

## **4123:1-5-13 Motor vehicles, mobile mechanized equipment, and marine operations.**

(A) Reserved.

(B) Reserved.

(C) General requirements for motor vehicles and mobile mechanized equipment.

- (1) A safety tire rack, cage, or equivalent protection shall be provided and used when inflating, mounting, or dismounting tires installed on split rims or rims equipped with locking rings or similar devices.
- (2) Machinery, equipment, or parts thereof, being supported by slings, hoists, or jacks shall be substantially blocked or cribbed. Bulldozer blades, scraper blades, end-loader buckets, dump bodies, and similar equipment shall be either fully lowered or blocked when being repaired or not in use.
- (3) Equipment parked on inclines shall have the brakes set, and the blade, bucket, etc., fully lowered if the equipment is unattended (out of sight or more than twenty-five feet from the operator).
- (4) All cab glass shall be safety glass or equivalent with the vision unimpaired by its condition.
- (5) All equipment which can contact power lines shall also comply with the requirements of paragraph (D) of rule 4123:1-5-23 of the Administrative Code.
- (6) At locations where gasoline is being transferred to the fuel tank of any machinery, a notice shall be posted by the employer stating specifically that the engine shall be shut down and that no smoking or open flames be permitted during the transfer.
- (7) All motor vehicles operating within the confines of the owner's property shall be equipped with an audible or visual warning device, in an operable condition, activated at the operator's station.

(D) Overhead protection.

- (1) All haulage vehicles loaded by means of cranes, power shovels, loaders, or similar equipment shall have a substantial cab shield or canopy to protect the operator from shifting or falling materials.
- (2) High lift rider trucks shall have a substantial overhead guard as protection against falling objects, constructed in a manner that does not interfere with visibility.

Openings shall not exceed six inches in one of the two dimensions, width or length, and shall extend over the operator under all normal truck operations, including forward tilts.

(a) Where materials being handled are of such dimensions that objects could fall through the above protection, then substantial guarding, such as expanded metal, woven wire, or similar materials, shall be used in addition to the above (see rule 4123:1-5-99 of the Administrative Code).

(b) Exception: Where headroom conditions are such that overhead protection cannot be used because of clearance, means of limiting the lift height shall be provided and the load shall not extend above the operator's head.

(3) In stacking or tiering operations, where the load extends above the backrest and may endanger the operator, load backrest extensions shall be provided and used.

(E) Motor vehicles used to transport employees.

(1) Vehicles assigned to, or generally used for the transportation of employees shall be equipped with securely fastened seats and backrests.

(2) Tools and material transported in the same compartment with employees shall be secured to prevent movement.

(F) Powered industrial trucks.

(1) General requirements.

(a) All nameplates and markings shall be affixed in place and maintained in legible condition.

(b) Modifications or additions which affect capacity shall conform with manufacturer's specifications. Capacity, operation, and maintenance instruction plates, tags, or decals shall be changed accordingly.

(c) Where trucks are designed to permit the interchange of front-end attachments, each attachment shall be marked to identify it and show its approximate weight and capacity, together with instructions to consult truck nameplate for combination capacity at maximum elevation with load laterally centered.

(d) Trucks shall not be altered so that the relative positions of the various parts are different from what they were when originally received from the manufacturer, nor shall they be altered either by the addition of extra parts not provided by the manufacturer or by the elimination of any parts, except

as provided in paragraph (F)(1)(e) of this rule. Additional counterweighting of fork trucks shall not be done unless authorized by the truck manufacturer.

- (e) Trucks originally approved for the use of gasoline for fuel may be converted to liquefied petroleum gas (LPG) fuel; provided the conversion meets the manufacturer's specifications.
  - (f) Moving parts that represent a hazard to the operator in the normal operating position shall be guarded.
  - (g) Employees shall not be required to operate any truck that is not equipped with an adequate, properly maintained braking system.
  - (h) Only employees who have been trained and are authorized by their employer shall be required to operate a powered industrial truck.
- (2) Restricted locations for fire safety purposes.
- (a) The location or atmosphere shall be classified, as to whether it is hazardous or nonhazardous, prior to trucks being used therein.
  - (b) Trucks shall not be used in atmospheres containing explosive or flammable concentrations of liquids, gases, or vapors, such as, but not limited to, acetylene, butadiene, or hydrogen.
  - (c) Under the following described conditions trucks may be used only if designed and built specifically for use therein (see appendix to this rule for "Summary Table on use of Industrial Trucks in Various Locations"):
    - (i) Atmospheres containing explosives or flammable concentrations of metal dust, such as aluminum, magnesium, and their alloys, or other metals of similarly hazardous characteristics;
    - (ii) Atmospheres containing explosives or flammable concentrations of dust in grain processing operations, such as starch plants, malting plants, and other occupancies of similar nature;
    - (iii) Atmospheres containing explosive or flammable concentrations of dust from coal, coke, carbon black, or similar materials;
    - (iv) Locations hazardous due to the presence of easily ignitable fibers or flyings which may or may not be in suspension in the air;
    - (v) Locations where deposits or accumulations of the aforementioned dusts may be ignited by arcs or sparks originating in the truck;

(vi) Locations where easily ignitable fibers are stored or handled, including outside storages.

(3) Lighting and ventilating for operating areas.

(a) Where general lighting is less than two lumens per square foot, auxiliary directional lighting shall be provided on the truck.

(b) Adequate ventilation shall be provided in enclosed areas as required in rule 4123:1-5-18 of the Administrative Code (see also the current edition of "Threshold Limit Values (TLVs) for Chemical Substances in the Work Environment" adopted by the "American Conference of Governmental Hygienists (ACGIH)."

(4) Lifting of personnel.

Lift trucks equipped with vertical only, or vertical and horizontal travel controls using a lifting carriage or forks for lifting of personnel shall:

(a) Have a platform with standard guardrails, intermediate rail, and toeboards, and a mast guard seventy-two inches in height, all securely fastened to the lifting carriage or forks;

(b) Have controls whereby personnel on the platform can shut off power to the truck and the platform, provided that such controls shall not be required if there is a truck operator in attendance at the truck controls at all times when the platform is raised; and

(c) Have overhead protection on the work platform where the employee is exposed to falling objects.

(G) Highway-type trucks, trailers, and railroad cars.

(1) Wheel chocks shall be provided and employees instructed to place them under the rear wheels to prevent highway-type trucks and trailers from rolling while they are being loaded or unloaded by powered industrial trucks. Equivalent protection may be provided instead of wheel chocks.

(2) Wheel stops or other recognized protective devices shall be provided and used to prevent railroad cars from moving while they are being loaded or unloaded by powered industrial trucks.

(3) Warning signals, i.e., blue lights at night and blue flags in the daytime, shall be placed at any end of a car accessible by switch engines to warn against movement of railroad cars while dockboards or bridge plates are in position.

(H) Marine operations and equipment.

When employees are required to step or operate a vehicle to or from a wharf, float, barge, or towboat, a ramp with side boards or a walkway shall be provided substantial in construction and fastening.

Effective: 4/10/11

Prior Effective Dates: 8/1/77; 1/1/86