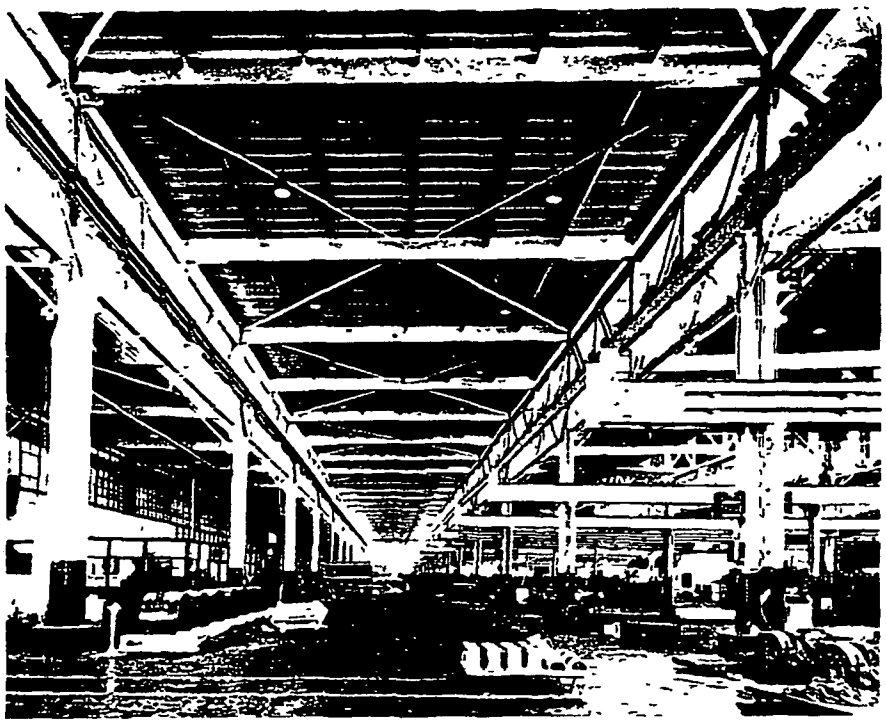


FIG. 35-4 —Noncombustible building with low-hazard metal working occupancy

Courtesy National Fire Protection Assn

This type building dominates in congested areas of large cities Its occupancy should be limited to light or moderate hazards, use of highly combustible interior finishes should be minimized

Even when sheathed, ordinary construction (unlike fire-resistive or noncombustible construction) still has combustible materials in concealed wall and ceiling spaces Fire frequently originates in these concealed spaces or enters into them through openings and then spreads rapidly throughout the entire building, unless the building is safeguarded by fire-stopping or other means

Wood frame construction consists primarily of wood exterior walls, partitions, floors, and roofs (Fig 35-5) Exterior walls may be sheathed with brick veneer, stucco, or metal-clad, cement-asbestos, or asphalt siding

Although generally inferior to other types of construction from a fire safety standpoint, it can be made reasonably safe for light-hazard, low-density occupancies The safety-to-life factor can be greatly increased by suitable protection against the horizontal and vertical spread of fire, the provision of safe exits, and the elimination of combustible interior finishes Automatic sprinkler protection can greatly improve the fire safety outlook in frame buildings, it is fundamental to fire protection of wood frame schools, nursing homes, and similar institutions

Vertical and horizontal cut-offs Regardless of the type of building construction, the person responsible for fire control in an industrial plant should thoroughly investigate the feasibility of more stringent requirements

Stair enclosures, necessary to provide a safe exit path for occupants, also serve to retard the upward spread of fire Under certain conditions, such as where large areas or high values are involved, buildings may be di-