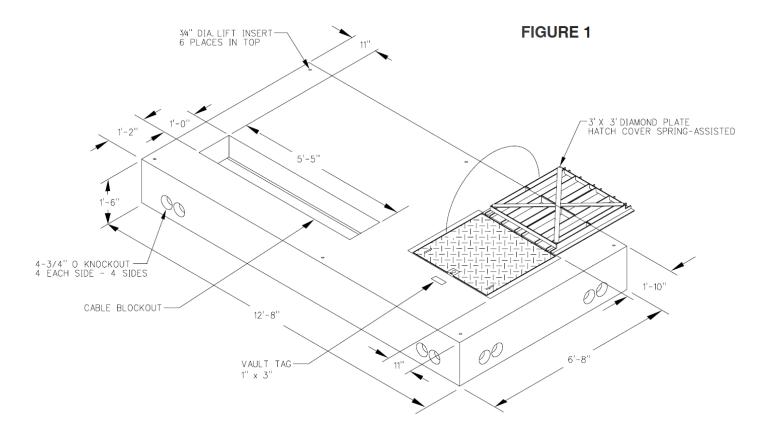
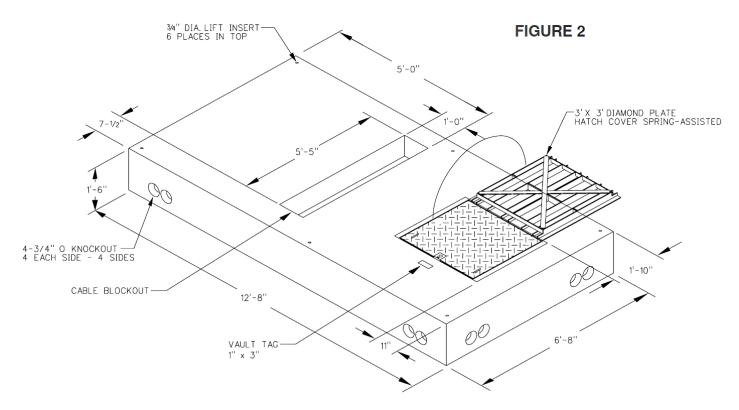
### **Material Standards**

Revision 2 Aug 12, 2015







#### **Material Standards**

## 1. Scope

This material standard covers the requirements for manufacturing and supplying reinforced concrete vault covers having the dimensions and features indicated in Figures 1 and 2 as shown above.

## 2. Application

The concrete covers specified in this material standard will be used as the base for installation of S&C Vista 15kV dead-front pad-mounted switch cabinets, of which District Material ID Number 1000685 is representative. The concrete covers shall be designed to mount on top of the 612-ML mid-section of Oldcastle Precast type 612 vaults.

#### 3. Reference Standards

Reference is made in this material standard to the following standards, the latest editions, amendments, and supplements of which shall apply, unless otherwise stated in this document or in associated purchasing documents:

ASTM A615	Specification for Deformed and Plain Billet-Steel Bars for Concrete Reinforcement
ASTM C33	Specification for Concrete Aggregates
ASTM C150	Specification for Portland Cement
ASTM A123	Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products

### 4. Material ID Number

This material standard applies to District Material ID Numbers 1002285 (Figure 1) and 1003794 (Figure 2).

## 5. Concrete and Reinforcing Bars

The vault covers shall be manufactured of concrete meeting a minimum compressive strength of 4,000 psi after 28 days. The concrete shall meet the requirements of ASTM C150 and C33. Reinforcing bars shall be size No. 3 meeting the requirements of ASTM A615.

#### 6. Frame and Cover

The frame for the diamond plate hatch cover shall be manufactured of angle iron securely anchored in the concrete cover (cast in place). The hatch cover shall be manufactured of steel, shall be equipped with a spring locking latch with a 3/8" penta-head bolt, shall have spring-assisted opening and shall have a recessed lift handle. The hatch cover shall be hinged for full 180° opening. The frame and hatch cover shall be hot-dip galvanized after fabrication in accordance with ASTM A123.

## 7. Lifting Inserts

The top surface of the vault cover shall be equipped with six lifting inserts. The lifting inserts shall be 3/4" diameter threaded type. Lifting inserts shall be protected with removable plastic caps.



#### **Material Standards**

10000955.1 Reinforced Conc VIt Covers for S&C Vista 15kV Dead-Front Sw

### 8. Identification Plate

A 1" wide x 3" long x 3/16" thick (min.) brass or bronze blank identification plate (vault tag) shall be centered in front of the diamond plate hatch cover on the side where the latch is located. The plate shall be embedded so it is flush with the surface of the vault cover. The top surface of the plate shall not be covered over with concrete.

### 9. Concrete Finish

The top surface of the concrete vault covers shall have a brush finish. All top edges shall be tooled.

# 10. Shipping

Each vault cover shall be shipped to the job site or storage location designated by the District.