Heat Wave Threatens Unprotected Data Centers and Offsite Data Storage Facilities

The recent heat wave is more than just a threat to the health and comfort of people in the grips of this lingering weather pattern. Many businesses that rely on outdoor work, such as landscaping and construction, have had to curtail or shut down their operations out of concern for their employees' safety. The blistering heat also affects critical IT infrastructure and offsite data storage operations. Data centers must maintain temperatures below a specific threshold (usually around 80-degrees F.) before the servers and other equipment start to malfunction and shut down. As any data center operator can tell you, downtime is not tolerated for any reason.

A less obvious but equally critical issue is the protection of temperature-sensitive magnetic media that is used to store backup data. The data tapes that contain this mission critical information must be protected from fluctuations of temperature and humidity levels, and can lose data when exposed to temperatures over 125-degrees F. FIRELOCK builds fireproof modular vaults to maintain the interior temperature below this critical threshold even if the exterior temperature reaches 2,000-degrees in a catastrophic fire. A beneficial by-product of the unsurpassed insulating capabilities of these vaults is an R-33 insulation rating. This makes them very economical to climate control, even when a heat wave strikes.

Organizations of all sizes can enjoy the protection of these Class 125 vaults by utilizing the offsite data storage services of one of the members of the network of FIRELOCK-equipped companies located all over the country. There are many offsite storage companies that claim to offer climate controlled tape storage, but most are just a partitioned area of a warehouse with an air conditioner. When exterior temperatures soar the lack of insulation in the tape storage area pushes these substandard HVAC systems to the point of failure, and critical information is at risk of being lost forever. It's not unusual for rolling blackouts to affect large areas during a heat wave when power demand outpaces supply. Most conscientious offsite data storage firms are equipped with backup power generators for such emergencies, but even if they malfunction the media within will be protected. The climate inside a FIRELOCK vault will remain stable for many hours due to the excellent insulation of the vault structure and double door system.

For data centers, the heat wave that is roasting most of the U.S. creates great stress on the HVAC systems that struggle to keep server rooms cool even in mild weather. The chillers must work even harder than usual to keep cool air flowing into the data centers filled with heat-producing IT equipment. This strain is exacerbated when ambient air temperatures increase the workload in the server room. That's when HVAC systems can fail and data centers shut down.

One highly effective way to prevent this scenario is protecting the critical areas of the data center with a server vault. Not only are these vaults capable of protecting vital IT equipment from catastrophic fires, the vault's insulation protects the critical space from increases in ambient air temperature and creates a stable environment year round. Power

consumption is also reduced when the server room is insulated from exterior heat. Because these modular vaults are custom designed for each client they can be installed in existing rooms without wasting space. The modular design also allows them to be expanded or relocated in the future.

In time this heat wave will run its course and most of the country will be back to more moderate weather, but there is no doubt we will have heat waves again in the future. Those who prepare for extreme conditions will have peace of mind from knowing their data centers and critical backup tapes are safe, no matter what Mother Nature brings.