

Cutting Edge Vault Protection



Executives - challenged to safeguard their information assets and computer media with the most secure vault technology - look to FIRELOCK for cutting edge protection.

A nationwide network of sophisticated data vault storage centers provides tested security for their clients' data media. Over fifty major markets are served using the FIRELOCK Data Vault and new geographic areas are being added each year with a goal of nationwide protection.

Kutztown, PA - The digital revolution has transformed the way human beings work, communicate and share ideas—creating an unstoppable tidal wave of information that must be collected, processed and securely archived for future use.

Because approximately 93% of all business documents are created digitally, and only 30% are ever committed to paper, maintaining vital records is of growing concern. Digital media—including CD-ROMs, tape backups and diskettes—are fragile, and can become unreadable in a few short years if they become exposed to conditions such as high heat, humidity and strong magnetic fields during storage. And they are particularly vulnerable to conventional fire extinguishment agents, like water.

In the pre-digital age, valuable documents were often archived in concrete vaults which were adequate to protect papers from fire and environmental degradation. But concrete vaults can cause serious problems for sensitive digital media, most of which are damaged at temperatures greater than 125° and relative humidity above 80%. In a fire, escaping steam from concrete walls can raise the temperature inside a vault to 212° F and relative humidity to 100%. Concrete vaults are also susceptible to moisture-related problems such as molds and mildew.

In 1985, in response to industry concerns about the long-term survivability of digital media, Firelock was founded. The company, located in Pennsylvania, began to manufacture a new kind of modular storage vault, using panels filled with a heat-resistant ceramic material in place of conventional poured-in-place concrete vaults. Since then, Firelock has grown to become the largest designer and manufacturer of fireproof vaults in the world.

According to Hugh Smith, Firelock's Senior Vice-President and Director of Marketing, both active and passive fire protection play a key role in the design of his company's vaults. "Digital records are most likely to be damaged over time by fluctuations of temperature and humidity, magnetic fields and even common dust," says Smith. "That's why Firelock vaults are equipped with shielding and environmental controls to maintain optimal storage conditions. But it's fire that really gets peoples' attention," he maintains, "because for many companies, even a relatively minor fire could result in enormous financial losses or even put them out of business."

The NFPA 232 Committee, on which Smith and other insurance company and fire protection professionals serve, pointed out that not only had there been a tremendous increase in electronic media requiring protection from heat and fire, but that there was also a great potential for damage to fragile media from water, smoke and even low rises in heat.

Because of these concerns, in 2000 the NFPA 232 Committee re-wrote the "Protection of Records" Standard to allow the use of gaseous clean agent fire suppression systems in vaults storing vital records. "Clean agents, by definition, do not leave a residue behind when they evaporate, which is essential for digital media and other easily-damaged objects," Smith explains.

The challenge for Firelock was choosing a clean agent that would meet their unique requirements. "Firelock has built its reputation by providing the very best vaults in the business," Smith states. "We weren't going to risk that reputation by equipping them with fire protection agents that have a questionable environmental profile or may be regulated out of existence in a few years."

The most recent trend in the digital world is to create server vaults using the Firelock Modular Vault. The server vaults include “Unimount Track Ceiling” to mount wire tray raceways above the servers which eliminate the need for expensive raised computer floors. Special environmental monitors track temperature, humidity, moisture on the floor, light and sound levels on a 24/7 basis and alert the manager with cell phone or PDA email alerts. These monitors also include special camera units to allow the manager to view the vault interior via a web cam, keeping the vault interior always available for observation.

“Novec 1230 fluid offers fast, efficient extinguishment, which is critical—because even a small fire inside the vault can do enormous damage to sensitive electronic media,” declares Smith. “With Novec 1230 fluid, we can charge the vault to extinguishing concentration levels faster, without worrying about toxicity. Because our vaults are sealed so tightly, we can get by with a 4.2% concentration, instead of the standard 5 to 6%, which is still far below the NOAEL (“No Observed Adverse Effects Level” - a measurement of a chemical substance’s potential toxicity) of 10%. That’s a margin of safety our customers can live with.”

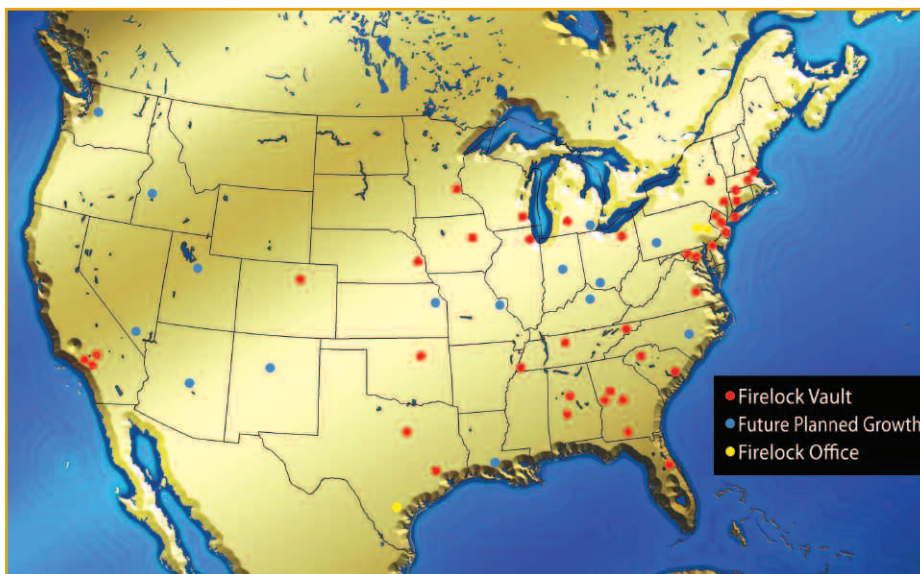
“It’s also critical,” says Smith, “that the agent do no harm to the materials stored in the vault. Novec 1230 fluid is not electrically conductive, so it won’t damage the media or interfere with computers, servers and other equipment operating inside the vault,” he says. “In an emergency, it just does its job and evaporates without a trace. It’s almost as though the fire never happened.”

Firelock’s unique approach to protecting vital computer media and servers has led to the development of a nationwide network of secure, cutting edge data storage service providers. This Firelock Affinity Network or FAN Club, as they are known to IT Managers and Records Managers, provides clients with offsite storage of vital media necessary for back-ups and disaster recovery. These independent data storage professionals work together to allow the most security conscious companies a perfect environment for protecting their information assets.

Trust is what Firelock’s business is all about. “Our customers have entrusted assets worth untold billions of dollars, as well as irreplaceable records and artifacts, to the protection of Firelock vaults,” says Smith. “That’s an awesome responsibility, and one we take very seriously”.



Exterior view of a newly-installed Firelock media storage vault.



The “FAN” Network of sophisticated Data Vaulting Centers continues to expand across the United States.



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