Cork tile	Made of molded and compressed ground cork bark with natural resins of the cork to bind the mass together when heat cured under pressure	(Same as asphalt tile)	Other materials—Paint products (paint, enamel, shellac, varnish, plastic) are semipermanent finishes used principally on wood and concrete floors They do not materially increase the slipperiness of the base
Steel	Iron containing carbon in any amount up to about 1 7 percent as an alloying constituent, and malleable when used under suitable conditions	Surface can be touched up with an arc welding electrode so the shape of raised places on the surface resembles angle worms Also an abrasive-reinforced plastic coating can be painted on to any desired thickness, dries hard as cement and has a sandpaper like finish If a temporary non-skid surface is needed two uses of mats can be employed (a) flexible rubber mats made from old automobile tires, (b) rubber or vinyl runners	

* Floors and stairways should be designed to have slip-resistant surfaces insofar as possible, adhesive carborundum strips may be used on stair treads or ramps and at critical concrete areas Etching with mild hydrochloric (muriatic) acid solution will lessen slip problems

** Colloidal silica is an opalescent, acqueous solution containing 30 percent amorphous silicon dioxide and a small amount of alkali as a stabilizer

bling hazards Spilled materials must be cleaned up promptly (See Fig 22–4)

Reducing or Eliminating the Hazards

Slips and falls

Floors, stairs, and other walking surfaces are hazardous enough when they are clean, clear, and free of defects—they are a major source of slips and falls Since the footwear worn by non-employees cannot be controlled, the safety professional must make sure that walking surfaces offer no additional problems Walking surfaces should be non-slippery, clear and in good repair, and adequately illuminated

Slipmeters developed by testing agencies and insurance companies measure the slipperiness of floors One type of instrument (see Fig 22–5) is mounted on three leather "feet" It is pulled across the floor by a motorized winch, the dial on top measures the intensity of the pull required to start moving it This is converted into a "slip index" Floor slipperiness, however, may increase because of moisture, oil, grease, foreign or waste materials, and incorrect cleaning or waxing

Falls on floors occur in various ways and from various causes A person may slip and thus lose traction, or he may trip over an open drawer, box in the aisle, or other object In either case, he may suffer an injurious fall

In nearly every floor fall accident claim, this condition is alleged to have existed However, of the actual unsafe conditions the primary mechanical causes of falls on floors are, in reality, unobserved, misplaced, or poorly designed movable equipment, fixtures, or displays, poor housekeeping, and defective equipment Obviously, the condition of shoes or type of footwear soles and heels might be major contributing factors

Inadequate illumination can also be a cause of falls Light values at floor level should be uniform with no glare or shadows Also, there should be no violent contrasts in light levels between floor areas, such as from bright sunlight outside the entrance to a dimly lit lounge or restaurant

Undoubtedly, a large percentage of falls stem from unsafe acts and from purely personal causes such as age, illness, emotional