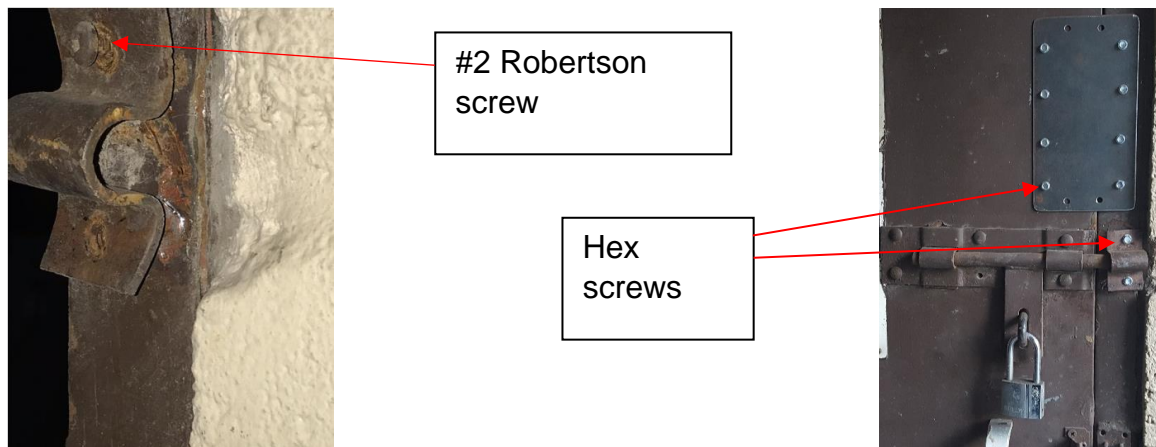


## Vault Access

### Background

The ESA has received reports of serious injuries or fatalities in respect to members of the public performing illegal acts to obtain copper by accessing transformer vaults housing Electrical Distributor owned equipment, by removing the sliding bolt fasteners with the use of common tools while a lock was in place.



### ESA Direction

The following requirements for vault doors in the current CSA 22.3 No.7-20 Underground Systems states:

#### **9.7 Vault doors, subsurface box covers, and subsurface chamber covers**

**9.7.1** *Subsurface box and chamber covers shall be designed or restrained so that they will not fall into subsurface chambers and boxes or protrude far enough to contact cables or equipment. Covers shall be over 45 kg (100 lb) or otherwise be tamper-resistant. Vault doors shall be tamper-resistant.*

**Tamper-resistant** — *the state in which, in any normal operating condition, contact with live parts cannot be made either directly or by means of any conductive material, with or without the use of such common tools as might be accessible to children. It does not imply proof against any deliberate actions of adults and children.*

Although tamper-resistant requirements for vault doors were not considered in CSA 22.3 No.7-15 Underground Systems as enforced under Ont. Reg. 22/04 Section 5(3),

ESA will issue utility public safety concerns for locations found which do not meet the tamper-resistant requirements and intent.

## ESA Recommends

- Electrical Distributor's should review their electrical equipment vault design standards relating to tamper-resistant requirements, including mounting of the sliding bolts, door hinges and ventilations.
- Electrical Distributor's inspection of vaults housing electrical equipment should include verification of tamper-resistant requirements.