

What is Makeup air

Makeup air is the air that is used to replace exhausted air to prevent negative pressures in a building or space.

When is Makeup air required for domestic kitchen exhaust system

Exhaust hood systems capable of exhausting in excess of 400cfm shall be provided with makeup air at a rate approximately equal to the exhaust rate that is in excess of 400cfm. Such makeup air systems shall be equipped with a means of closure and shall be **automatically controlled** to start and operate simultaneously with the exhaust system.

Exception : Where all appliances in the house are direct-vent, power-vent, un-vented, or electric makeup air shall be provided where exhaust fans are capable of exhausting more than 600cfm . Exhaust hood system capable of exhausting more than 600cfm shall be provided with makeup air at a rate approximately equal to the exhaust rate that is in excess of 600 cfm.



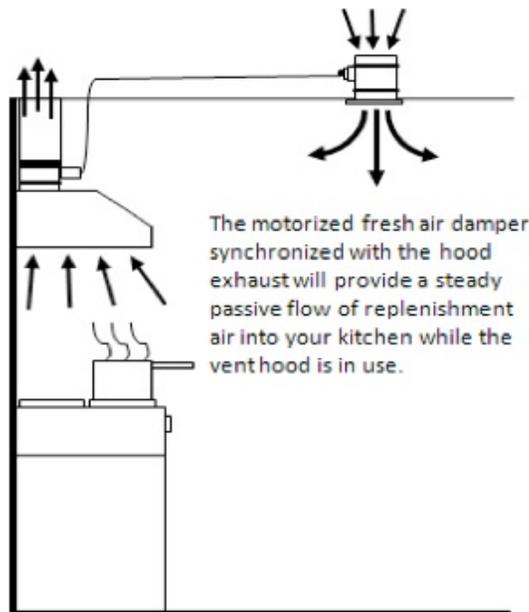
Where is the Makeup air obtained from

Makeup air must be obtained from outside the structure.

What methods can be used to obtain Makeup air.

There are a few ways to obtain the required makeup air.

- ◆ Small inline duct fans interlocked with the exhaust system.
- ◆ Motorized intake dampers interlocked with the exhaust system.
- ◆ Short circuit exhaust systems with the makeup air built into the hood.



Questions

Can I bring the required makeup air in through the heating system?

In most cases the equipment manufactures will not allow this application because the equipment is not designed to handle that amount of unconditioned outside air.

If I have a natural draft water heater in the garage, what is the threshold for makeup air.

If there are any vented appliances in the home that are not direct-vent or power-vent the allowed exhaust rate without makeup air is 400cfm.

I have a wood burning fire place and my kitchen exhaust system is capable of exhausting 675cfm. What is the required makeup air.

Because of the vented fire place the required makeup air would be 275cfm which is the difference above the allowed 400cfm.

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