

AGC Houston

THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA

Quality People. Quality Projects.



Guidelines for Creation of a Fall Rescue Plan.©

Created By:

AGC Houston Safety Committee

Guidelines for Creation of a Fall Rescue Plan

Introduction

The purpose of this document is to provide guidelines for creation of a Fall Rescue Plan using current best practices and applying a thoughtful approach to retrieving a fallen worker soon enough to minimize the effect of the fall on the worker and without endangering the lives of individuals conducting the rescue operation. Planning for safe rescue is an integral component of a managed Fall Protection Program as envisioned by American National Standards Institute document [ANSI Z359.2] and by the Occupational Health and Safety Administration standard under CFR 1926.502.(d).(20).

Project and Work Description

- **Project location:** (List the project name, address, global positioning system (GPS) coordinates if available, and directions to the project site for Local Emergency Services.)
- **Competent person(s):** (List the names and contact telephone numbers for the employer's designated fall protection competent person(s) and fall rescue competent person(s).)
- **Scope of work:** (Briefly describe the work to be performed and explain the fall exposure involved, including the reasons requiring use of personal fall arrest systems (FPAS) rather than implementing other work processes or utilizing passive forms of fall protection, i.e. guardrails, hole-covers, aerial lifts, etc.)

Fall Hazard Assessment

- **Fall Exposure Evaluation:** (Conduct a study of the project site and work methods considering the following elements.)
 - **Employees:** Consider involving the workers who will be performing the tasks and will be exposed to potential fall hazards to provide their observations and recommendations in the planning process. Consider periodic reevaluations of the Fall Rescue Plan with the work team to determine if all concerns have been addressed and whether the assumed initial working conditions have changed.
 - **Exposures:** List potential fall exposure types expected to be worked around, i.e. holes, shafts, leading edges, etc.
 - **Equipment:** Evaluate fall protection systems and equipment anticipated to provide effective protection.
 - **Events:** Determine the maximum fall exposure that could require rescue and the methods, equipment, and training that would be required in the anticipated "worst case" scenario. Review whether other fall exposures exist that could require alternate rescue methods, equipment, and training different from this scenario.
 - **Emergency Responders:** Consider requesting assistance from the nearest local emergency services and assess their ability to assist in an emergency. Consider incorporating the responders' recommendations into the fall rescue plan.

- **Rescue Operations Considerations:** (Consider the following items when evaluating the work site for safe rescue operations and provide necessary accommodations.)
 - **Anchorage:** Evaluate the location and support strength of available anchorage points and provide additional supports where needed. Consider designating alternate emergency anchorage points and attachment equipment to be used by the rescue team, in light of the requirement that anchor points are to be independent of the primary fall protection anchors used by workers needing rescue.
 - **Building:** Consider structural features such as multiple stories, multiple roof levels, access points, inaccessible areas, elevators, hoists or other available equipment on site.
 - **Environment:** Assess issues related to varying weather conditions to be expected during the performance of the work tasks such as temperature extremes, rain, snow, high winds, solar exposure, and lightning.
 - **Equipment:** Determine the type and means of rescue equipment that will be required to safely rescue a fallen worker from an elevated location. List the needed equipment, where it will be stored, the frequency that it will be inspected, and who will take it to the scene of the incident.
 - **Hazards:** Determine whether other risks are present, including power lines, dangerous equipment, equipment exhausts, impalement risks, etc.
 - **Personnel:** Consider the roles and qualifications of potential rescue team members and outline the steps in the rescue process including means to protect them during rescue operations. (Refer to the project's Crisis Management Plan for guidance on contacting emergency response services and notification of responsible parties.)
 - **Site:** Review the campus or facility orientation, access to the site, traffic patterns, ground level obstructions, security parameters, etc., which may complicate effective response.
 - **Time:** Evaluate scenarios involving rescue by local off-site emergency responders. If the time exceeds ten minutes, the fall rescue plan should, if feasible, provide a means of physical relief for the suspended worker, unless rescue can be accomplished with on-site responders.

Equipment

GENERAL: This section outlines the fall rescue equipment available to manage the rescue of a fallen worker safely. All possible emergency situations cannot be anticipated, however the rescue equipment listed are available options that may be implemented to conduct a fall rescue safely. Equipment shall be used in conjunction with fall rescue plan and training.

GOAL: Confirm an assessment is conducted of site fall hazards, environmental conditions and site specific emergency response procedures to identify the fall rescue equipment to use as part of the rescue plan. The project management team shall conduct an assessment of the site specific application to identify the rescue equipment required to minimize the fall exposure of the rescuer. The following rescue systems are options to use as part of the rescue plan.

Contents of the Fall Rescue Equipment Selection

1. Self & Personnel Rescue Equipment

The equipment listed below are products that are equipped with manufacturer recommended user guidelines. The guidelines may include inspection, maintenance, capacity specifications, and limitations. The user shall read and adhere to the manufacturer guidelines.

- Rescue Ladder
- Suspension Trauma Safety Straps Self-Retracting Lifeline (SRL) with Rescue (Dual Mode Self-Retracting)
- The Rescue & Escape Device (RED)

The above listed items are not a complete list of fall rescue equipment. Consult with your fall protection suppliers for more options and training.

2. Aerial Work Platforms

Aerial work platforms may be used to rescue a fallen worker only if the use of the equipment is not going to create a safety hazard for the operator, the victim or any other personnel involved in the rescue. Listed below are general guidelines that must be met for the safe use of aerial work platforms.

- Only trained and certified persons shall operate an aerial lift. The designated operator for the fall rescue shall demonstrate their ability to operate the equipment safely. The operator must have a valid operator card in possession while operating equipment.
- All PPE must be worn by people in a basket; all other manufacture rules and regulations must be followed when using such equipment.

3. Crane & Suspended Personnel Platforms

The project team will confirm that all alternate methods of access to a fallen worker are considered prior to the utilization of suspended personnel baskets. Listed below are general guidelines that must be met for the safe use of a crane & suspended personnel platform.

- The supervisor will confirm that each person involved with this operation receives instruction and clear understanding as to their responsibility prior to engaging in the use of work baskets or platforms.

4. Local Emergency Services

Prior to starting the project, the Local Emergency Services (LES) shall be located, contacted to determine the availability and limitations of LES for fall rescue and a site visit shall be requested. The purpose of the site visit is to allow the LES to familiarize themselves with the project and make necessary preparations to assist with a fall rescue. (*Note: LES are not intended as the primary source of fall rescue services*) Listed below are general guidelines that should be used when using LES as the primary fall rescue team.

- Locate the Local Emergency Services.
- Make contact and request a site visit.
- Develop a fall rescue guidelines in conjunction with the LES.
- Include the plan developed as part of the site emergency response plan
- Communicate the emergency response plan to all personnel on site.
- Post the emergency response plan and LES contact number & location at the site.

Training

Rescue personnel should possess the skills needed to implement the Fall Rescue Plan or should be trained to do so. ANSI Z359.2 offers guidance regarding fall rescue training.

Pre-Exposure Meeting

Reviewing the Fall Rescue Plan during typical pre-construction meetings is an important agenda item for trade contractors with workers potentially exposed to falls requiring the utilization of personal fall arrest systems. The Fall Rescue Plan can be an important supplement to the project's Crisis Management Plan.

Job Hazard Analysis

A Job Hazard Analysis (JHA) completed for each work shift should be reviewed with the work team exposed to the potential fall hazard. (Refer to the attached JHA form for potential included content.)

Job Hazard Analysis Fall Event Rescue Plan

Issue Date:

Expiration Time:

Project Name:		
Project Address:		
Global Positioning System (GPS) Coordinates:		North
Directions to Project:		
Designated Competent Person(s) and Contact Telephone Numbers		
Employee Name	Position	Contact Number
Project Specific Considerations		
Description of Work:		
Reasons Personal Fall Arrest System (PFAS) is required: (Consider alternate means and methods to perform the assigned tasks without fall exposure, i.e. guardrails, scaffold, lifts, etc.)		
Fall Protection Equipment and Systems to be Utilized: (Check or circle selected items to be used)		
<input type="checkbox"/> Vertical Lifelines	<input type="checkbox"/> Horizontal Lifelines	<input type="checkbox"/> Personal Fall Arrest Systems
<input type="checkbox"/> Positioning Devices	<input type="checkbox"/> Safety Net Systems	<input type="checkbox"/> Swing Stage
<input type="checkbox"/> Personnel Basket	<input type="checkbox"/> Other: _____	
Potential Fall Exposures: (Check or circle selected items anticipated)		
<input type="checkbox"/> Hole	Maximum working height: _____	
<input type="checkbox"/> Shaft	Maximum working height: _____	
<input type="checkbox"/> Tank or Vessel	Maximum working height: _____	
<input type="checkbox"/> Leading Edge	Maximum working height: _____	
<input type="checkbox"/> Building Exterior	Maximum working height: _____	
<input type="checkbox"/> Roof	Maximum working height: _____	
<input type="checkbox"/> Tower Crane	Maximum working height: _____	
<input type="checkbox"/> Other: _____	Maximum working height: _____	
Physical Description of Fall Exposure: (i.e. Iron worker 5 stories up connecting or roofer 5 stories up exposed to leading edge.)		
Means of Access/Egress from Work Locations: (scaffold, roof access, ladder, aerial lift, etc.)		
Site Conditions: (ground level obstructions, facility layout considerations, security protocol constraints, traffic control limitations, inaccessible areas)		
Building Design & Structural Considerations: (structural offsets, constricted access points, multi-level roof tops)		

Environment: (temperature extremes, surface conditions, winds, solar exposures)		
Approximate Response Times:		
<ul style="list-style-type: none"> • On-site Rescue Team: • Off-Site Local Emergency Services: 		
Alternate Emergency Anchorage Points: (structural components, devices, equipment)		
Adjacent Hazards: (power lines, dangerous equipment, impalement & entrapment, exhaust systems)		
On-site Response Measures (No work shall proceed until (ALL) boxes are checked YES.)		
Planned Approach: (In the event of a rescue from a maximum height exposure, what rescue methods and equipment will be required?)		
<input type="checkbox"/> Yes (Explain) <input type="checkbox"/> No (Explain)		
Equipment: (In the event of a rescue, is the necessary equipment available on-site?)		
<input type="checkbox"/> Yes (Explain) <input type="checkbox"/> No (Explain)		
Personnel: (In the event of a rescue, have all personnel been trained in the proper use of the equipment and methods of their use?)		
<input type="checkbox"/> Yes (Explain) <input type="checkbox"/> No (Explain)		
Description of Rescue Equipment: (List all items to be utilized.)		
Signatures: (Competent Person(s) & Exposed Worker(s))		
Employee's Name: (Print)	Signature:	Date:
Reviewed by Signatures:		
Reviewer's Name: (Print)	Signature:	Date: