modular server vaulting

by Firelock

SOUTHWEST SOLUTIONS GROUP
business organization systems

A Truly Elegant Solution
to Protect
Mission Critical Systems

Why Protect Data Centers with FIRELOCK Vaults?

Building a data center without a fire suppression system to prevent the destruction of delicate equipment is inconceivable. Yet fire suppression systems only protect against fires that start inside the data center. This leaves data centers vulnerable to the threat of fires that start anywhere else in the building. All to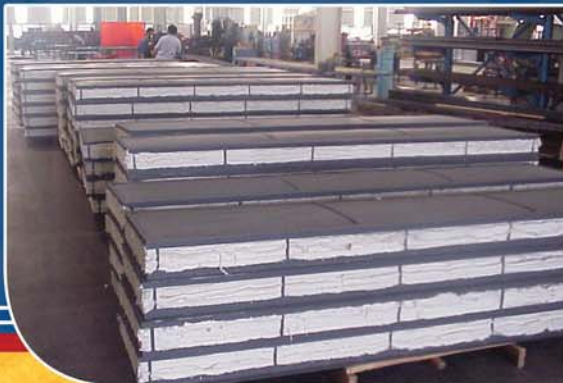o often, the sprinkler system in other parts of the facility is unable to extinguish fires due to malfunction or is overwhelmed by the intensity of the fire. By the time it reaches the data center area, no internal fire suppression system can save it. FIRELOCK® modular server vaulting safeguards this mission critical infrastructure with Class 125 protection.

How likely is a fire in your facility?

Current NFPA Statistics for Commercial Building Fires:

- 13,200 electrical fires
- 9,000 contained trash (wastebasket) fires
- 2,100 spontaneous combustion fires
- 10,900 Heating/HVAC equipment fires
- 2,300 fires started by lightning

FIRELOCK® modular server vaulting Components ~ *Essential pieces of server vaulting protection.*

Modular Panel System
Wall and roof panels feature ceramic fiber insulation and a built-in vapor barrier to protect heat-sensitive equipment.

Double Door Assembly with Auto-Closer
A double door is required to meet the stringent Class 125 requirement to protect data.

HVAC Coolant Penetrations
These insulated penetrations allow split HVAC systems to be used while maintaining a Class 125 vault rating.

Over *64%* of fires in commercial buildings are due to two things that a data center cannot do without:

Power and Climate Control Equipment

The equipment required to support data centers increases the risk of fire to adjacent areas:

- *Power generators*
- *UPS battery backup units*
- *High voltage transformers*

Fires can strike anywhere.

Recent fire statistics from the United States Fire Administration (USFA):

- *31,000 cases of arson in the U.S. resulting in $755 Million in damages*
- *Over 111,500 non-residential fires totaling over $2.6 Billion in damages*

Providing Real FIRE PROTECTION for Servers

"When a fire starts outside the data center and burns into the server room, the disaster escalates and becomes catastrophic."

—Fire Protection Engineer

Unimount Ceiling Grid
Cable management systems mount neatly and efficiently to the mounting rails installed by FIRELOCK.

Insulated Cable Penetrations
All data and power cables are routed through insulated assemblies and utilize ceramic fiber and intumescent caulking to protect these vulnerable areas.

Proof of Protection

Laboratory Fire Tests Reflect Firelock Vault's Unprecedented Levels of Data Protection

Firelock Vault Panels, Cable Trays and Vault Doors are the first to provide Class 125 Listing and Labeling for Modular Data Vault Chambers

Omega Point Laboratories, Inc. put a complete Firelock Fireproof Modular Vault assembly through a grueling 5-hour test under the UL-72 ASTM-119 Time Temperature Curve. The Firelock Vault greatly exceeded previous documented levels of protection. The results of the testing are shown in the label below.

Test Description: The Vault was subjected to UL 72/ASTM E-119 Time Temperature Curve with monitoring thermocouples on the cold face and/or interior wall surface of the vault wall. The Vault was required to maintain predetermined temperature limits for the protection of server equipment and magnetic media stored within the vault chamber. The time limits and associated temperature limits are described in the chart. Vault Categories are impacted by Vault chamber size and therefore the listings are as follows:

INSULATED PANELS

OMEGA POINT LABORATORIES
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

Listed

Omega Point Laboratories
Reference Directory of Listed
Building Products, Materials
& Assemblies and www.opl.com
for Specifics

OMEGA POINT LABORATORIES is accredited by the American Association for Laboratory Accreditation (A2LA) as well as the International Conference of Building Officials Evaluation Service (ICBO ES).

Available Vaults/Ratings from Firelock Modular Vaults

Unventilated Vaults Constructed of the Following Sizes:	Vault Rating
9' x 9' or larger in either or both dimensions	Class 125 - Two Hour
18' x 18' or larger in either or both dimensions	Class 125 - Three Hour
28' x 28' or larger in either or both dimensions	Class 125 - Four Hour

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