

## INSTALLATION GUIDE

# Isodrive 3250

Under our policy of continuous product development, product specifications may change without notice. Please refer to the online version of the manual for the latest updates and specifications.

Revision V6 02/08/24



**schweigen**

[www.schweigen.com.au](http://www.schweigen.com.au)

**Thank you for purchasing your new Schweigen Isodrive system.**

To get the maximum output from this unit, 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.

<b>1. Welcome</b>	2
<b>2. Your Safety</b>	
Receiving your rangehood	4
Before Installation	4
Electrical Cord	4
Motor Features	5
General Notes on Installation and Use	5
Recommended Installation Distance	5
Minimum Mounting Height	6
Avoidance of Back Flow	6
Safety of Children	6
Replacement of Supply Cord	6
Why Schweigen SteelFlex™ Safety Duct	6
<b>3. Description</b>	
Isodrive Motor	7
<b>Installation</b>	
Roof Installation	8
Through Wall Installation	10
Twin 200mm Outlet Installation Example (3250 kit required)	12
Optional Weather Shield Installation Guide	13
Optional Backdraft Shutter Installation Through Wall	14
Optional Backdraft Shutter Installation Through Roof	15
<b>4. Measurements</b>	
Measurements for Isodrive 3250	16
<b>5. SteelFlex™ Safety Duct</b>	
SteelFlex™ Safety Ducting Installation	17
Assembling SteelFlex™ Safety Duct	18
Shallow Roof Space	19
Important Note	19
Installing SteelFlex™ Safety Duct	20
<b>6. Maintenance</b>	
Roof Restoration or Cleaning	21
<b>7. Warranty/Disclaimer</b>	22

## 2. Your Safety



### RECEIVING YOUR RANGEHOOD

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, neither 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 an experienced Home Appliances technician.

Please see our website **[www.schweigen.com.au](http://www.schweigen.com.au)** for experienced 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 motor used in the Isodrive systems after the canopy/rangehood has been mounted on the wall or ceiling. (Refer to canopy/rangehood unit installation manual).

**NOTE:** All PVC pipe and SteelFlex™ ducting measurements are referring to inside measurements, unless otherwise mentioned..

### Motor Features

- Roof and wall mounting with IPX4 degree of weather protection.
- Super quiet, long vane, backward curved centrifugal fan.
- Airflow is dependant on installation and the ducting used. The result is based on the German DIN and European EN IEC 61591:2020+A11 testing criteria for rangehood performance and is focus on the removal of contaminants from the kitchen to the external atmosphere. **The use of a smaller than 250mm ducting would result in a loss of airflow.**
- **Simple installation:** The motor mounts onto a 250mm PVC pipe for ultimate strength and allows for easy Dekite roof sealing.
- Industrial quality motor and fan made in Germany and rated at 40,000 hours.
- Motor is a high efficiency PSC type and rated at 150W costing around the same as two 70W light globes to run.
- **WARRANTY 10 YEARS** return to manufacturer. Covers faulty manufacturing or components. It does not cover normal wear and tear, chemical or storm damage etc. (see warranty card for more information).

### General Notes on Installation and Use

This fan unit is designed to be installed using 250mm (ISD) metal pipe as the initial connection duct to the fan module, and is supplied with a 250mm (ISD) metal pipe and 250mm (ISD) SteelFlex™ (see page 17 for installation details).

This fan is suitable for connection to multiple duct runs with a minimum inlet area of 22,000mm<sup>2</sup>. When installing, maximum 8 metres of the 250mm SteelFlex™ ducting **MUST** be used and no more than 2 to 3 bends in the ducting. Where possible SteelFlex™ ducting must be extended sufficiently to present a smooth air passage with bends of at least the radius of twice the diameter of the duct. **Excessive bends in the ducting will compromised extraction.**

**WARNING:** The rangehood must not be ducted into a wall cavity or a ceiling space, where a build up of grease can occur and become a potential fire risk. This will void your warranty.

**NOTE:** Fan module and SteelFlex™ 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 Schweigen SteelFlex™ Safety Duct'.

### Recommended Installation Distance

Isodrive 3250 motor, **recommended 4 to 6 metres** of SteelFlex™ ducting and with at least two bends.

**NOTE:** Although less than 4 to 5 metres will increase extraction power this may result in a higher air noise level. Maximum duct length 8 metres (use 250mm ducting), however please be aware that **increasing the duct length above 5 metre will decrease airflow**. Check with supplier if longer duct length is required. Do not reduce the duct size **at any time** and **avoid sharp bends**.

## 2. Your Safety

### 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. Exhaust fans may adversely affect the safe operation of appliances burning gas or other fuels (including those in other rooms) due to back flow of combustion gases. These gases can potentially result in carbon monoxide poisoning. After installation of an exhaust fan such as a partition fan or a duct fan the operation of flued gas appliances should be tested by a competent person to ensure that back flow of combustion gases does not occur.

### Safety of Children

This fan is not intended for use by young children or infirm persons without supervision.

### 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.

### Why Schweigen SteelFlex™ Safety Duct

**Schweigen SteelFlex™ is an ultra-strong and flexible high-performance safety ducting made of Shirikon Firemesh® - a tri-layer tear-resistant UV-treated sleeve. Both are developed by Schweigen - the Silent Rangehood specialists, for quiet and efficient high-volume transfers of temperature-sensitive air. Engineered to enhance the health and safety of your home, Schweigen SteelFlex™ is antimicrobial treated, thermally insulated and acoustically dampened. It is fireproof, pest and crush proof with a treated surface that prevents the build-up of grease and bacteria.**

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 places the noise outside the house.

**WARNING:** Installation without the use of at least the minimum recommended length of acoustically matched SteelFlex™ 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. An experienced installer list can be obtained from Schweigen website [www.schweigen.com.au](http://www.schweigen.com.au) or by calling **1300 881 693**.



## NOTE

For more SteelFlex™ ducting instructions, refer page 17.

## Isodrive Motor

### Included in the box:

1. Isodrive 3250 motor  
Approx. 3 metre, 10amp cable and standard plug
2. Fire resistant 250mm outside dimension metal riser pipe
3. SteelFlex™ safety ducting (250mm). Approx. 4 metres, 250mm (260mm outside dimension) diameter
4. SteelFlex™ safety ducting (200mm). Approx. 2 metres, 200mm (210mm outside dimension) diameter
5. 4 x Steel ring clamps
6. 6 x 20mm self-drilling button head screws
7. 250-200mm reducer (only use when connecting the Isodrive 3250 motor to a single 200mm opening on a rangehood)
8. 250mm backdraft shutter
9. Wall hanging bracket

### Not included in the box:

- Roof seal kit / Dektite
- Support straps for poly pipe which connects to the roof truss
- Aluminium foil tape
- Wall Mounting Kit

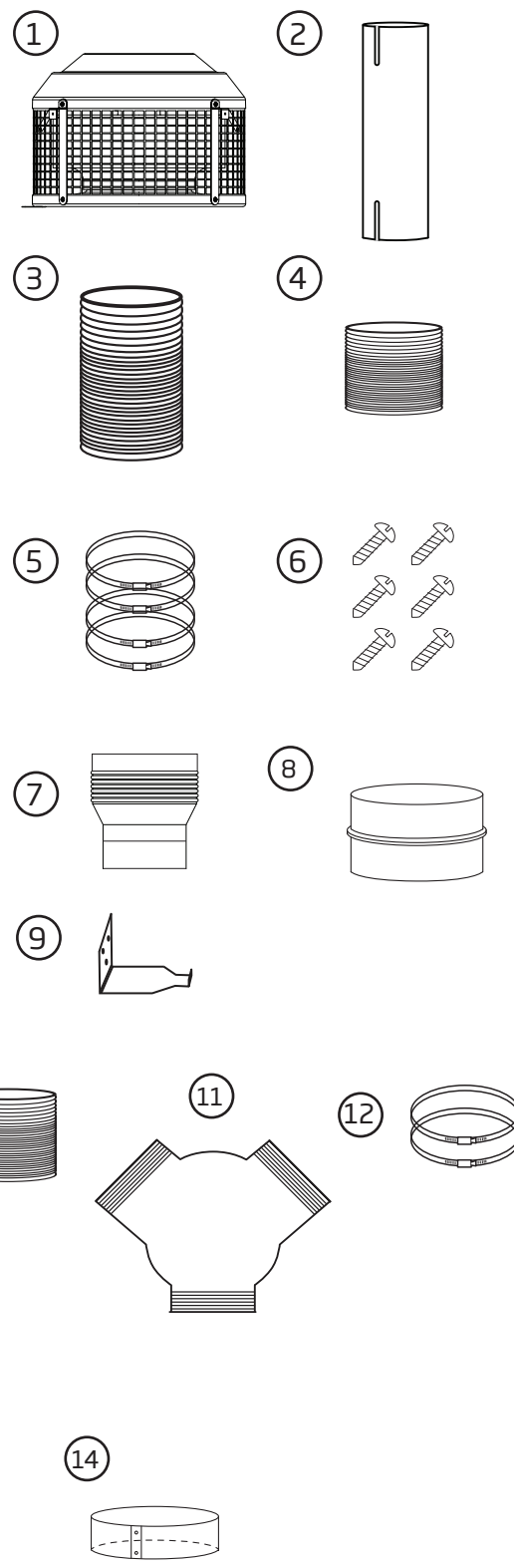
### Included with the 3250 Kit

(for rangehoods with twin outlets only)

10. SteelFlex™ safety ducting. Approx. 2 metres, 200mm (210mm outside dimension) diameter
11. Y joint (250 X 200 X 200mm)
12. 2 x 200mm ring clamps

### Optional:

13. Wall plate (AC0038)
14. Weather shield kit (AC0039)



## 4. Installation

### Roof Installation

Recommended duct length: 3250 motor – minimum 4 metres, optimal 4-5 metres.

Mount 250mm (ISD) rigid PVC pipe securely to beams, trusses or other appropriate structures: refer figure 1. The pipe should be mounted vertically with the roof penetration being sealed using a Dektite or other appropriate sealing membrane or device when installing through a metal finished roof. **DO NOT** install on a over lapping join.

Ensure that the PVC pipe **protrudes a minimum of 50mm** past the top of the Dektite, checking that the fan assembly clears the roof cladding at upper edge as shown in figure 1 – Roof Mount Option.

Pass power cord and plug through mounting flange and pipe, then out the slotted PVC pipe for connection to the socket coming from the canopy/rangehood. Refer to figure 1.

Do not insert plug into socket outlet or switch on until installation has been completed. Fit fan module to pipe and fix in position using side locking screw.

Certain external installation configurations may cause audible levels of noise to be heard due to the air being expelled from the motor. To minimize external noise disturbance you can use between 4 to 8 metres of SteelFlex™ duct to place the Isodrive motor in an appropriate position.

Please be aware that the 3250 motor is capable of expelling air at 3250m<sup>3</sup>/hr.

For more information on environmental noise limit and conditions please contact your local Council. We have a list of experienced installers available on the Schweigen website.

Do not install the SteelFlex™ in a straight line and minimum of two gentle bends in the ducts is required.



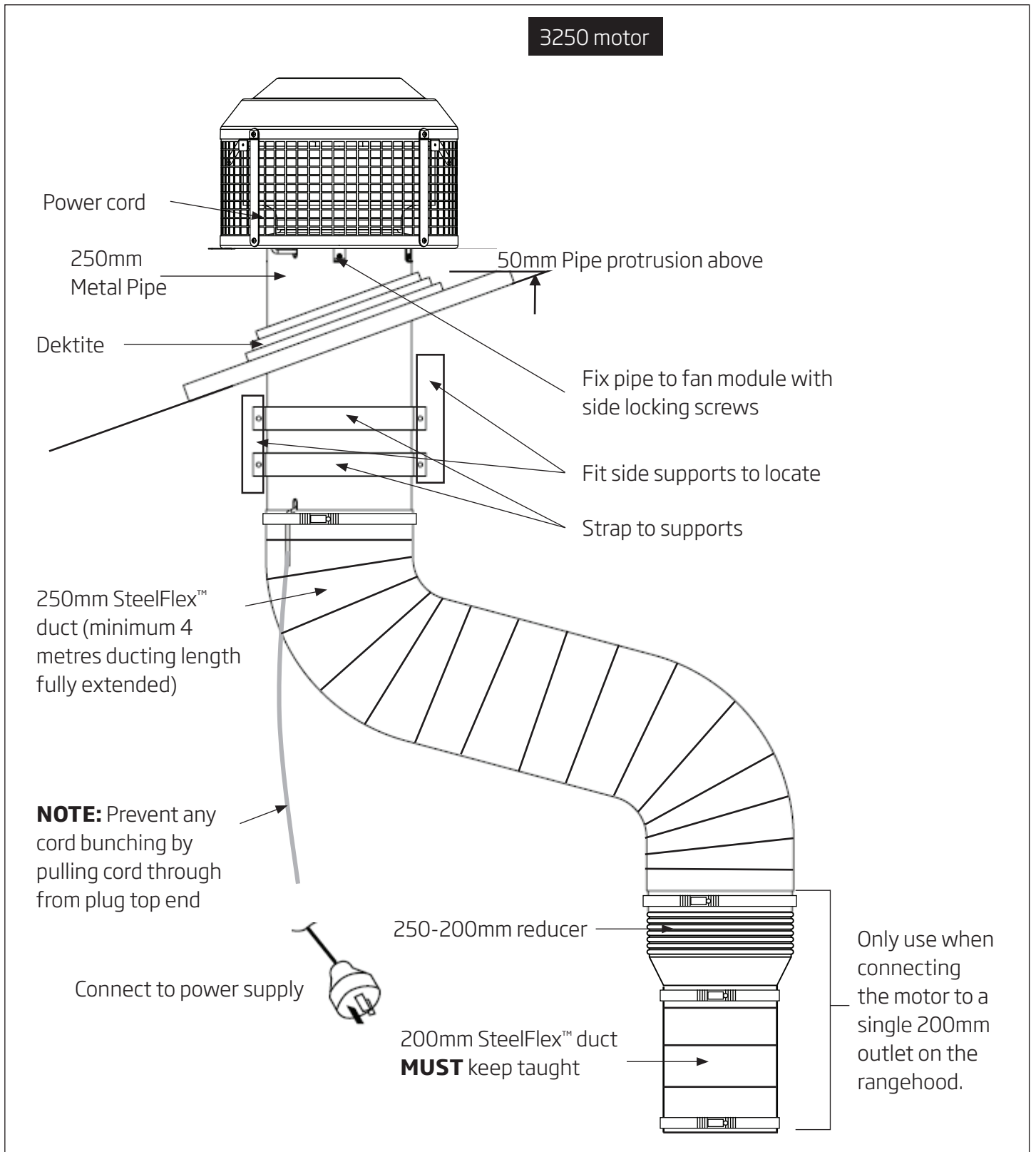


Figure 1: Roof mount option



## IMPORTANT

For more SteelFlex™ ducting instructions, refer page 17.

### Through Wall Installation

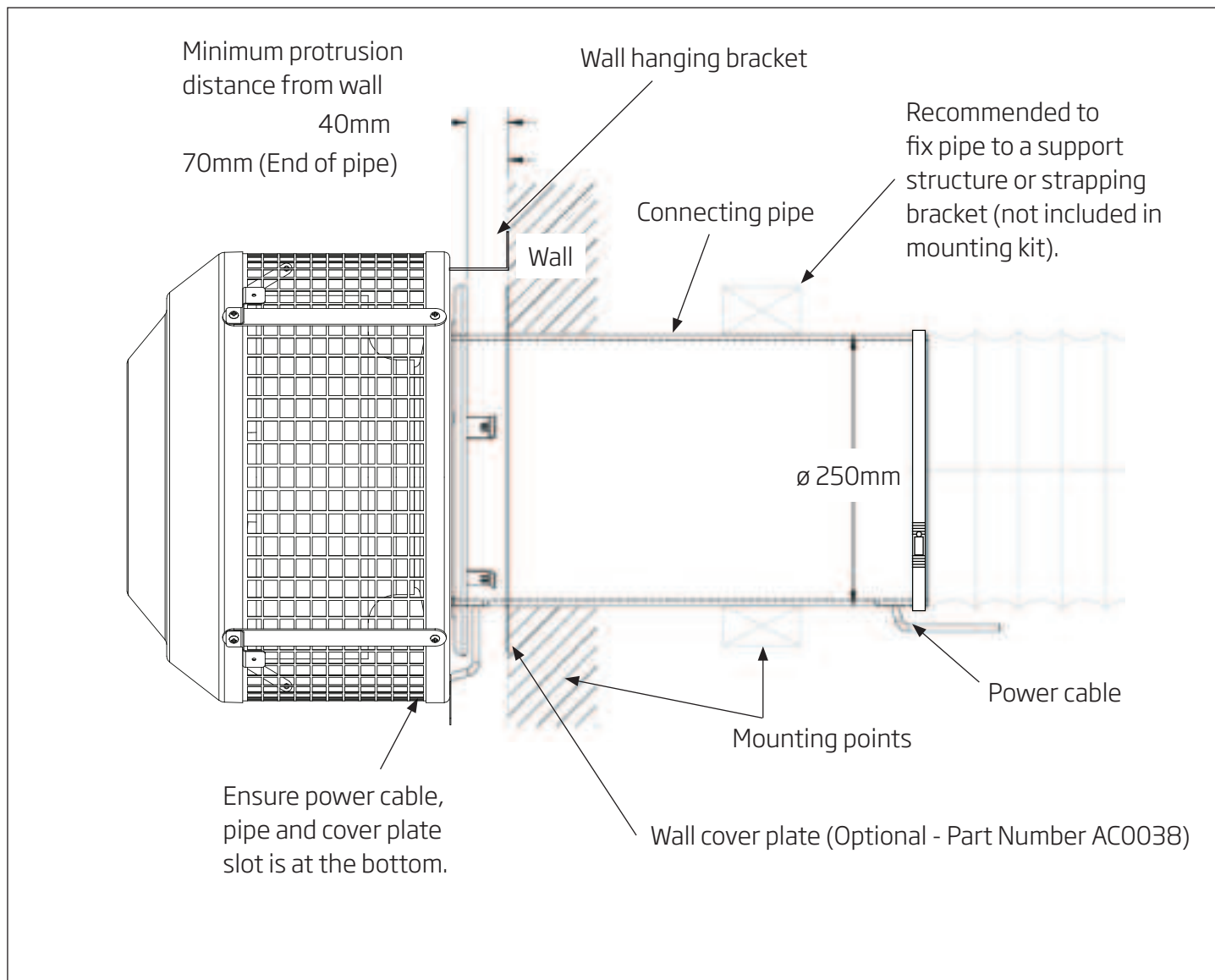
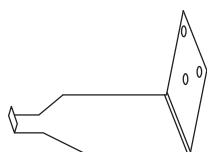


Figure 2: Through wall installation

**NOTE:** Make sure that the connecting pipe is well supported, at least 2 mounting points recommended.



### IMPORTANT

It is a requirement to use the hanging bracket for all wall mount installations. Please refer to the illustrations for mounting.

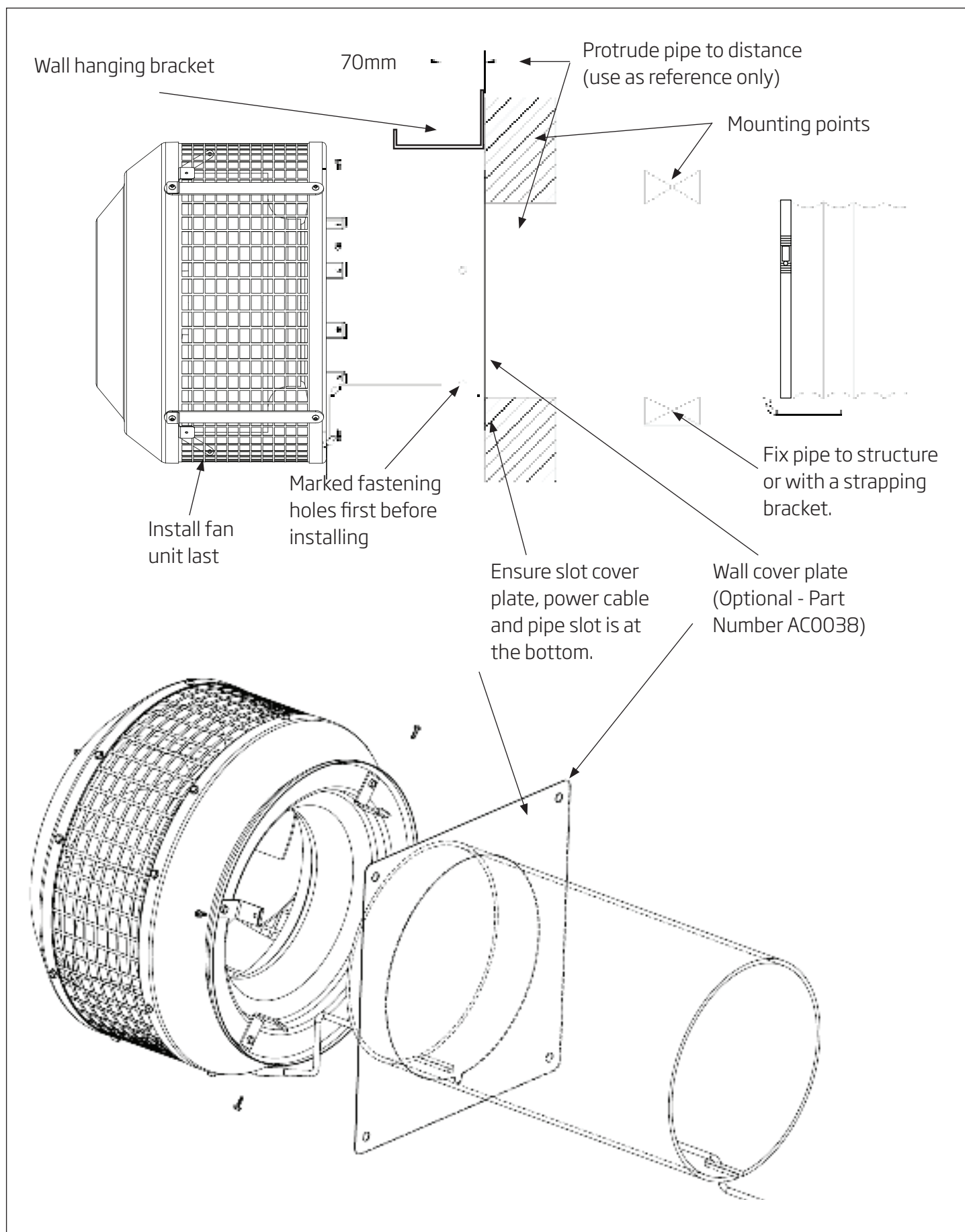


Figure 3: Through wall installation

## 4. Installation

### Twin 200mm Outlet Installation Example (3250 kit required)

This is for use where one motor is to be used and there are two 200mm outlets.

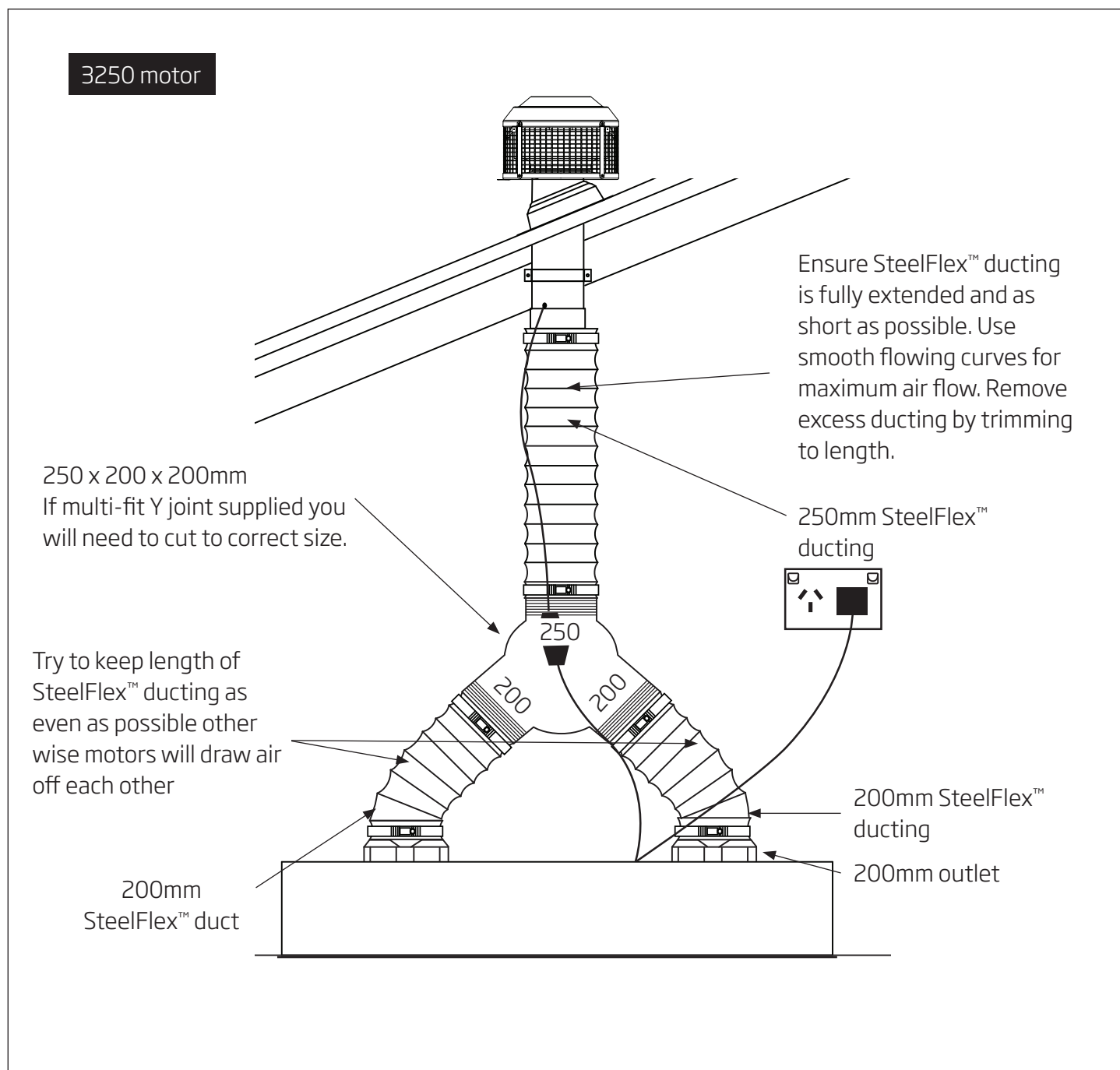


Figure 4: Roof mount option

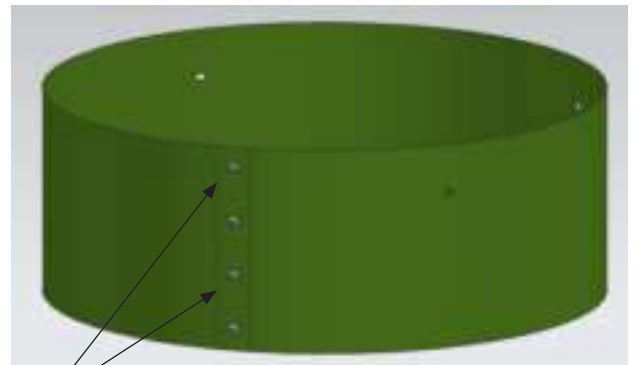
## Optional Weather Shield Installation Guide

### Step 1

Remove Weather Shield (1 pc), Weather Shield Mounting Bracket (4 pcs) and Mounting Screws from packaging.

### Step 2

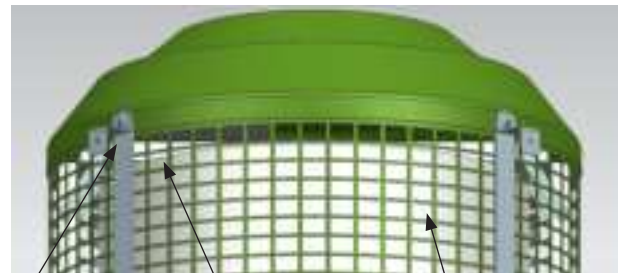
Remove plastic cover from Weather Shield and bend to form a circle. Fasten 4 screws at location shown.



4 screws

### Step 3

Place Mounting Brackets on to Fan Guard, and fasten screws as shown. Ensure orientation of Bracket is mounted as shown.



Mounting bracket

screws

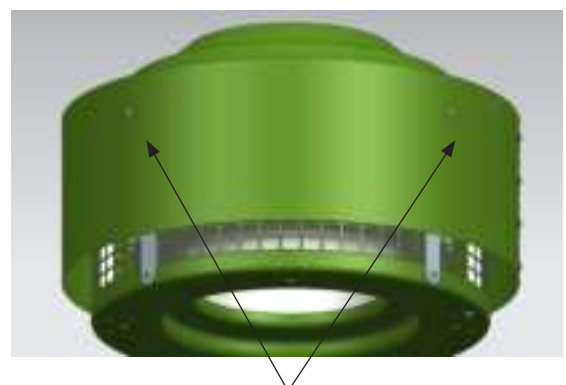
Fan guard

### Step 4

Repeat Step 3 for the rest of the Brackets.

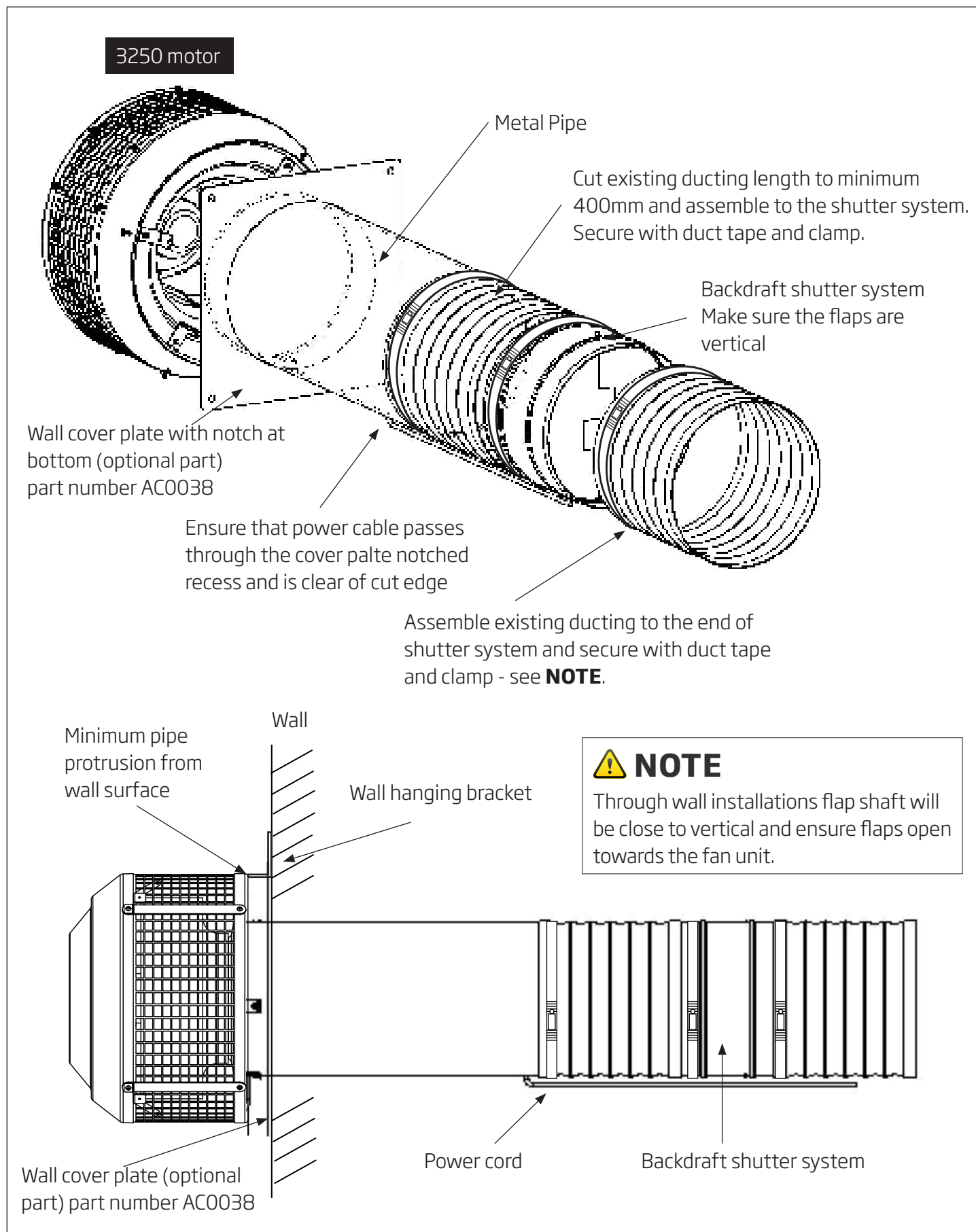
### Step 5

Mount Weather Shield and align mounting holes with the Brackets, and fasten with screws (4 areas).



Align mounting holes with the brackets

### Backdraft Shutter Installation Through Wall



## Backdraft Shutter Installation Through Roof

- Cut 250mm SteelFlex™ duct length to minimum 400mm.
- Assemble by fitting shutter assembly into the ducting.
- Check to ensure the flaps close and open freely before assembling the bottom end of the ducting.

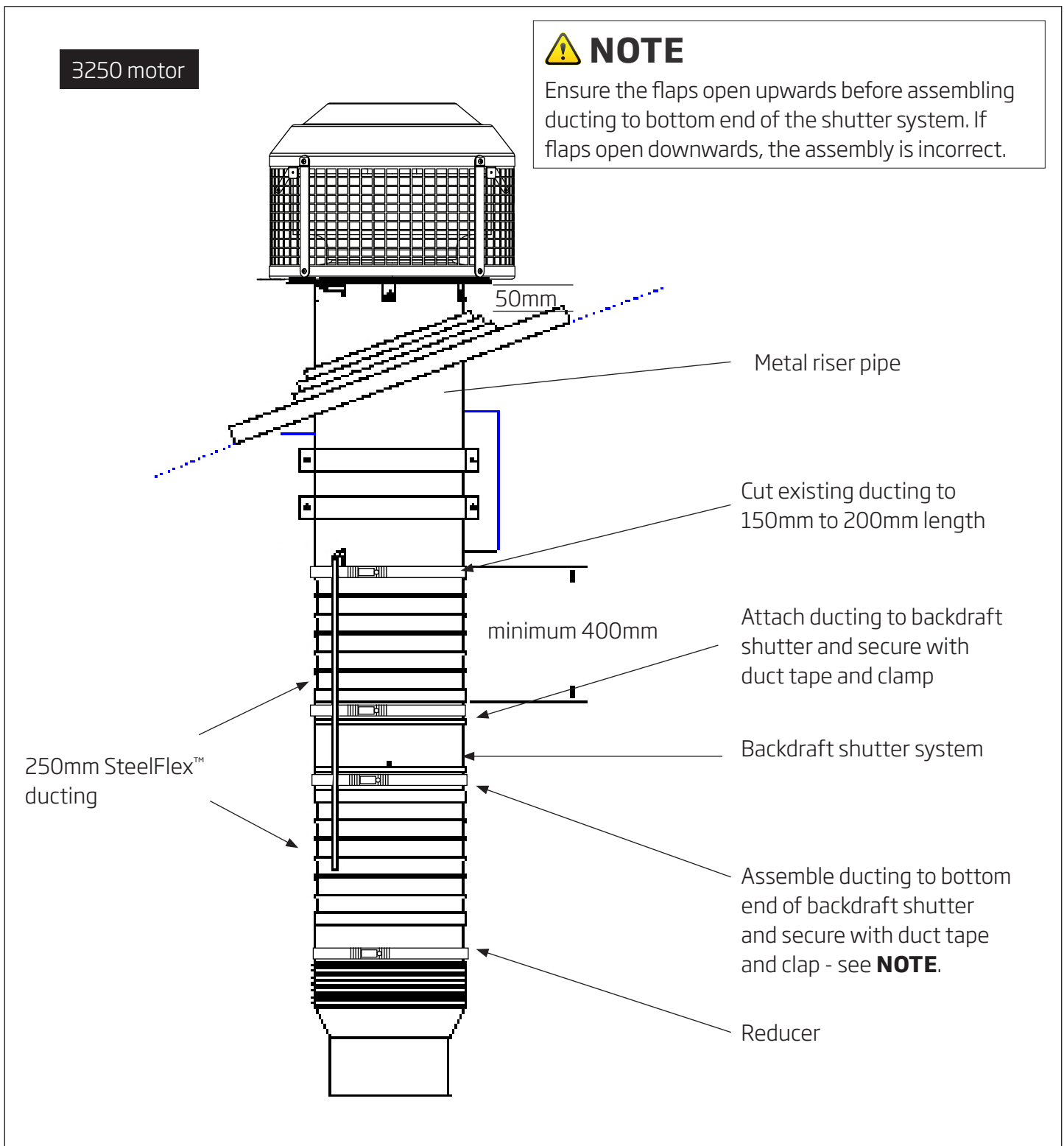


Figure 5: Backdraft shutter roof mount

### Measurements for Isodrive 3250 (Not to Scale)

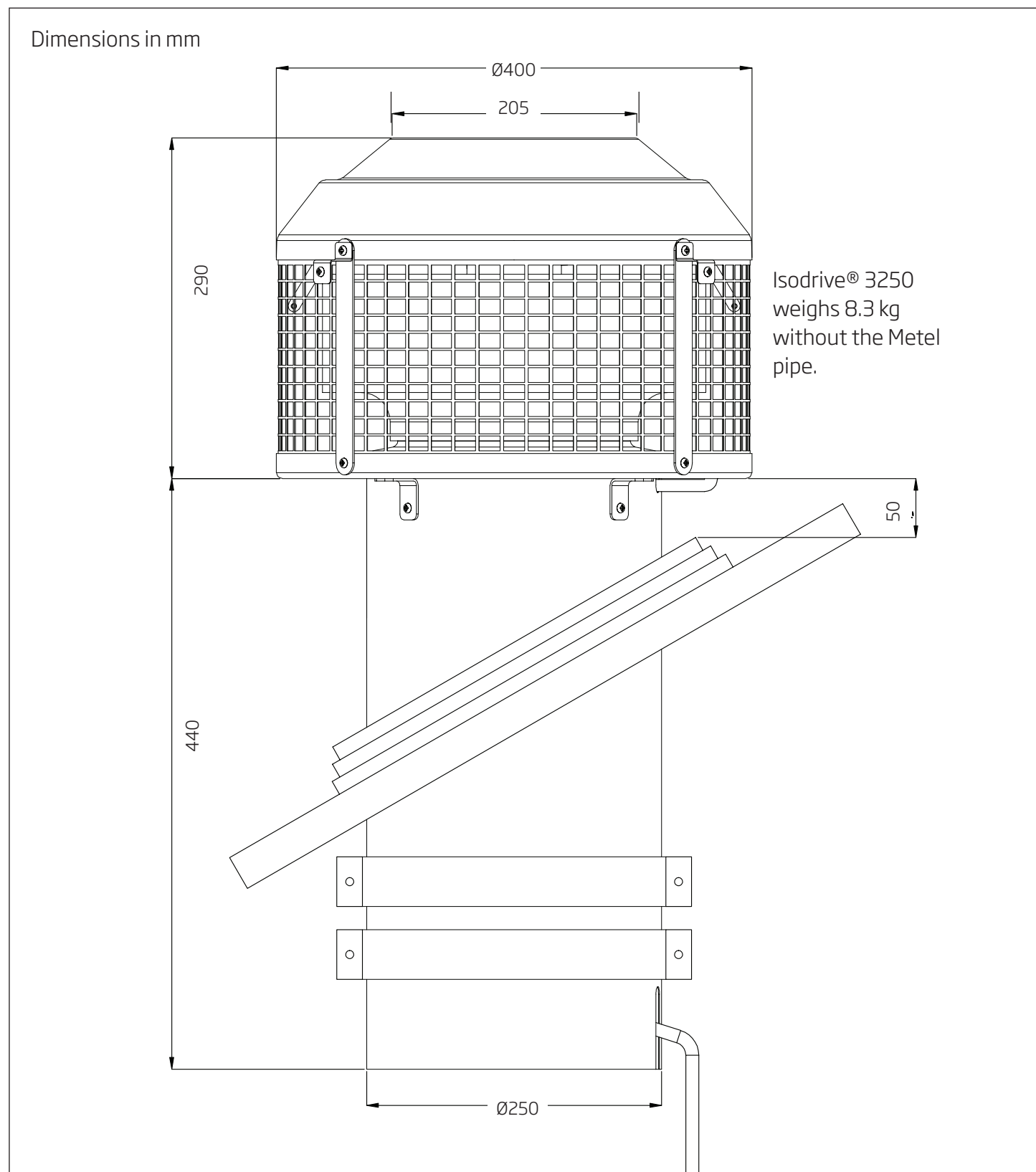


Figure 7: Measurements for Isodrive 3250



### SteelFlex™ Safety Ducting

SteelFlex™ safety 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 installers can be obtained from the Schweigen website [www.schweigen.com.au](http://www.schweigen.com.au).**

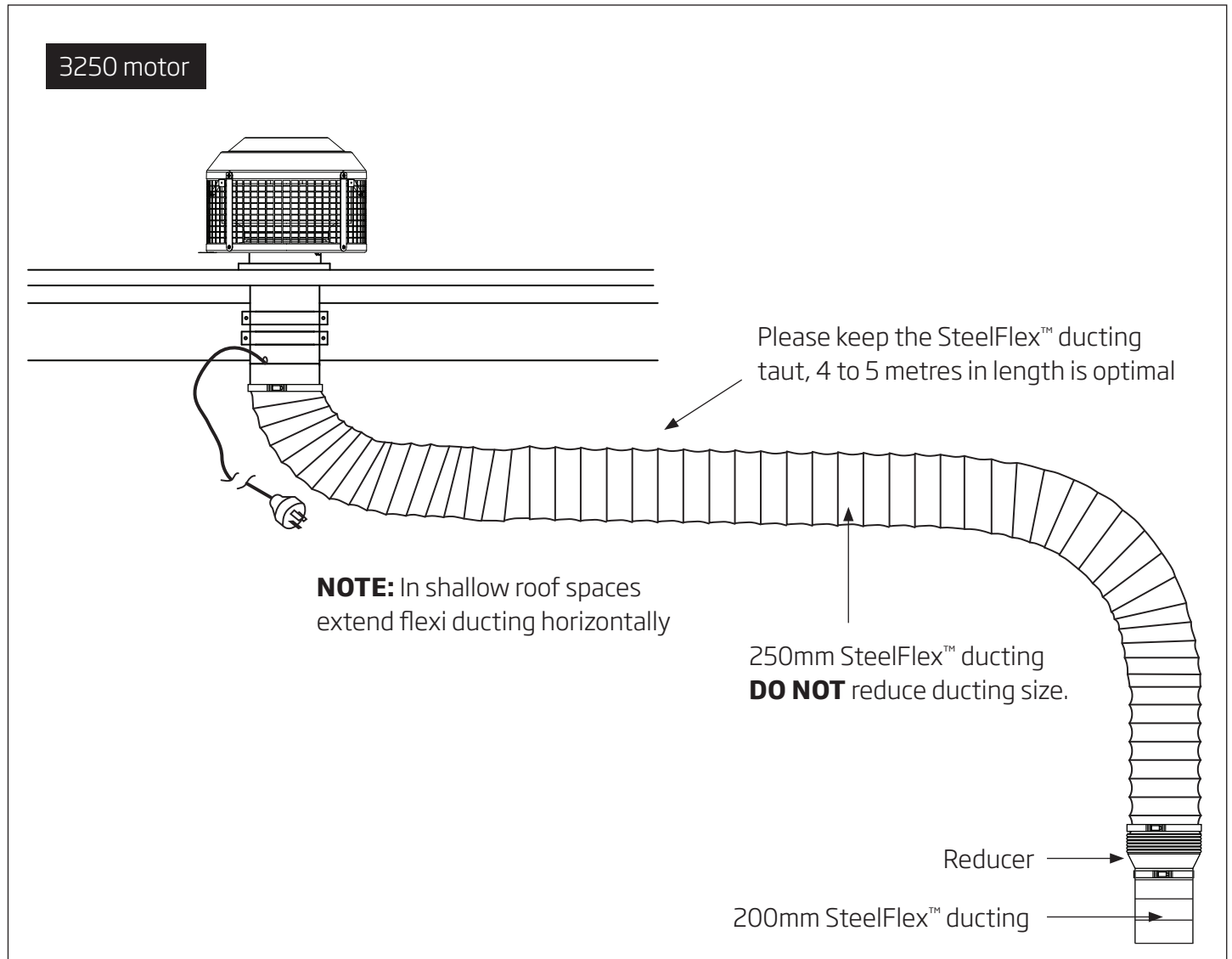


Figure 8: SteelFlex™ Safety Ducting

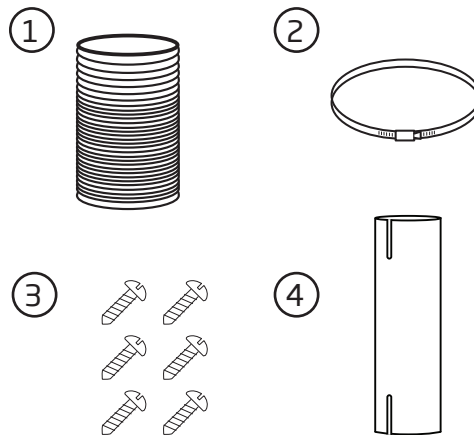
## 6. SteelFlex™ Safety Duct

### Assembling SteelFlex™ Safety Duct

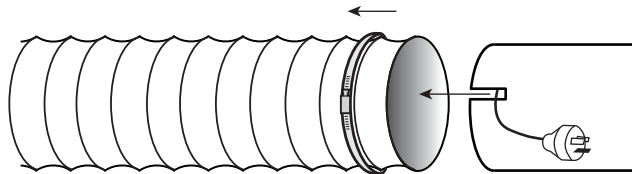
SteelFlex™ safety duct must be secured to a 250mm mounting pipe.

#### Parts required:

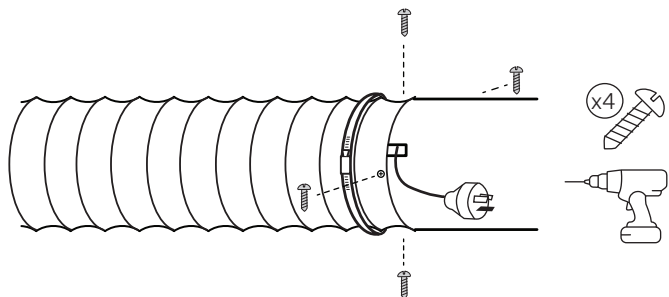
1. SteelFlex™ safety ducting
2. Steel ring clamp
3. 20mm self-drilling button head screws
4. 250mm metal riser pipe



1. Slide the steel ring clamp over the end of the duct then insert the metal riser pipe into the duct end



2. Secure duct to the riser pipe at regular intervals with 4 x 20mm button head screws



3. Slide the steel ring clamp back up and tighten to secure the riser pipe and the duct

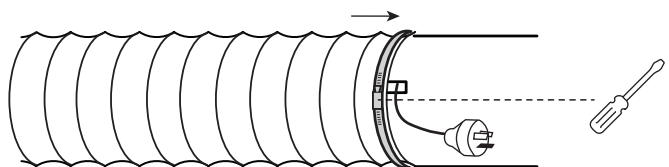


Figure 9: Duct assembling

**NOTE:** Do not use duct tape to fasten the duct – the screws and hose clamp are adequate to secure the duct to the riser pipe.

## Shallow Roof Space

In shallow roof spaces, do not crush or kink SteelFlex™ 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 10.

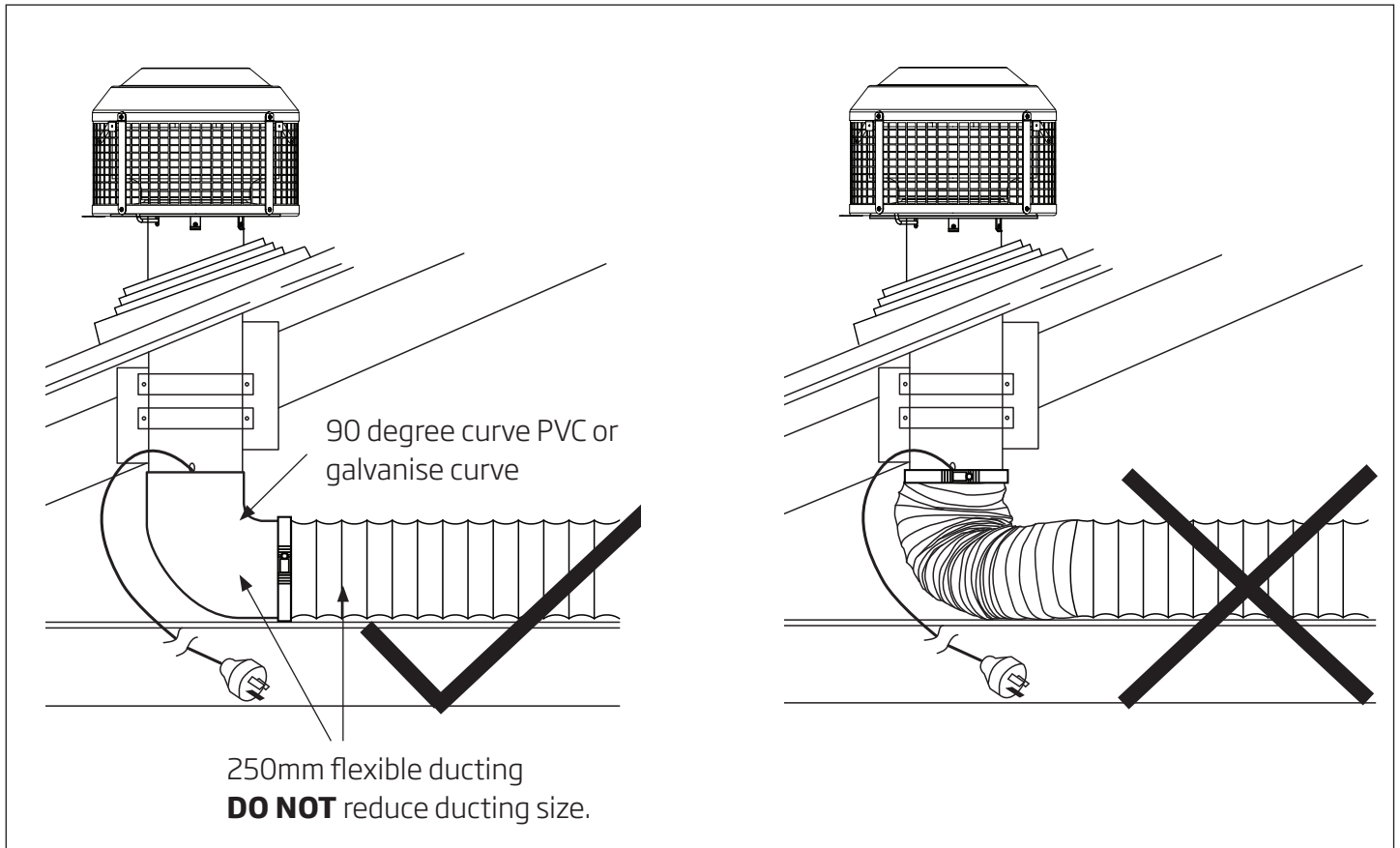


Figure 10: Shallow roof space

## Important Note

Please do not crush or kink SteelFlex™ 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.

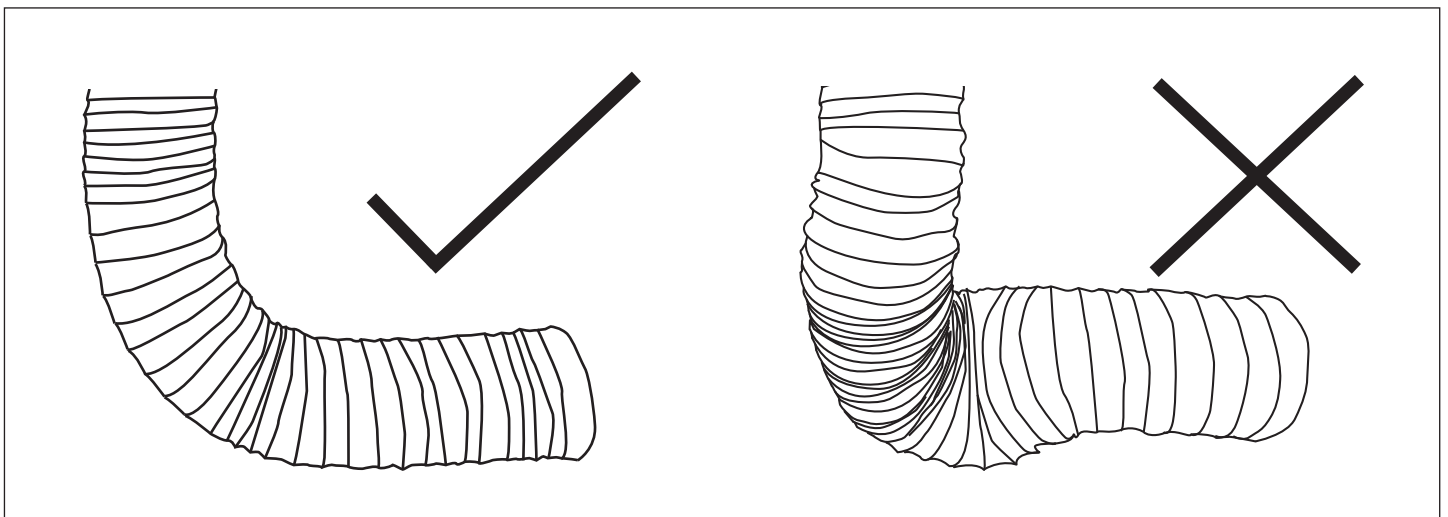


Figure 11: SteelFlex™ duct recommended installation

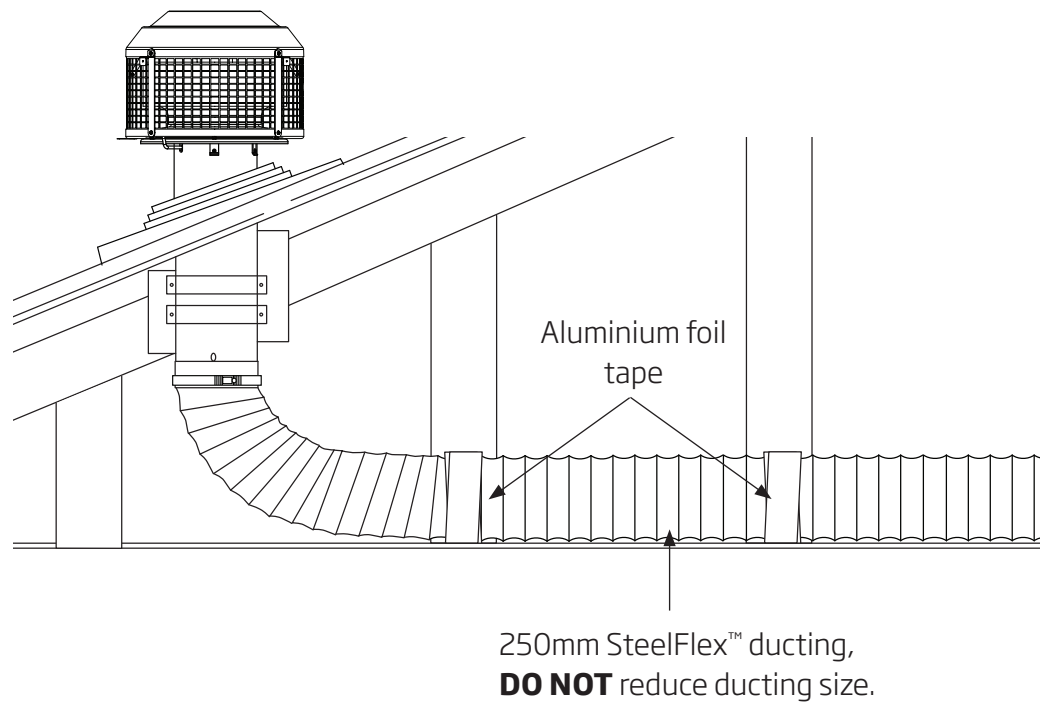
### Securing SteelFlex™ Safety Duct

SteelFlex™ safety duct must be installed with supports at maximum intervals of 1.5 metres. SteelFlex™ safety ductwork can be supported by using good quality gaffer or 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.

#### Option 1

Secure the SteelFlex™ duct to the beam



#### Option 2

Support SteelFlex™ duct by using hangers.

**NOTE:** Care shall be taken to minimize sagging or snaking of the duct between supports.

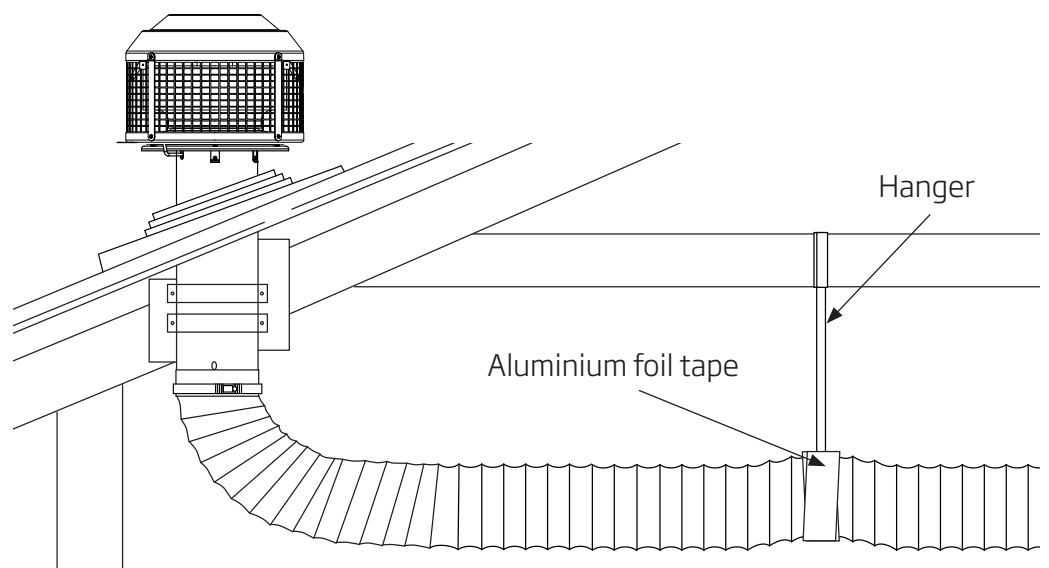


Figure 12: Securing SteelFlex™ Safety Duct

## Roof Restoration or Cleaning

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

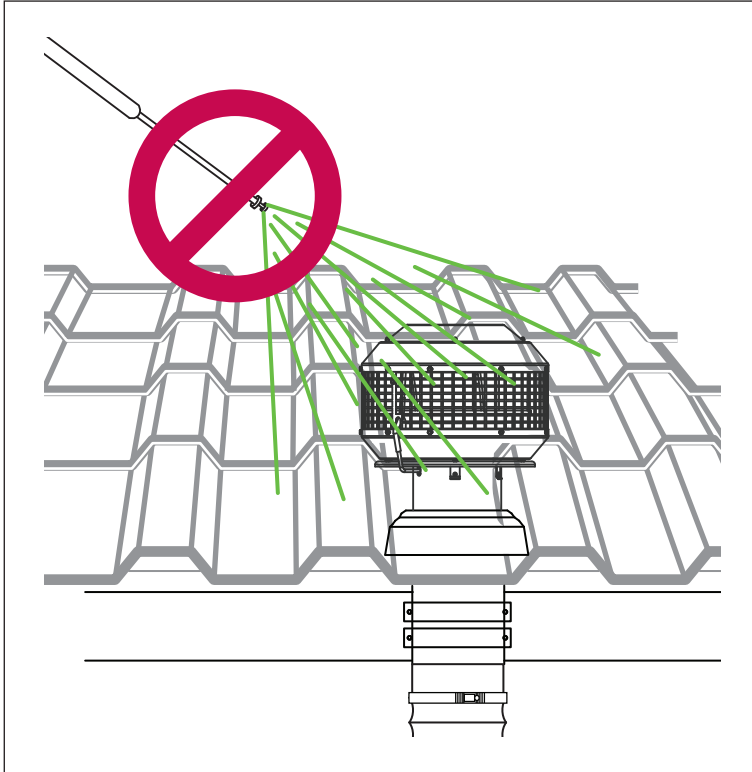


Figure 13: Avoid chemical contact to motor system



### IMPORTANT

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

*\*\*Images for illustration purposes only.  
Applies for all motors.*

## 9. Warranty / Disclaimer

### **Warranty** (See warranty for more information)

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. Schweigen SteelFlex™ comes with a Lifetime Warranty\*.

### **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 Home Appliances 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 guide are for illustrative purposes only.

*\*Terms and conditions apply.*





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