

Appendix H

Checklists

1. Fall Protection Program Compliance Audit
2. Site-Specific Fall Survey Report
3. Site-Specific Fall Arrest Rescue Plan
4. Fall Protection Equipment Inspection
5. Fall-Arrest System And Equipment
6. Competent Or Qualified Person (optional)

**1. FALL PROTECTION PROGRAM COMPLIANCE
AUDIT CHECKLIST**

FALL PROTECTION PROGRAM COMPLIANCE CHECK LIST FOR PERSONNEL PERFORMING WORK AT HEIGHTS, EXPOSED TO FALL HAZARDS AND USING FP EQUIPMENT		Date of Audit:		
Project		District		
Prepared/Audited by		Signature		
FALL PROTECTION PROGRAM CRITERIA		Yes	No	N/A
1	<p>Does the Project have personnel working at heights, exposed to fall hazards above 4 feet and using Fall Protection (FP) Equipment?</p> <p>Is there a possibility of a fall from any height onto dangerous equipment, into a hazardous environment or onto an impalement hazard? Is there any need to deviate from the 4 feet threshold requirement? Is this deviation approved by the designated Competent Person?</p> <p>If Yes, fall protection program is required to be established and implemented</p>			
BASIC PROGRAM REQUIREMENTS				
2	Is the fall protection program written and approved by the Project?			
3	As an alternate to the written fall Protection Program, is the Project using the Fall protection guide as their program with Safety Office approval?			
ADDITIONAL REQUIREMENTS				
4	Is there a need for the Project to have additional requirements above and beyond the requirements stated in this Guide?			
DUTIES AND RESPONSIBILITIES				
5	Did the Project delineate duties and assigned responsibilities of personnel involved in the fall protection program, including Program Manager, Competent and Qualified Persons for fall protection, in the implementation of a managed fall protection program?			

6	Do the assigned personnel have the necessary skills, knowledge, training and expertise to manage, administer, and implement the fall protection program safely?			
WORKPLACE SURVEYS AND ASSESSMENT OF FALL HAZARDS				
7	Has a survey been conducted for each fall hazard at existing buildings, facilities or structures and a Fall Hazard Survey Report prepared?			
8	Was fall hazard analysis performed to determine the risk assessment, hazard severity and fall mishap probability?			
9	Are one or more fall protection methods identified in the survey report to eliminate or control each fall hazard?			
10	Do the surveyed walking working surfaces have the structural integrity to safely support the workers (i.e. working on roofs)?			
11	For personnel conducting roof inspections and, investigations, have they received proper training to conduct the work safely, prior to accessing the roof?			
FALL PROTECTION AND PREVENTION PLAN				
12	For personnel exposed to fall hazards and using fall arrest equipment (not otherwise protected by passive fall protection system such as guardrails) has a Site Specific Fall Protection and Prevention Plan been prepared and submitted to the Safety Office for review and approval? (It is recommended to prepare a generic fall protection and prevention plan for non-routine tasks (i.e. emergency tasks)). The plan shall be updated as conditions change, once every six months.			
13	Is the fall protection and prevention plan prepared either by the designated competent or qualified person for fall protection? If the plan includes fall protection components or systems requiring direction, supervision, design calculations or drawings by the qualified person for fall protection, the name, qualifications and responsibilities of the qualified person shall be addressed in the plan.			
14	Does the plan describe in detail the specific practices, equipment, methods and procedures to be used for the protection of workers from falling to lower level and the inspection requirements?			

PREFERRED ORDER OF CONTROL MEASURES			
15	Have the fall hazards been evaluated to determine the preferred order of control measure for selecting the appropriate fall protection method (i.e. elimination or prevention)?		
16	Can fall hazards be eliminated by alternate work methods or changing task(s) or process(s)?		
SELECTION OF FALL PROTECTION MEASURE			
17	Is the most appropriate fall protection method selected, compatible with the type of work being performed?		
STANDARD GUARDRAIL SYSTEM			
18	If guardrails are used, do they comply with the specified requirements for height, strength and minimum material of construction?		
19	If perimeter cables used at unprotected side or edge, as a method of attaching a lanyard to the cables, do they meet the design requirements for horizontal lifelines? Did the qualified person for fall protection design the system as a horizontal lifeline system?		
COVERS			
20	If covers are used to cover a hole 2 inches in its least dimension, are they capable of withstanding without failure, at least twice the combined weight of the worker, equipment and material? When covers are used, are they clearly marked or color coded?		
WORK PLATFORMS			
21	When working from elevated work platform, is the platform equipped with guardrail or other fall protection system? Is the work platform maintained properly?		
SAFETY NET SYSTEM			
22	Does the safety net installation meet the specified criteria and requirements, including the size of the mesh openings and the strength of the outer rope or		

	webbing?			
23	Has the safety net been tested in suspended position immediately after installation and under the supervision of qualified person?			
24	If a safety net is relocated, repaired or left in place for more than 6 months, was it retested in suspension under the supervision of qualified person?			
25	Is the inspection of the safety net performed by a competent person and in accordance with manufacturer's recommendations?			
26	Inspection of safely nets shall be performed immediately after installation, weekly thereafter, and following any alteration or repair. Has the inspection been documented?			
PERSONAL FALL PROTECTION SYSTEMS				
27	Do all the fall arrest systems and equipment used meet ANSI/ASSE Z359 Fall Protection Code Standards?			
28	When selecting personal fall protection system, are the free fall distance, total fall distance and available clearance taken into consideration?			
29	Do the snaphooks and carabiners used meet ANSI Z359 Fall Protection Code/Standards? (Snaphooks and carabiners meeting ANSI Z359.1-1992 (R1999) shall not be used.)			
30	For workers having body weight outside the capacity range of 130-310 lbs and using fall protection equipment, is it permitted in writing by the manufacturer?			
31	If it is necessary to increase the free fall distances beyond 6 feet (i.e. tying at the foot level) and limiting the maximum arresting force on the body under 1,800 lbs, is the qualified person for fall protection making this determination? When the tie off point is located below the dorsal D-ring, use the 12 ft free fall energy absorbing single or "y" lanyards. A qualified person for fall protection is required to make this determination.			
32	If the Sternal D-ring attachment point of the body harness (located at the sternum) is used for fall arrest, is the worker exposed to a free fall distance of less than two feet and the average arrest force on the body is 900 lbs?			

33	Self Retracting Devices (SRD) shall not be used in horizontal applications unless permitted by the manufacturer. Is the SRD used in vertical application?			
34	When using “Y” lanyard for 100% tie-off, does the joint between the two legs of the lanyard withstand a force of 5,000 lbs?			
35	The unused leg of the “Y” lanyard shall not be attached to any part of the harness, except to attachment points specifically designated by the manufacturer. Has the manufacturer of the equipment designated such attachment points?			
36	When using positioning system, is the worker using a separate system (secondary system) that provides back-up protection from a fall? When using a restraint system, is the lanyard length short enough (or adjustable) to prevent a worker from being exposed to a fall hazard?			
37	When using ladder climbing devices for ascending or descending on fixed ladders, is the length of connection point between the body harness and the rail or cable 9 inches or less? Will the system be activated within two feet after a fall occurs? Prior to installation, has the ladder to which the climbing device will attached to, been designed to withstand the forces generated by the fall of the climber?			
FALL ARREST EQUIPMENT SELECTION CRITERIA				
39	Does the selected fall arrest equipment meet ANSI Z359 (2007) Fall Protection Code? (Any equipment meeting ANSI A10.14 shall not be used)			
40	Can the manufacturer of the selected equipment substantiate thru Third-Party Testing Laboratories, Witness Testing or Manufacturer Self- Certification Testing that the equipment meets ANSI Z359 Fall Protection Code/Standards and/or designed, selected and approved by the qualified person for fall protection?			
TRAINING				
41	Is all fall protection training for all personnel involved in the fall protection program in accordance with the ANSI Z359 Fall Protection Code?			
42	Are workers trained by a competent person for fall protection who is qualified to deliver the training on the safe use of fall protection and rescue equipment, including hands on and practical demonstrations?			

43	Did the assigned Competent and Qualified Persons for Fall Protection receive adequate training?			
44	Did other personnel involved in the fall protection program receive adequate training?			
45	Has the above training been documented and verified with a certificate of training?			
46	<p>Did end users receive refresher/update training on the use of fall protection equipment once every two years?</p> <p>Did the competent person for fall protection receive refresher/update training to stay current with the fall protection and educational requirements once every two years?</p> <p>Did other personnel involved in the fall protection program receive recommended or required refresher/update training as specified in ANSI Z359.2 standard?</p>			
SELECTION OF ANCHORAGES FOR FALL ARREST EQUIPMENT				
47	<p>For fall arrest anchorages selected/identified and designed by a qualified person for fall protection, are they capable of supporting at least twice the maximum arresting force?</p> <p>For fall arrest anchorages selected by a competent person for fall protection, are they capable of supporting a minimum force of 5,000 pounds per person attached?</p>			
48	<p>For positioning and travel restraint anchorages selected by a competent person for fall protection are they capable of supporting 3,000 pounds per employee attached?</p> <p>If positioning and restraint anchorages selected and designed by a qualified person for fall protection, do they meet the requirement of two times the foreseeable force on the worker?</p>			
49	Are the horizontal lifeline anchorages designed by a registered professional engineer with experience in designing HLL systems; or designed by a qualified person for fall protection who has appropriate training and experience?			
RESCUE PLAN AND PROCEDURES				

50	For personnel working at heights and using fall arrest equipment, has a site specific rescue plan and procedures been prepared and maintained at the work location?			
51	If self-rescue or assisted-rescue are the planned methods to be used during rescue, did personnel conducting rescue receive adequate training?			
52	If required, are independent anchorages for rescue identified and selected?			
53	If the method of rescue is by the jurisdictional public and Government-emergency response agencies, has a pre-incident plan been developed?			
INSPECTION OF PERSONAL FALL PROTECTION EQUIPMENT				
54	Have procedures been established for inspection, storage care and maintenance of the equipment and IAW manufacturer's instructions and recommendations?			
55	Does the competent person for fall protection inspect the fall protection equipment annually and w/documentation?			
56	Does the end user inspect the equipment prior to each use?			
FALLS FROM HEIGHTS MISHAP REPORTING				
57	Are falls from heights mishaps reported to the Safety Office?			
EVALUATION OF PROGRAM EFFECTIVENESS				
58	Are procedures in place to audit and evaluate the fall protection program, at least once every two years?			

End of Section

2. Site-Specific Fall Survey Report Checklist

<u>GENERAL INFORMATION</u>			
Project:		Date:	
Building/Facility #:		Work Area:	
Survey Conducted By:		Approved By:	
Fall Hazard # (1, 2, 3, etc.)	1	FP Program Manager or Competent Person:	
<u>SURVEY INFORMATION</u>			
Major Fall Hazard Zone or Type:		Work Location:	
Personnel Interviewed:	1.	Guiding Regs:	EM 385-1-1, 29 CFR 1910 and 1926, ANSI/ASME Z 359
	2.	Work Type:	
	3.		
Distance of Personnel from Fall Hazard (Ft):		Location or Distance to Obstructions (Ft)?	
Suggested Anchorage(s) (if fall arrest system utilized):			
Distance to Ground Below (Ft):		Number of Personnel Exposed to Fall Hazard:	
Frequency/Duration of Fall Exposure:	/	Exposure Risk:	High
Potential Severity of Fall:	Severe Injury	Obstructions in Fall Path:	
Access or Egress to Fall Hazard Area (i.e. ladder, Stairs, Work Platform, Scissor Lift, etc.)	Ladder	Condition of Floor/Other Surfaces:	Good

Historical Fall Mishaps at the Facility?		Unknown	Lock Out/Tag Out Hazard?	No	
Is There a Risk of the Following?			Suggested Fall Protection Solutions		
Hot Objects:	<input type="checkbox"/>		Fall Arrest (FA) System		
Sparks:	<input type="checkbox"/>		FA Type:	Horizontal Life-Line	<input type="checkbox"/>
				Portable System	<input type="checkbox"/>
Flames:	<input type="checkbox"/>			Overhead Beam Strap	<input type="checkbox"/>
				Self-Retracting Lanyard	<input type="checkbox"/>
				Energy Absorbing Lanyard	<input type="checkbox"/>
Chemical Hazards:	<input type="checkbox"/>		Maintenance Stand or work platforms	<input type="checkbox"/>	
Electrical Hazards:	<input type="checkbox"/>		Restraint System	<input type="checkbox"/>	
Sharp Objects:	<input type="checkbox"/>		Positioning System	<input type="checkbox"/>	
Abrasive Surfaces:	<input type="checkbox"/>		Aerial Lift/Work Platforms	<input type="checkbox"/>	
Weather Factor:	<input type="checkbox"/>		Horizontal or Vertical Lifeline System		
Other risk Factors:	<input type="checkbox"/>		Other FP methods		
Anchorage(s) Locations (if Applicable)					
Can Rescue Be Performed If Required?			Type of Rescue:	Self or Assisted Rescue	
Can Rescue be performed if required? Or is there a rescue plan prepared?		Unknown	Explain Other:		
Are End Users Trained on Fall Arrest Systems?		Unknown	Do Swing Fall Hazards Exist?	Unknown	
Additional Information				Yes	

Note: For complete fall hazard survey of the facility, tabulate and develop summary of findings for all locations.

End of Section

3. Site-Specific Fall Arrest Rescue Plan (Checklist)

<u>GENERAL INFORMATION</u>			
Project:		Date:	
Building/Facility #:		Primary and secondary Phone Numbers:	
Detailed Location:		Ladder/Lift Location:	
First Aid Kit Location(s)	1.	Fire Extinguisher Locations:	1.
	2.		2.
	3.		3.
Nearest Medical Facility and Directions:			
Applicable Local Regulations or Requirements			
Procedure for Requesting Rescue	1.		
	2.		
	3.		
	4.		

Describe Rescue Operation and Method:	
Types of Equipment Used (Ladder, Hoist, Aerial Lift, etc.):	
If Self-Rescue or Assisted Rescue is Planned, Describe Equipment to be used	
Specialized Training for the Rescue Team:	
Describe if Additional Anchorages for Rescue are Required:	
Has Rescue Plan Been developed in coordination with Local Emergency Services (essential if relying on them to provide rescue)?	
Is a pre-Incident Plan prepared when the planned Method of Rescue is the Fire Department	
Additional Comments:	
Prepared By:	
Approved By:	

End of Section

4. FALL PROTECTION EQUIPMENT INSPECTION CHECKLIST

Project:		Page 1								
Inspected by: _____ (Competent Person's Name)					Date: _____					
Work Area: _____					Other: _____					
Instructions: <ol style="list-style-type: none"> 1. All parts of the fall protection system and components are to be checked for excessive wear and damage. 2. Use the symbol "Y" for yes or OK. 3. Use the symbol "N" for no or replace. 4. All equipment must be inspected visually before each use by the end user and by the competent person at least annually with documentation. 										
Name or Equip #	Self Retracting Lifelines		Lanyards		Full Body Harnesses			Horizontal Lifeline System		
	Cable	Mechanism	Webbing	Energy Absorber	Webbing	"D" Rings and Connectors	Labeling	Anchorage Connection/ Stanchions	Cable	Hardware

End of Section

5. FALL-ARREST SYSTEM AND EQUIPMENT CHECKLIST

(Must answer yes to all applicable questions)

Prepared either by the competent person or a person trained and designated by the competent person for fall protection.

ANCHORAGES

1. Do workers know appropriate anchorage points for each task that requires a fall-arrest/positioning or restraint system? _____
2. Are all anchorage points stable, substantial, and have sufficient strength to withstand twice the potential impact energy of the free-fall? _____
3. Is the "D" ring of the full body harnesses located at the back shoulder height? _____

Are anchorage points for self-retracting lifeline systems located overhead?

4. Can the employee move from one station to another or climb up and down without exposure to a fall? _____
5. If the lifeline, lanyard, or self-retracting lifeline is not permanently attached to an anchorage point at the elevated work area, is the first worker up or the last worker down protected while climbing and traversing? _____

LANYARDS

1. Is the lanyard length as short as necessary and in no case greater than 6 feet? (1.8 meters) _____
2. Are manually adjustable lanyards used when it is desirable to be able to take slack out of the lanyard? _____
3. Does the lanyard have a shock-absorbing feature to limit the arresting forces? _____
4. If the lanyard has a shock absorber, is it obvious to the user that the shock absorber has been deployed? (Is there a warning label, broken pouch, etc.)

5. Have you prohibited tying of knots from the lanyard to the lifeline? (Mechanical rope grabs or fall arresters must be used) _____

SELF-RETRACTING LANYARD (SRL)

1. Are employees properly trained to use a SRL? _____
2. Is the SRL under a regular maintenance and inspection program?

3. Is the end of the cable properly spliced? _____ (Thimble eye, Flemish eye-spliced, and swaged fitting/ferrule)

SNAPHOOKS

1. Are double-locking snap hooks being used? _____
2. Is the snap hook attached to the D-ring, eyebolt, or other hardware in a manner approved by the manufacturer of the snap hook? _____
3. Are snap hooks inspected regularly for stress, wear, distortion, and spring failure? _____
4. Are snap hooks arranged so they are never connected to each other?
_____ (They should NOT be connected to each other).

FULL BODY HARNESSSES

1. Are full-body harnesses selected for a particular job quipped with all necessary attachment points? (For fall arresting, work positioning, descent control, rescue, or ladder fall-protection systems) _____
2. Are body harnesses inspected regularly for wear, abrasion, broken stitching, and missing hardware? _____
3. Is the Velcro type of closure prohibited from all load-bearing connections?

4. Have workers been instructed in the use and care of body harnesses?

FALL ARRESTERS

1. Is the fall arrester compatible with the lifeline on which it is to be installed or operated? _____
2. Is the fall arrester in operational condition? _____
3. Is the fall arrester equipped with a changeover lever that allows it to become a stationary anchor on the lifeline? _____

4. Is the fall arrester equipped with a locking mechanism that prevents unintentional opening of the device and subsequent disengagement from the lifeline? _____
5. Is the fall arrester's "up" direction marked properly so that the equipment can be attached to the line correctly? _____

VERTICAL LIFELINES

1. Does the lifeline have a minimum breaking strength of 5,000 pounds? (2,268 kilograms) _____
2. Is the lifeline protected from abrasive or cutting edges? _____
3. Does the system provide fall protection as the worker connects to and releases from the lifeline? _____
4. Is the lifeline arranged so workers never have to hold it for balance? (A lifeline should never be used for balance) _____
5. Is the vertical segment integrated with the horizontal segment to provide continuous fall protection? _____

HORIZONTAL LIFELINES

1. Has the entire horizontal lifeline system been designed and approved by a qualified person? _____
2. Have the anchorages to which the lifeline is attached been designed and evaluated specifically for a horizontal lifeline? _____
3. Has the designer of the system approved the number of employees that will be using it? _____
4. Is the rope or cable free from signs of wear or abrasion? _____
5. Does the rope or cable have the required initial sag? _____
6. Have the workers been warned about potential falls? _____
Have the clearances been checked? _____
7. Is the hardware riding on the horizontal lifeline made of steel? (Aluminum is not permitted because it wears excessively) _____
8. Is the fall arrester included in a regular maintenance and inspection program? _____

OTHER CONSIDERATIONS

1. Has the free-fall distance been considered, so that a worker will not strike a lower surface or object before the fall is arrested? _____
2. Have pendulum-swing fall hazards been eliminated? _____
3. Have safe methods to retrieve fallen workers been planned? _____
4. Is all fall-arrest equipment free of potential damage from welding, chemical corrosion, or sandblasts? _____
5. Are all components of the system compatible according to the manufacturer's instruction? _____

6. Have employees been properly trained in the following issues?

Manufacturer's recommendations, restrictions, instructions, and warnings

Location of appropriate anchorage points and attachment techniques

Are there any problems associated with elongation, deceleration distance, and method of use, inspection, and storage? _____

7. Are all regular inspections performed by trained inspectors? _____
8. Are written reports maintained? _____
9. Has the total fall distance been considered? _____
10. Has rescue of the worker been considered? _____

End of Section

6. COMPETENT OR QUALIFIED PERSON

Optional Checklist for use when a competent or qualified person is required to develop fall protection and prevention plan

COMPETENT OR QUALIFIED PERSON CHECKLIST						
Project:	Location:					
FP Program Manager:	Date:					
COMPETENT PERSON INFORMATION						
Competent Persons Name: _____ Length of experience in this occupation: _____ Length of experience with this employer: _____						
TRAINING KNOWLEDGE AND EXPERIENCE				Yes	No	N/A
Does the designated individual have training knowledge and experience in:						
<ul style="list-style-type: none"> • Applicable fall protection regulations, standards and requirements? 						
<ul style="list-style-type: none"> • Fall hazard recognition (How to recognize and identify fall hazards)? 						
<ul style="list-style-type: none"> • Duties and responsibilities of other designated personnel under the FP Program (e.g. qualified person, end user, authorized rescuer, etc.)? 						
<ul style="list-style-type: none"> • Conducting fall hazard surveys and preparing survey report? 						
<ul style="list-style-type: none"> • The requirements and criteria for guardrails, safety nets, scaffolds, aerial lifts and movable and stationary work platforms, warning line system, and safety monitoring system? 						

<ul style="list-style-type: none"> • Developing fall protection and prevention plans (written fall protection procedures)? <p style="text-align: center;">Notes:</p> <ol style="list-style-type: none"> 1. If the Fall Protection and Prevention plan includes fall protection components or systems requiring direction, supervision, design calculations or drawings by a Qualified Person for Fall Protection or a professional engineer, the name, qualifications, responsibilities, training knowledge, experience and signature of the Qualified Person for Fall Protection or professional engineer shall also be addressed in the plan. 2. At a minimum, the qualified person/professional engineer information is required when using horizontal lifelines, other engineered systems, the anchorages or tie off points are located below the dorsal D–ring and designing certified anchorages that require being twice the maximum arrest or potential force. 			
<ul style="list-style-type: none"> • Fall arrest, positioning, restraint and ladder climbing systems 			
<ul style="list-style-type: none"> • Fall hazard elimination and control methods including how to assemble, disassemble and use fall protection systems and equipment (donning of the equipment, equipment installation techniques and proper anchoring and tie-off techniques)? 			
<ul style="list-style-type: none"> • Fall protection system and equipment assessments (e.g. component compatibility, estimating free fall distances, total fall distance and required clearance, and common hazards of each system and component used) and determining when a system is unsafe? 			
<ul style="list-style-type: none"> • How to conduct detailed inspection storage care and maintenance of equipment, components and systems with documentation? 			
<ul style="list-style-type: none"> • Fall protection rescue equipment and procedures and prepare fall hazard rescue plan? 			
<ul style="list-style-type: none"> • The selection and use of non-certified anchors (e.g. 5,000 lbs anchorage for fall arrest)? 			
<ul style="list-style-type: none"> • Requirements for working over or near water or working from/in machinery over water 			

List training/experience including certificate of training;			
AUTHORITY	Yes	No	N/A
Does the designated individual have authority from the Project to:			
Take prompt corrective action to eliminate existing and predictable hazards?			
Stop work?			

End of Section