REFERENCE TITLE: residential construction; fall protection

State of Arizona
Senate
Fiftieth Legislature
Second Regular Session
2012

SB 1441

Introduced by
Senators Biggs: Reagan

AN ACT

AMENDING SECTION 23-408, ARIZONA REVISED STATUTES; AMENDING TITLE 23, CHAPTER 2, ARTICLE 10, ARIZONA REVISED STATUTES, BY ADDING SECTION 23-434; AMENDING TITLE 23, CHAPTER 2, ARIZONA REVISED STATUTES, BY ADDING ARTICLE 13; RELATING TO FALL PROTECTION FOR RESIDENTIAL CONSTRUCTION.

(TEXT OF BILL BEGINS ON NEXT PAGE)

Be it enacted by the Legislature of the State of Arizona:

Section 1. Section 23-408, Arizona Revised Statutes, is amended to read:

23-408. Inspection of places and practices of employment; employee initiation of investigation; violation; classification; injunction

A. The director of the division of occupational safety and health, or his authorized representative, upon presentation of credentials, shall be permitted to inspect places of employment, question employees~~,~~ and investigate conditions, practices or matters in connection with employment subject to this article at reasonable times, as he may deem appropriate to determine whether any person has violated any provision of this article~~,~~ or any rule or regulation issued thereunder or ~~which~~ THAT may aid in the enforcement of the provisions of this article. No employer or other person shall refuse to admit the director or his authorized representatives to any such place or refuse to permit any such inspection if the proper credentials are presented and the inspection is made at a reasonable time.

B. The director or his authorized representative shall inspect at least every six months any operation ~~which~~ THAT mixes rock, sand, gravel or similar materials with water and cement or with asphalt and ~~which~~ THAT is not included in the definition of mine in section 27-301. The director or his representative shall monitor and work with the mine inspector only to the extent necessary to ensure the state's compliance with federal occupational safety and health act standards, (P.L. 91-596).

C. Notice of an intended inspection shall not be given to an employer prior to the time of actual entry upon the workplace, except by specific authorization by the director.

D. A representative of the employer and a representative authorized by his employees shall be given an opportunity to accompany the director or his authorized representative during the physical inspection of any workplace for the purpose of aiding such inspection. Where there is no authorized employee representative, the director or his authorized representative shall consult a reasonable number of employees concerning matters of safety and health in the workplace.

E. Except as provided in section 23-426, information and facts developed by the commission, the director or any employee of the commission or division in the course of any inspection or investigation are public records subject to inspection pursuant to title 39, chapter 1, article 2, if, pursuant to section 23-415, subsection D, the inspection or investigation has been closed or a citation has been issued. Such information and facts shall not be admissible in any court or before any administrative body except pursuant to ~~the provisions of~~ this article. Notwithstanding ~~the provisions of~~ this subsection, the director or any commission employee is not required to appear at any deposition, trial or hearing concerning a division inspection or investigation unless the appearance is related to a hearing

held pursuant to this article. Hearings held pursuant to this article are open to the public.

F. An employee or a representative of employees who believes that a violation of a safety or health standard or regulation exists that threatens physical harm or that an imminent danger exists may request an investigation by giving notice to the director or his authorized representative of such violation or danger. Any such notice shall be reduced to writing, shall set forth with reasonable particularity the grounds for the notice and shall be signed by the employees or representative of the employees. Upon the request of the employee giving such notice, his name and the names of other employees referred to therein shall not appear on any copy of such notice or any record published, released or made available. If upon receipt of such notification the director determines that there are reasonable grounds to believe that such violation or danger exists, he shall make an investigation in accordance with the provisions of this article as soon as practicable to determine if such violation or danger exists. If the director determines there are no reasonable grounds to believe that a violation or danger exists, he shall notify the employees or representative of the employees in writing of such a determination.

G. Any person who violates any provision of this section is guilty of a class 2 misdemeanor.

H. The commission, or its authorized representative, in addition to initiating an action under subsection F OF THIS SECTION, may file in the superior court in the county where the inspection was refused a verified complaint against an employer who violates subsection A OF THIS SECTION and request an injunction against continued refusal to permit an inspection.

I. ALL DIVISION INITIATED INSPECTIONS SHALL BE CONDUCTED ANNUALLY IN EVERY COUNTY IN THE STATE IN EQUAL PROPORTION TO THE POPULATION OF EACH COUNTY RELATIVE TO THE POPULATION OF THIS STATE. FOR THE PURPOSES OF THIS SUBSECTION, THE POPULATION OF A COUNTY, CITY OR TOWN SHALL BE DETERMINED AS PROVIDED BY SECTION 28-6532 OR 42-5033.01.

Sec. 2. Title 23, chapter 2, article 10, Arizona Revised Statutes, is amended by adding section 23-434, to read:

23-434. Reports; confidentiality; violation; classification

A. THE DIVISION SHALL COLLECT ALL REPORTS DETAILING FALLS OCCURRING ON CONSTRUCTION SITES IN THIS STATE AND PREPARE A COMPREHENSIVE ANNUAL STATISTICAL REPORT BASED ON THE DATA THAT IS GATHERED IN THE REPORTS. THE STATISTICAL REPORTS SHALL NOT DISCLOSE THE IDENTITY OF ANY PERSON OR ENTITY FILING A REPORT OR THE IDENTITY OF INJURED EMPLOYEE ABOUT WHOM THE REPORT IS FILED. THE DIVISION SHALL MAKE THE STATISTICAL REPORT AVAILABLE ON THE DIVISION'S WEBSITE.

B. THE DIVISION'S REPORT PRESCRIBED BY SUBSECTION A OF THIS SECTION SHALL INCLUDE THE FOLLOWING:

1. THE NUMBER OF CONSTRUCTION FALLS THAT OCCURRED IN THIS STATE.

2. THE NUMBER OF CONSTRUCTION FALLS THAT OCCURRED ON RESIDENTIAL CONSTRUCTION SITES IN THIS STATE.

3. THE NUMBER OF CONSTRUCTION FALLS THAT OCCURRED ON COMMERCIAL AND INDUSTRIAL CONSTRUCTION SITES IN THIS STATE.

4. THE HEIGHT FROM WHICH EACH FALL OCCURRED.

5. THE PHYSICAL LOCATION ON THE CONSTRUCTION SITE WHERE THE EMPLOYEE WAS STANDING AT THE TIME OF THE FALL.

6. THE TRADE INVOLVED IN EACH FALL.

7. THE TYPE OF FALL PROTECTION, IF ANY, BEING USED AT THE TIME OF THE FALL. TYPES OF FALL PROTECTION INCLUDE A SAFETY NET, GUARDRAIL, PERSONAL FALL ARREST SYSTEM OR SAFETY MONITOR.

8. THE ACTIVITY BEING CONDUCTED BY THE EMPLOYEE AT THE TIME OF THE FALL.

C. EXCEPT FOR THE STATISTICAL REPORT UNDER SUBSECTION A OF THIS SECTION, ANY REPORT FILED WITH THE DIVISION REGARDING FALLS IS NOT A PUBLIC RECORD AND IS NOT AVAILABLE FOR PUBLIC INSPECTION. DISCLOSURE MAY BE MADE TO LAW ENFORCEMENT OFFICIALS ON AN ORDER OF A COURT AFTER APPLICATION SHOWING GOOD CAUSE. THE COURT MAY CONDITION DISCLOSURE OF THE INFORMATION ON ANY APPROPRIATE SAFEGUARDS THAT THE COURT MAY IMPOSE.

D. AN EMPLOYEE, AGENT OR CONTRACTOR OF THE DIVISION WHO WILFULLY DISCLOSES ANY INFORMATION OBTAINED FROM REPORTS THAT ARE FILED WITH THE DIVISION, OTHER THAN DISCLOSURE AUTHORIZED UNDER SUBSECTIONS A AND C OF THIS SECTION OR AS OTHERWISE AUTHORIZED BY LAW, IS GUILTY OF A CLASS 3 MISDEMEANOR.

Sec. 3. Title 23, chapter 2, Arizona Revised Statutes, is amended by adding article 13, to read:

ARTICLE 13. FALL PROTECTION FOR RESIDENTIAL CONSTRUCTION

23-492. Definitions

IN THIS ARTICLE, UNLESS THE CONTEXT OTHERWISE REQUIRES:

1. "ACCESS" MEANS A MEANS OF REACHING A WORK SPACE OR AREA.

2. "ANCHORAGE" MEANS A SECURE POINT OF ATTACHMENT FOR LIFELINES, LANYARDS OR DECELERATION DEVICES.

3. "APPROVED":

(a) MEANS PRODUCTS, MATERIALS, DEVICES, SYSTEMS OR INSTALLATIONS THAT HAVE BEEN APPROVED, LISTED, LABELED OR CERTIFIED AS CONFORMING TO APPLICABLE GOVERNMENTAL OR OTHER NATIONALLY RECOGNIZED STANDARDS, OR APPLICABLE SCIENTIFIC PRINCIPLES. THE APPROVAL, LISTING, LABELING OR CERTIFICATION OF CONFORMITY SHALL BE BASED ON AN EVALUATION PERFORMED BY A PERSON, FIRM OR ENTITY WITH APPROPRIATE REGISTERED ENGINEERING COMPETENCE OR BY A PERSON, FIRM OR ENTITY, INDEPENDENT OF THE MANUFACTURER OR SUPPLIER OF THE PRODUCT, WITH DEMONSTRATED COMPETENCE IN THE FIELD OF SUCH SUPERVISION. THE DIVISION MAY REQUIRE ADDITIONAL PROOF THAT THE PRODUCTS, MATERIALS, DEVICES, SYSTEMS OR INSTALLATIONS WILL PROVIDE REASONABLE SAFETY UNDER THE CONDITIONS OF USE. IF ADDITIONAL PROOF IS REQUIRED BY THE DIVISION, IT WILL BE NECESSARY TO SUBMIT TO THE DIVISION ENGINEERING CALCULATIONS, STRESS ANALYSES AND OTHER

DATA FOR EACH DESIGN, MODEL OR MAKE FOR WHICH AN APPROVAL IS REQUESTED. THE DIVISION MUST APPROVE OR DISAPPROVE THE PRODUCT, MATERIAL, DEVICE, SYSTEM OR INSTALLATION AS SUBMITTED OR UNDER SPECIFIED CONDITIONS.

(b) INCLUDES PRODUCTS, MATERIALS, DEVICES, SYSTEMS OR INSTALLATIONS THAT HAVE BEEN APPROVED, LISTED, LABELED OR CERTIFIED BY A NATIONALLY RECOGNIZED TESTING LABORATORY.

4. "BODY BELT" MEANS A SIMPLE OR COMPOUND STRAP WITH MEANS FOR SECURING THE STRAP ABOUT THE WAIST AND FOR SECURING A LANYARD TO THE STRAP.

5. "BODY HARNESS" MEANS STRAPS THAT 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 MEANS FOR ATTACHING THE STRAP TO OTHER COMPONENTS OF A PERSONAL FALL ARREST SYSTEM.

6. "COMPETENT PERSON" MEANS A PERSON WHO IS CAPABLE OF IDENTIFYING EXISTING AND PREDICTABLE HAZARDS IN THE SURROUNDINGS OR WORKING CONDITIONS THAT ARE UNSANITARY, HAZARDOUS OR DANGEROUS TO EMPLOYEES AND WHO HAS AUTHORIZATION TO TAKE PROMPT CORRECTIVE MEASURES TO ELIMINATE THE HAZARDS.

7. "CONNECTOR" MEANS A DEVICE THAT IS USED TO CONNECT PARTS OF THE PERSONAL FALL ARREST SYSTEM AND POSITING DEVICE SYSTEM TOGETHER, INCLUDING A DEVICE THAT IS AN INDEPENDENT COMPONENT OF THE SYSTEM OR AN INTEGRAL COMPONENT OR PART OF THE SYSTEM.

8. "CONTROLLED ACCESS ZONE" MEANS A WORK AREA THAT DOES NOT USE GUARDRAILS, PERSONAL FALL ARREST SYSTEMS OR SAFETY NETS.

9. "DECELERATION DEVICE" MEANS ANY MECHANISM THAT SERVES TO DISSIPATE A SUBSTANTIAL AMOUNT OF ENERGY DURING A FALL ARREST OR OTHERWISE LIMIT THE ENERGY IMPOSED ON THE EMPLOYEE DURING FALL ARREST. DECELERATION DEVICE INCLUDES A ROPE GRAB, RIP-STITCH LANYARD, SPECIALLY-WOVEN LANYARD, TEARING OR DEFORMING LANYARDS OR AUTOMATIC SELF-RETRACTING LIFELINE OR LANYARDS.

10. "DECELERATION DISTANCE" MEANS THE ADDITIONAL VERTICAL DISTANCE A FALLING EMPLOYEE TRAVELS, EXCLUDING LIFELINE ELONGATION AND FREE FALL DISTANCE, BEFORE STOPPING, FROM THE POINT AT WHICH THE DECELERATION DEVICE BEGINS TO OPERATE. THE DECELERATION DISTANCE IS MEASURED AS THE DISTANCE BETWEEN THE LOCATION OF AN EMPLOYEE'S BODY BELT OR BODY HARNESS ATTACHMENT POINT AT THE MOMENT OF ACTIVATION OF THE DECELERATION DEVICE DURING A FALL AND THE LOCATION OF THAT ATTACHMENT POINT AFTER THE EMPLOYEE COMES TO A FULL STOP.

11. "DROP LINE" OR "SAFETY LINE" MEANS A VERTICAL LINE FROM A FIXED ANCHORAGE, INDEPENDENT OF THE WORK SURFACE, TO WHICH THE LANYARD IS AFFIXED.

12. "EMPLOYER" MEANS:

(a) THIS STATE AND ANY AGENCY OF THIS STATE.

(b) ANY COUNTY, CITY, TOWN OR DISTRICT AND ALL PUBLIC AND QUASI-PUBLIC CORPORATIONS AND PUBLIC AGENCIES.

(c) ANY PERSON, INCLUDING A PUBLIC SERVICE CORPORATION, THAT HAS ANY NATURAL PERSON IN SERVICE.

(d) THE LEGAL REPRESENTATIVE OF ANY DECEASED EMPLOYER.

13. "FREE FALL" MEANS THE ACT OF FALLING BEFORE A PERSONAL FALL ARREST SYSTEM BEGINS TO APPLY FORCE TO ARREST THE FALL.

14. "FREE FALL DISTANCE" MEANS THE VERTICAL DISPLACEMENT OF THE FALL ARREST ATTACHMENT POINT ON THE EMPLOYEE'S BODY BELT OR BODY HARNESS BETWEEN ONSET OF THE FALL AND JUST BEFORE THE SYSTEM BEGINS TO APPLY FORCE TO ARREST THE FALL. FREE FALL DISTANCE DOES NOT INCLUDE DECELERATION DISTANCE OR LIFELINE OR LANYARD ELONGATION, BUT DOES INCLUDE ANY DECELERATION DEVICE SLIDE DISTANCE OR SELF-RETRACTING LIFELINE OR LANYARD EXTENSION BEFORE THEY OPERATE AND FALL ARREST FORCES OCCUR.

15. "GRADE" OR "ADJACENT GROUND ELEVATION" MEANS THE LOWEST POINT OF ELEVATION OF THE FINISHED SURFACE OF THE GROUND, PAVING OR SIDEWALK THAT IS WITHIN THE AREA BETWEEN THE BUILDING AND THE PROPERTY LINE, OR WHEN THE PROPERTY LINE IS MORE THAN FIVE FEET FROM THE BUILDING, BETWEEN THE BUILDING AND A LINE FIVE FEET FROM THE BUILDING.

16. "GUARDRAIL" OR "RAILING" MEANS A BARRIER THAT CONSISTS OF A TOP RAIL AND A MIDRAIL THAT IS SECURED TO UPRIGHTS AND ERECTED ALONG THE EXPOSED SIDES AND ENDS OF PLATFORMS.

17. "HOLE" MEANS ANY OPENING IN A FLOOR PLATFORM THAT IS SMALLER THAN AN OPENING.

18. "LANYARD" MEANS A FLEXIBLE LINE THAT SECURES A WEARER OF A BODY BELT OR BODY HARNESS TO A DROP LINE, LIFELINE OR FIXED ANCHORAGE.

19. "LEADING EDGE" MEANS THE EDGE OF A FLOOR, ROOF OR FORM WORK FOR A FLOOR OR OTHER WALKING OR WORKING SURFACE THAT CHANGES LOCATION AS ADDITIONAL FLOOR, ROOF, DECKING OR FORM WORK SECTIONS ARE PLACED, FORMED OR CONSTRUCTED. A LEADING EDGE IS CONSIDERED TO BE AN UNPROTECTED SIDE AND EDGE DURING PERIODS WHEN THE LEADING EDGE IS NOT ACTIVELY AND CONTINUOUSLY UNDER CONSTRUCTION.

20. "LIFELINE" MEANS A HORIZONTAL LINE OR CATENARY LINE BETWEEN TWO FIXED ANCHORAGES, INDEPENDENT OF THE WORK SURFACE TO WHICH THE LANYARD IS SECURED EITHER BY TYING OFF OR BY MEANS OF A SUITABLE SLIDING CONNECTION. LIFELINES CAN BE EITHER VERTICAL OR HORIZONTAL.

21. "LOWER LEVELS" MEANS THE AREAS OR SURFACES TO WHICH AN EMPLOYEE CAN FALL, INCLUDING GROUND LEVELS, FLOORS, PLATFORMS, RAMPS, RUNWAYS, EXCAVATIONS, PITS, TANKS, MATERIAL, WATER, EQUIPMENT, STRUCTURES OR ANY PORTIONS OF THESE AREAS OR SURFACES.

22. "LUMBER" MEANS DOUGLAS FIR OR AN EQUIVALENT THAT HAS BEEN GRADED UNDER STANDARDS AS HIGH AS THOSE FOLLOWED BY THE WEST COAST LUMBER INSPECTION BUREAU OR BY THE WESTERN WOOD PRODUCTS ASSOCIATION AS SUITABLE FOR A BENDING STRESS OF ONE THOUSAND FIVE HUNDRED POUND PER SQUARE INCH.

23. "MIDRAIL" MEANS A RAIL THAT IS APPROXIMATELY MIDWAY BETWEEN THE TOP RAIL AND PLATFORM AND THAT IS SECURED TO THE UPRIGHTS ERECTED ALONG THE EXPOSED SIDES AND ENDS OF PLATFORMS.

24. "OPENING" MEANS AN OPENING IN ANY FLOOR PLATFORM, TWELVE INCHES OR MORE IN THE LEAST HORIZONTAL DIMENSION, INCLUDING STAIRWAY FLOOR OPENINGS, LADDERWAY FLOOR OPENINGS, HATCHWAYS AND CHUTE FLOOR OPENINGS.

25. "PERSONAL FALL ARREST SYSTEM" MEANS A SYSTEM THAT IS USED TO ARREST AN EMPLOYEE IN A FALL FROM A WORKING LEVEL AND CONSISTS OF AN ANCHORAGE, CONNECTORS OR BODY HARNESS AND MAY INCLUDE A LANYARD, DECELERATION DEVICE, LIFELINE OR A SUITABLE COMBINATION. THE USE OF A BODY BELT FOR FALL ARREST IS PROHIBITED.

26. "PERSONAL FALL RESTRAINT SYSTEM" MEANS A SYSTEM THAT IS USED TO PREVENT AN EMPLOYEE FROM FALLING AND CONSISTS OF ANCHORAGES, CONNECTORS AND A BODY BELT OR BODY HARNESS. PERSONAL FALL RESTRAINT SYSTEM INCLUDES LANYARDS, LIFELINES OR ROPE GRABS THAT ARE DESIGNED FOR THIS PURPOSE.

27. "PERSONAL FALL PROTECTION SYSTEM" MEANS A PERSONAL FALL PROTECTION SYSTEM AND INCLUDES PERSONAL FALL ARREST SYSTEMS, POSITIONING DEVICE SYSTEMS, FALL RESTRAINT SYSTEMS, SAFETY NETS AND GUARDRAILS.

28. "POSITIONING DEVICE SYSTEM" MEANS A BODY BELT OR BODY HARNESS SYSTEM THAT IS RIGGED TO ALLOW AN EMPLOYEE TO BE SUPPORTED ON AN ELEVATED SURFACE SUCH AS A WALL AND WORKS WITH BOTH HANDS FREE WHILE LEANING.

29. "PRECAST CONCRETE" MEANS CONCRETE MEMBERS SUCH AS WALLS, PANELS, SLABS, COLUMNS AND BEAMS THAT HAVE BEEN FORMED, CAST AND CURED BEFORE FINAL PLACEMENT IN A STRUCTURE.

30. "QUALIFIED PERSON" MEANS A PERSON WHO IS DESIGNATED BY THE EMPLOYER WHO HAD TRAINING, EXPERIENCE OR INSTRUCTION AND WHO HAS DEMONSTRATED THE ABILITY TO SAFELY PERFORM ALL ASSIGNED DUTIES AND, IF REQUIRED, WHO IS PROPERLY LICENSED IN ACCORDANCE WITH FEDERAL, STATE OR LOCAL LAWS, RULES AND REGULATIONS.

31. "RAMP" MEANS A SURFACE SLOPING PASSAGEWAY THAT CONNECTS TWO DIFFERENT LEVELS.

32. "RUNWAY" MEANS AN ELEVATED PASSAGEWAY.

33. "SAFETY BELT" MEANS A DEVICE THAT IS SPECIFICALLY USED FOR THE PURPOSE OF SECURING, SUSPENDING OR RETRIEVING A WORKER IN OR FROM A HAZARDOUS WORK AREA.

34. "SAFETY MONITORING SYSTEM" MEANS A SAFETY SYSTEM IN WHICH A COMPETENT PERSON IS RESPONSIBLE FOR RECOGNIZING AND WARNING EMPLOYEES OF FALL HAZARDS.

35. "SELF-RETRACTING LIFELINE OR LANYARD" MEANS A DECELERATION DEVICE THAT CONTAINS A DRUM-WOUND LINE THAT CAN BE SLOWLY EXTRACTED FROM, OR RETRACTED ONTO, THE DRUM UNDER SLIGHT TENSION DURING NORMAL EMPLOYEE MOVEMENT, AND WHICH, AFTER ONSET OF A FALL, AUTOMATICALLY LOCKS THE DRUM AND ARRESTS THE FALL.

36. "STANDARD" INCLUDES:

(a) STANDARD AS REFERRED TO LADDERS AND RAILINGS.

(b) A STANDARD THAT IS ULTIMATELY BASED ON STANDARDS ESTABLISHED BY AMERICAN NATIONAL STANDARDS INSTITUTE, SAE INTERNATIONAL, ENGINEERS COMPETENT IN SPECIALIZED FIELDS, EQUIPMENT MANUFACTURERS AND OTHER DULY RECOGNIZED AUTHORITIES.

37. "STORY" MEANS THAT PORTION OF A BUILDING, INCLUDING BETWEEN THE UPPER SURFACE OF ANY FLOOR AND THE UPPER SURFACE OF THE FLOOR NEXT ABOVE,

EXCEPT THAT THE TOPMOST STORY SHALL BE THAT PORTION OF A BUILDING INCLUDED BETWEEN THE UPPER SURFACE OF THE TOPMOST FLOOR AND THE CEILING OR ROOF ABOVE. STORY INCLUDES THE FINISHED FLOOR LEVEL DIRECTLY ABOVE A BASEMENT, CELLAR OR UNUSED UNDERFLOOR SPACE THAT IS MORE THAN SIX FEET ABOVE GRADE FOR MORE THAN FIFTY PER CENT OF THE TOTAL PERIMETER OR IS MORE THAN TWELVE FEET ABOVE GRADE SUCH BASEMENT, CELLAR OR UNUSED UNDERFLOOR SPACE.

38. "STRUCTURE" MEANS AN EDIFICE OR BUILDING OF ANY KIND THAT IS BUILT OR CONSTRUCTED OR ANY PIECE OF WORK THAT IS ARTIFICIALLY BUILT UP OR COMPOSED OF PARTS JOINED TOGETHER IN SOME DEFINITE MANNER.

39. "TOEBOARD" MEANS A BARRIER THAT IS SECURED ALONG THE SIDES AND ENDS OF A PLATFORM AT THE PLATFORM LEVEL USED TO GUARD AGAINST THE FALLING OF MATERIAL.

40. "UNPROTECTED SIDES AND EDGES" MEANS ANY SIDE OR EDGE, EXCEPT AT ENTRANCES TO POINTS OF ACCESS, OF A WALKING OR WORKING SURFACE, INCLUDING A FLOOR, ROOF, RAMP OR RUNWAY WHERE THERE IS NO WALL OR STANDARD GUARDRAIL OR PROTECTION PROVIDED.

41. "WALL OPENING" MEANS A GAP OR VOID THIRTY INCHES OR MORE HIGH AND EIGHTEEN INCHES OR MORE WIDE THAT IS IN A WALL OR PARTITION THROUGH WHICH EMPLOYEES CAN FALL TO A LOWER LEVEL.

23-492.01. Applicability

A. WITHIN THIRTY DAYS OF THE EFFECTIVE DATE OF THIS ARTICLE, THE COMMISSION SHALL ADOPT, PURSUANT TO SECTION 23-412, THIS ARTICLE AS PART OF THIS STATE'S OCCUPATIONAL SAFETY AND HEALTH PLAN UNDER 29 UNITED STATES CODE SECTION 667 FOR FALL PROTECTION ON RESIDENTIAL CONSTRUCTION SITES.

B. THE ADOPTION OF THE FALL PROTECTION STANDARD REQUIREMENTS UNDER THIS ARTICLE IS EXEMPT TITLE 41, CHAPTER 6.

C. ANY PROVISION OF THIS STATE'S OCCUPATIONAL SAFETY AND HEALTH PLAN THAT IS NOT OTHERWISE COVERED BY THIS ARTICLE REMAINS IN FORCE.

23-492.02. Residential construction fall protection

A. EACH EMPLOYEE WHO IS ENGAGED IN RESIDENTIAL CONSTRUCTION ACTIVITIES FIFTEEN FEET OR MORE ABOVE LOWER LEVELS SHALL BE PROTECTED BY GUARDRAIL SYSTEMS, SAFETY NET SYSTEMS OR PERSONAL FALL ARREST SYSTEMS UNLESS OTHERWISE PROVIDED IN THIS ARTICLE. IF THE EMPLOYER DEMONSTRATES THAT IT IS IMPRACTICAL OR CREATES A GREATER HAZARD TO USE THESE SYSTEMS, THE EMPLOYER SHALL DEVELOP AND IMPLEMENT A FALL PROTECTION PLAN THAT MEETS THE REQUIREMENTS OF THE WRITTEN FALL PROTECTION PLAN.

B. IF THE WORK IS OF SHORT DURATION OR NON-REPETITIVE AND IS OF LIMITED EXPOSURE AND THE HAZARDS INVOLVED IN RIGGING AND INSTALLING THE SAFETY DEVICES REQUIRED BY THIS ARTICLE EQUALS OR EXCEEDS THE HAZARDS INVOLVED IN THE ACTUAL CONSTRUCTION, THESE PROVISIONS MAY BE TEMPORARILY SUSPENDED IF ADEQUATE RISK CONTROL IS RECOGNIZED AND MAINTAINED UNDER IMMEDIATE, COMPETENT SUPERVISION.

C. NO BUILDING STRUCTURE, OR PART THEREOF, OR ANY TEMPORARY SUPPORT OR SCAFFOLDING IN CONNECTION THEREWITH SHALL BE SUBJECTED TO ANY LOAD BEYOND ITS DESIGN LOAD STRENGTH, UNLESS THE EMPLOYER DETERMINES, BASED ON INFORMATION

RECEIVED FROM A QUALIFIED PERSON WHO IS EXPERIENCED IN STRUCTURAL DESIGN, THAT THE STRUCTURE OR PORTION OF THE STRUCTURE IS CAPABLE OF SAFELY SUPPORTING THE LOAD. FOR THE PURPOSE OF THIS SUBSECTION, THE DESIGN LOAD STRENGTH REFERS TO THE LOAD BEARING CAPACITY OF A STRUCTURAL MEMBER COMPUTED ON THE BASIS OF THE ALLOWABLE STRESS THAT IS ASSUMED IN THE DESIGN.

23-492.03. Floor, roof and wall openings; guards

A. THIS SECTION APPLIES TO TEMPORARY OR EMERGENCY CONDITIONS WHERE THERE IS A DANGER OF EMPLOYEES OR MATERIALS FALLING THROUGH FLOOR, ROOF OR WALL OPENINGS OR FROM STAIRWAYS OR RUNWAYS.

B. FLOOR, ROOF AND SKYLIGHT OPENINGS SHALL BE GUARDED BY EITHER TEMPORARY RAILINGS AND TOEBOARDS OR BY COVERS. TEMPORARY RAILINGS AND TOEBOARDS SHALL MEET THE REQUIREMENTS OF SECTION 23-492.06. THE RAILING SHALL BE PROVIDED ON ALL EXPOSED SIDES, EXCEPT AT ENTRANCES TO STAIRWAYS. COVERS SHALL BE CAPABLE OF SAFELY SUPPORTING THE GREATER OF FOUR HUNDRED POUNDS OR TWICE THE WEIGHT OF THE EMPLOYEES, EQUIPMENT AND MATERIALS THAT MAY BE IMPOSED ON ANY ONE SQUARE FOOT AREA OF THE COVER AT ANY TIME. COVERS SHALL BE SECURED IN PLACE TO PREVENT ACCIDENTAL REMOVAL OR DISPLACEMENT AND SHALL BE A PRESSURE SENSITIZED, PAINTED OR STENCILED SIGN WITH LEGIBLE LETTERS NOT LESS THAN ONE INCH HIGH THAT STATES "OPENING - DO NOT REMOVE". MARKINGS OF CHALK OR KEEL SHALL NOT BE USED.

C. LADDERWAY FLOOR OPENINGS OR PLATFORMS SHALL BE GUARDED BY STANDARD RAILINGS WITH STANDARD TOEBOARDS ON ALL EXPOSED SIDES, EXCEPT AT ENTRANCE TO OPENING, WITH THE PASSAGE THROUGH THE RAILING EITHER PROVIDED WITH A SWINGING GATE OR SO OFFSET THAT A PERSON CANNOT WALK DIRECTLY INTO THE OPENING.

D. HATCHWAY AND CHUTE FLOOR OPENINGS SHALL BE GUARDED BY EITHER:

1. HINGED COVERS OF STANDARD STRENGTH AND CONSTRUCTION AND A STANDARD RAILING WITH ONLY ONE EXPOSED SIDE. IF THE OPENING IS NOT IN USE, THE COVER SHALL BE CLOSED OR THE EXPOSED SIDE SHALL BE GUARDED AT BOTH TOP AND INTERMEDIATE POSITIONS BY REMOVABLE STANDARD RAILINGS.

2. A REMOVABLE STANDARD RAILING WITH TOEBOARD ON NOT MORE THAN TWO SIDES OF THE OPENING AND FIXED STANDARD RAILINGS WITH TOEBOARDS ON ALL OTHER EXPOSED SIDES. THE REMOVABLE RAILING SHALL BE KEPT IN PLACE IF THE OPENING IS NOT IN USE AND SHOULD PREFERABLY BE HINGED OR OTHERWISE MOUNTED SO AS TO BE CONVENIENTLY REPLACEABLE.

E. PITS AND TRAP DOOR FLOOR OPENINGS SHALL BE GUARDED BY FLOOR OPENING COVERS OF STANDARD STRENGTH AND CONSTRUCTION. IF THE COVER IS NOT IN PLACE, THE PIT OR TRAP OPENINGS SHALL BE PROTECTED ON ALL EXPOSED SIDES BY MOVABLE STANDARD RAILINGS.

F. MANHOLE FLOOR OPENINGS SHALL BE GUARDED BY STANDARD COVERS THAT NEED NOT BE HINGED IN PLACE. IF THE COVER IS NOT IN PLACE, THE MANHOLE OPENING SHALL BE PROTECTED BY STANDARD RAILINGS.

G. TEMPORARY FLOOR OPENINGS SHALL HAVE STANDARD RAILINGS.

H. FLOOR HOLES, INTO WHICH PERSONS CAN ACCIDENTALLY WALK, SHALL BE GUARDED BY EITHER A STANDARD RAILING WITH STANDARD TOEBOARD ON ALL EXPOSED SIDES, OR A FLOOR HOLE COVER OF STANDARD STRENGTH AND CONSTRUCTION THAT IS

SECURED AGAINST ACCIDENTAL DISPLACEMENT. IF THE COVER IS NOT IN PLACE, THE FLOOR HOLE SHALL BE PROTECTED BY STANDARD RAILING.

I. WALL OPENINGS, FROM WHICH THERE IS A DROP OF MORE THAN FOUR FEET AND THE BOTTOM OF THE OPENING IS LESS THAN THREE FEET ABOVE THE WORKING SURFACE, SHALL BE GUARDED AS FOLLOWS:

1. WHEN THE HEIGHT AND PLACEMENT OF THE OPENING IN RELATION TO THE WORKING SURFACE IS SUCH THAT EITHER A STANDARD RAIL OR INTERMEDIATE RAIL WILL EFFECTIVELY REDUCE THE DANGER OF FALLING, ONE OR BOTH SHALL BE PROVIDED.

2. THE BOTTOM OF A WALL OPENING, WHICH IS LESS THAN FOUR INCHES ABOVE THE WORKING SURFACE REGARDLESS OF WIDTH, SHALL BE PROTECTED BY A STANDARD TOEBOARD OR AN ENCLOSING SCREEN EITHER OF SOLID CONSTRUCTION OR AS OTHERWISE REQUIRED BY THIS SECTION.

J. AN EXTENSION PLATFORM OUTSIDE A WALL OPENING ONTO WHICH MATERIALS CAN BE HOISTED FOR HANDLING SHALL HAVE SIDE RAILS OR EQUIVALENT GUARDS OF STANDARD SPECIFICATIONS. ONE SIDE OF AN EXTENSION PLATFORM MAY HAVE REMOVABLE RAILINGS IN ORDER TO FACILITATE HANDLING MATERIALS.

K. THIS SECTION APPLIES IF A CHUTE IS ATTACHED TO AN OPENING, EXCEPT THAT A TOEBOARD IS NOT REQUIRED.

L. WALL OPENING PROTECTION SHALL MEET THE FOLLOWING REQUIREMENTS:

1. BARRIERS SHALL BE OF SUCH CONSTRUCTION AND MOUNTING THAT, WHEN IN PLACE AT THE OPENING, THE BARRIER IS CAPABLE OF WITHSTANDING A LOAD OF AT LEAST TWO HUNDRED POUNDS APPLIED IN ANY DIRECTION EXCEPT UPWARD.

2. SCREENS SHALL BE OF SUCH CONSTRUCTION AND MOUNTING THAT THEY ARE CAPABLE OF WITHSTANDING A LOAD OF AT LEAST TWO HUNDRED POUNDS APPLIED HORIZONTALLY AT ANY POINT ON THE NEAR SIDE OF THE SCREEN. THEY MAY BE OF SOLID CONSTRUCTION, OF GRILL WORK WITH OPENINGS NOT MORE THAN EIGHT INCHES LONG OR OF SLAT WORK WITH OPENINGS NOT MORE THAN FOUR INCHES WIDE WITH LENGTH UNRESTRICTED.

23-492.04. Wood and light gage steel frame residential construction; application; definitions

A. THIS SECTION APPLIES TO WORK DIRECTLY ASSOCIATED WITH THE FRAMING OF NEW RESIDENTIAL BUILDING OR STRUCTURES USING THE OPERATIONS, METHODS AND PROCEDURES ASSOCIATED WITH RESIDENTIAL-TYPE FRAMING ACTIVITIES, INCLUDING JOISTS OR TRUSSES RESTING ON STUD WALLS.

B. BEFORE MANUALLY RAISING FRAMED WALLS THAT ARE FIFTEEN FEET OR MORE IN HEIGHT, TEMPORARY RESTRAINTS SUCH AS CLEATS ON THE FOUNDATION OR FLOOR SYSTEM OR STRAPS ON THE WALL BOTTOM PLATE SHALL BE INSTALLED TO PREVENT INADVERTENT HORIZONTAL SLIDING OR UPLIFT OF THE FRAMED WALL BOTTOM PLATE. ANCHOR BOLTS ALONE SHALL NOT BE USED FOR BLOCKING OR BRACING WHEN RAISING FRAMED WALLS FIFTEEN FEET OR MORE IN HEIGHT.

C. EMPLOYEES SHALL NOT WORK FROM OR WALK ON TOP PLATES, JOISTS, RAFTERS, TRUSSES, BEAMS OR OTHER STRUCTURAL MEMBERS UNTIL THEY ARE SECURELY BRACED AND SUPPORTED.

D. IF EMPLOYEES ARE WALKING OR WORKING ON TOP PLATES, JOISTS, RAFTERS, TRUSSES, BEAMS OR OTHER SIMILAR STRUCTURAL MEMBERS OVER FIFTEEN FEET ABOVE

THE SURROUNDING GRADE OR FLOOR LEVEL BELOW, FALL PROTECTION SHALL BE PROVIDED BY SCAFFOLDING, GUARDRAILS, A PERSONAL FALL PROTECTION SYSTEM OR BY OTHER MEANS PRESCRIBED BY THIS ARTICLE, EXCEPT:

1. IF EMPLOYEES ARE WALKING OR WORKING ON SECURELY BRACED JOISTS, RAFTERS OR ROOF TRUSSES ON CENTER SPACING NOT EXCEEDING TWENTY-FOUR INCHES AND MORE THAN SIX FEET FROM AN UNPROTECTED SIDE OR EDGE, THE EMPLOYEES SHALL BE CONSIDERED PROTECTED FROM FALLS BETWEEN THE JOISTS, RAFTERS AND ROOF TRUSSES.

2. IF INSTALLING FLOOR JOISTS, EMPLOYEES SHALL BE CONSIDERED PROTECTED FROM FALLS UP TO AND INCLUDING FIFTEEN FEET ABOVE THE SURROUNDING GRADE OR FLOOR LEVEL BELOW WHEN STANDING ON OR WORKING FROM JOISTS LAID ON THEIR SIDE ON THE TOP PLATE ON CENTER SPACING NOT EXCEEDING TWENTY-FOUR INCHES IF WALKING OR WORKING WITHIN TWENTY-FOUR INCHES OF THE TOP PLATE OR OTHER STRUCTURAL SUPPORT.

E. IF A TRUSS SUPPORT PLATE IS USED DURING THE INSTALLATION OF TRUSSES, THE TRUSS SUPPORT PLATE SHALL BE CONSTRUCTED OF A TWO-FOOT BY SIX-FOOT PLANK LAID FLAT THAT IS SECURED LINEALLY TO A TWO-FOOT BY SIX-FOOT PLANK LAID ON EDGE AND SUPPORTED WITH TWO-FOOT BY FOUR-FOOT WOOD MEMBERS THAT ARE SPACED NO MORE THAN SIX FEET ON CENTER AND ATTACHED TO DIAGONAL BRACING ADEQUATELY SECURED TO SUPPORT ITS INTENDED LOAD. ALL MATERIAL DIMENSIONS ARE MINIMUM AND NOMINAL.

F. IF WORKING ON FLOORS AND OTHER WALKING OR WORKING SURFACES THAT WILL LATER BE ENCLOSED BY FRAMED EXTERIOR WALLS, EMPLOYEES DIRECTLY INVOLVED WITH THE LAYOUT AND CONSTRUCTION OF FRAMED STUD WALLS SHALL BE PROTECTED FROM FALLING BY STANDARD GUARDRAILS PURSUANT TO SECTION 23-492.06 AROUND ALL UNPROTECTED SIDES OR EDGES, OR BY OTHER MEANS PRESCRIBED BY THIS ARTICLE, IF THE FLOOR OR WALKING OR WORKING SURFACE IS OVER FIFTEEN FEET ABOVE THE SURROUNDING GRADE OR FLOOR LEVEL BELOW.

G. THE FOLLOWING APPLIES WHEN INSTALLING STARTER BOARD, ROOF SHEATHING AND FASCIA BOARD:

1. EMPLOYEES SHALL BE PROTECTED FROM FALLING BY SCAFFOLDING, GUARDRAILS, PERSONAL FALL PROTECTION SYSTEMS OR OTHER MEANS PRESCRIBED BY THIS ARTICLE, AS FOLLOWS:

(a) FOR STRUCTURES GREATER THAN ONE STORY IN HEIGHT WHERE THE FALL HEIGHT EXCEEDS FIFTEEN FEET ABOVE THE SURROUNDING GRADE OR FLOOR LEVEL BELOW.

(b) IF WORKING ON A ROOF THAT IS SLOPED GREATER THAN 7:12, EXCEPT FOR A ROOF THAT IS SLOPED UP TO 12:12, SLIDE GUARDS MAY BE USED AS FALL PROTECTION UP TO AND INCLUDING FIFTEEN FEET AS MEASURED FROM THE EAVES TO THE SURROUNDING GRADE OR FLOOR LEVEL BELOW.

2. EMPLOYEES WHO WORK INSIDE THE GABLE END TRUSS OR RAFTER SHALL BE CONSIDERED PROTECTED FROM FALLS WHERE THE GABLE END TRUSS HAS BEEN INSTALLED AND BRACED TO WITHSTAND A LATERAL FORCE OF TWO HUNDRED POUNDS AND THE EMPLOYEE INSTALLS FASCIA OR STARTER BOARD WORKING FROM WITHIN THE GABLE END TRUSS OR RAFTER.

3. IF WORK MUST BE PERFORMED OUTSIDE THE GABLE END TRUSS OR RAFTER, THE EMPLOYEE SHALL BE PROTECTED FROM FALLING BY SCAFFOLDING OR A PERSONAL FALL PROTECTION SYSTEM OR OTHER MEANS PRESCRIBED BY THIS ARTICLE, EXCEPT THAT IF THE WORK IS OF SHORT DURATION AND LIMITED EXPOSURE AND THE HAZARDS INVOLVED IN RIGGING AND INSTALLING THE SAFETY DEVICES REQUIRE EQUAL OR EXCEED THE HAZARDS INVOLVED IN THE ACTUAL CONSTRUCTION, THESE PROVISIONS MAY BE TEMPORARILY SUSPENDED PROVIDED THE WORK IS PERFORMED BY A QUALIFIED PERSON.

H. WALL OPENINGS SHALL BE GUARDED PURSUANT TO SECTION 23-492.03. THE GUARDRAIL MAY BE REMOVED IMMEDIATELY BEFORE INSTALLING THE WINDOW COMPONENTS IF REMOVAL OF THE GUARDRAIL IS NECESSARY TO INSTALL THE WINDOW.

I. IF SCAFFOLDING IS USED, IT SHALL BE CONSTRUCTED PURSUANT TO 29 CODE OF FEDERAL REGULATIONS SECTION 1926, SUBPART L. IF SCAFFOLDS ARE INSTALLED PARALLEL AND ADJACENT TO FRAMED STRUCTURE WALLS, THE INTERIOR RAILING MAY BE OMITTED FOR INSTALLATION FLOOR JOISTS, RAFTERS OR TRUSSES IF THE SCAFFOLD PLATFORM IS FIFTEEN FEET OR LESS FROM THE INTERIOR FLOOR LEVEL BELOW AND THE TOP PLATE IS HIGHER THAN THE ADJACENT WORK PLATFORM. IF SCAFFOLDING IS USED AS AN EDGE PROTECTION PLATFORM:

1. THE PLATFORM SHALL NOT BE MORE THAN TWO FEET VERTICALLY BELOW THE TOP PLATE AND THE PLATFORM SHALL BE FULLY PLANKED.

2. THE DISTANCE BETWEEN THE INBOARD EDGE OF THE PLATFORM AND THE BUILDING OR STRUCTURE WALL SHALL NOT BE MORE THAN SIXTEEN INCHES.

3. A TOEBOARD THAT IS TWO FEET BY SIX FEET OR LARGER SHALL BE SECURED ON EDGE PARALLEL TO THE OUTER RAIL.

J. SCAFFOLDS SHALL BE SECURED IN TENSION AND COMPRESSION TO THE STRUCTURE AT OR NEAR THE TOP OF THE SCAFFOLD AT EACH END AND AT EVERY OTHER FRAME NOT TO EXCEED TWENTY-FOOT INTERVALS.

K. GUARD RAILINGS SHALL EXTEND NOT LESS THAN FORTY-TWO INCHES VERTICALLY ABOVE THE EAVES IF THE OUTBOARD EDGE OF THE PLATFORM EXTENDS LESS THAN TWELVE INCHES HORIZONTALLY BEYOND THE EAVES.

L. EMPLOYEES WHO ARE EXPOSED TO FALL HAZARDS SHALL BE TRAINED IN PURSUANT TO SECTION 23-492.06 TO RECOGNIZE FALL HAZARDS ASSOCIATED WITH THE ERECTION AND CONSTRUCTION ACTIVITIES AND TRAINED TO MINIMIZE THESE HAZARDS. SUCH TRAINING SHALL BE DOCUMENTED PURSUANT TO 23-492.06.

M. FOR THE PURPOSES OF THIS SECTION:

1. "BOTTOM PLATE" OR "SOLE PLATE" MEANS THE BOTTOM HORIZONTAL MEMBER OF A FRAME WALL.

2. "EAVES" MEANS THE LOWEST EDGE OF A SLOPED ROOF.

3. "FASCIA BOARD" MEANS THE EXTERIOR TRIM BOARD AT THE PERIMETER OF THE ROOF.

4. "JOIST" MEANS ONE OF A SERIES OF PARALLEL BEAMS USED TO CREATE A STRUCTURAL SUPPORT SYSTEM FOR A FLOOR DECK OR FLAT ROOF ONTO WHICH SHEATHING IS FASTENED.

5. "NOMINAL SIZE" MEANS THE COMMERCIAL SIZE DESIGNATION OF A STANDARD WIDTH AND DEPTH OF STANDARDIZED SAWN LUMBER AND GLUE LAMINATED LUMBER GRADES, LARGER THAN THE STANDARD ACTUAL NET SIZE OF THE FINISHED, DRESSED LUMBER.

NOMINAL SIZE INCLUDES AN APPROXIMATE ROUGH-CUT DIMENSION ASSIGNED TO A PIECE OF MATERIAL AS A CONVENIENCE IN REFERENCING TO THE PIECE.

6. "RAFTER" MEANS ONE OF A SERIES OF STRUCTURAL MEMBERS OF A ROOF THAT IS DESIGNED TO SUPPORT ROOF LOADS. RAFTER INCLUDES:

(a) A FRAMING MEMBER THAT RUNS UP AND DOWN THE SLOPE OF A PITCHED ROOF.

(b) THE BEAMS THAT SLOPE FROM THE RIDGE OF A ROOF TO THE EAVES AND MAKE-UP THE MAIN BODY OF THE ROOFS FRAMEWORK.

(c) ROOF JOINTS FOR THE RAFTERS OF A FLAT ROOF.

7. "ROOF SLOPE" MEANS THE INCLINE ANGLE OF A ROOF SURFACE, GIVEN AS A RATIO OF THE VERTICAL RISE TO THE HORIZONTAL RUN.

8. "SHEATHING" MEANS THE STRUCTURAL PANEL COVERING THAT IS FASTENED TO STUDS, FLOOR JOISTS, RAFTERS OR TRUSSES.

9. "SLIDE GUARDS" MEANS A TWO INCH NOMINAL CLEAT, ON CENTERS NOT TO EXCEED FOUR FEET, THAT IS SECURELY FASTENED TO THE ROOF SHEATHING TO PROVIDE FOOTING ON A SLOPED ROOF.

10. "STARTER BOARD" MEANS THE BOARD-TYPE SHEATHING MATERIAL THAT IS INSTALLED AT EAVES AND GABLE ENDS IN THE PLANE OF THE SHEATHING AND VISIBLE FROM THE UNDERSIDE.

11. "STUD" OR "WALL STUD" MEANS A VERTICAL FRAMING MEMBER IN WALLS AND PARTITIONS THAT ARE ATTACHED TO THE HORIZONTAL SOLE PLATE BELOW AND THE TOP PLATE ABOVE.

12. "TOP PLATE" MEANS THE TOP HORIZONTAL MEMBER OF A FRAME WALL SUPPORTING CEILING JOISTS, RAFTERS OR OTHER STRUCTURAL MEMBERS.

13. "TRUSS" MEANS THE PREFABRICATED STRUCTURAL ROOF UNIT THAT CONSISTS OF TRIANGULAR BRACING OR TRUSS WEB BETWEEN THE CEILING JOIST OR BOTTOM CHORD AND THE ROOF RAFTER OR TOP CHORD COMMONLY INSTALLED PARALLEL WITH OTHER TRUSSES TO CREATE A STRUCTURAL SUPPORT SYSTEM FOR A ROOF AFTER WHICH SHEATHING IS FASTENED. THE BOTTOM CHORD OFTEN SERVES AS A CEILING JOIST. EACH MEMBER IS USUALLY SUBJECTED TO LONGITUDINAL STRESS ONLY, EITHER TENSION OR COMPRESSION.

14. "TRUSS SUPPORT PLATE" MEANS A TEMPORARY SUPPORT STRUCTURE THAT IS ERECTED NEAR MID-SPAN OF AN AREA WITH A LARGE OPEN SPAN, SUCH AS A GARAGE, TO SUPPORT TRUSSES DURING INSTALLATION.

23-492.05. Roofing operations and equipment

A. ROOF JACKS SHALL BE CONSTRUCTED TO FIT THE SLOPE OF THE ROOF AND BE DESIGNED, FABRICATED AND INSTALLED IN SUCH A MANNER THAT THEY WILL SUSTAIN ALL EXPECTED LOADS. THE SUPPORTED PLANK SHALL BE POSITIONED AT SOME ANGLE FROM PERPENDICULAR TO THE ROOF TO HORIZONTAL. INTERVALS OR SPANS BETWEEN ROOF JACKS SHALL NOT EXCEED TEN FEET. IF ROOF SUPPORTS ARE USED, THEY SHALL CONSIST OF FIRST-GRADE MANILA ROPE OF AT LEAST THREE-FOURTHS INCH DIAMETER OR OTHER MATERIAL OF EQUIVALENT STRENGTH. WOODEN SUPPORTING MEMBERS THAT SPAN BETWEEN JACKS SHALL BE SELECTED LUMBER OR EQUIVALENT AND BE OF AT LEAST TWO-INCH BY SIX-INCH MATERIAL. WHERE SUPPORTING MEMBERS OTHER THAN WOOD ARE USED THEY SHALL BE OF AT LEAST THE EQUIVALENT STRENGTH. WOODEN SUPPORTING

MEMBERS THAT SPAN BETWEEN JACKS SHALL BE SELECTED LUMBER OR EQUIVALENT AND BE OF AT LEAST TWO-INCH BY SIX-INCH MATERIAL. WHERE SUPPORTING MEMBERS OTHER THAN WOOD ARE USED THEY SHALL BE OF AT LEAST EQUIVALENT STRENGTH.

B. IF CATCH PLATFORMS ARE USED, THEY SHALL BE INSTALLED IN CLOSE PROXIMITY BELOW THE EAVES BELOW ROOF WORK AREAS, EXTEND AT LEAST TWO FEET HORIZONTALLY BEYOND THE PROJECTION OF THE EAVES, AND BE PROVIDED WITH STANDARD RAILINGS AND TOEBOARDS PURSUANT TO SECTION 23-492.06. THE PLATFORMS SHALL BE FULLY PLANKED.

C. IF BUILT-UP SCAFFOLD PLATFORMS ARE USED TO PROTECT WORKERS FROM FALLS FROM THE EDGES OF ROOFS, THEY SHALL BE INSTALLED AND MAINTAINED PURSUANT TO 29 CODE OF FEDERAL REGULATIONS SECTION 1926, SUBPART L. FULLY PLANKED PLATFORM SHALL BE PROVIDED NEAR THE EAVE LEVEL.

D. IF A SYSTEM OF EAVE BARRIERS IS PROVIDED TO PREVENT FALLS FROM ROOFS, THE BARRIER, UNLESS OF SOLID CONSTRUCTION, SHALL COMPLY WITH SECTION 23-492.06. THE BARRIER SYSTEM SHALL BE SECURELY ANCHORED AT EAVE LEVEL OR SUPPORTED BY ROPES SECURELY TIED TO SUBSTANTIAL ANCHORAGES ON THE ROOF. IF THE BARRIER SYSTEM IS TO BE MOVED FROM ONE WORK AREA TO ANOTHER, EMPLOYEES PERFORMING THE MOVING OPERATIONS SHALL BE PROTECTED BY THE USE OF SAFETY BELTS AND LINES.

E. IF USED TO PREVENT WORKERS FROM FALLING OFF ROOFS, PERSONAL FALL ARREST SYSTEMS, PERSONAL FALL RESTRAINT SYSTEMS AND POSITIONING DEVICES SHALL BE INSTALLED AND USED PURSUANT TO SECTION 23-492.07. SAFETY LINES SHALL BE ATTACHED IN A SECURE MANNER TO SUBSTANTIAL ANCHORAGES ON THE ROOF.

F. STANDARD RAILINGS AND TOEBOARDS SHALL BE PROVIDED ON THE OPEN SIDES OF THE PLATFORMS OF HIGH-LIFT MATERIAL TRUCKS WHEN THE PLATFORM IS USED AS A WORK SURFACE, UNLESS IT IS NOT FEASIBLE DURING LOADING OR UNLOADING OPERATIONS AT ELEVATIONS FIFTEEN FEET OR MORE ABOVE GROUND, FLOOR OR LEVEL UNDERNEATH.

G. RAMPS AND RUNWAYS THAT ARE ERECTED AND USED EXCLUSIVELY FOR THE PURPOSE OF LOADING OR UNLOADING ROOFING MATERIALS AT ELEVATIONS ABOVE GROUND, OR OTHER LEVEL BELOW, NOT EXCEEDING FIFTEEN FEET IN HEIGHT SHALL BE INSTALLED AND MAINTAINED ON BOTH SIDES OF THE RAMP OR RUNWAY. A TEN-INCH WIDE HORIZONTAL OPENING IS PERMITTED BETWEEN THE RAILING AND THE RAMP OR RUNWAY PLATFORM.

H. DURING ROOFING OPERATIONS THE EMPLOYER SHALL COMPLY WITH THE PROVISIONS OF ALL SAFETY AND HEALTH LAWS, RULES AND REGULATIONS AND EMPLOYEES SHALL BE TRAINED AND INSTRUCTED PURSUANT TO SECTION 23-492.09.

I. EMPLOYEES SHALL BE PROTECTED FROM FALLS FROM ROOFS OF A HEIGHT OF MORE THAN FIFTEEN FEET BY USE OF ONE OR A COMBINATION OF METHODS IN THIS SECTION. THIS SUBSECTION APPLIES REGARDLESS OF HEIGHT IF FELT LAYING MACHINES OR OTHER EQUIPMENT ARE PULLED BY AN OPERATOR WHO WALKS BACKWARDS.

J. WARNING LINES THAT CONSIST OF ROPE, WIRE OR SIMILAR MATERIAL AND THAT ARE FLAGGED WITH HIGHLY VISIBLE MATERIAL HANGING FROM WARNING LINES AT APPROXIMATELY SIX-FOOT INTERVALS SHALL BE INSTALLED THIRTY-FOUR TO FORTY-FIVE INCHES ABOVE THE ROOF SURFACE TO WARN EMPLOYEES THAT THEY ARE APPROACHING THE

EDGE OF THE ROOF. THE STANCHIONS, WHETHER PORTABLE OR FIXED, THAT SUPPORT THE WARNING LINES SHALL BE DESIGNED AND INSTALLED TO MINIMIZE THE TIP OVER OR DISPLACEMENT UNDER NORMAL WORKING CONDITIONS. WARNING LINES SHALL HAVE A MINIMUM TENSILE STRENGTH OF FIVE HUNDRED POUNDS. THE LINE SHALL BE ATTACHED AT EACH STANCHION IN SUCH A WAY THAT PULLING ON ONE SECTION OF THE LINE BETWEEN STANCHIONS WILL NOT RESULT IN SLACK BEING TAKEN UP IN ADJACENT SECTIONS BEFORE THE STANCHION TIPS OVER.

K. UNLESS CONDITIONS PROHIBIT, HEADERS CONSISTING OF SHEETS OF ROOFING OR OTHER ROOFING MATERIALS SHALL ALSO BE LAID PARALLEL TO THE EDGES OF THE ROOF TO WARN EMPLOYEES THAT THEY ARE APPROACHING THE EDGE OF THE ROOF.

L. THE WARNING LINES AND HEADERS SHALL BE PLACED NO CLOSER THAN FIVE FEET FROM THE ROOF EDGE.

M. IF USING FELT LAYING MACHINES OR OTHER EQUIPMENT THAT ARE PULLED BY AN OPERATOR WHO WALKS BACKWARDS OR MOTORIZED EQUIPMENT ON WHICH THE OPERATOR RIDES, THE HEADERS SHALL BE PLACED NO CLOSER THAN TEN FEET AND THE WARNING LINES SHALL BE PLACED NO CLOSER THAN FIVE FEET FROM THOSE ROOF EDGES THAT ARE PERPENDICULAR OR NEARLY PERPENDICULAR TO THE DIRECTION IN WHICH THE OPERATOR IS MOVING. IF CONDITIONS PROHIBIT THE USE OF HEADERS, THE WARNING LINES SHALL BE PLACED NO CLOSER THAN TEN FEET FROM THOSE ROOF EDGES THAT ARE PERPENDICULAR NEARLY PERPENDICULAR TO THE DIRECTION IN WHICH THE OPERATOR IS MOVING.

N. THE WARNING LINES AND HEADERS SHALL BE ERECTED EITHER AROUND THE COMPLETE PERIMETER OF THE ROOF OR ONLY IN AREAS OF THE ROOF WHERE WORK IS BEING ACCOMPLISHED, SO LONG AS THE WARNING LINES AND HEADERS ARE MOVED AS THE WORK PROGRESSES IN SUCH A MANNER AS TO PROVIDE CONTINUOUS WARNING TO EMPLOYEES IN THE WORK AREA WHEN THEY ARE APPROACHING THE ROOF EDGE. ACCESS PATHS SHALL BE ERECTED AS FOLLOWS:

1. POINTS OF ACCESS, MATERIALS HANDLING AREAS AND STORAGE AREAS SHALL BE CONNECTED TO THE WORK AREA BY A CLEAR ACCESS PATH FORMED BY TWO WARNING LINES.

2. WHEN THE PATH TO A POINT OF ACCESS IS NOT IN USE, A ROPE, WIRE OR CHAIN, EQUAL IN STRENGTH AND HEIGHT TO THE WARNING LINE, SHALL BE PLACED ACROSS THE PATH AT THE POINT WHERE THE PATCH INTERSECTS THE WARNING LINE ERECTED AROUND THE WORK AREA.

O. EMPLOYEES SHALL BE INSTRUCTED TO STAY INSIDE THE WARNING LINES AND HEADERS EXCEPT WHEN WORK MUST BE PERFORMED AT THE ROOF EDGE.

P. APPLICATION OF MATERIALS OUTSIDE THE WARNING LINES SHALL BE CLOSELY SUPERVISED BY A QUALIFIED PERSON.

Q. ON NARROW ROOFS AND ROOFS OF UNUSUAL SHAPE, AS MEASURED IN 29 CODE OF FEDERAL REGULATIONS SECTION 1926, SUBPART M, APPENDIX A, WHERE WARNING LINES AND HEADERS WOULD BE IMPRACTICAL, THE APPLICATION OF MATERIALS SHALL BE CLOSELY SUPERVISED BY A QUALIFIED PERSON.

R. IF A FELT LAYING MACHINE OR ANY OTHER EQUIPMENT THAT IS PULLED BY AN OPERATOR WHO WALKS BACKWARDS IS BEING USED, THE OPERATOR SHALL BE NO CLOSER THAN THREE FEET TO THE ROOF EDGES THAT ARE PARALLEL OR NEARLY PARALLEL

TO THE DIRECTION IN WHICH THE OPERATOR IS MOVING. MOTORIZED EQUIPMENT ON WHICH THE OPERATOR RIDES SHALL NOT BE USED OR STORED BETWEEN THE WARNING LINE AND THE ROOF EDGE.

S. SUBSECTIONS I THROUGH R OF THIS SECTION DO NOT APPLY IF EMPLOYEES ARE PROTECTED BY THE USE OF ANY OF THE FOLLOWING:

1. PERSONAL FALL PROTECTION.
2. CATCH PLATFORMS.
3. SCAFFOLD PLATFORMS.
4. EAVE BARRIERS.
5. STANDARD RAILINGS AND TOEBOARDS.
6. PARAPETS AT LEAST TWENTY-FOUR INCHES HIGH, EXCEPT THAT AT THOSE JOB SITES WHERE FELT LAYING MACHINES OR OTHER EQUIPMENT THAT IS PULLED BY AN OPERATOR WHO WALKS BACKWARDS OR MOTORIZED EQUIPMENT ON WHICH THE OPERATOR RIDES IS BEING USED, THIS SUBSECTION SHALL NOT APPLY PROVIDED THAT THE PARAPET IS THIRTY-SIX INCHES OR MORE IN HEIGHT AT THOSE ROOF EDGES THAT ARE PERPENDICULAR OR NEARLY PERPENDICULAR TO THE DIRECTION IN WHICH THE EQUIPMENT IS MOVING.

T. EMPLOYEES SHALL BE PROTECTED FROM FALLS FROM ROOFS OF A HEIGHT OF MORE THAN FIFTEEN FEET BY USING ANY OF THE FOLLOWING:

1. PARAPETS THAT ARE TWENTY-FOUR INCHES OR HIGHER.
2. PERSONAL FALL PROTECTION.
3. CATCH PLATFORMS.
4. SCAFFOLD PLATFORMS.
5. EAVE BARRIERS.
6. STANDARD RAILINGS AND TOEBOARDS.

U. SUBSECTION T DOES NOT APPLY AT THOSE JOB SITES WHERE MOTORIZED EQUIPMENT ON WHICH THE OPERATOR RIDES THAT HAS BEEN DESIGNATED FOR USE ON ROOFS OF SLOPES GREATER THAN 4:12 IS BEING USED IF THE PARAPET IS THIRTY-SIX INCHES OR MORE IN HEIGHT AT THOSE ROOF EDGES THAT ARE PERPENDICULAR OR NEARLY PERPENDICULAR TO THE DIRECTION IN WHICH THE EQUIPMENT IS MOVING.

V. EQUIPMENT THAT IS PULLED BY AN OPERATOR WHO WALKS BACKWARDS SHALL NOT BE USED ON A ROOF HAVING A SLOPE GREATER THAN 4:12.

W. EMPLOYEES SHALL BE PROTECTED FROM FALLS FROM ROOFS THAT ARE OF A HEIGHT OF MORE THAN FIFTEEN FEET BY THE USE OF A ROOF JACK SYSTEM PURSUANT TO SUBSECTION A OF THIS SECTION, A MINIMUM OF TWENTY-FOUR INCH HIGH PARAPET OR OTHER METHOD OF AFFORDING EQUIVALENT PROTECTION.

X. EMPLOYEES SHALL BE PROTECTED FROM FALLS FROM ROOFS THAT ARE OF A HEIGHT OF MORE THAN FIFTEEN FEET BY ANY OF THE FOLLOWING:

1. PARAPET AT LEAST TWENTY-FOUR INCHES HIGH.
2. PERSONAL FALL PROTECTION.
3. CATCH PLATFORMS.
4. SCAFFOLD PLATFORMS.
5. EAVE BARRIERS.
6. ROOF JACK SYSTEMS. FOR ROOF JACK SYSTEMS ON ROOFS STEEPER THAN 7:12, SAFETY LINES SHALL BE REQUIRED.

Y. FOR PURPOSES OF THIS SECTION, THE HEIGHT MEASUREMENT SHALL BE DETERMINED BY MEASURING THE VERTICAL DISTANCE FROM THE LOWEST EDGE OF THE ROOF OR EAVES TO THE GROUND OR LEVEL BELOW. THE HEIGHT OF PARAPETS SHALL NOT BE INCLUDED IN THE ROOF HEIGHT MEASUREMENTS.

Z. IN ADDITION TO THE TRAINING REQUIRED UNDER SECTION 23-492.09, EACH AFFECTED EMPLOYEE SHALL BE TRAINED TO ENSURE SPECIFIC AWARENESS OF THE FALL HAZARDS ASSOCIATED WITH ROOFING WORK, INCLUDING:

1. WORK ON OR NEAR GABLE ENDS.
2. SLIPPING HAZARDS.
3. ROOF HOLES AND OPENINGS.
4. SKYLIGHTS.
5. WORK ON LADDERS AND SCAFFOLDS.
6. ACCESS TO ROOF.
7. PLACEMENT AND LOCATION OF MATERIALS ON ROOF.
8. CARE AND USE OF FALL PROTECTION SYSTEMS.

AA. DOCUMENTATION OF EMPLOYEE TRAINING SHALL BE MAINTAINED AS REQUIRED BY 29 CODE OF FEDERAL REGULATIONS SECTION 1926.503.

23-492.06. Railings, safety nets and personal fall protection systems used in residential construction

A. IF REQUIRED BY THIS ARTICLE:

1. ALL STANDARD GUARDRAILS AND TOEBOARDS SHALL COMPLY WITH 29 CODE OF FEDERAL REGULATIONS SECTION 1926.502(b).

2. ALL SAFETY NETS SHALL COMPLY WITH 29 CODE OF FEDERAL REGULATIONS SECTION 1926.502(c).

3. ALL PERSONAL FALL PROTECTION SYSTEMS SHALL COMPLY WITH 29 CODE OF FEDERAL REGULATIONS SECTION 1926.502(d).

B. IF USING GUARDRAILS, SAFETY NETS AND PERSONAL FALL PROTECTION SYSTEMS, EMPLOYERS MAY FOLLOW THE NONMANDATORY GUIDELINES FOR COMPLIANCE FOUND IN 29 CODE OF FEDERAL REGULATIONS SECTION 1926, SUBPART M, APPENDIX B, C AND D.

23-492.07. Fall protection plan; applicability

A. THIS SECTION APPLIES TO ALL CONSTRUCTION OPERATIONS WHEN IT CAN BE SHOWN THAT THE USE OF GUARDRAILS, SAFETY NETS OR PERSONAL FALL PROTECTION SYSTEM IS IMPRACTICAL OR CREATES A GREATER HAZARD.

B. THE FALL PROTECTION PLAN SHALL BE PREPARED BY A QUALIFIED PERSON AND DEVELOPED SPECIFICALLY FOR THE SITE WHERE THE CONSTRUCTION WORK IS BEING PERFORMED, AND THE PLAN MUST BE MAINTAINED UP TO DATE. THE PLAN SHALL DOCUMENT THE IDENTITY OF THE QUALIFIED PERSON. UNDER THIS SECTION, THE EMPLOYER MAY DEVELOP ONLY A SINGLE SITE FALL PROTECTION PLAN FOR SITES WHERE THE CONSTRUCTION OPERATIONS ARE ESSENTIALLY IDENTICAL.

C. ANY CHANGES TO THE FALL PROTECTION PLAN SHALL BE APPROVED BY THE QUALIFIED PERSON. THE IDENTITY OF THE QUALIFIED PERSON SHALL BE DOCUMENTED.

D. A COPY OF THE FALL PROTECTION PLAN WITH ALL APPROVED CHANGES SHALL BE MAINTAINED AT THE JOB SITE.

E. THE IMPLEMENTATION OF THE FALL PROTECTION PLAN SHALL BE UNDER THE SUPERVISION OF A COMPETENT PERSON. THE PLAN SHALL DOCUMENT THE IDENTITY OF THE COMPETENT PERSON.

F. THE FALL PROTECTION PLAN SHALL DOCUMENT THE REASONS WHY THE USE OF GUARDRAILS, SAFETY NETS OR PERSONAL FALL PROTECTION SYSTEM IS IMPRACTICAL OR CREATES A GREATER HAZARD.

G. THE FALL PROTECTION PLAN SHALL INCLUDE A WRITTEN DISCUSSION OF OTHER MEASURES THAT REDUCE OR ELIMINATE THE FALL HAZARD FOR WORKERS WHO CANNOT BE PROVIDED WITH PROTECTION PROVIDED BY GUARDRAILS, SAFETY NETS OR PERSONAL FALL PROTECTION SYSTEM.

H. THE FALL PROTECTION PLAN SHALL IDENTIFY EACH LOCATION WHERE GUARDRAILS, SAFETY NETS OR PERSONAL FALL PROTECTION SYSTEM CANNOT BE USED. THESE LOCATIONS SHALL BE CLASSIFIED AS CONTROLLED ACCESS ZONES AND THE EMPLOYER SHALL COMPLY WITH SECTION 23-492.08.

I. WHERE NO ALTERNATIVE MEASURES HAVE BEEN IMPLEMENTED, THE EMPLOYER SHALL IMPLEMENT A SAFETY MONITORING SYSTEM THAT COMPLIES WITH SECTION 23-492.08.

J. THE FALL PROTECTION PLAN MUST INCLUDE A STATEMENT PROVIDING THE NAME OR OTHER METHOD OF IDENTIFICATION FOR EACH EMPLOYEE WHO IS DESIGNATED TO WORK IN CONTROLLED ACCESS ZONES. NO OTHER EMPLOYEES MAY ENTER CONTROLLED ACCESS ZONES.

K. IN THE EVENT AN EMPLOYEE FALLS, OR SOME OTHER RELATED, SERIOUS INCIDENT OCCURS SUCH AS A NEAR MISS, THE EMPLOYER SHALL INVESTIGATE THE CIRCUMSTANCES OF THE FALL OR OTHER INCIDENT TO DETERMINE IF THE FALL PROTECTION PLAN NEEDS TO BE AMENDED AND SHALL IMPLEMENT THOSE CHANGES TO PREVENT SIMILAR TYPES OF FALLS OR INCIDENTS.

23-492.08. Controlled access zones and safety monitoring systems

A. IF USED TO CONTROL ACCESS TO AREAS WHERE LEADING EDGE AND OTHER OPERATIONS ARE TAKING PLACE, THE CONTROLLED ACCESS ZONE SHALL BE DEFINED BY A CONTROL LINE OR BY OTHER MEANS THAT RESTRICTS ACCESS. SIGNS SHALL BE POSTED TO WARN UNAUTHORIZED EMPLOYEES TO STAY OUT OF THE CONTROLLED ACCESS ZONE. IF CONTROL LINES ARE USED, THEY SHALL BE ERECTED NOT LESS THAN SIX FEET OR MORE THAN TWENTY-FIVE FEET FROM THE UNPROTECTED OR LEADING EDGE, EXCEPT WHEN ERECTING PRECAST CONCRETE MEMBERS. IF ERECTING PRECAST CONCRETE MEMBERS, THE CONTROL LINE SHALL BE ERECTED NOT LESS THAN SIX FEET OR MORE THAN SIXTY FEET OR HALF THE LENGTH OF THE MEMBER BEING ERECTED, WHICHEVER IS LESS, FROM THE LEADING EDGE. THE CONTROL LINE SHALL EXTEND ALONG THE ENTIRE LENGTH OF THE UNPROTECTED OR LEADING EDGE AND SHALL BE APPROXIMATELY PARALLEL TO THE UNPROTECTED OR LEADING EDGE. THE CONTROL LINE SHALL BE CONNECTED ON EACH SIDE TO A STANDARD RAILING OR WALL, OR SECURELY ANCHORED ON EACH END. CONTROL LINES SHALL CONSIST OF ROPES, WIRES, TAPES OR EQUIVALENT MATERIALS AND SUPPORTING STANCHIONS AS FOLLOWS:

1. EACH LINE SHALL BE FLAGGED OR OTHERWISE CLEARLY MARKED AT NOT MORE THAN SIX-FOOT INTERVALS WITH HIGH-VISIBILITY MATERIAL.

2. EACH LINE SHALL BE RIGGED AND SUPPORTED IN SUCH A WAY THAT ITS LOWEST POINT IS NOT LESS THAN THIRTY-NINE INCHES FROM THE WORKING LEVEL OR WORKING AREA AND ITS HIGHEST POINT IS NOT MORE THAN FORTY-FIVE INCHES.

3. EACH LINE SHALL HAVE A MINIMUM BREAKING STRENGTH OF TWO HUNDRED POUNDS.

B. THE EMPLOYER SHALL DESIGNATE A COMPETENT PERSON AS A SAFETY MONITOR TO MONITOR THE SAFETY OF OTHER EMPLOYEES. THE EMPLOYER SHALL ENSURE THAT THE SAFETY MONITOR:

1. IS COMPETENT TO RECOGNIZE FALL HAZARDS.

2. WARNS EMPLOYEES WHEN IT APPEARS THAT THE EMPLOYEES ARE UNAWARE OF A FALL HAZARD OR ARE ACTING IN AN UNSAFE MANNER.

3. IS WITHIN VISUAL SIGHTING DISTANCE OF EMPLOYEES AND COMMUNICATES WITH THE EMPLOYEES WHO ARE BEING MONITORED.

4. DOES NOT HAVE OTHER RESPONSIBILITIES THAT COULD TAKE THE MONITOR'S ATTENTION AWAY FROM THE MONITORING FUNCTION.

C. AN EMPLOYEE, OTHER THAN AN EMPLOYEE COVERED BY A FALL PROTECTION PLAN, SHALL NOT BE ALLOWED IN AN AREA WHERE ANY EMPLOYEE IS BEING PROTECTED BY A SAFETY MONITORING SYSTEM.

D. EACH EMPLOYEE WHO WORKS IN A CONTROLLED ACCESS ZONE SHALL COMPLY WITH FALL HAZARD WARNINGS FROM SAFETY MONITORS.

23-492.09. Training requirements

ALL EMPLOYEES WHO AREA COVERED UNDER THIS ARTICLE SHALL BE TRAINED IN COMPLIANCE WITH 29 CODE OF FEDERAL REGULATIONS SECTION 1926.503, AND DOCUMENTATION OF THE EMPLOYEE TRAINING SHALL BE MAINTAINED AS PRESCRIBED BY 29 CODE OF FEDERAL REGULATIONS SECTION 1926.503.