

No reduction is to be made in respect of pillars supporting storage-rooms.

6. *Minimum Loads on Beams.*—The minimum distributed live load on any floor-beam other than the external-wall beams or secondary beams is to be taken as 400 lb. per foot run. Moreover, every beam is to be capable of sustaining at any point in its span a point load of at least 3,000 lb. This does not apply to buildings of the 40 lb. or 60 lb. class, Section 2 (a) and (b).

7. *Moving Loads.*—In cases where live loads are such as to produce shock from impact or vibration, 20 per cent., or such other allowance as may be specified by the engineer to meet special conditions, shall be added to the stresses due to the effect of the static load.

8. *Lifts.*—In every case for lifts, elevators, hoists, &c., the equivalent static load at the top of the lift-shaft is to be taken as at least 50 per cent. in excess of the combined load of the actual pull in the ropes, the weight of overhead machinery, sheaves, supports, and overhead beams.

9. *Industrial and Commercial Buildings.*—The actual live loads of buildings of the industrial or commercial type, in so far as said actual live loads may be reasonably estimated, shall be used in the design of such buildings or parts thereof. Special provision shall be made for machine or apparatus loads when such machine or apparatus loads would result in greater stresses in the structural member of the floors than would be caused by the loadings specified above for such occupancies.

10. *Floors supporting Trucks.*—Public garages, and commercial and industrial buildings in which loaded trucks are to be placed, used, or stored, shall have their floor systems designed to support a concentrated rear-wheel load of a loaded truck placed in any possible position. The weight of such loaded truck shall be taken as that of the heaviest which the floor must support, but the weight of said concentrated wheel-load to be used in the design shall not be less than 11,500 lb.

11. *Arrangement of Live Loads.*—Effect of loads in adjoining stories: When the construction is such that the structural elements thereof act together in the nature of an elastic frame due to their continuity and rigidity of connections, the effect on the structural elements of any one story of live loads in adjoining stories shall properly be taken into account in the design; but the assumed simultaneous arrangement of live loading on all floors of the various stories need not be more severe than that giving similar alternately loaded and unloaded spans in each floor, and corresponding alternately loaded and unloaded vertical tiers.

Distribution of live loads on any floor: Each floor and the individual structural members thereof shall be designed for the most severe possible distribution of live loading on said floor and said individual structural members thereof.

Partial loading for trusses and trussed beams: The web members of trussed structural members of floors and roofs shall be properly proportioned for partial live loading in any one span of said trussed structural members.

UNIFORM CODE.—CHIMNEYS.

1. Chimneys shall be built of concrete, brick, concrete blocks, stone, or other approved incombustible material. The fireplace and gathering shall have a thickness of not less than 6 in. if built of monolithic reinforced concrete, or 9 in. if built of plain concrete, brickwork, or other unit masonry, and shall have no through vertical joints. All joints shall be filled with lime mortar gauged with cement. The backs of concrete fireplaces shall be adequately protected against damage by fire.

2. Except as provided below for continuously reinforced concrete chimneys, every chimney-shaft shall be adequately connected in a fireproof manner to the block so as to permit of slight movement of the shaft at this point and shall be vertically reinforced with continuous steel rods not less than $\frac{5}{8}$ in. diameter, bound together at intervals of not more than 12 in. with No. 8 black wire, all thoroughly embedded in fine cement concrete or cement mortar. There shall be not less than four such rods in single-flue chimneys, and not less than two additional rods for each additional flue. Where shafts are so constructed, the spaces between the shaft and wooden rafters or beams at roof-level shall be suitably packed with incombustible material to form a fire-stop and adequately chock the chimney. At ceiling and floor levels adequate fire-stops shall be provided, so designed that the chimney is not restrained at these points.

3. The thickness of material surrounding flues shall be not less than 4 in., and any shaft built with material involving vertical joints or any shaft of concrete other than pumice concrete shall have the flue formed with approved liners of earthenware or fireclay not less than 1 in. in thickness or of reinforced pumice concrete pipe not less than $1\frac{1}{2}$ in. in thickness. No flue, except washhouse-boiler flues, shall be less than 8 in. in diameter or 8 in. square. The flue-liners may be omitted providing the reinforced concrete is increased to not less than 6 in. in thickness and that the No. 8 gauge horizontal ties are spaced at intervals of not more than 6 in.

4. Chimneys constructed of continuously reinforced concrete from foundation to head shall have at least $2\frac{1}{4}$ in. of clearance from all rafters or beams at roof and floor levels, but shall be provided with fire-stops so designed that the chimney is not restrained.

5. If any shaft required to be chocked at the roof projects above the roof for a height of more than two-fifths of the total length of the shaft, then such projecting portion shall be adequately braced to the roof in two directions with approved iron braces.

6. These regulations shall not apply to chimneys for any furnace, steam boiler, or close fire constructed for any purpose of trade, business, or manufacture, or which might be intended for use in connection with any cooking-range or cooking-apparatus in a building when occupied as an hotel, boardinghouse, or eatinghouse, and shall not apply to washhouse-boiler chimneys. The latter may be of approved pipes of adequate fireproof quality and strength, provided the chimney-shaft does not exceed 12 ft. in length.

7. Any design of chimney involving new principles of construction or materials may be approved, provided the chimney complies fully with the standard of structural strength and safety from fire hazard provided in the above clauses.