

2025 MNOSHA Construction – Fall Protection

Name: Lee Craig





Mission

Minnesota OSHA

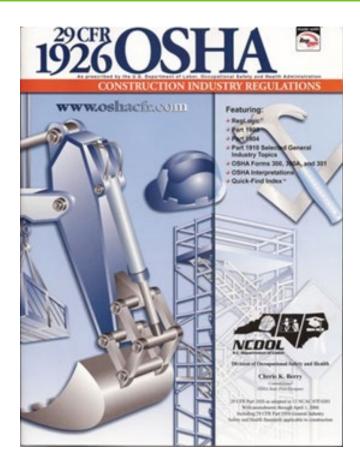
"To assure that every worker in the State of Minnesota has a safe and healthful workplace."





Applicable Laws

- Chapter 182 Statutes (The Minnesota Plan)
- Minnesota Rules Chapters 5205 through
 5215
- 29 CFR 1910 General Industry and 1926 Construction Standards







MNOSHA Compliance Current Staff

- 24 Safety Investigators
- 7 Health Investigators
- 4 Principal Safety
- 4 Industrial Hygienist 3
- 4 MNSTAR/Consultants
- 4 Directors

- 3 Training Officers
- 4 Discrimination Investigators
- 3 Management Analysts
- 7 Program Support
- 8 Supervisors
- 1 Electronics Tech





OSHA Workplace Safety Consultation

Provides free voluntary and confidential workplace safety and health assistance to Minnesota businesses, with a priority for small businesses and high-hazard industries.

Services Provided:

- On-site consultation
- Hazard recognition
- Safety management effectiveness
- Training/Education/Outreach
- Technical assistance

Programs:

- Safety grants
- Workplace violence prevention
- Ergonomics
- Labor-Management safety committee
- MN Safety and Health Achievement Recognition (MNSHARP)
- MNSTAR

Businesses can request services by contacting WSC at (651) 284-5060, 1-800-657-3776 or osha.consultation@state.mn.us





MNOSHA Compliance Fatality Investigations Federal Fiscal Year 2020 - 2024

During the period October 1, 2019 – September 30, 2024, the annual average number of fatalities under Minnesota OSHA jurisdiction was 34.

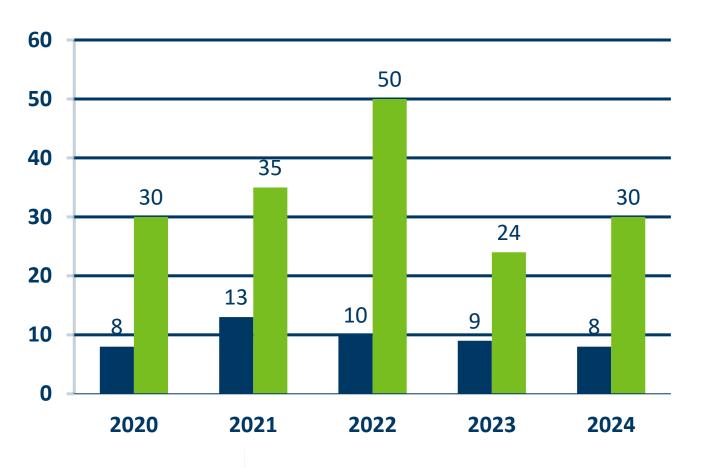
The most common types of workplace fatalities were:

- Contact with an object or equipment: Average of 8 workers each year
- Falls: Average of 8 workers each year





Construction Fatalities Federal Fiscal Year 2020-2024



- **■** Construction
- Total





Minnesota OSHA's Most Frequently Cited Standards in Construction Federal Fiscal Year 2024

Standard	Description	Frequency
1926.501	Fall protection	130
Minnesota Statutes 182.653, subd. 8	A Workplace Accident and Injury Reduction (AWAIR) program	71
1926.1053	Ladders	60
1926.451	General requirement for scaffold	55
1910.1200 & 5206.0700	Hazard communication	32
Minnesota Rules 5207.1100	Elevating work platform equipment	32
1926.651	Specific requirements for excavations	29
Minnesota Statutes 182.0676	Safety Committee	27
1926.503	Fall protection training requirements	24
1926.652(a)(1)	Requirements for protective systems	16
1926.100(a)	Hard hats	15
1926.20(b)(2)	Frequent and Regular Inspections	13





Applicable Standards: Subpart M

- 1. 1926.501 General Requirements
- 2. 1926.502 Fall protection systems criteria and practice
- 3. 1926.503 Training requirements





Statistics: Last 5 years

- 1. 2021 total of 264 fall protection citations
- 2. 2022 total of 249 fall protection citations
- 3. 2023 total of 182 fall protection citations
- 4. 2024 total of 116 fall protection citations
- 5. 2025 total of 53 fall protection citations so far.





Statistics: Last 5 years

- 1. 1926.501(b)(1)— Unprotected sides and edges 193 citations
- 2. 1926.501(b)(11)— Steep sloped roofs 158 citations
- 3. 1926.503(a)(1) Fall protection training 110 citations
- 4. 1926.501(b)(10)—Roofing work low sloped roofs- 100 citations
- 5. 1926.501(b)(14) Wall openings- 19 citations





1926.501 Standards:

1926.501(b)(1) – Employees exposed to unprotected sides and edges, 6 feet or more above lower levels, shall be protected from falling by:

- 1. Guardrail systems
- 2. Safety Net systems
- 3. Personal Fall Arrest systems





1926.501 Standards:

1926.501(b)(1) – This standard includes working on roof sheathing and top plates.







1926.501 Standards:

1926.501(b)(11) – Each employee on a steep roof with unprotected sides and edges, 6 feet or more above lower levels, shall be protected from falling by:

- 1. Guardrail systems with toeboards
- 2. Safety Net systems
- 3. Personal Fall Arrest systems





1926.501 Standards:

1926.501(b)(10) – Employees engaged in roofing activities on low slope roofs, 6' or more above lower levels, shall be protected from falling by:

- Guardrail system
- Safety net system
- Personal Fall Arrest system

Guardrail, or Safety Net, or Personal Fall Arrest systems, or Safety Monitor.

Combination of a Warning Line and





1926.501 Standards:

1926.501(b)(10) – On roofs 50 feet or less in width, the use of a safety monitoring system alone, can be used.

This option is commonly cited as the safety monitor cannot engage in activities that take away their focus from their safety monitor duties.





1926.501 Standards:

1926.501(b)(14) – Employees exposed to wall openings, 6 feet or more above lower levels, shall be protected from falling by:

- 1. Guardrail systems
- 2. Safety Net systems
- 3. Personal Fall Arrest systems





1926.501 Standards:

1926.501(b)(14) – What constitutes an opening?

Opening means a gap or void 30 inches or more high and 18 inches wide, in a wall or partition through which employees can fall to a lower level.





1926.501 Standards:

1926.501(b)(4)(i) – Employees exposed to holes (including skylights), 6 feet or more above lower levels, shall be protected from falling by:

- 1. Guardrail systems around the hole
- 2. Covers
- 3. Personal Fall Arrest systems





1926.501 Standards:

1926.501(b)(4)(ii) – Employees shall be protected from tripping in or stepping into or through holes (including skylights) by covers.







1926.501 Standards:

1926.501(b)(4)(iii) – Employees shall be protected from <u>objects</u> falling through holes (including skylights) by covers.







1926.501 Standards:

1926.501(b)(7)(i) – Employees at the edge of an excavation, 6 feet or more above lower levels and where the <u>edge cannot readily be seen</u> shall be protected from falling by:

- 1. Guardrail systems
- 2. Fences
- 3. Barricades
- 4. Covers





Guardrail



Safety Net



Personal Fall Arrest







1926.502(b) - Guardrail Systems

1926.502(b)(1) - 42" plus or minus 3" for toprail with midrail at halfway point.

Note: When stilts are used, the guardrail shall increase an equal amount.





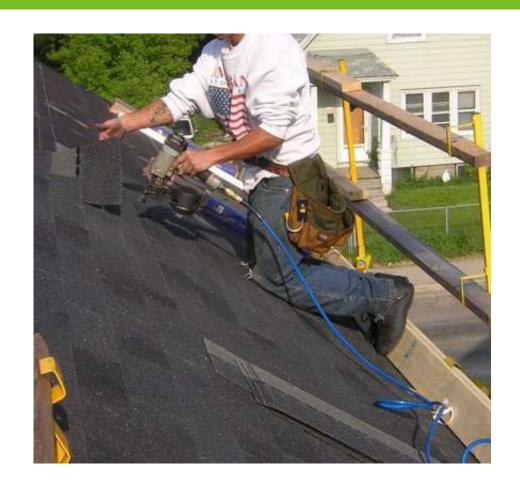


1926.502(b) – Guardrail Systems

1926.502(b)(4) – Shall be capable of withstanding <u>at least</u> 200 lbs of force in downward and outward force.

The guardrail needs to be sufficient to prevent employees from falling.







1926.502(b) – Guardrail Systems

1926.502(b)(12) – When used around holes used for access (ladderways), they shall be provided with a gate or be offset that a person cannot walk directly into the hole.



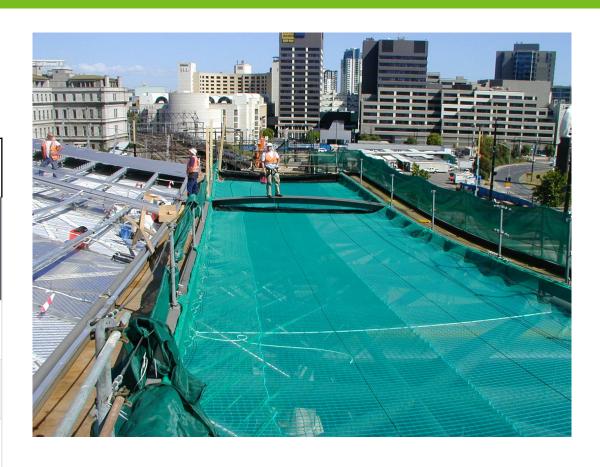




1926.502(c) – Safety Net Systems

Safety Net Outermost Projection Distances

Vertical distance from working level to horizontal plane of net	Minimum required horizontal distance of outer edge of net from the edge of the working surface
Up to 5 feet	8 feet.
More than 5 feet up to 10 feet	10 feet.
More than 10 feet	13 feet.







1926.502(c) – Safety Net Systems

1926.502(c)(3) – Safety nets shall have sufficient clearance under them to prevent contact with surface or structure in the event of a fall.







1926.502(c) – Safety Net Systems

1926.502(c)(6) – Materials, scrap pieces, equipment and tools which have fallen into the safety net shall be removed as soon as possible and at least before the next work shift.







1926.502(d) – Personal Fall Arrest Systems

1926.502(d)(15) – Anchorages used for attachment of personal fall arrest equipment shall support at least 5,000 pounds.







1926.502(d) – Personal Fall Arrest Systems

1926.502(d)(11) – Lifelines shall be protected against being cut or abraded.







1926.502(d) – Personal Fall Arrest Systems

1926.502(d)(21) – Personal fall arrest systems shall be inspected prior to each use for wear, damage and other deterioration, and defective components shall be removed from service.







1926.502(f) – Warning line System

1926.502(f)(1) – The warning line shall be erected around all sides of the roof area.

1926.502(f)(2) – Warning lines shall consist of ropes, wires, or chains, and supporting stanchions.







Alternative Options:

Scaffolds – Subpart L

Ladders – Subpart X

Aerial Lifts – Subpart L







1926.502(k) - Fall Protection Plan

If an employer can demonstrate that conventional fall protection is <u>infeasible</u> or <u>creates a greater hazard</u>, the employer shall develop and implement a written site-specific fall protection plan.







1926.502(k) - Fall Protection Plan

MNOSHA does NOT consider "economic infeasibility" to be a basis for failing to provide conventional fall protection.







Training

Fall Protection Training:

- 1. The employer shall provide a training program for each employee who might be exposed to fall hazards.
- 2. The program shall enable each employee to recognize hazards related to falls.
- 3. The training shall instruct employees on the procedures to be followed to minimize these hazards.





Training

Certification of Training:

The employer shall verify compliance with a written certification record.

- 1. Name or identify of employee, date(s) of training, and signature of person who conducted training or signature of the employer.
- 2. The latest training certification shall be maintained.





Training

Retraining:

- 1. When the employer has reason to believe that an employee, who's been trained, doesn't have the understanding or skill, the employer shall provide retaining.
- 2. Situations include changes in the workplace, changes in types of fall protection or equipment and/or employees demonstrating a lack of understanding or skill.





How to stay current with MNOSHA?

Federal OSHA Website: MNOSHA Website:

<u>www.osha.gov</u> <u>www.dli.mn.gov</u>

Safety Lines: MNOSHA Newsletter Subscription

https://dli.mn.gov/business/workplace-safety-and-health/mnosha-compliance-safety-lines-newsletter





Hazard Recognition

- Can you spot the hazards in the following photos?
- What is the issue and how can it be abated?
- What regulations are applicable?
- How can the hazard be avoided in the future?















Thank you

Occupational Safety and Health Administration

Minnesota Department of Labor and Industry

443 Lafayette Road N., St. Paul, MN 55155

Phone: 651-284-5050 | Web: <u>dli.mn.gov</u>



