

breathe easier

REMODELING

tips for healthier home remodeling



3M is proud to be
an educational
partner with the
American Lung
Association Health
House® program



clear the air



This booklet is a publication of 3M ————— and the American Lung Association Health House® program.



3M and the American Lung Association Health House® program are partnering to educate consumers about ways they can improve home air quality. 3M is a founding partner of the American Lung Association Health House program.

The goal of the American Lung Association Health House program is to raise the standard for healthier home environments. This is accomplished through national demonstration homes; consumer, builder, and site inspector training programs; and educational partnerships and alliances. Health House demonstration homes are designed with an emphasis on improving air quality and are built with special considerations for the indoor and outdoor environment. Filtrete™ Filters from 3M are used in Health House national demonstration sites.

3M and the American Lung Association Health House program do not intend for any of the tips in this booklet to be construed as medical advice or serve as a substitute for medical treatment or consultation. The American Lung Association Health House program does not endorse products.

Make a healthy indoor environment part of your remodeling plan.

If you're considering a major home remodeling or renovation project, it's essential to develop a game plan to help control levels of air pollution inside the home. That's because common renovation and remodeling tasks—such as sanding, sawing, painting and installing drywall—may result in higher levels of potentially harmful particles in your living environment. In addition, biological contaminants from insects and rodents may become exposed during renovations. Such exposure can pose serious health risks, especially for those with allergies and asthma.

The good news is there are many steps homeowners and contractors can take to reduce elevated levels of dust, mold, radon and other particles often associated with major remodeling and renovation projects.

Following the tips in this booklet can help create a healthier indoor environment—both during your renovation and well into the future.

DID YOU KNOW?

Poor indoor air quality can cause or contribute to the development of chronic respiratory diseases such as asthma and hypersensitivity.

smart start



Before the work begins.

Discuss existing issues or concerns with contractors during the bidding process. Issues to consider include radon, asbestos, heating, ventilating and air conditioning systems (HVAC), humidity levels and lead-based paint and odors from existing wood burning equipment.

Home improvement projects provide a good opportunity to have your home measured for radon levels. If levels are high, your home inspector can install a ventilation pipe that draws the radon from below your house and disperses it into the air outside.

Remodeling projects can increase the amount of dust and levels of other particles within the home. People with asthma or allergies, especially children, may want to consider living elsewhere during a major remodeling project.

Home improvement projects provide an excellent opportunity to have furnaces and other appliances checked by a professional. They should be checked for safety, efficiency and possible upgrades.

Make sure carbon monoxide detectors are in place and operating properly—especially if the remodeling project includes furnace replacement, temporary heating/ventilation or repair of existing equipment.

When considering room additions, have a contractor evaluate the existing heating and cooling system to determine if it needs cleaning.

Before hiring a contractor, check references, warranties and licensing. Also confirm how long the contractor has been in business and make sure he/she has experience in your type of project.

DID YOU KNOW?

An estimated one out of every 15 homes in the United States has radon levels above 4pci/L, the EPA-recommended action level.

DID YOU KNOW?

Biological contaminants may become exposed during renovations and can pose serious health risks.



project pointers



Considerations during your project.

Reduce levels of dust and other common household contaminants. Isolate work areas from the living space with plastic sheeting or zipper doors.

Use an exhaust fan in the work area to help prevent contaminants from entering the living space.

Have a plan for appropriate removal and disposal of debris, so construction debris doesn't spread into occupied spaces.

If you have pets, limit their access to the remodeling area so they don't track contaminants throughout the home.

If there is asbestos or lead-based paint in your home, hire a professional to remove these materials. Attempting to remove asbestos or lead-based paint by yourself can increase your exposure.

Use a high-efficiency furnace filter—such as the Filtrete™ Ultra Allergen Reduction Filter from 3M. It contains electrostatically charged fibers that capture up to 30 times more smoke, pet dander and other pollutants than the typical fiberglass filter.

Run the furnace fan continuously—regardless of the outdoor temperature—to ensure proper air circulation and continuous filtration.

Shut off the air ducts in the work area so that the dust and contaminants are not drawn into the living area.



Vacuuming can help reduce particles that have settled onto the floor and carpeting. Consider vacuuming every day during the remodeling project. Use a high efficiency vacuum or a central vacuum ducted to the outside. Be sure to check the warranty of your vacuum before you clean large amounts of construction debris.

Consider using a respirator to help reduce exposure to dust from sanding wood, drywall or non-lead based paints.

Sweep work areas at least daily to minimize debris and reduce the spread of dust particles.

Use a woven microfiber cleaning cloth. These cloths attract and capture particles such as lint and dust.

Even if isolation strategies are used during demolition work, area filters should be used to protect the environment and workers from contaminants. A room air cleaner or even a box fan with a high efficiency filter attached can be used to help reduce contaminants in the air.

DID YOU KNOW?

By using a high-efficiency air filter, such as a Filtrete™ Filter from 3M, in your central heating or air conditioning system, you reduce particulate levels in your home.

DID YOU KNOW?

Remodeling projects can generate a significant amount of dust and particles within your home. Be sure to change your furnace filter more often.



think about it



Controlling moisture.

High levels of moisture in the home can lead to mold growth. Exposure to mold may result in respiratory and other health problems—particularly for those who are allergic to this substance. To control moisture levels during home renovation and remodeling projects, follow these tips:

Keep humidity in your home between 30 and 60 percent, especially during remodeling projects, to prevent mold growth that can cause allergies.

If you're unsure of the relative humidity (RH) levels in your home, you can purchase an inexpensive digital indoor humidity gauge.

Cooling season (summer months):

RH should be below 60% (optimum 30–50%).

Heating season (winter months):

RH should be at 30% (may need to be lowered at temperatures below 10°F).

Seal large leaks between living areas and the attic, basement and crawl spaces. Reducing air leakage can reduce energy costs and help better control of relative humidity.

Cover lumber to prevent moisture from being absorbed into the wood. Finished wood should be acclimated to indoor conditions prior to installation.

Make sure windows are properly sealed during installation to keep out moisture.

Route water away from house via landscaping and rain gutters. Downspouts should extend several feet away from the house so that rainwater flows away from the home. When landscaping, make sure land slopes away from the home to reduce moisture problems.

Carefully consider your options when choosing paint, stains and finishes for your home. Some low volatile organic compound (VOC) paints, stains and finishes may reduce odors.

Do not occupy a recently painted room until it's been thoroughly ventilated for several days.

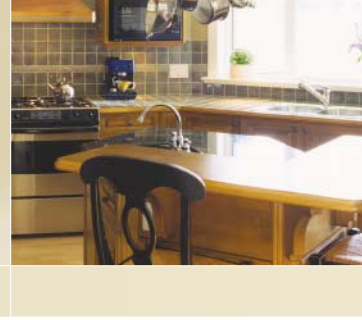
During landscaping projects, don't place pollen-producing plants near windows or other air inlets.

Don't allow anyone to smoke in the home or on the premises.

DID YOU KNOW?

You should keep humidity in your home between 30 and 60 percent, especially during remodeling projects, to prevent mold growth that can cause allergies.

consider this



When the project's done.

Once a home remodeling or renovation project is complete, it's important to maintain good indoor air quality. Keep in mind that many home improvement products, such as paint, can release trace amounts of gases for months after application. To combat indoor air pollution year-round, consider the following tips:

Don't permit recyclable items such as newspapers, rags, cans and bottles to accumulate in your living space. These products can be sources of toxic vapors, unpleasant odors and bacteria. Store them in a covered area outdoors and recycle frequently.

Hang dry-cleaned items, like draperies, on an outdoor clothesline before bringing them inside. This will help air out cleaning solvents.

Never store more than a few pieces of firewood indoors. Drying firewood often increases humidity levels and releases mold spores that can contaminate your entire house.

Use a high-efficiency furnace filter and change it on a regular basis—ideally every two to three months.



Other resources on healthier home remodeling:

American Lung Association:

www.lungusa.org

1-800-586-4872

American Lung Association Health House program:

www.healthhouse.org

1-877-521-1491

Partnership for Advancing Technology in Housing:

www.pathnet.org

202-708-4277

National Association of Home Builders:

www.nahb.com

1-800-368-5242

American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.:

www.ashrae.org/

1-800-527-4723

Environmental Protection Agency Office of Air and Radiation:

www.epa.gov/iaq/

1-800-438-4318

U.S. Department of Energy:

www.energy.gov/

1-800-342-5363

U.S. Department of Housing and Urban Development:

www.hud.gov/

202-708-1112

National Association of the Remodeling Industry, Inc.:

www.nari.org/

847-298-9200

DID YOU KNOW?
Drying firewood indoors often increases humidity levels and releases mold spores that can contaminate your entire house.

more helpful tips

FOR ADDITIONAL
INFORMATION
ON AIR QUALITY
AND RELATED
ISSUES, VISIT:

www.lungusa.org
www.healthhouse.org
www.filtrete.com

For dozens more tips on how to reduce indoor air pollution, the American Lung Association Health House® program and 3M offer two additional booklets: *Tips for Creating a Healthier Home* and *Tips for Creating a Healthier Home for Kids*.

All booklets can be obtained free-of-charge by:

Sending an e-mail with your name and address to:
3mfiltrete@3mservice.montagenet.com

Or calling 1-800-388-3458.

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