

# CraftSmart Fiber Protection Vault

## Installation Manual

---



Are you?

**CLEARFIELD  
CERTIFIED**



### Clearfield College Product Training

Clearfield's Certified Partnership Training Program (CPTP) is open to customers and contractors with the desire to become a Clearfield partner.

**SIGN UP TODAY** to learn the proper installation techniques for Clearfield products.

**It's FREE!!**

[www.seeclearfield.com/training/clearfield-college/certified-partnership-training.html](http://www.seeclearfield.com/training/clearfield-college/certified-partnership-training.html)

# CraftSmart Fiber Protection Vault

## Installation Manual

---



### Table of Contents

<b>Application</b> .....	<b>3</b>
<b>Description</b> .....	<b>3</b>
<b>Vault Assembly</b> .....	<b>4</b>
<b>Installing Step Racks</b> .....	<b>7</b>
<b>Vault Installation</b> .....	<b>8</b>
<b>Mounting Risers/Pedestals to Vault Lid</b> .....	<b>9</b>
<b>Standard Warranty</b> .....	<b>10</b>
<b>Proprietary Notice</b> .....	<b>11</b>
<b>Technical Support</b> .....	<b>11</b>



# CraftSmart Fiber Protection Vault

## Installation Manual

### Application

The CraftSmart Fiber Protection Vault (FPV) is a flat packed, easily assembled solution for the optimized installation and deployment of Clearfield FDH Cabinets and Pedestals.

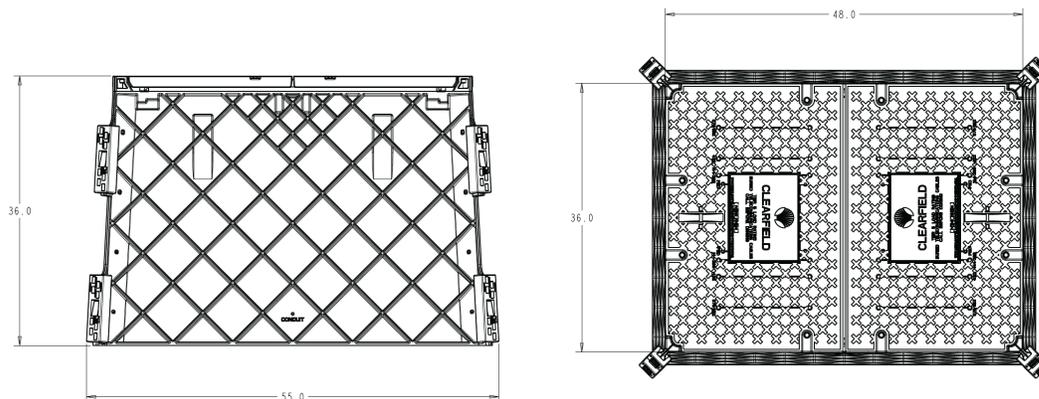
All vaults include a custom cut-out in half of the lid, designed specifically for easy installation and mounting of FieldSmart FDH Cabinets and FieldSmart Fiber Delivery Point (FDP) Pedestals in above grade deployments with below grade slack cable storage. FPVs are equally suited for drop cable, splicing, interconnect and mid-span scenarios, which allows for maximum flexibility and customization in the outside plant network.

Designed to meet industry standards for strength and reliability exposure to underground applications.

### Description

The Clearfield® CraftSmart product line provides physical fiber protection for products. It completes and delivers a turn-key passive solution from the central office/headend to the customer premises. CraftSmart Fiber Protection Vaults (FPV) provide the most costeffective thermoplastic enclosures in the industry - meeting and exceeding the industry standards for strength, reliability, and environmental concerns.

Formed from a High-Density Polyethylene (HDPE) Thermoplastic, these vaults provide a solid base and light-weight material alternative to traditional polymer concrete enclosures. All CraftSmart Vaults come flat packed are easily assembled by the customer on site. The flat pack configuration allows for reduced transportation, handling, and storage costs typically associated with a pre-assembled vault. Multiple industry standard sizes can be ordered with solid covers or pre-cut covers to accommodate all FieldSmart passive and active cabinet solutions.



Flared Wall	Inside Dim. Width A	Inside Dim. Width B	Outside Dim. Width C	Outside Dim. Width D	Height	Approx. Weight with HDPE Cover	Recommended Clearfield Products
36" x 48"	36"	48"	43"	55"	36"	260 lbs	Clearfield FDH Cabinets, 144, 288, 432, 576, 1152 PON and 432, 864, 1728 XCONN. FiberFirst Pedestal, YOURx-Terminal, YOURx-MPT, SeeChange Terminal

# CraftSmart Fiber Protection Vault

## Installation Manual



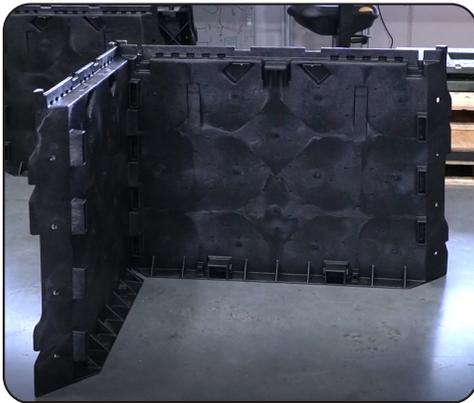
### Vault Assembly

1. Remove the pieces of the vault from the box. These include:

- 2 short vault walls, 2 long vault walls
- 2 lid halves
- 3 support beams
- 8 wall clips
- Optional hardware to further secure walls
- J-hook hardware kit for riser and pedestal mounting included with cutout lid option



2. Stand up the 4 walls of the vault, aligning them together using the the interlocking box joints.

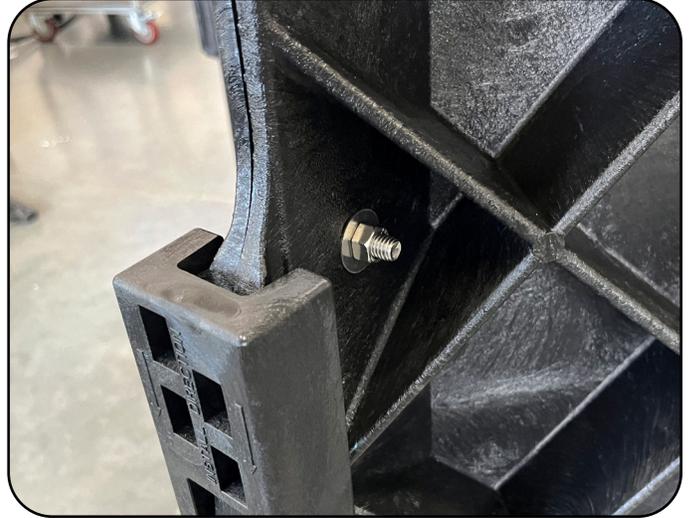
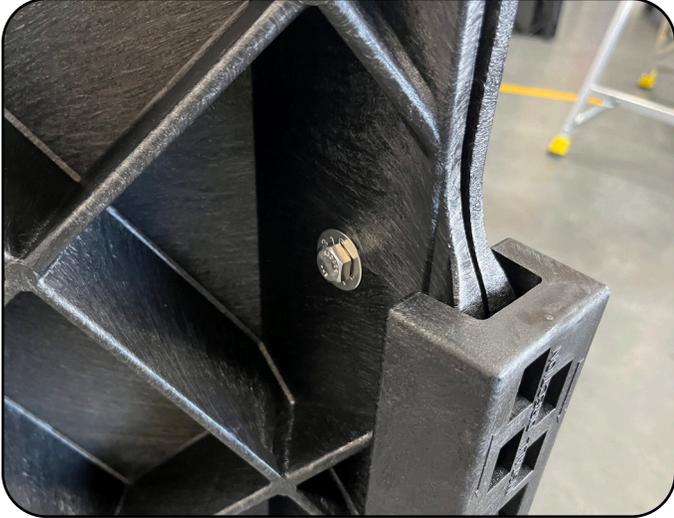


3. Secure the walls together using the 8 wall clips (2 per side). Following the direction of the arrows on the outside of the clips, slide the channel of the clips down over the flanges on the corners of the walls.

**Note:** Once installed, the wall clips are not removable.



- Optionally, use the provided hardware to further secure the vault walls together, passing the bolts through the holes located above the wall clips.



- Install the 3 support beams into their locations inside the vault, two at the base and one on top.



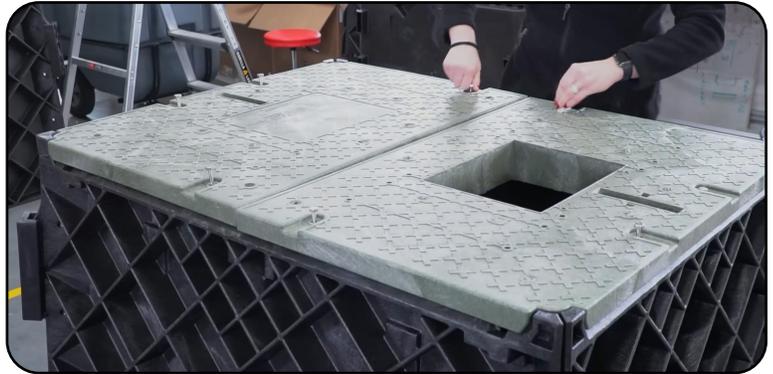
# CraftSmart Fiber Protection Vault

## Installation Manual

---



6. Place the two halves of your lid on the vault and finger tighten the retained bolts.



7. Fully tighten the bolts securing the lid to the vault.

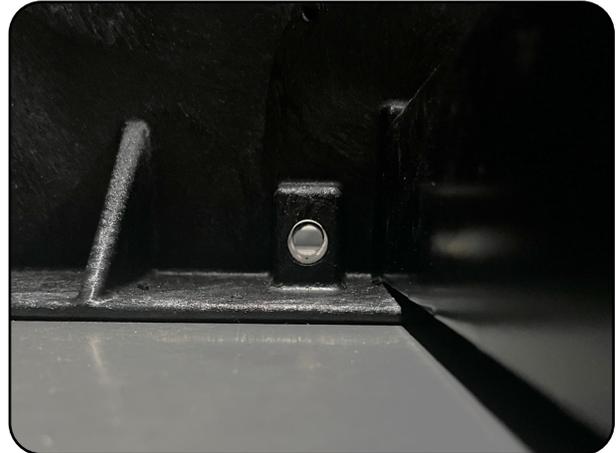


8. The CraftSmart Fiber Protection vault is now ready to be installed.



### Installing Step Racks

1. To install the optional step racks prior to burying the vault, first drill out the two pre-marked drill points located at the top and bottom of the wall with a 3/8" (or slightly larger) bit.



2. Using the hardware provided, secure the step racks to the vault wall. Place the small washer over the shorter bolt and feed through the hole at the top of the vault wall. Secure with the larger washer, lock nut and regular nut.
3. Repeat at the base of the wall with the longer bolt.
4. Place the steps in the desired location.



# CraftSmart Fiber Protection Vault

## Installation Manual



### Vault Installation

These instructions provide general information useful for vault installation. This guide cannot anticipate all situations that could develop in the field. Rather, it represents information applicable to common installation conditions.

#### Site Preparation:

Ensure that national/local electrical and building codes, as well as OSHA and company safety work rules, are observed and provisions made for street flags, barricades, and cones. Secure permits as required by the city and company.

#### **WARNING: Buried Telecommunications Cables - Call Before Digging**

#### Excavation:

Plan excavation approximately twelve to sixteen inches (12" - 16") longer and wider than the actual dimensions of the vault to be installed. Similarly, excavate six to eight inches (6" - 8") deeper than the overall dimensions of the vault with the cover in place.

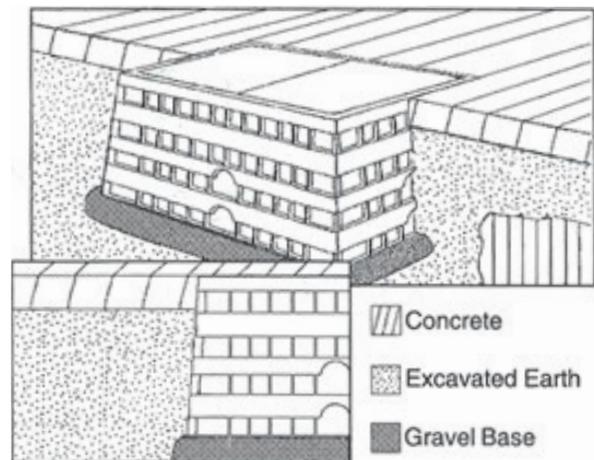
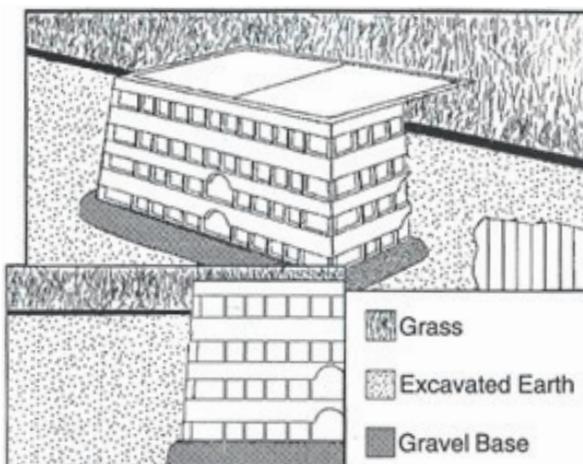
**Note:** Vault size is generally defined by the approximate cover dimensions. The vault actual measurements will differ. The dimensions above for determining the size of the excavation provide sufficient volume for accommodating the maximum recommended select backfill. The volume of excavation would be reduced if a lesser volume of backfill material were chosen. Excavate the hole to appropriate dimensions with a mechanical excavator or hand dig as appropriate. **Confirm the excavation floor is level.**

#### Installation:

Clearfield highly recommends the installation of a vapor barrier beneath the crushed rock floor of the excavated area. It is recommended to use a minimum of three to six (3" - 6") inches of crushed rock to prevent subsidence over time. Gravel is the recommended material because of its drainage characteristics. The compacted material should be leveled so the top of the vault is flush to the grade.

**Note:** Base material shall be crushed rock 3/4" and smaller, and not "river rock" or "round stone." Desired compaction and equivalent resistance to lateral loading will not be achieved with round stone. The rock should be free of soil and organic material.

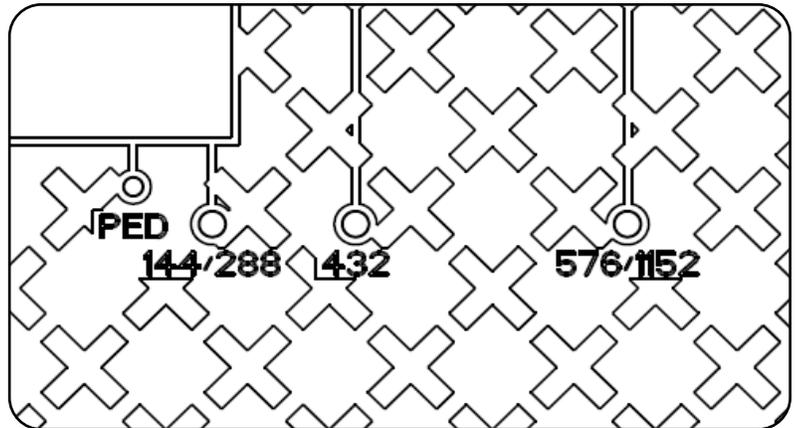
**Install the vault with the cover and support beams in place.** Backfill the extra excavated material into the gaps around the vault and compact by hand.



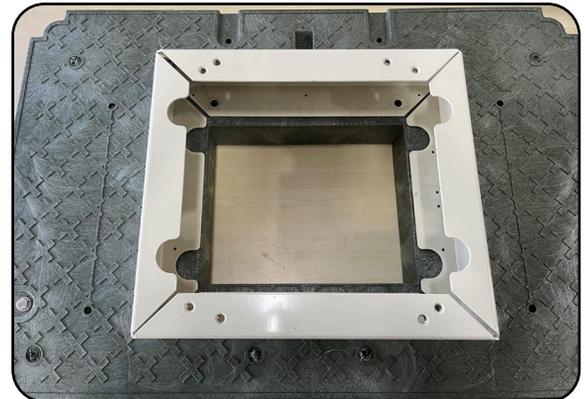
### Mounting Risers/Pedestals to Vault Lid

When mounting a riser or pedestal to the cutout lid, a J-hook mounting hardware kit will be included. The cutout lid features mounting holes intended for different sizes of cabinet riser and pedestal. The holes will be labeled as shown. Choose the mounting holes corresponding to the product you are mounting. From left (innermost hole) to right (outermost):

1. CraftSmart 12" FiberFirst Pedestal
2. Clearfield FieldSmart Cabinets, 144 and 288 PON, 432 XCONN
3. Clearfield FieldSmart Cabinets, 432 PON
4. Clearfield FieldSmart Cabinets, 576 and 1152 PON, 864 and 1728 XCONN



1. Place the riser or pedestal over the lid cutout, aligning the holes in the riser/ped with the corresponding holes in the lid.



2. From below, feed the threaded end of the J-hook up through the hole, ensuring the J-hook is over a rib on the underside of the lid.



3. Secure the riser/ped to the lid with the provided washers and nuts on the J-hook bolts.

# CraftSmart Fiber Protection Vault

## Installation Manual

---



### Standard Warranty

Clearfield warrants to the original purchaser of the Product sold hereunder is free from defects in material and workmanship under normal use and service, subject to exceptions stated herein. Product purchased is warranted as follows: Clearfield designed and branded Products are warranted for three (3) years; Products manufactured by Clearfield to customer prints and/or specifications are warranted for one (1) year; and any Product Clearfield acquires from or through a third-party manufacturer or distributor and resells to Customer as the original customer will carry the manufacturer's pass-through warranty, if any. In all cases, the warranty period commences on the date of shipment to the original purchaser.

### Warranty Claim Procedure

If any Product purchased from Clearfield is found defective under the above warranty, the following basic procedure must be followed:

1. Customer must contact Clearfield and obtain a Return Materials Authorization
2. Following authorization, the Customer ships the product-freight collect to Clearfield's manufacturing facility
3. Clearfield shall repair or replace the defective Product at its sole option and discretion, and return the repaired or replacement Product to Customer's site, freight prepaid

Note: If the Product is not found to be defective by Clearfield, the product will be returned to the Customer and the customer billed for freight in both directions.

View our warranty policy here: <https://www.seeclearfield.com/warranty.html>

### Limitations of Warranty

Correction of defects by repair or replacement, at the option of Clearfield Inc, shall constitute the exclusive sole remedy for a breach of this limited warranty. Clearfield shall not be liable under any circumstances for any special, consequential, incidental, punitive, or exemplary damages arising out of or in any way connected with the product or with agreement to sell product to buyer, including, but not limited to damages for lost profits, loss of use, or for any damages or sums paid by buyer to third parties. The foregoing limitation of liability shall apply whether the claim is based upon principles of contract, warranty, negligence or other tort, breach of statutory duty, principles of indemnity or contribution, the failure of any limited or exclusive remedy to achieve its essential purpose, or otherwise.

Clearfield will not be responsible for any labor or materials costs associated with installation or incorporation of Clearfield products at customer sites, including any costs of alteration, replacement or defective product, or any field repairs.

### Other Limitations

Clearfield assumes no warranty liability regarding defects caused by:

1. Customer's modification of Product, excepting installation activities described in Clearfield documentation
2. Customer re-packaging of Product for shipment to third parties or destinations other than those originally shipped to by Clearfield, or any defects suffered during shipping where the Product has been re-packaged
3. Customer's installation or maintenance, excepting activities described in and performed in accordance with Clearfield documentation
4. Customer's improper or negligent use or application of Product
5. Other causes external to the Product, including but not limited to accidents, catastrophe, acts of God, government action, war, riot, strikes, civil commotion, sovereign conduct, or the acts or conduct of any person or persons not party to or associated with Clearfield
6. Environmental factors and weathering resulting in aging and damage not necessary or applicable to the function of the product



# CraftSmart Fiber Protection Vault

## *Installation Manual*

---

### Proprietary Notice

Information contained in this document is copyrighted by Clearfield, Inc. and may not be duplicated in full or part by any person without prior written approval of Clearfield, Inc.

Its purpose is to provide the user with adequately detailed documentation to efficiently install the equipment supplied. Every effort has been made to keep the information contained in this document current and accurate as of the date of publication or revision.

However, no guarantee is given or implied that the document is error free or that it is accurate with regard to any specification.

### Technical Support

Clearfield, Inc. can be contacted for any issues that arise with the supplied product.

If you need to return the supplied product, you must contact the Clearfield, Inc. Customer Service Department to request a Returned Materials Authorization (RMA) number.

Clearfield, Inc.  
7050 Winnetka Ave N  
Minneapolis, MN 55428

Toll Free: 800.422.2537  
Phone: 763.476.6866  
Fax: 763.475.8457

Customer Support: [sales@seeclearfield.com](mailto:sales@seeclearfield.com)  
Technical Support: [techsupport@seeclearfield.com](mailto:techsupport@seeclearfield.com)