

RENOVATING SCHOOLS

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Designed and produced by the Green Flag Program with information from the Green Squad website, a project of the Natural Resources Defense Council and the Healthy Schools Network.

Some areas of your school may be off-limits without permission from your teacher or principal, and some projects should be done with at least one partner. Check with your teacher before beginning any activities or projects related to this fact sheet.

WHY IT MATTERS

Renovations can make your school a better place. But if they're not done right, they can cause harm inside the building and way beyond. Renovations often release dust and chemicals that can spread inside your school and make you sick. And they also may waste materials like wood, which uses up our natural resources.

What a mess! School renovations can spread sawdust, plaster and floor grindings, which can irritate your airways, especially if you have asthma. Renovation can also spread mold. And, depending on your school's age, construction work can stir up chips or dust flakes from lead paint or fibers from asbestos, a cancer-causing material once used for insulation and in floor tiles. Mold, lead and asbestos are all dangerous to breathe.

Other renovation problems may be invisible but you might smell them. Many of the products used in renovations, such as paints and glues, release chemicals into the air. New carpets, drapes and furniture also give off chemicals that can hurt your eyes, skin, or lungs. The chemicals released this way are known as volatile organic compounds, or VOCs.

Renovations can cause problems outside your school, too, if materials are used wastefully. For instance, did you know that a lot of the wood that's ordered for renovation projects is never used? (This is an even bigger problem in the construction of new buildings.)

Wood is also used very inefficiently. Often, workers just throw out leftover pieces. Think of all the trees that are chopped down for lumber that no one ever uses!

WHAT YOU CAN DO

It's up to your school to do renovations the right way, and you can help make sure it happens. Read the tips below to see how your school should proceed. If these steps aren't being followed during a school renovation, tell your parents or talk to your teacher or principal. If dust or fumes from renovations ever make you sick, tell your teacher, your parents or your school nurse right away.

WHAT YOUR SCHOOL CAN DO

Get Information

Many places offer information on safe renovation practices. The Healthy Schools Network's Guide to School Renovation and Construction is a great place to start. (See the Healthy Schools Network's guide page at http://www.healthyschools.org/guides_materials.html for an order form, or contact them by email at info@healthyschools.org.) Other sources of information for your school officials and workers: the Environmental Building News website at <http://www.buildinggreen.com/>, <http://www.greenseal.org/>, or the U.S. Green Building Council's LEED (Leadership in Energy & Environmental Design) specifications at http://www.usgbc.org/LEED/LEED_main.asp. And don't forget our fact sheet on Painting Schools!

Use Greener, Healthier Products

- **Use products that emit few or no volatile organic chemicals:** Many low-VOC and zero-VOC products are

now available. Whenever possible, workers at your school should use these products. The sources above can help them (and school officials) learn which ingredients to look for and which to avoid.

- **Use materials efficiently:** Renovation projects should use materials efficiently to reduce waste. School officials should insist on this from the very start. They need to make sure that everyone involved in renovations — from architects to workers — looks for ways to cut waste. Two places with lots of ideas for using materials efficiently are Environmental Building News at <http://www.buildinggreen.com/> and the National Association of Home Builder's Research Center at <http://www.nahbrc.org/>, especially the Toolbase and Green Building Activities sections.
- **Use FSC wood:** If wood is being used in a renovation project, it's important to know where it came from. Whenever possible, wood should come from a forest where wildlife and habitat are protected. Today there's a way to tell whether wood is from that kind of forest: the Forest Stewardship Council (FSC) label. FSC visits forests to see if they're managed well. If they are, the forests can use the FSC label on their wood. (The label should be from FSC only. Other labeling programs do not meet high enough standards.) The Certified Forest Products Council at <http://www.certifiedwood.org/> can help school officials, architects and workers find companies that sell FSC-certified wood.
- **Let the sun shine in:** Before a major renovation project begins, your school's builder or architect should investigate new ways to use the sun's power. Using the sun's rays to light your classrooms and hallways, and to cut down on your school's use of electricity and heating fuels, can make your school a nicer, more comfortable place to learn. It can also save money (more for field trips!) and help fight pollution and global warming.
- **Investigate green building practices:** Lots of new building methods have come along in the past few years that make schools and other buildings healthier and less harmful to the environment. For instance, energy-efficient windows can help keep your school warmer in the winter and cooler in the summer. Green building techniques and products may cost more initially, but often they help save money in the long run.

Keep Kids Safe

- **Start with a plan:** Your school should discuss renovation plans with builders and contractors to be sure they've developed a safe and healthy renovation plan that incorporates all the steps below. During renovation someone at your school should oversee the project and be sure workers stick to the plan.
- **Notify students and parents before renovations begin and explain how students' health will be protected:** Before renovations start, school officials should tell you and your family what will be done, how long it will last, what materials will be used and what steps will be taken to control dust and fumes and keep them from spreading into occupied areas.
- **Schedule renovations for times when class is not in session:** Whenever possible, renovations should be done when students and school staff are not in the building. Vacations or weekends are the best times.
- **Keep students away from work areas:** If renovation takes place during school hours, the area that's being worked on should be off-limits to students while the work is underway — and during the cleanup, too.
- **Prevent the spread of dust and fumes:** Dust and fumes should be blocked by heavy plastic sheeting, temporary walls or some other barrier. Work areas should be cleaned every day. And fire exits must remain clear.
- **Ventilate well and allow time for fumes or chemicals to disperse:** Work areas must be ventilated, so fumes or dust don't build up. It's equally important to allow time for these substances to disperse before anyone uses the new space.
- **Clean up afterward:** Anyplace that's renovated should be thoroughly cleaned before it's used again. Your parents should be allowed to check the area before you're allowed back in.

For more facts, tips and project ideas, visit the Green Squad website at www.nrdc.org/greensquad. The Green Squad is a project of the Natural Resources Defense Council and the Healthy Schools Network.



To learn about the Green Flag School Program's three-step approach to making your school a healthier place to work and learn, go to www.greenflagschools.org