

# APPENDIX F

## SANDING SAFETY

**NOTE: When sanding a previously finished floor, ascertain whether the floor finish contains lead. Floor finishes applied before 1978 may contain lead. Test kits are available to determine the presence of lead in floor finishes and other architectural coatings. Abide by local, state and federal guidelines for handling and disposal of lead-based products. For more information, visit the U.S. Environmental Protection Agency website at [www.epa.gov/lead](http://www.epa.gov/lead).**

### Part I - Spontaneous Combustion

One of the most important safety issues to consider in the sanding process is spontaneous combustion, which can occur with sanding dust. Combustion caused by wood dust is a potentially serious problem. There are several ways in which it can occur. The first and least common is the wood dust starting on fire in the dust-collection bag when a new floor is being sanded. The heat created from the friction of the machine and sandpaper on the floor can increase to the point that the sawdust begins to smolder inside the bag. Wood dust must reach a temperature of 400 degrees Fahrenheit for it to ignite. Combustion happens much more frequently, however, when an old floor is being sanded. The old finishes that are on the floor become ground into a fine powder. Again, the heat created by the friction can cause spontaneous ignition.

Although it is not technically spontaneous combustion, a problem also occurs when small sparks fly into the dust-collection bag. These sparks, which are often caused by abrasives striking nails, can cause a fire to begin smoldering, not visible until minutes or hours later. For this reason, all nails should be set prior to sanding. This will also help prevent damage to the machine.

Sanding dust should be disposed of safely. Keep an eye on the dust-collection bags on all equipment. Empty the bags often in a proper container. Also, empty dust collection bags before transporting the machine or leaving the job site — even if you're just leaving for a short time.

Always remove dust receptacles from the job site at the end of every day and dispose of them in the proper manner. For that matter, it's a good idea to remove dust receptacles and unplug machines any time you leave the jobsite for any length of time. Refinishing old floors poses additional safety issues.

#### **Six Potential Flare-ups**

Friction: Dull sandpaper, overworked paper, improper paper selection

Sparks: Staples, nails, radiator pipes, improper paper tracking

Dust: Never leave in truck, machine or job

Stain rags: Dispose in water bucket or metal safety container

Electric fires: Faulty cords, loose connections, breaker box fires

Liquids/vapors: Lacquer sealers, universal sealers, shellacs, conversion varnish

 **Keep fire extinguishers in the truck and on the job.**

 **Smoking should be prohibited on the jobsite and in the truck.**

## Part II – Equipment Operation

Another important safety issue involves the proper operation of the sanding machinery. The following safety guidelines should be adhered to:

- A. Proper electrical connections are essential. Refer to local electrical codes and to manufacturers' guidelines for each piece of equipment.
- B. Read the warnings and operational instructions that are provided by the manufacturer of each sanding machine.
- C. Wear eye, ear and approved respiratory protection devices as required by OSHA.
- D. Safe work shoes (with laces tied) are important.
- E. Make sure you are always in complete control of all equipment.
- F. Use extra caution when wearing a waist belt attached to drum or belt sanders.
- G. Keep electrical cords away from machines' moving parts. Also keep cords out from underfoot and off your shoulders, since electrical cords can be the cause of injury. Use the manufacturer's recommended apparatus for proper cord control.
- H. Unplug all machines when you are repairing or adjusting them, when changing abrasives, or when leaving the jobsite.
- I. Empty sanding bags often in a proper container, especially before transporting the machine or leaving the job site. Remove dust receptacles and unplug machines any time you leave the jobsite for any length of time.

**SAFETY NOTE:** Make sure all electrical equipment has proper grounding.