



Minimum Approach Distances Safety Message

MAD is an acronym that stands for minimum approach distance, which is the calculated safe working distance that provides worker protection when working on or in the vicinity of energized lines and equipment.

MAD Components

Understanding air as an insulator and the requirements for inadvertent movement are key to understanding how MAD plays an important role in worker safety. MAD consists of two components, an electrical component and an ergonomic component. The electrical component is the minimum air insulation distance, or MAID, required to prevent a sparkover at the work site. The ergonomic component is an “adder” used to compensate for inadvertent worker movement in relation to energized parts.

OSHA MAD Working Rules

MAD working rules must ensure that no worker approaches or takes any conductive object closer to exposed energized parts than the established MAD, unless one of the following occurs:

- The worker is insulated from the energized part.
- The energized part is insulated (unless you're working on it) anything not being worked on must be covered.
- Appropriate live-line barehand work is performed.

Exposure Types

Workers performing work on electric power systems face two types of electrical exposures: phase-to-ground exposure and phase-to-phase exposure.

Discussion Point:

1. What's the Minimum Approach Distance for your system?
2. Remember, you're required to have your PPE on well before you enter the MAD