



## Lift Decommissioning / Removal MOD 01

### 1. Scope and General

It is an Otis requirement that decommissioning / removal of a lift is to be carried out by qualified employees and/or subcontractors.

As with all aspects of demolition, there are different methods available, depending on the circumstances found on site.

The following outlines Otis Australasia's required approach to planning and executing the decommissioning / removal of lift equipment.

All subcontractor works shall be subject to the The Otis Contractor EH&S Management Policy EHS15

#### 1.1 Definitions/Glossary (only if applicable)

Competent person	<p>A person who has an understanding of the elevator or escalator equipment, its functions and whose experience and skills allow them to identify potential operational, commercial and safety risks. The majority of persons working on site at any time must be competent.</p> <p>There are two minimum requirements that a competent person must possess:</p> <ol style="list-style-type: none"> <li>1. Technical expertise:             <ol style="list-style-type: none"> <li>a. As a minimum the competent person must have a minimum 5 years' experience within the lift industry conducting maintenance/repairs.</li> <li>b. Has an understanding of WWJSSS and its requirements.</li> </ol> </li> <li>2. EH&amp;S             <ol style="list-style-type: none"> <li>a. Able to work safely in an unfamiliar environments.</li> <li>b. Can demonstrate compliance to the Cardinal Rules.</li> </ol> </li> </ol>
Nominated qualified person	A person with suitable experience in decommissioning and removing elevators who will supervise the works and provide guidance to all persons working on the site.
Hoardings	Semi-permanent structure that prevents unauthorised access to work areas. To be provided with relevant warning signage on front door of each hoarding.
WWJSSS	World Wide Job Site Safety Standards- Otis minimum requirements for worker and user safety.
SWMS	Safe Method Work Statement. All relevant SWMS are to be developed and approved for each task in the work plan. <b>Approved SWMS</b> are to be readily available for site reference and auditing purposes.

## 2. PLANNING

### 2.1 Site Survey

In accordance with SIP01, before preparing an estimate, relevant information shall be gathered in order to adequately estimate the project. A site inspection shall include inspecting for relevant EHS Hazards that may introduce additional cost such as Hazardous Substances and means of access and egress to the work area.

A Site survey must be conducted and documented by a competent person prior to any work methods being created. The survey shall consider, but not be limited to:

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- a) The materials of the lift shaft construction (eg brick/masonry, reinforced/unreinforced, etc) and, in particular, the location, nature and extent of any hazardous substances (eg Asbestos),
- b) Any other services (e.g. electrical, gas, mechanical, plumbing and drainage) contained within the lift shaft and/or motor room structure, and their disposition (eg, keep or remove, live or unused)
- c) The condition of the structure and its fittings and fixtures, with regard to their state of disrepair or deterioration.
- d) Any other details of the structure regarding its strength, construction or contents which will influence the selection of demolition procedures given in the work plan and installation of the new lift.
- e) The type of structural system and the sequence of construction.

All site survey documentation is to be stored appropriately and readily available for site reference and auditing purposes.

## 2.2 Work Plan

A work plan shall be developed outlining the scope and sequence of the work including the following considerations:

- a. The need for temporary decks, scaffolds, barricades and hoardings to be evaluated.
- b. A work plan outlining sequence of works shall be documented detailing the methods and procedures for the safe demolition of the structure
- c. Removal of existing lifts usually fall into 3 methods
  - i. Lower car and cwt to pit. Disassemble car and cwt. Scaffold shaft to remove rails.
  - ii. Old lift platform as working platform using old lift machine on inspection control
  - iii. Old lift platform as working platform using a man riding winch

All work planning documentation is to be stored appropriately and readily available for site reference and auditing purposes.

## 3. Safe Work Method Statements (SWMS)

All relevant SWMS are to be developed and approved for each task in the work plan and readily available for site reference and auditing purposes.

## 4. TECHNICAL RULES FOR LIFT DECOMMISSIONING / REMOVAL

The following outlines minimum technical rules to be applied:

1. Work to be carried out by competent persons.
2. A nominated qualified person, with suitable experience is required to supervise the works. This person must be nominated to Otis with any changes communicated and approved by Otis.
3. Appropriate licences for the work to be undertaken shall be held.
4. Site register completed and available on all hazardous materials. E.g. Asbestos.
5. Appropriate PPE per Otis Procedure EHS33 PPE Application and Care
6. Display 'Lift out of service' signs at all landings.
7. Disconnect electrical power to all areas of lift machinery as appropriate. Lock-out and tag out at source of supplies when no longer needed
8. Install a minimum of 2 life lines in each lift shaft per Otis WWJSSS requirements.
9. Locked hoardings are to be installed at appropriate lift entrances with relevant warning signage on the front of each door.
10. Lift entrances without hoardings must be locked in a safe manner.
11. Care should be taken to avoid loss of traction by changing car weight (eg removal of finishes).
12. A Structural Engineer must be consulted, and approval granted by them, if there is any concern about the structural integrity of the building structure or lifting points, or if there is alterations required to the building structure.
13. If the lift platform is to be used as a running platform to remove the existing lift, then all relevant requirements of WWJSSS for construction shall apply. E.g.
  - a. Only 'man riding' hoists are to be used (e.g. Tirak, Astro) for running platform method or the lift machine with multiple ropes.
  - b. Running platform to be controlled by a pendant requiring two buttons to be pressed per WWJSSS
  - c. An audio visual device to be fitted under the car per WWJSSS

- d. Additional safety devices shall be installed and tested daily per WWJSSS, one of which can be the car governor and safety gear (e.g. Skylock and safety rope)
- 14. All material to be lifted out in a controlled manner. On no account shall any removed material be allowed to fall a distance to the pit floor.
- 15. Dispose / recycle of all redundant equipment as per local government stated regulations.

**5. Supporting Documents (other procedures, forms, tools, training material)**

Document Reference	Document Title	Description
EHS33	PPE Application and Care	This document outlines the usage and application of Personal Protective Equipment (PPE) and its care/replacement in the field. All employees and Sub Contractors are responsible for using appropriate PPE as directed by the Employee Safety Handbook, local rules and procedures, as a result of job hazard analysis and as required by Otis standard work processes such as WWJSSS whenever it is required. Employees and subcontractors must only use PPE that has been approved and issued by Otis.
WWJSSS	Worldwide Job Site Safety Standards	This procedure is focused on establishing and maintaining effective safety management systems, and specifying key mandatory work rules designed to mitigate the possibility of injury or illness from hazards common to our industry.
EHS15	Contractor Environment, Health & Safety Management	This document outlines the process to ensure that all contractors, conducting works on behalf of Otis do so in accordance with Otis regulatory requirements and all risk associated with activities of any contractor in carrying out work for Otis are effectively managed and controlled.
Australian Standard 2601	Demolition of Structures	
SIP01	Sales Installation Process Procedure	This document explains the Sales Installation Process (SIP) Procedure for the New Equipment business, the roles and responsibilities for individuals involved in the process and the standard work to be followed

**5. Document Management**

Version	Summary of Changes	Prepared by	Approved by	Approval Date
1.0	Original	Ken Miller	Anthony Seddon	11/2017

**5.1 Keeping Procedures Current**

Procedures are living documents, which reflect progress in technology and systems. To maintain currency, procedures are periodically reviewed (at least annually) and procedures may also be withdrawn.

To ensure currency, always obtain the procedure from the Otis Australasia intranet.