



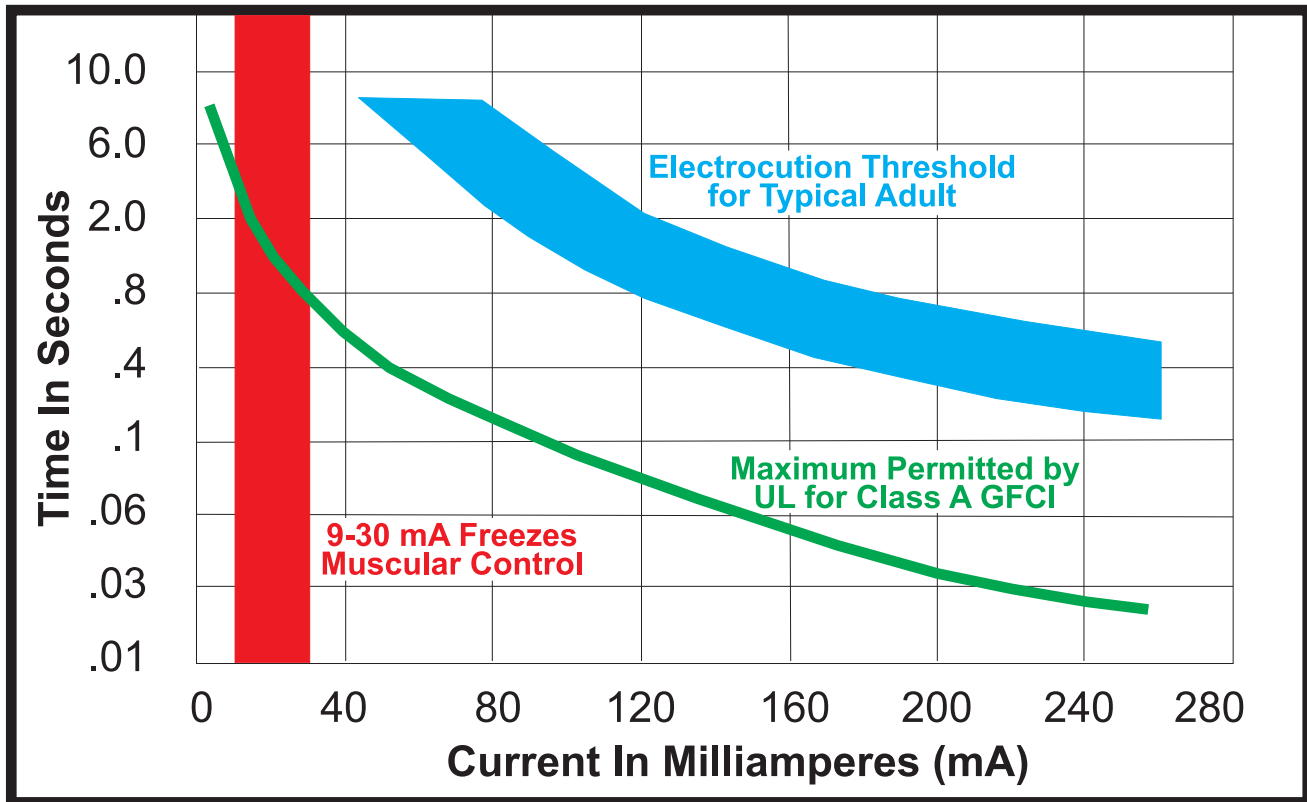
# TOOLBOX

## SAFETY TRAINING

Company \_\_\_\_\_ Location \_\_\_\_\_ Date \_\_\_\_\_

**Vol 32 - No 29**

**GFCI**



According to OSHA, 350 electrical related deaths occur each year. For the protection of employees from coming in contact with electricity at the construction site, OSHA has given the employer two choices in how they can protect their workers. The employer can use either ground fault circuit interrupters as specified in 1926.404(b)(1)(ii) or an assured equipment grounding conductor program specified in 1926.404(b)(1)(iii). The method most employers use is the ground fault circuit interrupter (GFCI).

The GFCI is a device that measures the current going through hot wire to the current returning in the neutral wire. If the difference is more than .005 amperes (amps), referred to as 5 milliamps (5mA), the GFCI will open the circuit stopping the flow of electricity. The estimated affect that electricity has on human body is as follows (see diagram). At 5mA the body will receive a mild shock. At 9mA-30mA the body will freeze muscular control. At 50mA-150mA the body will be electrocuted. As the graph illustrates, GFCI is safety below the threshold for the body to reach any danger.

**29 CFR 1926.404 (b)(1)**

**GROUND FAULT PROTECTION:**

*The employer shall use either ground fault circuit interrupters or an assured equipment grounding conductor program to protect employees on the construction sites.*



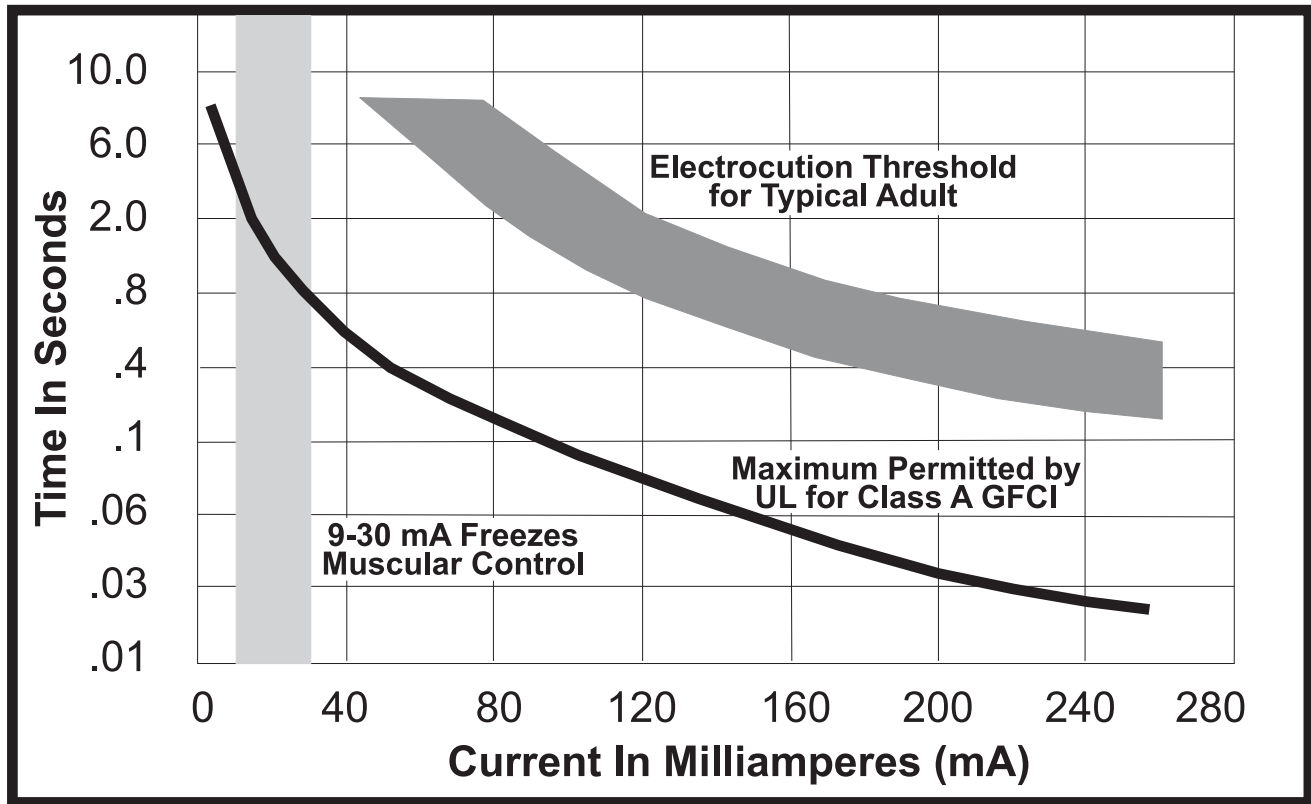
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