



Conveyance Plan Review Submittal Checklist

Use of Checklist:

This checklist helps people determine the items and details they need to include on permit drawings when new conveyances are being installed or existing conveyances are being altered. Conveyances are elevators, escalators, dumbwaiters, material lifts, accessibility lifts and moving walks, etc.

Definitions and Acronyms:

ASME. American Society of Mechanical Engineers

SDCI. Seattle Department of Construction and Inspections

Building official. The Director of the Seattle Department of Construction and Inspections or a duly authorized representative.

Limitations:

Section 3007 of the Seattle Building Code also includes general requirements for permit drawings that are submitted with conveyance permit applications. This checklist provides greater detail on these general requirements. The items required by section 3007, the checklist below, and the requirements of ASME A17.1, 2.28 Safety Code for Elevators and Escalators referenced in this document must be included in the permit drawings submitted to SDCI for review.

General Requirements for Conveyance Permit Drawings:

- 1. The conveyance permit drawings shall be submitted in two or more sets or shall be submitted in electronic format with the conveyance permit application.
- 2. The drawings shall show beams, attachments, loads and reactions/calculations, and shall be reviewed and stamped by a professional engineer, registered in the state of Washington and by the structural engineer in responsible charge for the building.
Note: An engineer's stamp is not required for hydraulic elevators.
- 3. The drawings shall be easily read (legible).
- 4. The installation of a conveyance shall not begin until an approved set of drawings and permit has been issued by the *building official*.
- 5. The stamped, approved drawings and the conveyance permit shall be posted on the job site during the installation or alteration and shall remain on the job site until the conveyance has passed the final SDCI inspection.

Checklist:

1. The drawings shall include the items listed in the layout criteria of ASME A17.1/CSA B44, 2.28.1 and items (1)-(6) below (as applicable):

- (1) A machine/control room drawing (plan view) identifying location and, room dimensions, location of drive machine, motor controller, mainline disconnect, light switch, and door swing (show 48" for all electrical clearances and working clearances).
- (2) A hoistway plan view identifying hoistway and conveyance equipment dimensions and clearances, footprint of car enclosure showing doors and inside net dimensions, location and dimensions of hoistway, and car door or gates.
- (3) A hoistway elevation view identifying elevation of the hoistway and conveyance equipment dimensions and clearances, the location of the pit ladder (distance from wall and width), pit light, light switch, pit stop switch, and top and bottom vertical car clearances. The height to the

maintainable equipment at the top of the hoistway from the horizontal plane of the top of the car with the car positioned at the top landing shall be indicated on the hoistway elevation plans.

(4) Detail drawings identifying specific details of conveyance components: Rail bracket fastening, sill support and fastening, machine beams, entrance assembly detail (name, trademark or file number), and additional seismic requirements (see ASME A17.1, Section 8.4 or 8.5 as applicable).

(1) General conveyance data to include:

- (a) Conveyance type (e.g., electric, hydraulic, platform lift, etc.).
- (b) Rated capacity and speed.
- (c) Building designation (e.g., Elev. #1, Car #2, etc.).
- (d) Entrance assembly details ASME A17.1, 2.11.15 and 2.11.18.
- (e) Car enclosure (construction material and ventilation) including weight allowances for cab and flooring. ASME A17.1, 2.14.2.
- (f) Standoff panels. Submit test data showing compliance with ASTM E 84 and/or ANSI/UL 723 (if applicable).
- (g) Door type and manufacturer (single speed, two-speed, center opening, right hand (RH)/left hand (LH) opening.
- (h) Car and hall fixture detail.
- (i) Finish floor materials (thickness and size of product). Submit test data showing compliance with ASTM E 648 and critical radiant flux of adhesive (if applicable).
- (j) Power unit/drive motor (manufacturer and HP).
- (k) Equipment heat generation (in BTU's) for elevator equipment and, where provided, for transformers.
- (l) Size, number, or type of compensation means.
- (m) Emergency brake manufacturer and type.
- (n) Car buffer type, impact, and stroke.
- (o) CWT buffer type, impact, and stroke.
- (p) Designed top/bottom runby.

(2) Additional electric and/or roped hydraulic elevator data to include:

- (q) Size and number of suspension means.
- (r) Roping type (1:1, 2:1, underslung).
- (s) Governor location.
- (t) Governor rope size and type.
- (u) Safety manufacturer and type.

(3) Additional hydraulic and/or roped hydraulic elevator data to include:

- (v) Jack assembly manufacturer.
- (w) Plunger outside diameter (OD). (if telescoping, O.D. of each section).
- (x) Plunger wall thickness.
- (y) Cylinder outside diameter and wall thickness.
- (z) Overspeed valve (hydraulic only).

(5) For alteration permits, provide documentation for the scope of work, per 1 - 4 above and ASME A17.1, 8.7.

(6) For car enclosure alteration permits, provide weight differential documentation containing the total weight of items removed, added, and the resulting percent of differential to the original designed cab weight per ASME A17.1, 8.7.2.15.2.

Note: The checklist is based on the Washington Administrative Code conveyance submittal list (WAC 296-96-02421), requirements found in ASME A17.1/CSA B44, 2.28.1, and Seattle-specific requirements.