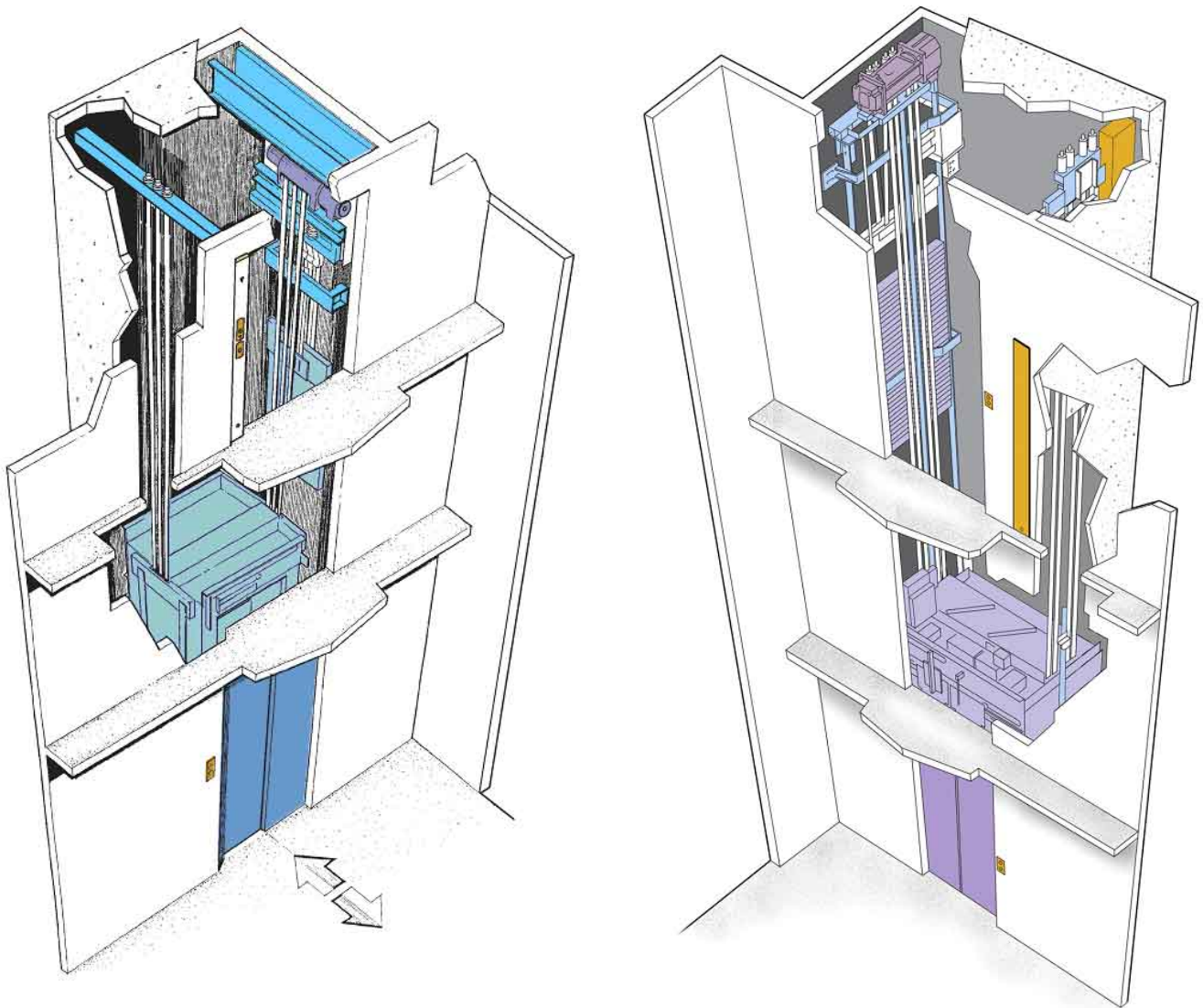


Builder's Guide

Gen2™ Builder's Guide



The Elevator Re-Imagined



Otis





A United Technologies Company

Dear Customer,

In order to install the elevator at your site it is important that the following pre-start *job-site essentials* are checked by you:

- 1) The hoistway, landings and pit must be complete, clean, dry and adequately protected against incoming water and inclement weather.
- 2) The hoistway dimensions are as per the contract layout drawings, including all hall and overhead beam penetrations.
- 3) The inserts are in the correct location
- 4) The hoistway openings are protected as per local industry regulations and/or contract layout drawings
- 5) Finished floor levels are indicated on each landing (F.F.L)
- 6) Electrical power must be available with adequate capacity (both for installation tooling and lift mains) and be correctly located as per the contract layout drawing.
- 7) A phone line must be available and be correctly located as per the contract layout drawing.
- 8) The unloading area, and transportation route to both the storage area and hoistway must be clearly defined
- 9) Provide battery backed up task lighting in the hoistway for the installation of the elevator
- 10) Secure, dry, undercover materials storage location (100m²) is available within a distance of 20 metres of the hoistway and access to the hoistway is clear/unobstructed at all times during the installation
- 11) Access to the hoistway and stairways are safe and illuminated
- 12) On site sanitation facilities are available

We urge you to make sure that these critical conditions are verified and available. In case of any questions or anticipated problems you should contact your nominated Otis Representative or Project Supervisor immediately.

Checked by authorised site manager or representative	Authorised OTIS representative or Project Supervisor
Date 	
Office 	
Mobile 	
fax 	
@	
Agreed delivery date of material:	Unloading location:
Agreed start date	Storage location:
OTIS Representative or Project Supervisor:	Otis contract number:

NOTE: THIS DOCUMENT MUST BE READ IN CONJUNCTION WITH THE CONTRACT LAYOUT AND THE GUIDE TO YOUR RESPONSIBILITIES SHEET



Hoistway Dimensions

In order to install the lift(s) the hoistway must respect dimensional tolerances and plumb-ness as specified on the contract layout drawings. Also the exact floor levels at each landing must be indicated nearby the entrance (e.g. by a 1000 mm mark). Dimensional non-conformities in hoistway are likely to require re-ordering of material or re-work and cause delays. They therefore potentially generate extra cost. We strongly emphasise the need for accurate hoistway dimensions, tolerances and plumb-ness (+/- 13mm)



Availability of Power

During the installation electrical power will be used to:

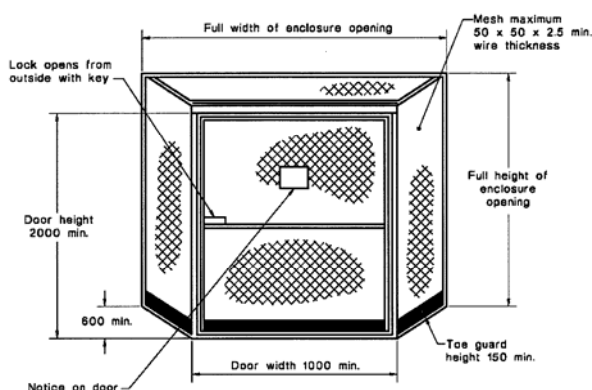
- Operate power tools and temporary lighting
- Operate electrical hoisting equipment
- Move the lift car during the installation process

It is therefore important that electrical power is provided with the right capacity rating and at the appropriate location as per the contract layout drawing / product specification.



Safety Barriers / Hoistway Protection

Prior to OTIS mechanics accessing the hoistway all openings must be protected adequately as per OTIS drawings / specifications or local / industry legislation in the case where they are more stringent. For typical requirements, refer to the diagram below.



Safe Access & Stairways

Safe access to landings is essential. Access should be possible by means of fixed stairways with fall prevention (e.g. temporary handrails) over the complete transportation / access route. Stairways and access routes should be illuminated. The use of ladders to gain access to either the site, storage facility or the hoistway is not acceptable.



Unloading & Storage

In order to enable efficient material distribution it is important that the material can be unloaded from the delivery truck within a distance of 50 metres of the storage / unit location and have rollable access from unloading area to storage area.

Onsite - Provide 100 square metres, secure & weatherproof storage for Otis equipment and materials when delivered to site within 20 metres of lift shaft and located on lowest landing served, with clear and level access between unloading/ storage area and lift shaft.

(In the event that storage on the Site as specified above is not available, the Customer shall be liable for storage costs of \$250 per unit per week, plus \$3000 for cartage costs between the storage location and the Site).

Customer is responsible for all traffic control at the Site during delivery of the Equipment to the Site.

Commencement - Please note: If your site is not ready for delivery on the scheduled date of commencement ("Commencement Date") and you do not advise Otis fourteen (14) weeks prior to the Commencement Date then storage costs of \$250.00 per week per unit or pro rata for each part of a week will be charged to the contract as a variation. These storage costs will continue until such time as the site is ready for delivery.



Availability of Phone Line

Prior to making the unit available for either the final users or for temporary use during the construction* process of the building it is necessary that:

- The unit is completely installed and adjusted
- The hoistway is completely closed & waterproof
- A telephone line is provided

The availability of the phone-line is a very frequent cause for delays. We recommend taking special care in the timely availability of the telephone line since it is critical for receiving a safe to work certificate. In the event that the phone line is not available when required, the customer shall be liable for re-establishment costs should Otis have to leave and return back to site to finalise project.

Certain group configurations only require a single phone line for multiple units. Contact the OTIS Supervisors for the specific details.

* OTIS does not recommend the use of the lift by third parties during the construction of the building. This will require additional cleaning and re-adjustment prior to final hand-over. Also there is a substantial risk of damage with possible delays in completion. Temporary use of the lift always requires a special contract.

A guide to your responsibilities



Hoistway

- A clean, dry two hour fire rated hoistway built to the lift code and applicable government regulations, to the dimensions as shown and tolerance of +/- 13mm as shown and designed to bear the reactions as shown.
- A waterproof pit designed to bear the reactions shown
- Penetrations/ beams for Machine Beam Installation as shown (Machine beams by Otis. Hoist beam by customer)
- Penetrations for Installation Platform as shown
- Rough opening cut outs for landing doors as shown
- Penetrations for all fixtures. 25mm diameter hole in the centre of fixture location as shown
- 2 Recesses and 1 penetration for the E&I Panel on the top floor served as shown
- Building in of inserts flush with the inside face of finished hoistway wall for fixing rails and landing frame assemblies as shown. (Inserts provided by Otis)
- Provide accurate grid and datum lines per landing indicating finished floor levels. Eg a 1000mm mark
- Provide hoistway protection guards to all hoistway entrances in accordance with SAA lift code
- Weather proof hoistway
- Weather proof top landing served for protection of E&I panel
- Cutting & closing of walls in hoistway
- Cover plate for machine beam penetrations – 2 hour fire rated hoistway
- Cover plate/grouting for Installation platform penetrations – 2 hour fire rated hoistway
- Grouting/making good finished front wall to landing finished frame
- Supply Engineers Certificate, certifying hoistway
- Ventilation in top of shaft. Area to comply with local building regulations. (located to avoid equipment in shaft). The hoistway shall be suitably ventilated. In the absence of relevant regulations or standards, it is recommended to provide ventilation openings at the top of the hoistway, with a minimum 0.10sqm. The ambient temperature in the hoistway shall be maintained between 0°C & +40°C. Note: Relevant regulations and standards should be checked for the need for fire dampers.



Power, Communication

- Prior to the commencement and during the entire installation of the elevator, provide uninterrupted temporary power within 5m of the E&I recess on the top floor served. This supply will cater for a maximum demand of 15amps and be available in three phase 400VAC and single phase 230VAC. This supply will be used for erection, lighting, testing and operation of tools and hoisting equipment.
- Prior to the commencement of installation, provide permanent power, located in the E&I recess as shown, with a tail of 5 metres. If multiple lifts are being installed submains per lift are required
 - Power supplied to be 3 phase, 50 Hertz, 4 Wire, 400volt
 - Maximum Demand: (contract basis)
 - 20 amp Neutral
 - Rating of mains protective device, to be greater than largest lift circuit breaker
- All power supplied to Otis, whether permanent or temporary and/or rental shall be at the builders cost
- Prior to the commencement of installation, provide a dedicated analogue phone line, terminated at a final distribution point on the inside of the shaft at the top floor served within 3 m of the E&I panel.
- The installation and on-going rental fees of the phone line shall be at the builders cost

Miscellaneous

- Provide & install a lift car floor covering, which complies with local code regulations
- All painting, including any necessary retouching, masonry and woodwork etc, not included in the contract
- Provide an undercover weather proof, secure storage area of 100sqm located within 20m of the lowest floor served by the lift.
- Provide clear access between storage area and lift hoistway, suitable for moving large and heavy goods
- Provide an unloading area for material deliveries that is within 50m of storage area.
- Provide clear access between unloading area and storage area, suitable for moving large and heavy goods.
- Provide safe access and well illuminated work areas.
- Provide battery backed up task lighting in the hoistway for the installation of the elevator
- Provide access to sanitation facilities within 100m of elevator shaft

Drawings & Finishes

- All buildings drawings and specifications are issued to Otis at time of tender acceptance (this includes door frame data sheets % architectural finishes).