

INSTALLATION MANUAL

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UNIT OVERVIEW







WALL UNIT RIGHT HANDED



UNIT DIMENSIONS

250 UNIT

Unit dimensions







UNIT DIMENSIONS

600 UNIT

Unit dimensions



HOLE CUTTING GUIDE

CIRCULAR DUCT

DUCT SIZE (Internal/External Diameter)	*100 (ID) 000	TAS ID	160 (ID) 170 (D)
INTERNAL WALL & PLASTERBOARD HOLE SIZE	775	1 _{R0}	
EXTERNAL WALL HOLE SIZE			160

RECTANGULAR DUCT

DUCT SIZE (Internal/External Diameter)	110 (ID)	200 (ID) 200 (ID) 200 (B) 50 50 50 50 50 50 50 50 50 50	220 (ID) (C) (C) (C) (C) (C) (C) (C) (C
INTERNAL WALL & PLASTERBOARD HOLE SIZE	र् <u>ग</u> 20 ह	210 R	

MOUNTING THE UNIT

Loft Unit

Assemble the mounting cradle as shown. Check the bracket is square and fix down into the location shown on your design. When the mounting cradle is secure the unit can then be lowered into place.



Wall Unit

Fix the wall bracket at your desired height using the 8 screw holes in the bracket. We recommend 1m clearance above the unit to allow for the duct connections. Attach the strip of foam to the back of the unit and then lower the unit into place.



CONDENSATE DRAIN

A waterless trap must be connected to the 22mm condensate drain which is located at the bottom of both the loft and wall units. Once the trap is in place, the drain must then be connected to the nearest waste pipe.

The condensate drain can be rotated to any desired orientation if required to simplify pipe installation.





EXTERNAL CONNECTIONS

Roof Terminals

When locating the position of the roof terminals it is important to ensure that they are as close to the MVHR unit as possible, and 1.5m away from each other.

Our standard roof terminal provides a free area of 20,000mm². This will come with an adapter that needs to be cut down to suit the size of the duct being attached. If you are not using the roof terminals provided by Rega you will need to ensure they match the free area of duct.

600R loft and wall unit – 160mm duct – 20,000mm² free area

250R loft and wall unit – 125mm duct – 12,000mm² free area

When the roof terminals have been fitted in place they can then be connected to the unit. See 'installing the duct'.



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EXTERNAL CONNECTIONS

Wall Grilles

When locating the position of the wall grilles it is important to ensure that they are as close to the MVHR unit as possible, and 1.5m away from each other.

The holes in the wall need to be cut to allow a couple millimetre tolerance around the wall sleeve sent with your grilles.

125mm wall sleeve – 127mm external hole.

160mm wall sleeve - 162mm external hole.



Once the holes are cut, ready the wall sleeves before slotting in place. To prepare the wall sleeve you will need to fit a coupler into one end and secure it using the PVC tape provided, this will be the internal end. The sleeves can then be pushed through the external holes until they sit flush with the finish of the external walls. Secure in place using expanding foam.

Once secure, the internal side of the wall sleeves can be connected to the unit. See 'installing the duct'.

To fit the external grilles, apply a generous amount of sealant to the spigot on the back of the grille, push into the wall sleeve and wipe clear any excess sealant.

Soffit Grilles

When locating the position of the soffit grilles it is important to ensure that they are as close to the MVHR unit as possible, and 1.5m away from each other.

When the grilles are installed in the soffit, there may be space restrictions for routing the duct over the wall plate. A flexible rectangular duct is available for use in these situations, which come in two sizes: 200x60mm or 220x90mm.



INSTALLING THE DUCT

Fittings

Before use, you will need to tape the spigots of the couplers, tees, and reducers. This will give the metal duct something to bite into when fastened using a clip. This will also ensure an air-tight connection.





Acoustic Duct

Where to use: Initial duct runs for all 4 connections off the unit.

Supply length: 4m

Cutting Method: Sharp non-serrated blade or knife.

Fixing: Worm drive clips.

Before fitting the duct, you will need to tape the external foil bag to the inner tube of the duct, this will prevent any leakages. To do this pull the foil bag and insulation back by around 75mm. Then use the PVC tape provided to seal the foil bag to the perforated inner tube. Place the worm drive clip over the taped area and tighten until secure and airtight.



Semi-Rigid Duct

Supply length: 1m compressed.

Duct will need to be stretched to 4m onsite. This is best carried out by two people pulling from each end. Allow the duct to twist whilst extending.

Cutting Method: Sharp non-serrated blade or knife.

Fixing: Worm drive clips.

INSTALLING THE DUCT

Insulated Duct

Supply length: 4m

Cutting Method: Sharp non-serrated blade or knife.

Fixing: Worm drive clips. To fit these, stretch the inner tube slightly out of the insulation sleeve and fit the clip to it. Once the clip is secure simply pull the insulation and bag over the clip.





Rigid Metal Duct

Supply length: 3m

Cutting Method: Angle grinder

Fixing: Silicon sealant. The duct will need to be supported every 3m using metal banding. (more aesthetic brackets can be supplied on request if duct will be exposed)

Rectangular Duct

Supply length: 1m

Cutting Method: Fine tooth hacksaw or angle grinder

Fixing: Joints between rectangular duct and plastic fittings should be sealed using a layer of PVC tape and a layer of foil tape over the top.



FITTING THE VALVES

If you are using our recessed vents the have different fitting requirements please refere to the instructions provided with the vents.

Before fitting your valves, ensure you have selected the correct size and type of valve for each location, this will be shown on your design. Identify the different valve types for both the supply and extract rooms. To help differentiate all extraction vents will be fitted with a filter to prevent dust from entering the duct system.

Locate the position of the duct tails in each room and cut holes for the ceiling valves. The hole size for a 100mm vent is 115mm and for a 125mm vent 140mm, this allows tolerance for the clips.

Pull the tails of aluminium duct through the cut holes and trim the duct so it extends 50mm below ceiling level.

Separate the body of the room valve from its cover.

The body is permanently fixed up to the ceiling using the black metal retaining clips and sealed to the duct using adhesive. Firstly, loosen the retaining clips, then apply a fillet of non-solvent-based grab adhesive to the body of the valve, and to the back of the flange that will be in contact with the ceiling.

Hold the end of the duct and slide the valve body into it. Once securely in, compress the duct to push the body into position in the ceiling and tighten both retaining clips.



FITTING THE VALVES

Recessed Valves

Full fitting instructions for the recessed vents can be found within the packaging. The recessed vents will need to be fitted and finished by the plasterer and decorators as required.

Extraction vents using recessed vents will be supplied with either a filter plenum in joist zones or voids, or a filter sleeve for connection from the loft. The final duct connection will be made to the plenum/filter sleeve and the recessed vent should then be installed as shown.

Recessed Vent Plenum



FITTING THE VALVES

Recessed Vent Filter Sleeve



FITTING THE CONTROLS

A 4-Core low voltage cable will be required from the location of the unit to the selected location of the system controls. An typical location for the switch is the utility or kitchen for easy access.

The circuit board at the central unit is reachable by removing the cover. The cable can be run through the empty cable gland on the unit. This will either be located on the side if you have a loft unit, or on the top if you have a wall unit.

Please see the below wiring diagram.



Why is the fresh air fan not running?

The switch needs to be installed and the fresh air set to on for the fan to run.

How do I tell the difference between the acoustic duct and insulated duct?

To differentiate between acoustic and standard insulated ducts, visually inspect the metal duct beneath the insulation layer. Acoustic ducts will have a perforated surface, while standard insulated ducts will have a smooth, non-perforated metal surface.

What are the plasterboard sleeves for?

Plasterboard sleeves facilitate a smooth ceiling finish by providing pre-formed openings for ductwork. These sleeves allow the plasterer to complete the ceiling uninterrupted, with the sleeves serving as placeholders for the ducts. During unit installation, the ducts can then be easily connected to the existing sleeves, minimizing disruption and ensuring a clean aesthetic.

COMMISSIONING THE SYSTEM

You will need your system commissioned by a qualified individual.

The unit can be plugged into a standard 13amp socket or hardwired in to a 5amp spur.

The speed controls for each fan are located on top of the wall unit or on the side of the loft unit. These controls can be adjusted with a flat head screwdriver and are labelled from 1 to 10, 10 being the maximum speed, 1 being the lowest. Any speed below 3 with result in the fans ceasing to run.

Rega Ventilation offer a full commissioning service. If you would like a quote please contact us.



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