

Electrical Safety Clearance Distances

NFPA 70E Approach Boundaries and PPE Categories

Minimum Approach Distance (Limited)

Voltage Range	Min. Distance
50V - 300V	3 ft 6 in
301V - 750V	3 ft 6 in
751V - 15kV	5 ft 0 in
15.1kV - 36kV	6 ft 0 in
36.1kV - 46kV	8 ft 0 in
46.1kV - 72.5kV	8 ft 0 in

Arc Flash Boundaries

- **Flash Protection:** Distance where incident energy = 1.2 cal/cm²
- **Limited Approach:** Qualified persons only beyond this point
- **Restricted Approach:** Shock hazard present
- **Prohibited Approach:** Same as direct contact

PPE Categories (NFPA 70E)

Cat	Cal/cm ²	Required PPE
0	< 1.2	Non-melting clothing, safety glasses
1	1.2 - 4	FR shirt/pants, face shield, hard hat
2	4 - 8	Cotton underwear, FR clothing, flash suit hood
3	8 - 25	FR clothing + flash suit, leather gloves
4	25 - 40	Multi-layer flash suit, heavy-duty leather gloves

LOTO Reminder: Always apply Lockout/Tagout before servicing. Verify zero energy state. Test before touch.

