

Job Hazard Analysis



University of Washington – Seattle Campus
 Facilities Services – Campus Engineering & Operations
 Seattle, WA 98195

Working Job Title: Elevator Mechanic /Lead

JHA Completed by Shop 23 Manager and CEUO Safety Engineer

Date: June 2022

The Job Hazard Analysis form is designed to help supervisors assess and address health and safety hazards that have the potential to cause serious injury or illness (e.g. power tools, electrical repairs). Supervisors can use this document to train staff on safe work procedures.

The information below is a good faith effort to identify hazards encountered by elevator mechanics / leads. If a specific job task is not listed below, contact your supervisor to determine if a specific job hazard analysis or work plan is required.

The baseline training requirements for this position are:

- Asbestos Awareness
- Driver Safety and Awareness Online
- Fire Extinguisher Hands On
- First aid & CPR
- Hepatitis B Vaccination (must be offered)
- Monthly shop safety meetings on PPE, shop safety standard operating procedures and SDS
- Bloodborne Pathogens for Non-Lab Online
- Ergonomic Online training (optional)
- Fire Extinguisher Online
- HazCom/GHS
- Lead Awareness Online
- Covid-19 Safety Training: Back to the Workplace

This document will serve as the certification of hazard assessment for personal protective equipment for the above working job title position.

Job Tasks	Potential Hazard	Controls & Recommended Actions	Training and Personal Protective Equipment
Driving vehicles	<ul style="list-style-type: none"> Bodily injury 	<ul style="list-style-type: none"> Daily pre-trip vehicle inspection Follow all traffic rules Maintain current driver's license Report problems with state vehicles 	<p>Task Specific Training</p> <ul style="list-style-type: none"> Driver Safety and Awareness Monthly shop safety meetings on PPE Seatbelt use policy <p>PPE</p> <ul style="list-style-type: none"> Seatbelt
Computer work	<ul style="list-style-type: none"> Eye strain Ergonomic problems such as carpal tunnel and back problems 	<ul style="list-style-type: none"> Adequate lighting Request on Ergonomic evaluation from EH&S Review ergonomic info on EH&S website Take frequent breaks/stretch/move 	<p>Task Specific Training</p> <ul style="list-style-type: none"> Ergonomic Online training (optional) <p>PPE</p> <ul style="list-style-type: none"> None
General use of hand and power tools such as multi-meters, screwdrivers, wrenches, wire strippers, handcart, tool bag	<ul style="list-style-type: none"> Bodily injury 	<ul style="list-style-type: none"> Follow industry safety standards for operating power/hand tools Location of exits Location of fire extinguisher Location of first aid kit Safety Data Sheets (SDS) for chemical and products 	<p>Task Specific Training</p> <ul style="list-style-type: none"> Monthly shop safety meetings on PPE and SDS <p>PPE</p> <ul style="list-style-type: none"> Gloves -as needed Hearing protection -as needed Impact glasses -as needed Substantial footwear
Maintain inventory supplies	<ul style="list-style-type: none"> Ergonomic problems such as carpal tunnel and back problems Work off ladders Bodily injury 	<ul style="list-style-type: none"> Get help or use lifting tools for items exceeding 50 pounds or is an awkward shape Request an ergonomic evaluation from EH&S Take frequent breaks/stretch Use hand cart 	<p>Task Specific Training</p> <ul style="list-style-type: none"> Back Protection & Lifting Safety Online Ergonomic online training (optional) Ladder Safety Hands On Ladder Safety Online Monthly shop safety meetings on PPE Spill clean-up <p>PPE</p> <ul style="list-style-type: none"> Substantial footwear Steel toe footwear – as needed
Cell phone usage	<ul style="list-style-type: none"> Inattention leading to bodily injury 	<ul style="list-style-type: none"> Be aware of your surroundings Don't drive and talk unless utilizing a 'hands-free' device 	<p>Task Specific Training</p> <ul style="list-style-type: none"> Driver Safety and Awareness <p>PPE</p> <ul style="list-style-type: none"> None
Clean up of elevator shop products (such as de-greaser, hydraulic oils, fluids)	<ul style="list-style-type: none"> Bodily injury (such as chemical splash, corrosive burn, skin/eye irritant) 	<ul style="list-style-type: none"> Ventilate space – as needed Spill kit Secondary containment – as needed FS chemical waste disposal procedures 	<p>Task Specific Training</p> <ul style="list-style-type: none"> Monthly shop safety meetings on PPE and SDS HazCom/GIS training <p>PPE</p> <ul style="list-style-type: none"> Gloves – as recommended by SDS Splash goggles – as recommend by SDS Substantial footwear Any other PPE as specified on the SDS

Job Tasks	Potential Hazard	Controls & Recommended Actions	Training and Personal Protective Equipment
Repair/replace/adjust/troubleshoot electrical and mechanical conveyance equipment (such as elevator, wheelchair lift) that are <50v – OR - not exposed to energized equipment in public areas (such as car enclosure, elevator lobby)	<ul style="list-style-type: none"> • Biological hazards (such as vials, needles, blood) • Ergonomic problems such as lifting, repetitive motion, awkward posture • Hazardous chemicals (such as degreasers, oils) • Hazardous energy (mechanical (doors)) • Pedestrian traffic • Power/Hand tools • Regulated materials (such as asbestos (doors, brake pads, lining, wiring), lead, silica) • Slip/trip/fall • Work off ladders 	<ul style="list-style-type: none"> • Avoid energized electrical work when possible • Barricades/signs/spotter (if applicable) • Ensure work area is clear from spills and trip hazards • Follow industry safety standards for operating power/hand tools • Get help or use lifting tools for items exceeding 50 pounds, or is an awkward shape • Lockout procedure, LOTO locks & tags • Location of building exits • Location of fire extinguisher • Location of first aid kit • Shop safety standard operating procedures • Safety Data Sheets (SDS) for chemical and products • This job position does not typically perform work on regulated building materials 	<p>Task Specific Training</p> <ul style="list-style-type: none"> • Back Protection & Lifting Safety Online • Ladder Safety Hands On • Ladder Safety Online • Lockout/Tagout Safety • Supv LOTO Field Evaluation <p>PPE (as required unless noted as needed)</p> <ul style="list-style-type: none"> • Gloves -as needed • Impact glasses/goggles • Substantial footwear

Job Tasks	Potential Hazard	Controls & Recommended Actions	Training and Personal Protective Equipment
Repair/replace/adjust/troubleshoot electrical and mechanical conveyance equipment (such as elevator, wheelchair lift) when working on exposed equipment that is >50v in public areas (such as car enclosure, elevator lobby)	<ul style="list-style-type: none"> • Biological hazards (such as vials, needles, blood) • Electrically energized equipment • Ergonomic problems such as lifting, repetitive motion, awkward posture • Hazardous chemicals (such as degreasers, oils) • Hazardous energy (such as mechanical (doors), pressure (liquid lines)) • Pedestrian traffic • Power/Hand tools • Regulated materials (such as asbestos, (doors, brake pads, lining, wiring), lead, silica) • Slip/trip/fall • Work off ladders 	<ul style="list-style-type: none"> • Barricades/signs/spotter (if applicable) • Energized electrical work permit & work plan (if applicable) • Ensure work area is clear from spills and trip hazards • Follow industry safety standards for operating power/hand tools • Get help or use lifting tools for items exceeding 50 pounds, or is an awkward shape • Lockout procedure, LOTO locks & tags • Location of building exits • Location of fire extinguisher • Location of first aid kit • Safety Data Sheets (SDS) for chemical and products • Shop safety standard operating procedures • This job position does not typically perform work on regulated building materials 	<p>Task Specific Training</p> <ul style="list-style-type: none"> • Back Protection & Lifting Safety Online • Ladder Safety Hands On • Ladder Safety Online • Lockout/Tagout Safety • NFPA 70E Arc Flash/Electrical Safety • Supv LOTO Field Evaluation <p>PPE (as required unless noted as needed)</p> <ul style="list-style-type: none"> • Arc Flash rated: clothing, Tyvek coveralls, gloves, hard hat, head cover, impact glasses/goggles, substantial <u>leather</u> footwear- as required per NFPA 70E • Electrically rated tools • Gloves -as needed • Impact glasses/goggles – as needed • Substantial footwear

Job Tasks	Potential Hazard	Controls & Recommended Actions	Training and Personal Protective Equipment
Repair/replace/adjust/troubleshoot electrical and mechanical conveyance equipment (such as elevator, wheelchair lift) that are <50v -OR- not exposed to energized equipment in mechanical areas (such as shafts, pits, machine rooms)	<ul style="list-style-type: none"> Airborne contaminants (such as general building dust, refrigerant leak) Biological hazards (such as sanitary sewer leaks, vials, blood, needles) Confined spaces (such as pit) Ergonomic problems such as lifting, repetitive motion, awkward posture Fall hazard (such as >2" gap between car and shaft wall, car top without rails) Hazardous chemicals (such as degreasers, oils) Hazardous energy (such as mechanical (doors), pressure (hydraulic lines)) Heat stress Hoisting/rigging with mechanical equipment Insufficient lighting Noise Power/Hand tools Regulated materials such as asbestos, lead, silica Slip/trip/fall UV light (radiant energy – radio frequency) Work off ladders 	<ul style="list-style-type: none"> Avoid energized electrical work when possible Confined space permit (if applicable) Ensure work area is clear from spills and trip hazards Fall Protection work plan (if applicable) Get help or use lifting tools for items exceeding 50 pounds, or is an awkward shape If hot, drink water and take necessary rest breaks Lockout procedure, LOTO locks & tags Location of building exits Location of fire extinguisher Location of first aid kit Refrigerant leak SOP (if applicable) Safety Data Sheets (SDS) for chemical and products Shop safety standard operating procedures This job position does not typically perform work on regulated building materials Understand and implement industry safety standards for operating power/hand tools Understand and implement regulatory practices / standards for operating a hoist Use temporary lighting (such as head lamps) 	<p>Task Specific Training</p> <ul style="list-style-type: none"> Audiometric Hearing Test Back Protection & Lifting Safety Online Confined Space Hands On Fall Protection Hearing Protection/Conservation Online Hoisting & Rigging Ladder Safety Hands On Ladder Safety Online Lockout/Tagout Safety Radio-Frequency Radiation Safety Awareness Refrigerant Monitoring Supv LOTO Field Evaluation <p>PPE (as required unless noted as needed)</p> <ul style="list-style-type: none"> Dust mask -as needed Gloves -as needed Hard hat Head light / temporary lighting Hearing protection - as needed Impact glasses/goggles Personal fall restraint/arrest equipment Substantial footwear Steel-toe or cap-on

Job Tasks	Potential Hazard	Controls & Recommended Actions	Training and Personal Protective Equipment
Repair/replace/adjust/troubleshoot low voltage electrical and mechanical conveyance equipment (such as elevator, wheelchair lift) when working on exposed equipment that is >50v in mechanical areas (such as shafts, pits, machine rooms)	<ul style="list-style-type: none"> Airborne contaminants (such as general building dust, refrigerant leak) Biological hazards (such as sanitary sewer leaks, vials, blood) Confined spaces (such as pit) Electrically energized equipment Ergonomic problems such as lifting, repetitive motion, awkward posture Fall hazard (such as >2" gap between car and shaft wall) Hazardous chemicals (such as degreasers, oils) Hazardous energy – (such as mechanical (doors), pressure (hydraulic lines)) Heat stress Hoisting/rigging with mechanical equipment Insufficient lighting Noise Overhead equipment/hazards Power/Hand tools Regulated materials such as asbestos, lead, silica Slip/trip/fall UV light (radiant energy – radio frequency) Work off ladders 	<ul style="list-style-type: none"> Confined space permit (if applicable) Ensure work area is clear from spills and trip hazards Fall Protection work plan (if applicable) Follow industry safety standards for operating hoisting/rigging equipment Follow industry safety standards for operating power/hand tools Get help or use lifting tools for items exceeding 50 pounds, or is an awkward shape If hot, drink water and take necessary rest breaks Lockout procedure, LOTO locks & tags Location of building exits Location of fire extinguisher Location of first aid kit Refrigerant leak SOP (if applicable) Safety Data Sheets (SDS) for chemical and products Shop safety standard operating procedures This job position does not typically perform work on regulated building materials Understand and implement industry safety standards for operating power/hand tools Understand and implement regulatory practices / standards for operating a hoist Use temporary lighting (such as head lamps) 	<p>Task Specific Training</p> <ul style="list-style-type: none"> Audiometric Hearing Test Back Protection & Lifting Safety Online Confined Space Hands On Fall Protection Hearing Protection/Conservation Online Hoisting & Rigging Ladder Safety Hands On Ladder Safety Online Lockout/Tagout Safety NFPA 70E Arc Flash/Electrical Safety Radio-Frequency Radiation Safety Awareness Refrigerant Monitoring Supv LOTO Field Evaluation <p>PPE (as required unless noted as needed)</p> <ul style="list-style-type: none"> Arc Flash rated: clothing, Tyvek coveralls, gloves, hard hat, head cover, impact glasses/goggles, substantial <u>leather</u> footwear- as required per NFPA 70E Dust mask -as needed Electrically rated tools Gloves -as needed Hard hat Head light / temporary lighting Hearing protection -as needed Impact glasses/goggles – as needed Personal fall restraint/arrest equipment Steel-toe or cap-on footwear

Job Tasks	Potential Hazard	Controls & Recommended Actions	Training and Personal Protective Equipment
Repair/replace/adjust/troubleshoot electrical and mechanical conveyance equipment (such as elevator, wheelchair lift) <50v or not exposed to energized equipment in animal areas	<ul style="list-style-type: none"> Airborne contaminants (such as animal dander) Biological hazards (such as vials, blood, needles) Ergonomic problems such as lifting, repetitive motion, awkward posture Fall Hazard (such as >2" gap between car and shaft wall) Hazardous chemicals (such as degreasers, lube oils) Hazardous energy –mechanical (doors), pressure (hydraulic lines) Heat stress Insufficient lighting Noise Pedestrian traffic Power/Hand tools Regulated materials such as asbestos, lead, silica Slip/trip/fall Work off ladders 	<ul style="list-style-type: none"> Avoid energized electrical work when possible Barricades/signs/spotter (if applicable) Check-in with the department contact person prior to work Ensure work area is clear from spills and trip hazards Fall Protection work plan (if applicable) Follow industry safety standards for operating power/hand tools Get help or use lifting tools for items exceeding 50 pounds, or is an awkward shape If hot, drink water and take necessary rest breaks Lockout procedure, LOTO locks & tags Location of building exits Location of fire extinguisher Location of first aid kit Safety Data Sheets (SDS) for chemical and products Shop safety standard operating procedures This job position does not typically perform work on regulated building materials Use temporary lighting (such as head lamps) 	<p>Task Specific Training</p> <ul style="list-style-type: none"> Audiometric Hearing Test Back Protection & Lifting Safety Online Biosafety: Working in non-human primate areas Department specific training Fall Protection Hearing Protection/Conservation Online Ladder Safety Hands On Ladder Safety Online Lockout/Tagout Safety Supv LOTO Field Evaluation <p>PPE (as required unless noted as needed)</p> <ul style="list-style-type: none"> Animal Areas: head cover, shoe covers, gloves, coveralls, face shield Dust mask -as needed Head light / temporary lighting Hearing protection -as needed Impact glasses/goggles – as needed Personal fall restraint/arrest equipment Substantial footwear Any other PPE as specified by the department

Job Tasks	Potential Hazard	Controls & Recommended Actions	Training and Personal Protective Equipment
Repair/replace/adjust/troubleshoot low voltage electrical and mechanical conveyance equipment (such as elevator, wheelchair lift) working on exposed equipment that is >50v equipment in animal areas	<ul style="list-style-type: none"> Airborne contaminants (such as animal dander) Biological hazards (such as vials, blood, needles) Electrically energized equipment Ergonomic problems such as lifting, repetitive motion, awkward posture Fall Hazard (such as >2" gap between car and shaft wall) Hazardous chemicals (such as degreasers, lube oils) Hazardous energy –mechanical (doors), pressure (hydraulic lines) Heat stress Insufficient lighting Noise Pedestrian traffic Power/Hand tools Regulated materials such as asbestos, lead, silica Slip/trip/fall Work off ladders 	<ul style="list-style-type: none"> Barricades/signs/spotter (if applicable) Check-in with the Confined space permit (if applicable) Energized electrical work permit & work plan (if applicable) Ensure work area is clear from spills and trip hazards Fall Protection work plan (if applicable) Follow industry safety standards for operating power/hand tools Get help or use lifting tools for items exceeding 50 pounds, or is an awkward shape If hot, drink water and take necessary rest breaks Lockout procedure, LOTO locks & tags Location of building exits Location of fire extinguisher Location of first aid kit Safety Data Sheets (SDS) for chemical and products Shop safety standard operating procedures This job position does not typically perform work on regulated building materials Understand and implement industry safety standards for operating power/hand tools Understand and implement regulatory practices / standards for operating a hoist Use temporary lighting (such as head lamps) 	<p>Task Specific Training</p> <ul style="list-style-type: none"> Audiometric Hearing Test Back Protection & Lifting Safety Online Biosafety: Working in non-human primate areas Department specific training Fall Protection Hearing Protection/Conservation Online Ladder Safety Hands On Ladder Safety Online Lockout/Tagout Safety NFPA 70E Arc Flash/Electrical Safety Supv LOTO Field Evaluation <p>PPE (as required unless noted as needed)</p> <ul style="list-style-type: none"> Arc Flash rated: clothing, Tyvek coveralls, gloves, hard hat, head cover, impact glasses/goggles, substantial <u>leather</u> footwear- as required per NFPA 70E Animal Areas: head cover, shoe covers, gloves, coveralls, face shield Electrically rated tools Head light / temporary lighting Hearing protection -as needed Personal fall restraint/arrest equipment Any other PPE as specified by the department