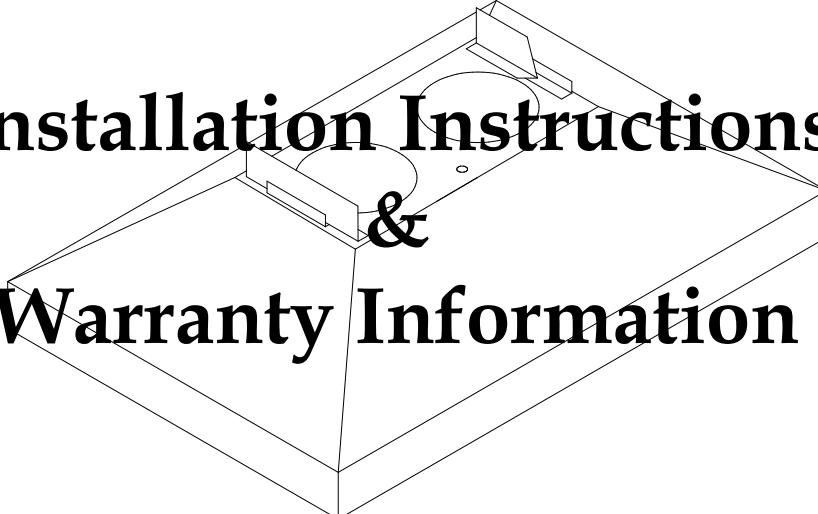




Residential Make Up Air System
MA7, MA8 & MA10



A technical line drawing of a kitchen ventilation system. It shows a rectangular duct or cabinet body with a circular diffuser at the top. A smaller duct or pipe extends from the side of the main body. The drawing is composed of thin black lines on a white background.

Installation Instructions
&
Warranty Information

**DO NOT THROW AWAY,
PROPERTY OF THE HOME OWNER!**

Imperial Cal Products, Inc.



READ ALL INSTRUCTIONS PRIOR TO INSTALLATION

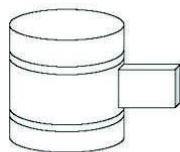
FOR RESIDENTIAL USE ONLY

WARNING: To reduce the risk of fire, electrical shock hazard, or injury to persons, observe the following:

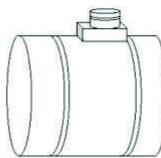
- 1 Shut off and disconnect all power supply to unit (s) prior to installation or service/repair of device.
- 2 Use this unit only in manner intended by manufacturer.
- 3 All applications of device must follow all applicable laws, codes, regulations and standards.
- 4 Installation of device must be completed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

**PROPERTY OF HOME OWNER,
DO NOT THROW AWAY!**

Technical Specifications



Switch Assembly

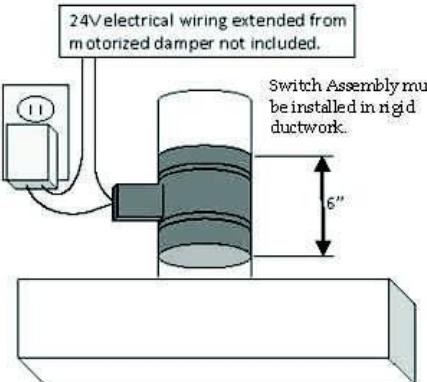


Motorized Damper



24V Plug-in
Power Transformer

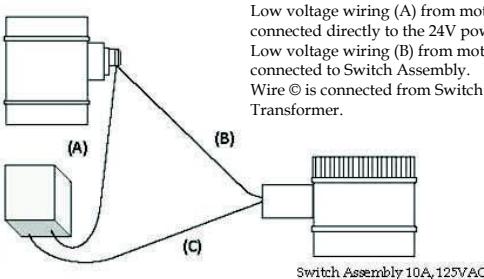
No additional Electrical Wiring Required:
The 24V Transformer can be plugged into a 120V receptacle next to kitchen venthood for a convenient and aesthetic install.



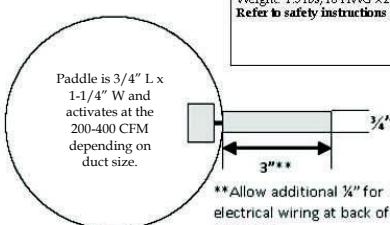
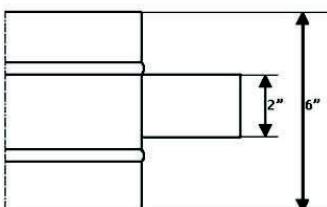
The recommended location for the Switch Assembly collar is in a straight duct run directly above the kitchen exhaust fan motor. We suggest installation of Switch Assembly collar be no higher than 24" above exhaust fan motor. If you are unable to install in a straight duct run, a 90 degree elbow may be required.

Motorized Damper
.25 amps, 24VAC, 60 HZ, 7 Watts

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



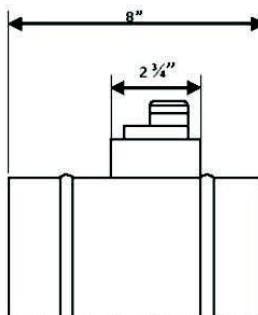
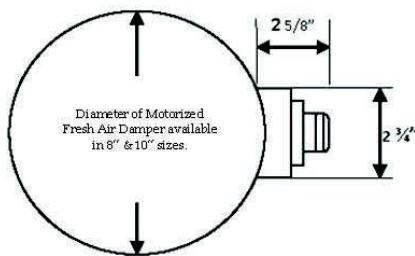
Switch Assembly and Collar Specifications:



**Allow additional $\frac{1}{4}$ " for electrical wiring at back of switch box.

Technical Specifications

Motorized Fresh Air Damper Specifications:



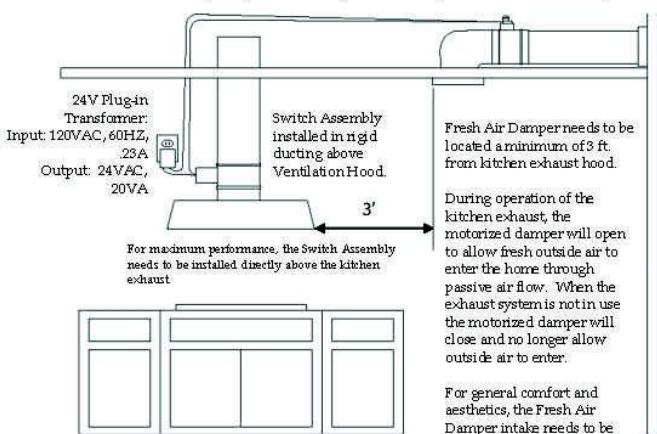
Unit Specifications
 Weight: 3 lbs., .25 amps,
 24VAC, 60 Hz, 7 Watts.
 Shipped in normally closed position.

Refer to safety instructions prior to installation.

Passive Air Flow Installation

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

Fresh Air Damper in normal closed position



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

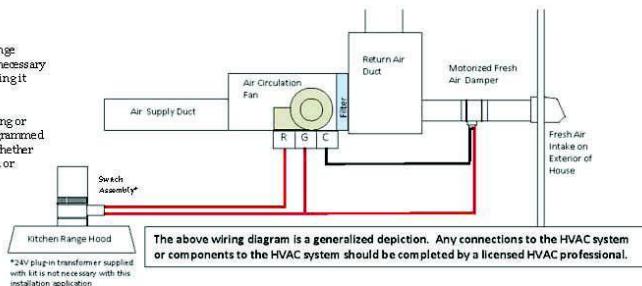
Outside fresh air inlet must be installed on the exterior of the house a minimum distance of 10 ft. from combustion vents and other exhaust openings. Locate the fresh air inlet away from any outside motor, generator, pump, BBQ grill, hearth/fire pit, chemical storage area, or any potentially hazardous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

Air Handling Fan Direct Connect Installation

Using a revolutionary new method of installation, the MA7, MA8 & MA10 have 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 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 Switch Assembly will return to the "off" position. The installation method will 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.



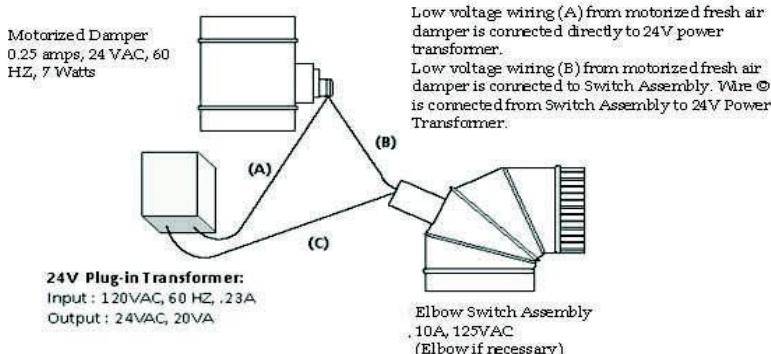
The size of the fresh air intake duct and motorized damper needs to be relative to the size of the kitchen exhaust ducting and air evacuation rate.

Recommended Fresh Air Intake Sizing

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 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 the use with the HVAC system.

Elbow Switch Assembly (If necessary)



The 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. Elbow must be attached to rigid ducting.

Warranty Information

Imperial offers a limited 3 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 manufacturer's limited warranty.

Additional Items Excluded From Manufacturer's 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.

***OPTIONS**

90 Degree Elbow Transition available. Call with Duct Size.

