HO-CHUNK NATION CODE (HCC)
TITLE 6 – PERSONNEL, EMPLOYMENT AND LABOR CODE
SECTION 8 – OCCUPATIONAL SAFETY AND HEALTH PROGRAM AT OF 2002
SUBSECTION 14 – FALL PROTECTION

ENACTED BY LEGISLATURE: MAY 20, 2002

CITE AS: 6 HCC § 8-14

1. **Authority.** See basic document (Occupational Safety and Health Program Act).

2. **Purpose.** This subsection of the Occupational Safety and Health Program Act provides for the minimum requirements for Fall Protection. It is used to prevent falls when employees use scaffolding, highlifts, or climb to perform maintenance, servicing or construction activities.

3. **Definitions.** See basic document (Occupational Safety and Health Program Act). In addition, the following definitions apply to this subsection.

a. "Aerial Lifts" mean mobile automated elevating work platforms, including scissors and boom lifts.

b. "Anchorage" means a secure point of attachment for lifelines, lanyards or deceleration devices.

c. "Body Harness" means straps which may be secured about the employee in a manner that will distribute the fall arrest forces over at least the thighs, pelvis, waist, chest and shoulders with a means for attaching it to other components of a personal fall arrest system.

d. "Competent Person" means one who is capable of identifying existing and predictable hazards in the work area that are unsanitary, hazardous or dangerous to employees and who has the authority to take prompt corrective measures to eliminate such hazards.

e. "Deceleration Device" means any mechanism, such as a rope grab, rip-stitch lanyard, specially woven lanyard, tearing or deforming lanyards, automatic self-retracting lifelines/lanyards, etc., which serves to dissipate a substantial amount of energy during a fall arrest or otherwise limit energy imposed on an employee during fall arrest.

f. "Elevated Work" means a working location with an elevation six (6) feet above the floor or other working surface.

g. "Free Fall" means an act of falling before a personal fall arrest system begins to apply force to arrest the fall.

h. "Free Fall Distance" means the vertical displacement of the fall arrest attachment point on the employee's body harness between the onset of the fall and just before the system begins to apply force to arrest the fall.

i. "Guardrail System" means a barrier erected to prevent employees from falling to lower levels.

j. "Hole" means a gap or void two (2) inches or more in its least dimension in a floor, roof, or other walking/working surface.

k. "Lanyard" means a flexible line of rope, wire rope, or strap, which generally has a connector at each end for connecting the body harness to a deceleration device, lifeline or anchorage.

l. "Leading Edge" means an "unprotected side and edge" during periods when it is not actively and continuously under construction.

m. "Lifeline" means a component consisting of a flexible line for connection to an anchorage at one end to hang vertically (vertical lifeline) or for connection to anchorage at both ends to stretch horizontally (horizontal lifeline) and which serves as a means for connecting other components of a personal fall arrest system to the anchorage.

n. "Mechanical Equipment" means all motor and human propelled wheeled equipment used for roofing work except wheelbarrows and mopcarts.

o. "Opening" means a gap or void thirty (30) inches or more high and eighteen (18) inches or more wide in a wall or partition through which employees can fall to a lower level.

p. "Personal Fall Arrest System" means a system used to arrest an employee in a fall from a working level. It consists of an anchorage, connectors, a body harness and may include a lanyard, deceleration device, lifeline or suitable combinations of these.

q. "Scissors Lift" means a piece of equipment that is self-propelled which raises electrically or hydraulically and supports a working platform that has safety rails installed where an employee can stand to perform work that is beyond the reach of ladders or scaffolding.

r. "Self-retracting Lifeline/Lanyard" means a deceleration device containing a drum-wound line, which can be slowly extracted from or retracted into the drum under slight tension during normal employee movement and which, after onset of a fall automatically locks the drum and arrests the fall.

s. "Snaphook" means a connector comprised of a hook-shaped member with a normally closed keeper or similar arrangement which may be opened to permit the hook to receive an object and when released, automatically closes to retain the object. Snaphooks shall be the locking type with a self-closing, self-locking keeper which remains closed and locked until unlocked and pressed open for connection or disconnection.

t. "Toeboard" means a low protective barrier that will prevent the fall of materials and equipment to lower levels and provide protection from falls for personnel.

u. "Unprotected Side and Edges" means any side or edge of a walking/working surface; e.g., floor, roof, ramp or runway where there is no wall and/or parapet at least 39 inches high.

v. "Warning Line System" means a barrier erected on a roof to warn employees that they are approaching an unprotected roof side or edge and which designates an area in which roofing work may take place without the use of a guardrail, body harness or safety net systems to protect employees in the area.

4. **Training Requirements.** All employees who perform work activities within the scope of this subsection will be trained in the recognition of fall hazards and in the proper use and inspection of fall protection systems.

5. **Procedures.**

a. Fall Protection Systems. One of the following methods will be used to provide fall protection.

(1) Guardrail Systems.

(a) The top edge height of top rails or equivalent guardrail system members shall be 42 inches plus or minus three (3) inches above the walking/working level. When conditions warrant, the height of the top edge may exceed the 45 inch height provided the guardrail system meets all other criteria.

(b) Midrails shall be midway between the top edge of the guardrail and the walking /working level.

(c) Guardrail systems shall be capable of withstanding a force of at least 200 pounds in any direction, at any point along the top rail. Midrail shall withstand a force of 150 pounds.

(d) Guardrails shall be fabricated from materials with dimension at least:

1 2" x 2" x 3/8" angled steel or square tubing.

2 2" x 4" wood.

3 One-half (½) inch wire rope (for construction applications). (NOTE: If wire rope is used for top rails, it shall be flagged at not more than six (6) feet intervals with high-visibility material.)

4 Stanchions shall be spaced at least six (6) feet for wooden and eight (8) feet for steel materials.

5 Four (4) inch toeboards shall be used as necessary to prevent tools and objects from creating a falling hazard.

(2) Personal Fall Arrest Systems.

(a) Only full body harnesses are allowed for personal fall arrest. Body belts are not acceptable as a means for personal fall arrest.

(b) Anchorage used for attachment of personal fall arrest equipment shall be:

1 Located at or above the employee's waist.

2 Capable of supporting 5,000 pounds per employee attached independent of any anchorage being used to support or suspend platforms.

(c) When stopping a fall, systems shall be rigged such that an employee in free-fall will fall less than six (6) feet and not contact any lower level.

(d) The attachment point of the body harness shall be located in the center of the wearer's back near shoulder level.

(e) Once a personal fall arrest system and components have been used in a fall they shall be immediately removed from service. Users shall inspect arrest systems prior to each use for wear, damage or other deterioration. Defective components shall be removed from service immediately.

(f) D-rings and snaphooks shall have a minimum tensile strength of 5,000 pounds. Lanyards and vertical lifelines shall have a minimum breaking strength of 5,000 pounds.

(g) Snaphooks shall be a double locking-type.

(h) Lifelines shall be protected against being cut or abraded.

(i) Self-retracting lifelines and lanyards shall automatically limit free-fall distance to less than two (2) feet.

(j) Body harnesses and components shall be used for employee protection and not to hoist materials.

(3) Perimeter Warning Line Systems.

(a) If other fall protection measures cannot be used, perimeter warning line systems will be used to alert persons of an unprotected edge.

(b) When mechanical equipment is being used, the warning line shall be erected not less than six (6) feet from the roof edge which is parallel to the direction of mechanical equipment operation and not less than ten (10) feet from the roof edge which is perpendicular to the direction of mechanical equipment operation.

(c) When mechanical equipment is not being used, the warning line shall be erected not less than six (6) feet from the roof edge.

(d) Warning lines shall consist of ropes, wires or chains and supporting stanchions erected as follows:

1 Rigged and supported in such a way that its lowest point (including sag) is greater than 34 inches from the walking/working surface and its highest point is no greater than 39 inches from the walking/working surface.

2 After being erected, stanchions shall be capable of resisting, without tipping over, a force of at least 16 pounds applied horizontally against the stanchion.

3 Shall be flagged at six (6) feet intervals with visibility material.

(4) Safety Nets.

(a) Nets shall be erected as close as practicable but no more than thirty (30) feet beneath the work level.

(b) Mesh openings shall not exceed six (6) inches in either direction.

(c) Nets shall have a minimum breaking strength of 5,000 pounds.

(d) Nets shall be drop tested with a 400 pound sand bag before use and every six (6) months if left in place.

(e) Nets must extend beyond the edge of the unprotected work surface in case the person falls outward rather than straight down. Extension lengths as follows:

1 Eight (8) feet beyond the perpendicular fall zone for drops up to five (5) feet.

2 Ten (10) feet beyond the perpendicular fall zone for drops from five (5) feet to ten (10) feet.

3 Thirteen (13) feet beyond the perpendicular fall zone for drops from ten (10) feet to thirty (30) feet.

(f) Nets must be inspected weekly by the job supervisor for wear, damage and deterioration.

(g) Nets must be inspected after any occurrence which could affect its integrity, such as steel member falling into the net.

(h) Any materials, scrap, tools, or equipment that falls into the net must be removed as soon as possible but no later than the end of the work shift.

b. Elevated Work from Mobile Equipment.

(1) Body harnesses shall be worn and lanyard attached to the boom or basket when working from an aerial lift.

(2) Tying off to top of adjacent structures shall not be permitted.

(3) Employees must work from a basket floor as opposed to sitting or standing on railing. If the task requires a climb to an adjacent structure, a harness with a two-line system must be used to ensure continual attachment.

c. Ladders.

(1) New purchases of extension ladders shall be fiberglass side rails with a minimum 300 pounds rating. Existing aluminum and wood extension ladders will be removed from service.

(2) Warning devices such as signs and traffic cones shall be used to provide protection when ladders are placed in areas of vehicular traffic or pedestrian traffic.

(3) Ladders shall be equipped with non-slip bases.

(4) Basic user precautions listed in OSHA regulations shall also apply.

(5) Ladders shall be inventoried and assigned a control number for inspection purposes. Ladders shall be inspected annually by a qualified employee, results of the inspection recorded and unserviceable ladders removed and destroyed.

d. Scaffolds.

(1) If lumber is being used for working surface it shall be scaffold grade planking.

(2) The entire working surface of the scaffold system shall be planked over to prevent falls to a lower level.

(3) Planking shall extend beyond the end braces between six (6) inches and twelve (12) inches unless cleated or otherwise secured.

(4) Guardrails and toeboards shall be installed at ten (10) feet unless the scaffolding is so close to the ceiling that guardrails are not feasible. In this situation, personal fall protection equipment shall be used.

(5) Scaffolds shall be secured to the building or structure when the height exceeds four (4) times the minimum base width or at 30 feet horizontal intervals and 26 feet vertical intervals.

(6) A safe means of entering the scaffold is required. Climbing cross braces is prohibited.

(7) A competent person shall be present during the erection, alteration, movement and disassembly of the scaffold.

6. **Administrative and Enforcement.** See paragraph 12 of basic document (Occupational Safety and Health Program Act).

Legislative History:

12/6/01	Reviewed by Administration Committee.
1/9/02	Legislature posts for 45-day Public Review.
5/20/02	Enacted as Fall Protection (6 HCC § 8-14) by Legislative Resolution 5/20/02E.