

# CABINETS

## A Factsheet from Austin Energy's Green Building Program

Are your kitchen cabinets hazardous to your health? They could be; new cabinets can give off fumes that are hazardous to your health. These fumes, called VOC's (volatile organic compounds), come from the materials typically used to make cabinet doors and boxes, the glues that hold them together, and the finishes used to seal them. You may notice the odors of these fumes when the house is very new, but not after a while--partly because you get used to them, and partly because they lessen over time. Some of them may continue to cause irritation indefinitely (causing symptoms like headaches and a stuffy nose), especially when heat and humidity are high.

## Are Better Cabinets Available?

There are ways to reduce fumes or even avoid them altogether. To reduce fumes to a level acceptable for most people's health, be sure all surfaces of new cabinets (including backs, insides and especially edges) are sealed with a water-based, low-VOC sealer. Most modern cabinets are made of particle board or interior plywood. The glues used to manufacture these materials are high in the VOC's and in formaldehyde. (To identify this chemical, remember when you dissected a frog in biology class. It was the formaldehyde fumes--in a concentrated dose--that made your throat choke up and your eyes sting.)

If your cabinets come "raw" (without finish), you can specify to your builder exactly how and with what you want them sealed. A coat of sealer should be applied *before* cabinets are installed. In usual construction practice, raw cabinets are finished after installation. The painter will probably charge you a little extra for this because they are sealing where they usually don't, but it's worth it for a thorough job--no spots missed. Most pre-fabricated cabinets come with a factory finish, applied according to strict regulations. You still need to check the manufacturer's information sheets to find out the VOC level of the finish used. If it isn't applied to all surfaces, you can still have this done on the job.

## Local Choices

Central Texas is one of the few places in the country that still has quite a few custom cabinet shops. By using their services, we stimulate our local economy, encourage a disappearing art, and get more choice--in price, style, and material. Given a choice, specify plywood instead of particle board: it has less glue to offgass formaldehyde, is a stronger material, and won't deteriorate easily.

Choose formaldehyde-free cabinet materials. One such material, available locally, is called Medite II. It is a medium-density fiberboard (a fine-grained higher-density particleboard), but it uses a formaldehyde-free glue. Other materials to consider are any number of formaldehyde-free, wheat-straw boards, available by special order. Both of these materials come in 4'x8' sheets, so they work well for cabinet boxes (the backs, ends and shelves), which require large pieces of material. The front frames and doors can be made of solid wood if you want stained cabinets instead of painted ones. Solid wood can be used for the boxes as well, but does cost more. For people who have extreme chemical sensitivity, even to the resins in wood, metal cabinets are the best choice.

## Remodeling

Consider renovating and sealing your existing cabinets. You may be able to get the updated look you want just by replacing doors, hardware and hinges. (If they won't do for your kitchen, maybe you can reuse them in your utility room or garage.) If your cabinets are quite old, chances are they are made out of solid wood, so formaldehyde won't be a problem. If they are made of particleboard or plywood, seal every surface you can reach, as described above. Then caulk all around the edges where the cabinets meet the floor, walls, and so forth, to seal off the surfaces you can't get to.

The main thing to know about cabinets is that you do have healthier choices. Once you are aware of them, you can make a good choice for your family.

MATERIALS

## **Resources**

### *"Meditite II"*

available locally from:

Fine Lumber and Plywood

9407 Brown Lane, Austin, TX 78754

836-8990

<http://finelumber.citysearch.com/>

### *"Meadowood"*

Meadowood Industries, Inc.

33242 Red Bridge Rd, S.E.

Albany, OR 97321

(541) 259-1303

### *"Wheatboard"*

Primeboard Inc.

2111 N. 3M Drive

Wahpeton, ND 58075

(701) 642-1152

<http://www.primeboard.com>

### *"Naturall Fibre Board"*

Naturall Fibre Board, LC

P.O.Box 175

Minneapolis, KS 67467

(785) 392-9922

This list does not constitute an endorsement or recommendation by the City of Austin, Austin Energy or the Green Building Program. Please check references thoroughly before employing the services of any contractor.