Box Pad and Switchgear Pads

Installation Guide for Box Pad and Switchgear Pads



Please refer to local utility for installation guidelines. These installation guidelines are for reference only, proper installation shall be the sole responsibility of the contractor.

Trenching and Digging

A firm base for the box pad is very important; any trenching that is done to install cables/conduits must be thoroughly filled and tamped (Fig. 1).

Excavate an area roughly 12-18" larger than the base of the box and 3-6" deeper (Fig. 2). Ideally you want about 3" of the box above final grade, so you need to determine the depth of the hole compared to the height of the box you are installing (Fig. 3).







Base Preparation

The bottom flange must rest on a firm foundation. Use approximately 3-6" of compacted materials such as gravel, soil or stone dust. After the box pad has been placed in position and leveled (Fig. 4), 3" of soil should be placed on the flange to keep the box pad in place. We recommend 4" of back fill inside the box pad to offer additional sidewall support and reduce the chance of a wash out (Fig. 5).







Page A www.oldcastleinfrastructure.com | (888) 965-3227

Box Pad and Switchgear Pads

Installation Guide for Box Pad and Switchgear Pads

Backfilling

Back filling the exterior wall can be typically done by using clean loose material excavated from hole. Avoid using oversized stones, rocks, concrete, frozen chunks etc. Pack the backfill by foot tamping. Do not use mechanical equipment for tamping, and do not compact around the box pad by driving vehicles next to it. Compact material to a level about 3" from the top surface (Fig. 6).



Important Issues

- Under no circumstances should equipment pad be permitted to be drilled, cut or otherwise modified. All cable or conduits should enter the box pad by passing under the edge of the pad.
- Do not use sand as backfill. Sand provides no frictional resistance to movement, and actually creates tremendous side wall pressure. This is why we recommend the inside of the box pad be filled 4" to help balance resistance.
- If a box pad location must be on an embankment or slope, it shall be the responsibility of the developer to clear and level an area adequate for proper installation and to provide a retaining wall to protect the installation. Similarly, if a transformer pad must be placed on a down slope, the developer shall build up and level an area suitable for a proper installation and provide an acceptable means to protect against washout. If the equipment being supported by the pad is heavy then it is critical that all four sides be backfilled, and leveled to a sufficient height.
- We don't recommend placing equipment on pad until unit has been backfilled.

