

Is your GFCI working correctly?

If your home, office, or commercial facility was constructed after 1970, it came equipped with ground fault circuit interrupters in the kitchen, bathroom, garage — anywhere that water and electricity are in proximity. A ground fault occurs when electricity flows to the ground rather than to a neutral wire. Caused by a loose or worn internal wire, water, or even high humidity, a ground fault can electrify appliances and tools such as drills, saws, and sanders. The unsuspecting person who touches electrified equipment provides an ideal path to ground the current. A GFCI eliminates that threat by comparing the amount of current going into the equipment with the amount of current returning. If the difference is between four and six milliamperes, the GFCI breaks the circuit.

If a receptacle GFCI's internal components — the circuit board or the metal oxide varistor (MOV) — are damaged the GFCI will operate as a 120-volt, single phase, 15, 20, or 30-amp outlet without breaking the circuit. Repeated power surges, spikes, and lightning strikes to the electrical system can damage the device's internal components. As of January 2, 2003, however, manufacturers could only produce GFCIs that totally tripped out when they were damaged or tested; these GFCIs cannot be reset until the fault has been cleared. If you are purchasing a GFCI, make sure that you are purchasing the new style. You should test receptacle GFCIs after you install them and then once every month. Press the

Continued on Page 3

It's cold out there

If you're working outdoors this winter, protect yourself from the cold and damp. Working when you're cold and wet not only makes it harder to concentrate, use tools, or operate equipment, prolonged exposure can cause hypothermia or frostbite.

Hypothermia begins when your internal body temperature drops below normal and loses heat faster than it can produce it. Symptoms include shivering, slurred speech, confusion, and clumsy movement. Exposure to cold, moisture, and wind increases the risk of hypothermia which occurs most

often between 20° and 50° F. Moisture on your skin or clothing increases the likelihood of your body losing heat; even light wind intensifies the effect on exposed skin. And when you're tired, your body has less energy to use for heat.

White, waxy, or grayish-yellow patches on the skin are symptoms of superficial **frostbite**. The skin is cold and numb; when pressed, the surface is stiff but underlying tissue is soft. Deep frostbite usually affects the feet or hands. Symptoms include waxy, pale, rigid skin and blisters.

Prevention

Know before you go. Learn the signs and symptoms of hypothermia and frostbite. Check the weather forecast, consider your work environment, and wear layered clothing. Many prescription drugs make you drowsy, fatigued, or sensitive to cold; if you're taking a medication, ask your pharmacist about its effects. When you're on the job:

- Drink warm, sweet beverages and avoid alcohol to keep hydrated.
- Eat warm high-calorie foods for energy.
- Take short rest breaks in a dry, warm shelter to recover.
- Work with a partner, carry a cell phone, or tell others where you're working and when you'll return.

In this issue:

Fall Protection: Questions and answers	2
Construction industry's frequently cited standards	2
Did you know? Substance abuse — statistics on drug use in the workplace	3
Skanska recognized for safety at Bend and Redmond hospital projects	3
2005 GOSH Conference open for registration	4
Workers' Memorial Scholarship deadline is March 1	4

Fall protection: Questions and answers

Decks and established floors

Q *OR-OSHA's fall protection rule, 437-003-1501(3), requires fall protection at six feet for a worker who is on an established floor that has an unprotected side or edge. Is the deck (or subfloor) considered an established floor when the second story walls of a residential or stick-frame structure are being framed and raised?*

A No. The deck is considered part of the framing process and is not an established floor until the exterior walls are erected. However, during the construction of the second-story deck and walls, all floor holes six feet or more above a lower level must be guarded. Once the exterior walls are in place, fall protection is required for fall hazards of six feet or more (such as holes, wall openings, unprotected sides or edges).

Ladders and balconies

Q *A construction worker is doing a job from a ladder – but the ladder is on a balcony, the worker is above the balcony guardrail, and more than six feet above a lower level. Does the worker need to use fall protection?*

A No. OR-OSHA's subdivision 3/M fall protection requirements do not apply to a worker who is doing a job from a ladder. However, the worker must follow the safe-practice requirements for ladders in subdivision 3/X.

Construction industry's frequently cited standards

OR-OSHA's general fall protection requirement (Subdivision 3/M, 437-003-1501) was the most frequently cited standard the at construction workplaces from October, 2003 through the end of September, 2004. The requirement states that when employees are exposed to a hazard that could cause them to fall 10 feet or more, they must be protected by a fall-protection system described in Subdivision 3/M, 1926.502. The requirement lists five exceptions that lower the trigger height to six feet: holes in walking/working surfaces, wall openings, established floors with unprotected sides or edges, excavations, and work above dangerous equipment.

Failure to provide fall-protection training and fall-protection systems were also frequently cited, as were other important OR-OSHA standards such as hazard communication, lead, and scaffolding.

Standards cited by Oregon OSHA during construction workplace inspections; October 2003 through September 2004

Rank	Standard	Description	Times cited	Penalties	Penalty/ Citation
1	437-003-1501	Fall protection; general	452	\$387,110	\$856
2	437-001-0765	Safety committees	283	\$13,750	\$49
3	1926.451	Scaffolding	123	\$29,660	\$241
4	437-003-0503	Fall protection; training	122	\$16,290	\$134
5	1926.62	Lead	120	\$18,670	\$156
6	437-001-0760	Employer responsibilities; training	82	\$40,565	\$495
7	1926.1053	Ladders	75	\$9,370	\$125
8	1926.59	Hazard communication	69	\$735	\$11
9	1926.100	Head Protection	66	\$8,715	\$132
10	1910.134	Respiratory Protection	56	\$1,890	\$34
11	1910.120	Hazard communication; written program	56	\$810	\$14
12	1926.502	Fall protection; systems and practices	54	\$20,530	\$380

Times cited represents the number of times the standard was cited. **Penalties** represents the total penalty amount currently assessed, including settlement adjustments. Source: Occupational Safety and Health Administration (Federal OSHA); www.osha.gov

Did you know?

Substance abuse — statistics on drug use in the workplace:

- Ten percent of adult full-time workers are current users of illicit drugs.
- Substance-abusing workers, compared with their colleagues, are five times more likely to file a worker's compensation claim, 3.6 times more likely to be involved in on-the-job accidents, and late for work three times as often.
- Among workers, construction workers have the highest rate of drug use, at 16 percent; and alcohol abuse is at 17.6 percent.
- Employees in companies with fewer than 25 employees are twice as likely to use illicit drugs as employees in larger companies.
- Illicit drug use among employees is linked to a lack of workplace drug policies.
- Fifteen percent of illicit drug users and six percent of heavy alcohol users report that they had gone to work high or a little drunk in the past year.
- Alcoholism causes 500 million lost workdays each year.

Source: *Division of Workplace Programs, Substance Abuse and Mental Health Services Programs, Department of Health and Human Services, 2004.*

For more information

Substance Abuse and Mental Health Services Administration, Division of Workplace programs

www.workplace.samhsa.gov

Department of Labor, Working Partners for an Alcohol- and Drug-Free Workplace Program

www.dol.gov/workingpartners/welcome.htm

Skanska recognized for safety at Bend and Redmond hospital projects

Skanska USA Building (Central and Southern Oregon Projects Division) was welcomed into the Oregon OSHA Safety and Health Achievement Recognition Program (SHARP), November 30, 2004, for an exceptional commitment to safety during the expansion of St. Charles Medical Center, Bend, and St. Charles Medical Center, Redmond.

SHARP is a recognition program that provides incentives and tools to help Oregon employers work with their employees to find and correct hazards, develop and implement effective safety-and-health programs, continuously improve, and become self-sufficient in managing occupational safety-and-health issues. Currently, 86 employers in Oregon participate in the safety-and-health recognition program.

At the Bend and Redmond hospital projects, Skanska did not incur an injury for which a day of work was lost or restricted during 2003. By comparison, the statewide average injury rate for the construction industry in Oregon for 2003 was 2.3 days of lost time or restricted duties.

Skanska's contract includes 200,000 square feet of new construction at the Bend and Redmond campuses of Cascade Healthcare Community. The work performed during phase one of the expansion at St. Charles Medical Center, Bend, involved the added challenges of erecting steel, concrete pouring and forming, and performing installation of electrical or plumbing infrastructure while working in a fully functioning hospital and trauma center.

GFCI, continued from Page 1

“test” button to ensure that the device trips and breaks the circuit. Then push the “reset” button to reactivate the device.

Mike Murphy, Safety Director, NECA-IBEW Electrical Training Center, points out that this method may not be reliable for testing GFCIs made before January, 2003.

“In my inspection and testing of GFCI circuit breakers and receptacles made before January 2, 2003, I have found

that the manufacturers' recommended testing method isn't foolproof and will identify defectives as OK. The instrument that I have found to be most reliable is the **Leviton Polarity tester**; it tests for polarity and shows where the device trips out (not before four milliamps nor after six milliamps). Voltage must be checked after the GFCI trips to make sure it is working correctly.”

2005 GOSH Conference open for registration

Registration is now available for the 2005 Oregon Governor's Occupational Safety and Health Conference (GOSH), scheduled for February 28 to March 3 at the Oregon Convention Center in Portland. The biennial conference is a partnership between Oregon OSHA and the American Society of Safety Engineers Columbia-Willamette Chapter.

More than 30 full-day workshops and 80 single-topic classes will take place during the four-day conference. Topics:

- Critical Issues and Best Practices in Construction
- Keeping Safe When Working with Behavior Challenges
- Property Liability Exposures for the Business Owner
- The Needs of an Aging Workforce

Registration fees for the conference are \$275 to attend the entire conference, or attend the Tuesday and Wednesday sessions for \$150. Attend either Tuesday or Wednesday for \$95 or the full-day Monday or Thursday workshops for \$120. An awards luncheon on Wednesday, March 2nd will honor outstanding achievements in workplace safety and health. All registration fees include lunch for the day in attendance except the Wednesday awards luncheon, which is available for \$15. More than 200 exhibitors will offer demonstrations and introduce their products or services throughout the conference.

Register for the 2005 GOSH Conference online at www.b-there.com/breg/GOSH2005 or by downloading a registration form from the Oregon OSHA Web site, www.orosha.org/conferences.

Workers' Memorial Scholarship deadline is March 1

The Workers' Memorial Scholarship is open to any high school graduate, graduating high school senior, GED recipient, current college undergraduate or graduate student who is a dependent or spouse of an Oregon worker that has been fatally injured or permanently disabled while on the job. Scholarship funds may be used at colleges within the United States.

The deadline for submitting an application for the 2005-2006 school year is March 1.

Application forms are included in the 2005-2006 Scholarship Application packet available from the Oregon Student Assistance Commission (OSAC) on its Web site, www.osac.state.or.us. Online applications are also accepted at the OSAC electronic application Web site, www.GetCollegeFunds.org. Applicants must be Oregon residents receiving fatality benefits, a dependent or spouse of a fatally injured worker, or the dependent or spouse of an Oregon worker who has incurred permanent total disability and whose claim for workers' compensation benefits has been accepted.

For more information concerning the Workers' Memorial Scholarship program, contact Kathy Mossbrucker with Oregon OSHA, (503) 947-7992, or Alan Baas with the Oregon Student Assistance Commission, at (800) 452-8807.

OR-OSHA

Construction Depot

A newsletter for the construction industry

QUARTERLY

OR-OSHA Construction Depot is published quarterly by the Oregon Occupational Safety and Health Division of the Department of Consumer and Business Services.

Department of Consumer and Business Services director
Cory Streisinger

Oregon OSHA administrator
Peter De Luca

Construction Depot editor
Ellis Brasch

Designer and illustrator
Patricia Young

DCBS editor
Dian Cox

*Reprinting, excerpting or plagiarizing any part of this publication is fine with us! Please send us a copy of your publication or inform the **Construction Depot** editor as a courtesy.*

*If you have questions about the information in **Construction Depot**, please contact Ellis Brasch ellis.k.brasch@state.or.us or call (503) 947-7399.*

For general information, technical answers or information about Oregon OSHA services, please call (503) 378-3272 or toll-free within Oregon, (800) 922-2689.



For a color version of Construction Depot and related occupational-safety-and-health information, visit the OR-OSHA Web site, www.orosha.org.