



# Electrical GFCI & Strain Relief

OSHA Standard 1926 Subpart K - Electrical - 1926.404(b)(1) Ground-fault protection - 1926.404(b)(1)(i) General. The employer shall use either ground fault circuit interrupters as specified in paragraph (b)(1)(ii) of this section or an assured equipment grounding conductor program as specified in paragraph (b)(1)(iii) of this section to protect employees on construction sites. These requirements are in addition to any other requirements for equipment grounding conductors.

OSHA Standard 1926 Subpart K - Electrical - 1926.404(b)(1)(ii) Ground-fault circuit interrupters. All 120-volt, single-phase 15- and 20-ampere receptacle outlets on construction sites, which are not a part of the permanent wiring of the building or structure, and which are in use by employees, shall have approved ground-fault circuit interrupters for personnel protection.

OSHA Standard 1926 Subpart K - Electrical - 1926.405(a)(2)(ii)(I) Flexible cords and cables shall be protected from damage. Sharp corners and projections shall be avoided. Flexible cords and cables may pass through doorways or other pinch points if protection is provided to avoid damage.

OSHA Standard 1926.405(g)(2)(iv) Strain relief. Flexible cords shall be connected to devices and fittings so that strain relief is provided which will prevent pull from being directly transmitted to joints or terminal screws.

**Key Points: Electrical Hazards are the #4 killer on construction sites (both High and low voltage).**

## WHAT YOU NEED TO KNOW! A GFCI IS YOUR BEST FRIEND ON A CONSTRUCTION SITE.

- GFCI's are required on ALL Temporary Power: There are two specific areas where you might inherit an issue: 1. Renovations on sites in existing buildings. 2. When temporary power is transitioned to permanent power on a new construction site. You need to ensure GRCI's are used.
- GFCI's: Are required to be TESTED DAILY – Push the button at the beginning of each day / shift.
- GFCI's are also required on welders & generators utilized for power sources. Do not assume protection is incorporated in the system. Test it or Call us to test or have tested.
- Stress relief on all cords and tools is required. If you see anything but the outside insulation of a cord or tool end - it needs to be taken out of service. Check cord ends and extreme bend areas.
- 110 current is responsible for 55% of all electrocutions on job sites. A 15 AMP breaker has 15,000 mA's. it only takes 150 milliamps (mA ) crossing your heart to kill you.
- A GFCI will trip when it detects a 5 mA leak. If a GFCI continues to trip replace it – if that one trips also there is something wrong with you cord or tool.

1926.405 - Wiring Methods, Components, and Equipment for General Use. | Occupational Safety and Health Administration. [www.osha.gov/laws-regs/regulations/standardnumber/1926/1926.405](http://www.osha.gov/laws-regs/regulations/standardnumber/1926/1926.405).

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QUANDEL IS COMMITTED TO OUR NUMBER ONE CORE VALUE:  
**SAFETY: FIRST. LAST. ALWAYS!**