



Policy L.10

Platform Lifts and Stairway Chairlifts

The purpose of this policy is to clarify the requirements, allowances and restrictions for Platform lifts and Stairway Chair lifts installed within stairways and private residence garages and to provide information regarding the interface between the codes that govern these conveyances and structures. Platform lifts and Stairway chairlifts shall be installed in compliance with the applicable editions of the ASME A18.1-Safety Standard for Platform Lifts and Stairway Chairlifts (A18.1), International Building Code (IBC), International Existing Building Code (IEBC), International Residential Code (IRC), International Fire Code (IFC) and the National Electrical Code (NEC) that are in effect at the time of permit application.

Private Residence units are those which are installed in or at a private residence for use by the mobility impaired (A18.1 – Sections 5, 6 & 7). The A18.1 code book defines “*Private Residence*” as “*a separate dwelling or a separate apartment in a multiple dwelling that is occupied only by the members of a single family*”. Each unit requires a permit which involves plan review and inspection by the MOA Elevator Inspection Section.

Although inclined and vertical platform lifts (IPLs and VPLs) and stairway chairlifts (SCLs) may increase accessibility and safety for mobility impaired individuals, the devices introduce obstructions that can make a stairway more difficult to use and negotiate for others. Consequently, code writing agencies have established protocols for these conveyance installations.

Private Residence – Platform Lifts and Stairway Chairlifts installed within a garage:

Electrical switches and electrical equipment found on VPLs, IPLs and SCLs can serve as a possible electrical ignition source as defined by the jurisdiction, but the ignition source risk has been determined to be relatively low because of the following conditions:

1. The equipment cannot start up and operate automatically and it must have a person present at the controls to operate.
2. The equipment primarily utilizes low voltage with its control and operation circuitry.

With the determined low risk for this equipment and the need for this equipment to provide access to a residence from the garage floor level for persons with mobility impairments, accessibility equipment regulated by the ASME A18.1 standard shall be permitted to be installed with electrical equipment and switches located beneath the 18 inch minimum height restriction for recognized electrical ignition sources. The allowance for this equipment to be installed at any height within a garage applies only to the equipment itself, as any disconnecting means that is not a designed component of the equipment and any receptacle that is to be used as the power source for this equipment will be required to be elevated not less than 18 inches above the floor surface of the garage.

Private Residence – Inclined Platform Lifts and Stairway Chairlifts:

A private residence (or dwelling unit) can fall under the jurisdiction of either the IRC or IBC. The IRC regulates detached single-family homes, duplexes and townhouses, while the IBC regulates all other dwelling units. Since the IRC does not recognize stairway chairlifts, the MOA has made the determination that IPLs and SCLs shall be allowed in those structures regulated by the IRC as long as the installation complies with the IBC. The IBC recognizes IPLs and SCLs only within dwelling units under Section 1009.4 Exception 4 (2012 edition) and Section 1011.2 Exception 3 (2018 edition). The exception reads as follows:

Where an incline platform lift or stairway chairlift is installed on stairways serving occupancies in Group R-3, or within dwelling units in occupancies in Group R-2, a clear passage width not less than 20 inches shall be provided. If the seat and platform can be folded when not in use, the distance shall be measured from the folded position.

Each IPL and SCL shall have the 20-inch measurements taken when in the parked positions at the ends of the rail, or when they are parked on their charging contacts. The 20-inch clearance shall not apply along the incline, and the 20-inch clearance shall not apply to IPLs and SCLs that have the ability to park outside the stairway. The 20-inch clearance requirement shall be met when practicable. Where not practicable a reduction up to one inch may be permitted.

When an IPL or SCL is installed within a dwelling unit, a code compliant handrail is required opposite the lift. Current handrail requirements are found in the IRC Section R311.7 or the IBC Section 1012 (2012 edition) and Section 1014 (2018 edition). This will result in one unobstructed handrail available for use in the stairway. It will be the practice in the MOA to allow a handrail to project not more than 4.5 inches into the required 20" clear passage width, and to allow base molding, stringers, etc. to project not more than 4.5 inches into the required 20" clear passage width.

When a lift is installed adjacent to an entry/exit door, the door must be openable to at least 90 deg. In some cases, this may mean changing the swing of the entry/exit door.

Residential Assisted Living Facilities:

IBC Section 310 classifies residential assisted living facilities housing 5 or fewer residents as Group R-3 and those housing 6 to 16 residents capable of self-preservation as Group R-4. Stairway chair lifts installed in residential assisted living facilities shall comply with ASME A18.1, Section 4 and will be issued a MOA tag number and be subject to periodic inspection by the jurisdiction. The clearance allowances in a private residence do not apply to a Group R-4 assisted living facility.

Commercial Building – Inclined Platform Lifts and Stairway Chairlifts:

The IBC and IEBC do not recognize the use of SCLs other than within a dwelling unit; SCLs do not qualify as an accessible route. IBC Section 3411.8.3 (2012 edition) and IEBC Section 305.8.3 (2018 edition) commentaries indicate that a chairlift is "*not acceptable as part of an accessible route in either new or existing construction.*"

IPLs and SCLs are not allowed on stairs required for egress because the lifts interfere with use of the stair and conflict with basic stairway code requirements. IPLs and SCLs may be allowed on a redundant stair that is not required to serve as a means of egress. IPLs and SCLs may not be installed in exits per IBC Section 1020.1 (2012 edition) and Section 1022.1 (2018 edition). Each case must be evaluated by MOA Architectural and Fire Plan Review prior to permit submittal to determine if the stair is redundant and not required for egress. In order to determine whether a stairway is a required means of egress, Plan Review needs to be provided the number of stories, floor area per story, various uses throughout the building and locations and widths of all stairs. Note that most buildings require at least 2 stairways for egress and some require more. Basic floor plans are usually required to make a determination. If approved for installation by Plan Review, a permit application may then be submitted by the lift contractor to the MOA Elevator Inspection section for review, permit issuance and subsequent inspections. IPLs and SCLs installed in commercial buildings are subject to periodic inspections.

Additional Information:

The following IBC code sections and commentary language are part and only part of the analysis to be used by the MOA Plan Review Dept., and will apply to each permit application as it is reviewed for code compliance and possible installation:

IBC Section 1009.4, Exception 4 (2012 edition) and Section 1011.2, Exception 3 (2018 edition) addresses the use of IPLs and SCLs serving individual dwelling units. For clarification on the types of lifts, see the commentary to Section 1109.8. Both types of lifts may be installed to aid persons with mobility impairments in their homes.

IBC Section 1109.8 addresses when platform lifts are permitted to be a part of a required accessible route in new construction. Platform lifts qualify as an accessible route in existing buildings; however, IPLs cannot be installed on a stair that is a required means of egress.

IBC Section 3411.8.3 (2012 edition) and IEBC Section 305.8.3 (2018 edition) commentaries indicate that these sections provide for the use of platform (wheelchair) lifts in existing buildings. In order to create an accessible route where there are changes in floor levels, the provisions for new construction would most often require the installation of an elevator or ramp. Platform lifts are allowed in new construction for limited conditions (see IBC Section 1109.8). If the space, construction or site constraints in an existing building precludes the installation of an elevator or ramp, a platform lift may be the only practical solution. Given the choice between no accessibility or accessibility by a platform lift, accessibility is preferable. Note that in accordance with IBC Section 1007.5 (2012 edition) and Section 1009.5 (2018 edition), platform lifts are also permitted for an accessible means of egress; however, accessible means of egress are not required in existing buildings undergoing alterations in accordance with IBC Section 3411.6, Exception 2 (2012 edition) and IEBC Section 305.6, Exception 2 (2018 edition).



Robert Doehl, Building Official
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