.
• To keep the door gasket from sticking to the appliance as the paint is curing; periodically open the fireplace's door.
• For the first two weeks use generous amounts of fuel and burn the appliance with the air control (if applicable) fully open for an hour as the appliance goes through a process of eliminating moisture in the steel and firebricks. The initial heat output will be reduced while the moisture is being drawn from the appliance and it will be necessary to build several hot fires to remove this moisture.

DURING THIS PROCESS DO NOT OVERFIRE THE APPLIANCE.

REDUCE THE AMOUNT OF AIR COMING INTO THE APPLIANCE IF THE APPLIANCE OR CHIMNEY BECOMES RED.

The chimney vent system used on your wood burning appliance should be designed with the least amount of restriction possible to enable the exhaust products to easily flow through it. Chimney vent systems that are too short or too long can also have an adverse effect on the flow of exhaust through it. Offsets in the flue can restrict the flow of exhaust gases and may require an increase in the overall flue length.

The wood burning appliance and chimney vent system also requires a sufficient supply of combustion air not only to support the combustion in the combustion chamber but to replace the exhaust leaving it so it can flow freely up through the vent system and out into the atmosphere. It is the correct balance of combustion air and the chimney vent system that will ensure the appliance provides you with its optimum performance.

Be sure to provide sufficient combustion air when taking combustion air internally. There are many other appliances in your home competing for air such as: a kitchen range hood, forced air heating devices or a bathroom exhaust fan.

ENSURE THAT THE LIFT DOOR TRANSIT SCREW(S) ARE REMOVED PRIOR TO CONSTRUCTING THE SKAMOTEC ENCLOSURE AND 'BOXING IN' THE APPLIANCE.

WEAR GLOVES AND SAFETY GLASSES FOR PROTECTION.

WEAR A SUITABLE RESPIRATOR MASK WHEN CUTTING THE SKAMO ENCLOSURE BOARD.

CAREFULLY FOLLOW THE INSTRUCTIONS FOR ASSEMBLY. FAILURE TO DO SO MAY RESULT IN A FIRE, ESPECIALLY IF COMBUSTIBLES ARE TOO CLOSE TO THE APPLIANCE OR CHIMNEY AND AIR SPACES ARE BLOCKED, PREVENTING THE FREE MOVEMENT OF COOLING AIR.

DO NOT DRAW OUTSIDE AIR FROM GARAGE SPACES - EXHAUST PRODUCTS OF GASOLINE ENGINES ARE HAZARDOUS. DO NOT INSTALL OUTSIDE AIR DUCTS SUCH THAT THE AIR MAY BE DRAWN FROM ATTIC SPACES, BASEMENTS OR ABOVE THE ROOFING WHERE OTHER HEATING APPLIANCES OR FANS AND CHIMNEYS EXHAUST OR UTILIZE AIR. THESE PRECAUTIONS WILL REDUCE THE POSSIBILITY OF APPLIANCE SMOKING OR AIR FLOW REVERSAL. THE OUTSIDE AIR INLET MUST REMAIN CLEAR OF LEAVES, DEBRIS, ICE AND/OR SNOW OR ANY OTHER OBSTACLES. IT MUST BE UNRESTRICTED WHILE APPLIANCE IS IN USE TO PREVENT ROOM AIR STARVATION WHICH CAN CAUSE SMOKE SPILLAGE AND AN INABILITY TO MAINTAIN A FIRE. SMOKE SPILLAGE CAN ALSO SET OFF SMOKE ALARMS.

NEGATIVE PRESSURE WITHIN YOUR HOME MAY INADVERTENTLY AFFECT YOUR APPLIANCE.

DO NOT USE MAKESHIFT COMPROMISES DURING INSTALLATION. DO NOT BLOCK OR RESTRICT AIR, GRILLE OR LOUVRE OPENINGS.

ALWAYS MAINTAIN THE MINIMUM AIR SPACE REQUIRED TO THE ENCLOSURE TO PREVENT FIRES.

DO NOT PACK REQUIRED AIR SPACES WITH INSULATION OR OTHER MATERIALS.

3.2 INSTALLATION - OVERVIEW

CONVECTION

Spartherm wood fires are convection fires with “central heating” capabilities. Convection means that there is a natural circulation of air, which ensures that the heat is distributed more evenly throughout the entire room or dwelling. The cold air is drawn in at the base of the fire, and then moved up through the convection channel, which runs along the fire’s combustion chamber. The heated air pours out at the top of the fire via the duct spigots (4 off).

The hot air can then be completely or partially distributed to other areas of the same room or alternative rooms via flexible aluminium ducting or vents within the cavity walls.

The total convection air venting open surface area must be at least 880 cm^2 distributed between the aluminium ducted vents and cavity vents. In addition, two ‘intake’ vents of at least 90 x 300 mm or an open surface area of at least 540 cm^2 must be provided into the cavity surrounding the fireplace to provide adequate air for convection. This is in addition to the requirements for combustion air as outlined in the planning section.

The intake vent(s) should be placed as low as possible in the cavity ideally below 300 mm from the floor. They should be no more than 300mm from the bottom of the appliance. Two vents (one each side) is preferential over one.

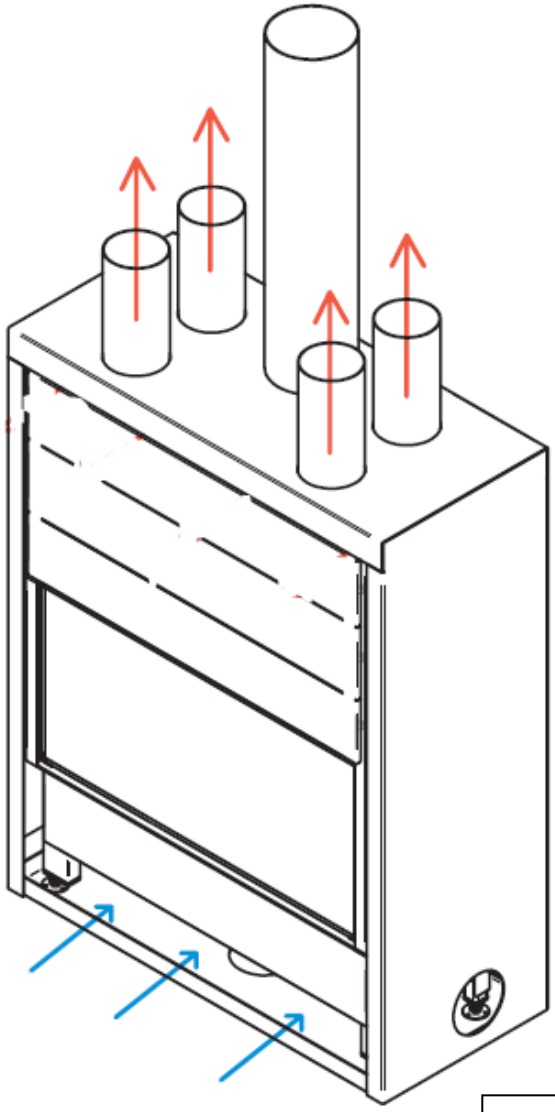
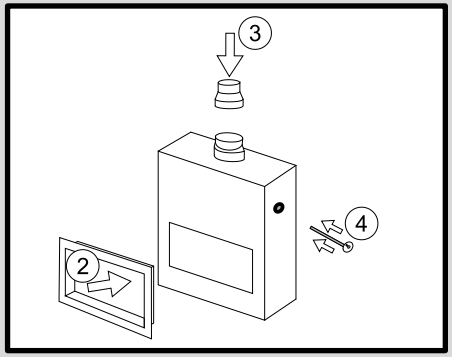


Figure 8

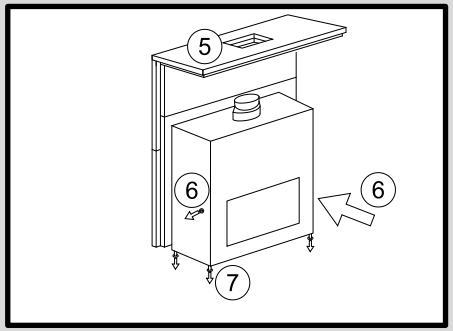
3.3 INSTALLATION - PLANNING

INSTALLATION PROCESS - SUMMARY

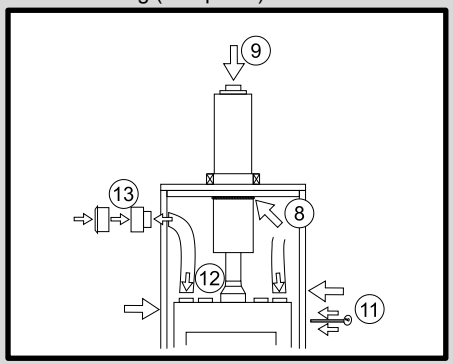
1. Carefully unpack the fireplace. Place the Chamotte firebricks and baffles safely aside.
2. Fit the frame to the fireplace.
3. Fit and seal the flue converter to flue spigot (Single XL {Varia Bh-P7}, Double-sided {Varia A-FDh – P8} only).
4. Cut hole in convection air case for flue damper control shaft in desired position (not required on Double-sided {Varia A-FDh – P8}).



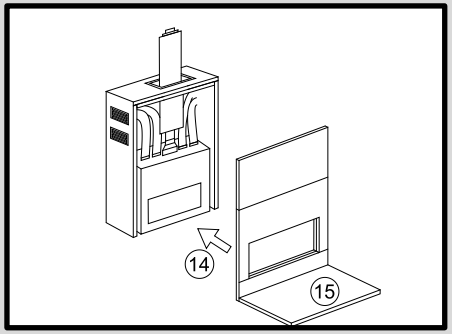
5. Construct cavity back wall and cavity top (ceiling). Use flashings provided.
6. Position the fire in place and remove door transit screws.
7. Secure fireplace legs (X4) to non-combustible floor.



8. Fit flue with drop box and closure plate. Seal around interface with cavity.
9. Fit lower flue pipes and casings, seal and secure in place.
10. Fit remainder of flue system to comply with AS/NZS 2918:2001
11. Fit cavity sidewalls and flue damper control shaft / knob. Use flashings for sides.
12. Fit vent ducting to convection air case.
13. Fit vents and connect ducting (if required).



14. Fit cavity front walls (fit vents and ducting if required).
15. Fit hearth to specified minimum size.



16. Stop / plaster / paint Skamotec cavity and hearth to required specified finish.
17. Fit Chamotte fire bricks and vermiculite baffle (see section 4.0)

INSTALLATION PROCESS - DETAIL

WARNING

THE AIR TEMPERATURES WITHIN THE SKAMO ENCLOSURE BOARD ENCLOSURE CAN BE VERY HIGH. THE ENCLOSURE MUST BE DESIGNED AND CONSTRUCTED IN A MANNER TO COMPLETELY NEGATE THE RISK OF ADJACENT HEAT SENSITIVE OR COMBUSTIBLE MATERIALS BECOMING TOO HOT.

The cavity / housing for the fireplace must be constructed entirely from **skamo enclosure** 40mm calcium silicate board only.

Refer to the skamo enclosure board guidelines as an aid to using this material: www.sparthermfires.co.nz/skamotec (Information is an aid only – all installation requirements must comply with this document).

Combustible or heat sensitive materials shall **NOT** be used within the construction of the cavity / housing.

Do not line the outer face of the skamo enclosure board with combustible materials (plasterboard, etc.).

Skamo enclosure board can be easily worked or formed using conventional hand/ power tools using dust extraction where necessary.

In unsupported sheet form, the skamo enclosure board is fragile and should be handled with care.

In areas that are likely to become hot (above the fireplace door etc.) then an approved adhesive with a higher operating temperature is required. For these areas you must use skamo enclosure glue. Recommended screws are 10g x 75mm on 200mm to 300mm centres. **Where a skamo enclosure board will have glue applied (i.e. joints, back blocking, double layers, flashing areas, etc.) sheets must be primed with either Mapei Primer G or Skamol Enclosure Primer prior to gluing.**

Metal flashings have been supplied to help ensure air tightness of the joints at the top of the cavity. These can be secured to the skamo enclosure board using 2.0 x 30mm diamond point plain shank nails.

The fire or door frame must not come into contact with the skamo enclosure board. **A gap of at least 5mm between the fire and the skamo enclosure board** is advised (also refer to minimum clearance table). The fire will expand and contract during use. If in contact with the wall substrate this will cause cracks in the wall.

Consider and plan for the incorporation of the **flue damper control lever and shaft shown below**. All models require the mandatory use of these parts (see specification table).

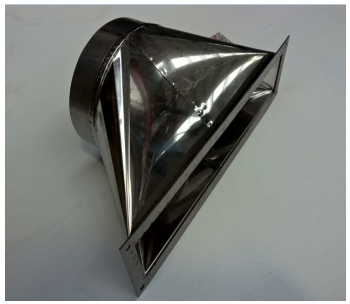
Figure 9

A suitably sized hole will need to be drilled in the steel convection air jacket to accommodate the flexible shaft to suit the planned position of the control lever.

The fireplace must be installed on a **non-combustible base** that is suitably engineered to support the weight of the appliance. We recommend a reinforced concrete slab (min. 100mm thick).Suitable **seismic restraint** must be provided. This can easily be achieved by screwing or bolting the 4 feet of the fireplace securely to the concrete slab.

Combustion air – In addition to providing cavity (convection) intake air vents it is a requirement to also provide air for combustion. If taking the combustion air from outside of the building (Direct vent) through a Ø150mm (165mm OD) pipe and into the appliance via the optional appliance adaptor (recommended), ensure that the run of the Ø150mm pipe is as short as possible and as unrestricted as possible.

Try to use 45° bends in lieu of 90° bends and restrict the total number of bends to 2. If the pipe is in an area where condensate may form on the outside then adequate provision for lagging/insulation of the pipe outer should be planned.



Varia Bh-P7 inlet

Varia ASh-P8, A-FDh-P8, A-FDh-P8 & 2L/R 80h-P7 inlet

Figure 10

It is also advised to make provision for periodic cleaning of the pipe inner by providing a “rodding eye” or other means of access. Where the pipe terminates on the outside of the building it should be suitably protected from water, foreign matter ingress and rodent/bird/flying insect ingress.

The Ø150mm pipe run **within** the skamo enclosure board enclosure should be made from a heat resistant material (galvanised steel, stainless steel etc.). You may transition to PVC pipe or similar 300mm after the pipe has exited the Skamotec enclosure.

Providing a means to access each of the pipe joints for future inspection and cleaning is recommended.

Considerations for positioning the combustion air intake vent & pipe

- Ensure that the chimney top and the air intake are in the same pressure zone. Different zones could cause problems particularly on windy days.

- Ensure that the air intake pipe cannot suck air out of the system (placed in negative pressure zone)
- Ensure that smoke from the flue will not be sucked in again by the air intake.

If taking combustion air from the immediate room, ensure that the area has sufficient ventilation. Ensure to comply with *AS/NZS 2918:2001* clause 7.1 in addition to the requirements for convection air intake as set out in 3.2 installation overview.

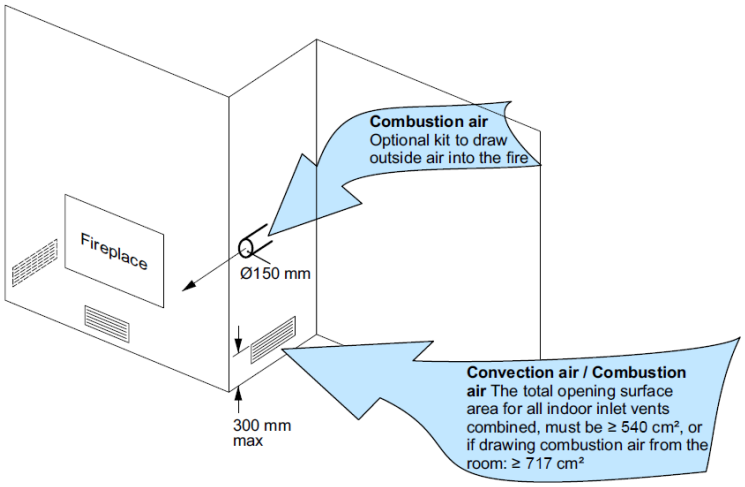


Figure 11

If taking combustion air from the immediate room it is required that “intake” venting of the cavity of at least 717 cm^2 (or 540cm^2 if a 150mm outside combustion air kit is connected). This vent should be connected into the cavity at a level below 300 mm from the floor.

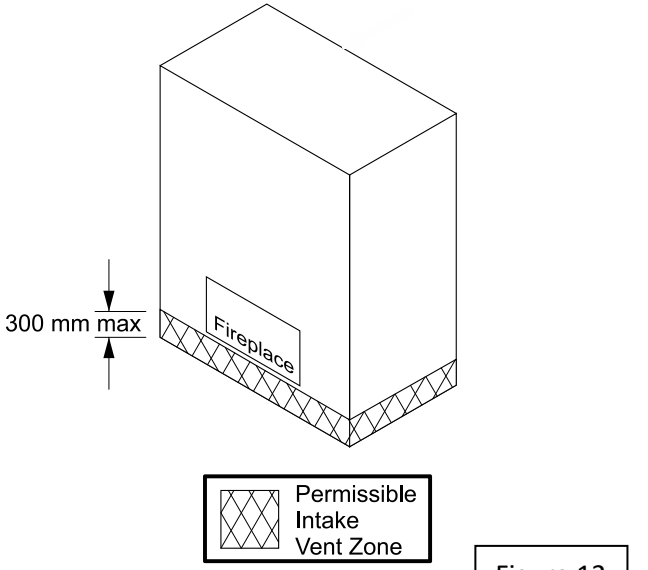


Figure 12

Intake vents must be constructed entirely of non-combustible materials and must not be able to be closed or easily obstructed.

3.4 DUCTING INSTALLATION (CONVECTION AIR)

Plan your use of the insert optimally. By installing hot air vents and flexible aluminium hoses (available as a kit) on top of the fire, it is possible to “distribute” the heat to other rooms/areas if required.

Consider the placement of convection vents/outlet holes. Note: the heat will tend to seek the one at the highest level and/or least resistance to flow. Balancing the system in terms of flow resistance should help optimise heat distribution.

Ensure that the area requirements are respected and that the vents are not able to be inadvertently or otherwise blocked, closed or obstructed.

We do not recommend the use of floor vents.

The total aluminium ducting length for each of the 4 outlets should not exceed 7.0M.
The minimum vertical rise before transition to a horizontal direction should be 0.5M.

Use this chart to estimate the approximate initial vertical rise of the top of the appliance required for the length of horizontal ducting to be used.

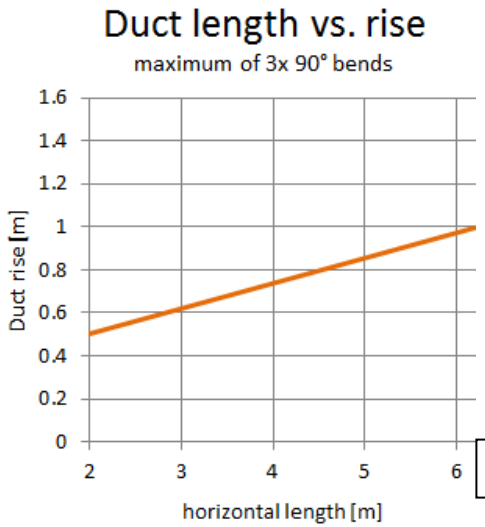


Figure 13

Any horizontal elements should have a “rise” of **at least 3°** towards the outlet to encourage and maintain ‘thermal syphoning’.

Ensure that the ducting is well supported throughout its length and that no downwards direction or “dips” in the ducting are present as this will prevent or impede air flow.

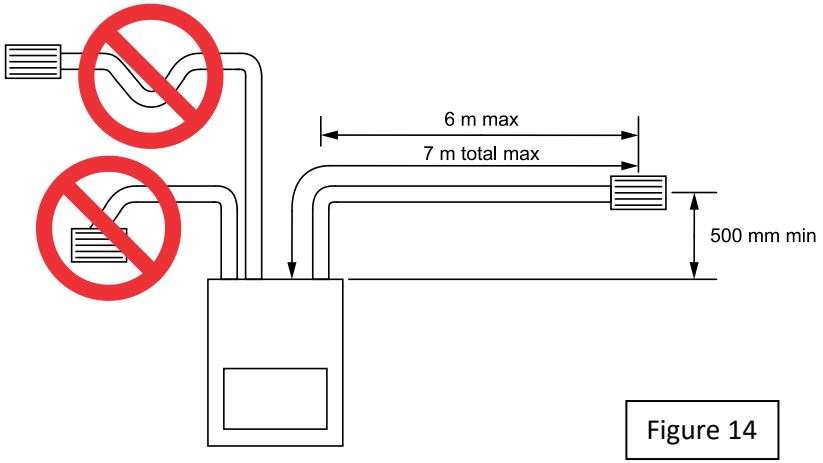


Figure 14

THE VENT DISCHARGE AIR MAY BE VERY HOT AND COULD PRESENT A FIRE OR HEAT DAMAGE RISK. ENSURE TO COMPLY WITH THE MINIMUM DISTANCE TO COMBUSTIBLES PUBLISHED IN THIS DOCUMENT PARTICULARLY WHEN PLACING HEAT SENSITIVE MATERIALS SUCH AS ORNAMENTS, ARTWORK AND SOFT FURNISHINGS.

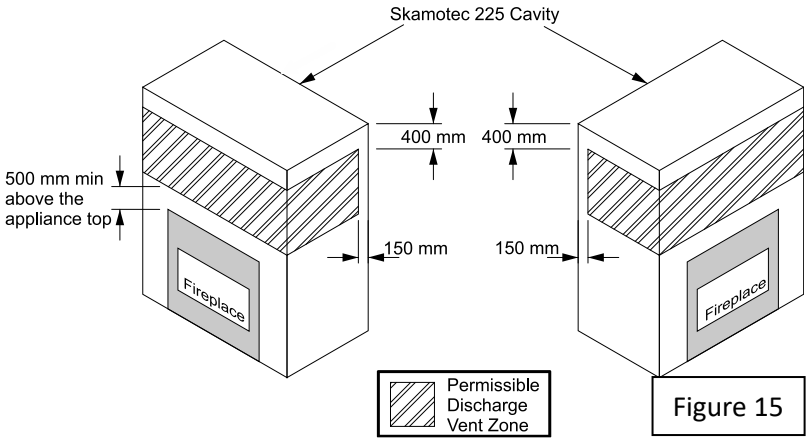


Figure 15

TWO DIFFERENT TYPES OF CONVECTION AIR VENTS MUST BE PROVIDED; ducted vents (vents connected to the appliance spigot with flexible aluminium ducting) and non-ducted vents (an aperture cut into the skamotec cavity wall and finished with a decorative grill if desired. It is mandatory to have at least 1 non ducted vent in the cavity wall (not connected directly to the appliance). The minimum size for the non-ducted vent is 176cm2.

If the number of ducted vents is decreased then the non-ducted vent open surface area must be increased accordingly:

Number of ducted vents (attached to appliance)	Open surface area of non-ducted vent in cavity
4 x 176cm^2	176cm^2
3 x 176cm^2	176cm^2 X 2 =352cm^2
2 x 176cm^2	176cm^2 X 3 =528cm^2
1 x 176cm^2	176cm^2 X 4 =704cm^2
0	176cm^2 X 5 =880cm^2

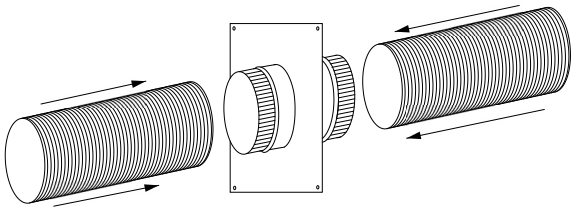
WARNING

THE AIR EXPELLED FROM THE DUCTING / VENTS IS HOT AND MAY PRESENT A RISK OF BURNS OR HEAT DAMAGE.

When placing outlets in rooms other than the room the appliance is installed, it is important to allow for return air to equalise pressure between the rooms.

There may be discoloration of the wall above the fire doors and the convection outlet vents/holes. Only suitably rated and approved aluminium flexible ducting and discharge vents must be used – these have been carefully chosen to work safely with your appliance. These are available solely from your dealer/distributor.

Wherever the ducting penetrates the skamotec cavity, a wall thimble that constrains the ducting, entirely seals the penetration from the cavity and controls the distance to combustibles or heat sensitive materials shall be used. Please refer to your dealer for suitable parts.



Aluminium ducting and wall sealing plate

Figure 16

Outside the confines of the cavity, the aluminium ducting should be run and completely housed within a box cavity construction made entirely from skamo enclosure board. Do not use any combustible materials within this boxing.

Wherever the discharge air vent is located in a wall other than the fireplace cavity (constructed from skamo enclosure board), the wall facing material immediately surrounding the discharge air vent must be constructed of a heat resistive insulating material such as Promina or Eterpan board (min 10mm thick). Any wall support elements/structure made of combustible materials immediately adjacent the vent should be protected from heat by the use of skamo enclosure board sheets as shown:

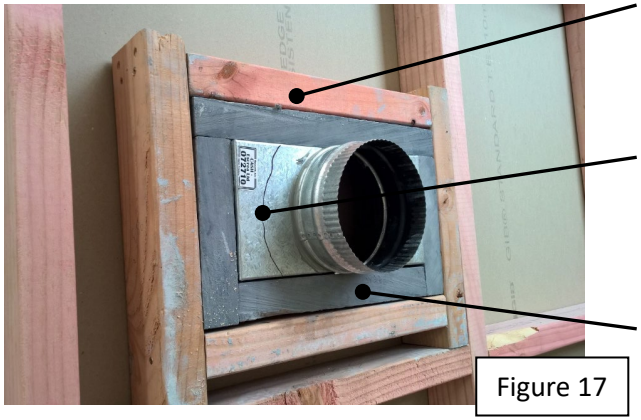


Figure 17

Figure 18

The discharge vent must be no closer than 400mm to a heat sensitive ceiling or overhead projection.

Escea accepts no liability for improper installation or consequential damages.

WARNING

PROVISION MUST ALWAYS BE MADE FOR RETURN AIR FROM HEATED ROOMS E.G. UNDERCUT DOORS, VENTS OR NATURAL LEAKAGE.
WARNING: OVERHEATED ROOMS OR AREAS ARE NOT SAFE FOR INFANTS!

3.5 SAFETY CLEARANCES

All safety clearance dimensions stated are minimum requirements.

An insulating hearth conforming to the size requirements in the following table must be installed unless the floor is made entirely from a non-combustible material. The hearth must be constructed from 40mm skamo enclosure board and finished in a suitable non-combustible material (stone, ceramic tile, brick etc.).

Cavity placement against combustible materials

Wherever the fireplace is placed against a combustible or heat sensitive wall or material a double layer (2 x 40mm sheets) of skamo enclosure board shall be used as a heat barrier. If space constraints allow it is good practice to also build in an air gap (40mm) between the skamo enclosure board and the combustible wall / material. The air gap should be "vented" top and bottom to allow for "cooling air" circulation. The vent holes must NOT be open to or take air from the fireplace cavity as this area becomes very hot during use. The potential to transfer hot air from within the cavity into the "air gap" should be avoided under all circumstances.

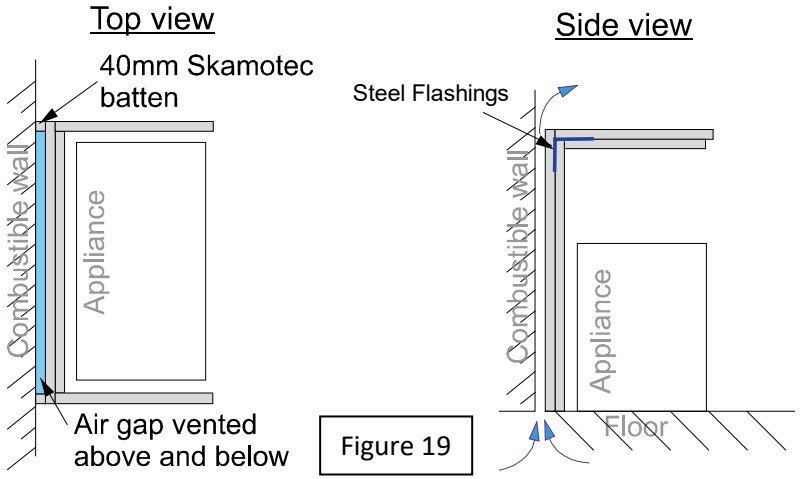


Figure 19

Wherever there are joins between the double layer sheets of skamo enclosure board they should be "staggered" or "offset" by at least 150mm. Steel flashings have been provided to help ensure air tightness of the joints at the top of the cavity. These should be placed at seams and attached with 2x30mm diamond point nails.

Figure 20

Wherever a double layer of skamo enclosure board is used the corner details should be "staggered" or "offset" as in the following diagram to minimise the likelihood of a heat leak path.

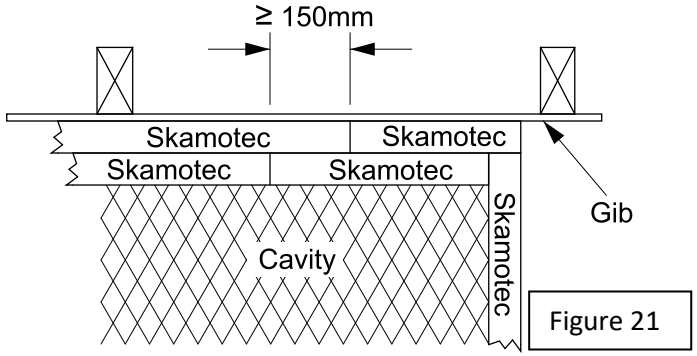


Figure 21

Refer to the following table and diagrams for minimum clearances:

	A (back)	B (sides)	C	D	E Placed centrally
Single XL (Varia Bh-P7)	30	30	700	650	1570
Single Large (Varia ASh-P8)	50	35	475	425	1360
Corner L/R (Varia 2L/2R 80h-P7)	50	30	560	D1=450 D2=300	E1=260 E2=260
Double Sided (Varia A-FDh-P8)	N/A	35	630	450	1280

Single Sided XL & L (Varia Bh-P7, Varia ASh-P8)

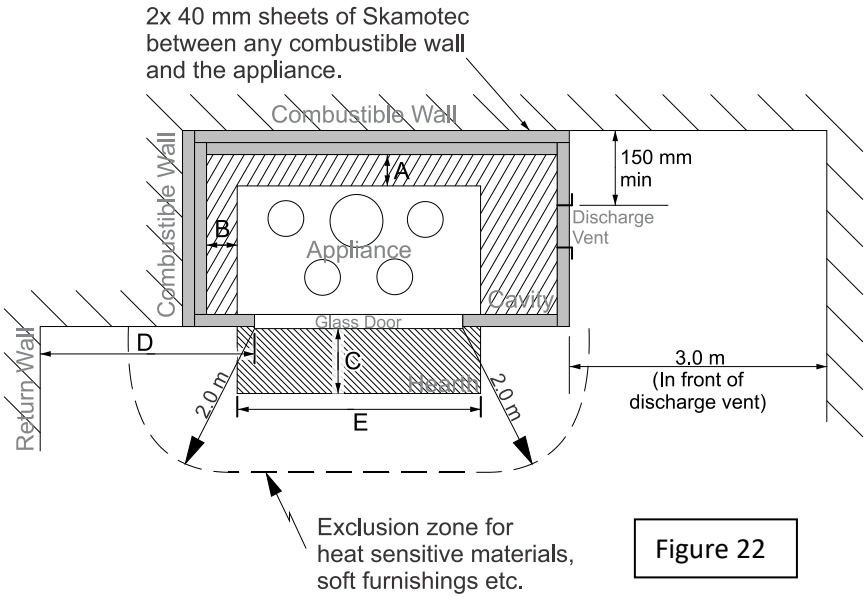


Figure 22

Corner L/R (Varia 2L/2R 80h-P7)

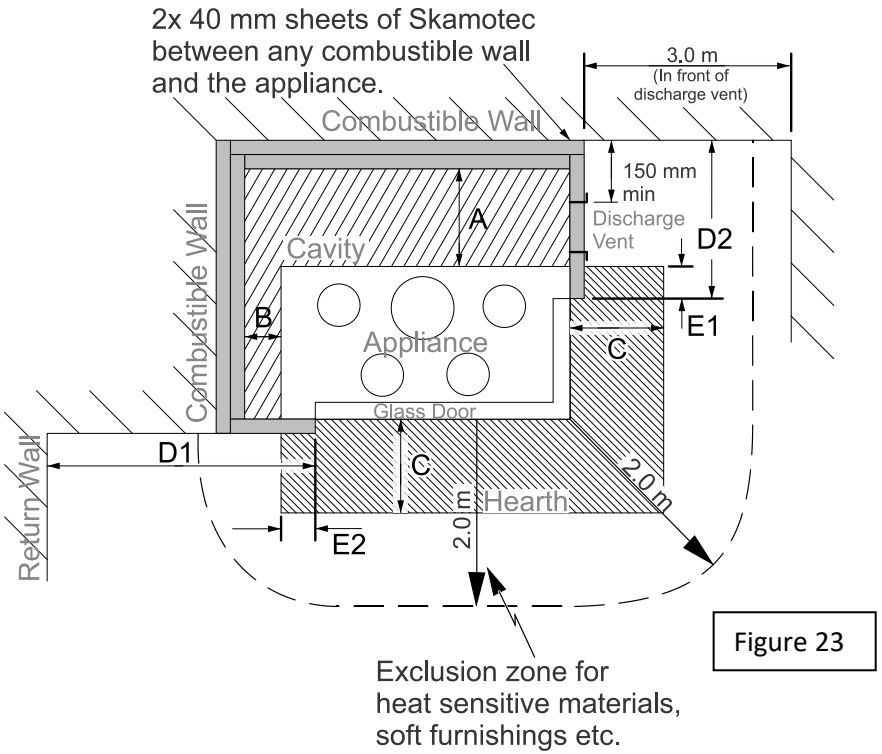


Figure 23

Double Sided (Varia A-FDh-P8)

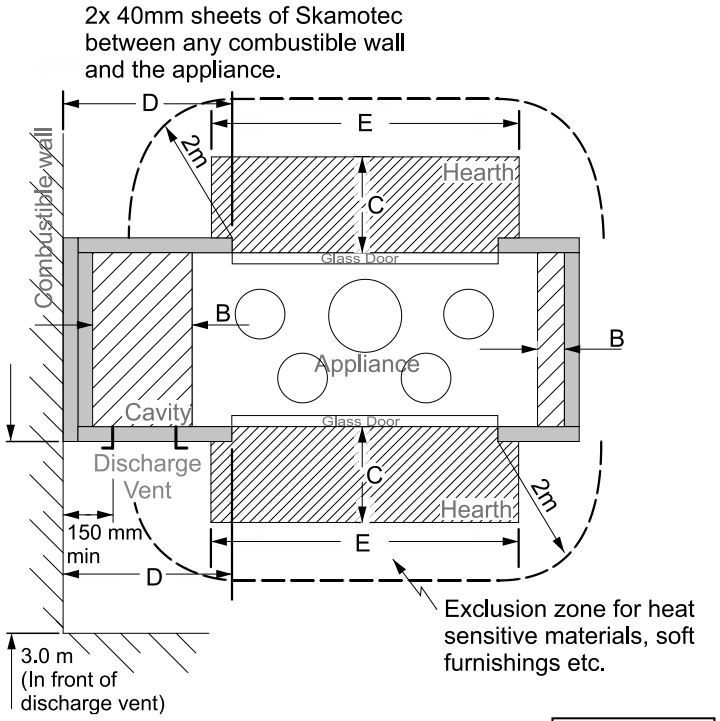


Figure 24

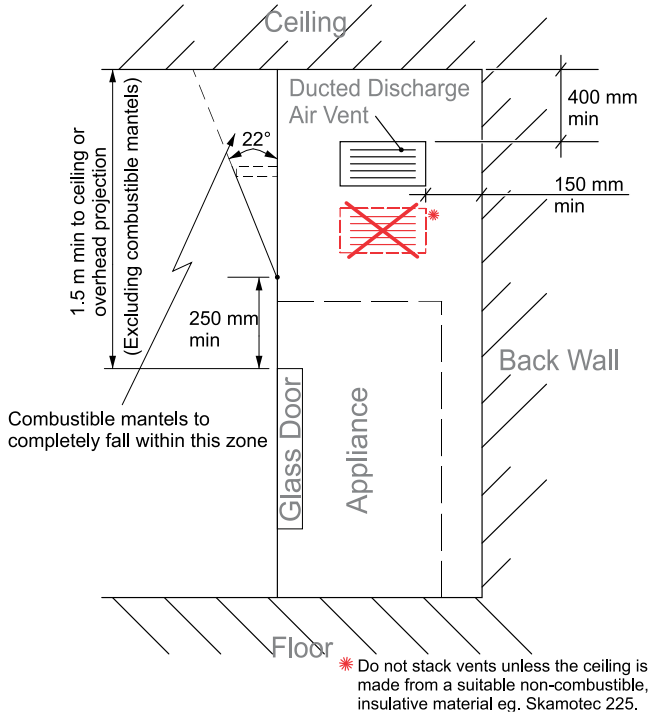


Figure 25

For non-ducted vents:

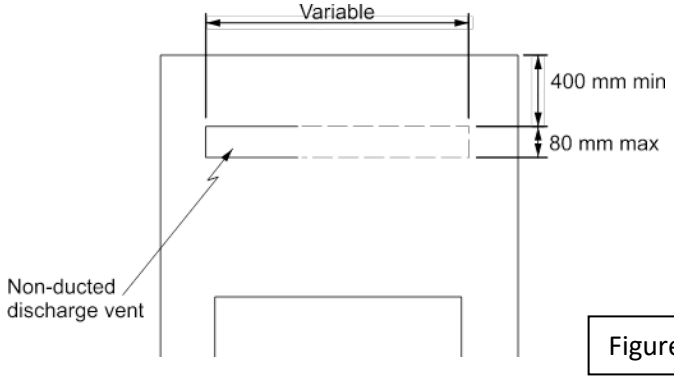


Figure 26

3.6 INSTALLING THE FLUE

Any flue system used on this fire must comply and be installed to fully meet the requirements of *AS/NZS 2918:2001 Domestic solid fuel burning appliances – Installation*.

Refer to the specification section to ascertain the correct flue diameter for your appliance.

A **minimum flue height of 4.2m** above the top of the appliance is recommended.

A flue drop box kit specifically designed for this appliance providing a means to incorporate a triple skinned flue installation is available from your authorised dealer or distributor. The drop box must also form a means to seal the appliance cavity from the rest of the dwelling thus retaining the hot air within the cavity.

The dropbox will rest on the supplied C-beams and should be attached to the C-beam using tech screws.

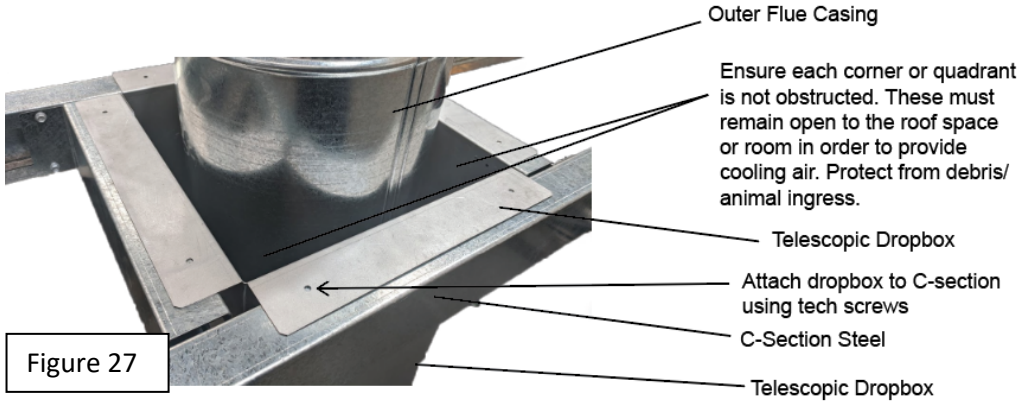


Figure 27

After the dropbox passes through the Skamotec enclosure, slide the steel closure plate up against the Skamotec and attach the dropbox to the steel closure plate using rivets.

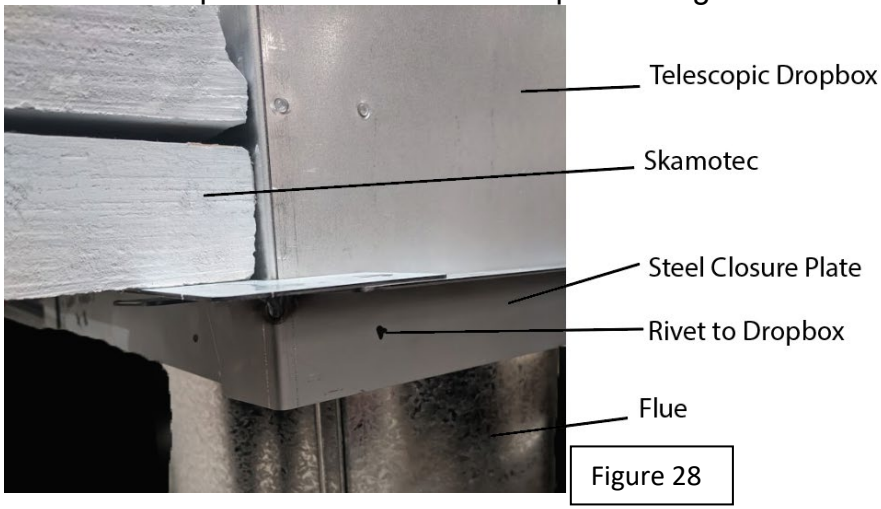


Figure 28

Ensure that the instructions supplied with the drop box are followed.

To protect the drop box against undesired ingress of debris or rodents/birds ensure that the supplied grilles are fitted as shown in the following image:

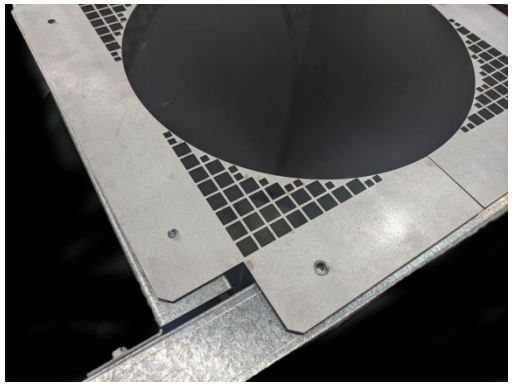


Figure 29

WARNING

A 25MM CLEARANCE TO COMBUSTIBLES MUST BE MAINTAINED FOR ALL FLUE COMPONENTS.

WARNING

ENSURE THAT ANY CHIMNEY CHASE OR DEAD AIR SPACE ADJACENT TO THE FLUE LINERS IS ADEQUATELY VENTILATED BY PROVISION OF DEDICATED VENT(S) TO THE BUILDING EXTERIOR OR VENTILATION THROUGH A DEDICATED CHIMNEY LINER VENT.

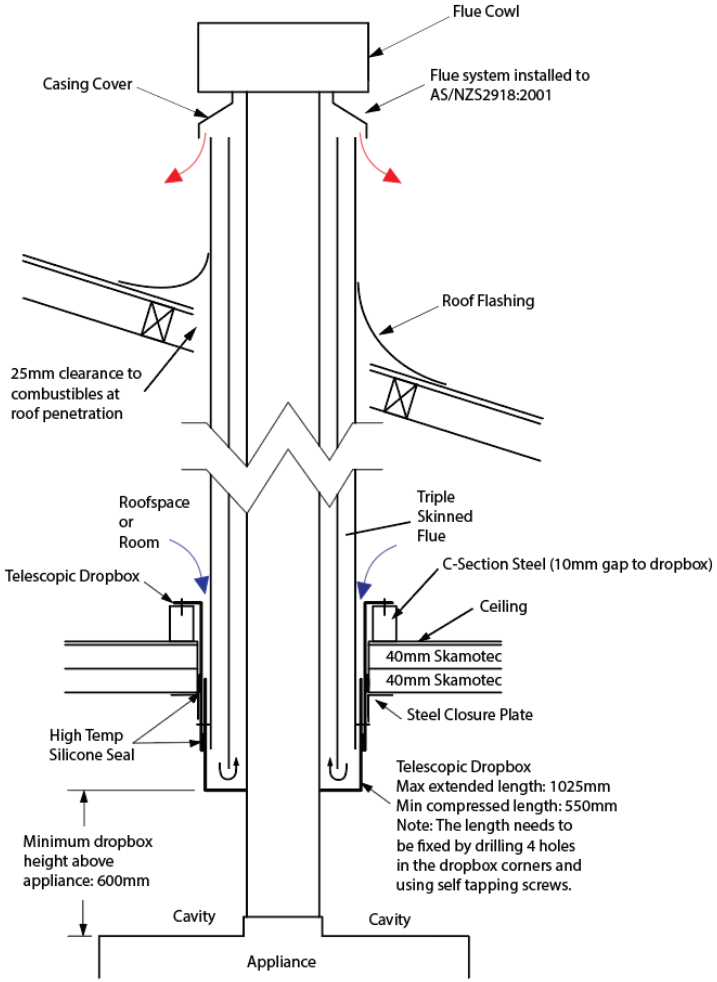


Figure 30

3.7 EXAMPLE OF CAVITY CONSTRUCTION

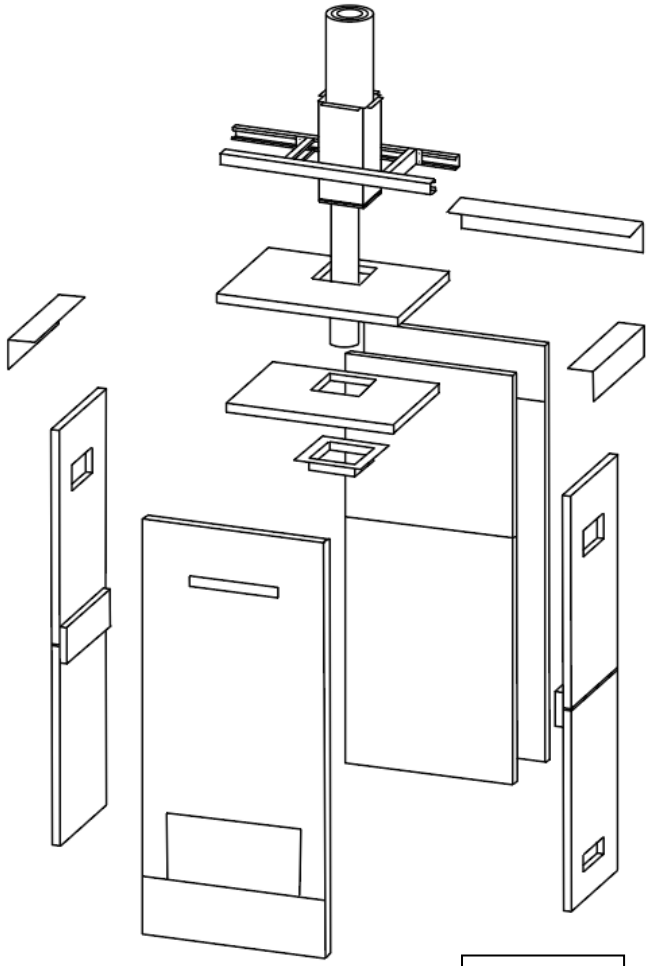


Figure 31

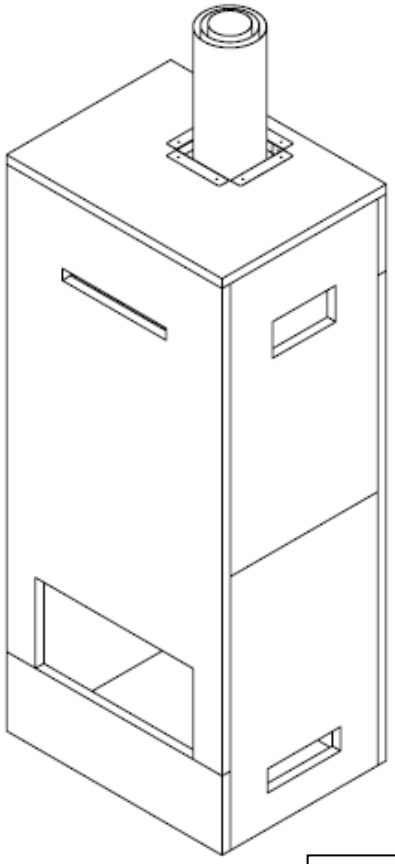


Figure 32

3.8 FINISHING THE ENCLOSURE

The enclosure may be finished by adopting conventional GIB stopping (plastering) materials and techniques but with some further considerations:

Skamo enclosure board is a particularly absorbent material and should be sealed with a suitable heat resistant primer (Mapei Primer G or Skamol Enclosure Primer) prior to finishing or plastering.

Joints between skamo enclosure board sheets should be accomplished with paper tape and plaster in cooler areas and fibreglass mesh tape and plaster in areas that may get hot.

Butt joints between sheets should be fully glued. **At these joints, the boards need to be primed with either Mapei Primer G or Skamol Enclosure Primer prior to gluing**.

Wherever practical, butt joints between sheets should be reinforced at the rear (inside the enclosure) with a strip or plank (200mm) of skamo enclosure board. Try to overlap each sheet by 100mm with the strip. The strips should be glued and screwed in place.

Avoid creating joints between skamo enclosure board sheets in areas that will become particularly hot (directly above the fire or adjacent hot air vents). This will help minimise any cracking.

If practical, try to create the aperture for the fireplace glass frame entirely within one piece of skamo enclosure board (no joins at corners).

Internal and external corners of the enclosure can be finished using an appropriate dry wall corner beading system. The design of the enclosure should ensure that corners are not positioned in areas likely to become hot (directly above the fire or surfaces affected by radiant energy) as this is likely to result in cracking of the plaster due to differential of expansion.

Most water based or acrylic paints are suitable for use on the enclosure.

Some discoloration or staining of surfaces above the fire or adjacent hot air vents is to be expected. Periodic re-painting of these affected surfaces may be required.

The enclosure must be clad in a suitable material that is not combustible or sensitive to heat. Such materials may include but are not necessarily limited to: stone, ceramic tiles, steel/metal, etc.

The enclosure should NOT be finished with or clad in materials that are combustible or sensitive to heat. Materials such as wall paper, paper faced plaster board, plastic, or wood panels are NOT suitable and must NOT be used.

4.0. BRICKS & BAFFLES INSTALLATION

⚠ WARNING

OPERATION OF THE APPLIANCE WITHOUT THE FIREBRICKS (CHAMOTTE) OR BAFFLES IN PLACE CAN RESULT IN EXCESSIVE TEMPERATURES THAT COULD DAMAGE THE APPLIANCE, CHIMNEY AND THE SURROUNDING ENCLOSURE.

DO NOT OPERATE THE APPLIANCE WITHOUT THE FIREBRICKS OR BAFFLES IN PLACE AS THIS COULD RESULT IN A HOUSE FIRE!

THE CHAMOTTE PIECES ARE FRAGILE AND MAY BE HEAVY – HANDLE WITH CARE!

Refer to the following diagrams for the correct installation of these components.

Single Sided XL (Varia Bh-P7)

Chamotte must be assembled in numerical order

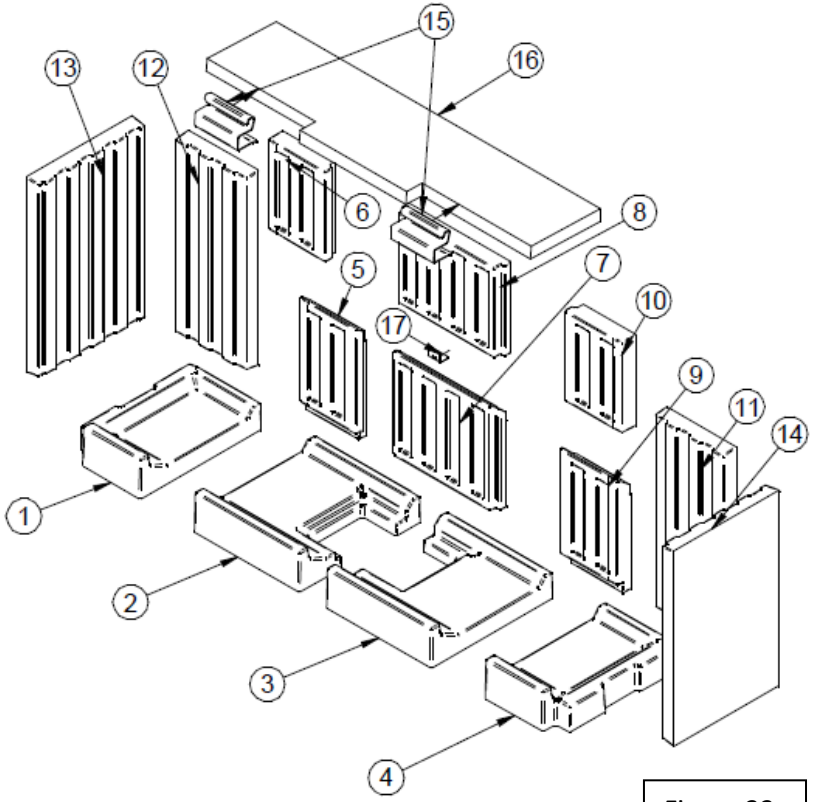


Figure 33

Single Sided Large (Varia ASh-P8)

Chamotte must be assembled in numerical order

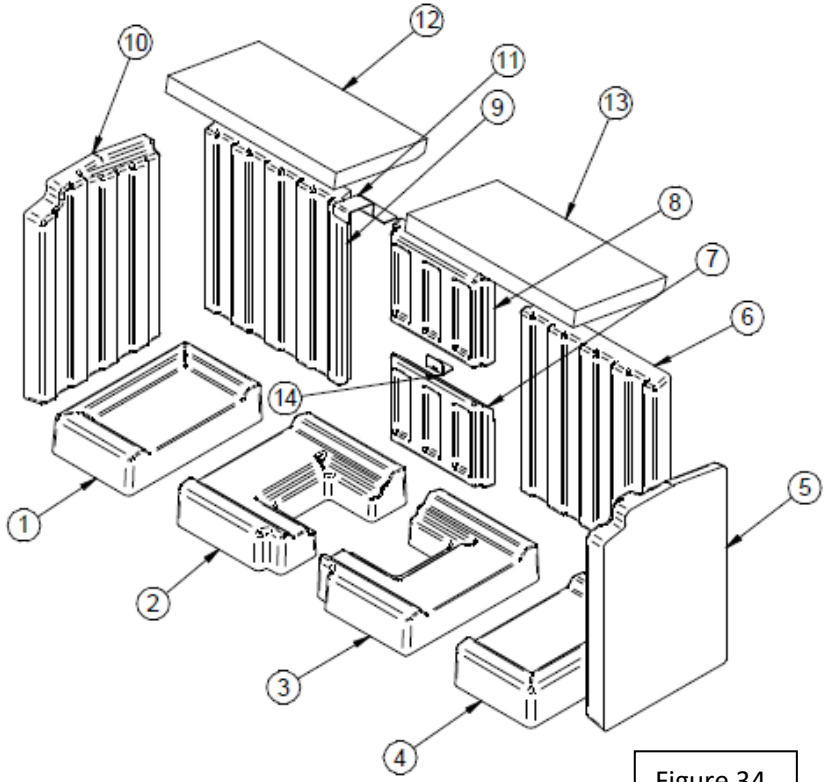


Figure 34

Corner Fireplace Left (Varia 2L 80h-P7)

Chamotte must be assembled in numerical order

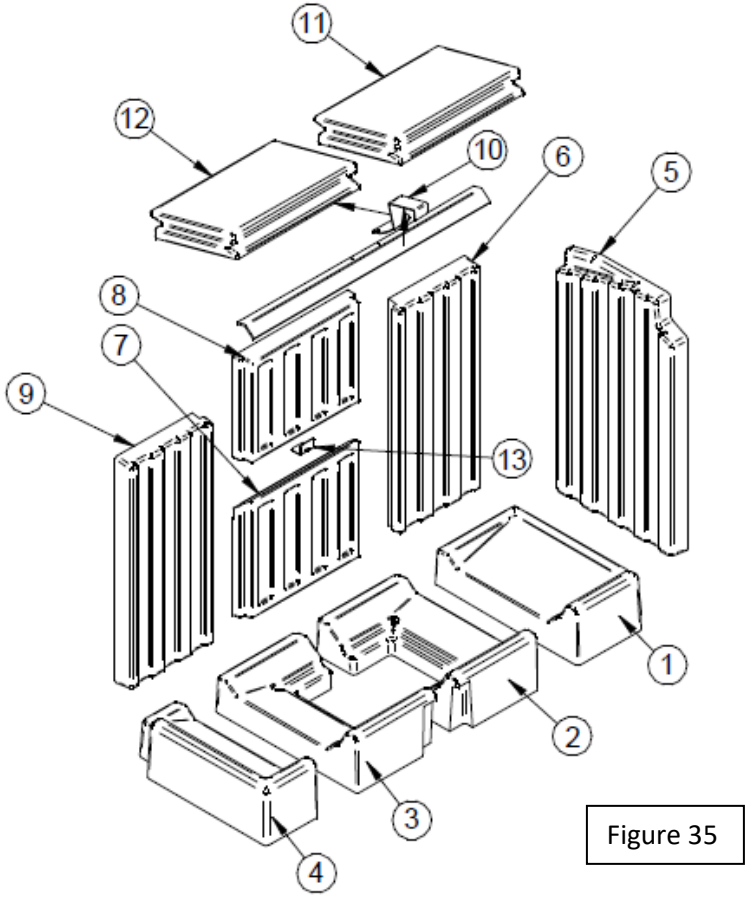


Figure 35

Corner Fireplace Right (Varia 2R 80h-P7)

Chamotte must be assembled in numerical order

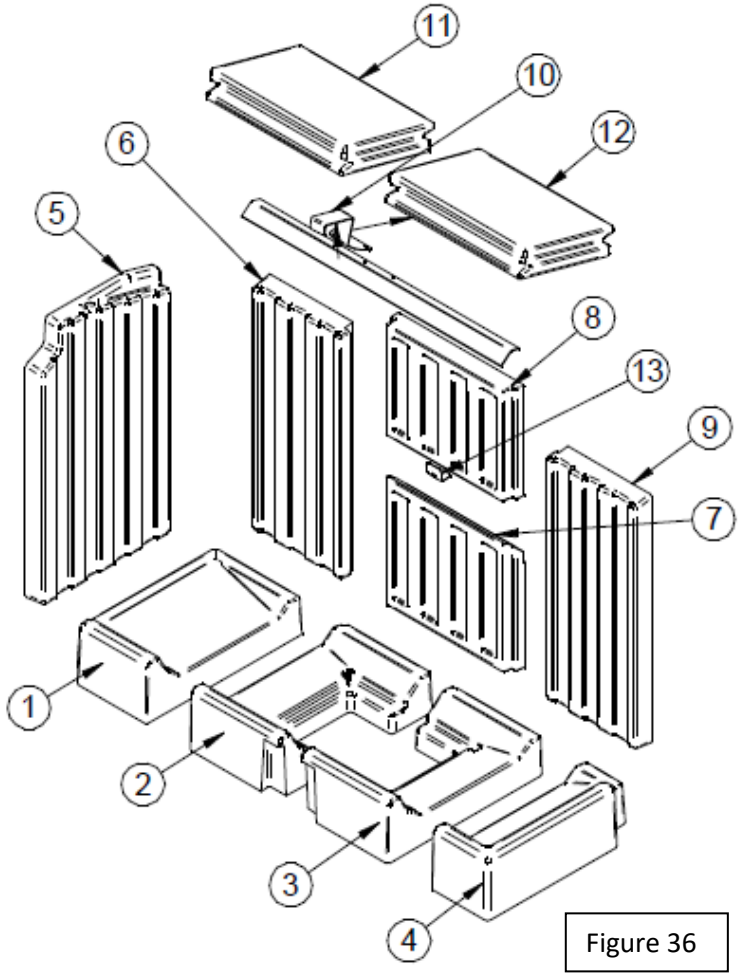


Figure 36

Double Sided (Varia A-FDh-P8)
Chamotte must be assembled in numerical order

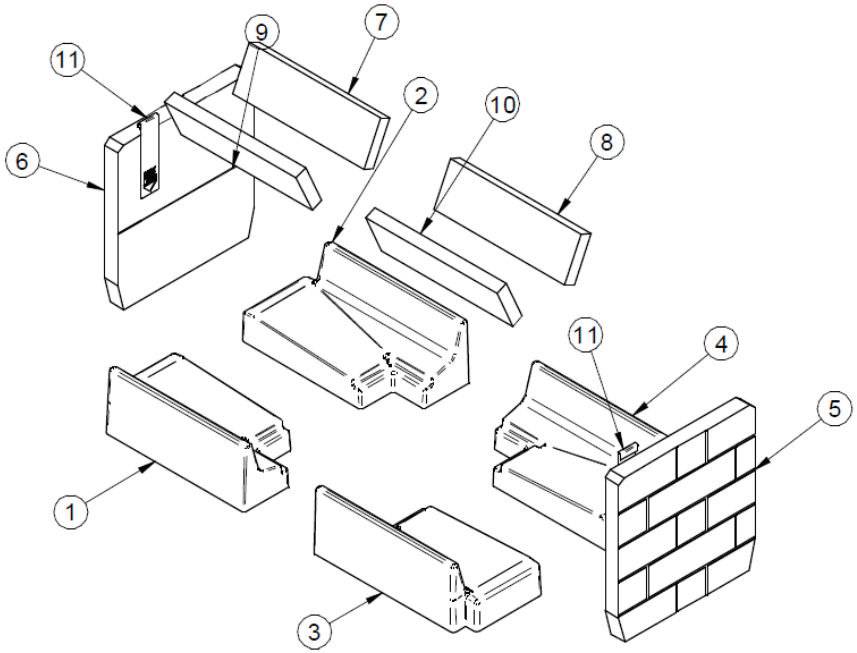


Figure 37

5.0 OPERATION

WARNING

DO NOT MODIFY THIS APPLIANCE.
BURN WELL SEASONED SOFT WOOD ONLY (LESS THAN 25% MOISTURE).
ALWAYS OPERATE THIS APPLIANCE WITH THE DOOR CLOSED AND LATCHED EXCEPT DURING START UP AND RE-FUELING.
ALWAYS WEAR GLOVES TO PREVENT INJURY.
DO NOT LEAVE THE FIRE UNATTENDED WHEN THE DOOR IS UNLATCHED OR WHEN USING A SPARK SCREEN AS UNSTABLE WOOD COULD FALL OUT OF THE FIRE CHAMBER CREATING A FIRE HAZARD TO YOUR HOME.
NEVER EVER, NOT EVEN FOR A BRIEF MOMENT, LEAVE CHILDREN UNATTENDED WHEN THERE IS A FIRE BURNING IN THE APPLIANCE.
NEVER USE GASOLINE, GASOLINE-TYPE LANTERN FUEL, KEROSENE, CHARCOAL LIGHTER FLUID, OR SIMILAR LIQUIDS TO START OR 'FRESHEN UP' A FIRE IN THIS APPLIANCE.
KEEP ALL SUCH LIQUIDS WELL AWAY FROM THE APPLIANCE WHILE IT IS IN USE.
OBJECTS PLACED IN FRONT OF THE APPLIANCE SHOULD MAINTAIN A SAFE DISTANCE.
OPEN AIR CONTROL (AND DAMPER WHEN FITTED) BEFORE OPENING FIRING DOOR.
HOT WHILE IN OPERATION, KEEP CHILDREN, CLOTHING AND FURNITURE AWAY.

WARNING

WEAR SUITABLE GLOVES TO OPERATE YOUR APPLIANCE.
NEVER OPERATE THE FIRE WITH THE GRATE COVER REMOVED.
DO NOT POKE OR STIR THE LOGS WHILE THEY ARE BURNING.
AVOID RISK OF BURNS. REMOVE OPERATIONAL TOOL AFTER USE!!!
BRIEF CONTACT MAY CAUSE SKIN BURNS.

Your Spartherm product is designed with the most advanced technology. The appliance is extremely airtight. It has an exclusive direct outside air supply (optional kit); a safety feature designed to prevent spillage, and to keep your house free of carbon monoxide, in case of a down drafting chimney or an internal negative pressure.

The first fire(s) in your appliance may be difficult to get going and keep going with a lesser amount of heat being generated. This is a result of the moisture being driven out of the fire brick. Allow 30 hours of hot fires before your appliance will perform optimally.

During the break-in period (the first 2 or 3 fires) create only small, hot fires using kindling or small wood pieces; this will allow the firebrick to cure.

Do not be alarmed if small hairline cracks develop in the firebrick. This is a normal occurrence and does not pose a safety hazard.

The paint may also smell for the first few fires as it cures and it is recommended to open a door or window to alleviate the smell.

Traditional Method of Lighting a Fire (Bottom Up)
To start, a brisk fire is required. Place loosely crumpled paper on the floor of the appliance and cover with dry kindling. Open the draft control fully (if available) by moving the lever to the right. Fully open the flue damper if this is an option. Light the paper and leave the door slightly ajar (25mm) until all kindling is burning.

To maintain a brisk fire, a hot ember bed must be established and maintained.

Slowly add slightly larger wood pieces. Lay the pieces lengthwise from side to side in the hot ember bed with a small gap between each piece so that the air can flow directly into this gap and ignite the fuel above.

When the fire seems to be at its peak, medium/large sized logs may be added. Once these logs have caught fire, carefully close the door. Closing the door too quickly after refuelling will reduce the firebox temperature and result in an unsatisfactory burn.

WARNING

NEVER LOAD THE WOOD HIGHER THAN THE AIR BAR AT THE REAR OF THE FIREBOX OR ANY OTHER "MAX" LEVEL MARK INDICATED WITHIN THE FIREBOX (DEPENDENT ON MODEL).

Remember it is more efficient to burn medium sized wood, briskly, and refuel frequently than to load the appliance with large logs that result in a smouldering, inefficient fire and dirty glass. As soon as the door is closed, you will observe a change in the flame pattern.

The flames will get smaller and lazier because less oxygen is getting into the combustion chamber. The flames, however, are more efficient. The flames will remain lazy but become larger again as soon as the firebricks have been heated thoroughly and the chimney becomes heated and provides a good draft. At this point, the roaring fire that you see when the door is opened is wastefully drawing heated room air up the chimney -- certainly not desirable.

Always operate the fire with the door fully closed once the medium sized logs have caught fire.

You can now add larger pieces of wood and operate the appliance normally. Once the appliance is entirely hot, it will burn very efficiently with little smoke from the chimney. There will be a bed of orange embers in the firebox and secondary flames flickering just below the top firebrick.

You can safely fill the firebox with wood up to the air inlet on the backside of the firebox or any other "MAX" mark indicated. On the Double Sided Fire (A-FDh-P8) there is a line about two thirds of the way up the side vermiculite pieces which indicates the maximum loading limit.

Once the medium sized firewood is burning briskly and an ember bed has started to establish you can control the fire using the air adjustment control (if fitted).

Turning the control to the left will reduce the air and result in a slower burning and less intense fire/heat.

Turning the control to the right will result in more air and a quicker burn with more intense fire/heat.

On some appliances the air control must be adjusted using the operational tool shown below unless a lever with a finger hole is provided on the product. Use a protective glove under all circumstances.

Figure 38 Operational tool

Learning to manage the appliance to your liking requires some practice, as you must first become familiar with its functioning. Do not expect an immediate reaction of the fire when you adjust the air control (if fitted). The flame will not

intensify or diminish quickly as is the case with liquid or gas fuels. Solid fuels like firewood react more slowly.

Top – Down Lighting Method (Alternative)

Lighting a fire can sometimes be difficult. The following method of lighting a fire is one that is widely practiced in other parts of the world. This is a tried and tested procedure which is better for the environment.

If you experience problems with the traditional (bottom up) method, particularly relating to smoke spillage then please try the following:

People often talk about *top down* and *bottom up* lighting. You either start lighting from the top or from the bottom. The top down method produces less soot and ashes (better for the environment), minimises smoke spillage into the room, ensures better air supply and makes the first wood load last longer.

What you will need:

- 3 or 4 larger logs of wood (dry)
- 8 to 12 pieces of kindling sticks
- Firelighters
- Matches

Step1

- Ensure that all air controls in the fireplace are open (if available). Put the logs on the bottom of the fireplace. It is important that the wood is cleft and dry. The logs may be as thick as a fist or thicker.

Step 2

- Add a layer of small logs of about 4 cm, and then one or two layers of kindling. Remember that air is important – approx. 1 cm between the pieces of wood is the perfect spacing.

Step 3

- Put 3 or 4 pieces of paraffin or alcohol based firelighter (about 3cm x 3cm each) on top of the layer of kindling wood.

Step 4

- Light each of the firelighter pieces and close the door to within 5 cm of closed. Leave the door slightly open or ajar for about 10 minutes or until the fire has established itself. Do not leave the fire unattended with the door open.
- When the flames are well established and the larger logs are burning, close the door.

- After the initial burn, add required amount of wood and adjust the aeration setting to the desired position.

DO NOT OVERFIRE THE APPLIANCE!

Over firing can occur by:
A. Burning large amounts of smaller wood pieces such as furniture scraps, skids or treated wood.
B. Overfilling your appliance. Load wood only up to line of air inlet nozzles at the backside of the firebox or, if not present, up to 50% of the fireboxes backside height or marked line.
C. Vigorously burning large loads of wood with the draft control on “HIGH” (fully open) for long periods of time (one or two hours).
D. Operating the appliance with the ash dump door (if available) blocked open or a poor gasket seal on the main door.

Expansion / contraction noises during heating up and cooling down cycles are normal and to be expected.

After extended periods of non-operation such as following a vacation or a warm weather season, the appliance may emit a slight odour for a few hours. This is caused by dust particles on the firebox burning off. Open a window to sufficiently ventilate the room.

Can’t get the fire going?
Use more kindling and paper. Assuming the chimney and vent are sized correctly and there is sufficient combustion air, the lack of sufficiently dry quantities of small kindling may be the problem. Thumb size is a good gauge for small kindling diameter.

Can’t get heat out of the appliance?
One of two things may have happened. The appliance door may have been closed prematurely and the appliance itself has not reached optimum temperature.
Reopen the door and/or draft control to re-establish a brisk fire.
Another problem may be wet or green wood. The typical symptom is sizzling wood and moisture being driven from the wood.

5.1 USE OF THE FLUE DAMPER

Your appliance may be fitted with a flue damper control (rotary knob located somewhere on the outside face of the cavity). The flue damper controls the amount of restriction within the appliance flue. When used properly the flue damper will help minimise smoke spillage into the room when refuelling.

Once combustion has been properly established, the appliance will run at its optimum efficiency when the flue damper is restricted to its most restrictive (closed) condition. This position differs depending on your appliance model. This (closed) position should be the default position for the flue damper when using your appliance.

Whenever you refuel the appliance it is advised that you adhere to the following procedure:

- Open the flue damper to its most unrestrictive (open) position (TURN FULLY ANTI-CLOCKWISE).
- Wait a few moments for the appliance to react to this new position and settle down.
- Open the fuel loading door and refuel the appliance in accordance with section 5.0.
- Close the fuel loading door.
- Wait a few moments for the new fuel to ignite.
- Close the flue damper to its closed (default) position (TURN FULLY CLOCKWISE).

Following this procedure should ensure that smoke spillage into the immediate room is minimised during refuelling.

5.2 FUEL

⚠ WARNING

THIS APPLIANCE IS DESIGNED TO BURN NATURAL SOFTWOOD WITH A MOISTURE CONTENT OF LESS THAN 25% ONLY. DO NOT BURN TREATED WOOD, COAL, CHARCOAL, COLOURED PAPER, CARDBOARD, SOLVENTS OR GARBAGE.
HIGHER EFFICIENCIES AND LOWER EMISSIONS GENERALLY RESULT WHEN BURNING AIR DRIED SEASONED WOOD, AS COMPARED TO GREEN OR FRESHLY CUT WOOD.
DO NOT BURN GREEN OR FRESHLY CUT WOOD. BURNING WET UNSEASONED WOOD CAN CAUSE EXCESSIVE CREOSOTE ACCUMULATION. WHEN IGNITED IT CAN CAUSE A CHIMNEY FIRE THAT MAY RESULT IN A SERIOUS HOUSE FIRE.
DO NOT STORE FUEL WITHIN THE CLEARANCE TO COMBUSTIBLES ZONE, OR IN THE SPACE REQUIRED FOR RE-FUELING AND ASH REMOVAL.
NEVER STORE WOOD IN THE ASH PAN COMPARTMENT (if applicable).

When loading the appliance, ensure that the upper fibre baffles are not forced out of position. For maximum efficiency, when the appliance is thoroughly hot, load it fully to the line of air inlet nozzles at the backside of the firebox or, if not present, to 50% of the fireboxes backside height and burn at a medium-low setting. The whiteness of the bricks and the

cleanliness of the glass are good indicators of your operating efficiency. Not enough heat is produced when only a few pieces of wood are burned or the wood may not burn completely.

NOTE: When loading the appliance, ensure to keep fuel back from the glass. If coals are to accumulate on the front lip, there is a chance they will fall out when the door is opened. Burn only dry, clean unpainted wood that has been seasoned. It produces more heat and less soot or creosote. Freshly cut wood contains about 50% moisture while after proper seasoning only about 20% of the water remains.

As wood is burned, this water boils off consuming energy that should be used in heating. The wetter the wood, the less heat is given off and the more creosote is produced. Dry firewood has cracks in the end of the grain.

Firewood should be split, stacked in a manner that air can get to all parts of it and covered in early spring to be ready for burning the following autumn.

Cut the wood so that it will fit horizontally side to side.

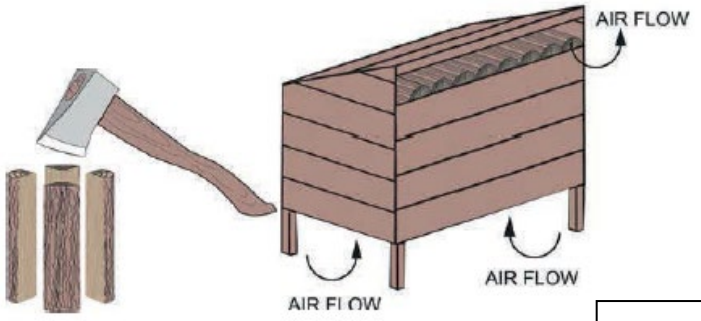


Figure 39

5.3 SMOKING

A properly installed appliance should not smoke. If yours does, check the following:

- Has the chimney had time to get hot?
- Is the smoke passage blocked anywhere in the appliance, chimney connector or chimney?
- Is the room too airtight or the air intake (if installed) not connected to the outside? Try with a window partly open.
- Is the smoke flow impeded by too long a horizontal pipe or too many bends?
- Is it a weak draft perhaps caused by a leaky chimney, a cold outside chimney, too large a diameter of a chimney, too short a chimney, or a chimney too close to trees or a higher roof?

5.4 ASH REMOVAL PROCEDURES

WARNING

IMPROPER DISPOSAL OF ASHES MAY RESULT IN FIRES.
DO NOT DISCARD ASHES IN CARDBOARD BOXES, DISCARD IN BACK YARDS, OR STORE IN GARAGES.
IF USING A VACUUM TO CLEAN UP ASHES, BE SURE THE ASHES ARE ENTIRELY COOLED. USING A VACUUM TO CLEAN UP WARM ASHES COULD CAUSE A FIRE INSIDE THE VACUUM.
NEVER OPERATE YOUR APPLIANCE WITH THE ASH PLUG (IF APPLICABLE) REMOVED.
FAILURE TO ACHIEVE A GOOD SEAL BETWEEN THE ASH OPENING, ASH PLUG OR ASH WELL DOOR MAY RESULT IN AN OVER FIRE CONDITION THAT COULD CAUSE DAMAGE TO THE APPLIANCE AND/OR SURROUNDINGS.

Allow the ashes in your firebox to accumulate to a depth of 50 TO 75mm; they tend to burn themselves up.

When the fire has burned down and cooled, remove any excess ashes but leave an ash bed approximately 25mm deep on the firebox bottom to help maintain a hot charcoal bed.

Shovel some ashes out through the door into a metal container with a tight fitting lid. Leave an ash bed approximately 1” (25mm) deep on the firebox bottom to help maintain a hot charcoal bed. Keep the closed container on a non-combustible floor or ground, well away from all combustible materials.

The ashes should be retained in the closed container until all cinders have thoroughly cooled. Cold wood ashes can be used on the garden or in compost.

5.5 CREOSOTE FORMATION & REMOVAL

When wood is burned slowly, it produces tar and other organic vapours, which combine with expelled moisture to form creosote. The creosote vapours condense in the relatively cooler chimney flue of a slow-burning fire.

As a result, creosote residue accumulates on the flue lining. When ignited this creosote makes an extremely hot fire. The chimney connector and chimney should be inspected regularly during the heating season to determine if a creosote build-up has occurred. If creosote has accumulated it should be removed to reduce the risk of a chimney fire.

RUNAWAY OR CHIMNEY FIRE

WARNING

A CHIMNEY FIRE CAN PERMANENTLY DAMAGE YOUR CHIMNEY SYSTEM.
THIS DAMAGE CAN ONLY BE REPAIRED BY REPLACING THE DAMAGED COMPONENT PARTS. CHIMNEY FIRES ARE NOT COVERED BY THE WARRANTY.

CAUSES:
• Using incorrect fuel, or small fuel pieces which would normally be used as kindling.
• Leaving the door ajar too long and creating extreme temperatures as the air rushes in the open door.
• Improperly installed or worn gaskets.
• Creosote build-up in chimney.

SOLUTIONS:
• Do not burn treated or processed wood, coal, charcoal, coloured paper or cardboard.
• Do not burn green or freshly cut wood.
• Be careful not to over fire the appliance by leaving the door open too long after the initial start-up.
• Replace worn, dried out (inflexible) gaskets.
• Have the chimney regularly cleaned.

IN CASE OF A CHIMNEY FIRE:
• Have a well understood plan for evacuation and a place outside for everyone to meet. Prepare to evacuate to ensure everyone's safety.
• Close air control on appliance.
• Call local fire department. Have a fire extinguisher handy. Contact local authorities for further information on how to handle a chimney fire.
• After the chimney fire is out, clean and inspect the chimney for stress and cracks prior to lighting another fire. Also check combustibles around the chimney and the roof.

5.6 CHIMNEY CLEANING

Both the chimney and the appliance must be inspected and cleaned at least once a year.

For serious wood burners, chimney cleaning must be done as needed to avoid chimney fires; the venting systems for controlled combustion appliances may need cleaning as often as once a month. These rates, however, depend on the burning habits of the individual operating the appliance. For example, it is possible to clog a solid fuel appliance chimney in a few days if slow, smouldering fires are burned and the chimney is cold.

NOTE: Appliances burned consistently without hot fires may result in significant creosote accumulations in the chimney.

Certain items and considerations are important in chimney cleaning:
•We recommend that you use a registered chimney cleaning professional.
• Proper tools should be used, including a brush specifically designed for chimney cleaning.

• The chimney connector and dampers as well as the chimney should be cleaned.
• The appliance's firebox and baffle system should be cleaned if needed.
• The chimney should be inspected and repairs made if needed.
• The chimney should be swept from above. Removal of the vermiculite baffle(s) and steel baffle plate from within the firebox will aid in access to vacuum the residue from below. The flue damper should be set to fully open for this procedure.

5.7 DO's and DON'Ts

DO
• Build a hot fire.
• Use only dry wood.
• Several pieces of medium sized wood are better than a few big pieces.
• Refuel frequently using medium sized wood.
• Clean chimney regularly (at least once a year).
• "Fine Tune" the air settings (if available) for optimum performance.

DON'T
• Take ash out immediately. Let it accumulate to a depth of at least one inch. A good ash layer provides for a longer lasting and better burning fire.
• Burn wet wood
• Close the door too soon or damper down too quickly.
• Burn one large log rather than two or three smaller, more reasonably sized logs.
• Burn at continually "low setting", if glass door is constantly blackened. This means the firebox temperature is too low and energy is wasted by incomplete combustion.

6.0 SERVICING / MAINTENANCE

WARNING

APPLIANCE MAY BE HOT, DO NOT SERVICE UNTIL APPLIANCE HAS COOLED.
DO NOT USE ABRASIVE CLEANERS.

Check your chimney for creosote and soot build up regularly until a safe frequency for cleaning is established.

If accumulation is excessive, clean both the chimney and the appliance. You may want to call a professional chimney sweep to clean them. Both have to be cleaned at least once a year or as often as necessary.

Remove fire baffles and clean above them once a year. Replace any broken bricks.

6.1 CARE OF GLASS

WARNING

HOT GLASS WILL CAUSE BURNS.
DO NOT TOUCH GLASS UNTIL COOLED.
NEVER ALLOW CHILDREN TO TOUCH GLASS.

If the glass is not kept clean permanent discolouration and / or blemishes may result. Normally a hot fire will clean the glass. The most common reasons for dirty glass include: not using sufficient fuel to get the appliance thoroughly hot, using green or wet wood, or closing the draft so far that there is insufficient air for complete combustion.

If it is necessary to clean the glass, buff lightly with a clean dry cloth and non-abrasive cleaner.

DO NOT CLEAN GLASS WHEN HOT! Clean the glass after the first 10 hours of operation with the recommended appliance glass cleaner (supplied). Thereafter clean as required.

The glass is very strong but do not let burning fuel rest or fall against it and always close the door gently. **NEVER FORCE IT SHUT!**

If the glass should ever crack or break while the fire is burning, do not open the door until the fire is out and do not operate the appliance again until the glass has been replaced. New glass is available from your authorised dealer or distributor. An up to date list of authorised dealers can be found at sparthermfires.co.nz

DO NOT USE SUBSTITUTE MATERIALS.

6.2 CLEANING THE CERAMIC GLASS

WARNING

THE GLASS CERAMIC SHEET MAY ONLY BE CLEANED WHEN COLD (FIREPLACE INSERT NOT BURNING AND COOLED DOWN; NO HOT ASH IN THE FIRE CHAMBER).

FLAT DOOR

Figure 40 Operational tool

1. Close the glass door (slide down fully).
2. From the left, place the “operational tool” on the catch located centrally above the fire compartment door.

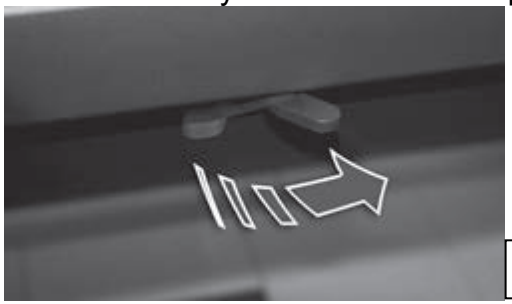


Figure 41

Unlatch by twisting to the right.

3. Then tip the door to open.

Figure 42

Using one hand, tilt the door open up to its end stop.

CORNER/BAY DOOR

1. Slide down the glass door fully.
2. Using the “operational tool”, twist open the catch for the sliding rail locking mechanism, located above the fire compartment door, right and left.

The door is now locked in bottom position.

Figure 43

Another locking bolt is located on the opposite side.

3. Release the lateral door catches by hand, or with the “operational tool”, by twisting – observe the sequence. Important: First release the bottom catch, then the top one (the top catch supports opening).

Figure 44

Then twist open the top catch.

4. Swing open the fireplace door to the left and/or right.

Figure 45

Handle the doors by their frames only!

6.3 CARE OF PLATED PARTS

If the appliance is equipped with plated parts, you must clean fingerprints or other marks from the plated surfaces before operating the appliance for the first time. Use a glass cleaner or vinegar and towel to clean. If not cleaned properly before operating for the first time, the marks can cause permanent blemishes on the plating. After the plating is cured, the fingerprints and oils will not affect the finish and little maintenance is required, just wipe clean as needed. Prolonged high temperature burning with the door ajar may cause discolouration on plated parts.

NOTE: The protective wrap on plated parts is best removed when the assembly is at room temperature but this can be improved if the assembly is warmed, using a hair dryer or similar heat source.

6.4 GLASS REPLACEMENT

⚠ WARNING

DO NOT USE SUBSTITUTE MATERIALS
GLASS MAY BE HOT, DO NOT TOUCH GLASS UNTIL COOLED.
CARE MUST BE TAKEN WHEN REMOVING AND DISPOSING OF ANY BROKEN DOOR GLASS OR DAMAGED COMPONENTS.
BE SURE TO VACUUM UP ANY BROKEN GLASS FROM INSIDE THE APPLIANCE BEFORE OPERATION.
DO NOT STRIKE, SLAM OR SCRATCH GLASS. DO NOT OPERATE APPLIANCE WITH GLASS REMOVED, CRACKED, BROKEN OR SCRATCHED.

Installation:
Wear appropriate eye and hand protection.

Remove the door from the fire and remove the glass retainer. Position the 4 mm ceramic Schott Robax glass in the door, make sure that the glass gasket will properly seal your unit, and replace the retainer, it should rest on the gasket not the glass. Tighten securely, but do not wrench down on the glass as this may cause the glass to break.

Contact your dealer for questions concerning prices and policies on replacement parts. Normally all parts can be ordered through your authorised dealer / distributor.
An up to date list of authorised dealers can be found at sparthermfires.co.nz

FOR WARRANTY REPLACEMENT PARTS, A PHOTOCOPY OF THE ORIGINAL INVOICE WILL BE REQUIRED TO HONOUR THE CLAIM.

When ordering replacement parts always give the following information:

- Model & Serial Number of appliance
- Installation date of appliance
- Part number
- Description of part
- Finish

WARNING

FAILURE TO POSITION THE PARTS IN ACCORDANCE WITH THIS MANUAL OR FAILURE TO USE ONLY PARTS SPECIFICALLY APPROVED WITH THIS APPLIANCE MAY RESULT IN PROPERTY DAMAGE AND/OR PERSONAL INJURY.

7.0 TROUBLESHOOTING

WARNING

APPLIANCE MAY BE HOT, DO NOT SERVICE UNTIL APPLIANCE HAS COOLED.
DO NOT USE ABRASIVE CLEANERS.

Problem	Solution
Can't get the fire started.	• Not enough kindling / paper? Add more. • Not enough air? Ensure air control is fully open. Also ensure that the air opening is not obstructed. • Cold air blockage? Burn a piece of paper to establish a draft. • Use dry seasoned wood. • Flue blockage? Inspect chimney.
Smokes when door is open.	•Ensure the flue damper is in the open position during refuelling. • Cold air blockage? Burn a piece of paper to establish a draft. • Insufficient draft? Add more flue pipe. • Let air stabilize before opening door. • Ensure baffles are positioned correctly. • Negative pressure? Open a window near the appliance.
Appliance emits odour.	• Paint curing. See "GENERAL INSTRUCTIONS" section.
Fire doesn't burn hot enough.	• Wood is too wet. • Insufficient draft? Add more flue pipe. • Not enough air? Ensure air control is fully open. Also ensure that the air opening is not obstructed.
Wood burns too fast.	• Air control may need to be adjusted down. • Check to see ash plug is properly seated (if equipped). • Check door gasket for adequate seal. • Wood may be extremely dry.
Dirty glass.	• Air control may be closed too far. Open air control more. • Burn hotter, smaller fires. Use well-seasoned wood.

8.0 GENERAL WARRANTY TERMS AND CONDITIONS

GENERAL INFORMATION
This quality manufactured product is state of the art. The materials used were meticulously selected and are constantly checked, as is our entire production process.
Setting up or installing this product requires specialized knowledge. Spartherm products may therefore only be installed and commissioned by specialized firms and in compliance with statutory regulations as amended.

Manufactured in Germany by Spartherm GmbH, Maschweg 38, D-49324 Melle.

Distributed in New Zealand by Escea Ltd, 17 Carnforth Street, Dunedin 9058. Ph. 0800 173 000.

Warranty Conditions for Spartherm New Zealand

This warranty is provided by the New Zealand Distributor of Spartherm Fires, who trade as Escea Limited (referred to in this document as Escea). The warranty applies from the date of purchase from or through an authorised Spartherm fire dealer.

1. Nature of Warranty

1.1 Subject to the exclusions in section 2 & 3, Escea undertake to put right any defects in the Spartherm products supplied by Escea for the periods specified below:

Parts	Parts and Labour Warranty
Basic firebox parts of the fireplace including inserts, stoves, cassettes and doors	5 years*
Elevating mechanisms, operation devices such as handles, adjustment leavers, shock absorbers, electronic and electrical components such as exhausters, governors, and safety devices	2 Years*
Fireclay bricks / vermiculite, fire grates, seals and glass**	6 months*

* From date of purchase
** Fireclay Bricks / vermiculite: These are natural products subjected to expansion and contraction during the heating process. This may create cracks. For as long as the linings remain in position in the fire chamber and do not break up, they remain fully functional and hence not subject to warranty claims.

1.2 Escea must pre-authorise all warranty work.

1.3 The benefits provided by under this warranty are in addition to the consumer guarantees and any other statutory rights you may have under the consumer law and/or other applicable laws.

2.0 Warranty Exclusions

2.1 This warranty does not apply and will be void where:

2.1.1 The Spartherm fire is not installed in accordance with AS/NZS 2918:2001 and any building code and consent.

2.1.2 The Spartherm fire has not been installed or operated in accordance to the Spartherm installation manual, in particular, defects, malfunctions or failures caused by incorrect installation, normal wear and tear, misuse, neglect, lack of proper and regular maintenance, accidental damage any other alteration, or failure to follow operating instructions in the installation manual or any misuse that causes an overfired situation resulting in heat damage.

2.1.3 The use of products, including flue systems that are not specified in accordance with installation manual.

2.1.4 Installation of the fireplace, repairs or modifications by persons not authorised by Escea, use of parts not supplied by Escea, or damage or other events which have occurred since the product left the control of Escea.

2.1.5 Any scratches, dints, finger print marks and melted items that occurred after the arrival of the product to the Spartherm Dealer.

2.1.6 Discolouration of the enamel, galvanized surfaces or glass caused by soiling by soot or built-in residues of burnt materials as well as visibly changed colour or other aspects due to thermal stress, or overload.

2.1.7 If the installation and operating instructions are not followed resulting in the overheating of the pulleys and bearings.

2.1.8 Improper handling of fragile components such as glass.

2.1.9 Damage caused by incorrect use or the burning of treated or painted wood, driftwood or other fuels which are not recommended.

2.1.10 Changes in the interior / exterior surfaces of the house, fire or flue (e.g. any staining or soot / smoke damage, cracking, discoloration or degradation of surfaces caused by thermal stress).

2.1.11 Damage caused by abnormally corrosive environments (e.g. sea salt corrosion).

2.1.12 Damage caused by water affecting the Spartherm fire.

2.1.13 Operation of the Spartherm fire without its fire clay bricks, vermiculite, door seals, fire grates, complete glass doors in place or partly open doors will create an overfired situation resulting in damage, which will not be covered by warranty.

2.1.14 Spartherm wood fires are coated with high temperature paint that may show signs of surface rust if exposed to moisture for an extended period of time. Escea reserve the right to prep and paint a brand new fire that has just been delivered rather than supplying a new fire in the rare event any rust is present. Any subsequent rust damage is not covered by warranty.

2.1.15 This warranty does not cover paint blemishes or imperfections because of the uneven nature of high temperature paint. A spray can of touch up Spartherm paint is available and can be purchased from your Spartherm dealer.

2.1.16 Subject to any statutory provisions to the contrary, at Escea's discretion, Escea's liability in respect of Spartherm products that are found to have manufacturing defects will be limited to refunding, repairing or replacing the defective products. In the event of a warranty repair that results in the skamol board needing to be removed to access the Spartherm fireplace, the reinstatement of the skamol board will be covered under warranty. The reinstatement and replacement of any affected wall, ceiling or floor coverings, coatings or claddings are not covered by warranty. Escea does not accept liability for consequential damage or any incidental expenses resulting directly or indirectly from any defect or breach of warranty, claims for damage to building or any other consequential loss.

3.0 Other Spartherm Warranty Conditions

3.1 No dealer, distributor, or similar person has the authority to warrant Spartherm products beyond the terms contained in this warranty.

3.2 This warranty is automatically voided if the appliance's serial number has been removed or altered in anyway.

3.3 We particularly recommend that your Spartherm fireplace and chimney are serviced annually by a fireplace installer or service person.

3.4 Any differences in fireplace appearance from Spartherm promotional images that is due to printing limitations, environmental factors or wood variations are not a warranty issue.

3.5 Where you make a claim under this warranty, an authorised repairer may need to attend your premises to inspect the Spartherm product. Escea may charge you a service call fee if a repairer will be required to travel more than 30 km from the nearest service centre to your location. You can obtain details on the location of service centres and service call fees by visiting the Spartherm website or calling the customer care line below.

4.0 Warranty Claims

4.1 If you make a valid claim under warranty and none of the exclusions set out in section 2 and 3 apply, Escea will, at Escea's election either:

4.1.1 Repair the relevant part of the Spartherm product; or

4.1.2 Replace the relevant part of the Spartherm product with a product of identical specification (or where the product is superseded or no longer in stock, with a product of as close a specification as possible).

5.0 How to make a warranty claim

5.1 To make a valid claim under this warranty, you must:

5.1.1 Lodge the claim through the dealer who supplied the fire, as soon as you first become aware of the breakdown. The Spartherm Dealer will then follow Escea's warranty claim process.

5.1.2 Provide the Spartherm product serial number.

5.1.3 Provide reasonable proof of purchase for the Spartherm product.

5.1.4 If required, provide access to the premises at which the Spartherm product is located (so it can be inspected).

New Zealand Spartherm Distributor	**Filing a Claim**
Escea Limited **17 Carnforth Street** **Dunedin, 9018, New Zealand** **Ph 0800 17 3000** **www.Sparthermfires.co.nz**	**Contact the dealer you purchased the fire from**

This document contains technical data subject to change without notice.

9.0 SERVICE HISTORY & DATA PLATE

The appliance must be serviced at least annually and possibly more frequently – dependant on usage.

Date	Dealer name	Service Technician	Service performed	Notes

630359_5

Data Plate:

Installer - Adhere duplicate data plate here:

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