Subsurface Chamber and Box Covers

Distribution Company Awareness

This bulletin is to provide awareness around the appropriate application of subsurface chamber and subsurface box covers (e.g. pull boxes and associated flush mounted covers). This bulletin supports the Ontario government's "Alert" entitled "Loading limitations of utility service covers", which was released following a recent incident where an Ontario worker died and another was critically injured, after the mobile elevated work platform they were operating tipped over when a flush mounted utility service cover broke under the weight of the equipment.

Regulation 22/04 Excerpt

Safety standards
4. *(5) All underground distribution lines, including secondary distribution lines, shall meet the following safety standards:*

> *3. Energized conductors and live parts shall be barriered such that equipment or unauthorized persons do not come into contact with them or draw arcs under reasonably foreseeable circumstances.*

Introduction

Subsurface chamber and subsurface box covers can have various structural load ratings based on the application in which they are deployed; which can range from a light duty (pedestrian traffic only) to heavy duty (deliberate vehicular traffic applications). Employers must inspect utility service covers in the work area and ensure they are capable of supporting all loads, or that they are adequately covered with a covering capable of supporting all loads expected to be applied to them, including mobile equipment or machinery. This bulletin highlights the need for distributors to ensure that energized conductors and live parts shall be adequately barriered.

ESA Recommends

Distributors review their standards and approved equipment to ensure that subsurface chamber and subsurface box covers are adequately barriered for the loads expected to be imposed upon them in the areas in which they are approved for installation. More information on the structural loading tests of covers, the Society of Cable Telecommunications Engineers (SCTE, has published SCTE Standard 77 2023, entitled "Specifications for Underground Enclosure Integrity".