



# Wichita-Sedgwick County Metropolitan Area Building and Construction Department

# **Attention Contractors:**

There are several important changes that we all need to be aware of with the adoption of the 2015

<u>Safety Code for Existing Elevators and Escalators along with the Wichita-Sedgwick County Unified Building and</u>

Trade Code.

<u>Article IV (UBTC):</u> Section 4.5.020 (B) – Installations Standards for existing elevators, dumbwaiters, escalators, moving walks, material lifts and related hoistway installations. With the adoption of the A17.3 existing elevator safety code, we have structured a five year code compliance schedule to allow the building owners the time needed to bring the older elevators and associated equipment up to a current safety standard as set by the A17.3 code.

# 30 days after 2018 safety test

All sections of the code not listed under one of the other criteria's including but not limited to;

## 2.2.3 Lighting

Permanent electric lighting shall be provided in all machine rooms and machinery spaces.

#### 2.6.6 Pull Straps

Manually operated, vertically sliding biparting entrances of elevators that can be operated from the landings shall be provided with pull straps on the inside and outside of the door. Pull straps shall be provided on the car side of doors of elevators that can be operated from the car only. The length of the pull straps shall conform to the following:

- (a) The bottom of the strap shall be not more than 79 in. above the landing when the panel is in the fully opened position.
- (b) The length of the strap shall not be extended by means of ropes or other materials.

## 3.7.4 Capacity Plates

(a) Every elevator shall be provided with a capacity plate permanently and securely fastened in place and located in a conspicuous position inside the car.

#### 3.7.5 Signs on Freight Elevators

In addition to the capacity plates required by 3.7.4, signs shall be provided in elevators not permitted to carry passengers that read: "THIS IS NOT A PASSENGER ELEVATOR, NO PERSONS OTHER THAN THE OPERATOR AND FREIGHT HANDLERS ARE PERMITTED TO RIDE ON THIS ELEVATOR."

# 1-year after 2018 safety test - (2019)

#### 2.1.2 Windows in Hoistway Enclosures

Every hoistway-window opening ten stories or less above a thoroughfare, and every such window opening three stories or less above a roof of an adjacent building, shall be guarded on the outside

## 2.1.3 Projections in Hoistway

(b) Landing sills, except for elevators equipped with vertically sliding biparting counterbalanced doors or with vertically sliding counterweighted doors, which slide down to open, shall be guarded on the underside with guard plates

## 2.1.3 Projections in Hoistway

(I) Where a car leveling device is provided and the hoistway edge of the sill is either flush with or projects into the hoistway, the guard shall have a straight vertical face extending below the sill not less than the depth of the leveling zone plus 3 in.

#### 2.1.4.2 Air Ducts and Wiring

(a) All air ducts, wiring, raceways, and cables currently in the hoistway shall be securely fastened to prevent interference with the operation of the elevator equipment.

#### 2.3.1 Access to Pits

(a) Means of access for authorized personnel shall be provided to all pits.

#### 2.3.3 Stop Switch

A stop switch conforming to the requirements of 3.10.4(e) shall be provided in the pit of every elevator.

#### 2.7.3 Elevator Parking Device

(a) Parking Devices Required. Elevators that are operated from within the car only shall have elevator parking devices installed at every landing that is equipped with an unlocking device.

#### 2.7.4 Access to Hoistway

Hoistway door unlocking devices or hoistway access switches shall be provided on elevators having hoistway doors that are unlocked when closed with car at landing, or locked but openable from the landing by means effective only when the car is in the landing zone. Hoistway door unlocking devices shall be permitted to be provided at all landings for emergency purposes.

#### 3.3.5 Protection of Platforms against Fire

The underside of wood platforms, the exposed surfaces of wood platform stringers, and edges of laminated platforms shall be protected against fire by one of the following methods:

#### 3.4.4.1 Top Emergency Exits

(a) For elevators installed in enclosed hoistways, cars shall be provided with a car top emergency exit with a cover hinged or otherwise attached to the car top so that the cover can be opened from the top of the car only and opens outward.

#### 3.5.1 Car Safeties

The car of every elevator suspended by wire ropes shall be provided with a safety capable of stopping and sustaining the car with rated load.

#### 3.5.5 Maximum Permissible Movement of Governor Rope to Operate the Safety Mechanism

- (a) For car safeties
  - (I) 200 ft. /min or less, 42 in.
  - (2) 201 ft. /min to 375 ft. /min, 36 in.
  - (3) Over 375 ft. /min, 30 in.
- (b) For counterweight safeties, 42 in. for all speeds.

#### 3.9.2 Final Terminal Stopping Devices

Enclosed upper and lower final terminal electromechanical stopping devices shall be provided and arranged to prevent movement of the car by the normal operating devices in either direction of travel after the car has passed a terminal landing.

#### 3.10.1 Types of Operating Devices

Manually actuated rope (i.e., shipper rope) or rod operating devices, or rope operating devices actuated by wheels, levers, or cranks shall not be used.

#### 3.10.2 Car-Switch Operation Elevators

Handles of lever-type operating devices of car-switch operation elevators shall be so arranged that they will return to the stop position and latch there automatically when the hand of the operator is removed.

#### 4.5.2 Pressure Tanks

- (c) Pressure Gage. Tanks shall be provided with a pressure gage that will indicate the pressure correctly to not less than 1 1/2 times the pressure setting of the relief valve.
- (d) Inspector's Gage Connection. Tanks shall be provided with 0.25 in. pipe size valve connection for attaching an inspector's pressure gage while the tank is in service.

# 2-years after 2018 safety test - (2020)

#### 2.1.4 Pipes, Air Ducts, and Wiring

(d) Existing pipes that cannot be removed or rerouted shall be securely fastened and covered to separate them from the hoistway, prevent leakage or condensate from entering the hoistway.

#### 2.2.4 Ventilation

Machine rooms shall be provided with natural or mechanical ventilation to avoid overheating of the electrical equipment and to ensure safe and normal operation of the elevator.

## 2.8.2 Reopening Device for Power-Operated Car Doors or Gates

Where required by 2.8.1, a power-operated car door or gate shall be provided with a reopening device that will function to stop and reopen the car door or gate and the adjacent hoistway door in the event that the car door or gate is obstructed while closing.

#### 3.6.1 Speed Governor Overspeed and Car Safety Mechanism Switches

A switch shall be provided on the speed governor and operated by the overspeed action of the governor when used with Type B and Type C car safeties of elevators having a rated speed exceeding 150 ft. /min.

#### 3.10.4 Electrical Protective Devices

Electrical protective devices shall be provided.

# 3-years after 2018 safety test – (2021)

#### 3.6.2 Governor Ropes

Governor ropes shall be of iron, steel, monel metal, phosphor bronze, or stainless steel. They shall be regular-lay construction, and not less than 0.375 in. in diameter. Tiller-rope construction shall not be used.

#### 3.10.3 Top-of-Car Operating Devices

(a) Elevators with automatic or continuous-pressure operation shall have a continuous-pressure button operating switch mounted on the top of the car for the purpose of operating the car solely from the top of the car. The device shall operate the car at a speed not exceeding 150 ft. /min.

#### 4.7.2 Top-of-Car Operating Devices

Top-of-car operating devices shall be provided and shall conform to the requirements of 3.10.3, except for uncounterweighted elevators having a rise of not more than 15 ft."

# 4-years after 2018 safety test - (2022)

#### 2.2.2 Access to Machine Rooms and Machinery Spaces

A permanent means of access to elevator machine rooms and machinery spaces shall be provided for authorized persons. Access doors to machine rooms and machinery spaces shall be kept closed and locked. The only means of access to a machine room shall not be through the hoistway.

#### 2.6.1 Doors or Gates Required

(b) Freight Elevators. Hoistway-landing openings for freight elevators shall be provided with entrances that guard the full width of the opening, and guard the height to a minimum of 6 ft. above the landing sill.

# 5-years after 2018 safety test - (2023)

#### 3.4.2 Car Doors and Gates

(a) Doors, Gates, and Electric Contacts. Cars shall have a car door or gate provided at each entrance equipped with a car door or gate electric contact.

# 3.11.3 Firefighters' Service

Elevators shall conform to the requirements of ASME/ANSI A17.1 1987 Rules 211.3 through 211.8 unless at the time of installation or alteration it was required to comply with a later edition of A17.1.

#### 4.3.3 Hydraulic Elevators

Hydraulic elevators that have any portion of the cylinder buried in the ground and that do not have a double cylinder or a cylinder with a safety bulkhead shall

- (a) Have the cylinder replaced with a double cylinder or a cylinder with a safety bulkhead protected from corrosion
- (b) Be provided with a device meeting the requirements of Section 3.5 or a device arranged to operate in the down direction at an overspeed not exceeding 125% of rated speed.
- (c) Have other means acceptable to the authority having jurisdiction to protect against unintended movement of the car as a result of uncontrolled fluid loss.

This is not a complete list of all the changes, but a list of highlights that will affect the ELEVATOR industry.