



Resurfacing a Spalled Slab

by Henry Spies

Q. I am working on a garage which has a heavily spalled concrete slab. I did a little excavating and found that the slab is on a good sub-base and is very thick and stable. The damage seems to have been caused by road salts dripping off the cars. What can be done to repair the surface of the concrete?

A. The most economical solution is to trowel on a thin coat of latex concrete patching compound. Since it is indoors and not subject to heavy traffic, it should last. The spalled surface must be well-cleaned, the dust blown off, and a bonding agent



Epo-Rok leveling compound can be trowelled. applied before the latex concrete. If heavy traffic is anticipated, there are two-part, epoxy-based leveling compounds that are usually pumped in place. *Bonsal Self-Leveling Wear Topping* (W.R. Bonsal Co., P.O. Box 241148, Charlotte, NC 28224; 800/334-0784 or 704/525-1621 in North Carolina) is one such product. *Epo-Rok* (Federal International Chemicals, 862 Industrial Drive, Elmhurst, IL 60126; 800/637-7793) is an epoxy-based concrete floor surfacer that can be troweled on. Such toppings are typically used in an industrial setting,

such as to repair forklift aisles. They are generally more expensive than the latex compounds.

The repaired surface should be sealed to prevent further salt damage. There are a number of commercial concrete sealers available. The Illinois Department of Transportation uses a mixture of one part boiled linseed oil to five parts kerosene to seal new concrete highways. It is inexpensive and seems to work well.

Removing Rust Stains

Q. What can be done to remove the stains caused by rusting nail heads on siding with a natural finish?

A. Brushing the stains and nail heads with a solution of phosphoric acid (*Naval Jelly* or *Rust Cutter*), letting it set for 20 minutes or so, and then washing it off, may help remove the rust stains. These solutions leave a phosphate coating on the nail head that will also help prevent rusting in the future. If the siding is badly stained, covering the streaks with an opaque stain of the appropriate color may be the best solution.

Besides the unsightly looks, a bigger problem is the chemical reaction of the rust with the wood, which can cause decay. If this goes far enough, it cannot be solved without removing a layer of wood with a belt sander or replacing the siding.

Spraying the Deck

Q. I have been told that exposed floor decks can be sprayed with linseed oil to protect them from moisture damage until

the building is enclosed. Is there any reason why I shouldn't do this?

A. I don't know why the linseed oil coating would present any problems, as long as nothing will be attached to the subfloor with any mastic or adhesive. If any underlayment or finish floor were to be adhesive-bonded to the subfloor, I wouldn't spray the floor.

On the other hand, I'm not sure that you would accomplish anything by using the linseed oil coating. Most of the moisture damage occurs at the joints in the subfloor, with water wicking into the ends of the panels. It would take an exceptionally heavy application to seal the edge joints.

Adhesive for Mirrors

Q. What is the best way to mount a mirror to the wall? Can ordinary construction adhesive be used?

A. Construction adhesives contain solvents that may affect the silvering on the back of the mirror. A specialized product, such as *Mirror Mastic* (C.R. Lawrence Co., 1501 Tonne Road, Elk Grove Village, IL 60007; 708/437-8320) is a better choice.

Mounting clips are available in several sizes and types, and may be a better answer, since the mirror can be removed without breaking it or destroying the wall.

Hank Spies is a building consultant formerly with the Small Homes Council-Building Research Council of the University of Illinois. Questions should be sent to him at JLC, RR#2, Box 146, Richmond, VT 05477.