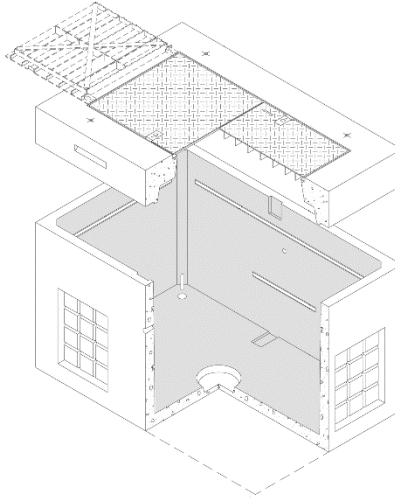


575 Electric Vault, Primary Service



1. Scope

This standard covers the detailed requirements for 575 electrical vault components (vault base and cover with hatches) and 575 vault assemblies. Components may be ordered separately or ordered as an assembly.

This standard applies to the following Seattle City Light (SCL) stock numbers:

Stock No.	Description
014370	Base , standard 575
014371	Cover with two hatches
014372	Assembly (base and cover with hatches)

2. Application

575 vaults are used in the construction of underground electric systems. Precast concrete structures are used to house loadbreak junction boxes, act as a pulling vault, or be used to make service connections and splices for the SCL system.

575 vault assemblies are not to be used in high traffic locations.

Standards Coordinator
Quan Wang

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3. Requirements

3.1 General

This standard is to be used in conjunction with the latest revision of SCL 7203.21, "Precast Reinforced Concrete Structures, General."

3.2 Grounding and Bonding

Vault grounding shall conform to SCL 7203.21.

3.3 Base

Table 3.3a. Vault Base Components

	Size, Nominal (in)	Location	Per Location	Total Number
Knockouts				
Waffle (12 6-in squares)	18 x 24	All 4 walls, 18 in below the top of wall toward the wall corner	2 ea side	8
Ground rod	2-1/2 dia	2 corners of floor	1 ea	2
Channels				
Galvanized "C" channel, horizontal, embedded in walls				
	36 long	End walls, above waffle, 9 in from top of wall	1 ea side	2
	72 long	Side walls, above waffle, 9 in from top of wall	1 ea side	2
	24 long	Between waffle knockouts, 19.5 inches from channel above	1 ea side	2
Sump, round	12 dia	Floor, off-center (long axis)	1, to one side	1
Pulling irons	1/2 dia	As requested per project; 1 ea corner of floor (typical)	1 ea corner	4
Lift holes	1-1/2 dia	2 opposite walls, centered on side wall	1 ea side	2
Ground Inserts, bronze	1/2 dia	2 walls, opposite, internal and external	2 ea side	4
Ladder	–	Not required	–	

The base shall have dimensions as shown in Tables 3.3b and 3.3c, and Figure 3.3.

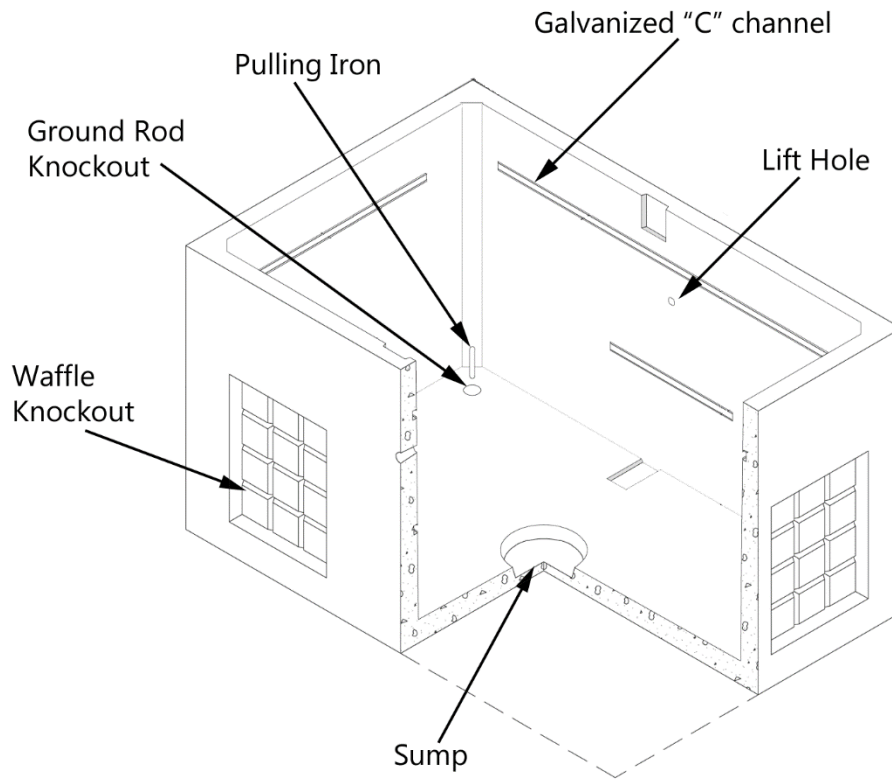
Table 3.3b. Base Dimensions, Inside, Nominal (ft-in)

Length	Width	Height
6-6	4-2	3-8

Table 3.3c. Base Dimensions, Outside, Nominal (ft-in)

Length	Width	Height
7-0	4-8	4-0

Figure 3.3. Base



3.4 Cover

Vault cover shall consist of a concrete collar with two 3 ft x 3 ft non-slip, spring-assisted, solid hatches.

Cover shall have overall dimensions as shown in Table 3.4.

Cover shall have a 3/4-in diameter (nominal) lift insert at each corner on the top, as shown in Figure 3.4.

UV-resistant caps shall be provided to cover the lift inserts.

Cover shall have a keyway to ensure a tight fit.

Hinges for the hatch shall be along the short end of the cover slab.

The solid hatch shall have the following attributes:

- 3 ft x 3 ft dimension
- H20 rating
- Two recessed lift handles
- Non-slip surfaces
- 5/8-in bonding point hole on support bar for grounding hatch
- Hatch-locking mechanism with Penta head bolt
- "Electric" labeled on top of the hatch.

Figure 3.4. Cover With Two Hatches

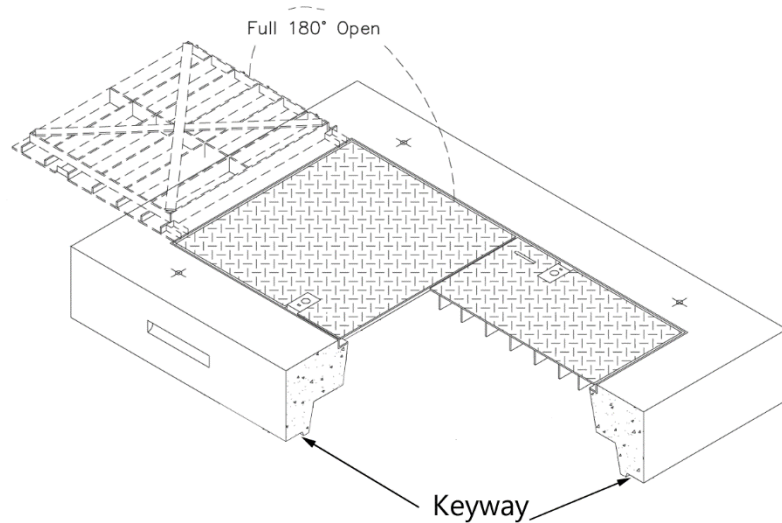


Table 3.4. Cover Dimensions, Nominal

Concrete Collar			
Length (ft-in)	Width (ft-in)	Thickness (in)	Opening (in)
7-0	4-8	12	6 x 3

4. Issuance

Unit: EA

5. Approved Manufacturer

Stock No.	Description	Oldcastle/Utility Vault Catalog No.
014370	Base , standard 575	575-BL
014371	Cover , with two hatches	57-2-33F
014372	Assembly ; base and cover with hatches	575-LA

6. References

SCL Material Standard 7203.21; "Precast Reinforced Concrete Structure, General"

7. Sources

Wang, Quan; SCL Standards Engineer, originator, and subject matter expert for 7203.38 (quan.wang@seattle.gov)