LEIVER
Technical Services

Frequently Asked Questions

Q: Is an employer responsible for performing an arc flash hazard analysis and providing the appropriate PPE for its workers?
A: Yes, **OSHA 29 CFR 1910.132(d)** specifies this requirement for assessing the work place and providing PPE.

Q: Does OSHA provide the detailed steps necessary to perform an arc flash hazard analysis?
A: No, OSHA states what the employer MUST do to protect its workers. The employer is expected to use current consensus standards for guidelines on performing the analysis. The current consensus standard for electrical safety in the workplace is **NFPA 70E 2009 Edition**.

Q: Does OSHA enforce NFPA 70E standards?
A: No, OSHA can only enforce the CFR. They will also "refer" an employer to consensus standards such as **NFPA 70E 2009 Edition**.

Q: Does OSHA's Electrical Standard: Final Rule affect today's electrical safety mandates?
A: Yes, the **OSHA Electrical Standard: Final Rule** became effective August 2007 and set new standards for electrical safety. The previous standard was over 20 years old. A key definition change is that of a "qualified" employee.

Q: Can flame resistant (FR) clothing be layered to achieve a higher level of protection?
A: Yes, but the layers must be tested as a layered combination to establish the level of protection.

Q: Can Table 130.7(C)(9) be used in lieu of an actually arc flash hazard assessment?
A: Yes, but there are some prerequisites that must be met prior to using the table. These items can be found in the “General Notes” and “Specific Notes” section at the end of the table. In essence, the available short circuit current and fault clearing times must be known.

Q: Does Table 130.7(C)(9) provide the same protection as a calculated analysis?
A: Rarely. The table can be very conservative (over protective) or inadequate (under protective) when compared to the actual calculations. Our calculations show the table to be wrong over 90% of the time. While the majority of the discrepancies provide for over protection, there is a small percentage whereby the employee will be under protected and often should not be working on the circuit while energized.

Q: Does an arc flash analysis ever yield a Hazard/Risk Category (HRC) of 2* which requires a balaclava hood in addition to the arc rated face shield?
A: No, the 2* is limited to an assessment via Table 130.7(C)(9).

Q: Is an Energized Work Permit required for diagnostics?
A: No, a permit is not required for diagnostics (voltage testing etc.) or visual inspection provided the Restricted Approach Boundary is not crossed.

Q: Can an unqualified production employee without any electrical training become qualified?
A: Yes, they must first meet the definition of a qualified person and have the training as outlined in OSHA 29 CFR 1910 Subpart S before being classified as qualified.

Q: Can a qualified employee work on any energized circuit, at any time, if they are wearing the appropriate PPE?
A: No, OSHA clearly identifies the two circumstances that allow work on energized systems. Furthermore, buses with an incident energy level > 40 cal/cm^2 may not be worked on while energized.

Q: What determines the Arc Flash Protection Boundary?
A: The Arc Flash Protection Boundary is the point where a person would receive a second degree burn (blister) if an arc occurred.

Q: Is OSHA citing employers for not assessing their workplace or not providing the appropriate PPE?
A: Yes, several citations may be found by searching the internet. Electrical contractors are also being cited.

Q: If my company adopts the NFPA 70E and performs an arc flash hazard analysis, what responsibilities do electrical contractors have?
A: They must follow OSHA 29 CFR standards regardless of whether an analysis has been performed. Both the "Host Employer" and "Contractor" share responsibilities with regard to electrical safety.