Ordinary wax for polishing wood, tile, and similar floor surfaces is unsuitable because of its inherently slippery nature However, according to the manufacturers, floor oils and waxes can be used to surface various types of floors without adding unduly to their slipperiness, provided that instructions regarding their application are followed

Oils and greases, water, paper, sawdust, and numerous other foreign materials on floors create slipping hazards Leaks of oil from machines and of water and other liquids from pipelines and spillage from processing equipment often can be eliminated by good maintenance of the equipment, such as promptly tightening loose connections

Pans and absorbent materials can be used when leakage cannot be readily eliminated at the source However, a study of such sources often reveals ways of keeping slippery materials from getting on the floors, such as the installation of splash guards on machines using cutting oils

Slippery materials spilled on floors should be cleaned up promptly To remove grease and oils, the area can be covered with air-slaked lime to a depth of about ¼ in After two or three hours, the lime then is removed with a scraper or stiff brush Sand and various commercial cleaners also can be used

Even as innocuous a substance as coffee can cause an accident if spilled in a high traffic area In National Safety Council offices, cups containing beverages must either be covered or be on a tray if carried to an employee's desk

Aisles should be kept clear of machinery, equipment, raw and manufactured materials In many cases, the allowable floor loading has been figured on clear aisle space with no allowance made for power trucks using aisles It is advisable for efficient, safe operation to determine whether floors and aisles are capable of sustaining loads of power trucks Lines to indicate aisle width should be well maintained

Overloading of floors, which may be caused by the installation of heavy equipment, excessive weight and unequal distribution of stored raw and finished materials, and heavy truck transportation, is particularly hazardous Signs stating allowable floor loads and horizontal lines showing the maximum height to which materials may be piled should be painted on the walls (Fig 17-21)

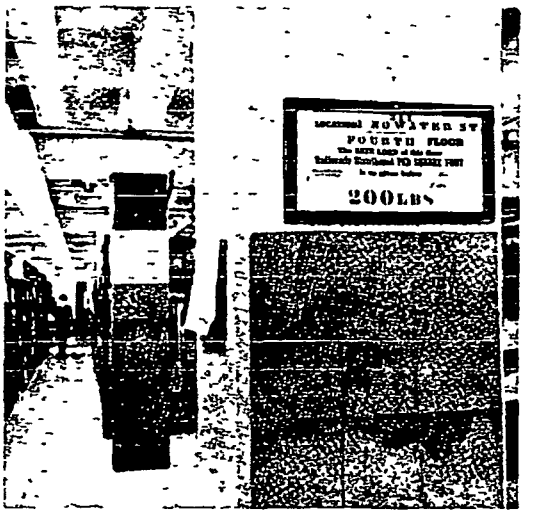


FIG 17-21 —Where the same type of material is stored regularly, a line can be marked on the wall to indicate the height to which material can be piled without exceeding the allowable floor load In addition to safe floor load limit signs, a warning sign reading DO NOT PILE ABOVE LINE can also be placed on the wall

Strength and load determinations. Accurate data on floor load capacity are a prime requisite for a physical plant survey If these data are not already known or readily obtainable from building plans, a structural analysis by a qualified engineer may be necessary Rough estimates based upon experience or conclusions arrived at by a casual glance at a handbook are dangerous Use accurate weight data

Load distribution is often a complex problem Most buildings are designed to carry uniform loads A concentrated load places twice as much stress on supporting members as a uniform load of equal weight For this reason, most heavily concentrated loads, such as machines, are placed directly over beams or girders rather than on slabs or joists

As is the case with floor load capacity, the safety engineer should consult plant engineering specialists for an accurate determination of concentrated loads