



Description	Product Code
Standard Switching	FAN0618
Timer	FAN0619

This Manrose inline extraction fan kit is designed for ventilation within a shower cubicle. The high performance fan provides high levels of extraction and enables additional ducting to be added to this system.

**Thank you for purchasing this quality 150mm inline extraction fan kit.**

To ensure correct function and safety, please read all instructions before using the product and keep all instructions for future reference.

When using electrical appliances, basic safety precautions should always be followed to reduce the risk of fire, electrical shock and personal injury.

## SPECIFICATIONS

Duct (mm)	Fan Type	Max. Fan Watts (W)	Max. Fan Pressure (PA)	Free Air Fan Performance		Specific Fan Power (W/l/s)	Interior Grille	Exterior Grille
				(l/s)	(m <sup>3</sup> /hr)			
150	EC Axial	18	91	105	380	0.17	Round White and Square White	Weatherproof Cowl White and Fixed Louvre White

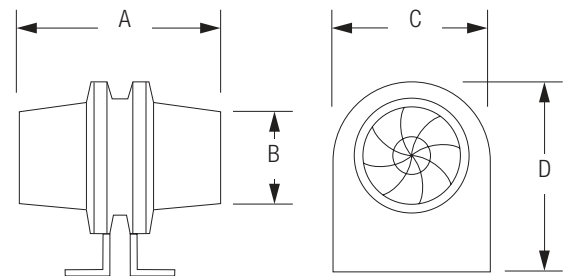
E6337 Compliance: AS/NZS60335-2.80:2016

## DIMENSIONS

Cut-Out Size	A	B	C	D
160	200	143	170	185

*Note: Grille cut-out size is a nominal diameter for a circular cut-out.*

Cut-out Size Internal	Square Grille	165/155
	Easyfit Grille	195
Cut-out Size External	Square Grille	160



## TECHNICAL

Supply	Motor Housing	Impeller & Outer Rotor	Ducting
220-240V AC, 50Hz	Die cast aluminium	PBT plastic	5m Flexible PVC

## FAN TIMER SELECTION

Please use the FAN2444 fan timer model shown

Do not use old model FAN2444 (with resistor) or either FAN0372 fan timers shown



## REGULATIONS AND STANDARDS

### New Zealand Building Code and Healthy Homes

The following two category requirements have been established for mandatory extraction ventilation in New Zealand.

#### The New Zealand Building Code for New Building Consents

The building regulatory system sets out a framework to promote good quality decisions being made during the Building Consent process. The legislation and regulations work together, as the building regulatory system. The functional clauses of the NZ Building Code are grouped and described by a letter and number. Clause G of the NZ Building Code covers services, with G4 setting out the performance requirements for ventilation. The Building Code is enshrined in law. The New Zealand Building Code, G4, has been changed. This is supported by Acceptable Solution G4/AS1 Fourth Edition that specifies mechanical ventilation in accommodation units that contain cooktops, showers and baths.

#### Residential Tenancy Regulations to the Healthy Homes Standards

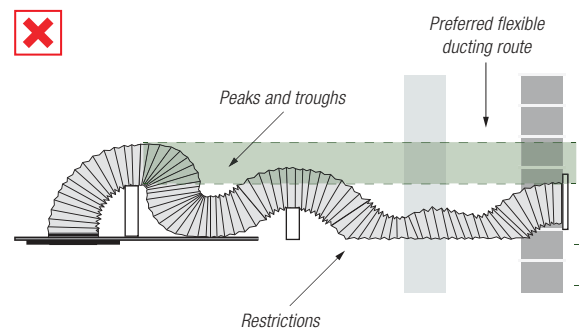
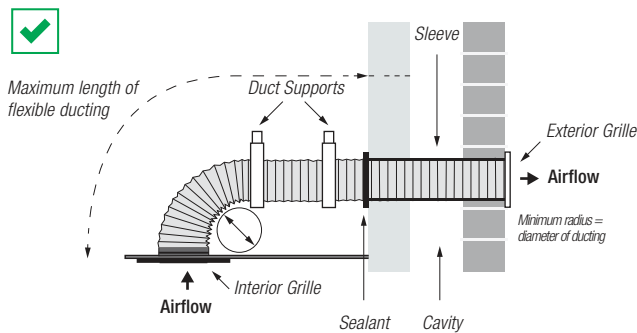
Residential Tenancy Regulations for rental properties only is changing to the Healthy Homes Standards, sub part 4 - Ventilation Standards.

#### Complying with the Acceptable Solution G4/AS1

To comply, the mandatory mechanical extract system must deliver minimum airflow rates for the complete installed ventilation system. This means that airflow rates must deliver the airflow after resistance of the ducting, internal and external grilles, as well as all other accessories, such as backdraught shutters, are included.

Fan selection is important as some types are far better at overcoming ducting system pressure drops.

Additionally, the quality of the ducting system installation can be all important. Rigid duct systems (see page 102) are best as they are the most efficient. Good installation practice is vital for flexible duct systems.



### Choosing the Right Fan to Comply

Fans cannot be selected on the basis of free-air performance only. Fans must now be selected on the basis of the complete installed system performance for a designated room as per the table below.

Room	Airflow Rate (min.)	
	Intermittent	Continuous
Toilet <sup>1)</sup>	25 l/s	10 l/s
Bathroom/shower	25 l/s	10 l/s
Laundry <sup>2)</sup>	40 l/s	-
Kitchen	50 l/s	12 l/s

1) Toilets only require ventilation if they have no openable windows

2) Simx recommends 40 l/s for laundries with unvented non-condensing tumble dryers as covered in AS 1668: Part 2 2012

Recent unregulated extract fan practices in New Zealand has trended to basic, low pressure axial fan products, as installed system performance has not been defined for independent inspection testing and compliance signed off by local authorities.

#### Bathroom

25 l/s

		Metres of Ducting									
		1	2	3	4	5	6	7	8	9	10
No. of Bends	1										
	2										
	3										
	4										
	5										

#### Fan Selection

Hyper150 EC

Mixflo 150

#### Kitchen

50 l/s

		Metres of Ducting									
		1	2	3	4	5	6	7	8	9	10
No. of Bends	1										
	2										
	3										
	4										
	5										

Blue Jet



**INLINE EXTRACTION FAN KIT INSTALLATION AND ELECTRICAL CONNECTION MUST BE CARRIED OUT BY A REGISTERED ELECTRICIAN**



## CAUTION

- Before use, please check that the supply voltage and that of the appliance are the same (see product rating label).
- All wiring and wiring connections must comply with all current national wiring rules and regulations including AS/NZS3000:2017, or latest edition thereof.
- Any changes or modifications made or attempted to this product, without the prior written approval of the manufacturer, will void any and all stated warranties.
- When fitting through an external wall, an external grille must be fitted at all times.
- Fan kits should only be installed by fixed wiring. A flexible cord should not be used.
- This fan is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they are capable of, and have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- Children should be supervised to ensure that they do not play with the fan.
- In case of damage to the supply cord, switch off the device and do not tamper with it. Damaged supply cords must only be repaired or replaced exclusively by the manufacturer or by an appointed representative. Failure to comply with the above may endanger the safety of people and cause possible damage to the whole system.
- The fan kit is to be installed so that the blades are more than 2.1m above the floor.
- Precautions must be taken to avoid the back-flow of gases into the room from the open flue of gas or other fuel-burning appliances when mounted in outside windows or walls.



**BEFORE INSTALLING THE INLINE EXTRACTION FAN KIT, MAKE SURE YOU HAVE TURNED OFF THE MAIN ELECTRICITY SUPPLY. DO NOT TURN IT BACK ON UNTIL THE INLINE EXTRACTION FAN KIT IS FULLY INSTALLED AND READY TO USE.**



**ALL ELECTRICAL WORK MUST BE CARRIED OUT BY A REGISTERED ELECTRICIAN IN ACCORDANCE WITH THE LATEST WIRING RULES AS/NZS3000.**

## WARNING

- This inline extraction fan kit is hot when in use. To avoid burns, do not let bare skin touch hot surfaces. Keep combustible materials away from the fan kit and keep them away from the sides and rear.
- Do not use near or in the immediate vicinity of a bath or swimming pool or any wet areas.
- To protect against electric shock, do not immerse cord or plug in water or any other liquids.
- Do not insert or allow foreign objects to enter any ventilation openings, as this may cause an electric shock, fire or damage to the fan kit.
- Do not put fingers or foreign objects into the grille while in operation.
- Any changes or modifications made or attempted to this product, without the prior written approval of the manufacturer, will void any and all stated warranties.
- To prevent overheating of this fan kit, keep the air inlets and outlets clean and free of anything that may cause blockage. Check all inlets and outlets from time to time to ensure it is clear of any dirt or dust accumulation. **DO NOT COVER.**
- Do not use it in areas where gasoline, paint, or flammable liquids are used or stored.
- This product contains recyclable materials. Do not dispose of this product as unsorted council waste. Please contact your local council for the nearest collection point.

## ELECTRICAL CONNECTIONS

Diagram 1

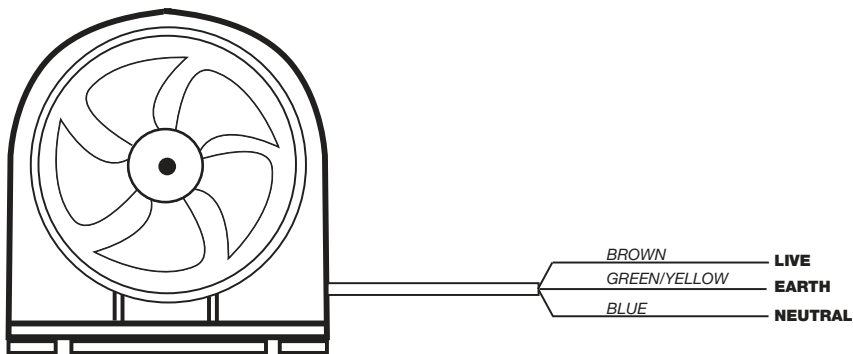
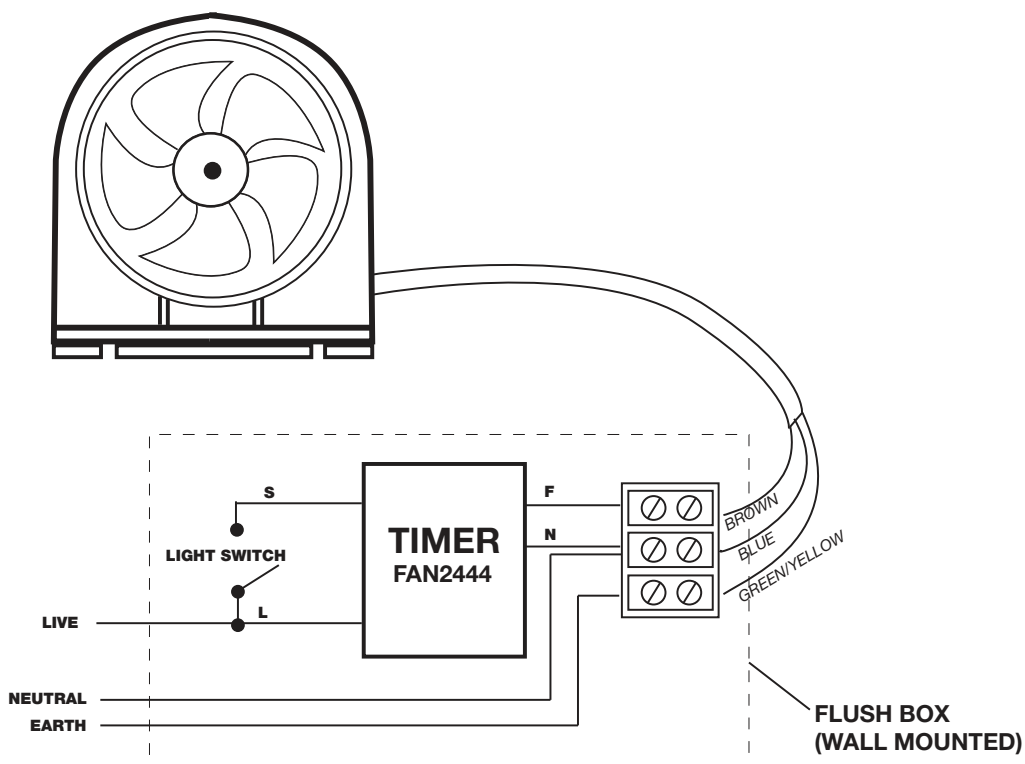


Diagram 2



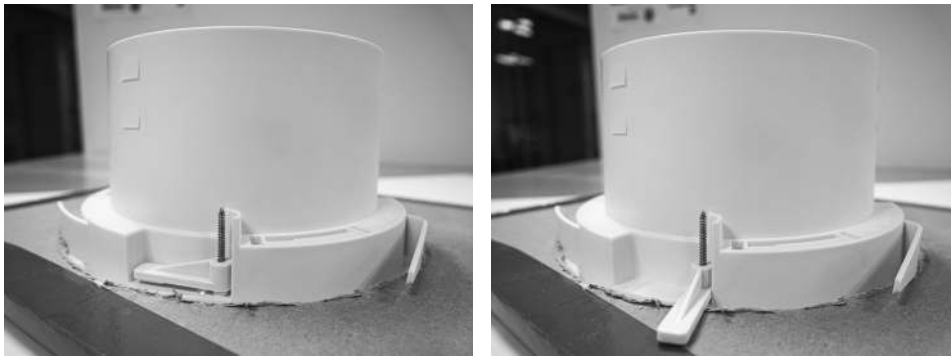
## INSTALLATION

### 1. The **interior grille** (EasyFit grille - DCT1550)

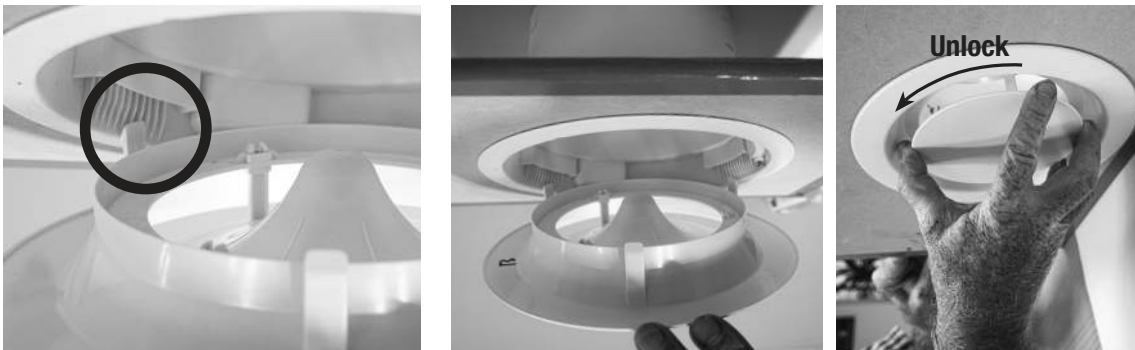
- Cut a hole size 195mm (tolerance is +/- 5mm) in the required location
- Use wings for 10mm thick ceilings
- Wing mounting: Fold wings in to fit into hole, push base into the hole.



- Wing dismounting: While applying a gentle force to extract the base rotate the base Clock-wise.
- Use clamps for 13mm to 26mm thick ceilings
- Clamp mounting: Undo 3 screws until the clamp is a couple of millimeters thicker than your ceiling, fold the clamps and wings in to fit into hole, push base into the hole and tighten the 3 screws until there is a slightly tighter resistance. Check the slotted holes next to each screw to ensure the clamps have been deployed.
- Clamp dismounting: Undo all 3 screws and fold them in, while applying a gentle force to extract the base rotate the base Clock-wise.



- Fascia mounting: Align the 3 clips on the fascia with the 3 slots on the base and push in until you hear a click. If no click is heard, back the fascia out and rotate it Clock-wise slightly and push it back in to hear the click.
- Fascia removal: Rotate the fascia Counter-clock-wise.
- Use the mounting clamps for a more secure grille to ceiling fit.



## INSTALLATION

1. The **interior square grille** comes in two parts, the chassis (or spigot) and the fascia options. If using the gib-fixing clips option, cut a 165mm hole in the ceiling directly over the shower head ensuring first that the area above is free from obstruction and between two joists. If not using the gib fixing clips option, cut a 155mm diameter hole.
2. If using the gib fixing clip option the white fastening wedge-type clips must be fitted onto the grille body – the closed end of the 'V' points towards the rear of the grille. Start the screw through the flange on the grille into the screw-hole in the clip with two or three turns. If the ceiling or wall lining is thicker than standard 12mm board it may be necessary to use longer screws than those supplied. When fitted, fasten the ducting onto the grilles using the tape supplied.

Push the grille fully into the hole and then use a screwdriver to push the clips up into the hole. Once through the hole the clips will spring open and can then be tightened with the screw to pull back down onto the rear side of the lining. Tighten until firm only. Do not over-tighten.

Fit the chosen fascia onto the chassis. Note if using the round option, there are two lugs on the rear rim of the egg-crate insert which locate into corresponding slots in the black housing, adjacent to the ends of the bridge-piece in the housing. This ensures the eggcrate pattern is lined up with the bridge-piece correctly.

3. Select a suitable place for the fan to be screwed to a joist and secure using two screws through the fixing bracket. The fan motor is of ball bearing design to prolong the life of the motor.

**NOTE: The discharge end of the fan unit is the end where you can see the fan blade clearly. There is also an arrow on the unit showing airflow direction.**

4. For the **exterior grille** there is also a choice of options, either a weatherproof cowl or a fixed grille. Select a suitable position in either the soffit or on an outside wall for your chosen grille. Carefully remove the grille insert/cowl from its housing by levering gently at the sides with a small screwdriver. Cut a 160mm hole ensuring first that the area above is free from obstruction.
5. Attach one end of the flexible duct to the spigot with the duct tape provided and, from the outside, feed the duct through the hole until the grille is flush with the soffit/wall.

Mark the position of the fixing holes on the soffit/wall. Drill the holes and screw the grille to the soffit/wall then refit the chosen grille to the chassis.

**NOTE: It is best not to cut the flexible duct until the grille has been screwed to the outside surface to avoid the possibility of cutting the duct too short.**

6. Pull the flexible duct gently to the discharge spigot of the fan and cut it to length and connect to the fan with duct tape provided.

**NOTE: The discharge end of the fan unit is the end where you can see the fan blade clearly. There is also an arrow on the unit showing airflow direction.**

7. Connect the remaining piece of duct to the ceiling grille and onto the fan using the duct tape provided.

**NOTE: Make sure wherever possible to keep the duct running in a straight line as this will improve the performance of the fan.**

8. Make the electrical connection as follows:

### **Wiring of Standard Switching model FAN0618 (Diagram 1).**

The fan can be connected to the light switch so that the fan will start when the light is switched on, or a dedicated fan switch (not supplied). The fan should not be accessible to a person using either the shower or the bath.

### **Wiring of Timer Switching model FAN0619 (Diagram 2).**

The fan can be connected to the light switch so that the fan will start when the light is switched on, or a dedicated fan switch (not supplied).

## INSTALLATION

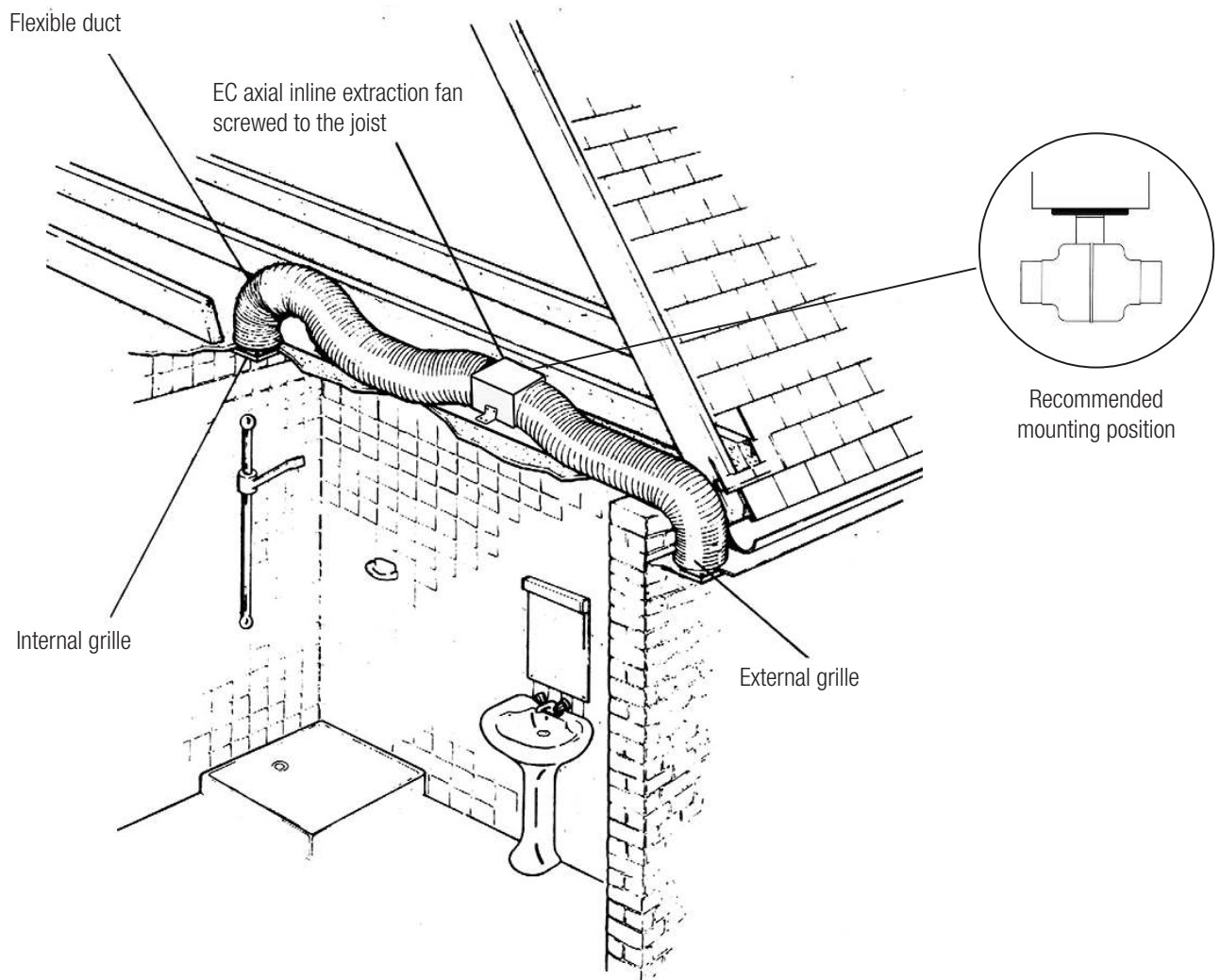
The fan should not be accessible to a person using either the shower or the bath.

**NOTE: All wiring must be fixed securely and the cable to the fan should be a minimum of 1mm<sup>2</sup> in section in section. All wiring must comply with current regulations. This system should be installed by a registered electrician.**

The timer mechanism supplied is a fully adjustable timer which is installed in the flush box. This means that the fan will run on for approx 0-20 minutes depending on settings (see diagram 2 for wiring instructions, and also instructions included with FAN2444 timer).

**NOTE: There is an adjustable 0-5 minute delay time setting for switching the fan on.**

## TYPICAL INSTALLATION



# MANROSE<sup>®</sup>

## Warranty Information

In this warranty:

**We** means Manrose;

**You** means the consumer of the Goods

**Supplier** means the authorised distributor or retailer that sold you the Goods in New Zealand or Australia; and

**Goods** means the Manrose product accompanied by this warranty and purchased in New Zealand or Australia.

The benefits provided to you under the following warranty are in addition to any other rights and remedies available to you under the law:

1. If, during the time from the date of purchase (Warranty Period), there is a defect in the Goods due to improper workmanship or material, we will replace or repair the Goods without charge. Any replacement product is warranted only for the time remaining on the original Warranty Period.
2. We are not obliged to replace or repair the Goods under clause 1 if the Goods have been improperly stored, installed, connected, used, operated, repaired, damaged, abused, tampered with, altered (without our written approval), or not maintained in accordance with our recommended installation, connection and operating instructions.
3. The warranty provided under clause 1 is limited to replacement or repair of the Goods only, at our option. To the extent permitted by law, we exclude liability for:
  - a) consequential loss or any other loss or damage caused to property or persons arising from any cause whatsoever;
  - b) damage to consumable items such as lamps and starters; and
  - c) damage arising from normal wear and tear.
4. In order to claim under this warranty you must, within the Warranty Period, return the Goods to the Supplier, together with the original proof of purchase including the details below:

Supplier Name \_\_\_\_\_

Date Of Purchase \_\_\_\_\_

Model Number \_\_\_\_\_

Invoice/Receipt No. \_\_\_\_\_

5. This warranty does not cover the cost of claiming under the warranty or transporting the Goods to and from the Supplier.

Our Goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the Goods repaired or replaced if the Goods fail to be of acceptable quality and the failure does not amount to a major failure.

To speak to someone about your Manrose product or claiming under this warranty, please contact:

### Simx Ltd New Zealand

p: +64 9 259 1660

f: +64 9 259 1661

[www.simx.co.nz](http://www.simx.co.nz)