

Phone 215 723-4226

Cell 215 378-0165

521 N. Fourth Street, Telford, PA 18969-2132 • Frank@ResponseEngineers.com

www.ResponseEngineers.com



Arc Flash Studies (Arc Flash Hazard Analysis, Arc Flash Incident Energy Calculations)

In an arc flash study the incident energy and arc flash boundary are calculated for each location of the power system. Protective clothing requirements are specified for working near energized buses in the power system. Warning labels are provided to be placed on the system equipment. The arc flash label lists important information such as Flash Hazard Boundary, Incident Energy at the given Working Distance, PPE (Personal Protective Equipment) Hazard Category, and the boundaries for Limited, Restricted, Prohibited Approaches.

Vital input data for an Arc Flash Study is taken from the Short Circuit Study and the Protective Device Coordination Study which must be performed first.

Response Engineers has completed Arc Flash Studies for the following projects:

- Air Products & Chemicals Data Center, Allentown PA
- Bristol Myers Squibb Data Center, Pennington NJ
- Mallinkrodt Baker, Phillipsburg NJ
- Cephalon Data Center, West Chester PA
- Cherry Island Landfill Gas Plant, Wilmington DE
- Chr. Hansen, Mahwah NJ
- Firestone Building Products, Prescott AR
- Firestone Tube Company, Russellville AR
- John Middleton Company, King of Prussia PA
- John Middleton Company, Limerick PA
- Just Born, Inc, Bethlehem PA
- Kellogg's, Blue Anchor NJ
- Kutztown University, Academic Forum, Kutztown PA
- Kutztown University, Recreation Center, Kutztown PA
- Lafayette College, Easton PA
- MedImmune, Frederick MD
- Montclair State University, Chapin Hall, Montclair NJ
- Morrisville High School, Morrisville PA
- Merck & Co., Building 12A, West Point PA
- Novamerican Steel, Morrisville PA
- Philadelphia Stock Exchange Data Center
- Porter Rd Pump Station, Lower Pottsgrove PA
- SAP America Data Center, Newtown Square PA
- The Residences at Two Liberty Place, Philadelphia PA
- U of PA Health System, Histology & Cytology Processing, Philadelphia PA
- Yellow Book Data Center, King of Prussia PA

 WARNING	
Arc Flash and Shock Hazard	
Appropriate PPE Required	
68 inch 5.5 cal/cm² Category 2 480 VAC 42 inch 12 inch 1 inch	Flash Hazard Boundary Flash Hazard at 24 inches Shock Hazard when cover is removed Limited Approach Restricted Approach Prohibited Approach
Location:	SWGR A
	
Response Engineers 521 N 4th St, Telford PA www.ResponseEngineers.com 888-353-2486	
Job#:	Prepared on: 10/21/07 By: F. Strenk
Refer to NFPA 70E "Standard for Electrical Safety in the Workplace" for Safety and PPE Requirements. Warning: Changes in equipment settings or system configuration will invalidate the calculated values and PPE requirements.	

Sample Arc Flash Warning Label

Response Engineers uses SKM Systems Analysis Software.

SHORT CIRCUIT-COORDINATION-ARC FLASH