



The Three Rings of Security

Security cameras are some of the easiest and most effective tools to keep businesses and homes safe from intruders and other threats. But choosing between the seemingly countless number of brands can feel like a nearly impossible task, especially for people who are investing in a surveillance system for the first time.

Let's look at the three rings of camera security – Outer Ring, Middle Ring, and Inner Ring – their roles and how they work together.



Tim Shafer

Sales Consultant, Security Expert
Detex Corporation

The Outer Ring

The outer ring is your perimeter protection, which may include your property line, fence, and exterior building walls.

To enhance security in this area, consider installing CCTV cameras that monitor the outside of your premises. These cameras deter potential thieves, as they must approach your location, and their presence signals that you take security seriously. These cameras allow you to observe any suspicious activity from the safety of your store.

Perimeter cameras should be strategically placed to ensure complete coverage of the area you want monitored, with no blind spots caused by lapses in camera coverage. Make sure that the area around the cameras is free of obstacles that could obstruct their view. Remember, it's important that the entire perimeter is monitored effectively, with the ability to clearly capture the presence of individuals both during the day and at night.

Additionally, install alarm devices that protect the perimeter openings and areas such as skylights and interior walls. Your store may have a high security alarm but if your neighbor does not, a thief can use their space to launch an attack on your space.

The Middle Ring

This is the actual space where your business operates. Are there good locks on the doors? Do you use burglary-resistant glazing or laminated glass in all windows and doors? Does CCTV cover all entry points, so you get good facial video of people entering your space? Do you have adequate interior motion detection to prevent a thief from hiding in your store after hours? Do you have hold up alarms in several places?

These are all questions you need to ask yourself, and more importantly, need to answer before making a security decision.

Apart from physical security, the middle ring also focuses on managing the human element of security. Do you have a screening practice before hiring to weed out the unqualified or persons with criminal history? Are background investigations repeated at specific intervals?

Also, the alarm system that protects your space should be monitored by a UL listed central station monitoring service. The alarm system should include line security to detect any tampering with the signal transmission path.

Access Control

Access control enables you to see who comes in and out of your facility. Access control devices should be on the door immediately leading into the operation area or storage area. This includes cases where vestibules, air locks, and mantraps are located right before an operations or storage area access point. A perimeter intrusion detection should be located and positioned in a way that secures the entire perimeter. Examples of intrusion detection devices include door or gate contacts, fence intrusion detection sensors, photoelectric beam sensors, motion detectors and glass break sensors. An intrusion detection system should be connected to a back-up generator to allow the system to operate during a power outage.

Walls, Doors, and Ceilings

Walls should be strong and sturdy enough to be considered an inefficient point of entry. Doors, door locks and frames should be solid and strong enough to prevent easy breaching (minimum 16 gauge). Ceiling or service hatches should be secured with a lock. Hinge pins should be located on the inside of the secured area near the hinges to help prevent the removal of the door.

Must make sure windows are strong and sturdy enough so that breaching presents challenges. Window construction such as thickness, number of panes, and material results in a sturdy barrier.

Vent openings should be secured with protective coverings such as metal grills, bars or expanded metal mesh to prevent someone crawling through.

Fences

Fences should be continuous, without breaks and well maintained. The bottom of the fence should be close enough to the ground to prevent entry from underneath. If the fence passes over a trench, the opening should be secured with fencing or other barriers. In addition, the fence should be constructed in a manner that prevents someone from easily jumping or climbing over it.

The Inner Ring

The Right Security Combination

- What are the ratings of your safe? The following are some applicable insurance ratings: "ER" Rate Safe (E Revised) - U.L.™ TL-15 Rate: Safes given a U.L.™ TL-15 rating have all passed standardized tests defined in UL© Standard 687 using the same tools and usually the same group of testing engineers. The label requires that the safe be constructed of 1-inch solid steel or equivalent. The label means that the safe has been tested for a networking time of 15 minutes using "...common hand tools, drills, punches, hammers, and pressure applying devices." Net working time means simply "when the tool comes off the safe the clock stops." There are over 50 different types of attacks that can be used to gain entrance into the safe. Usually, they will try only two or three - based on what they know about the product, and they know a lot.
- "F" Rate Safe - U.L.™ TL-30 Rate: The tests given for this rating are essentially the same as the TL-15 tests except for - you guessed it - the networking time. They get 30 minutes and a few more tools to help them gain entrance. Keep in mind these engineers have the manufacturing blueprints and can disassemble the safe being tested before the test begins to see how it works. They know their stuff.
- G&A Rate Safe - U.L.™ TL-30X6 Rate: The tests for these safes are essentially the same as the TL-30 test, except that the safe is tested on all 6 sides, including the floor of the safe. Again, the engineers can disassemble the unit prior to testing and have access to the blueprints to see how the safe is built and how it works.

Does your alarm system protect the safe? Is the safe visible on your CCTV system? Can you stream the vault image from the store to view at home?

Inside Cameras

A business will need around 16 to 64 cameras for complete safety. However, this depends on the size of the property you're trying to protect, your budget, and a host of other factors.

Consider the video quality on your CCTV system: is there enough detail to make identification? Most agencies do not have image recognition software. If all your videos look blurred and nondescript, your system isn't doing its job correctly.

Consider both overt and covert CCTV camera placements. Covert cameras at entry points can capture good facial images of people entering your store. This can be very valuable in identifying a thief after an event. Make sure you have adequate lighting for good video after hours.

Securely Store Your Equipment

Protect your recording equipment by securing in a locked cabinet or closet. Consider off-premises storage of digital images. Digital recording may give better quality unless you routinely clean, service, and replace videotapes.

Consider the following elements regarding the retention of security related documents:

- How will they be retained?
- Which individuals will have access to the records and where they will be stored?
- Adequate video storage capacity and archiving procedures.

Do you manage key control for both exterior doors and showcases? Lost or missing keys may have been stolen and not simply “lost.”

Now, let’s look at how the three rings of security apply to your space.

Small Businesses and Homes

If your space is on the smaller side, or even if you’re just looking to install a security system in your home, the following security camera providers are right for you. These businesses make smaller cameras with a more limited range of capabilities, which often end up being better for spaces that need low coverage without many bells and whistles.

Mid-Size and Large Businesses

Larger spaces require more coverage and complexity than smaller facilities, so your security cameras will be bigger, more obvious, and more expensive. Look to create a complete security system when you choose cameras and pay special attention to each brand’s how well each brand’s software integrates with other components of your security setup. Good software integration can enhance the overall effectiveness of your security system by allowing for seamless communication between devices, easier access to recorded footage, and more robust monitoring features.

Choosing your security cameras is just one part of implementing video surveillance. The video management software behind the camera needs to be able to support the functions you are looking for as well as integrate with your access control if you want to combine access events with surveillance footage. Protect your recording equipment by securing it in a locked cabinet or closet. Consider off-premises storage of digital images. Digital recording may give better quality unless you routinely clean, service and replace videotapes.

The site covers all areas within the established perimeter. It is the license holder's responsibility to define and indicate their proposed perimeter. When designing the site, the license holder should consider the "Rings of Protection" concept to enhance security and safety measures.

Conclusion

As you evaluate the three rings, you will note that they depend on each other for stability and support. A weak outer ring would have to be supported by strengthening the two inner rings. Similar actions should be considered if you sense that any weaknesses exist.

By approaching the problem from a three-ring perspective, you can make your facility more burglary and theft resistant than others. You don't have to make your location "burglar proof" but simply demonstrate that it is better secured than another target.



Tim Shafer

With decades of experience in access control and perimeter security, Tim Shafer is a trusted expert in the field. As a proven sales leader and dedicated community advocate, he blends deep industry knowledge with a passion for building safer environments. His work bridges innovative security solutions and meaningful client partnerships across diverse markets.

To connect with Tim for questions, consultations, or partnership opportunities, please contact him at tbs@detex.com or (800) 729-3839 ext 4335.