

Architect's Vault Planning Guide

Class 350 Four Hour Document Vault with Class 125 Media Rating

- Vault Doors
- Modular Panels
- Cable Trays
- Fire Dampers for Environmental Control



Vault Panels & Structural I Beams

All Panels are a male to female design and insert one into the other and then are tack welded in place. Each panel behaves as a box beam and provides superior strength for the vault. Dead Load of 150 to 350 ppsf are typical.

The vaults are rated for 185 mph wind loads and Zone IV Earthquake resistance.

Panels and Vault Components arrive



Vault Track and Vault Stanchion are mounted to floor and sealed



After Side Wall Panels are mounted in the floor track, the roof panels are installed.



Welded Assembly of Box Beam Frames



Vault Door Details





OPERATING INSTRUCTIONS FIRE VAULT DOOR

OPENING DOOR

- 1- OPEN COMBINATION LOCK AS PER MANUFACTURER'S INSTRUCTIONS
- 2- TURN THREE SPOKE HANDLE CLOCKWISE
- 3- PULL DOOR OPEN

CLOSING DOOR

- 1- CLOSE DOOR
- 2- TURN THREE SPOKE HANDLE CLOCKWISE
- 3- TURN COMB LOCK DIAL AS PER MANUFACTURER'S INSTRUCTIONS

EMERGENCY ESCAPE DEVICE

- 1- APPLY ROTATING PRESSURE ON ESCAPE DEVICE KNOB
- 2- PULL KNOB TOWARD DOOR CENTER
- 3- PUSH DOOR OPEN



Left Hand Door Illustrated

Vault Doors & Emergency Egress

Vault Door is equipped with combination lock. The Inner Class 125 Door is equipped with Lever Handle with high quality unpickable key lock. This can also be specified to use a card access or biometric card access system electric strike on the inner door. (Electric Strike by Hardware Sub.)

Vault Doors are equipped with Emergency Egress Device.



Vault Details

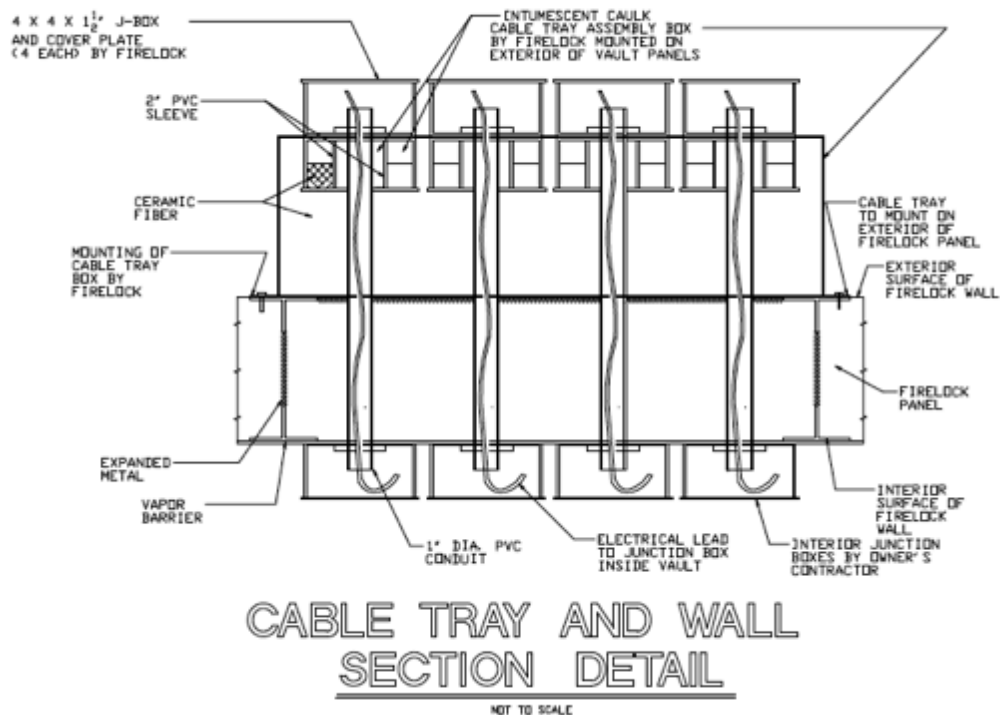
Vault Doors are typically equipped with an automatic hydraulic closer. But this limits the door open swing to 110° open.

Note that the light fixtures must be dust & vapor resistant type.



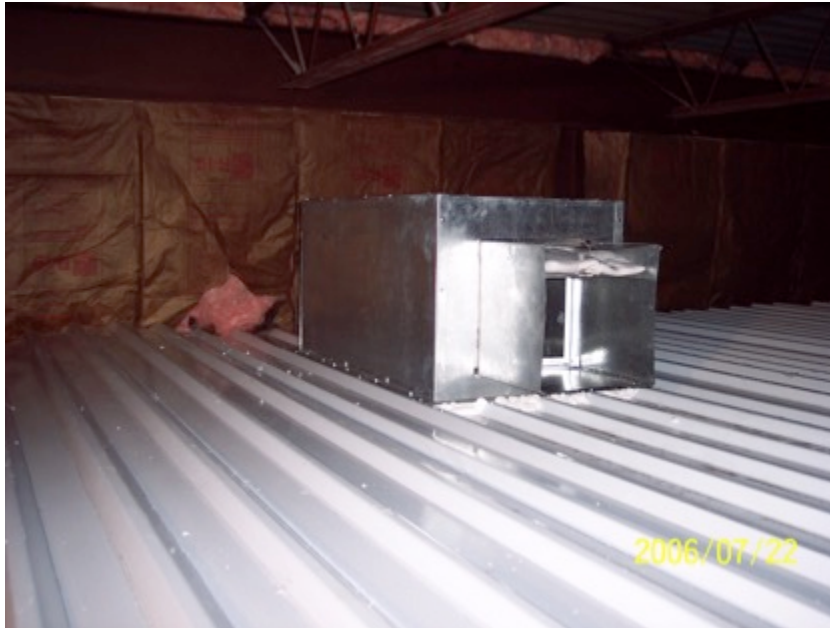
Cable Trays mounted on Roof Deck

Cable Trays use fire caulking inside the inner box, and a meltable conduit to run through to the interior of the vault. The caulk seals the conduit entry points. After caulking is complete, the top lid of the Cable Tray is fastened in place. Note the step down transformer also mounted to control the Automatic Door Closers



Electrical Penetrations through the Cable Tray

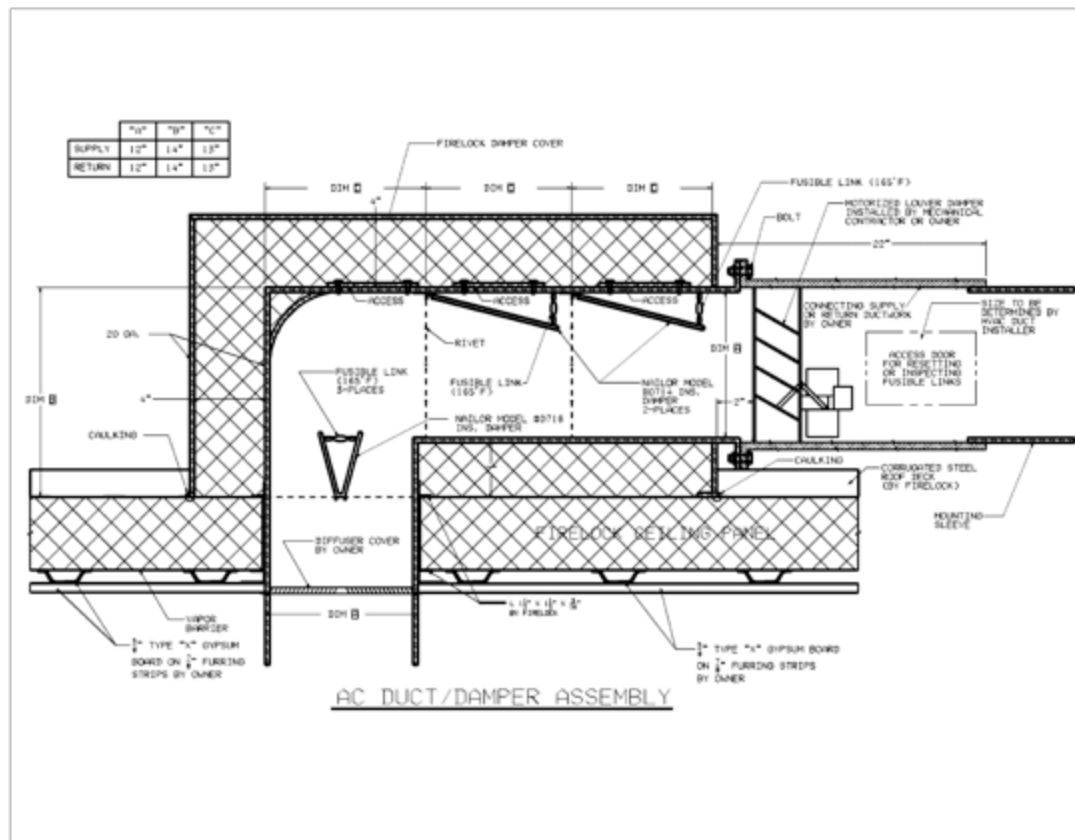
Cable Trays can enter through the roof panel or side wall panel as required by architectural design.

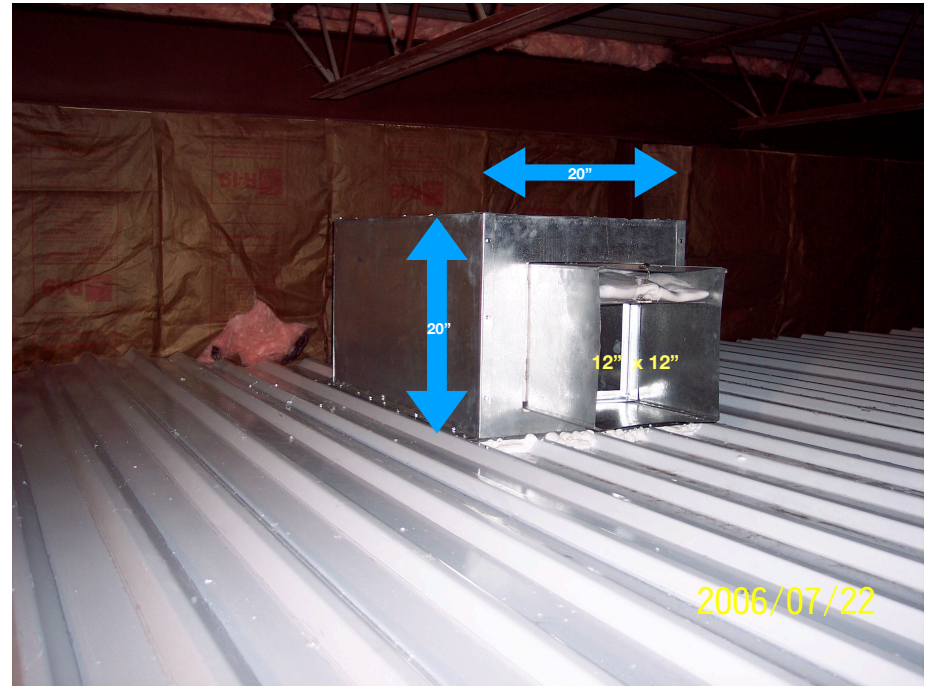
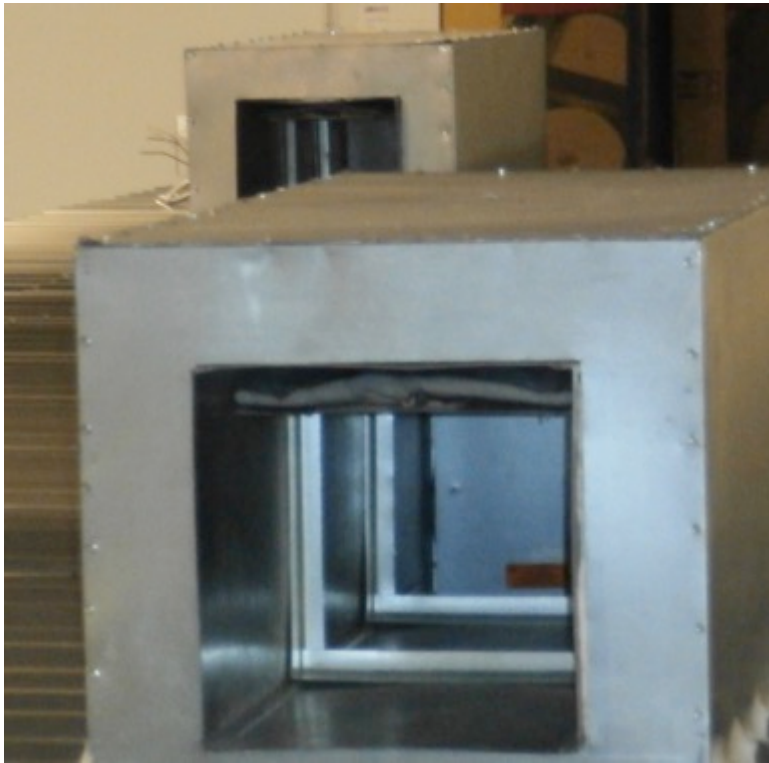


Fire Damper – Location Defined On Site

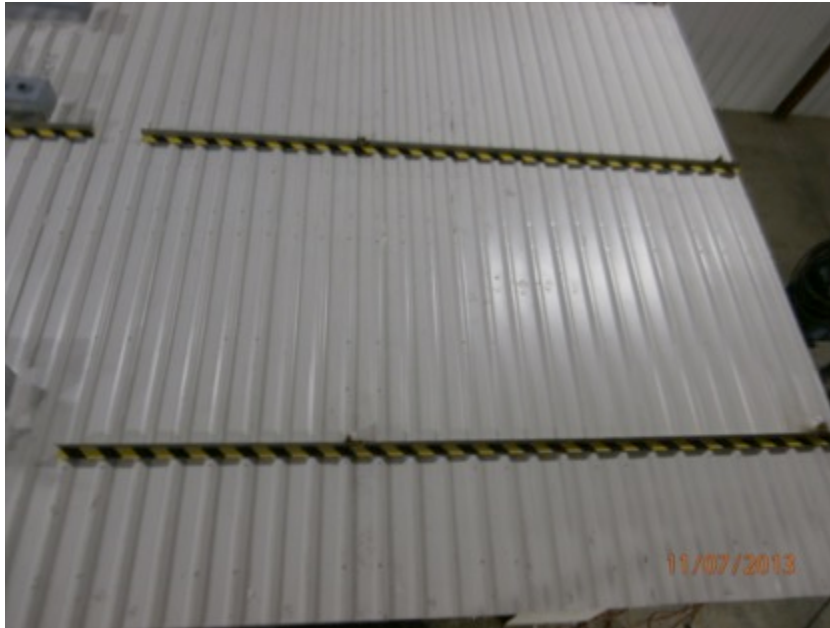
Unit penetrates panel to deliver conditioned air into the vault.

Fire Dampers are Triple Blade Units with and Insulated Housing





HVAC Fire Damper



Water-Shield Roof Deck

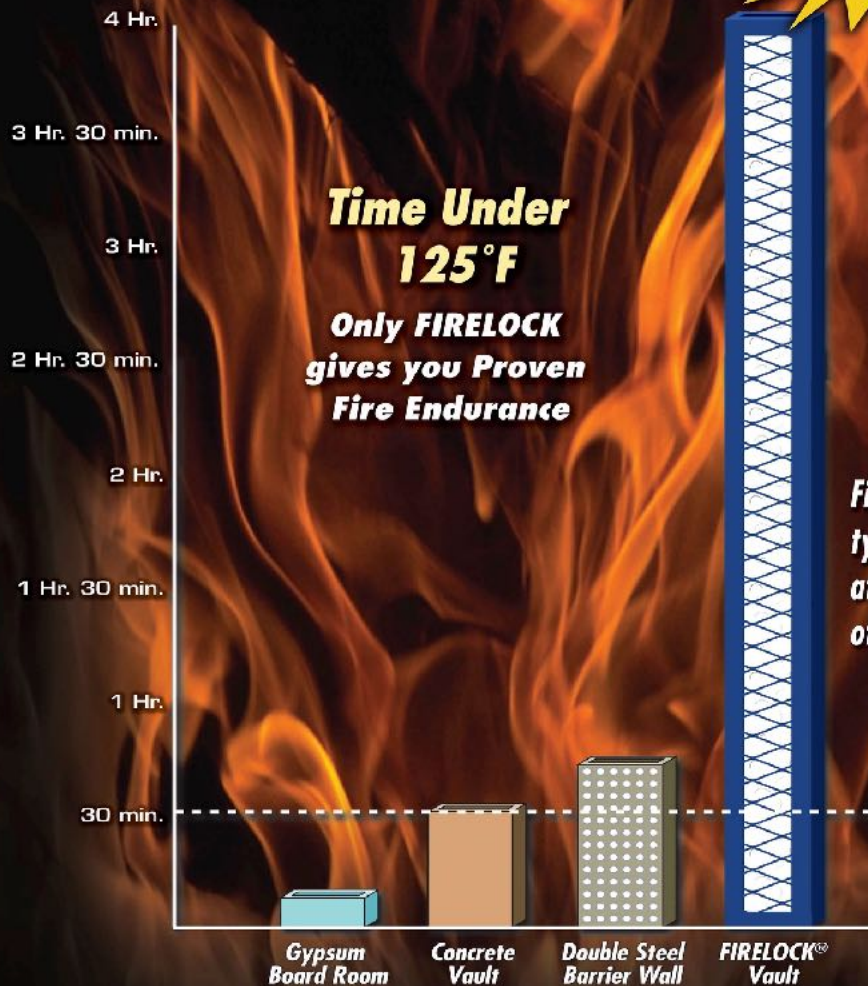
This vault is Tornado Rated and roof deck is anchored for high winds and water-resistance. The interior of the vault is a steel vapor barrier. The GC adds a $\frac{3}{4}$ " hat track to the interior of the vault and installs their drywall on this hat track. Structural can be exposed or hidden behind the drywall.

Media Protection in a Typical Facility Fire

**REAL
Protection
for Media**

**Time Under
125°F**
**Only FIRELOCK
gives you Proven
Fire Endurance**

*Fire fighting
typically begins
at an average
of 30 minutes!*



Listed
Point Laboratories
e Directory of Listed
Products, Materials
ies and www.opl.com
for Specifics

INSULATED PANELS

FIRELOCK Data Protection Systems™
Fleetwood, PA

Listing #16394-1

UL 72 Section 5 - Fire Endurance Test
UNVENTILATED Modular Vault with
Through Penetration and Door
Class 125 - 2 hrs.

Min. 4.5 x 9 Ft. Rectangular Vault

Min. 6 x 6 Ft. Square Vault

Class 350 - 4 hrs.

Min. 3 x 6 Ft. Rectangular Vault

Min. 4 x 4 Ft. Square Vault

and

ASTM E 119 - 5 hrs.

Modular Vault Panel