



HOMEOWNERS' GUIDE

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HOMEOWNERS' GUIDE FOR LENNOX HEALTHY CLIMATE[®] INDOOR AIR QUALITY PRODUCTS

Methods to Improve Indoor Air Quality

Optimal indoor air quality can be obtained by using four strategies in your home environment:

- Eliminate sources of poor air quality;
- Ventilate the home properly;
- Clean contaminants from the home;
- Monitor the indoor air quality to maintain a healthy home environment.

Eliminate sources of poor air quality

Identify and remove or reduce the sources of poor indoor air quality in the home. Pollutants which may affect indoor air quality include:

Dirt and Dust: Prevent filtration of dirty air and dust from unconditioned spaces (i.e. attics) into the HVAC system. Seal the ducts using mastic or aluminum foil tape along all joints. Use a vacuum cleaner equipped with a HEPA filter to permanently remove small dirt particles, rather than simply redistributing them, as is the case with a conventional vacuum cleaner.

Odors and Chemicals: Remove sources of odors and chemical contamination from the home and use products that minimize contaminant levels in the air. Lennox' PureAir[™] air purification system removes and destroys odors and chemicals.

Mold: Minimize mold by controlling moisture in the home. Prevent roof and water pipe leaks. Contact a contractor if your home develops a water leak.

Control the relative humidity in the home to keep it between 30 percent and 50 percent. Contact your Lennox dealer about products that reduce the humidity levels in the home [variable speed air handlers, furnaces and compressors, humidity controls and dehumidifiers (85X74)].

If mold is in the home, it must be properly removed. After the mold has been removed, Lennox' Healthy Climate[®] PureAir^m air purification system [model PCO-12C (75X69), PCO-20C (75X61), PCO-12U (X1179) and PCO-20U (X1183)] will help to remove mold spores from the air. Optional Healthy Climate[®] germicidal lights [models UV-500 (46X85), UV-1000 (46X87) and UV-2000 (46X89)] greatly reduce new mold growth on illuminated surfaces.

An accumulation of dirt and dust in the air ducts provides an ideal site for mold growth. To ensure optimal indoor air quality, non-porous insulation or externally insulated ducts should be used, particularly on the supply side (i.e. externally insulated metal plenums and ducts or smooth-lined flex duct are preferred). If your home has significant existing active mold growth, you should contact a company that specializes in mold removal. Lennox is a sponsor of the Indoor Air Quality Association (IAQA). Contact the IAQA (phone: 301-962-3804 or web: www.iaqa.org) or your state's health department for a list of companies which specialize in mold removal and training.

Ventilate the home properly

Contaminants in the home can be reduced by adequate ventilation. Open windows will allow natural ventilation; however, this is not a good option for people who are sensitive to pollutants in the outdoor air (pollens, chemicals, etc.). Lennox' Healthy Climate[®] Energy Recovery Ventilators [models ERV1-150 (64X66) and ERV1-200 (64X69)], Heat Recovery Ventilators [models HRV1-150 (64X65) and HRV1-200 (64X67)] and Ventilation Control System [model LVCS (X4141)]provide filtered ventilation. If you, or someone in your family is sensitive to outdoor pollutants, ask your Lennox dealer about these products. Exhaust fans which vent stale or contaminated air to the outside should be installed in the kitchen, bathroom(s) and laundry areas to effectively remove contaminants. Clothes dryers should be vented to the outdoors also. If there is a sudden source of contamination in your home [caused by burned food, oven cleaner, paint or hobby work that releases chemicals (model airplanes, soldering, furniture refinishing, etc.)], the PureAir[™] air purfication system WILL NOT reduce the odor immediately. In cases of sudden source contamination, open windows and doors to rapidly reduce the concentration of the contaminant.





Clean contaminants from the home

The PureAir[™] air purification system helps to signif icantly reduce levels of airborne volatile organic compounds, cooking odors, common household odors, airborne dust particles and mold spores, and pollen in residential spaces. The PureAir[™] air purification system includes a MERV 9 pleated filter (PCO-12C/20C) or MERV 8 pleated filter (PCO-12U/20U), UVA lamps, and a metal insert that is coated with a titanium dioxide catalyst. As air enters the system, a percentage of airborne particles and bioaerosols, such as mold and bacteria, larger than .3 microns are captured by the pleated filter. The smaller airborne particles, odors, and chemicals continue through the system. The UVA lamp activates the catalyst on the metal insert. The catalyst combines with water vapor in the air to form hydroxyl radicals that destroy a percentage of the remaining odors and chemicals. The PureAir[™] air purification system is NOT intended to be used for removal of active mold growth or high levels of chemicals in the air. For existing mold growth, the mold must be properly removed PRIOR to installation of the PureAir[™] air purification system.

Filtration: Lennox offers a portfolio of products to remove airborne pollutants such as pollen, dust mites, and mold spores: a 1" MERV 8 pleated filter requires quarterly replacement; a 5" MERV 8 pleated filter requires annual replacement; a high-efficiency, collapsible Merv 10 media air cleaner requires annual maintenance depending on the home environment; and an electronic air cleaner which is equivalent to a MERV 10 filter requires monthly maintenance (washing) to obtain maximum energy efficiency.

The MERV rating of a filter describes the size of the holes in the filter that allow air to pass through. The higher the MERV rating, the smaller the holes in the filter, providing enhanced filtration. The dirtier the filter, the better the filtration, however, the filter does need to be changed for maximum efficiency over time. With electronic air cleaners, however, the filtration capability diminishes over time. Filters need proper maintenance to ensure optimal system performance. Filtration products are designed to remove particles and capture bioaerosols. providing а comfortable livina environment.

Purification: Organic chemicals are reduced by converting them to carbon dioxide, water and minerals (as done by the PureAir[™] air purification system).

Molds can be killed or de-activated on illuminated surfaces by the Healthy Climate[®] germicidal lights. For optimal indoor air quality, the Healthy Climate[®] germicidal lights are recommended as a companion product to the PureAir[™] air purification system. Germicidal lights should be installed near the indoor coil to sterilize the surface to preven mold growth on the damp coil.

Monitor the indoor air quality to maintain a healthy home environment

The air quality in homes should be continuously monitored for temperature and relative humidity (%RH). Ask your Lennox dealer about long-term monitoring of temperature, relative humidity and carbon monoxide levels (CO detector -- X1124), as well as other monitoring options as they become available. Humidification: Dry, cold air in your home can make your nose and throat feel dry. It may also cause or aggravate other respiratory ailments. It may be necessary to add moisture to your home's air to ensure comfort in your home and to reduce the occurrence of dry skin, chapped lips and annoying static shocks. The Lennox Healthy Climate[®] humidifiers [WB2-12 (35X51), WB2-17 (35X52) and WP2-18 (35X50)] are available in by-pass and power models. Of course, these humidifiers are designed to work in conjunction with the PureAir[™] air purification system.

Maintenance: A healthy climate can be sustained ONLY with regular maintenance of the home system. The homeowner must change filters, germicidal lamps, metal inserts, humidifier pads, etc. Air ducts and indoor coils must be cleaned and units must be properly charged to ensure optimal efficiency. Maintenance is particularly critical if there are people in the home who have allergies, asthma, or other envirnmental sensitivities. The best way to ensure that the HVAC system and optional indoor air quality equipment are well-maintained is to take advantage of a semi-annual service contract offered by your Lennox dealer.

For a better understanding of the triggers that are related to allergies and asthma, please contact the Asthma and Allergy Foundation of America (www.aafa.org). Lennox is a sponsor of the Asthma and Allergy Foundation of America to promote improved consumer education about indoor air quality.

Refer to the installation and maintenance instructions included with your new Lennox Healthy Climate[®] product for recommended maintenance.



Note to Customer: Please complete information below and retain for future reference.	
Unit Model Number:	
Serial Number:	Date of Installation:
Installing Contractor:	Phone: