Access Control and Fire Alarm Integration

Access control systems secure doors using electric locks and restrict passage through those doors to authorized individuals. In the event of a fire, such a system could potentially limit an individual's ability to safely exit and could also restrict access by fire fighters. For this reason, most municipalities have design rules for access control systems and require a permit for their installation and use.

In general, if a building (or suite within a building) has a fire alarm and an access control system, the systems should be integrated so that if the fire alarm is triggered, the access control system will release its locks to allow free entry and exit.

Various factors are considered by a municipality in determining whether such an integration is required, including the type of locks used, which doors are secured, if there are alternative doors that would allow egress, and the floor within a building where the tenant is located.

When an integration between access control and fire systems is required, several things must occur:

- A permit must be filed by the access control vendor (usually required anyway)
- The fire vendor must provide a relay connection and any required programming to support it
- Someone must provide a 2 conductor wire between the access control system and the fire relay
- A pre-test must be scheduled, which requires a tech from both the fire and access control vendors. In multi-tenant buildings, these are usually outside of normal business hours. These vendors confirm that a fire alarm will successfully trigger (via the relay) a release of all required locks.
- A final test must be schedule, which requires a tech from both the fire and access control vendors, as well as an inspector from the local municipality. This, too, is usually performed outside of normal business hours.

Infassure includes in access control quotes a line item that covers the permitting expense, as well as our attendance of the pre-test and final. Assuming an integration into the fire system is required, there is and additional that is charged by the fire vendor to provide the relay and to attend the tests. This fee varies widely, depending on the vendor. We have seen this fee range as low as $600 and as high as $1500. We always encourage the fire vendor to bill the responsible party directly (usually tenant or landlord) rather than marking it up and billing it ourselves.