

Fall Protection Program

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Note: Numbers, such as (1910.26), in the following text refer to the applicable regulation. Regulations starting with 1910 apply to general industry and those starting with 1926 apply to construction activities.

Policy

The purpose of this policy is to protect employees from injuries resulting from slips, trips and falls. Where possible, fall prevention measures will be the primary means of protecting employees. All employees working 6 feet or above a lower surface shall comply with the University of Kansas Medical Center (KUMC) Fall Protection Program.

I. INTRODUCTION

According to Occupational Safety and Health Administration (OSHA), falls are the leading cause of construction deaths throughout the United States. Since 1994, 48 deaths due to occupational accidents have occurred in Region VII (Kansas, Missouri, Iowa, and Nebraska).

Obviously, the farther a person falls, the greater the possibility of injury or death. But even a fall from a 6-foot stepladder may cause a serious injury or even death. Serious injuries may even occur by a person slipping and falling to the floor on the same level or to a slightly lower level. Obviously, the very best policy is to prevent falls in the first place. Some form of fall protection may be required at any height or on any surface, however, it is mandatory that persons working at heights at or above six feet be protected by some form of fall protection such as guardrails or a safety harnesses.

Throughout the KUMC there are many potential fall hazards which include, but are not limited to: work from ladders, scaffolds, or platforms; work from elevated locations such as roofs or near excavations; work from fixed equipment; climbing or descending stairs, tripping hazards in offices and labs; weather conditions which create hazardous walking situations; any form of climbing such as tree trimming, etc.

II. SCOPE

This Policy and Procedure will cover exposures to falls from the following sources:

- Working Surfaces (floors, walkways, floor openings, wall openings, and stairs)
- Use of Fixed and Portable Ladders
- Work from Scaffolds or Ladder Stands
- Work from Aerial Lifts or Vehicle Mounted Platforms
- Elevated Work Surfaces in Construction or Repair Activities (Roofs, other leading edge work.)
- Work in or near Excavations

III. WALKING/WORKING SURFACES (Floors, walkways, floor openings, wall openings, and stairs)

Appendix A has been provided as a checklist to assist in improving the safety of walking/working surfaces.

A. Floors and Walkways (1910.22)

Housekeeping – Rooms, hallways, and storage spaces should be kept clean and orderly to prevent slips, trips, and falls. Hallways, aisles, and other pathways should not have objects placed or stored in them for any reason.

Wet Locations – Floors shall be maintained, so far as possible, in a dry condition. Where wet processes are used, drainage, false floors, platform, mats, etc. should be

used to provide dry work surfaces, as practical. When cleaning or other temporary situations cause floors to be wet, signs or other warning devices shall be used to warn of the hazard.

Loading – Spaces used for industrial or storage purposes must be maintained so that loads do not exceed approved load ratings. Load ratings should be posted in the affected area.

B. Floor Openings (1910.23)

Every floor opening measuring twelve inches or more in its smallest dimension shall be provided with a secured cover or a guardrail.

A cover shall guard manholes, trapdoors, pits, ladderway floor openings, and chute openings. When the cover is not in place, the opening shall be protected by removable standard guardrails.

Skylights must be guarded by guardrails or screening to prevent collapse.

Toe boards are to be installed around floor and wall openings where there is potential for tools and material falling on personnel on level below.

C. Wall Openings and Stairs (1910.23, 1910.24, 1926.1052)

Wall openings and open sided stairs that are more than four feet above a lower surface shall be guarded by a standard railings or handrails.

Standard railings must be 42 inches high with a mid rail and toe board. They must also be able to withstand a force of 200 pounds without failing.

Stair rails (handrails) shall be 36 inches to 42 inches above the leading edge of the tread. On new construction intermediate rails or guards shall be place to that a six inch diameter sphere can not pass through at any point.

IV. FIXED AND PORTABLE LADDERS

A. Fixed Ladders (1910.27 and 1926.1053)

Employees will be protected from falling from fixed ladders when the fall potential is 20 feet or more, by cages or ladder safety devices.

Whenever a guardrail, stair railing, floor opening or secured hole cover will not provide the protection necessary to prevent a fall, the following devices must be provided and used:

- Personal lifeline systems including harness, body belt and life line; or
- Safety nets; or

- Climbing protection systems, such as climbing safety devices used on fixed ladders when a cage cannot be used.

Design and construction of all fixed ladders will be in accordance with OSHA 1910.27 & 1926.1053.

Fixed ladders shall be inspected at least annually to insure their condition, stability, and adequacy.

B. Portable Ladders (1910.25, 1910.26, 1926.1053)

Three basic materials are used to make ladders, wood, aluminum and fiberglass. As wood ladders are more subject to wear and tear and thus failure, all new ladders purchased should be metal or fiberglass. Fiberglass ladders are preferred for most instances, as they do not conduct electricity and will help prevent accidental electrocutions. If special circumstances dictate that metal ladders are preferable, they shall be clearly marked "not for electrical work."

Ladders should meet ANSI A14.2 for aluminum ladders and A14.5 for fiberglass ladders, and applicable OSHA standards. This should be specified when purchasing ladders. Site built ladders are not permitted.

General Requirements for use of ladders include:

Ladder Design:

- Portable ladders shall have non-conductive side rails such as fiberglass or wood if they are used where the employee or the ladder could contact exposed electrically energized parts.
- All portable ladders, except wood stepladders will be provided with slip resistant feet to prevent accidental displacement.
- Ladders of proper type and length to reach the working height shall be selected. In addition, the ladder's manufacturers rated capacity shall not be exceeded.
- The sections of extension ladders shall not be used individually. Sections must overlap according to the manufactures design.
- Stepladders shall be equipped with a metal spreader or locking device to securely hold the front and back sections in open position.
- Stepladders shall not be used as a straight ladder by leaning them against a wall unless manufactured to do so.

Use of Ladders:

- The base of a straight ladder shall be placed so the distance from the base of the vertical support is one-fourth the working length of the ladder.
- The top of the ladder must be placed with the two rails supported, unless designed to use a single support attachment.

- The employee shall use both hands and shall face the ladder when going up and down.
- Any needed material shall be raised or lowered using a hand line.
- Ladders shall not be moved, shifted, or extended while occupied.
- Workers should not stand higher than the second rung from the top on a stepladder, or higher than the third rung on other ladders.
- Ladders shall not be placed in front of doors opening toward the ladder unless the door access is blocked open, locked, or guarded, or access is blocked to prevent use. The area around the top and bottom of ladders shall be kept clear.
- Ladders shall not be placed on boxes, barrels, vehicles, or other unstable bases to obtain additional height.
- Ladders shall not be used on ice, snow, or other slippery surfaces unless suitable means are employed to prevent slipping.
- If an employee must stand on a ladder and perform work at heights greater than six feet above another level, that employee shall either have a second person holding the ladder the entire time they are on the ladder, or shall wear approved fall protection equipment and be tied off with a lanyard secured to an approved attachment point (not to the ladder).
- When used to gain access to a rooftop, the top of a ladder used should extend at least three feet above the point of contact.
- Where possible, a second person to hold the ladder should be used, especially on uneven ground.
- Ladders shall be stored in safe, dry locations, and out of walkways to prevent tripping.

C. Inspection of Ladders

All ladders, both fixed and portable, require inspection. Ladders should be inspected prior to each use to insure their suitability for the work to be performed. Ladders must also be inspected whenever tipped over accidentally or after any occurrence that affects their safe use.

The person performing the inspection should use the checklist included as **Appendices B** and the following general requirements.

- Damaged (cracked, bent or broken) ladders shall not be used.
- Improvised repairs shall not be made to defective ladders.
- Ropes on extension ladders shall be free from frayed or worn spots.
- Wooden ladders shall not be painted.

The person performing the inspections is authorized to remove the ladder from service by marking it "DANGEROUS, Do Not Use" and/or discarding it in the nearest adequate trash container.

Periodic (annual) inspections shall be performed on all ladders, fixed and portable. The checklist included in **Appendices B** shall be used and the person performing the

inspection is authorized to remove unsafe ladders from service. To show that the annual inspection has occurred, a color-coded sticker or piece of tape should be placed on the inspected ladder's side rail. The employee inspecting the ladder shall initial and date the color-coded sticker or tape.

The department using the ladder is responsible for inspecting ladders under its control.

D. Ladder Training (1926.1060)

Employees that use ladders shall be trained in hazard recognition and techniques that may be used to minimize risk to themselves and people nearby.

Training shall be conducted by a competent person and must include the following:

- The nature of fall hazards
- The proper steps in the use of fall protection systems
- Placement, proper use, and care of ladders
- Recognition of load-carrying capacities of ladders
- Review of the Standard
- Retraining to be provided as necessary for thorough understanding and knowledge of ladder use.

V. **SCAFFOLDING and LADDER STANDS**

A. Scaffolds (1910.28 and 1926.450 to 454)

Scaffolds shall be used for persons engaged in work that cannot be done safely from the ground or from solid construction, except where ladders or lifts will provide adequate and safe work practices.

Scaffolds shall be designed and constructed by a "Qualified Person". A "Qualified Person" as defined by OSHA, will be one who by possession of a recognized degree, or professional standing, or who by extensive knowledge, training, and experience, has successfully demonstrated the ability to solve problems related to scaffold design and erection. The latest provisions contained in OSHA 1926 Subpart L shall be followed in the design, erection and use of scaffolding. A copy of which may be obtained from the Safety Office KU Med Center.

Additionally, the erection, moving, altering, or dismantling of scaffolding shall be under the supervision and direction of a "Competent Person" qualified in scaffolding, as defined by OSHA 1926 Subpart L. Employees performing such work must be supervised and trained, with documentation of training content forwarded to the Safety Office KU Med Center. **Appendix C** has been provided as a checklist to assist in improving the safety of scaffolds.

General requirements for the construction and use of scaffolding include;

Load Capacities:

- Footing shall be rigid and capable of carrying the maximum intended load.
- Unstable materials such as barrels, boxes, concrete blocks, etc shall not be used to support scaffolds.
- Scaffolds and their components shall be capable of supporting at least four times the maximum intended load. Suspension ropes shall be capable of supporting at least six times the maximum intended load.

Working Surfaces

- Platforms on each working level shall be fully planked between guardrails.
- All planking or platforms shall be overlapped a minimum of 12 inches or be secured from movement.
- Scaffold planks shall extend over their end supports no less than 6 inches and no more than 18 inches.
- Access ladders or equivalent safe access to working levels shall be provided.
- Scaffold poles, legs, or uprights shall be plumb and securely braced to prevent swaying.
- Scaffolds shall be provided with a screen between the toeboard and midrail where persons are required to work or pass under the scaffold.
- Generally, scaffolds shall not be more than four times taller than their minimum base dimension unless secured to a permanent structure.
- Generally, scaffolds that are more than 10 feet high shall have standard guardrails, midrails, and toeboards. Cross members shall not be used as guardrails.

Use of Scaffolds

- Scaffolds shall not be moved while in use.
- Employees shall not work on scaffolds during storms or high wind or when the working surfaces are covered with ice.
- Damaged scaffold shall not be used until repairs have been completed.

B. Ladder Stands (1910.29)

Ladder Stands include mobile work platforms, rolling scaffolds, and scissor lifts. This section does not include vehicle mounted work platforms such as boom platforms that are covered in section VII.

General requirements for the construction and use of ladder stands include;

- All mobile work platforms shall be used according to the manufactures directions.
- Only personnel trained in the use, functions, and limitations of the platform may use ladder stands or platforms.
- Mobile work platforms shall not be modified without the manufacture's approval.

- Work platforms shall be capable of carrying the intended load.
- All components including wheels, nails, bolts, and other fasteners shall be of adequate size and number according to the manufacturer's specifications.
- Ladder Stand shall be placed on a solid footing. The footing must be able to support the ladder stand and load without settling.
- Maximum work level shall not exceed four times the minimum base dimension. Manufacturer supplied outriggers may be employed to extend the effective base dimension.
- Work platforms 10 feet or higher shall have a standard guardrail including toe boards.
- Wheels or casters shall be provided with a positive wheel/swivel lock to prevent movement while the platform is occupied.
- Ladder Stands shall not be moved horizontally while occupied.

VI. VEHICLE MOUNTED PLATFORMS (1910.67)

All vehicle-mounted platforms, including extendible boom platforms, vertical towers and combinations thereof, shall be in compliance with ANSI A92.2-1969. Aerial lifts may not be field modified except by manufacturer. Any repairs must be made using original equipment, manufacturer parts.

A. General Safety Precautions

- Only personnel specifically trained shall operate aerial lifts
- Prior to moving aerial lift vehicles, the ladder bucket and outriggers shall be stowed in place, with lifting device in a zero energy state
- Lift controls shall be tested each day prior to use to verify that proper and safe working conditions
- Employees shall always stand firmly on the floor of the basket
- Employees shall not sit or climb on the edge of the basket or use planks, ladders, or other devices for a work position
- A body harness shall be worn with a lanyard attached to the boom or basket when working from an aerial. Attachment to adjacent structures, poles and/or equipment is prohibited.
- Manufacturer specified load ratings shall not be exceeded
- When in use, brakes shall be set and outriggers, if equipped, positioned on solid footing and wheels chocked
- Aerial lifts shall not be moved when the boom is elevated and the basket is occupied unless the lift has been specifically designed for such operation.
- Articulating boom and extendible boom platforms shall have dual controls, one control located in the operator basket, the other being located for use at ground level. Controls shall be readily marked with the lower control unit serving as the override. When the lift is occupied, ground level controls shall not be used without the operator's permission except in emergency circumstances.

- Equipment may not be operated within ten feet of overhead high-voltage lines. Any fall protection equipment, including body harnesses, lanyards, and lifelines used to arrest an actual employee fall, shall be destroyed and replaced immediately following an incident.

B. Electrical Tests

Electrical tests shall be made in compliance with ANSI A92.2- 1969, Section 5 or in accordance with the manufacturer's recommendations

C. Hydraulic and Pneumatic Specifications

Critical components, such that a failure could result in a collapse or sudden movement shall be maintained in accordance with ANSI A92.2- 1969 Section 4.9 or in accordance with the original manufacturer's equipment and shall have a bursting safety factor of at least 2:1.

VII. ELEVATED WORK SURFACES IN CONSTRUCTION OR REPAIR ACTIVITIES (Roof, other leading edge work) (1926.500 to 503)

Elevated Work Surfaces include conditions not already mentioned in this policy such as working near excavations, roofs and leading edge construction activities. This type of work at KUMC is generally performed by outside contractors or a few specialized maintenance employees.

Note that these standards do not apply when employees are making inspection, investigation, or assessment of workplace conditions prior to or after actual construction/repair work. However, supervisory employees should insure all feasible protective devices or procedures are utilized during such time.

Additionally, employees performing maintenance work on exhaust equipment, HVAC, plumbing, etc. should be protected from falls by means previously described, such as railings, permanent stairs or ladders, and work platforms. Any specialized situations should be addressed to the Safety Office KU Med Center for recommendations.

Employees performing work near fall hazards which include, but are not limited to; uncovered holes in working surfaces, shafts, skylights, excavations or other unprotected sides where there is a drop off of six or more feet shall be protected from falling from one or more of the following fall protection systems. Employees shall also be protected from falling into dangerous equipment from any level and object falling from overhead. Excavations that are six feet or more deep shall be protected from fall hazards by guardrail systems, fences, barricades, or covers.

- A. Guardrail System
- B. Safety Net System
- C. Personal Fall Arrest System

- D. Positioning Device System
- E. Warning Line System
- F. Controlled Access Zone System
- G. Safety Monitoring System
- H. Covers
- I. Toeboards
- J. Fall Protection Plan

Fall protection system shall be chosen according to effectiveness, employee safety, and safety while installing protection system.

- A. Guardrail System. Guardrail systems provide fall protection using standard guardrail. Height of guardrail may be increased if employees are using stilts or if conditions warrant.
 - Guardrail systems must be able to withstand, without failure, a force of at least 200 pounds in any direction.
 - Top edge of guardrail shall be approximately 42 inches
 - Top rails may be constructed of wood, metal, wire rope, rope, or any other material of sufficient strength as long as it does not present a safety hazard. Steel or plastic banding may not be use for top rails.
 - Mid rails or screen shall be installed between the working surface and the top rail. Mid rails or screens shall be able to withstand a force of at least 150 pounds.
 - Guardrails at access points or hoisting areas may have gates or other removable sections of guardrail. Gates or removable sections must be replaced when not in use.

- B. Safety Net System. Safety net systems provide fall protection by preventing a fall to a hard surface.
 - Safety nets shall be installed as close as practical under the working surface but in no case more than 30 feet.
 - Safety nets shall extend outward from the working surface as follows;

Up to 5 feet	-	8 feet
From 5 to 10 feet	-	10 feet
More than 10 feet	-	13 feet
 - Safety nets shall be capable of absorbing an impact force of 400 pounds dropped from the working surface. Drop tests shall be performed after initial installation and at six month intervals.
 - Safety nets shall be inspected at least once a week for wear, damage, and other potential hazards.
 - Openings in the safety net shall be no bigger than 6 inches.
 - Materials, scrap, or tools which have fallen into the safety net shall be removed as soon as possible.

- C. Personal Fall Arrest System. Personal fall arrest systems use lifelines and full body harness to catch employees during a fall.

- A body harness shall be used in the fall arrest system. Body belts shall not be used. The connection point shall be in the center of the wearer's back.
 - Connectors must be drop forged, pressed or formed steel, or equivalent. They must also have a corrosion resistant finish.
 - Snaphooks, Dee-rings, must be compatible with the member to which they are connected.
 - Horizontal lifelines shall be designed, installed and used under the supervision of a qualified person. The design must have a safety factor of two.
 - Lanyards and vertical lifelines shall have a minimum breaking strength of 5,000 pounds.
 - Only one employee may be attached to each vertical lifeline.
 - Ropes and straps (webbing) used in lanyards, lifelines, belts, and body harnesses shall be made from synthetic fibers.
 - Anchorages shall be capable of supporting at least 5,000 pounds per employee attached.
 - Personal fall arrest systems shall not be attached to guardrails.
 - When stopping a fall, the maximum arresting force shall be 1,800 pounds and the employee shall not free fall more than 6 feet.
 - Personal fall arrest systems subjected to loading shall be removed from service until inspected by a competent person for possible damage.
 - Personal fall arrest systems shall be inspected prior to each use.
- D. Positioning Device System – Positioning device systems provide fall protection by preventing an employee from getting near the edge of the working surface or other hazardous area.
- A body harness shall be used in the positioning device system. Body belts shall not be used. The connection point shall be in the center of the wearer's back.
 - Connectors must be drop forged, pressed or formed steel, or equivalent. They must also have a corrosion resistant finish.
 - Snaphooks, Dee-rings, must be compatible with the member to which they are connected.
 - Connecting assemblies shall have a minimum tensile strength of 5,000 pounds.
 - Positioning devices shall be rigged so that an employee cannot free fall more than two feet.
 - Only one employee may be attached to each vertical lifeline.
 - Ropes and straps (webbing) used in lanyards, lifelines, belts, and body harnesses shall be made from synthetic fibers.
 - Anchorages shall be capable of supporting at least 3,000 pounds per employee attached.
 - Positioning device systems shall not be attached to guardrails.
 - Positioning devices shall be rigged so that an employee cannot free fall more than two feet.
 - Positioning device systems shall be inspected prior to each use.

- E. **Warning Line Systems.** Warning line systems provide fall protection by making the employee aware of the location of the danger zone. In no case should an employee cross the warning line without some other form of fall protection.
- The warning line shall be erected not less than six feet from all open sides of the work area.
 - Point of access, material handling areas, storage areas and hoisting areas shall be connected to the work area by an access path formed by two warning lines. When this path is not in use a barricade shall be placed across the path.
 - Warning lines shall consist of ropes, wires, or chains and supporting stanchions.
 - The warning line shall be between 34 and 39 inches high and shall be capable of resisting, without tipping over, a force of at least 16 pounds.
- F. **Controlled Access Zone.** A controlled access zone is a work area designated for certain types of work (like bricklaying) that may take place without the use of conventional fall protection systems. Controlled access zones are used to keep unauthorized employees from areas without guardrails or other forms of fall protection.
- Control lines shall be erected not less than six feet and no more than 25 feet from each unprotected side of the work area.
 - Control lines shall consist of ropes, wires, or chains and supporting stanchions.
 - The warning line shall be between 39 and 42 inches high and shall be capable of resisting a force of at least 200 pounds.
 - Control lines also must be connected on each side to a guardrail system or wall.
- G. **Safety Monitoring System.** Safety monitoring systems designate a competent person to monitor the safety of other employees. The safety monitor is expected to warn the other employee when they get near the edge of the structure.
- Safety Monitoring Systems shall **not** be used unless all other systems have been determined to be infeasible.
- H. **Covers.** Covers are designed to cover the opening of a hole.
- Covers must be able to support at least twice the anticipated weight of employees, equipment, or other loads.
 - Covers shall be designed to prevent accidental displacement.
 - Covers shall be color coded or marked “Hole” or “Cover”.
- I. **Toeboards and Canopies.** Toeboards and canopies are used to prevent objects from falling to a lower level and injuring personnel.
- Toeboards shall be a minimum of 3.5 inches high and be installed no more than ¼ inch above the working surface.
 - When tools or equipment are stacked higher than the top edge of the toeboard, screening or paneling shall be added to prevent the tools and equipment from falling to the level below.
 - Openings in toeboards shall be small enough to prevent passage of potential falling objects.

- Canopies, when used for falling object protection, shall be strong enough to prevent penetration of falling objects or collapse due to falling objects.
- J. Fall Protection Plan. This option is available only to employees engaged in leading edge work, precast concrete work, and residential work who can demonstrate that it is infeasible to use other forms of fall protection. Notify the Safety Office KU Med Center if you feel a Fall Protection Plan is necessary.

Appendix A

University of Kansas Medical Center Working Surfaces Checklist

Department: _____ Location: _____

Date: _____ Inspected by: _____ Contact: _____ Phone: _____

Floors and Walkways

- | | Yes | No | NA |
|---|--------------------------|--------------------------|--------------------------|
| • Are all areas clean and orderly and in a sanitary condition? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| • Are floors dry or covered with non-slip materials? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| • Are walkways kept clear? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| • Are floors free from protruding nails, loose boards and other trip hazards? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| • Are floor loading limits posted and not exceeded? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Floor Openings, Wall Openings, and Stairs

- | | | | |
|--|--------------------------|--------------------------|--------------------------|
| • Are floor openings 12" or larger guarded with a cover or Guardrail? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| • Are skylights guarded by guardrails or screening? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| • Are wall openings and open sided stairs protected by guardrail? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| • Are guardrails are 42" high, with midrail and toeboard? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| • Can guardrails withstand a minimum 200 pound force? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| • Are toeboards used on elevated surfaces when potential For materials falling on personnel below? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| • Are there stair rails when there are four or more steps? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Appendix B

University of Kansas Medical Center Ladder Inspection Checklist

Department: _____ Location: _____

Date: _____ Inspected by: _____ Contact: _____ Phone: _____

The following ladder inspection shall be performed at least annually for each ladder or after an event such as tipping over.

Ladder Construction

	Yes	No	NA
• Is the ladder constructed of metal or fiberglass?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Is the ladder rated Class 2 or better (250 pound rating)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Are steps textured or coated with slip resistant coating?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Is the ladder free of oil, grease, or slippery material?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Does ladder have slip resistant feet?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Are the side rails not bent or dented?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Is the extension ladder extension rope in good condition?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Is the ladder hardware in proper working condition?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Does the extension ladder have a positive stops to ensure proper overlap during use.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Does the step ladder bucket shelf fold down properly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Does the step ladder spreader device lock in place?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Are damaged ladders removed from service and labeled "DO NOT USE" ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Appendix C

University of Kansas Medical Center Scaffold Inspection Checklist

Department: _____ Location: _____

Date: _____ Inspected by: _____ Contact: _____ Phone: _____

The following scaffold inspection shall be performed before the use of each scaffold.

Scaffold Construction	Yes	No	NA
• Is the scaffold footing capable of carrying the load?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Are stable materials used to support the scaffold.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Scaffold components are capable of supporting 4 times the expected load.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Are platforms completely planked with no openings larger than one inch?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Are scaffold planks overlapped 12 inches or secured?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Do scaffold planks extend past supports less than 18 inches?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Does the scaffold have access ladder?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Are uprights plumb and secured to prevent movement?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Are guardrails, midrails, and toeboards provided if scaffold is more than 10' high?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Is scaffold less than 4 times higher than its smallest base dimension?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Has the scaffold been erected under the supervision of a competent person as defined by OSHA?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Are defective or damaged scaffolds removed from service until repaired?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Appendix D

University of Kansas Medical Center Fall Protection Checklist

Department: _____ Location: _____

Date: _____ Inspected by: _____ Contact: _____ Phone: _____

Factors in Fall Protection Selection

Step 1. Which of the following fall protection methods are impossible to use because of lack of space or interferences with other necessary equipment?

- | | |
|--|--|
| <input type="checkbox"/> Guardrail System | <input type="checkbox"/> Warning Line System |
| <input type="checkbox"/> Safety Net System | <input type="checkbox"/> Controlled Access Zone System |
| <input type="checkbox"/> Personal Fall Arrest System | <input type="checkbox"/> Safety Monitoring System |
| <input type="checkbox"/> Positioning Device System | <input type="checkbox"/> Fall Protection Plan |

Step 2. Number each of the remaining fall protection methods in step 1 by their anticipated level of protection. (10 being the highest level of protection and 1 the lowest)

Step 3. Number each of the remaining fall protection methods in step 1 by the anticipated hazards during construction. (10 being the least hazardous and 1 being the most hazardous)

Step 4. Number each of the remaining fall protection methods in step 1 by their difficulty in construction. (10 being the easiest to construct and 1 being the most difficult to construct)

	Level of Protection	Construction Hazards	Construction Difficulty	TOTAL
Guardrail System	_____	_____	_____	_____
Safety Net System	_____	_____	_____	_____
Personal Fall Arrest System	_____	_____	_____	_____
Positioning Device System	_____	_____	_____	_____
Warning Line System	_____	_____	_____	_____
Controlled Access Zone System	_____	_____	_____	_____
Safety Monitoring System	_____	_____	_____	_____
Fall Protection Plan	_____	_____	_____	_____

Choose the system with the greatest total number. Generally the last three fall protection systems should only be used when all of the other systems are infeasible.