

Job Hazard Analysis



University of Washington – Seattle Campus

Facilities Services - Campus Engineering & Operations
Seattle, WA 98195

Working Job Title: Fire Alarm Control Technician / 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 fire alarm technicians / 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	<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 	<p>Task Specific Training</p> <ul style="list-style-type: none"> Monthly shop safety meetings on PPE <p>PPE</p> <ul style="list-style-type: none"> Gloves -as needed Hearing protection -as needed Safety 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 	<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 Set-up work station using ergonomic principles 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 <p>PPE</p> <ul style="list-style-type: none"> Dusk mask -as needed Safety glasses -as needed Substantial footwear
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
Replace 12v batteries on fire alarm systems	<ul style="list-style-type: none"> Ergonomic problems such as lifting, repetitive motion, awkward posture Hazardous chemicals Hazardous energy (stored energy) Power/hand tools 	<ul style="list-style-type: none"> 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 Location of exits Location of fire extinguisher Location of first aid kit Use of hand cart 	<p>Task Specific Training</p> <ul style="list-style-type: none"> Back Protection & Lifting Safety Online Department specific training Ergonomic Online training (optional) HazCom/GHS Monthly shop safety meetings on PPE <p>PPE</p> <ul style="list-style-type: none"> Dry leather gloves Non-conductive tools Steel toe footwear Safety glasses

Job Tasks	Potential Hazard	Controls & Recommended Actions	Training and Personal Protective Equipment
Test/repair/replace fire alarm electrical components that are <50v –OR- not exposed to energized equipment in public/classroom/ office areas	<ul style="list-style-type: none"> Airborne contaminants Ergonomic problems (such as lifting, repetitive motion, awkward posture) 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"> Aerial lift Barricades/signs/spotter – (if applicable) Building system shutdown 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 Location of exits Location of fire extinguisher Location of first aid kit 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 Audiometric Hearing Test Back Protection & Lifting Safety Online Ergonomic Online training (optional) Fall Protection Fire Extinguisher Hands On Fire Extinguisher Online HazCom/GHS Hearing Protection/Conservation Online Ladder safety Hands On Ladder safety Online Lead Safety Online Lift Training Lockout/Tagout Safety Monthly shop safety meetings on PPE and SDS <p>PPE</p> <ul style="list-style-type: none"> Dust mask -as needed Hearing protection Impact glasses – as needed LOTO locks or tags 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
Test/repair/replace fire alarm electrical components when working on exposed equipment that is >50v in public/classroom/ office areas	<ul style="list-style-type: none"> Airborne contaminants Electrically energized equipment Ergonomic problems such as lifting, repetitive motion, awkward posture Hazardous energy (mechanical, heat, pressure) Nosie Pedestrian traffic Power/Hand tools Regulated materials such as asbestos, lead, silica Slip/trip/fall Work off ladders 	<ul style="list-style-type: none"> Aerial lift Barricades/signs /spotter – (if applicable) Energized electrical work permit & work plan – as needed 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 Location of exits Location of fire extinguisher Location of first aid kit Lockout procedure 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 Audiometric Hearing Test Back protection & Lifting Safety Online Ergonomic Online training (optional) Fire Extinguisher Hands On Fire Extinguisher Online Fall Protection HazCom/GHS Hearing Protection/Conservation Online Ladder Safety Hands On Ladder Safety Online Lead Safety Online Lift Training Lockout/Tagout Safety Monthly shop safety meetings on PPE 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 per NFPA 70E Hearing protection –as needed Impact glasses – as needed LOTO locks or tags Personal fall restraint/arrest equipment Substantial footwear Substantial <u>leather</u> footwear – as required per NFPA 70E Any other PPE as specified by the department

Job Tasks	Potential Hazard	Controls & Recommended Actions	Training and Personal Protective Equipment
Test/repair/replace fire alarm electrical components that are <50v –OR - not exposed to energized equipment in mechanical rooms	<ul style="list-style-type: none"> Airborne contaminants (such as refrigerant) Ergonomic problems such as lifting, repetitive motion, awkward posture Heat stress 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"> 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 If hot, drink water and take necessary rest breaks Location of exits Location of fire extinguisher Location of first aid kit Location of potable water sources Refrigerant leak work plan – if applicable Safety Data Sheets (SDS) for chemical and products 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 Audiometric Hearing Test Back Protection & Lifting Safety Online Confined Space Awareness Ergonomic Online training (optional) Fall Protection Fire Extinguisher Hands On Fire Extinguisher Online HazCom/GHS Hearing Protection/Conservation Online Ladder Safety Hands On Ladder Safety Online Lead Safety Online Lockout/Tagout Safety Monthly shop safety meetings on PPE, SDS and heat stress Refrigerant Monitoring <p>PPE</p> <ul style="list-style-type: none"> Dust mask -as needed Gloves - as needed Hearing protection Impact glasses – as needed LOTO locks or tags Substantial footwear
Job Tasks	Potential Hazard	Controls & Recommended Actions	Training and Personal Protective Equipment
Test/repair/replace fire alarm electrical components when working on exposed equipment that is >50v in mechanical rooms	<ul style="list-style-type: none"> Airborne contaminants (such as refrigerant) Electrically energized equipment Ergonomic problems such as lifting, repetitive motion, awkward posture Hazardous energy (mechanical, heat, pressure) Heat stress 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"> Energized electrical work permit & work plan – as needed 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 Location of exits Location of fire extinguisher Location of first aid kit Location of potable water sources Lockout procedure Refrigerant leak work plan – if applicable Safety Data Sheets (SDS) for chemical and products 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 Audiometric Hearing Test Back Protection & Lifting Safety Online Confined Space Awareness Ergonomic Online training (optional) Fall Protection Fire Extinguisher Hands On Fire Extinguisher Online HazCom/GHS Hearing Protection/Conservation Online Ladder Safety Hands On Ladder Safety Online Lead Safety Online Lockout/Tagout Safety Monthly shop safety meetings on PPE, SDS and heat stress 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 Hearing protection Impact glasses – 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>Test/repair/replace fire alarm electrical components that are <50v –OR- not exposed to energized equipment in animal areas</p>	<ul style="list-style-type: none"> • Airborne contaminants • Animal dander • Biological hazard • Ergonomic problems such as lifting, repetitive motion, awkward posture • 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 (if applicable) • Check-in with the departmental contact person prior to work • 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 • Location of exits • Location of fire extinguisher • Location of first aid kit • 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 • Audiometric Hearing Test • Back Protection & Lifting Safety Online • Biosafety: Working in Non-Human Primate Areas • Bloodborne Pathogens for Non-Lab • Department specific training • Ergonomic Online training (optional) • Fire Extinguisher Hands On • Fire Extinguisher Online • HazCom/GHS • Hearing Protection/Conservation Online • Ladder Safety Hands On • Ladder Safety Online • Lead Safety Online • Lockout/Tagout Safety • Monthly shop safety meetings on PPE and SDS <p>PPE</p> <ul style="list-style-type: none"> • Head cover – as required • Hearing protection -as needed • Gloves –as required • Impact glasses/goggles – as needed • LOTO locks or tags • Shoe covers – as required • Splash face shield – as required • Substantial footwear • Tyvek coveralls – as required

Job Tasks	Potential Hazard	Controls & Recommended Actions	Training and Personal Protective Equipment
<p>Test/repair/replace fire alarm electrical components when working on exposed equipment that is >50v in animal areas</p>	<ul style="list-style-type: none"> • Airborne contaminants • Animal dander • Biological hazard • Electrically energized equipment • Ergonomic problems such as lifting, repetitive motion, awkward posture • Hazardous energy (mechanical, heat, pressure) • 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 departmental contact person prior to work • Energized electrical work permit & work plan – as needed • 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 • Location of exits • Location of fire extinguisher • Location of first aid kit • Lockout procedure • 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 • Audiometric Hearing Test • Back Protection & Lifting Safety Online • Biosafety; Working in Non-Human Primate Areas • Bloodborne Pathogens for Non-Lab • Department specific training • Ergonomic Online training (optional) • Fire Extinguisher Hands On • Fire Extinguisher Online • HazCom/GHS • Hearing Protection/Conservation Online • Ladder Safety Hands On • Ladder Safety Online • Lead Safety Online • Lockout/Tagout Safety • Monthly shop safety meetings on PPE 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 • Head cover – as required per NFPA 70E • Hearing protection -as needed • Impact glasses/goggles – as needed • Impact glasses/goggles – as required per NFPA 70E • LOTO locks or tags • Shoe covers – as required • Splash face shield – as required • Substantial footwear • Substantial <u>leather</u> footwear– as required per NFPA 70E • Arc Flash rated Tyvek coveralls – as required • Tyvek coveralls – as required • Any other PPE as specified on the department

Job Tasks	Potential Hazard	Controls & Recommended Actions	Training and Personal Protective Equipment
<p>Test/repair/replace fire alarm electrical components that are <50v –OR - not exposed to energized equipment in laboratory areas</p>	<ul style="list-style-type: none"> • Airborne contaminants • Biological hazard • Ergonomic problems: (lifting, repetitive motion, awkward posture) • Hazardous chemicals • 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 departmental contact person prior to work • 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 • Location of exits • Location of fire extinguisher • Location of first aid kit • 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 • Audiometric Hearing Test • Back Protection & Lifting Safety Online • Bloodborne Pathogens for Non-Lab • Department specific training • Ergonomic Online training (optional) • Fire Extinguisher Hands On • Fire Extinguisher Online • HazCom/GHS • Hearing Protection/Conservation Online • Ladder Safety Hands On • Ladder Safety Online • Lead Safety Online • Lockout/Tagout Safety • Monthly shop safety meetings on PPE and SDS <p>PPE</p> <ul style="list-style-type: none"> • Dust mask -as needed • Gloves -as needed • Hearing protection -as needed • Impact glasses/goggles • LOTO locks or tags • Substantial footwear • Tyvek coveralls -as needed • Any other PPE as specified on the lab entry sign

Job Tasks	Potential Hazard	Controls & Recommended Actions	Training and Personal Protective Equipment
<p>Test/repair/replace fire alarm electrical components when working on exposed equipment that is >50v in laboratory areas</p>	<ul style="list-style-type: none"> • Airborne contaminants • Biological hazard • Electrically energized equipment • Ergonomic problems: (lifting, repetitive motion, awkward posture) • Hazardous chemicals • Hazardous energy (mechanical, heat, pressure) • 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 departmental contact person prior to work • Energized electrical work permit & work plan – as needed • 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 • Location of exits • Location of fire extinguisher • Location of first aid kit • Lockout procedure • 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 • Audiometric Hearing Test • Back Protection & Lifting Safety Online • Bloodborne Pathogens for Non-Lab • Department specific training • Ergonomic Online training (optional) • Fire Extinguisher Hands On • Fire Extinguisher Online • HazCom/GHS • Hearing Protection/Conservation Online • Ladder Safety Hands On • Ladder Safety Online • Lead Safety Online • Lockout/Tagout Safety • Monthly shop safety meetings on PPE 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 per NFPA 70E • Hearing protection -as needed • Impact glasses/goggles • Impact glasses/goggles – as required per NFPA 70E • LOTO locks or tags • Substantial footwear • Substantial <u>leather</u> footwear – as required per NFPA 70E • Tyvek coveralls (as needed) • Arc Flash rated Tyvek coveralls – as required • Any other PPE as specified on the lab entry sign

Job Tasks	Potential Hazard	Controls & Recommended Actions	Training and Personal Protective Equipment
<p>Test/repair/replace fire alarm electrical components that are <50v – OR - not exposed to energized equipment in construction areas</p>	<ul style="list-style-type: none"> • Airborne contaminants • Electrically energized equipment • Ergonomic problems such as lifting, repetitive motion, awkward posture • Hazardous chemicals • 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"> • Check-in with the construction contact person prior to work • 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 • Location of exits • Location of fire extinguisher • Location of first aid kit • Temporary lighting (if applicable) • 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 • Audiometric Hearing Yest • Back Protection & Lifting Safety Online • Confined Space Awareness • Construction site specific training • Ergonomic Online training (optional) • Fall Protection • Fire Extinguisher Hands On • Fire Extinguisher Online • First aid & CPR • HazCom/GHS • Hearing Protection/Conservation Online • Ladder Safety Hands On • Ladder Safety Online • Lead Safety Online • Lockout/Tagout Safety • Monthly shop safety meetings on PPE and SDS <p>PPE</p> <ul style="list-style-type: none"> • Dust mask -as needed • Gloves -as needed • Hard hat • Hearing protection – as required • Impact glasses • LOTO locks or tags • Safety vest • Substantial footwear • Any other PPE required by the construction site

Job Tasks	Potential Hazard	Controls & Recommended Actions	Training and Personal Protective Equipment
<p>Test/repair/replace fire alarm electrical components when working on exposed equipment that is >50v in construction areas</p>	<ul style="list-style-type: none"> • Airborne contaminants • Electrically energized equipment • Ergonomic problems such as lifting, repetitive motion, awkward posture • Hazardous chemicals • Hazardous energy (mechanical, heat, pressure) • 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"> • Check-in with the construction contact person prior to work • Energized electrical work permit & work plan – as needed • 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 exits • Location of fire extinguisher • Location of first aid kit • Temporary lighting (if applicable) • 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 • Audiometric Hearing Test • Back Protection & Lifting Safety Online • Confined Space Awareness • Construction site specific training • Ergonomic Online training (optional) • Fall Protection • Fire Extinguisher Hands On • Fire Extinguisher Online • First aid & CPR • HazCom/GHS • Hearing Protection/Conservation Online • Ladder Safety Hands On • Ladder Safety Online • Lead Safety Online • Lockout/Tagout Safety • Monthly shop safety meetings on PPE 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 • Hard hat • Head cover – as required per NFPA 70E • Hearing protection -as needed • Impact glasses • Impact glasses/goggles – as required per NFPA 70E • LOTO locks or tags • Safety vest • Substantial footwear • Substantial <u>leather</u> footwear – as required per NFPA 70E • Any other PPE required by the construction site