

Location of pad-mounted transformers from buildings

I. Non-combustible walls

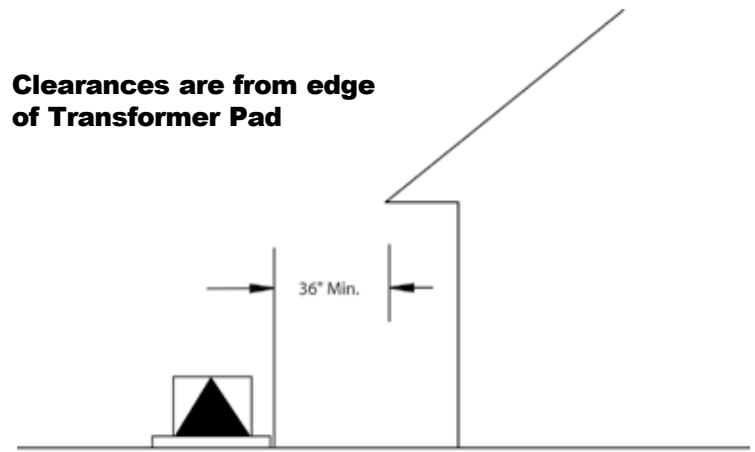
(Included in this class would be wood-framed, brick-veneered buildings, metal clad, steel-framed buildings; asbestos-cement-board walled; metal-framed buildings; and masonry buildings with a one-hour fire rating.) Pad-mount oil-insulated transformers may be located a minimum distance of 36" from the roof overhang of a non-combustible walled building if all the following clearances are maintained from doors, windows, and other building openings. If a combustible first floor overhang exists, a 10' distance from the edge of the transformer to the edge of the overhang or its associated roof overhang (combination of vertical and horizontal distance) shall be required in addition to the other clearances as shown in Figure 5.

A. Doors Pad-mount oil-insulated transformers shall not be located within a zone extending 20' outward and 10' to either side of a building door used primarily as an entrance or exit for the building, as shown in Figure 6. Doors to electrical equipment rooms are not considered a primary entrance.

B. Building openings Openings shall be defined as both operable and stationary windows and air intake or exhaust vents. Pad-mount oil-insulated transformers shall not be located within a zone extending 10' outward and 10' to either side of an opening located at the level of the transformer, as shown in Figure 7. If the opening is located above the transformer, the distance from the top of the transformer to the opening shall be a minimum of 10'.

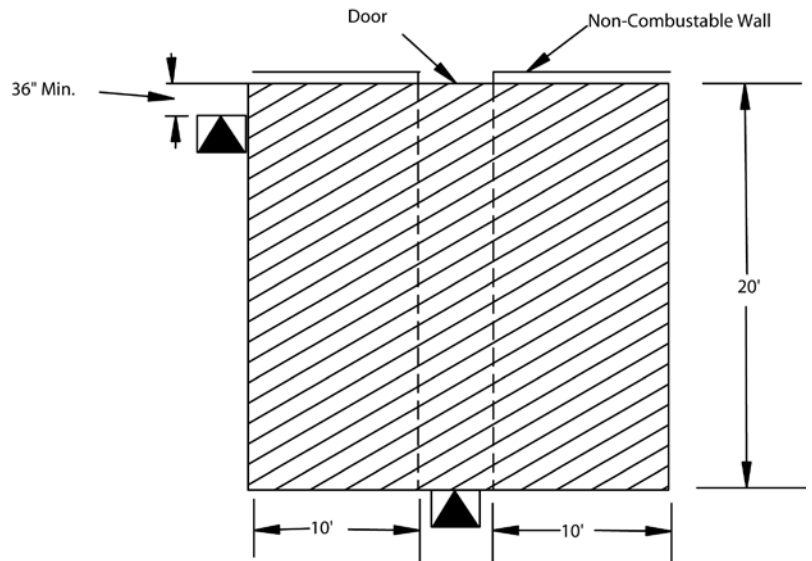
The above term "level of the transformer" is to be interpreted as within 10' of the ground.

**FIGURE 5
Non-Combustible Walls**

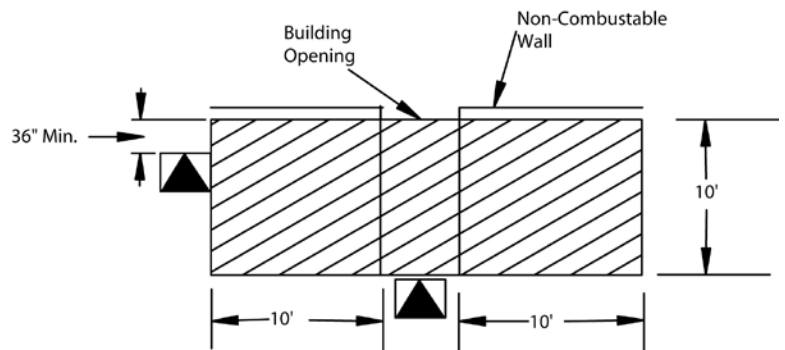


Clearances are from edge of Transformer Pad

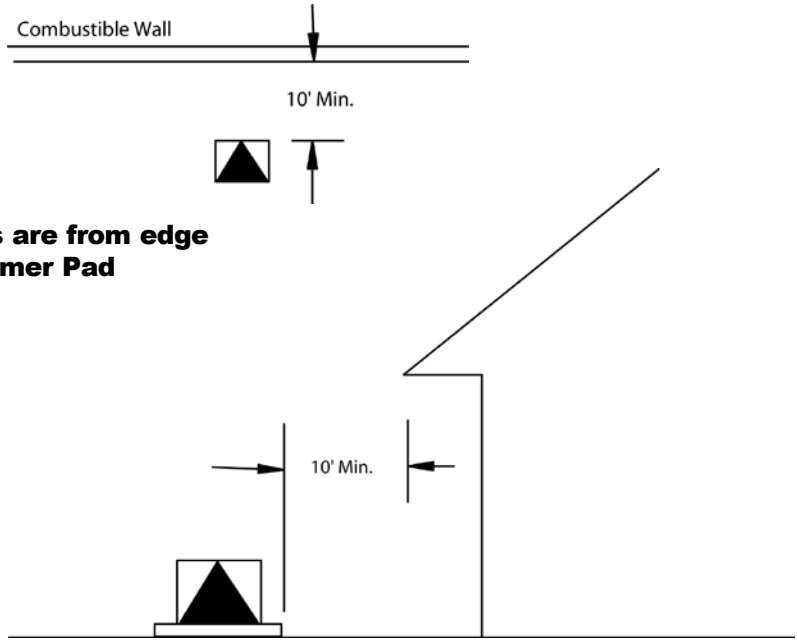
**FIGURE 6
Doors**



**FIGURE 7
Building Openings**



**FIGURES 8 and 9
Combustible Walls**



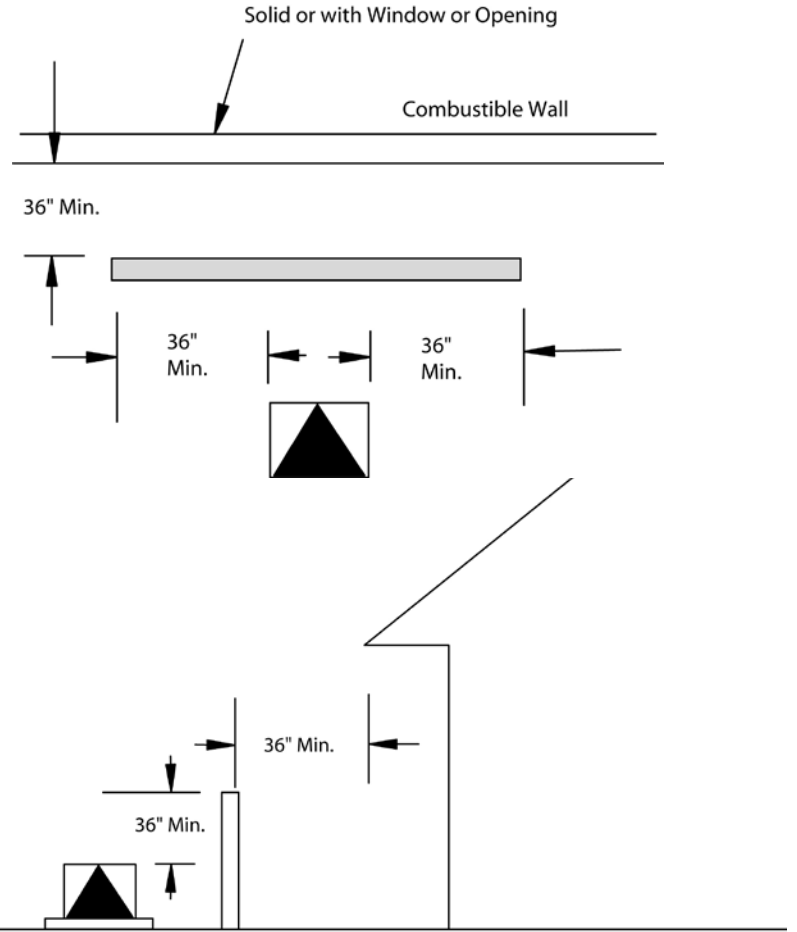
Clearances are from edge of Transformer Pad

II. Combustible walls (Included in this class would be wood buildings and metal clad buildings with wood frame construction.) Pad-mount oil-insulated transformers shall be located a minimum of 10' from the roof overhang of combustible walled buildings if all of the clearances from the building doors, windows, and other openings set forth for non-combustible walled buildings are maintained. If a combustible first floor overhang exists, a 10' distance from the edge of the transformer to the edge of the overhang or its associated roof overhang (combination of vertical and horizontal distance) shall be required in addition to the other clearances as shown in Figures 8 and 9.

III. Barriers (Included in this class are reinforced concrete, brick, or concrete block barrier walls with a three-hour fire rating.) If the clearance in previous section cannot be obtained, a fire-resistant barrier shall be constructed in lieu of the separation. The barrier, when required, is provided by the customer. The following locations are acceptable.

A. Combustible walls The barrier shall extend 36" beyond each side of the pad-mount transformer. The height of the barrier shall be 36" above the top of the pad-mount transformer as shown in Figures 10 and 11. If a combustible first floor overhang exists, the 36" specified shall be measured from the edge of the overhang, or its associated roof overhang, rather than from the main building wall.

**FIGURES 10 and 11
Combustible Walls**



B. Non-combustible walls

The barrier shall extend to a projection line from the corner of the pad-mount transformer to the furthest corner of the window, door, or opening in question as shown in Figures 12 and 13. The height of the barrier shall be 1' above the top of the pad-mount transformer.

IV. Fire escapes Pad-mount oil-insulated transformers shall be located such that a minimum clearance of 20' is maintained from fire escapes at all times.

Exception: Pad-mounted transformers may be located closer to a fire escape than the 20' minimum, when a fire resistant barrier is constructed around the pad-mount transformer (sidewalls and roof). The barrier shall extend a minimum of 1' beyond the pad-mount transformer in all directions. The pad-mount transformer and barrier shall not in any way obstruct the fire escape exit. A clearance of 10' is required in front of the pad-mount transformer doors. Adequate transformer accessibility and ventilation must be provided.

V.

Decorative combustible

enclosure Decorative combustible enclosures (fence) installed by the customer around pad-mounted transformers adjacent to a combustible building wall shall not extend more than 24" beyond the transformer towards the combustible wall. A 10' clearance is required in front of pad-mount transformer doors. Adequate transformer accessibility and ventilation must be provided.

**FIGURES 12 and 13
Non-Combustible Walls**

