

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 _____

Date: _____

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.

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 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"> Asbestos Awareness Back Protection & Lifting Safety Online Bloodborne Pathogens for Non-Lab Online Ergonomic Online training (optional) Fire Extinguisher Hands On Fire Extinguisher Online First aid & CPR HazCom/GHS training Ladder Safety Hands On Ladder Safety Online Lead Awareness Online Lockout/Tagout Safety Monthly shop safety meetings on PPE, shop safety standard operating procedures and SDS Supv LOTO Field Evaluation <p>PPE</p> <ul style="list-style-type: none"> Gloves -as needed Impact glasses/goggles – as required LOTO locks or tags 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 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 portable refrigerant monitor where needed Use temporary lighting (such as head lamps) 	<p>Task Specific Training</p> <ul style="list-style-type: none"> Asbestos Awareness Back Protection & Lifting Safety Online Bloodborne Pathogens for Non-Lab Online Ergonomic Online training (optional) Fire Extinguisher Hands On Fire Extinguisher Online First aid & CPR HazCom/GHS training Ladder Safety Hands On Ladder Safety Online Lead Awareness Online Lockout/Tagout Safety Monthly shop safety meetings on PPE shop safety standard operating procedures and SDS NFPA 70E Arc Flash/Electrical Safety Supv LOTO Field Evaluation <p>PPE</p> <ul style="list-style-type: none"> Arc Flash clothing- as required per NFPA 70E Electrically rated tools Gloves – as required per NFPA 70E Gloves -as needed Head cover – as required per NFPA 70E Impact glasses/goggles – as needed Impact glasses/goggles – as required per NFPA 70E LOTO locks or tags Substantial footwear Substantial <u>leather</u> footwear – as required per NFPA 70E

Job Tasks	Potential Hazard	Controls & Recommended Actions	Training and Personal Protective Equipment
<p>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)</p>	<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 >12" 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 • 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 • 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 • Location of building exits • Location of fire extinguisher • Location of first aid kit • Refrigerant leak work plan (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 • Use portable refrigerant monitor where needed • Use temporary lighting (such as head lamps) • Water treatment plan • Cooling tower work practice (if applicable) 	<p>Task Specific Training</p> <ul style="list-style-type: none"> • Asbestos Awareness • Audiometric Hearing Test • Back Protection & Lifting Safety Online • Bloodborne Pathogens for Non-Lab Online • Confined Space Awareness Online • Ergonomic Online training (optional) • Fall Protection • First aid & CPR • Fire extinguisher Hands On • Fire Extinguisher Online • HazCom/GHS training • Hearing Protection/Conservation Online • Hoisting & Rigging • Ladder Safety Hands On • Ladder Safety Online • Lead Awareness Online • Lockout/Tagout Safety • Monthly shop safety meetings on PPE, shop safety standard operating procedures and SDS • Refrigerant Monitoring • Supv LOTO Field Evaluation <p>PPE</p> <ul style="list-style-type: none"> • Dust mask -as needed • Gloves -as needed • Head light / temporary lighting • Hearing protection (as needed) • Impact glasses/goggles - as required • LOTO locks or tags • Personal fall restraint/arrest equipment • Substantial footwear • Steel-toe or cap-on footwear – as required

Job Tasks	Potential Hazard	Controls & Recommended Actions	Training and Personal Protective Equipment
<p>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)</p>	<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 >12" 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 • Power/Hand tools • Regulated materials such as asbestos, lead, silica • Slip/trip/fall • 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 • Location of building exits • Location of fire extinguisher • Location of first aid kit • Refrigerant leak work plan (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 • Use portable refrigerant monitor where needed • Use temporary lighting (such as head lamps) • Water treatment plan • Cooling tower work practice (if applicable) 	<p>Task Specific Training</p> <ul style="list-style-type: none"> • Asbestos Awareness • Audiometric Hearing Test • Back Protection & Lifting Safety Online • Bloodborne Pathogens for Non-Lab Online • Confined Space Awareness Online • Ergonomic Online training (optional) • Fall Protection • Fire Extinguisher Hands On • Fire Extinguisher Online • First aid & CPR • HazCom/GHS training • Hearing Protection/Conservation Online • Hoisting & Rigging • Ladder Safety Hands On • Ladder Safety Online • Lead Awareness Online • Lockout/Tagout Safety • Monthly shop safety meetings on PPE shop safety standard operating procedures and SDS • NFPA 70E Arc Flash/Electrical Safety • Refrigerant Monitoring • Supv LOTO Field Evaluation <p>PPE</p> <ul style="list-style-type: none"> • Arc Flash clothing- as required per NFPA 70E • Dust mask -as needed • Electrically rated tools • Gloves – as required per NFPA 70E • Gloves -as needed • Head cover – as required per NFPA 70E • Head light / temporary lighting • Hearing protection -as needed • Impact glasses/goggles – as needed • Impact glasses/goggles - as required per NFPA 70E • LOTO locks or tags • Personal fall restraint/arrest equipment • Substantial <u>leather</u> footwear – as required per NFPA 70E • Steel-toe or cap-on footwear – as required

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) • Confined spaces (such as pit) • Ergonomic problems such as lifting, repetitive motion, awkward posture • Fall Hazard (such as >12" 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 • 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 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 • 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"> • Asbestos Awareness • Audiometric Hearing Test • Back Protection & Lifting Safety Online • Biosafety: Working in non-human primate areas • Bloodborne Pathogens for Non-Lab Online • Confined Space Awareness Online • Department specific training • Ergonomic Online training (optional) • Fall Protection • Fire Extinguisher Hands On • Fire Extinguisher Online • First aid & CPR • HazCom/GHS training • Hearing Protection/Conservation Online • Ladder Safety Hands On • Ladder Safety Online • Lead Awareness Online • Lockout/Tagout Safety • Monthly shop safety meetings on PPE, shop safety standard operating procedures and SDS • Supv LOTO Field Evaluation <p>PPE</p> <ul style="list-style-type: none"> • Dust mask -as needed • Gloves -as needed • Head cover – as required • Head light / temporary lighting • Hearing protection -as needed • Impact glasses/goggles – as needed • LOTO locks or tags • Personal fall restraint/arrest equipment • Shoe covers – as required • Splash face shield – as required • Substantial footwear • Tyvek coveralls – as required • Any other PPE as specified by the department

Job Tasks	Potential Hazard	Controls & Recommended Actions	Training and Personal Protective Equipment
<p>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</p>	<ul style="list-style-type: none"> • Airborne contaminants (such as animal dander) • Biological hazards (such as vials, blood, needles) • Confined spaces (such as pit) • Electrically energized equipment • Ergonomic problems such as lifting, repetitive motion, awkward posture • Fall Hazard (such as >12" 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 • 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"> • Asbestos Awareness • Audiometric Hearing Test • Back Protection & Lifting Safety Online • Biosafety: Working in non-human primate areas • Bloodborne Pathogens for Non-Lab Online • Confined Space Awareness Online • Department specific training • Ergonomic Online training (optional) • Fall Protection • Fire Extinguisher Hands On • Fire Extinguisher Online • First aid & CPR • HazCom/GHS training • Hearing Protection/Conservation Online • Ladder Safety Hands On • Ladder Safety Online • Lead Awareness Online • Lockout/Tagout Safety • Monthly shop safety meetings on PPE, shop safety standard operating procedures and SDS • NFPA 70E Arc Flash/Electrical Safety • Supv LOTO Field Evaluation <p>PPE</p> <ul style="list-style-type: none"> • Arc Flash clothing- as required per NFPA 70E • Dust mask -as needed • Electrically rated tools • Gloves – as required per NFPA 70E • Gloves -as needed • Head cover – as required • Head cover – as required per NFPA 70E • Head light / temporary lighting • Hearing protection -as needed • Impact glasses/goggles - as required per NFPA 70E • LOTO locks or tags • Personal fall restraint/arrest equipment • Shoe covers – as required • Splash face shield – as required • Substantial <u>leather</u> footwear – as required per NFPA 70E • Arc Flash rated Tyvek coveralls – as required • Any other PPE as specified by the department