

# SELECTING A WHEELCHAIR LIFT

*or in code parlance, a VERTICAL PLATFORM LIFT (VPL)*

Wheelchair lifts are available in two styles- vertical platform lifts and inclined platform lifts. The verticals are the most common and the inclined are normally only used when there isn't sufficient space for the vertical. Most disable users prefer the vertical because they feel very conspicuous on the open platform of an inclined unit.

The rules governing the use and installation of lifts are many. There are two codes and three standards. In California there is Title 8 (General Industry Safety Orders, which includes the elevator code) and Title 24 (California Building Code). The standards are ASME A18.1-2003 (Wheelchair Lifts), The ADA(2004) and ANSI A117.1-2003. A18.1 is incorporated by reference as part of the elevator code. The ADA and A117.1 are Federal guidelines for adoption in whole or part by the individual states. The 2004 editions have not yet been approved by the Department of Justice although some of the items in them have been adopted in the California Building Code. Title 8 is a safety code while Title 24 is an accessibility code as far as wheelchair lifts are concerned.

Wheelchair lift layout drawings have to be approved by the local building departments or Division of State Architect (DSA) in the case of public buildings such as schools. Their approval is based on meeting Title 24. After installation inspection is performed by the Elevator, Ride and Tramrail (ERT) Division of Cal/ OSHA. The elevator inspector issues a temporary permit to operate at the time of inspection followed by the permanent permit from the Elevator Division office a few weeks later. This permit is required before a Certificate of Occupancy will be issued.

There are conflicts between the requirements of the various codes and standards. The elevator inspector only inspects based on the requirements of the elevator code and good safety practices. DSA, when reviewing plans prior to construction, will often require stamped structural calculations for lifts going over 5 ft. of travel.

Portable lifts are not covered by the codes and come under the General Industry Safety Orders. They do not require inspection. Normally they can only be used with portable stages.

The various codes and standards can be found listed on the McKinley website.

## VERTICAL PLATFORM LIFTS (VPL)

VPL's can be classified in three types-

1. Lifts with travel up to five foot. These can be unenclosed or enclosed.- The National Wheel-O-Vator model designations are BC, HBC, CDE, HCDE, PCDE, HPCDE with the maximum travel of the lift following. i.e. BC-42, 42" maximum travel.
2. Lifts with travel five to twelve feet must be enclosed. Those with a with a prefab enclosure are Models CDE, HCDE. HPCDE
3. Lifts with travel five to twelve foot with a runway enclosure fabricated in the field are. Model BC, HBC.

VPL nomenclature is as follows:

1. Lifts with a screw drive are BC and CDE. Speed is 9 fpm. Noise level is under 70 db'l's. Models with an FSV after the travel height means fast screw vertical and travel at 30 fpm.
2. Lifts with an H are hydraulic drive. Speed is 20 fpm.. Noise level is under 70 db'l.
3. Lifts with a P mean the panels are either plexiglass or laminated safety glass. Choice is clear or smoked.

VPL Options:

All are listed in the specification with code sections where applicable. The major ones are listed below:

- 1 Battery backup for drive system. This is required by Title 24 if lift is on an egress path of travel.

2. Remote alarm or phone is required if some is not always within the sight of the lift to take action when the alarm on the lift is sounded. The key word is always , and the decision as to whether it is required is made by the elevator inspector. This is required by Title 8

3. Auxiliary lighting is required if the main lighting goes out per Title 8. This can be done accomplished in the electrical section or on the lift, if so specified.

4. Power operators are required on all lifts except a straight through layout per Title 24.

5. Ninety degree turn platforms must be 42” x 60” clear with variations allowed to 48” x 54” clear.

6. 14 ft. travel is allowed by ASME A18.1-2005. To do this in California requires a variance from the OSHA Standards Board.

There are many other options listed in the lift specification sheet. The specification sheet is available in pdf. Proper editing is crucial for a clear spec. We suggest that you have your final plan and spec for wheelchair lift reviewed by our representative for code compliance before project is put out for bid. For projects in Southern California call Randy Weiler; in Northern California Neil Chaitin. Phone is 800-229-7275. Feel free to call them during the writing process for guidance.