

# 2021 Virginia Construction Code

## CHAPTER 30 ELEVATORS AND CONVEYING SYSTEMS

### SECTION 3004 CONVEYING SYSTEMS

#### 3004.1 General.

Escalators, moving walks, conveyors, personnel hoists and material hoists shall comply with the provisions of [Sections 3004.2 through 3004.4](#).

#### 3004.2 Escalators and moving walks.

Escalators and moving walks shall be constructed of *approved* noncombustible and fire-retardant materials. This requirement shall not apply to electrical *equipment*, wiring, wheels, handrails and the use of  $1/28$ -inch (0.9 mm) wood veneers on balustrades backed up with noncombustible materials.

##### 3004.2.1 Enclosure.

Escalator floor openings shall be enclosed with *shaft enclosures* complying with [Section 713](#).

##### 3004.2.2 Escalators.

Where provided in below-grade transportation stations, escalators shall have a clear width of not less than 32 inches (815 mm).

#### 3004.3 Conveyors.

Conveyors and conveying systems shall comply with [ASME B20.1](#).

##### 3004.3.1 Enclosure.

Conveyors and related *equipment* connecting successive floors or levels shall be enclosed with *shaft enclosures* complying with [Section 713](#).

##### 3004.3.2 Conveyor safeties.

Power-operated conveyors, belts and other material-moving devices shall be equipped with automatic limit switches that will shut off the power in an emergency and automatically stop all operation of the device.

#### 3004.4 Personnel and material hoists.

Personnel and material hoists shall be designed utilizing an *approved* method that accounts for the conditions imposed during the intended operation of the hoist device. The design shall include, but is not limited to, anticipated loads, structural stability, impact, vibration, stresses and seismic restraint. The design shall account for the construction, installation, operation and inspection of the hoist tower, car, machinery and control *equipment*, guide members and hoisting mechanism. Additionally, the design of personnel hoists shall include provisions for field testing and maintenance that will demonstrate that the hoist device functions in accordance with the design. Field tests shall be conducted upon the completion of an installation or following a major *alteration* of a personnel hoist.