

## CREW DETAILS

### IN AN EMERGENCY CALL:

**Crew Leader:**
**Project Phone Number:**
**Crew:**

## PROJECT OVERVIEW

**Purpose of Project:**
**Date of Project:**

**Benefit of Project:** Enhances the longevity and stability of buildings. | Ensures compliance with structural safety standards. | Facilitates complex architectural designs and frameworks. | Improves resistance to environmental and load stresses. | Provides robust and durable structural support. | Supports efficient construction processes and timelines.

## HAZARDS

HAZARD	RISK	RISK BENEFIT	MEASURE	RISK TO	RISK LEVEL
Arc flash	Burns, eye damage, fatalities	Allows efficient welding with protection against long-term vision damage for workers and bystanders.	Provide and enforce the use of welding helmets with properly rated lenses. Train workers on safe practices to avoid direct exposure to the welding arc, and use screens or curtains to shield others nearby. <b>(ALL)</b>	Workers	Before Measure: <b>High</b> After Measure: <b>Med</b>
Confined space entry	Asphyxiation, entrapment, injuries from poor ventilation	Allows necessary work in confined spaces with controlled risk of asphyxiation or entrapment.	Conduct atmospheric testing before entry and continuously monitor during work. Provide confined space training and ensure rescue procedures are in place. <b>(ALL)</b>	Workers	Before Measure: <b>High</b> After Measure: <b>Med</b>

HAZARD	RISK	RISK BENEFIT	MEASURE	RISK TO	RISK LEVEL
Crane operation hazards	Struck by loads, crane collapse, injuries to operators and nearby workers	Enables efficient lifting of heavy materials, essential for timely project completion, with controlled risk.	Ensure cranes are operated by certified personnel and conduct pre-operation inspections. Establish clear communication protocols, use spotters, and define exclusion zones to prevent unauthorized entry during lifts. <b>(ALL)</b>	Workers, contractors	Before Measure: <b>High</b> After Measure: <b>Med</b>
Electrical hazards	Electrocution, burns, equipment damage	Allows work near electrical installations when necessary, with measures in place to prevent electrocution.	Identify and de-energize nearby power lines or maintain safe distances. Use insulated tools and equipment, and provide electrical safety training to workers. Implement lockout/tagout procedures during maintenance. <b>(ALL)</b>	Workers	Before Measure: <b>High</b> After Measure: <b>Med</b>
Exposure to asbestos	Asbestos-related illnesses, respiratory conditions	Allows renovation of older structures with controlled asbestos exposure.	Conduct asbestos surveys and, if present, engage licensed removal contractors. Provide asbestos awareness training to workers. <b>(ALL)</b>	Workers, contractors	Before Measure: <b>High</b> After Measure: <b>Med</b>
Exposure to hazardous substances	Health issues, chemical burns, respiratory problems	Enables use of essential substances with minimized health risks.	Implement proper storage and labeling of hazardous materials. Provide personal protective equipment and training on handling procedures. <b>(ALL)</b>	Workers	Before Measure: <b>High</b> After Measure: <b>Med</b>
Exposure to lead-based materials	Lead poisoning, neurological damage	Allows refurbishment of older structures with controlled exposure.	Conduct pre-work material assessments and, if lead is present, provide respirators and implement dust suppression techniques. Monitor lead levels and conduct health checks. <b>(ALL)</b>	Workers	Before Measure: <b>High</b> After Measure: <b>Med</b>
Exposure to silica dust	Respiratory diseases, lung damage	Allows operations like cutting and drilling concrete with controlled respiratory risks.	Implement wet cutting methods and use dust extraction systems. Provide respiratory protection and conduct air monitoring. <b>(ALL)</b>	Workers	Before Measure: <b>High</b> After Measure: <b>Med</b>

HAZARD	RISK	RISK BENEFIT	MEASURE	RISK TO	RISK LEVEL
Fire from sparks and spatter	Burns, ignition of flammable materials, structural damage	Allows welding in various environments with minimized fire risks, enhancing site flexibility and safety.	Clear the area of flammable materials and establish fire watch procedures. Use welding blankets to contain sparks, and ensure fire extinguishers are readily available. <b>(ALL)</b>	Workers, contractors	Before Measure: <b>High</b> After Measure: <b>Med</b>
Fire hazards	Burns, injuries, structural damage	Enables hot work activities with minimized fire risk through stringent controls.	Store flammable materials properly and maintain clear access to firefighting equipment. Conduct hot work with permits and have fire watchers present during and after operations. <b>(ALL)</b>	Workers, contractors	Before Measure: <b>High</b> After Measure: <b>Med</b>
Lone working	Injuries without immediate assistance, stress	Increases flexibility in task assignments with managed risks.	Establish regular check-in procedures and provide communication devices. Assess tasks to ensure they can be safely performed alone. <b>(ALL)</b>	Lone workers	Before Measure: <b>High</b> After Measure: <b>Med</b>
Overhead power line contact	Electrocution, severe burns, fatalities	Facilitates working near utilities with minimized electrocution risk.	Identify and mark power line locations, maintain safe clearance distances, and use insulated equipment. Train workers in recognizing electrical hazards. <b>(ALL)</b>	Workers, contractors	Before Measure: <b>High</b> After Measure: <b>Med</b>
Struck by moving machinery	Injuries from machinery collisions, fractures	Promotes efficiency in material handling with minimized collision risks.	Install barriers and warning systems around machinery. Train operators in safe operation and ensure pedestrians are aware of machinery paths. Use high-visibility clothing for workers near machinery. <b>(ALL)</b>	Workers, site visitors	Before Measure: <b>High</b> After Measure: <b>Med</b>
Temporary structure instability	Collapse of structures, injuries, fatalities	Enables construction of support structures critical for elevated work, with reduced risk of failure.	Secure temporary structures with bracing, conduct regular inspections, and follow manufacturer specifications for load limits. <b>(ALL)</b>	Workers, contractors	Before Measure: <b>High</b> After Measure: <b>Med</b>

HAZARD	RISK	RISK BENEFIT	MEASURE	RISK TO	RISK LEVEL
Vehicular accidents on-site	Collisions, injuries, fatalities	Facilitates material transport within the site with reduced collision risks.	Designate specific routes for vehicles and pedestrians. Implement speed limits and use trained flaggers to control traffic. <b>(ALL)</b>	Workers, visitors, contractors	Before Measure: <b>High</b> After Measure: <b>Med</b>
Welding fumes exposure	Respiratory issues, long-term health conditions	Permits essential welding operations with reduced health risks from fume inhalation.	Utilize local exhaust ventilation systems to capture fumes at the source. Provide appropriate respiratory protective equipment and ensure regular health monitoring of workers. <b>(ALL)</b>	Workers	Before Measure: <b>High</b> After Measure: <b>Med</b>
Chemical burns	Skin burns, eye damage, long-term tissue injury	Allows safe handling of essential chemicals, enabling critical processes while minimizing risks.	Provide appropriate personal protective equipment and ensure availability of emergency washing facilities. Train workers on safe handling. <b>(ALL)</b>	Workers	Before Measure: <b>High</b> After Measure: <b>Low</b>
Compressed air hazards	Injuries from air bursts, hearing damage	Allows cleaning and powering tools with controlled risks, ensuring task completion.	Enforce the use of approved hoses and fittings, regularly inspect compressed air equipment, and train workers on proper handling to avoid misuse. <b>(ALL)</b>	Workers	Before Measure: <b>High</b> After Measure: <b>Low</b>
Equipment malfunction	Injuries from faulty equipment, delays in workflow	Ensures reliability of equipment, maintaining workflow efficiency.	Establish regular maintenance schedules and conduct pre-use inspections. Train operators to identify and report defects promptly. <b>(ALL)</b>	Workers, contractors	Before Measure: <b>High</b> After Measure: <b>Low</b>
Exposure to extreme weather	Heatstroke, hypothermia, frostbite	Allows continuation of work with precautions, minimizing weather-related health issues.	Monitor weather forecasts and establish protocols for severe conditions. Provide appropriate clothing and schedule work to avoid peak weather extremes. <b>(ALL)</b>	Workers	Before Measure: <b>High</b> After Measure: <b>Low</b>

HAZARD	RISK	RISK BENEFIT	MEASURE	RISK TO	RISK LEVEL
Exposure to ultraviolet radiation	Sunburn, heatstroke, long-term skin damage	Enables outdoor work under safe conditions, reducing heat-related illnesses.	Provide UV-blocking PPE, such as sunglasses and long-sleeve clothing. Schedule outdoor tasks during cooler hours and offer shaded rest areas. Educate workers about skin protection. <b>(ALL)</b>	Workers	Before Measure: <b>Med</b> After Measure: <b>Low</b>
Fall from height	Fall from height, injuries from lack of protection, fatalities	Allows work on elevated structures, essential for construction progress, while minimizing fall-related injuries.	Implement guardrails, safety nets, and personal fall arrest systems. Ensure workers are trained in fall prevention and use of fall protection equipment. Conduct regular inspections of fall protection systems and enforce adherence to safety protocols. <b>(ALL)</b>	Workers, contractors	Before Measure: <b>High</b> After Measure: <b>Low</b>
Falling objects	Injuries from falling objects, head trauma, fatalities	Enables simultaneous tasks at different elevations, optimizing project timelines, with reduced risk of injury from falling materials.	Install toeboards, debris nets, and overhead protective structures. Enforce the use of hard hats and establish exclusion zones beneath elevated work areas to prevent unauthorized access. <b>(ALL)</b>	Workers, site visitors	Before Measure: <b>High</b> After Measure: <b>Low</b>
Fatigue	Reduced concentration, increased risk of errors and injuries	Maintains productivity by ensuring workers are alert and effective.	Implement work-rest schedules and monitor working hours to prevent excessive overtime. Educate workers on recognizing fatigue symptoms. <b>(ALL)</b>	Workers	Before Measure: <b>Med</b> After Measure: <b>Low</b>
Hand-arm vibration syndrome	Long-term hand and arm injuries, reduced dexterity	Enables use of necessary power tools with reduced risk of long-term injury.	Use low-vibration tools and limit exposure time. Provide anti-vibration gloves and conduct regular health surveillance. <b>(ALL)</b>	Workers	Before Measure: <b>Med</b> After Measure: <b>Low</b>
Hot materials	Burns, handling injuries, heat-related injuries	Enables safe handling of heated materials, ensuring continuity in welding tasks with minimal injury risks.	Provide heat-resistant gloves, aprons, and clothing. Train workers to handle hot materials safely and ensure sufficient cooling time for welded parts before handling. <b>(ALL)</b>	Workers	Before Measure: <b>Med</b> After Measure: <b>Low</b>

HAZARD	RISK	RISK BENEFIT	MEASURE	RISK TO	RISK LEVEL
Manual handling injuries	Back injuries, strain from improper lifting techniques, chronic pain	Allows for the handling of materials in areas inaccessible to machinery, promoting flexibility in construction activities.	Provide mechanical lifting aids, such as cranes and hoists, and train workers in proper lifting techniques. Rotate tasks to prevent repetitive strain and implement team lifting for heavy components. <b>(ALL)</b>	Workers	Before Measure: <b>High</b> After Measure: <b>Low</b>
Noise-induced hearing loss	Hearing damage, long-term auditory impairment	Allows operation of necessary noisy equipment while protecting workers' hearing.	Conduct noise assessments and implement engineering controls to reduce noise levels. Provide hearing protection and enforce its use in designated high-noise areas. <b>(ALL)</b>	Workers	Before Measure: <b>High</b> After Measure: <b>Low</b>
Prolonged standing	Leg strain, back pain, circulation issues	Improves worker comfort and productivity over long shifts.	Provide anti-fatigue mats or supportive footwear and encourage regular movement breaks. Alternate tasks to reduce strain. <b>(ALL)</b>	Workers	Before Measure: <b>Med</b> After Measure: <b>Low</b>
Sharp object injuries	Cuts, lacerations, infections	Ensures efficient handling of materials and tools with reduced risk of injury.	Provide cut-resistant gloves and enforce proper storage of sharp tools and materials. Train workers on safe handling and disposal of sharp items. <b>(ALL)</b>	Workers	Before Measure: <b>Med</b> After Measure: <b>Low</b>
Slips, trips, and falls	Minor injuries, fractures, head injuries	Reduces minor injuries, maintaining productivity and worker morale.	Maintain good housekeeping to keep walkways clear. Use non-slip flooring materials and ensure adequate lighting in all work areas. <b>(ALL)</b>	Workers, site visitors	Before Measure: <b>Med</b> After Measure: <b>Low</b>
Structural collapse	Structural collapse, injuries from falling debris, fatalities	Facilitates complex structural assemblies by ensuring stability, thus preventing catastrophic failures.	Adhere to engineered erection sequences and ensure proper bracing and guying during assembly. Conduct regular inspections by qualified personnel to verify structural stability throughout construction phases. <b>(ALL)</b>	Workers, contractors, site visitors	Before Measure: <b>High</b> After Measure: <b>Low</b>

HAZARD	RISK	RISK BENEFIT	MEASURE	RISK TO	RISK LEVEL
Use of hand tools	Cuts, blunt force injuries, repetitive strain injuries	Facilitates precision tasks safely and efficiently.	Ensure all tools are maintained and inspected before use. Provide training on correct tool usage and replace damaged tools immediately. <b>(ALL)</b>	Workers	Before Measure: <b>Med</b> After Measure: <b>Low</b>
Unpredicted risks	Illness, injury, death		Continuous risk monitoring conducted by all staff. Any unforeseen hazards must be reported promptly to supervisors or management, with immediate corrective action taken as necessary. <b>(ALL)</b>	All	<b>N/A</b>

## NOTES

**Extra notes & activity evaluation:**

Completed by

Reviewed/Approved by

Risk Assessment Date

Review Required Date