

*Delivering Reliability*

## *Electrical Vaults*

*Power & Energy-Underground Structures*



## The Benefits of Precast Vaults

Electrical vaults house power cables and transformers, and are a preferred alternative to running electrical power cables above the ground and across utility poles. Oldcastle Precast's vaults come in multiple dimensions and are perfect for electrical, utilities, fiber-optic, and communications applications. Our products include access doors, manhole covers, blockouts, knockouts and much more.

## Environmentally Responsible

All of our products are produced in a controlled environment helping us maintain the high standards implemented by Oldcastle Precast. Many of our products are specifically designed to protect and improve the environment. We're always looking for new ways to minimize waste, increase recycling, improve energy management and use eco-friendly materials.

## Material and Design Loads

The structural notes below are for standard models. We can design vaults to meet other specifications.

<b>1. Concrete</b>	5000psi (35 Mpa) @ 28 days.
<b>2. Rebar</b>	ASTM A 615 grade 60 rebar.
<b>3. Mesh</b>	Welded Wire Fabric ASTM A185 grade 65
<b>4. Design</b>	Building Code Requirements for Reinforced Concrete (ACI 318-99) including all referenced standards and specifications. AAS-HTO "Standard Specifications for Highway Bridges" - 16th edition.
<b>5. Loads</b>	<p>Dead Load: Concrete - 150 PCF Earth Cover - 120 PCF</p> <p>Lateral Earth Pressure on walls: Equivalent Fluid pressure above water table + 39.6 PSF per foot of depth. Equivalent Fluid pressure below water table + 81.4 PSF per foot of depth. Surcharge on walls + 2 feet of earth cover</p> <p>Live Load: AASHTO HS20-44 32,000 lbs. rear axle loading</p>

We can provide drawings and calculations stamped by a Professional Engineer.

### COVER & FRAME

- FINISH: Hot Dip Galvanized after Fabrication.
- FRAME: Can be Fabricated for Cast-In Applications.
- LOADING: Designed for H20 loading for Non Roadway Applications.
- DOORS: Offered in Single, Double, or Triple Configurations, open 180 Degrees.

### EMBEDDED LIFTERS

- MATERIAL: Galvanized Utility Anchors
- LOADING: Offered in 2, 4, 8, & 20 Ton
- 1 Ton Universal Lifters also available.

### GRADE RINGS / RISERS

- FINISH: Concrete
- Designed to bring Covers up to Grade.
- Can be Rectangular or Round.

### EMBEDDED PULLING IRONS

- Allows Cable Pulling Equipment to be anchored.
- MATERIAL: Carbon Steel-Galvanizing Standard.
- Stainless Steel available on request.

### DRAINAGE SUMP

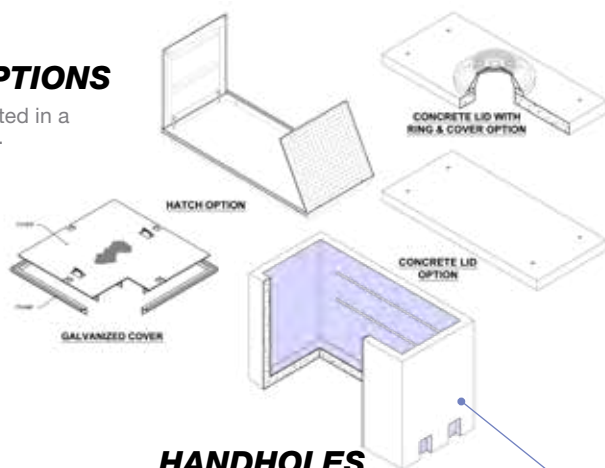
- MATERIAL: Propylene
- 2" Knock-Out hole in Base for Drain Pipe by others.
- Outer Lip Positively Locks Base into Concrete.

### RACKING

- Bolted to Unistrut or Brackets to hold and secure cables or wiring.
- FINISH: Galvanized Standard.
- Easy Vertical or Horizontal adjustability.
- Cable Support arms available from 4" to 18".

## COVER OPTIONS

- Can be Fabricated in a variety of Sizes.



## HANDHOLES

- Used in smaller Communications Vault Applications.
- Can be Fabricated in a variety of Sizes.

## MANHOLE COVER & FRAME

- MATERIAL: Cast or Ductile Iron.
- DESIGNS: Custom Lettering & Design available.
- LOADING: Built to an H20 rating up to 150 KIP.
- SIZES: 24, 30, 32, 36 Round

## UNISTRUT OR INSERTS

- Embedded into interior walls for bolting on racking other equipment.
- Different Lengths and Sizes available.
- Stainless Steel options are available.

## TERM-A-DUCTS

- MATERIAL: PVC
- Different Lengths and Sizes available.
- Provides Point of Entry/Termination for various cables and or air vents.

## KNOCK-OUTS

- Round or Rectangular Knock-Outs offered in multiple locations to provide access for cable, conduit, or pipes as required.
- Easily broken with a hammer to create desired opening shape and size.

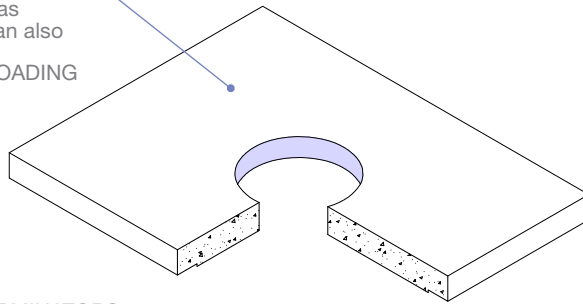
## One Piece Vault

One piece vault configurations typically consist of a Base Section and a Lid Section and are commonly used in applications requiring non-confined access.

NOTE: One Piece Vault configurations may also consist of a Slab Section and a Top Section.

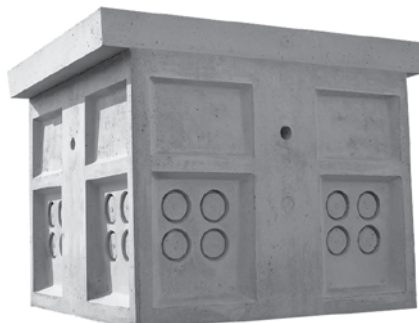
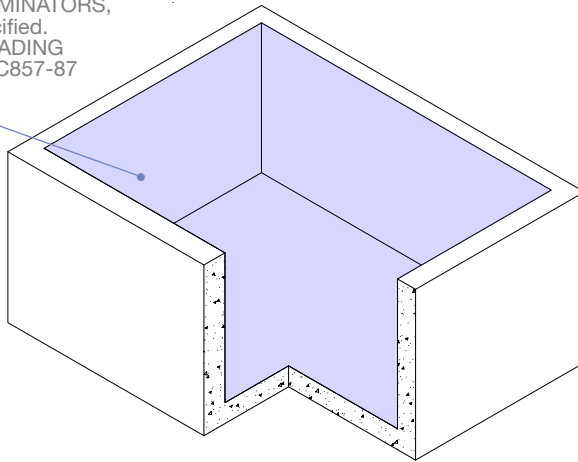
### LID SECTION

- ACCESS OPENING-Can be any size and location.
- INVERTED RING & COVER as well as STEEL or ALUMINUM HATCHES can also be cast in.
- DESIGNED FOR AASHTO HS-20 LOADING



### BASE SECTION

- SPECIAL ACCESS BLOCKOUTS, KNOCKOUTS, PULLING EYES, TERMINATORS, RACKS, ETC. can be placed as specified.
- DESIGNED FOR AASHTO HS-20 LOADING
- DESIGNED ACCORDING TO ASTM C857-87 AND ASTM C858-83s.



## Three Piece Vault

Three piece vault configurations typically consist of a Base Section, a Riser Section, and a Lid Section and are common in applications requiring non-confined access where minimum cover is required for loading and unloading, transportation, and storage.

### LID SECTION

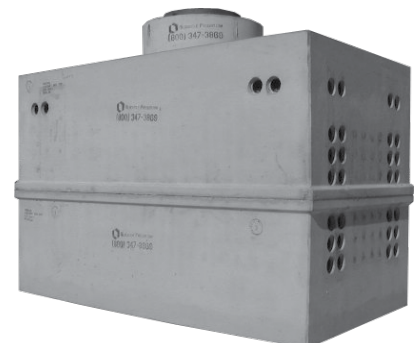
- ACCESS OPENING-Can be any size and location.
- INVERTED RING & COVER as well as STEEL or ALUMINUM HATCHES can also be cast in.
- DESIGNED FOR AASHTO HS-20 LOADING

### RISER SECTION

- SPECIAL ACCESS BLOCKOUTS, KNOCKOUTS, PULLING EYES, TERMINATORS, RACKS, ETC. can be placed as specified.
- DESIGNED FOR AASHTO HS-20 LOADING
- DESIGNED ACCORDING TO ASTM C857-87 AND ASTM C858-83s.

### SLAB SECTION

- DESIGNED FOR AASHTO HS-20 LOADING
- DESIGNED ACCORDING TO ASTM C857-87 AND ASTM C858-83s.





## Multi-Piece Vault

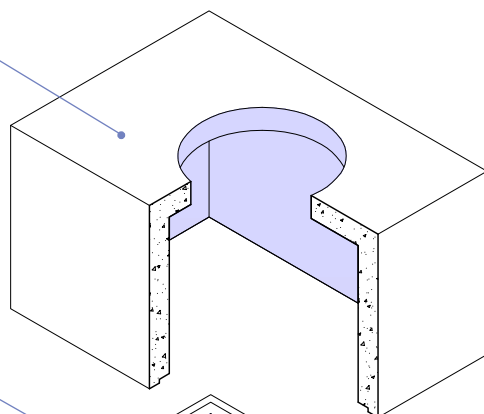
consist of a Slab Section, a Riser  
ly used in applications requiring  
component weight is desired for  
installation.

Multi-piece vault configurations typically consist of a Base Section, a Riser Section, and a Top Section and are commonly used in applications where Manhole access is sufficient and access to equipment by removal of the entire Top Section is NOT required.

NOTE: Multi Piece Vault configurations may also consist of various combinations of either a Slab Section or Base Section, Multiple Riser Sections, and either a Top Section or a Lid Section.

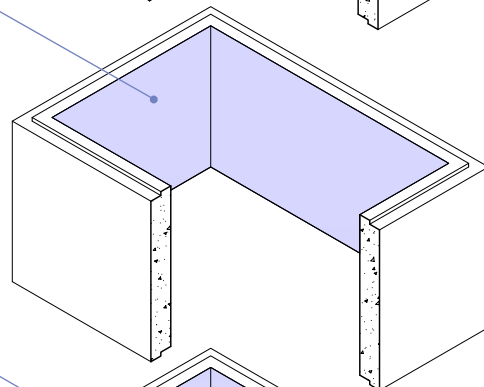
### TOP SECTION

- ACCESS OPENING-Can be any size and location.
- INVERTED RING & COVER as well as STEEL or ALUMINUM HATCHES can also be cast in.
- DESIGNED FOR AASHTO HS-20 LOADING
- "CLAMSHELL" Fabrication Method Reduces Weight by Allowing for Thinner Walls While Maintaining Structural Integrity



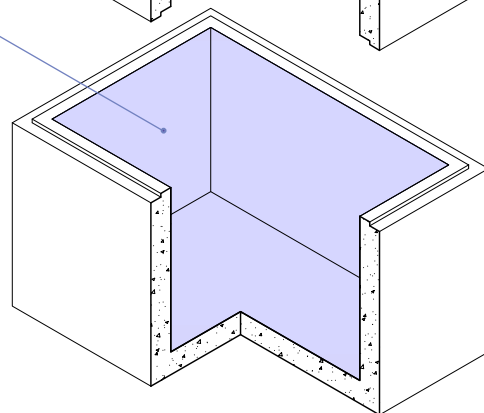
### RISER SECTION (Optional for greater depths)

- TONGUE & GROOVE OR SHIPLAP JOINT.
- DESIGNED FOR AASHTO HS-20 LOADING



### BASE SECTION

- SPECIAL ACCESS BLOCKOUTS, KNOCKOUTS, PULLING EYES, TERMINATORS, RACKS, ETC. can be placed as specified.
- DESIGNED FOR AASHTO HS-20 LOADING
- DESIGNED ACCORDING TO ASTM C857-87 AND ASTM C858-83s.



\*Electrical vaults are available in a variety of standard and custom sizes to suit virtually any application.

## Cable Tray Vaults

Cable Tray vaults are typically used to manage the installation and connection of wires and cables used in electrical applications.

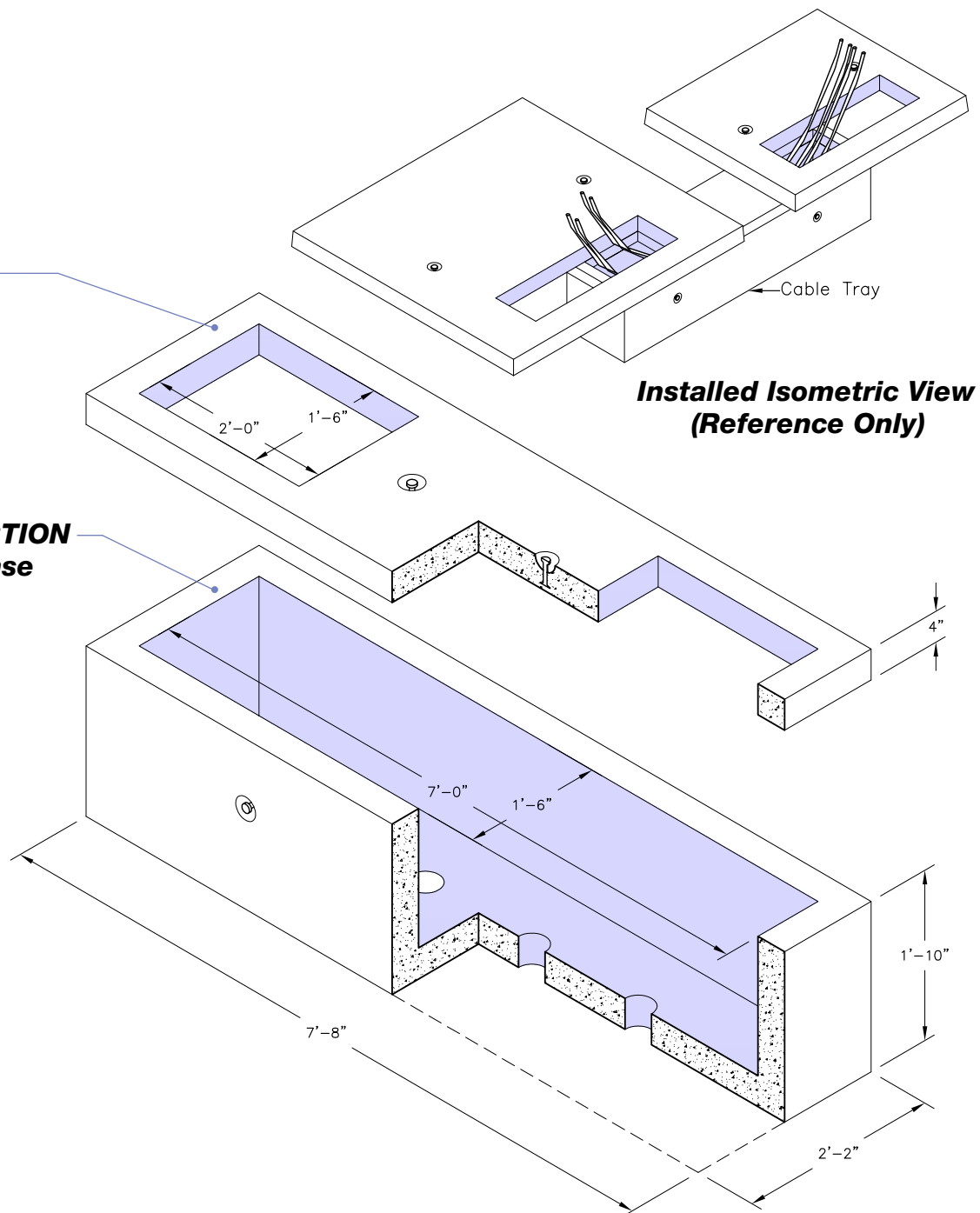
NOTE: Stack heights not to exceed (2) Pit Section. Designed for installation at grade with cabinet loading.

### LID SECTION Cable Tray

• Weight= 530 lbs

### BOTTOM SECTION Cable Tray Base

• Weight= 2,186 lbs



## Octagon Vaults

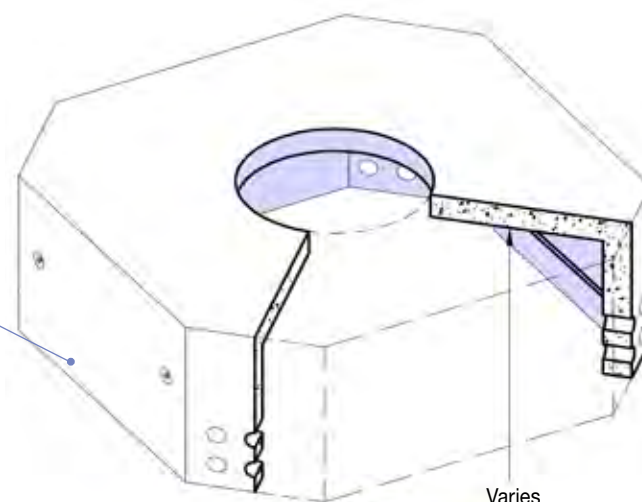
Octagon vaults are typically used in Communications, Power, and Government site applications.

### NOTES:

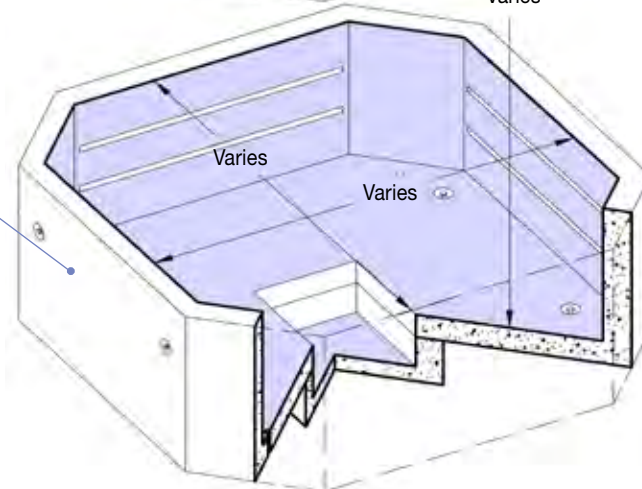
- Inverted Cast Iron Ring & Cover as well as Steel or Aluminum Hatches can be cast in.
- Access opening can be any Size & Location.



**TOP SECTION  
OCT-T**



**BOTTOM SECTION  
OCT-B**



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*oldcastleprecast.com*

*Delivering Reliability*



Oldcastle Precast is the leading manufacturer of precast concrete, polymer concrete and plastic products in the United States. With a nationwide network of facilities our products are always close at hand. Our employees are committed to upholding core values of reliability, quality and service in revolutionary ways. Our attention to detail exceeds the expectations of customers from some of the largest companies in the U.S., across a spectrum of industries.

888.965.3227

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