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Healthy Home Practices

IEE recommends the following practices and systems, which can be implemented to improve indoor air quality and reduce allergens in the home environment. The applicability and effectiveness of each item may depend on the specific layout and use patterns in your home.

• Ensure that all combustion devices are properly vented and exhaust flues are operating correctly under all mechanical exhaust/forced air system configurations. Do not use unvented combustion appliances such as unvented decorative fireplaces.

• Install exhaust fans for areas with sources of contaminants or moisture (e.g., bathrooms, laundry rooms, kitchen, etc) that are ducted to outdoors. Exhaust fans should be operated continually during contaminant or moisture generating activities. Consider installing delay-off timers on bathroom exhaust fans that maintain fan operation for 10 minutes following being turned off.

• Utilize air filters in the forced air system that have a minimum rating of MERV 8 but preferably MERV 11 or MERV 13 rating as determined by ASHRAE Standard 52.2. Ensure that the filters fit into their tracks snugly and the filter access panel is snug to minimize leakage of unfiltered air.

• Do not use electrostatic air cleaners or those that claim to emit ozone, sometimes inappropriately referred to by manufacturers as “activated oxygen”, “super oxygenated”, or “energized oxygen”.
See http://www.arb.ca.gov/research/indoor/ozone.htm

• Inspect the forced air heating/cooling system to ensure that all duct connections are intact and sealed tightly. Test the leakage of the duct system and seal leaks as needed to achieve the minimum air leakage achievable and no more than that required by the applicable building code for the structure. Contractors should use duct mastic to seal ducts and not duct tape.

• If the home is tightly constructed, which is typical of many new homes, consider adding a continuous mechanical supply of outside air. These systems can be separate from or integrated with an existing forced air heating/cooling system. In hot or cold climates and air-to-air heat exchanger can be incorporated to reduce the heating or cooling energy costs associated with this added outdoor air ventilation.

• Quickly dry out building materials that get wet from a moisture problem or overflow/flooding event and diagnose and correct the source of the moisture intrusion.

Drying all wet building materials within 24 - 48 hours will minimize the potential for mold growth.

• Utilize dust mite barrier sheets on bedding mattresses and pillows.

• Ensure that cockroach, mouse, rat or other pest/rodent problems do not develop in the home by using an integrated pest management plan which includes isolation of food sources, structural repairs of holes and gaps, mechanical and other non-chemical methods. As a last resort use the least toxic pesticide and ventilate the home well following application.

• If occupants are allergic to cat or dog dander do not allow these pets into the home.

• Remove shoes upon entry of the home or at a minimum provide walk-off mats at the entry that are effective in removing particles from foot wear.

• Eliminate or minimize wall-to-wall carpeting and ensure that any area rugs are cleaned of any accumulations of particulate matter regularly.

• Use vacuum cleaners equipped with a HEPA filters during regular cleaning. Regular cleaning of any carpeted surfaces should be conducted utilizing a beater-brush vacuum attachment.

• Minimize furniture and building materials made with composite wood products (e.g. particle board, medium density fiber board).

• Minimize solvent (paints, cleaners, etc.) use indoors and ventilate the home well when they are used.

• Select low emitting building materials, furnishings, and products certified according to California Architectural Specification – 01350.
See http://www.chps.net/manual/lem_table.htm

• Minimize use of indoor fragrances, deodorizers, incense, scented candles, etc.