Technical Safety Authority of Saskatchewan

Web Notice

Design Registration Submissions for Elevating Devices

The design registration submissions for all elevating devices can also be sent electronically to our designated email address at elevatordesign@tsask.ca for your convenience. This will include any manuals which may be required for the design registration process.

The documents will be reviewed and a stamped approved copy of the relevant material will be sent to the submitter directly upon completion.

This provides another option for the contractor rather than sending in duplicate paper copies for the approval process.

Below the information that is required to be submitted for elevator design registration.

P-4 REG 2 PASSENGER AND FREIGHT ELEVATOR, 2017

PART 1
Amendments to ASME A17.1-2013/CSA B44-13 Safety Code for Elevators and Escalators [Section 2 and Clause 4(1)(a)]
Code amended
1 The ASME A17.1-2013/CSA B44-13 Safety Code for Elevators and Escalators is amended in the manner set forth in this Part.
Rule 2.27 amended

2 Rule 2.27.3.2.2(a) is amended by striking out “lobby” and substituting “floor”.
Rule 2.27.11 repealed

3 Rule 2.27.11 is repealed.
Rule 5.3 repealed

4 Rule 5.3 is repealed.
Rule 5.4 repealed

5 Rule 5.4 is repealed.
Rule 5.7 repealed

6 Rule 5.7 is repealed.
Rule 5.9 repealed

7 Rule 5.9 is repealed.
Rule 5.11 repealed

8 Rule 5.11 is repealed.

PART 2
Details for Drawings and Specifications [Section 16]

Drawings and specifications submitted for review on registration must contain:

(a) the details specifically mentioned in the applicable code;

(b) the name and address of the building and the owner;

(c) the name and address of the architect and general contractor;

(d) the name of the elevator contractor and manufacturer;

(e) the elevator contractor's sales or code numbers for each machine;

(f) the class of service - passenger or freight;

(g) the class of loading - A, B or C;

(h) the type of machine - traction, drum or hydraulic;

(i) the type of operation;

(j) the type of control;

(k) the rated load;

(l) the contract speed;

(m) the roping - 1:1, 2:1, etc;

(n) the number, size and length of ropes;

(o) the diameter of sheaves and drums;

(p) the distance of travel;

(q) the number of stops and openings;

(r) the motor output and voltage rating;

(s) the clearance in and dimensions of the machine room;

(t) the location of disconnect and light switches in the machine room;

(u) the detail of access to the machine room and pit;

(v) the type of hoistway enclosures and specific arrangement for ventilation, if required by the applicable code;

(w) the hoistway dimensions - plan and elevation showing projections, ledges, etc;

(x) all horizontal and vertical clearances - final top and bottom car and counterweight clearances;

(y) the type of hoistway doors - manual or power;

(z) the distance between hoistway and car doors, showing sight guards, if required;

(aa) the type of door locks - mechanical locks and contacts or interlocks;

(bb) all weights and reactions;

(cc) the effective platform area;

(dd) electric and hydraulic schematic diagrams indicating safety-related circuitry and components and identifying the sequence of operation of the safety-related equipment;

(ee) the manufacturer's test procedures for safety-related equipment or components, as identified under the testing procedures in the applicable code;

(ff) the maximum bracket spacing;

(gg) the estimated maximum vertical forces on the guide rails on application of the safety or other retarding device;

(hh) in the case of freight elevators for Class B or C loading the horizontal forces on the guide rail faces during loading and unloading, and the estimated maximum horizontal forces in a post-wise direction on the guide rail faces on the application of the safety device;

(ii) the size and linear weight kg/m (lb/ft) of any rail reinforcement, where provided;

(jj) the total static and impact loads imposed on machinery and sheave beams, supports, and floors or foundations;

(kk) the impact load on buffer supports due to buffer engagement at the maximum permissible speed and load;

(ll) where compensation tie-down is applied, the load on the compensation tiedown supports the total static and dynamic loads from the governor, ropes, and tension system;

(mm) the horizontal forces on the building structure;

(nn) the maximum upward movement;

(oo) the net vertical load from the elevator system, which includes the total car weight and rated load, plunger, cylinder, and oil and structural supports;

(pp) the outside diameter and wall thickness of the cylinder, plunger, and piping, and the working pressure;

(qq) rated speed and operating speed in the down direction;

(rr) the minimum “grade” of pipe (ASTM or recognized standard) required to fulfil the installation requirements for pressure piping, or in lieu of a specific “grade” of pipe, the minimum tensile strength of pipe to be used for the installation;

(ss) the length of the plunger and cylinder;

(tt) the clearance between the bottom of the plunger and the bottom head of the cylinder.