

Instructions For Completing Form UCC-21 (REV 10-05): APPLICATION FOR CONSTRUCTION PERMIT: LIFTING DEVICES

PAGE 1:

Part A:

Building owner's name and contact information. This must be filled out completely.

Part B:

1. The location and name of the building where the lift is installed should include not only the mailing address, but also the name of the political subdivision (Borough, City or Township) and the county. Provide all requested information.
2. Use and occupancy: we need to know what the building code use is for this building, for example, motel, school, office, etc.
3. Indicate if there is a basement.
Stories: include the basement as a story.
4. The question pertaining to existing equipment is crucial in helping to speed up the research process. If there is an existing lift of any type in the building, we have to identify it and use the same MD and sequential equipment number for the new lift. For this purpose, a building is defined as any portion of a structure that is under the same roof or connected with a common wall or a connecting corridor.

This would also pertain to a large complex of buildings, if all the buildings use a common MD number (as occurs at universities). In this case, we must know the MD assigned to the complex, and it is very important to know if there are any lifts in the specific building listed on the permit. If there are no lifts in the building listed on the permit, we will issue a new MD and no longer use the existing one.

5. Replacing an existing lift: This is a very important question. It helps us with the research to determine if a new Department File Number (MD) and Equipment Number will be assigned to this lift. If this is a replacement lift we have to use the same equipment number as the lift being removed/replaced. You will have to provide this information.

Part C:

Select the type of lift. If you do not see the specific type of lift listed, you must check "Other" and write in the type of lift as defined in the ASME codes. Examples: Other: Special Purpose Personnel Elevator, or, Other: Rack and Pinion, etc.

If you select a Freight Lift or a Combination Passenger/Freight, you must also select the class of loading (A, B, or C). If you check C, you must also circle 1 or 2 or 3.

Part D:

Select the type of drive. If you do not see the specific type of drive listed, you must check "Other" and write in the type of drive as defined in the ASME codes. Example: Other: Rack and Pinion

Part E:

1. Capacity, per the definition in the ASME §1.3, is the weight that the lift is designed to handle.
Net Inside Platform Area is the useable square footage inside the car. This is the dimension that is used to calculate the allowable capacity of the lift. Measure this according to ASME § 2.16.
2. Car Speed Up and Down must be listed. This is to be calculated per the definition "rated speed" and "operating speed in the down direction" in ASME §1.3.
3. Travel, per the definition in ASME §1.3, is the vertical distance traveled between bottom and top terminal landings.

No. of Stops (Landings) is the number of floors at which the elevator stops. This has nothing to do with the number of car or hoistway openings. It is possible to have front and rear openings at the same stop or landing. This would be two openings, but one stop.

4. No. of Openings is the number of openings front and rear per the definition in ASME §1.3. For example: 7 front and 3 rear. The lift may only have 7 stops (landings), but have 10 openings, because several landings have openings front and rear.

Floor Designation: list the floors as they will be identified in the building. For example: LL-G-1 thru 5, or SB-B-G-1 thru 6.

Part F:

1. Hoistway: This question is asking if the hoistway is newly constructed, regardless of its location within an existing building, new building or new addition.

Building: If a newly constructed addition was built to house the new elevator, or a completely new building was constructed that will house the new elevator, your answer should be "New." If the elevator is going into an existing structure (even if the hoistway is new but within the existing walls), your answer should be "Existing."

2. If you responded "yes" to the previous question about the building then clarify if it is an addition to an existing building. An addition could be one to three new walls attached to the existing building for the sole purpose of constructing a new hoistway for this lift. Or it could be a large addition that shares a common wall with the original structure. The key to identifying an "addition" is if there is at least one new exterior wall and it shares at least one common wall with the rest of the building.
3. Free Standing Building: We want to know if the building the lift is going into is completely separate from another building. If you stated above that this is New (Construction), clarify if the lift is being installed in a building that is not an addition, does not share a common wall with an existing structure and thus is Free Standing.
4. Describe in general terms the required construction of the hoistway. This is the construction that was approved when the building plans were approved. For example: masonry block, glass, etc. The fire rating is that which is required by the building code, 1-hour, 2-hour, etc.

PAGE 2:

Part G:

1. You must indicate whether the lift has met the accessibility requirements of the UCC. This approval would have been supplied by a certified Accessibility Inspector/Plans Examiner.
2. Does the car construction meet the fire and flame rating required by the ASME code?: Passenger cars must comply with §2.14.2. Other types of lifts must comply with the applicable sections governing that specific lift type. For example, § 5.2.1.14 (LULA Elevators) requires car enclosures to comply with §2.14, and Vertical Reciprocating Conveyors are required to comply with B-20, §5.15 (that imposes any fire-related requirements found in adopted building codes and other applicable standards).
3. State the number of cables, chains, or other means of suspension. **Only steel wire rope is permitted for elevator cars. Other types of lifts (such as Vertical Reciprocating Conveyors) may use other means of suspension. If an elevator is to use anything other than steel wire ropes a variance must be obtained.** The Factor of Safety must be provided for an individual rope, chain or other type of suspension means.
4. Interlocks are required unless specifically exempt by the code. If a "Labeled" interlock is not used, you must explain why. For example, you might state: "§2.12.3.1 permits combination mechanical locks and electrical contacts on a specific type of freight elevators at specific locations." Note: VRCs require interlocks --- see [Advisory on VRCs](#).
5. Top Car Clearance for Electric Elevators: The shortest vertical distance between the top of the car crosshead or the distance that any sheave or any other equipment mounted in or on the crosshead projects above the top of the car crosshead, whichever is greater, or, between the top of the car where no crosshead is provided and the nearest part of the overhead structure of any other obstruction, when the car floor is level with the top terminal landing. When determining top car clearance, you must use the formulas referred to in §§2.4.6, 2.4.7, 2.4.8, & 2.4.10.

Top Car Clearance for Hydraulic Elevators: The shortest vertical distance within the hoistway between the car crosshead or any other object on the car top that is higher than the crosshead and the top of the hoistway or the

horizontal plane of the lowest obstruction at the top of the hoistway (i.e., hoist beam). This measurement must be taken when the car is at its maximum upward movement (on the stop ring); refer to §§3.4.4 through 3.4.8.

Top CWT (Counterweight) Clearance: The shortest vertical distance between any part of the counterweight structure and the nearest part of the overhead structure or any other obstruction in the overhead.

- For Electric Elevators: When determining top counterweight clearance, refer to §2.4.9.
- For Hydraulic Elevators: When determining top counterweight clearance, refer to §3.4.6.

Bottom Car Clearance: The clear vertical distance from the pit floor to the lowest structural or mechanical part, equipment, or device installed beneath the car platform, when the car rests on its fully compressed buffers.

- For Electric Elevators: When determining bottom car clearance and refuge space, refer to §2.4.1.
- For Hydraulic Elevators: When determining bottom car clearance and refuge space, refer to refer to §3.4.1.

6. **Top Car Refuge for Electric Elevators:** An unobstructed horizontal area of not less than 5.4 sq. ft. must be provided on top of the car enclosure for refuge. It shall not be less than 24 inches on any side. The minimum vertical distance between the top of the car enclosure and the overhead structure or other obstruction at the top of the hoistway must be at least 43 inches, when the car has reached its maximum upward movement. See §2.4.12.

Top Car Refuge for Hydraulic Elevators: An unobstructed horizontal area of not less than 5.49 sq. ft. must be provided on top of the car enclosure for refuge. It shall not be less than 24 inches on any side. The minimum vertical distance between the top of the car enclosure and the horizontal plane described by the lowest point in the overhead structure must be at least 43 inches, when the car has reached its maximum upward movement. See §3.4.7.

7. **Bottom Refuge Space for Electric Elevators:** The area a person can go to for safety in the event of an emergency. This space must meet the minimum area spelled out in §2.4.1. It is important to also follow §2.4.1.6 regarding striping any area that does not meet the minimum requirements for refuge spaces.

Bottom Refuge Space for Hydraulic Elevators: The area a person can go to for safety in the event of an emergency. This space must meet the minimum area spelled out in §3.4.1.3. It is important to also follow §3.4.1.6 regarding striping any area that does not meet the minimum requirements for refuge spaces.

8. **Bottom Car Runby:** There is a minimum and maximum distance permitted. It is the distance between the car buffer striker plate and the striking surface of the car buffer, when the car floor is level with the bottom terminal landing. This is the distance spelled out for Electric Elevators in §§ 2.4.2 thru 2.4.4 and for Hydraulic Elevators in §§3.4.2 and 3.4.3.

Top Car Runby for Hydraulic Elevators: The distance the elevator car can run above its top terminal landing before the plunger strikes its mechanical stop. Refer to §§3.4.2 and 3.4.3.

9. **Bottom Counterweight Runby:** The distance between the counterweight buffer striker plate and the striking surface of the counterweight buffer when the car floor is level with the top terminal landing.
 - For Bottom Counterweight Runby for Electric Elevators: Refer to §§2.4.2 and 2.4.4.
 - For Bottom Counterweight Runby for Hydraulic Elevators: Refer to §3.4.6.

10. Specify the type of buffer used.

11. State the buffer stroke in inches for both the car and the counterweight (when counterweight is provided). See definitions in §1.3 for “spring buffer stroke” and “oil buffer stroke.”

12. Indicate whether the hoistway door and hoistway door buck are “Labeled” for fire rated assemblies.

13. The number of car door openings pertains to the elevator car (not the number of landing openings).

14. If a safety is required, it must be on the approved Department of Labor & Industry list. You must provide both the model number as it appears on the Certificate that was issued by the Department of Labor & Industry and the certification number that appears on the Certificate.

15. Specify the type of governor being used. For example: centrifugal. Specify the type of brake. For example: electro-mechanical.
16. Indicate whether a slack cable/chain is provided.
17. Indicate the amount of voltage supplied to the disconnect and the controller. Verify that the electrical service is three-phase.

Part H:

Provide any additional information you feel is necessary to help us understand the work you propose to do and to facilitate our review and approval.

Parts I and J:

Provide complete contact information for the general contractor and the elevator company responsible for the installation of the lift.

Part K:

The name and contact information provided here should be for the person who can provide additional information. Also, your permit submission will be returned (either approved or for corrections and additional information) to this address.

PAGE 3:

Part L:

Provide the building name and street address.

The drawing number requested is from the elevator plan and the architectural/engineering plans. This number must match the elevator drawings being submitted to the Elevator Division for review. Having the design professional reference this number will verify that the design professional did in fact design the building around the design and specifications on the elevator plans. This will eliminate potential conflicts at the time of the final inspection. See advisories regarding this subject.

You must provide information regarding plan approval for the building in which the lifting device(s) will be installed.

If the building plan was approved by the Department of Labor & Industry (under either the Fire and Panic regulations or the Uniform Construction Code), include all the information requested in the appropriate sections.

If a local government has jurisdiction for the building, include all of the municipality approval information. It is important that we receive the name and phone number of the Building Code Official, in the event that we have any questions regarding the building approval. Since many municipalities are using third-party agencies (as opposed to their own employees) to enforce the UCC, having this information will facilitate contacting the appropriate person and our approval of your application. Provide this information in the appropriate section.

Note: Do not confuse the City of Philadelphia's Department of Licenses and Inspections (L&I) with the Pennsylvania Department of Labor & Industry. If the City of Philadelphia approved the building, this should be listed in the municipality approval section.

Applicant Signature Box

The name of the person filling out and submitting the application (not the design professional) should be printed here, and the same person should sign and date the form. Note that, on page 2, a different individual can be designated to receive a copy of the approved application.