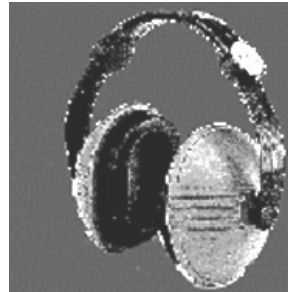


Personal Protective Equipment

Personal protective equipment (PPE) is designed to protect employees from serious workplace injury or illness resulting from contact with chemical, radiological, physical, electrical, mechanical, or other workplace hazards that cannot be eliminated. PPE is a supplementary form of protection when hazards have not been controlled through engineering or administrative controls.



Aren't all hard hats the same?

No. You must wear the right hat for the job. All hard hats approved for electrical work made since 1997 are marked "Class E." Hard hats made before 1997 are marked "Class B." These

markings will be on a label inside the helmet or stamped into the helmet itself. Newer hats may also be marked "Type 1" or "Type 2." Type 1 hard hats protect you from impacts on the top of your head. Type 2 hard hats protect you from impacts on the top and sides of your head.



Head Protection

Classes of Hard Hats

Class G (formerly Class A)

- ❖ General service (e.g., mining, building construction, shipbuilding, lumbering and manufacturing).
- ❖ Good impact protection but limited voltage protection.

Class E (formerly Class B)

- ❖ Electrical work.
- ❖ Protects against falling objects and high-voltage shock and burns.

Class C

- ❖ Designed for comfort; offers limited protection.
- ❖ Protects heads that may bump against fixed objects, but does not protect against falling objects or electrical shock.

Hazard—Improper Grounding: May allow a person contact with energized circuit or equipment.



Never use a three-prong grounding plug with the third prong broken off.

1910.304(g)(5): The path to ground from circuits, equipment, and enclosures shall be permanent, continuous, and effective.

Exits and Egress Hazard Control

- ❖ Controls to ensure proper and safe means of egress include:
 - Minimum access to exit width of 28 inches.
 - Generally, two exits should be provided.
 - Exits and access to exits must be marked.
- ❖ Means of egress, including stairways used for emergency exit, should be free of obstructions and adequately lit; where applicable, exits with wheelchair access should be designated.
- ❖ Employees must be aware of exits and trained in evacuation procedures.

The floor plan of a multi-story building should show location of stairways and elevators. Plan must indicate that stairs, not elevators, are the appropriate means of exit in case of emergency.

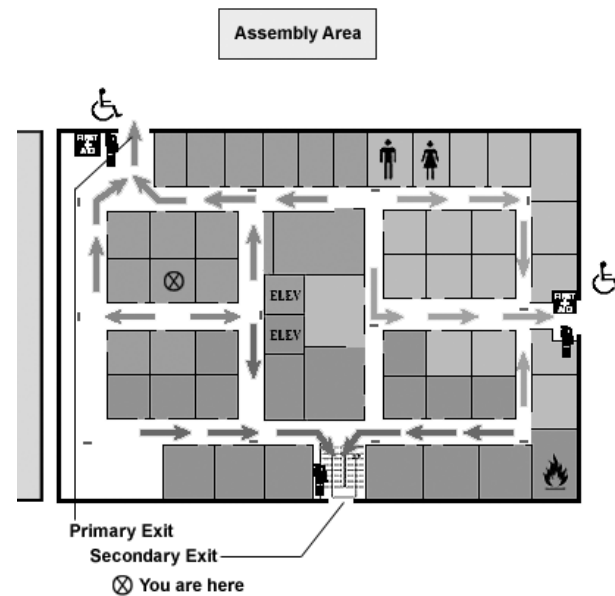


Photo Source [floorplan]:

http://www.osha.gov/SLTC/etools/evacuation/floorplan_demo.html

- ❖ The department has many publications that will assist you in addressing hazards in your workplace. Please visit: www.nclabor.com/pubs.htm

Occupational Safety and Health Sources of Information

You may call 1-800-NC-LABOR to reach any division of the N.C. Department of Labor; or visit the NCDOL home page on the World Wide Web: <http://www.nclabor.com>.

Occupational Safety and Health Division

Mailing Address: 1101 Mail Service Center, Raleigh, NC 27699-1101
Office Location: 111 Hillsborough St.
(Old Revenue Building, 3rd Floor)
Telephone: (919) 807-2900 Fax: (919) 807-2856

For information concerning education, training and interpretations of occupational safety and health standards, contact:

Education, Training and Technical Assistance Bureau

Mailing Address: 1101 Mail Service Center, Raleigh, NC 27699-1101
Office Location: 111 Hillsborough St.
(Old Revenue Building, 4th Floor)
Telephone: (919) 807-2875 Fax: (919) 807-2876

For information concerning occupational safety and health consultative services and safety awards programs, contact:

Consultative Services Bureau

Mailing Address: 1101 Mail Service Center, Raleigh, NC 27699-1101
Office Location: 111 Hillsborough St.
(Old Revenue Building, 3rd Floor)
Telephone: (919) 807-2899 Fax: (919) 807-2902

For information concerning migrant housing inspections and other related activities, contact:

Agricultural Safety and Health Bureau

Mailing Address: 1101 Mail Service Center, Raleigh, NC 27699-1101
Office Location: 111 Hillsborough St.
(Old Revenue Building, 2nd Floor)
Telephone: (919) 807-2923 Fax: (919) 807-2924

For information concerning occupational safety and health compliance, contact a Compliance field office:

Asheville Field Office

204 Charlotte Highway, Suite B, Asheville, NC 28803-8681
Telephone: (828) 299-8232 Fax: (828) 299-8266

Charlotte Field Office

901 Blairhill Road, Suite 200, Charlotte, NC 28217-1578
Telephone: (704) 665-4341 Fax: (704) 665-4342

Raleigh Field Office

Mailing Address: 1101 Mail Service Center, Raleigh, NC 27699-1101
Office Location: 313 Chapanoke Road, Suite 10
Telephone: (919) 779-8570 Fax: (919) 662-4709

Wilmington Field Office

1200 N. 23rd St., Wilmington, NC 28405-1824
Telephone: (910) 251-2678 Fax: (910) 251-2654

Winston-Salem Field Office

4964 University Parkway, Suite 202, Winston-Salem, NC 27106-2800
Telephone: (336) 776-4420 Fax: (336) 767-3989

For statistical information concerning program activities, contact:

Planning, Statistics and Information Management Bureau

Mailing Address: 1101 Mail Service Center, Raleigh, NC 27699-1101
Office Location: 111 Hillsborough St.
(Old Revenue Building, 2nd Floor)
Telephone: (919) 807-2950 Fax: (919) 807-2951

To make an OSH complaint,
OSH Complaint Desk: (919) 807-2796

1,000 copies of this public document were printed at a cost of \$146, or \$.14 per copy.

TOP TEN OSH VIOLATIONS CITED BY NCDOL IN 2009



Cherie Berry
Commissioner of Labor

OSH Division Administration and Enforcement

In North Carolina, NCDOL inspectors enforce the federal Occupational Safety and Health Act through a state plan approved by the U.S. Department of Labor. The Occupational Safety and Health Division of the N.C. Department of Labor offers many educational programs to the public and produces publications, including this guide, to help inform people about their rights and responsibilities regarding occupational safety and health.

When looking through this brochure, please remember the mission of the N.C. Department of Labor is greater than just to enforce regulations. An equally important goal is to help people find ways to create safe workplaces. This brochure, like the many other educational materials produced by this department, can help. Reading and using this information will aid you in developing a safety and health program that saves lives.

Compliance assists employers in improving their workplace safety and health programs to eliminate on-the-job injuries and illnesses through enforcement activity.

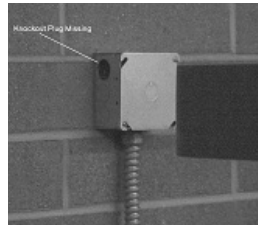
Consultative Services provides free on-site consultation regarding both safety and health issues. Services are provided to employers of limited size and to employers within high-hazard industries, assisting them to reach their goal of achieving a safe and healthful workplace for their employees.

Education, Training and Technical Assistance (ETTA) offers educational materials, arranges conferences and provides professional training for OSH staff members and for the public. The bureau also offers assistance with standards interpretation. In addition, ETTA administers the adoption of federal standards and develops North Carolina-specific standards, responds to requests for technical assistance and interpretations, and publishes a wide variety of industry guides, safety and health standards books for general industry and construction, and other documents of interest to the public.

Ten Most Frequently Cited Serious Standards (Public Sector Only)

1. 1910.151(c)—Medical and first aid—Eyewash and emergency showers
2. NCGS 95-129(1)—North Carolina General Duty Clause
3. 1910.133(a)(1)—Eye and face protection—General requirements
4. 1910.304(g)(5)—Electrical—Grounding—Path to ground
5. 1910.305(b)(1)(ii)—Electrical—Cabinets, boxes and fittings—Unused openings effectively closed
6. 1910.212(a)(1)—Machine guarding—General requirements
7. 1910.303(b)(1)(ii)—Electrical—General—Examination, installation and use—Mechanical strength and durability
8. 1910.23(c)(1)—Walking/working surfaces—Open sided floors/platforms 4 feet or more above adjacent ground require standard railings
9. 1910.132(d)(1)—Personal protective equipment—Hazard assessment
10. 1910.134(c)(1)—Personal protective equipment—Respiratory protection—Written program

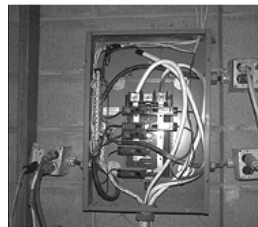
Common Electrical Hazards: Protect from injury; prevent contact with electricity.



Unused openings in electrical boxes must be effectively closed or covered.



Flexible cords must be connected to devices and fittings so that strain relief is provided, which will prevent pull from being directly transmitted to joints or terminal screw.



Circuit boxes must be guarded or covered.



Conductors must be protected from abrasion.



Improper use of power strip—not intended for outdoor use (wet or damp locations—don't use it!)



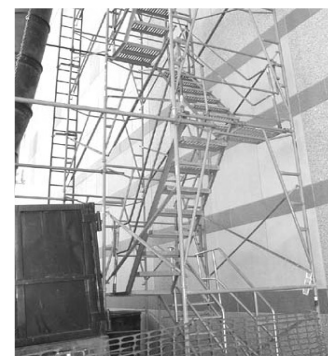
Box with missing knockout and missing ground pin must not be used.

In construction, you must be protected if you can fall more than 6 feet.



Ten Most Frequently Cited Serious Construction Industry Standards (Private Sector)

1. 1926.20(b)(2)—General safety and health provisions—Accident prevention—Frequent and regular inspection
2. 1926.501(b)(13)—Fall protection—Residential construction—Employees protected 6 feet or more above lower level
3. 1926.102(a)(1)—PPE—Eye and face protection—General requirements
4. 1926.1053(b)(1)—Ladders—Must extend 3 feet above landing or be properly secured to access upper landing
5. 1926.501(b)(1)—Fall protection—Unprotected sides and edges—Employees protected 6 feet or more above lower level
6. 1926.501(b)(11)—Fall protection—Steep roofs—Employees protected 6 feet or more above lower level
7. 1926.100(a)—PPE—Head protection—General requirements
8. 1926.503(a)(1)—Fall protection—Training program
9. 1926.451(e)(1)—Scaffolds—Access by various means
10. 1926.451(g)(4)(i)—Guardrail systems—Installed along open sides and end of platforms



Safe Practices—Portable Ladders and Scaffolds

- ❖ Side rails must extend at least 3 feet above the upper landing when portable ladders are used to access an upper landing.
- ❖ Maintain a safe access to scaffolds and scaffold platforms.
- ❖ Don't climb cross-braces to reach a scaffold platform.
- ❖ Use ladders or stairways to reach platforms that are more than 2 feet above or below the access point.
- ❖ Watch for electrical hazards, slippery platforms, and strong winds.

Ensure proper adjustment of tongue guard and work rest on bench grinders.



Keep work rests not more than 1/8 inch from wheel surface and tongue guard not more than 1/4 inch from wheel surface.

Ten Most Frequently Cited Serious General Industry Standards (Private Sector)

1. 1910.212(a)(1)—Machine guarding—General requirements
2. 1910.215(b)(9)—Machine guarding—Abrasive wheel machinery—Exposure adjustment
3. 1910.215(a)(4)—Machine guarding—Abrasive wheel machinery—Work rest adjustment
4. 1910.151(c)—Medical and first aid—Eyewash and safety showers
5. NCGS 95-129(1)—North Carolina General Duty Clause
6. 1910.304(g)(5)—Electrical—Grounding—Path to ground
7. 1910.133(a)(1)—Eye and face protection—General requirements
8. 1910.305(b)(1)(ii)—Electrical cabinets, boxes and fittings—Unused openings effectively closed
9. 1910.23(c)(1)—Walking/Working surfaces—Open sided floors/platforms 4 feet or more above adjacent ground require standard railings
10. 1910.212(a)(3)(ii)—Machine guarding—Point of operation guarding

Hazardous Mechanical Actions

- Cutting:** Bandsaws, circular saws, drills, lathes, milling machines
- Punching:** Power presses, iron workers
- Shearing:** Powered shears
- Bending:** Press brakes, tubing benders

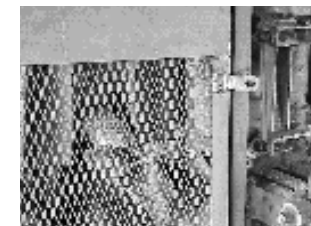
Crushed hands and arms, severed fingers and limbs, lacerations and abrasions

The list of possible machinery-related injuries is long and horrifying. Many hazards are created by moving machine parts. Safeguards are essential for protecting workers from preventable injuries.

Unguarded Band Saw



Guarded Band Saw



General Duty Clause



Safety is a must. Ensure equipment is used as intended. Comply with guidelines established by the manufacturer.

Ten Most Frequently Cited Violations by Agricultural Safety and Health Bureau

1. NCGS 95-129(1)—North Carolina General Duty Clause
2. NCGS 95-225(f)—Fire safety for migrant housing
3. NCGS 95-225(d)—Collection, treatment and disposal of sewage
4. 1910.142(c)(1)—Water supply—Adequate and approved
5. 1928.110(c)(2)(i)—Field sanitation—Toilet and handwashing facilities
6. NCGS 95-226(a)—Application for preoccupancy inspection
7. 1910.142(b)(3)—Temporary Labor Camps—Shelter—Beds, cots, or bunks and suitable storage facilities provided in room for sleeping
8. 1928.110(c)(1)(iii)—Field Sanitation—Water dispensed in single use cups
9. 1910.132(a)—PPE—General requirements
10. 1910.133(a)(1)—Eye and face protection—General requirements

Safety Eyewash and Shower Equipment: Protect from hazards of corrosives and acid materials.

