# INSTALLATION GUIDE Endline Isodrive System 1350



www.schweigen.com.au

#### Thank you for purchasing your new Schweigen Endline Isodrive system.

To get the maximum output from the Isodrive 1350 motor, please read through this guide before use and installation.

This guide contains important information on the correct use and maintenance of the unit, as well as important safety notes. This will ensure your personal safety and the lasting value of your Isodrive system.

Please always retain your proof of purchase to aid in any warranty queries.

This appliance and its packaging are produced by processes that minimise waste and respect the environment.

Please help us to continue this effort to protect the environment by using the appliance efficiently and dispose of the packaging in a responsible manner.

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## 2. Your Safety



# **RECEIVING YOUR ISODRIVE MOTOR**

Please read this section thoroughly before attempting to operate the appliance. Inspect your product upon receipt. **Any damage or defects MUST be reported within 48 hours, or no claim will be recognised.** 

#### DO NOT INSTALL THIS APPLIANCE IF YOU FIND IT DAMAGED.

If this product is installed damaged, the supplier, nor the retailer, will be responsible for the costs associated with the repair, replacement, removal or re-installation of the appliances.

This appliance is not intended for use by person/s (including children) with reduced physical, sensory or mental capabilities, or lack of experience and/ or knowledge. Unless the person has been given supervision or instruction concerning the use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance, it is not a toy.

Do not install Isodrive motor to a non-Schweigen and/or non-silent rangehood. If you fail to do so, your warranty will be voided.

The manufacturer declines all responsibility in case of failure to adopt proper safety measures.

Ensure that the location in which this appliance is installed, has good and permanent ventilation.

Please consult local laws and regulations and install in accordance.

Use an electrical connector with earth that is correct for your location.

Check that the voltage in your area corresponds to the appliance as indicated on the rating label.

## **Before Installation**

We recommend this appliance to be installed or repaired by a qualified Schweigen Home Appliances technician.

Please see our website **www.schweigen.com.au** for recommended installers.

It is dangerous to modify any part of this appliance. Modification of any kind, will immediately void the warranty.

# **Electrical Cord**

Ensure the supply cord is not exposed to heat, chemicals or sharp objects. If the supply cord is damaged, it must be replaced by the manufacturer, service agent or a similarly qualified person in order to avoid a hazard. The power supply cord connection **MUST BE** installed in such a way that access is easy in case of emergency. This guide is for the installation of the Isodrive motor system after the rangehood has been mounted. (Refer to rangehood installation manual on how to install the rangehood).

**NOTE:** All flexi ducting measurements are referring to inside measurements, unless otherwise mentioned.

#### **Motor Features**

- IPX4 degree of weather protection.
- Super quiet, long vane, backward curved centrifugal fan.
- Airflow is dependant on installation and the ducting used. Using single 200mm flexi-duct will deliver up to 1350m<sup>3</sup>/hr. The use of a smaller than 200mm flexi ducting would result in a loss of airflow and it is not recommended.
- **Simple installation:** Industrial quality motor and fan made in Germany and rated at 40,000 hours.
- Motor is a high efficiency PSC type and rated at 88W costing around the same as two 40W light globes to run.
- WARRANTY 10 YEARS covers faulty manufacturing or components. It does not cover normal wear and tear.

## General Notes on Installation and Use

This fan unit is designed to be installed using 200mm flexi ducting.

This fan is suitable for connection to ducting runs with a minimum inlet area of 17,000mm<sup>2</sup> and length up to 10m maximum (check with supplier if longer duct length required). Where possible flexible ducting must be extended sufficiently to present a smooth air passage with bends of at least the radii of twice the diameter of the duct. **Excessive bends in the ducting will compromised extraction.**  **WARNING:** The Endline Isodrive 1350 Motor System must be installed into an external wall cavity. The motor can not be installed into an internal wall cavity or ceiling space where a build up of grease can occur and become a potential fire risk. This will void warranty.

**NOTE:** Fan module and dual foil flexi-duct are acoustically matched. Use of semi-rigid or rigid ducting will result in increased noise and may void warranty. See installation instruction notes 'Why flexi-duct'.

## Recommended Ducting Installation Distance

Schweigen recommends a length of **4 to 6 metres** of flexi ducting, with at least 1 to 2 bends for optimal performance. Any shorter distances may result in higher airflow noise. The maximum ducting installation length is 10 metres. Check with supplier if longer duct length is required. Do not reduce the 200mm flexi duct size **at any time** and **avoid sharp bends**.

## **Minimum Mounting Height**

This fan unit is intended for mounting at a minimum height of 2.1 metres (measured to the lower part of the fan impeller) above a floor or the ground.

# **Avoidance of Back Flow**

Care should be taken to avoid the back flow of gases into the room from the open flue of gas or other open fire appliances.

# **Replacement of supply cord**

If the supply cord is damaged, it must be replaced by a service agent or suitably qualified person in order to avoid a hazard.

**NOTE:** Do not use with a timer.

# Why Flexi-duct?

Some internet sites strongly recommend the use of rigid ducting over fully flexible ducting. This may well be the case with conventional rangehoods with internal motors but not with external motor rangehood.

Schweigen's unique Isodrive system works in the opposite way to conventional rangehoods, pulling air through the hood and acoustically matched ducting, producing almost silent high volume flow. The use of a complete rigid or semi-rigid ducting system will allow an organ piping effect to occur; like a didgeridoo where a noise is produced at one end of a hollow rigid pipe and the noise is amplified out the other.

The Isodrive system drives the noise outside the house.

#### WARNING:

Installation without the use of at least the minimum recommended length of acoustically matched flexi-ducting in the system will void performance expectations. Any installation problem must be reported to Schweigen. Call outs relating to incorrect installation will result in a service fee direct to the customer. Schweigen takes no responsibility for problems caused by faulty installation, this may void warranty.

A preferred installer list can be obtained from Schweigen website **www.schweigen.com.au** or by calling **1300 881 693**.

## 3. Description

2

(4)

6

## **Endline Isodrive System 1350**

#### Included in the box:

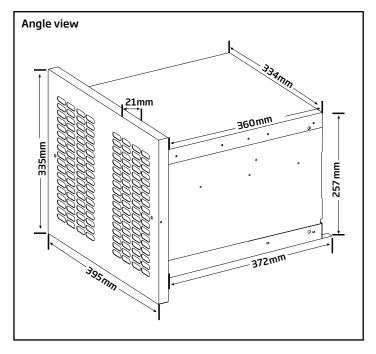
- 1. Isodrive 1350 motor + housing Approx. 5 metre, 10amp cable and standard male plug
- Flexible ducting Approx. 6 metres, 200mm (210mm 0D<sup>1</sup>) diameter
- 3. Bell-mouth adopter ring 200mm
- 4. Back Draught Shutter

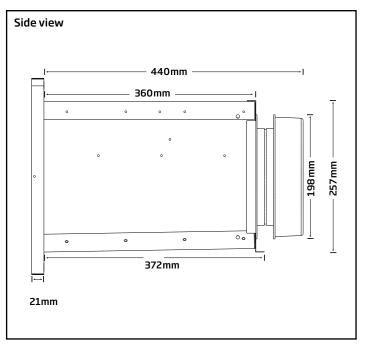
#### Not included in the box:

#### **Optional Accessories**

- 5. Fire guard Part number: P3024
- 6. Rear mounting bracket Part number: EL RMB build assy

#### Dimensions





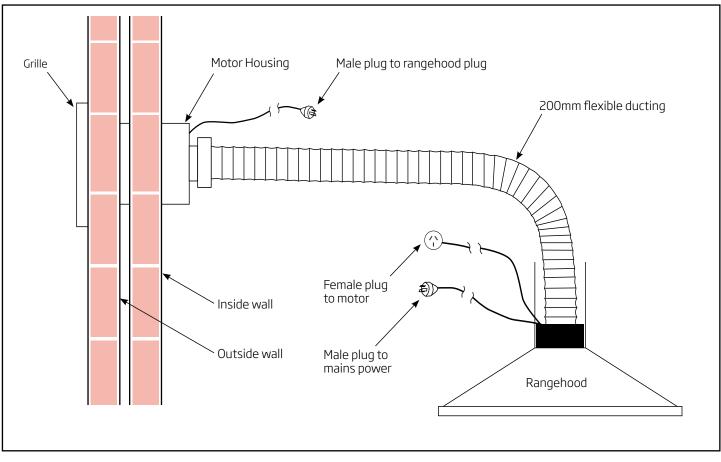
(1)

3

5

#### 4. Installation

#### **Installation Overview**



<sup>1</sup> OD refers to outside dimension.

# **Wall Installation**

- 1. Remove the Endline Isodrive 1350 Motor System from the packaging.
- 2. Undo the 2 screws holding front grille and the deflector, and remove them from housing (See figure 1A, pg.10).
- 3. Remove the foam packaging material that is behind the grille.
- Remove the motor from the housing and set safely aside before proceeding with the installation: Lift the motor mounting bracket side flanges up and over the locating stops and remove the motor assembly (See Figure 1B and Figure 2 on page 11).
- 5. Cut a wall aperture with measurements of 340mm horizontally and 265mm vertically ensuring the vertical cuts are at 90 degrees to the horizontal

cuts (See Fig.3, pg.12); if you have less than 40mm of depth in the wall aperture – or the wall requires extra stability for the motor housing to be installed – you may need to reinforce the wall with noggins and use the optional rear mounting bracket (See Optional Accessories, page 7, and Figure 6, page 13).

6. To prevent water ingress apply a high quality adhesive sealant to the rear of the front flange of the motor housing, ensuring that the entire gap between flange and wall is sealed (See Figure 1A, pg10; and Figure 4, pg.12) and secure motor housing to wall using 4 attachment screws (see figures 1A, 4, 5). Remove excess sealant that is extruded from the joint. **Note:** If you require extra support to stabilise the motor housing, you may use the optional accessory: *rear clamping assembly* (attachment screws not necessary), (see Fig.6, pg. 13).

- 7. Once the motor housing has been screwed and fitted securely to the wall. Insert the motor assembly, making sure the internal electrical plug is connected into the mounted power outlet inside the housing (see Fig.1A, pg. 10, Fig.1B, & Fig.2, pg.11).
- 8. Install the Front Grille and Deflector, and secure using grille attachment screws (see Fig. 1A, pg.10).

**NOTE:** A Fire Ember Mesh Guard may be required when installing the Endline Isodrive 1350 Motor System in a BAL (Bushfire Assessment Level area). This is an optional accessory (see pg.7 and Fig.7, pg.14).

**DO NOT** increase the length of flexi duct beyond the recommended installation lengths. See Recommended Installation Distance on page 5.

#### **Full Body Assembly Cross Section**

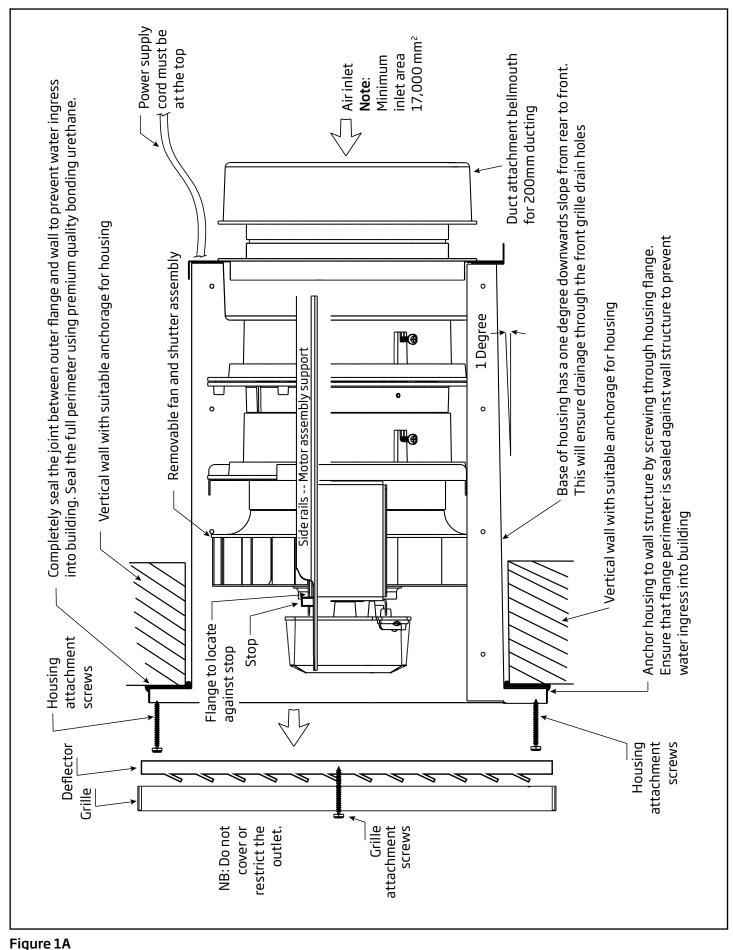
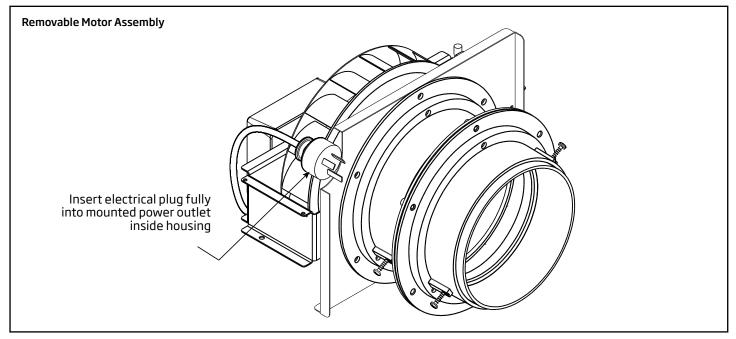


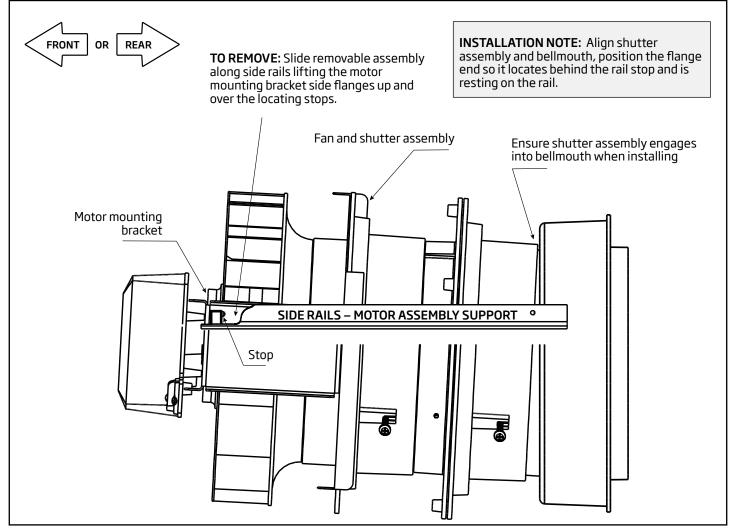
Figure 1

#### **Removal of Motor Assembly**



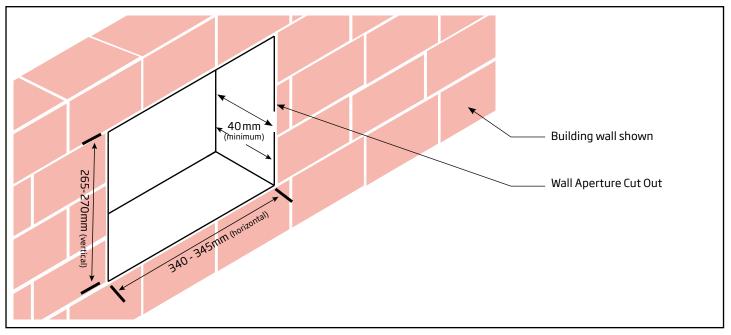


#### **Removal of Motor Assembly: Front or Rear**



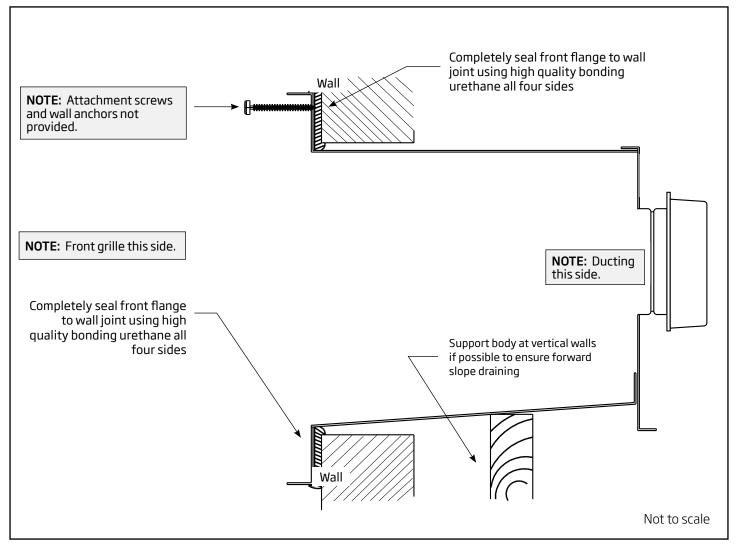
## 5. Installation

#### Wall Cut Out





#### **Motor Housing to Wall Fitment**





## 5. Installation

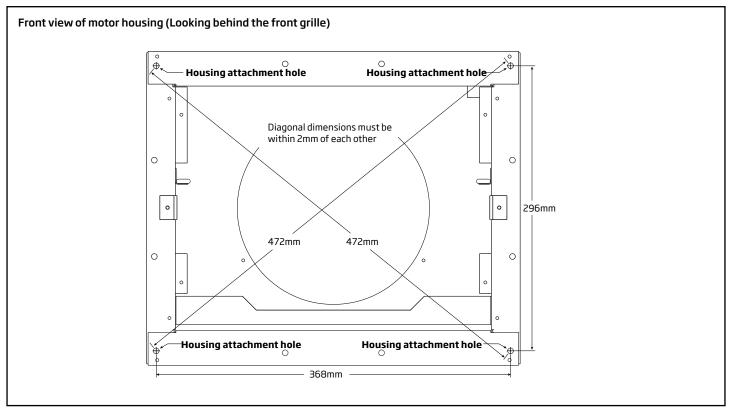
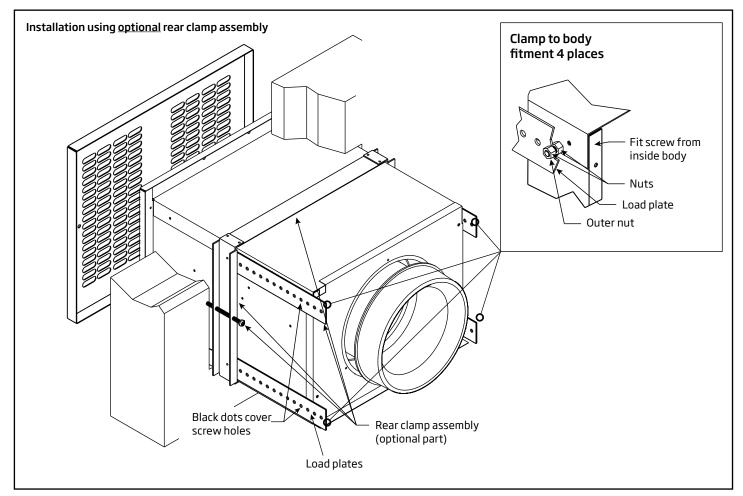


Figure 5



#### Attaching optional fire ember Mesh Guard

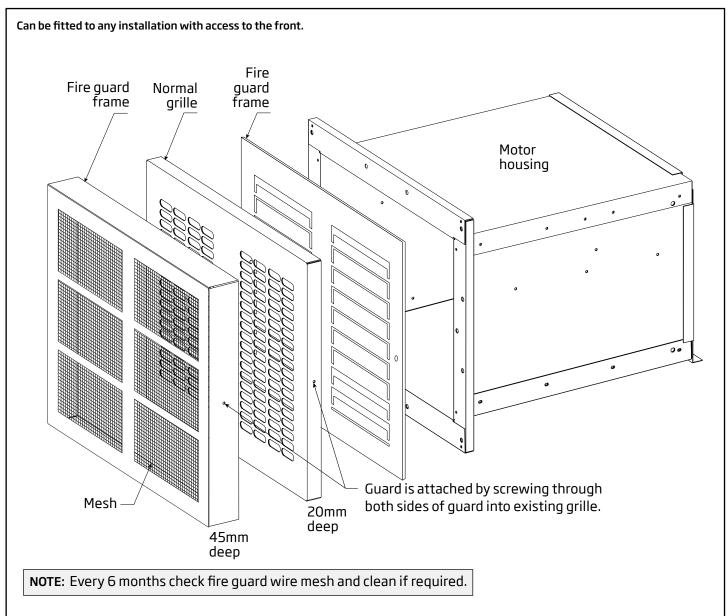


Figure 7

# **Flexible Ducting**

Flexible ducting must be fully extended and cut to the required length upon installation. Maximum fan performance will not be achieved unless the ducting is fully extended. Failure to fully extend ducting results in a smaller air passage and lower airflows. Incorrect installation may reduce airflow or increase noise levels. Call outs relating to incorrect installation will result in a service fee directed to the customer. Schweigen will take no responsibility for problems caused by faulty installation. **A list of preferred Schweigen installers can be obtained from the Schweigen website www.schweigen.com.au**.

# **Shallow Space**

In shallow roof spaces, do not crush or kink flexible ducting, as it will reduce air flow severely. 90 degree curve made of PVC or galvanise can be used as a substitute for the bend, refer to figure 12.

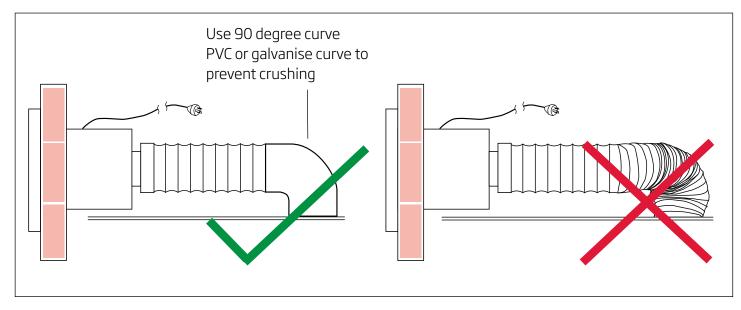
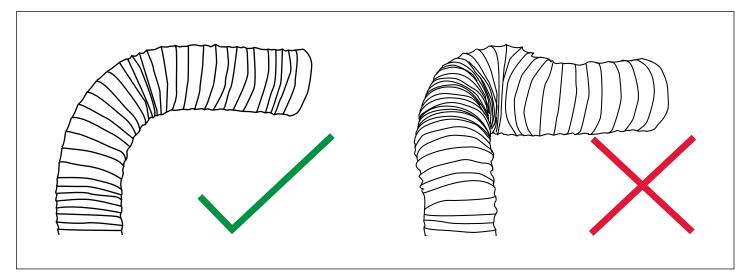


Figure 12

# **Important Note**

Please do not crush or kink flexible ducting, as it will reduce air flow and may cause noise to occur through the system. Ducting needs to be kept taut at all times. Refer to figure 13.



# Securing Flexible Duct (Example)

Flexible duct must be installed with supports at maximum intervals of 1.0 metres. Flexible ductwork can be supported by using good quality aluminium foil tape. Provided that it does not restrict the internal diameter of the ducting. Ducting installed looped over hanging beams should be installed in such a manner as to ensure the changes of direction are gradual. Support of the ducting with the use of hangers may be required, see option 2.

**NOTE:** Ducting should be kept taut at all times.

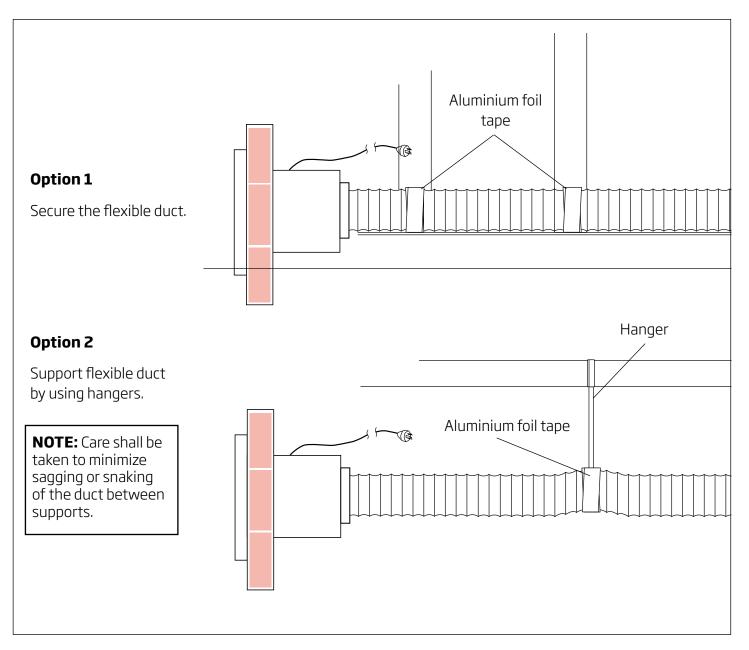
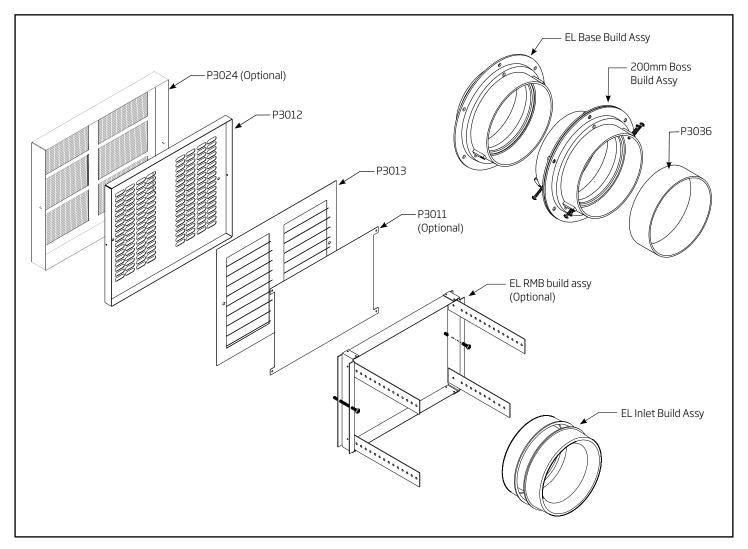


Figure 14 Examples of securing ducting

# 7. Parts List

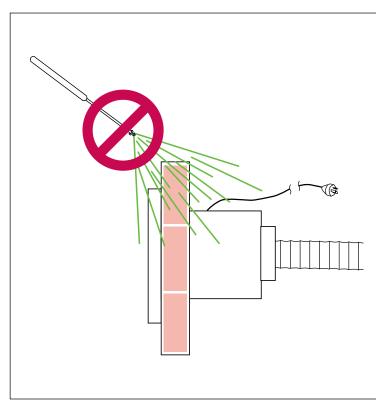
# Parts List for Isodrive Motor 1350



Part Number	Description	Quantity
Р3036	Eliso1350 - Vinidex: 150mm x 50mm Pipe	1
P3024	Eliso1350 - Fire Guard	Optional
P3013	Eliso1350 - Deflector	1
P3012	Eliso1350 - Grille	1
P3011	Eliso1350 - Installation Plate	Optional
El Rmb Build Assembly	Endline 1350 Rear Mounting Bracket	Optional
El Inlet Build Assembly	Endline 1350 Inlet Assembly (1 Bell Mouth Adaptor, cut to length 150mm Pipe and 1 Modified Bell Mouth Adaptor)	1
El Base Build Assembly	Eliso1350 Modified Base with cut to length 150mm Motor Inlet Pipe	1
200Mm Bdss Build Assembly	200mm Back Draft Shutter System	1

# **Restoration or Cleaning**

Before doing your wall restoration or cleaning, please completely cover the outside motor system and avoid all chemical contact.





#### IMPORANT

Any damages caused by the use of chemical products are not covered by warranty.

Figure 15 Avoid chemical contact to motor system

## **Specifications**

Endline Isodrive motor 1350 230-240V 50Hz 88W Class T IPX4

## Warranty

The Endline Isodrive Motor has a 10 Year Replacement Product Warranty. The consumer is responsible for any charges associated with removal of the faulty unit and installation of the new unit. The customer is also responsible for any freight charges incurred in this change over process.

# Disclaimer

Under our policy of continuous product development, product specifications may change without notice. Prospective purchasers should therefore check with the retailer to ensure this publication correctly describes the products being offered for sale. All information supplied is to be used for general reference purposes only and is on the understanding that Schweigen Pty Ltd will not be liable for any loss, liability or damage of whatever kind arising as a result of any reliance upon such information. All pictures used in the quide are for illustrative purposes only.

See Warranty Card for more information.




Australia 8/3-4 Anzed Court, Mulgrave 3170 Victoria. Phone 1300 881 693 Email sales@schweigen.com.au Web www.schweigen.com.au

New Zealand 5 Tolich Place, Henderson, Auckland 0610. Phone 0800 200 510 Email info.parex@emerson.com Web www.parex.co.nz