

FIG 17-20 — Heavy pipe and angle railing extend about 18 in from the floor to prevent damage to door jambs, walls, and building columns Standard 3- or 4-inch black iron pipe is welded to angle iron and fastened to the floor with heavy strap iron brackets

Courtesy Kraft Foods Company

repair Unusual sag should be investigated immediately and corrected If sag is found in a suspended ceiling, hangers and fastenings should be checked However, the sag may be the result of excessive loading of the floor above, which should be corrected

Floors

Accidents due to inadequate maintenance of floors are a major source of injuries in many plants Slippery conditions, particularly, account for numerous falls by workers Holes and other irregularities in wood and concrete floors, both inside and outside plant buildings, result in frequent injuries from stumbling and falling and, in addition, cause many truck accidents

Repair procedures Wood flooring should be inspected for rot, wear, and unusual stress as indicated by sag In many cases, a section of wood flooring may need to be replaced New flooring should be installed flush with the existing flooring Badly worn or loose wood block flooring should be replaced by anchored wood blocks

To anchor loose wood finish flooring, holes are drilled at an angle through the finished floor into the subfloor and flooring nails larger than the holes then are driven into the subfloor

For concrete floors, the damaged area should be chipped out, cleaned thoroughly, and wet down Cement mortar (1 part portland cement and 3 sand) is troweled in Minimum patch thickness is 1 in Patches 2 in thick or more may require wire mesh or reinforcing steel For finishing, a wood float gives a less slippery surface than does a steel trowel

For proper curing, traffic should be kept off the patch for at least three days, unless a quick-setting cement has been used

If mixed and applied properly, epoxy resin repair materials give excellent results A thickness of as little as $\frac{1}{8}$ to $\frac{3}{16}$ in will give an extremely tough wearing surface Be sure to take adequate precautions when using these mixes (See National Safety Council's *Epoxy Resin Systems*, Data Sheet 533)

Maintenance procedures. Use of the wrong cleaning materials, methods, and surfacing often causes even the most suitable types of flooring to deteriorate and become slippery Alkaline cleaners should not be used on terrazzo, but mild alkaline cleaners may be used on asphalt tile Oils are unsuitable for rubber tile and, when applied to wood floors, increase the fire hazard To keep floors clean, safe, and sanitary, the recommendations of the flooring manufacturer should be followed

In general, the routine maintenance procedure for linoleum, marble, terrazzo, asphalt tile, and other types of flooring used in offices, institutions, and similar buildings is to clean the floors with a soft floor brush or vacuum cleaner and, when necessary, mop them with a mop dampened with clean, cold water

One section of floor is cleaned at a time, and, if traffic in the area is heavy, that section is roped off When soap is used, any soapy film must be removed by thorough rinsing, to avoid a slippery condition