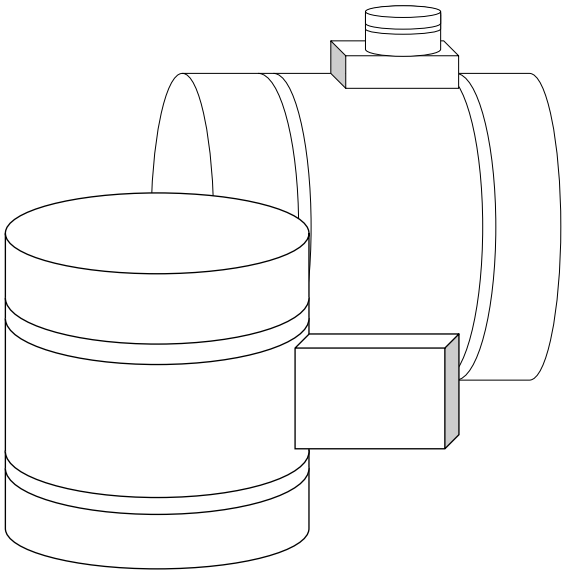
PROUDLY MADE IN THE USA

Residential Makeup Air System (RMAS)

Models:

RMAS06, RMAS08, RMAS10

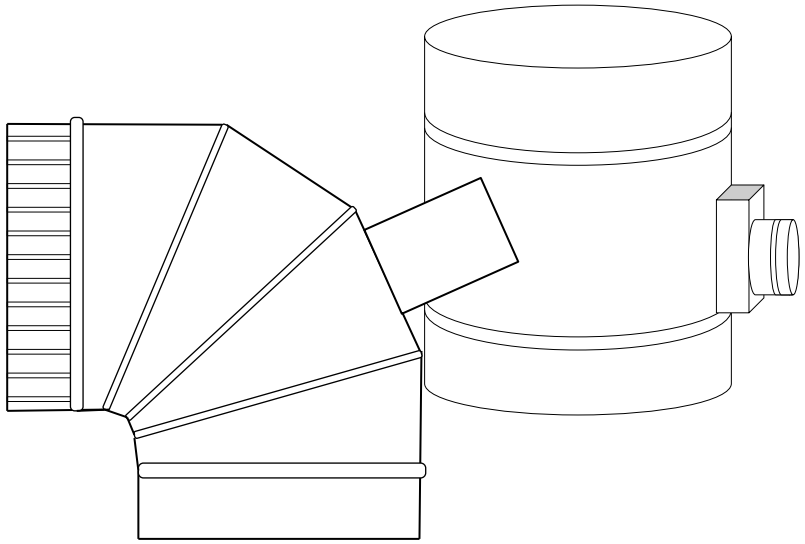
Patent Pending



Models:

RMAS06EL, RMAS08EL, RMAS10EL

Patent Pending



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PRODUCT INSTALLATION AND SAFETY INSTRUCTIONS

PROUDLY MADE IN THE USA

MODELS : (Patent Pending) RMAS06, RMAS06EL, RMAS08, RMAS08EL, RMAS10, RMAS10EL

READ ALL INSTRUCTIONS PRIOR TO INSTALLATION

FOR RESIDENTIAL USE ONLY

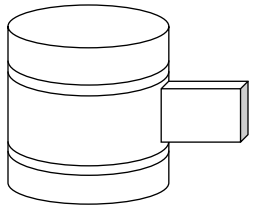
WARNING: TO REDUCE THE RISK OF FIRE, ELECTRICAL SHOCK HAZARD, OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:

1. Shut off and disconnect all power supply to unit(s) prior to installation or service/repair of device.
2. Use this unit only in manner intended by manufacturer.
3. All applications of device must follow all applicable laws, codes, regulations, and standards.
4. Installation of device must be completed by a certified installation expert or HVAC professional.
5. For residential use only, any use beyond factory recommendations voids all warranties.

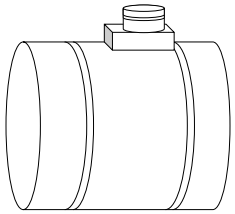
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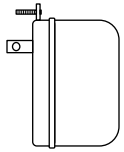
Parts Supplied for RMAS Series: each series /model sold as individual kit.



1 - RMAS* Switch Assembly
Patent Pending



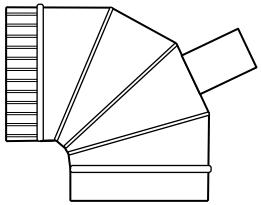
1 - RMAS* Motorized Damper



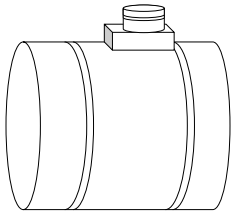
1 - 24V Plug-in Power Transformer

*Diameter varies by model

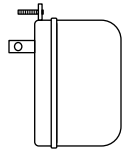
Parts Supplied for EL Series: each series/model sold as individual kit.



1 - RMAS*EL Switch Assembly
Patent Pending



1 - RMAS* Motorized Damper



1 - 24V Plug-in Power Transformer

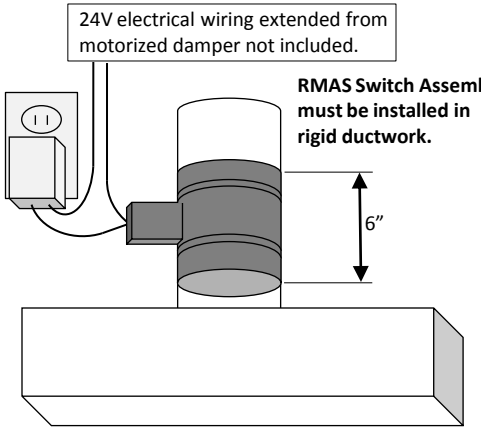
*Diameter varies by model

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Residential Makeup Air System (RMAS)

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Installing the RMAS Switch Assembly:

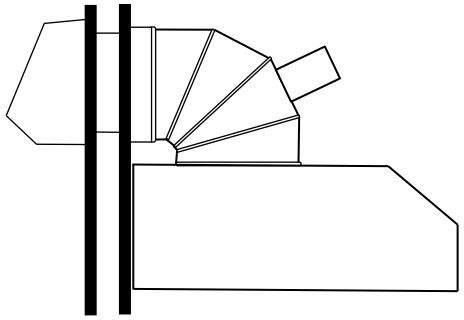


No additional Electrical Wiring Required:
The 24V Transformer can be plugged into a 120V receptacle next to kitchen vent hood for a convenient and aesthetic install.

The recommended location for the RMAS Switch Assembly collar is in a straight duct run directly above the kitchen exhaust fan motor. If the RMAS Switch Assembly collar is installed 24” or higher above the exhaust fan or unable to be installed in a straight duct run, then the RMAS*EL (90 degree elbow) collar may be required. (see below and next page)

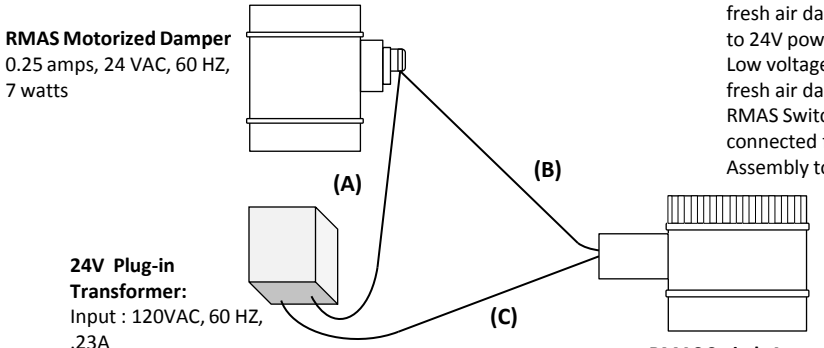
Installing the RMAS*EL Switch Assembly :

The RMAS*EL 90 degree elbow model can be attached directly to an outside wall, giving the installer or HVAC contractor the ability to complete even the tightest installations. RMAS*EL must be attached to rigid ducting. Available for special order in 6”, 8” and 10” diameters.



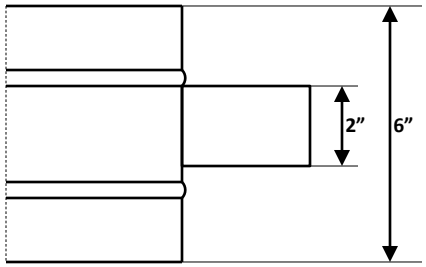
(Please refer to next page for clearances and specifications.)

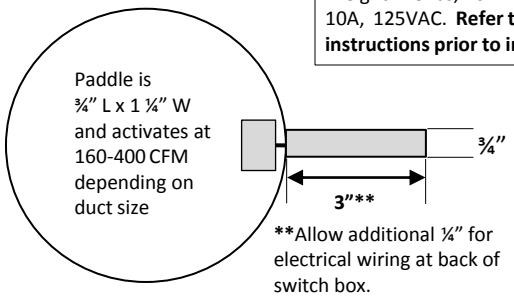
Wiring the RMAS Switch Assembly to the 24V Power Transformer:



Low voltage wiring (**A**) from motorized fresh air damper is connected directly to 24V power transformer.
Low voltage wiring (**B**) from motorized fresh air damper is connected to RMAS Switch Assembly. Wire **(C)** is connected from RMAS Switch Assembly to 24V Power Transformer.

RMAS Switch Assembly and Collar Specifications:

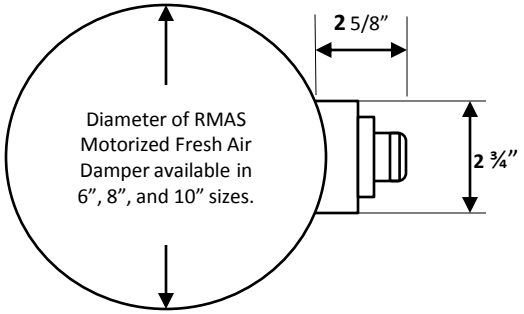


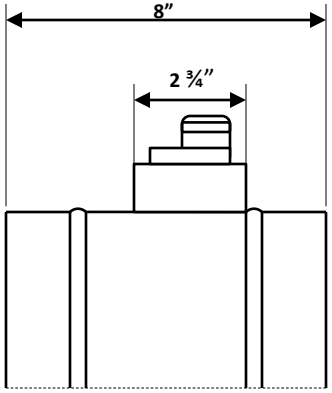


Unit Specifications
Weight: 1.5 lbs, 16 AWG x 2, 10A, 125VAC. **Refer to safety instructions prior to installation.**

******Allow additional ¼” for electrical wiring at back of switch box.

RMAS Motorized Fresh Air Damper Specifications:





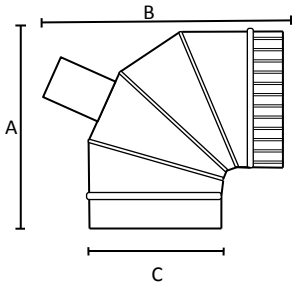
Unit Specifications
Weight: 3 lbs., 0.25 amps, 24 VAC, 60 HZ, 7 watts. Shipped in normally closed position.
Refer to safety instructions prior to installation.

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Residential Makeup Air System (RMAS) Passive Air Flow Installation

PROUDLY MADE IN THE USA

RMAS*EL Series 90 Degree Elbow



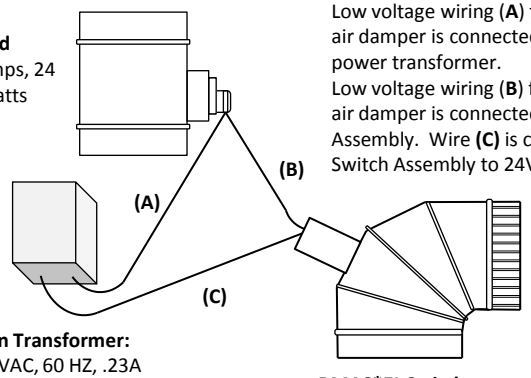
	A*	B*	C
RMAS06*EL	9”	12 ½”	6”
RMAS08*EL	10 ½”	12 ½”	8”
RMAS10*EL	12 ¾”	14 ¾”	10”

*actual dimensions may vary depending on the angles of the throat turns. Allow an additional 2” of spacing for variances.

Unit Specifications
Weight: 1.5 lbs, 16 AWG x 2, 10A, 125VAC. **Refer to safety instructions prior to installation**.

Wiring the RMAS*EL Switch Assembly to the 24V Power Transformer:

RMAS Motorized Damper 0.25 amps, 24 VAC, 60 HZ, 7 watts



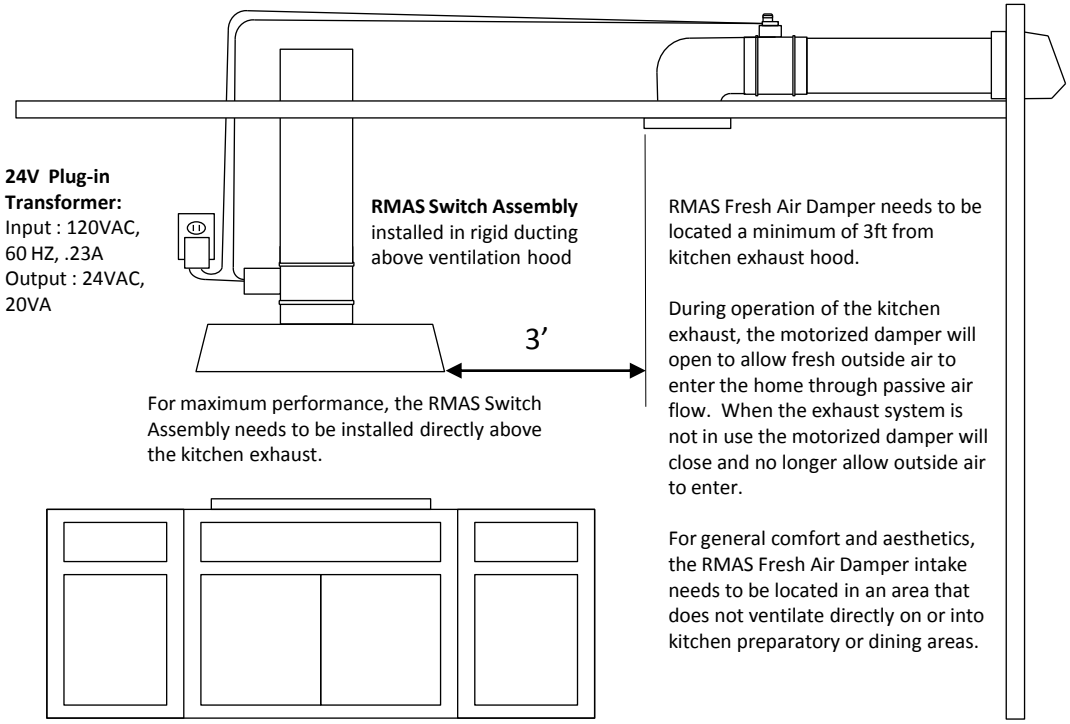
Low voltage wiring (**A**) from motorized fresh air damper is connected directly to 24V power transformer.
Low voltage wiring (**B**) from motorized fresh air damper is connected to RMAS Switch Assembly. Wire **(C)** is connected from RMAS Switch Assembly to 24V Power Transformer.

24V Plug-in Transformer:
Input : 120VAC, 60 HZ, .23A
Output : 24VAC, 20VA

RMAS*EL Switch Assembly 10A, 125VAC

24V low voltage wiring must be run at time of rough-in. (not included by manufacturer)

RMAS Fresh Air Damper in normally closed position



24V Plug-in Transformer:
Input : 120VAC, 60 HZ, .23A
Output : 24VAC, 20VA

RMAS Switch Assembly installed in rigid ducting above ventilation hood

For maximum performance, the RMAS Switch Assembly needs to be installed directly above the kitchen exhaust.

RMAS Fresh Air Damper needs to be located a minimum of 3ft from kitchen exhaust hood.

During operation of the kitchen exhaust, the motorized damper will open to allow fresh outside air to enter the home through passive air flow. When the exhaust system is not in use the motorized damper will close and no longer allow outside air to enter.

For general comfort and aesthetics, the RMAS Fresh Air Damper intake needs to be located in an area that does not ventilate directly on or into kitchen preparatory or dining areas.

The replenishment or make-up air must be drawn from outside of the home.

Outside fresh air inlet must be installed on the exterior of the house a minimum distance of 10ft from combustion vents and other exhaust openings. Locate the fresh air inlet away from any outside motor, generator, pump, BBQ grill, hearth/fire pit, chemical storage area, or any potentially hazardous exposure area.

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Residential Makeup Air System (RMAS) Air Circulation Fan Direct Connect Installation

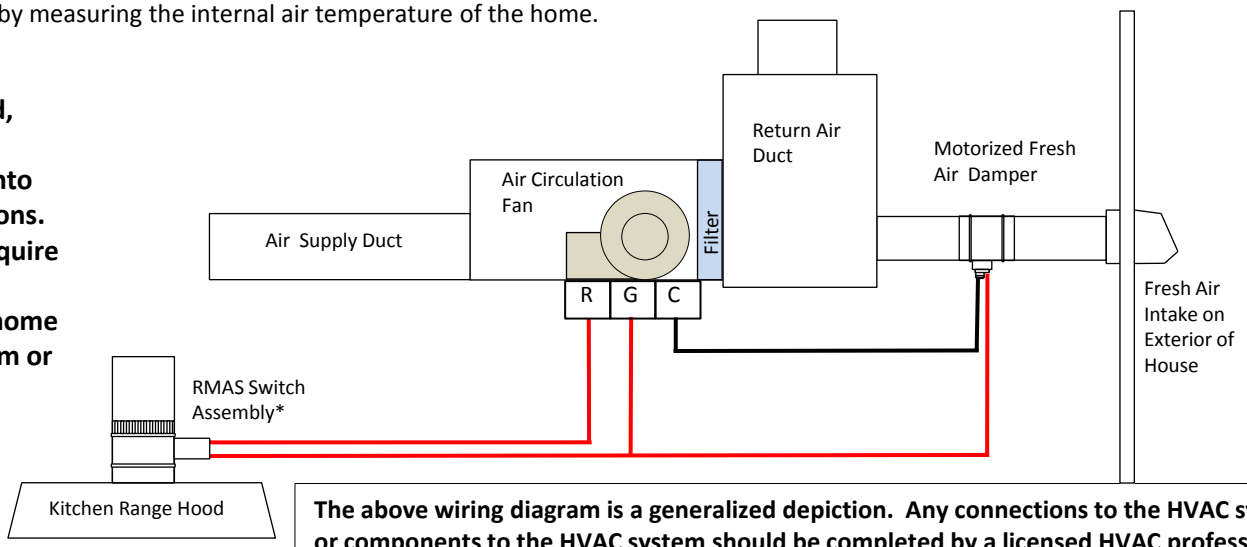
PROUDLY MADE IN THE USA

USING A REVOLUNTIONARY NEW METHOD OF INSTALLATION, THE RMAS HAS THE ABILITY TO CONNECT DIRECTLY TO THE HVAC AIR CIRCULATION FAN MOTOR. THIS PROVIDES CLEANER AND HEALTHIER AIR BY UTILIZING THE HVAC FILTRATION SYSTEM DURING OPERATION OF OUR RESIDENTIAL MAKE-UP AIR SYSTEM.

During operation of the kitchen range hood, the RMAS Switch Assembly will activate the air circulation fan motor independently of the heating and cooling system to open a motorized damper allowing fresh air to enter through the return air duct. The outside air will then pass through the furnace filter prior to being distributed throughout the air supply system. When air is no longer being exhausted by the kitchen range hood, the RMAS Switch Assembly will return to the "off" position.

This installation method will not override or affect the normal function of the HVAC thermostat or corresponding components. The HVAC system will heat and cool during operation of the make-up air system as needed by measuring the internal air temperature of the home.

During operation of a high CFM range hood, unconditioned outside air is necessary regardless of the method used to bring it into the home due to mass balance considerations. Furthermore, the replenishment air will require heating or cooling to the thermostatically programmed internal temperature of the home whether brought in by a make-up air system or through natural air infiltration.



*24V plug-in transformer supplied with kit is not necessary with this installation application

The above wiring diagram is a generalized depiction. Any connections to the HVAC system or components to the HVAC system should be completed by a licensed HVAC professional.

The size of the fresh air intake duct and motorized damper needs to be relative to the size of the kitchen exhaust ducting and air evacuation rate.

Recommended Fresh Air Intake Sizing
6" Motorized Damper – Up to a total of 600 CFM total exhaust rating
8" Motorized Damper – Up to a total of 1000 CFM total exhaust rating
10" Motorized Damper – Anything above a 1000 CFM total exhaust rating

Sizing the fresh air intake and duct symmetrically will help avoid air turbulence and drag while the internal air supply is replenished during operation of the kitchen vent hood. The RMAS switch assembly is powered solely by the HVAC control panel and is not connected through an external source or electrical supply, making it safe for use with the HVAC system.

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Warranty Information

LIMITED TWO YEAR WARRANTY:

CCB Innovations, LLC offers a limited two year parts only warranty for manufactured products from the original date of purchase. Warranty does not cover labor, removal of device, or installation of new device provided by manufacturer. All warranties voided by misuse of product, use beyond manufacturer's recommendations, non-residential use, or negligence by contractor or installer. Warranty only applies in the United States, any product sold or used outside of the United States will not be covered under manufacturers limited warranty.

ADDITIONAL ITEMS EXCLUDED FROM MANUFACTURERS LIMITED WARRANTY:

- Cosmetic damages not reported or claimed within 48 hours of original purchase
- Damage or failure resulting from accident, fire, flood, Acts of God, improper installation or installation not in accordance to applicable laws, codes, and regulations
- Any alteration or modification to original product or components beyond stated manufacturer's guidelines and recommendations

For product assistance please contact local dealer or info@ccbinnovations.com

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