

Electric Service Requirements Manual White Paper for INTERNAL and EXTERNAL use

Subject: Gated Areas and Enclosed Spaces

Section 4.1.3 of the 2022 Electric Service Requirements manual features a section on gated and enclosed spaces.

It instructs the contractor to contact the Power Company whenever a pad-mounted transformer is enclosed by fencing or firewalls. This white paper supplements the section by providing the details on proper clearances from metallic and nonmetallic materials.

The figures below are meant to be general, addressing both single-phase and three-phase pad-mounted transformers. Clearances from enclosing surfaces and switching cabinets are not discussed; however, any confined work area should be designed with the same clearances.

An extra foot of side clearance was added in Figure 1 below, to provide workspace around an open door.

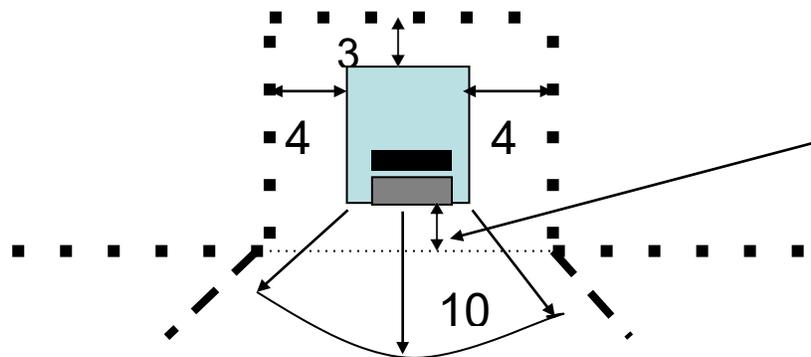


Figure 1 – Clearances Around Nonmetallic Equipment in an Enclosed Space

Requirements

1. The fence enclosure shall be large enough for adequate workspace.
2. The gate shall open such that the front work zone is not obstructed.
3. The gate or fence shall not limit the removal of the transformer.
4. Metallic fence or gate components may not be within 6 feet of the transformer.
5. The Power Company's lock shall be on the gate.
6. Requirements for clear zones near combustible surfaces shall be followed.
7. The location shall be accessible to Power Company trucks.
8. The location shall be within 10 feet of a maintained, drivable surface.
9. A metal gate must be greater than 6 feet from the padvault lid.
10. The gate of the enclosure must be no less that the width of the lid plus 3 feet minimum, on each side.

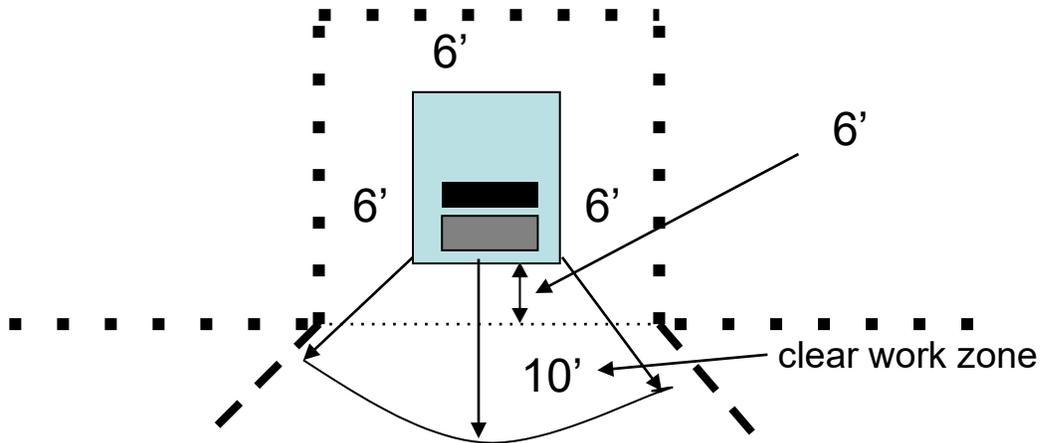


Figure 2 – Clearance Around a Metallic Fenced Enclosure

Requirements

1. The protected area shall be large enough to prevent contact between the metal fence and the transformer.
2. No metallic fence or gate may be within 6 feet of the padvault lid.
3. The gate shall open such that the clear work zone is not obstructed.
4. The gate or fence shall not limit the removal of the transformer.
5. The Power Company's lock shall be on the gate.
6. Requirements for clear zones near combustible surfaces shall be followed.
7. The location shall be accessible to Power Company trucks.
8. The location shall be within 10 feet of a maintained, drivable surface.
9. The gate of the enclosure must be no less that the width of the lid plus 6 feet minimum, on each side.