

**January 2015 Physical Security Design Manual(s) for VA Facilities COMPLIANCE CHECKLIST**

CHECKLIST DATE	
PARENT FACILITY NAME & NUMBER	
LEASE NAME/ID	
LOCATION (CITY & STATE)	

VA ENGINEERING REPRESENTATIVE  
VA POLICE REPRESENTATIVE  
A/E and/or PSDM CONSULTANT

Name	
Name	
Name	

Leased Bldg SQFT	
NEW or EXISTING	

LF

**1. INTRODUCTION**

CRITERIA AND CHAPTER	LIFE SAFETY: NEW Facility or Lease	LIFE SAFETY: EXISTING Medical-Related Lease	EXISTING MEDICAL-RELATED LEASE (YES, NO, N/A)
Scope	See 1.0 -1.1 in PSDM for Purpose, and Authority.		
<b>1.2 VA Facilities</b>			
<b>1.2.1 VA Owned Facilities</b>	Life-safety protected facilities that are owned and operated by VA shall follow the requirements of this document.		
<b>1.2.2 VA Medical-Related Leased Facilities</b>	This section provides guidance in the determination of applicable physical security standards for VA medically-related leased facilities. Refer to section 1.10.1 Exceptions, as necessary.		
<b>1.2.2.1 Leased Built-to-Suit Facilities up to 150,000 nuf</b>	Leased built-to-suit facilities up to 150,000 net usable square feet shall follow the requirements in the VA Physical Security Design Manual (PSDM) for Life-Safety Protected Facilities.	<b>1.2.3.1 Existing leased facilities up to 150,000 net usable square feet</b> shall comply with The Risk Management Process: An Interagency Security Committee (ISC) Standard dated August, 2013.	
<b>1.2.2.2 Leased Built-to-Suit Facilities greater than 150,000 nuf</b>	Leased built-to-suit facilities greater than 150,000 net usable square feet shall have a determination made by the local VAMC Director with concurrence by the Network Director, and approved by the Under Secretary for Health for Operations and Management or delegated approving official serving as the authority having jurisdiction (AHJ) as to whether the facility will be classified as mission critical or life-safety protected. This determination shall be identified and submitted in the original OMB-300 as part of the initial Capital Planning Process. <ul style="list-style-type: none"> <li>When the facility is classified as mission critical, follow VA PSDM for Mission Critical Facilities, as allowable per local, city, and state building codes.</li> <li>When the facility is classified as life-safety protected, follow the VA PSDM for Life-Safety Protected Facilities.</li> </ul>	<b>1.2.3.2 Existing leased facilities greater than 150,000 net usable square feet</b> shall have a determination made by the local VAMC Director with concurrence by the Network Director, and approved by the Under Secretary for Health for Operations and Management or delegated approving official serving as the authority having jurisdiction (AHJ) as to whether the facility will be classified as mission critical or life-safety protected. This determination will be identified and submitted in the future OMB-300 as part of the Capital Planning Process. <ul style="list-style-type: none"> <li>When the facility is classified as mission critical, follow VA PSDM for Mission Critical Facilities, as allowable per local, city, and state building codes.</li> <li>When the facility is classified as life-safety protected, follow The Risk Management Process: An Interagency Security Committee (ISC) Standard dated August, 2013.</li> </ul>	

**2. GLOSSARY OF TERMS, see PSDM.**

A/E: Architect(s) and Engineer(s) consultants

Alterations: Major alterations or renovations define a project where the area of renovation, including any associated addition, is equal to or greater than 50 percent of the area in the building in which the work is to be performed. In cases where renovations involve changes to the Anti-ram: Tested for resistance to a moving load impact at a given velocity and rated in terms of kinetic energy or "K" rating in tests for certification under Department of State programs or "M" rating in tests for certification under ASTM F2656.

Authority Having Jurisdiction (AHJ): The physical security decision-maker for the facility, such as the administration head, assistant secretary, other key official, or deputy assistant secretary, who is responsible for overseeing implementation of physical security requirements for Balanced Design: Controlled failure of a system with an established hierarchy of component failures, where connections are designed for the maximum strength of the connecting components and members supporting other members are designed for the maximum strength of the

Cache: A storage facility requiring a high level of security, often referring to facilities storing pharmaceuticals or other supplies for use in emergencies.

Charge Weight: The amount of explosives in a device in trinitrotoluene (TNT) equivalent.

Closed Circuit Television (CCTV): A video system in which an analog or digital signal travels from a camera to video monitoring stations at a designated location. Historically, the term for a security video system was closed circuit television (CCTV), a closed analog video system. Very

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<b>3. Site Considerations</b>						
Scope	See 3.0 in PSDM for Scope, Purpose, and Goals					
<b>3.1 Stand-off Distance</b>	No vehicle shall be parked closer than 25 feet (7.6 m) to any side of a life-safety protected VA facility, regardless of the building height. No unscreened vehicle shall be permitted to travel closer than 25 feet (7.6 m) and no screened vehicle shall be permitted to travel within 5 feet (1.5 m) of any life-safety protected VA facility. These minimum standoff distances are to be provided to the edge of the curb line demarcating the internal roadways and parking within a VA campus. For facilities not located within a campus with internal roadways or parking, the minimum 25 feet (7.6 m) standoff is to be provided to site perimeter fence.	3.1.1 Requirements for standoff distance at existing facilities shall be the same as in section 3.1.				
<b>3.2 Perimeter Fences</b>	Perimeter barriers shall consist of fences, walls, a combination of these, and gates as needed for access. The perimeter barrier shall be contiguous around the entire facility or the campus within which the facility is located. The barrier shall be designed to resist forced or surreptitious entry using hand tools, such as by spreading bars of a fence to provide a passable opening. Fences shall have sufficient lateral support to resist overturning by manual force. The perimeter barrier, or pedestrian barrier, does not have to be anti-ram rated unless the barrier serves to mitigate a determined risk. Access gates shall be located to direct pedestrians and vehicles in ways that enhance the operational environment of the security force.	3.2.5 Requirements for perimeter fences at existing facilities shall be the same as in section 3.2.				
3.2.1: Perimeter Fence Location	The perimeter barrier shall be located as close as possible to (or along) the property line of the site on which the facility is located such that the standoff distance to the barrier is maximized and satisfies the minimum standoff distance requirements.					
3.2.2: Perimeter Fence Height	The perimeter barrier shall have at least 8 feet (2.4 m) between potential horizontal footholds or designed with other anti-climb measures.					
3.2.3 Material	Fences shall be metal and of heavy industrial-grade construction with bar spacing at a maximum of 5 inches (127 mm) on center. Chain link fences and gates shall not be used. Walls shall be of reinforced masonry or concrete construction.					
3.2.4: Gates	Gates shall be of the same or similar design and materials as the adjacent fences. Location of the gates shall have standoff from public streets to provide the security force with early warning of approaching pedestrians or vehicles. Gates shall be located away from known criminal adjacencies (such as prisons and high crime areas). The site adjacent to the gates shall provide transitional, non-silhouette lighting, and traffic calming features. Gates shall be access card operated from the outside or as prescribed by the AHJ.					
3.2.4.1 and 3.2.4.2: Pedestrian and Vehicle Gates	Pedestrian and bicycle gates shall swing in the outward direction and shall be fully accessible to persons with disabilities in width and operation. Vehicular security gates shall be sliding or cantilevered (no tracks) and only wide enough to accommodate one vehicle lane. The vehicular gates shall be capable of being locked, but do not have to be anti-ram rated.					
<b>3.3 Vehicle and Pedestrian Screening</b>	No additional physical security requirements.					
<b>3.4: Anti-Ram Rated Vehicle Barriers</b>	Vehicle barriers shall be selected on the appropriateness of the architecture of the facility and the specifics of the site and natural environment.	3.4.3 Requirements for vehicle barriers at existing facilities shall be the same as in section 3.4.2, or as determined by the facility risk assessment.				
3.4.1: Active Barriers	No additional Physical Security Requirements.					
3.4.2: Stationary (Passive) Barriers	Anti-ram rated natural or manmade stationary barriers may be used. Landscaping examples include berms, gullies, boulders, trees, and other terrain. Hardscaping examples include benches and planters. Structural examples include walls, bollards, and cables.					

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3.4.2.1: Locations	Adjacent to high risk perimeter fences, protection for site utility equipment, at building entrances, at vehicle or ambulance drop-offs, at cafeterias, gathering areas, and other areas requiring additional protection from vehicles. High risk perimeter fences are portions of the fence at which there is a perpendicular vehicular roadway length equal to or greater than 200 feet (61 m), on which a vehicle can achieve a high approach speed.					
3.4.2.2: Structure	See Chapter 7, section 7.4 Anti-ram Resistance, for structural requirements of passive barriers.					
3.4.2.3: Accessibility for Persons with Disabilities	Coordinate locations of passive barriers, such as bollards, with accessibility requirements when placed adjacent to or across a path of pedestrian travel.					
3.5 Parking		3.5.4 When separation of types of traffic is not feasible, card-controlled access gates and other traffic separation measures shall be used.				
3.5.1: Location	No new facilities shall be built with parking in or under the facility.	Parking in or under an existing VA facility shall be restricted. Where parking must remain in or under a mission critical building, all vehicles entering the parking must be screened. Where screened parking is permitted, structural hardening of columns, load bearing walls, and slabs in the garage is to be provided per Chapter 7.				
3.5.1.1: Surface Parking	Vehicles shall not be parked or permitted to travel closer than 25 feet (7.6 m) to any life-safety protected VA facility.	3.5.4.1 Surface parking: Passenger vehicles shall not be parked closer than 25 feet (7.6 m) to any life-safety protected VA facility. Existing parking within this standoff distance shall be eliminated, where possible. Where surface parking must remain within the 25 feet (7.6 m) standoff distance, the VA life-safety protected facility must be hardened to achieve the performance requirements for the corresponding increase in blast loads. See Chapters 6 and 7 for additional information on the façade and structural hardening requirements.				
3.5.1.2: Parking Structures	No parking structure, whether on- or offsite, and whether above or below grade, shall be constructed closer than 25 feet (7.6 m) to any VA life-safety protected facility. Parking in or under a VA facility shall be restricted. No unscreened vehicles shall be permitted to be parked within or under any VA facility.	3.5.4.2 Parking structures: Where parking structure, whether on- or offsite, and whether above or below grade, must remain within the 25 feet (7.6 m) standoff distance, the VA life-safety protected facility must be hardened to achieve the performance requirements for the corresponding increase in blast loads. See Chapters 6 and 7 for additional information on the façade and structural hardening requirements.				
3.5.2: Access	Project meets all vehicle access requirements of 3.5.2.1 and 3.5.2.2.					
3.5.2.1: From Vehicle Entrance	From vehicle entrance: Access roads for all vehicles shall allow for separate driveways to the building entrance, service yard, or parking. <ul style="list-style-type: none"> <li>Separate entrances to the site shall be provided for patients and visitors, employees and staff, emergency, and service and delivery vehicles.</li> <li>Access roads from entrances to parking for each vehicle type shall be separated, but may be connected for maintenance and emergency vehicles through gates controlled by access cards.</li> <li>Access roads shall be configured to prevent vehicles from attaining speeds in excess of 25 mph (40 kph).</li> <li>Straight-line vehicular approaches to a facility shall be avoided.</li> </ul>					
3.5.2.2: From Parking to Facility	See Chapter 4 for information on building entrances.					
3.5.3: User Type: Parking based on Building Users	In addition to the requirements of sections 3.5.1 and 3.5.2, the following are parking and access requirements for physical security according to specific users.					
3.5.3.1: Patients and Visitors	Patients and visitors: Parking and access for patients, visitors, and the persons transporting them to and from the VA facility shall be as convenient as possible to the main entrance, subject to the requirements of section 3.5.1.1. Parking and facility access shall comply with accessibility requirements for persons with disabilities. <ul style="list-style-type: none"> <li>Where vehicles are unscreened, make site provisions to accommodate a shuttle service for persons needing assistance.</li> <li>Accessible shuttle stops or shelters in parking areas.</li> <li>Shuttle parking at building entrance.</li> </ul>					

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3.5.3.2: Emergency	Emergency entrance shall be provided with a small parking area for emergency patients and space for ambulances as convenient as possible to the emergency entrance, subject to the requirements of section 3.5.1.1. Ambulances shall be permitted to approach the building directly and not be subjected to the distance requirements of this chapter.					
3.5.3.3: Childcare Parents and Staff	All requirements for maintaining standoff distance between vehicles and the building shall apply. Child drop-off and pick-up shall be visible from the office of the childcare/development center and shall be monitored by VASS. All vehicular areas, onsite and adjacent offsite, including parking and access roads, shall be separated from playground areas by fences designed to prevent children from entering the vehicular areas and vehicles from entering the playground.					
3.5.3.4: Vendors	The standoff distance and screening requirements of sections 3.1 and 3.3 apply. Vendors shall use the delivery vehicle entrance and service yard at the loading dock. Parking shall be provided for vendors in the service yard.					
3.5.3.5: Employees	Where employees share access with patients and visitors, the entrance to the employee parking shall be controlled by a card-actuated gate. Employee parking areas shall be monitored by VASS. Emergency alert systems, such as blue phones, shall be provided at the discretion of the VA Police.					
3.6 Site Lighting		3.6.3: Site lighting for existing facilities shall meet the requirements in section 3.6.				
3.6.1: General Requirements	Provide minimum maintained illumination levels for pedestrian pathways, bicycle and vehicle routes, parking structures, parking lots, wayfinding, signage, pedestrian entrances, and building services which will provide safety and security for personnel, buildings, and site. Refer to the VA Electrical Design Manual for illumination requirements. Lighting shall provide for safety and security without compromising the quality of the site, the environment (including neighboring properties), or the architectural character of the buildings.					
3.6.1.1: Aesthetic	The site lighting shall provide desired illumination and enhancement of trees, landscaping, and buildings without providing dark shadowy areas compromising safety and security.					
3.6.1.2: VASS	Site lighting shall provide VASS and other surveillance support with illumination levels and color that assists in proper identification. Lighting shall be coordinated with VASS cameras to enhance surveillance and prevent interference. Avoid blinding VASS cameras in the placement and selection of fixtures and their cutoff angles.					
3.6.1.3: Luminance Levels	Illumination levels shall be in compliance with the Illumination Engineering Society of North America (IESNA), VA Electrical Design Guide, and local and state governing agencies.					
3.6.1.4: Signage and Wayfinding	Shall be enhanced by site lighting, including providing improved security by assisting pedestrians and vehicles to locate their destinations expeditiously. Refer to the latest edition of the VA Signage Design Guide.					
3.6.1.5: Environmental	Minimize light pollution and spill into neighboring properties by selection of fixtures' cutoff angles to minimize their nuisance visibility from adjacent areas on and off VA property.					
3.6.2: Lighting Locations	Comply with all requirements for site lighting as set forth in VA publications. In addition, the following areas require additional attention in lighting design to support security and safety needs.					
3.6.2.1: Site Entrances	Lighting shall be provided at all site entrances at illumination levels that assist in after dark performance of security duties. <ul style="list-style-type: none"> <li>● To assist guards with visual personal identification into vehicles to see the driver's compartment and view ID.</li> <li>● To assist guards with visual screening of box trucks, cargo areas, trunks, and trailers.</li> <li>● To provide illumination of wayfinding and other signage.</li> </ul>					

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3.6.2.2: Perimeter Fence	Lighting sufficient to support perimeter VASS surveillance shall be provided without objectionable spill onto neighboring properties or rights-of-way. Where a perimeter road has been provided for patrols or other functions, the lighting may be combined with <u>roadway lighting</u> .					
3.6.2.3: Building Entrances and Exits	Lighting at building entrances shall support VASS surveillance and ID functions while providing illumination of surfaces and features for safety.					
3.6.2.4 Parking areas:	All parking areas covered and open shall be lighted in support of VASS and other surveillance without objectionable spill into <u>adjacent areas on or off site</u> .					
3.6.2.5 Pathways:	Pedestrian and bicycle pathways and walks, including bike racks, gates, and other features shall be illuminated in support of VASS and other surveillance, while providing for safety without objectionable spill onto adjacent areas on and off site.					
3.6.2.6 Signage:	All signage shall be adequately illuminated to provide safe wayfinding and identification. Wayfinding maps and texts shall be <u>individually illuminated</u> .					
3.6.2.7 Enclosures:	Liquid oxygen tanks and other enclosures, such as water tanks/towers and refueling stations, shall be illuminated in support of VASS and visual surveillance without spillage into other areas <u>on- or off site</u> .					
3.6.2.8 Trash collection areas:	Collection areas shall be illuminated in service yards as a part of the yard illumination. Individual trash bins may not require illumination.					
3.6.2.9 Loading docks and associated yards:	Loading areas shall be fully illuminated for operations and in support of VASS and other surveillance and identification needs.					
<b>4. Building Entrances &amp; Exits</b>						
Scope	See 4.0 in PSDM for Scope, Purpose, and Goals					
4.1 Public Entrances and Lobbies	Public access to the facility should be restricted to a single or limited number of entrances.	4.1.8.1 Covered drop-off: Protect columns with anti-ram barriers such as bollards and from explosive devices by installation of architectural or structural finishes that prevent detonation within 6 inches (152 mm).				
4.1.1.1: Public Entrances	The primary public entrance is to the main lobby of the life-safety protected facility. Other public entrances shall be kept to a <u>minimum</u> .					
4.1.1.2: Staff Entrances	Staff entrances shall be located independently of main entrance lobbies and be convenient to staff parking. Provide staff entrances with access control, visual monitoring devices, and intrusion <u>detection system</u> .					
4.1.2: Screening Vestibule	The screening vestibule shall have sufficient space and be provided with power, telecommunications, and data connections for installation of access control and screening equipment that may be used should the need arise. Configure access from the drop-off to the lobby through the screening vestibule to prevent circumvention of screening process. Arrange path of travel to prevent vehicular access beyond the standoff distance to the building perimeter. Provide sufficient size to accommodate several people with mobility aids.  The screening vestibule may be one of two types: independent of the main building or part of the main building near the entrance doors. The standoff distance for vehicles may be measured to the main building façade whether the entry vestibule is within the building or an independent structure.	4.1.8.2 Vestibules: Where space permits, provide an entrance vestibule of sufficient size to accommodate several people with mobility aids. Configure access from the drop-off to the lobby through the screening vestibule to prevent circumvention of screening process. Arrange path of travel to prevent vehicular access beyond the standoff distance to the building perimeter.				
4.1.2.1: Screening Vestibule as Separate Lobby	Screening vestibules as a separate lobby that is independent of the main building. The preference is for the screening vestibule to be located outside of the VA life-safety protected facility footprint as a stand-alone structure or structurally isolated from the protected building, such that any damage to the vestibule will not impact the integrity of the VA life-safety protected facility. When the screening vestibule is a stand-alone or independent structure, the standoff requirements of Chapter 3, the façade requirements of Chapter 6, and the structural requirements of Chapter 7 are not applicable to the vestibule. However, laminated glass is to be used for all of the screening vestibule's exterior glazing.	4.1.8.3 Glazing: All glazing (both interior and exterior) in the lobby area shall be laminated glass or fitted with attached anti-fragmentation film.				

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4.1.2.2: Screening Vestibule as part of Main Lobby	Screening vestibule as a part of the main building lobby near the entrance doors. When the screening vestibule shares an internal wall or slab with the VA life-safety protected facility, the internal wall or slab is to be designed as an exterior wall or slab per the requirements of Chapter 6 and Chapter 7. The blast hardening requirements of Chapter 6 and Chapter 7 apply to the exterior wall(s) of the main building lobby.					
4.1.3: Primary Public Entrances and Lobbies						
4.1.3.1: Location	Vehicles may not approach within 25 feet (7.6 m) of the entrance.					
4.1.3.2: Doors	Entrance doors to the lobby shall be visible to or monitored by the security personnel.					
4.1.3.3: Access within the Facility	Access from the lobby to elevators, stairways, and corridors shall be controlled through the use of electronic access control or mechanical locking devices, limiting access to specific floors and areas that house functions requiring restricted access. <ul style="list-style-type: none"> <li>● Install card readers or other electronic access control devices at the entrances to restricted areas. Devices shall be located at entrances to suites and individual rooms from public corridors.</li> <li>● Install elevator call buttons requiring use of key cards or other electronic access control when they are located in restricted areas.</li> </ul>	4.1.8.4 Access within the facility: Modify existing elevator call buttons to require electronic access control to register calls when elevators open directly into restricted areas. Alternatively, construct secure vestibules at elevator lobbies on floors with restricted access.				
4.1.4: Access to Emergency Responders	When provided, the Fire Command Center (FCC) and secure house key box for emergency responders shall be located near an entrance door at a location approved by the VA PM, security personnel, and emergency responders. The door associated with the FCC shall be monitored by VASS and controlled by security personnel.					
4.1.5: Planning, Construction Details, and Materials						
4.1.5.1: Structural	Building entrances shall be constructed to fail in a way that minimizes hazard to persons inside. (See Chapter 6, Building Envelope and Chapter 7, Structural System, for additional requirements.) <ul style="list-style-type: none"> <li>● Protection of entrances and lobbies from vehicle ramming shall be accomplished outside and in front of the entrance. (See Chapter 3, section 3.4 Vehicle Barriers.)</li> <li>● Where a covered drop-off area is provided, its supporting structure shall be independent of the main building and protected from intentional and unintentional damage by vehicles. Protect supporting columns with anti-ram rated barriers and from explosive devices with architectural or structural finishes that prevent detonation within 6 inches.</li> <li>● Drop-off areas are not permitted beneath the VA life-safety protected facility footprint.</li> </ul>	4.1.8.1 Covered drop-off: Protect columns with anti-ram barriers such as bollards and from explosive devices by installation of architectural or structural finishes that prevent detonation within 6 inches (152 mm).				
4.1.5.2: Façade	All glazing (both interior and exterior) in the lobby area shall be laminated glass.	4.1.8.3 Glazing: All glazing (both interior and exterior) in the lobby area shall be laminated glass or fitted with attached anti-fragmentation film.				

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4.1.5.3: Doors and Hardware	<p>Exterior doors shall be in size, operation, and other characteristics in compliance with applicable regulatory requirements. Where doors are lockable, they shall comply with emergency egress requirements. Refer to Program Guide (PG-18-14) Room Finishes, Door, and Hardware Schedule, and Appendix A, Security Door Openings, for additional requirements.</p> <ul style="list-style-type: none"> <li>● Glass for entrance and egress doors shall be laminated.</li> <li>● Entrance doors shall be capable of being remotely locked and unlocked from the reception desk in the main lobby, the security control center (SCC), or other designated position.</li> <li>● Public entrance doors may be manually or power operated and may be swinging doors, horizontal sliding doors (power operated only), or revolving doors.</li> <li>● Staff entrance doors shall prevent unauthorized access.</li> <li>● Residential facilities requiring 24-hour access shall be provided with electronic or mechanical locks on exterior doors as well as visual monitoring and voice communication with connection to information desk or security office.</li> <li>● Staff entrance door hardware shall include either mechanical or electronic locks.</li> <li>● Means of egress doors that do not also function as entrances shall be provided with delayed action and alarmed emergency egress hardware.</li> </ul>					
4.1.5.4: Receptacles	<p>Letter boxes and receptacles for trash and smoking paraphernalia shall not be located within 5 feet (1.5 m) of load-bearing elements. Those within 25 feet (7.6 m) of the building shall be designed to prevent depositing of explosive charges or to contain explosions with a W0 charge weight (defined in the Physical Security Design Standards Data Definitions) as directed by the VA PM and coordinated with the structural engineer.</p>	4.1.8.6 Receptacles: Locate as per section 4.1.5.4.				
4.1.6: HVAC	<p>Maintain positive pressure in lobbies and entrance areas.</p> <ul style="list-style-type: none"> <li>● Refer to Chapter 9, Building Systems, for requirements regarding relationship of air intakes to drop-off areas.</li> </ul>					
4.1.7: Security	<p>All public entrances require security monitoring. At public entrances provide the means to restrict public access to those areas where screening is available when screening is required.</p>					
4.1.7.1: Security Guard Stations	No additional physical security requirements.					
4.1.7.2: Screening Devices	<p>At all public entrances provide the required connections for temporary installation of metal detectors and package screening equipment and sufficient space for their installation and operation.</p> <ul style="list-style-type: none"> <li>● Locate screening equipment in a manner that will prevent passage into the building or facility without passing through the devices.</li> <li>● When screening devices are not permanently installed, provide secure storage in close proximity to their installation location.</li> <li>● Locate screening equipment so as not to restrict emergency egress.</li> <li>● Screening devices shall accommodate persons with disabilities.</li> </ul>					
4.1.7.3: Security Devices	<p>VASS cameras shall be provided to monitor activities in the vestibules and lobbies and shall be located to provide views of approaching pedestrian and vehicular traffic, drop-off areas, building entrances, and departing pedestrian and vehicular traffic.</p>	4.1.8.5 Security devices: VASS cameras shall be required and located in accordance with section 4.1.7.3.				
4.2 Patient Drop-offs	<p>Patient drop-offs shall be located at primary building entrances or other locations that will provide convenient access to services without hindering the flow of traffic. Patient drop-off areas shall not be located under occupiable portions of the building or near staff-only entrances.</p>	4.2.4: Patient drop-offs for existing facilities shall meet the requirements of 4.2.				
4.2.1: Vehicular Access	<p>Drop-offs and staging areas for vehicles, including public transportation vehicles, shall be separated from the protected building structure by at least 25 feet (7.6 m).</p>					
4.2.2: Parking	<p>Parking shall not be permitted in patient drop-off areas. This should be designated by pavement markings and signage.</p>					

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4.2.3: Security	Provide VASS cameras for general surveillance of the area.					
<b>4.3 Building Exits and Life Safety Considerations</b>	Means of egress shall not be obstructed by installation of security devices such as guard stations, screening equipment, or other security devices. Delayed egress and alarmed exits shall comply with applicable codes and regulations.	4.3.4: Existing facilities shall meet the requirements of section 4.3.				
4.3.1: Site Requirements	Provide an unobstructed and adequately lighted path from each means of egress to a safe location outside the building. <ul style="list-style-type: none"> <li>Where the means of egress is accessible to persons with disabilities, provide an accessible route to a safe location outside the building.</li> <li>Where means of egress lead to loading docks or other service areas, direct users away from hazardous and pathological waste storage, mailrooms, and other areas that may be the source of injury or contamination.</li> <li>Plan and locate egress paths so that they are not obstructed by the anti-ram barriers or other similar devices.</li> </ul>					
4.3.2: Planning, Construction Details, and Materials	Construction of building entrances and exits shall be consistent with the requirements for adjacent building envelope elements. <ul style="list-style-type: none"> <li>See Chapter 6 for blast requirements for the building envelope.</li> <li>Means of egress doors shall be of construction that makes unauthorized entry from the exterior difficult. Provide hardware that minimizes the opportunity for unauthorized entry by using components such as continuous hinges and astragals.</li> </ul>					
4.3.3: Security Monitoring	Where means of egress do not also function as access points for the building, provide card reader for authorized users and delayed action, alarmed egress hardware to indicate unauthorized use. <ul style="list-style-type: none"> <li>Provide VASS cameras at locations with alarmed exits, at loading docks, and other areas subject to pilferage.</li> <li>Install door status monitors at doors intended to be used only for emergency egress.</li> </ul>					
<b>5. Functional Areas</b>	this form.					
Scope	See 5.0 in PSDM for Scope, Purpose, and Goals					
5.1 Agent Cashier	See PSDM Mission Critical for LS Requirements	See PSDM Mission Critical for LS Requirements				
5.2 Cache	See PSDM Mission Critical for LS Requirements	See PSDM Mission Critical for LS Requirements				
5.3 Childcare/Development Center	See PSDM Mission Critical for LS Requirements	See PSDM Mission Critical for LS Requirements				
5.4 Main Computer Room	See PSDM Mission Critical for LS Requirements	See PSDM Mission Critical for LS Requirements				
5.5 Emergency Department	See PSDM Mission Critical for LS Requirements	See PSDM Mission Critical for LS Requirements				
5.6 Emergency and/or Stand-by Generator Room	See PSDM Mission Critical for LS Requirements	See PSDM Mission Critical for LS Requirements				
5.7 Energy Center/Boiler Plant	See PSDM Mission Critical for LS Requirements	See PSDM Mission Critical for LS Requirements				
5.8 Fire Command Center	See PSDM Mission Critical for LS Requirements	See PSDM Mission Critical for LS Requirements				
5.9 Incident Command Center	See PSDM Mission Critical for LS Requirements	See PSDM Mission Critical for LS Requirements				
5.10 Loading Dock and Service Entrances	See PSDM Mission Critical for LS Requirements	See PSDM Mission Critical for LS Requirements				
5.11 Mailroom	See PSDM Mission Critical for LS Requirements	See PSDM Mission Critical for LS Requirements				
5.12 Pharmacy	See PSDM Mission Critical for LS Requirements	See PSDM Mission Critical for LS Requirements				
5.13 Police Operations Room and Holding Room	See PSDM Mission Critical for LS Requirements	See PSDM Mission Critical for LS Requirements				
5.14 Records Storage and Archives	See PSDM Mission Critical for LS Requirements	See PSDM Mission Critical for LS Requirements				
5.15 Research Laboratory andf Vivarium	See PSDM Mission Critical for LS Requirements	See PSDM Mission Critical for LS Requirements				
5.16 Security Control Center	See PSDM Mission Critical for LS Requirements	See PSDM Mission Critical for LS Requirements				
<b>6. Building Envelope</b>						
Scope	Project design team has security specialist and blast specialist per section 1.5					
<b>6.1 Walls</b>		6.1.2: For building upgrades in which the façade is being completely replaced, the existing facility shall comply with the requirements defined in Section 6.1.1.				



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6.1.1: Non-Load Bearing Walls	Non-load bearing walls shall be designed such that they have some permanent deformation but are generally repairable in response to the calculated peak pressures and impulses resulting from the design level vehicle threat (W1) located at the minimum standoff distance of 25 feet (7.6 m), but no greater than GP1. Standoff provided in excess of the 25 feet (7.6 m) or increased distances over the height of the building may not be accounted for in the calculation of the blast loading environment. Although negative phase loading should not be considered, the effects of rebound shall be included in the design of blast resistant façade. Deformations shall be as defined by the B3 response limits per the Protective Design Center document PDC-TR 06-08, Single Degree of Freedom Structural Response Limits for Antiterrorism Design.					
6.1.1.2: Supporting Structure	Walls shall span from slab to slab and shall not be attached directly to gravity load bearing elements (such as columns and shear walls) unless an advanced analysis of the load bearing element demonstrates it can accept the maximum blast forces transferred by the members framing into it without compromising its load bearing capacity.					
6.1.1.3: Loads	Walls shall be able to accept the tributary loads transferred from glazed fenestration in addition to the design level blast pressures applied directly to their surface.					
6.2 Fenestration and Doors		6.2.2: For upgrades in which the façade is not replaced, a mechanically anchored or wet glazed attached 7-mil thick anti-shatter film may be used to satisfy the requirements of this section. Glass replacement upgrades, window replacement upgrades, and "storm-window" upgrades interior to existing historic facade shall use laminated glass and structural silicone sealant. For insulated glazing units (IGUs) the laminated glass is required only for the inner lite. No upgrades to the frames or mullions are required for glass replacement projects. For upgrades in which the façade is being completely replaced, the existing facility shall comply with the requirements defined in Section 6.2.1.				
6.2.1: Façade Fenestration	All façade fenestration shall be designed to crack but fragments shall enter the occupied space and land on the floor no further than 10 feet (3 m) from the façade in response to the calculated peak pressures and impulses resulting from the design level threat (W1) located at the minimum standoff of 25 feet (7.6 m), but no greater than GP1. Although negative phase loading should not be considered, the effects of rebound shall be included in the design of blast resistant glazing. All blast resistant design requirements are in addition to the requirements of the VA Window Specifications. The use of operable windows for blast resistant design is discouraged; however, where operable windows are required, their performance must be demonstrated with acceptable explosive (or shock tube) test data while in the open position.					
6.2.1.1: Glass	All new exterior glazing is to use laminated glass. For insulated glazing units (IGUs) the laminated glass is required only for the inner lite.					
6.2.1.2: Glazing	The glass shall be restrained within the mullions with a minimum ½" bite and a continuous bead of structural silicone adhesive attaching the inner lite of glass to the frame to allow it to develop its post-damage capacity.					
6.2.1.3: Mullions	The mullions are to be of aluminum and/or steel construction and shall be designed to accept a blast load equal to the maximum capacity of the weakest lite of supported glass (i.e., balanced design), but no less than the design level pressures while sustaining deformations no greater than L/30. For windows with glazing lay-up governed by non-blast requirements (hurricane, forced entry, fabrication, handling, and ballistic), mullions are to be designed for the capacity of the glazing that would be required to meet the blast requirements only.					

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6.2.1.4: Curtainwall	Curtainwall framing members shall span from slab to slab and shall not be attached directly to gravity load bearing elements (such as columns and shear walls) unless an advanced analysis of the load bearing element demonstrates it can accept the maximum blast forces transferred by the members framing into it without compromising its load bearing capacity.					
6.2.3: Doors	All doors shall be designed using debris mitigating materials such as laminated glass and heavy gauge metal (14-gauge minimum), shall open towards the detonation, and the heavy duty frames and anchorages shall be capable of resisting the collected blast loads. Frame rotations shall be limited to L/30.  All roll down doors shall be constructed of 14-gauge metal, and the anchorage to the overhead support shall be designed to resist the collected blast loads.					
6.3 Atria		6.3.2: Upgrades involving the replacement of the atria framing shall meet the requirements of section 6.3.1.5.				
6.3.1: Atria	All vertical, horizontal, and sloped glass surfaces shall be designed to crack but fragments shall enter the occupied space and land on the floor no further than 10 feet (3 m) from the façade in response to the calculated peak pressures and impulses resulting from the design level vehicle threat (W1) located at the standoff distance, but no greater than GP1. Although negative phase loading should not be considered, the effects of rebound shall be included in the design of blast resistant façade. All blast resistant design requirements are in addition to the requirements of the VA Window Specifications. <b>6.3.1.1 Skylights:</b> See section 6.4.2. <b>6.3.1.2 Glass:</b> See Section 6.2.1.1. <b>6.3.1.3 Glazing:</b> See Section 6.2.1.2. <b>6.3.1.4 Mullions:</b> See Section 6.2.1.3. <b>6.3.1.5 Framing:</b> Atria framing members shall be designed to continue carrying gravity loads while sustaining deformations no greater than L/30 in response to the collected blast loads.					
6.4 Roofs		6.4.4: For upgrades in which the skylight is not replaced, a mechanically anchored or wet glazed 7-mil thick anti-shatter film may be used to satisfy the requirements of this section. Glass replacement upgrades shall use laminated glass and structural silicone sealant. For insulated glazing units (IGUs) the laminated glass is required only for the inner lite. No upgrades to the frames or mullions are required for glass replacement projects. For upgrades in which the skylight roof is being completely replaced, the existing facility shall comply with the requirements defined in Section 6.4.2. For upgrades in which the structural roof is being completely replaced the existing facility shall comply with the requirements defined in Section 6.4.1.				
6.4.1: Roof Structure	Roof structure (including metal deck, composite deck, concrete slabs, beams, joists, and girders) shall be designed to withstand the design level vehicle threat (W1) located at the minimum standoff distance of 25 feet (7.6 m). Note that the GP1 peak pressure and impulse limit should not be used in the design of the roof structure. Standoff provided in excess of the 25 feet (7.6 m) may not be accounted for in the calculation of the blast loading environment. Although negative phase loading should not be considered, the effects of rebound shall be included in the design of blast resistant roof. Deformations shall be as defined by the B3 response limits per the Protective Design Center document PDC-TR 06-08, Single Degree of Freedom Structural Response Limits for Antiterrorism Design. The blast loading shall take into account the presence of parapets, the diffusion of blast waves, and the spatial extent of the roof surface.					

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6.4.2: Skylights	Skylight glass shall be designed to crack but remain in its frame in response to the calculated peak pressures and impulses resulting from the design level vehicle threat (W1) located at the minimum standoff distance of 25 feet (7.6 m) ), but no greater than GP1. Standoff provided in excess of the 25 feet (7.6 m) may not be accounted for in the calculation of the blast loading environment.					
6.4.2.1 Glass:	All skylight glazing is to use laminated glass. For insulated glazing units (IGUs) the laminated glass is required only for the inner lite.					
6.4.2.2 Glazing:	Skylight glass shall be restrained within the mullions with a minimum ½" bite and a continuous bead of structural silicone adhesive attaching the inner lite of glass to the frame, to allow it to develop its post-damage capacity.					
6.4.2.3 Mullions:	The mullions are to be of aluminum and/or steel construction and shall be designed to accept a blast load equal to the maximum capacity of the weakest lite of supported glass (i.e., balance design), but no less than the design level pressures while sustaining deformations no greater than L/30.					
6.4.3: Penthouses Enclosing Critical Equipment	Penthouse enclosures shall be designed to resist the peak blast pressures and impulses resulting from the design level vehicle threat (W1) located at the minimum standoff distance of 25 feet (7.6 m), but no greater than GP1. Standoff provided in excess of the 25 feet (7.6 m) may not be accounted for in the calculation of the blast loading environment.					
6.5 Air Intakes and Exhausts Servicing Mission Critical Equipment		6.5.2: Air intakes and exhausts shall be upgraded to minimize the extent of debris that may enter critical spaces in response to the design level vehicle threat (W1) located at the minimum standoff distance of 25 feet (7.6 m), up to a maximum peak pressure and corresponding impulse of GP1. Standoff provided in excess of the 25 feet (7.6 m) may not be accounted for in the calculation of the blast loading environment. Hardened plenums and structured baffles, impact and wind driven rain resistant louvers, as described in section 6.5.1, shall be installed when a major interior renovation or major equipment replacement is performed.				
6.5.1: Intakes and Exhaust	Air intakes and exhausts shall be designed to minimize the blast over pressure applied to critical mechanical equipment due to the design level vehicle threat (W1) located at the minimum standoff distance of 25 feet (7.6 m), up to a maximum peak pressure and corresponding impulse of GP1, by means of hardened plenums and internal or external structured baffles. Standoff provided in excess of the 25 feet (7.6 m) may not be accounted for in the calculation of the blast loading environment. Deformations of hardened plenums and structured baffles in response to the blast loading shall be as defined by the B3 response limits per the Protective Design Center document PDC-TR 06-08, Single Degree of Freedom Structural Response Limits for Antiterrorism Design. Anchorage of baffles shall be designed for the collected blast loads. Baffles shall provide an overlap that is equivalent to the space between the baffle and the surrounding wall. The design shall deny a direct line of sight from the design level vehicle threat (W1) located at the standoff distance to the critical infrastructure within. Where direct lines of sight cannot be denied, distributed redundancy may be required to provide continuous operations. Louvers in areas prone to hurricanes or wind hazards (in accordance with ASCE 7-10) shall be certified by the manufacturer to meet the following Florida Building Code tests: Uniform Static Air Pressure Test, Cyclic Wind Pressure Test, Large Missile Impact Test, and Wind Driven Rain Resistance Test.					

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<b>6.6 Calculation Methods</b>	All blast design and analysis, whether for new or existing construction, shall be performed in accordance with accepted methods of structural dynamics. Explosive (or shock tube) testing is required wherever operable windows are used or where the behavior of energy absorbing or other complex façade systems cannot be characterized by analytical methods.					
6.6.1: Design and Detailing	The performance of façade in response to blast loading is highly dynamic and often inelastic. Design and detailing of protected façade shall therefore be based on analytical methods that accurately represent the loads and response. Explosive test data, developed by an experienced testing facility approved by the U.S. Government (USG), may be used to supplement the analytical methods where a direct analytical representation is not feasible.					
6.6.2: Blast Loads	Blast loads shall typically be developed using the semi-empirical relations of UFC 3-340-01, Design and Analysis of Hardened Structures to Conventional Weapons Effects, dated June 2002 (CONWEP).					
6.6.3. Dynamic Response	Dynamic structural response analyses shall be performed using either empirical data developed by an approved USG testing laboratory, simplified Single-Degree-of-Freedom (SDOF) analytical methods or advanced Finite Element Methods (FEM). Where simplified SDOF methods are used, the performance criteria shall be in accordance with this document. Where advanced FEM are used, the performance shall be demonstrated through interpretation of the calculated results. Dynamic glass response analyses shall be performed using window glazing analysis and design software developed by the USG, such as WINGARDPE, WINLAC, or HAZL, which are capable of predicting the glass, film, and laminate response when subjected to the blast loading environment.					
<b>7. Structural Systems</b>						
Scope	See 7.0 in PSDM for Scope, Purpose, and Goals					
<b>7.1 Blast Resistance</b>	Structures shall be constructed to withstand the actual pressures and corresponding impulses produced by the design level vehicle threat (W1) located at the standoff distance and the design level satchel threat (W0) that may be delivered to loading docks, mailrooms, and lobbies. The design shall provide a level of protection for which progressive collapse will not occur, the building damage will be economically repairable, and the space in and around damaged area can be used and will be fully functional after cleanup and repairs. Standoff distances provided in excess of 25 feet (7.6 m) may not be accounted for in the calculation of the blast loading environment.	7.1.2: See section 7.3.1.				
7.1.1: Priority for Protection	<p>The priority for blast resistance shall be given to critical elements that are essential to mitigating progressive collapse. Designs of secondary structural elements, primary nonstructural elements, and secondary non-structural elements shall minimize injury and damage. The priority depends on the relative importance of structural or non-structural elements in the following order.</p> <p>All flexural elements and their connections shall be designed and detailed such that no brittle failure mode limits the capacity of the section. Unless the element is designed to remain elastic in response to blast loading, ductile failure modes shall be the governing failure mode for flexural elements and their connections and splices. When the elements are designed to resist the blast loads elastically, the design of non-ductile modes shall include a 1.5 factor of safety on the calculated forces.</p>					
7.1.1.1 Primary structure:	Primary structural elements are the essential parts of the building's resistance to catastrophic failure, including columns, girders, roof beams, and the main lateral resistance system. Deformations shall be as defined by the B2 response limits per the Protective Design Center document PDC-TR 06-08, Single Degree of Freedom Structural Response Limits for Antiterrorism Design.					

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7.1.1.2 Secondary structure:	Secondary structural elements are all other load bearing members, such as floor beams and slabs. Deformations shall be as defined by the B3 response limits per the Protective Design Center document PDC-TR 06-08, Single Degree of Freedom Structural Response Limits for Antiterrorism Design.					
7.1.1.3 Primary non-structural (non-façade elements):	Primary non-structural elements and their attachments that are essential for life-safety systems or elements that can cause substantial injury if failure occurs, including overhead or heavy suspended mechanical units or fixtures weighing more than 31 lbs. Anchor these elements (excluding distributed systems such as suspended ceilings or piping networks) with lateral ties capable of resisting lateral motions associated with the building's calculated blast induced base shear. This requirement does not preclude the need to design the mountings for forces required by other criteria such as seismic standards.					
7.1.1.4 Secondary non-structural:	Secondary non-structural elements are all elements not covered in primary non-structural elements, such as partitions, furniture, and light fixtures. Provide a positive means of attachment of these elements to the building structure and to designing arrangements that will minimize debris following in-structure shock motions.					
<b>Columns and load bearing walls exposed to blast loading shall be hardened or isolated to resist the effects of the design level vehicle threat (W1) located at the provided standoff distance and the design level satchel threat (W0) that may be delivered to loading docks, mailrooms, and lobbies. The design shall provide a level of protection for which progressive collapse will not occur,</b>	Single story structures are exempt from progressive collapse requirements. All structures with two stories or more shall be designed to minimize the potential for progressive collapse using the Tie Force Method, in which the structure shall develop peripheral, internal, and vertical tie forces by providing continuous reinforcement and ductile detailing. The requirements of the Tie Force Method for demonstrating a structure's resistance to progressive collapse shall conform to U.S. Government (USG) guidelines, specifically, Design of Buildings to Resist Progressive Collapse, UFC 4-023-03 dated 27 January 2010.	7.2.1: No additional physical security requirements.				
<b>7.3 Column Protection</b>	Columns and load bearing walls exposed to blast loading shall be hardened or isolated to resist the effects of the design level vehicle threat (W1) located at the provided standoff distance and the design level satchel threat (W0) that may be delivered to loading docks, mailrooms, and lobbies. The design shall provide a level of protection for which progressive collapse will not occur, the building damage will be economically repairable, and the space in and around damaged area can be used and will be fully functional after cleanup and repairs. Deformation limits shall be as defined by the B2 response limits per the Protective Design Center document PDC-TR 06-08, Single Degree of Freedom Structural Response Limits for Antiterrorism Design.	7.3.1: Protect columns in spaces the public can access prior to screening from explosive devices by installation of architectural or structural finishes that prevent detonation within 6 inches (152 mm).				
<b>7.4 Wall Protection</b>	Non-load bearing interior walls separating high risk interior spaces (loading docks, mailrooms, and lobbies) shall be hardened to resist the effects of the design level satchel threat (W0) that may be delivered to these spaces. Walls shall be of reinforced masonry or concrete construction. Deformation limits shall be as defined by the B3 response limits per the Protective Design Center document PDC-TR 06-08, Single Degree of Freedom Structural Response Limits for Antiterrorism Design. Doors within these walls are to be of heavy gauge steel or laminated glass construction and are to open into the high risk space.					

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7.4.1: Screen Walls	Non-load bearing screen walls that enclose critical equipment and the structure providing lateral resistance shall be hardened to withstand the actual pressures and corresponding impulses produced by the design level vehicle threat (W1) located at the minimum standoff distance of 25 feet (7.6 m). Walls shall be of reinforced masonry or concrete construction. Deformation limits shall be as defined by the B3 response limits per the Protective Design Center document PDC-TR 06-08, Single Degree of Freedom Structural Response Limits for Antiterrorism Design. Doors within these walls are to be of heavy gauge steel and are to open outwards.					
<b>7.5 Anti-Ram Resistance</b>		7.5.2: The requirements of section 7.5.1 shall apply.				
7.5.1: Vehicle Barriers	Both active and passive barriers shall be tested and certified to be capable of stopping a 4,000 pound (1,800 Kg) vehicle at a speed of 30 miles per hour (48 Km/hr) with a maximum penetration distance of 3.3 feet (1m). (See also Chapter 3, Section 3.4 Vehicle Barriers.)					
7.5.1.1 Certification/Testing:	Performance of anti-ram element shall be demonstrated by means of impact testing or detailed finite element analysis of the vehicle impact. Testing is to be performed using either ASTM 2656-07 or DOS SD-STD-02.01, Revision A.					
7.5.1.2 Active barriers:	Active barriers shall be electric or hydraulic wedges, bollards, beams, drop arms, or sliding gates.					
7.5.1.3 Passive barriers:	Passive barriers shall be walls, stationary bollards, cables, or combination of landscape and hardscape that achieves the required anti-ram resistance.					
<b>7.6 Calculation Methods</b>	All blast design and analysis, whether for new or existing construction, shall be performed in accordance with accepted methods of structural dynamics.					
7.6.1: Design and Detailing	The performance of structures in response to blast loading is highly dynamic and often inelastic. Design and detailing of these structures shall therefore be based on analytical methods that accurately represent the loads and response. Explosive test data, developed by an experienced testing facility approved by the USG, may be used to supplement the analytical methods where a direct analytical representation is not feasible.					
7.6.2: Blast Loading	Blast loads shall typically be developed using the semi-empirical relations of UFC 3-340-01 (CONWEP); however, where near contact detonations are considered, Computational Fluid Dynamics (CFD) methods may be required.					
7.6.3: Dynamic Response	Dynamic structural response analyses shall be performed using either empirical data developed by an approved USG testing laboratory, simplified Single-Degree-of-Freedom (SDOF) analytical methods, or advanced Finite Element Methods (FEM). Where simplified SDOF methods are used, the performance criteria shall be in accordance with this section. Where advanced FEM are used, the performance shall be demonstrated through interpretation of the calculated results.					
<b>8. Utilities and Building Services</b>	NOTE: If project is located on a campus or site, this section applies to the entire campus/site and may not be in the scope of the individual project. IF this project is a stand-alone building not located on a campus/site, then the following requirements apply to the project/new building					
Scope	See 8.0 in PSDM for Scope, Purpose, and Goals					
<b>8.1 Utility Entrances</b>		8.1.4: No additional physical security requirements.				
8.1.1: Mechanical	No additional physical security requirements.					
8.1.2: Electrical	No additional physical security requirements.					
8.1.3: Telecommunications	No additional physical security requirements.					
<b>8.2 Site Distribution</b>		8.2.4: No additional physical security requirements.				
8.2.1: Mechanical	No additional physical security requirements.					
8.2.2: Electrical	No additional physical security requirements.					
8.2.3 Telecommunications	No additional physical security requirements.					
<b>8.3 Energy Center</b>		8.3.6: No additional physical security requirements.				
8.3.2 Sustained Service	No additional physical security requirements.					

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8.3.3 Standby Electrical System	No additional physical security requirements.					
8.3.4 Long-replacement-time Equipment	No additional physical security requirements.					
<b>8.4 Water and Fuel Storage</b>		8.4.8: No additional physical security requirements.				
8.4.1 Requirements	No additional physical security requirements.					
8.4.2 Storage Volume Criteria:	No additional physical security requirements unless the Life Safety Protected facility is on a campus with Mission Critical facilities and the Life Safety Protected facility establishes the greatest fire protection demand. See section 8.4.2.1.3 in the Physical Security Design Manual for Mission Critical Facilities.					
8.4.3 Water Storage Emergency Connection	No additional physical security requirements.					
8.4.4 Water Treatment	No additional physical security requirements.					
8.4.5 Onsite Water Well	No additional physical security requirements.					
8.4.6 Protection of Equipment	No additional physical security requirements.					
8.4.7 Electrical Power	No additional physical security requirements.					
<b>9. Building Systems</b>						
Scope	See 9.0 in PSDM for Scope, Purpose, and Goals					
9.0.1 Modularity	No additional physical security requirements.					
9.0.2 Security Considerations	No additional physical security requirements.					
9.1 HVAC Systems		9.1.3: No additional physical security requirements.				
9.1.1 Requirements	<b>9.1.1.1 Equipment location:</b> Major mechanical equipment shall not be located in high risk areas. <b>9.1.1.2 Emergency connections:</b> No additional physical security requirements. <b>9.1.1.3 Security control center (SCC):</b> No additional physical security requirements. <b>9.1.1.4 Entrances and lobbies:</b> Maintain positive pressure in lobbies					
9.1.2: Intakes and Exhausts						
9.1.2.1 Outdoor air intakes:	All air intakes shall be located so that they are protected from external sources of contamination. Locate the intakes away from publicly accessible areas, minimize obstructions near the intakes that might conceal a device, and use intrusion alarm sensors to monitor the intake areas. • Locate all outdoor air intakes a minimum of 50 feet (15 m) from areas where vehicles may be stopped with their engines running. • Locate all outdoor air intakes a minimum of 30 feet (9 m) above finish grade or on roof away from the roof line.					
9.1.2.2 Air intakes and exhausts:	Design to minimize the blast over pressure admitted into critical spaces and to deny a direct line of sight from a vehicle threat located at the standoff distance to the critical infrastructure within. Refer to Chapter 6.					
9.1.2.3 Hurricane areas:	Louvers in areas prone to hurricanes or wind-debris hazards (in accordance with ASCE 7-10) shall be certified by the manufacturer to meet the following Florida Building Code tests: Uniform Static Air Pressure Test, Cyclic Wind Pressure Test, Large Missile Impact Test, and Wind Driven Rain Resistance Test.					
<b>9.2 Electrical Systems</b>	Major electrical equipment shall not be located in high risk areas.	9.2.3: Existing facilities shall meet the requirements of section 9.2.2.				
9.2.1 Standby Electrical System	Major standby power system equipment shall not be located in high risk areas.					
9.2.2 Uninterruptible Power Supply (UPS)	Provide UPS equipment for telecommunications equipment that is required for proper operation of calls to 911.					
<b>9.3 Telecommunications Systems</b>	Refer to Chapter 5 for functional area requirements.	9.3.10: No additional physical security requirements.				
9.3.1 Demarcation Room	Demarcation rooms (demarc) shall not be located in high risk areas.					
9.3.2 Main Computer Room	Main computer rooms shall not be located in high risk areas.					
9.3.3 Telecommunications Rooms	Telecommunications rooms shall not be located in high risk areas.					
9.3.4 Wireless Local Area Network System	No additional physical security requirements.					

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9.3.5 Portable Radio System	No additional physical security requirements.					
9.3.6 Satellite Radiotelephone System	No additional physical security requirements.					
9.3.7 Public Address System	No additional physical security requirements.					
9.3.8 Distributed Antenna System	No additional physical security requirements.					
9.3.9 Very Small Aperture Terminal Satellite Data Terminal	No additional physical security requirements.					
<b>9.4 Plumbing Systems</b>		9.4.2: No additional physical security requirements.				
9.4.1 Medical Gases, Vacuum, and Oxygen Systems	No additional physical security requirements.					
<b>9.5 Fire Protection Systems</b>		9.5.2: Existing facilities shall meet the requirements of section 9.5.				
9.5.1: Fire Department Hose Connections	Fire department hose connections located on the exterior of a building shall be protected in such a manner as to limit access only to authorized personnel. Protection devices shall be approved by the Authority having Jurisdiction (AHJ) and local Fire Officials.					
<b>10. Security Systems</b>	NOTE: Refer to the PSDM Chapter 10 for Requirements for Security Systems. If any of the following cannot be implemented in full, complete the mitigation plan and timeline portion					
Scope	See 10.0 in PSDM for Scope, Purpose, and Goals					
10.1 Electronic Security Systems	Project complies with PSDM Requirements					
10.2 Physical Access Control System (PACS)	Project complies with PSDM Requirements					
10.3 Intrusion Detection System	Project complies with PSDM Requirements					
10.4 Video Assessment and Surveillance	Project complies with PSDM Requirements					
10.5 Duress, Security Phones, and Intercom System	Project complies with PSDM Requirements					
10.6 Detection and Screening Systems (DSS)	Project complies with PSDM Requirements					



# January 2015 Physical Security Design Manual(s) for VA Facilities COMPLIANCE CHECKLIST

Review Date	
Facility Name (#)	
Lease ID	
Lease Name	
Location (City & State)	
Leased Size (NUSF)	

VA Project Engineer	Name
VA Security Specialist	Name
A/E and/or Consultant	Name

LF

CRITERIA AND CHAPTER		EXISTING MEDICAL-RELATED LEASE (YES, NO, N/A)
Scope	See 1.0 -1.1 in PSDM for Purpose, and Authority.	
1.2.3.1	1.2.3.1 Existing leased facilities up to 150,000 net usable square feet shall comply with The Risk Management Process: An Interagency Security Committee (ISC) Standard dated August, 2013.	
1.2.3.2	1.2.3.2 Existing leased facilities greater than 150,000 net usable square feet shall have a determination made by the local VAMC Director with concurrence by the Network Director, and approved by the Under Secretary for Health for Operations and Management or delegated approving official serving as the authority having jurisdiction (AHJ) as to whether the facility will be classified as mission critical or life-safety protected. This determination will be identified and submitted in the future OMB-300 as part of the Capital Planning Process. <ul style="list-style-type: none"> <li>When the facility is classified as mission critical, follow VA PSDM for Mission Critical Facilities, as allowable per local, city, and state building codes.</li> </ul> When the facility is classified as life-safety protected, follow The Risk Management Process: An Interagency Security Committee (ISC) Standard dated August, 2013.	

Factor	Points				Score
	1	2	3	4	
Mission Criticality	LOW	MEDIUM	HIGH	VERY HIGH	
Symbolism	LOW	MEDIUM	HIGH	VERY HIGH	
Facility Population	<100	101 - 250	251 -750	>750	
Facility Size	<10,000 sf	10,001 - 100,000 sf	100,001 - 250,000 sf	>250,000 sf	
Threat to Tenant Agencies	LOW	MEDIUM	HIGH	VERY HIGH	
					Sum of above <b>0</b>
Facility Secuirty Level	I: 5 -7 Points	II: 8 - 12 Points	III: 13 - 17 Points	IV: 18 - 20 Points	Preliminary FSL
Intangible Adjustment	Justification:				+/- 1 FSL
					Final FSL

## Facility Security Level Scoring Criteria

### Mission Criticality:

Value	Points	Criteria	Examples
Very High	4	<p>National leadership, seats of constitutional branches. Houses chief officials for a branch of Government</p> <p>Communications centers that support national essential government functions</p> <p>Houses essential communications equipment necessary for defense or intelligence activities</p> <p>Houses individuals necessary to advance American interests with foreign governments.</p> <p>Houses government officials of foreign nations</p> <p>Houses individuals or specialized equipment necessary to identify and analyze threats to homeland security.</p> <p>Houses personnel or specialized equipment necessary to identify or respond to large-scale or unique incidents</p> <p>Houses personnel or specialized equipment essential to regulating national fiscal or monetary policy, financial markets, or other economic functions</p> <p>Contains currency, precious metals, or other material necessary to maintain economic stability</p> <p>Houses specialized equipment necessary to process or monitor financial transactions necessary for the Nation's economy</p> <p>Houses personnel or specialized equipment necessary to detect or respond to unique public health incidents</p> <p>Houses material or information that, if compromised, could cause a significant loss of life, including production quantities of chemicals, biohazards, explosives, weapons, etc.</p> <p>COG facilities</p>	<p>White House, the US Capital building, the Supreme Court building</p> <p>White House Communications Agency facilities</p> <p>Intelligence community facilities, including communications and weapons/munitions storage</p> <p>U.S. Department of State headquarters</p> <p>Foreign embassies and consulates in the United States</p> <p>U.S. Coast Guard, ports of entry, agencies engaged in counterterrorism or counter-narcotics</p> <p>Emergency operations centers, national response assets (e.g., Nuclear Emergency Support Teams)</p> <p>U.S. Department of Commerce building</p> <p>U.S. Mint facilities, Federal Reserve buildings</p> <p>National financial centers</p> <p>Centers for Disease Control and Prevention</p> <p>U.S. Department of Energy research reactor facilities, explosives storage facilities</p> <p>Federal Emergency Management Agency Emergency Operations Center</p>
High	3	<p>Original, irreplaceable material or information central to the daily conduct of government</p> <p>Designated as a shelter in the event of an emergency incident</p> <p>Regional or headquarters policy and management oversight</p> <p>Biological/chemical/radiological/medical research or storage of research and development (de minimis) quantities of chemicals, biohazards, explosives, and similar items</p> <p>COOP facilities for department and agency headquarters</p> <p>General criminal investigative work</p> <p>Judicial processes</p>	<p>National Archives</p> <p>Smithsonian museums</p> <p>GSA National Capitol Region Headquarters, Social Security Administration Headquarters, Census Bureau</p> <p>Plum Island Animal Disease Research Center</p> <p>GSA Central Office COOP facility</p> <p>Fraud, financial, non-terrorism-related crime</p> <p>Federal courts</p>
Medium	2	<p>District or State-wide service or regulatory operations</p> <p>COOP facilities for other than national headquarters</p>	<p>Agriculture Food Safety and Inspection Services District Office</p> <p>GSA Regional Office COOP site</p>
Low	1	Administrative, direct service, or regulatory activities at a local level	Agricultural County Extension Office

## Facility Security Level Scoring Criteria

### Symbolism

Value	Points	Criteria	Examples
Very High	4	<p>Popular destination for tourists</p> <p>A nationally significant historical event has occurred at the facility</p> <p>Widely recognized to represent the Nation's heritage, tradition, or values</p> <p>Contains significant original historical records or unique artifacts that could not be replaced in the event of their damage or destruction.</p> <p>Executive department headquarters building</p> <p>Other prominent symbols of U.S. power or authority</p>	<p>Smithsonian museums</p> <p>Independence Hall</p> <p>White House, U.S. Capitol, Supreme Court building</p> <p>National Archives, Smithsonian museums</p> <p>DOJ, U.S. Department of Transportation Headquarters</p> <p>U.S. Circuit, District, or Bankruptcy Courthouses, Central Intelligence Agency Headquarters</p>
High	3	<p>Well-known, regional U.S. Government facility</p> <p>Agency/bureau headquarters</p> <p>Located in a symbolic commercial financial building</p> <p>Co-located with other nongovernmental but highly symbolic facilities</p>	<p>Oklahoma City Federal Building</p> <p>GSA Central Office, Environmental Protection Agency Headquarters, Social Security Administration Headquarters</p> <p>International trade centers, regional or nationwide bank headquarters building</p> <p>Transportation hubs</p>
Medium	2	<p>Readily identified as a U.S. Government facility based on external features</p> <p>Readily identified as a U.S. Government facility based on the nature of public contact or other operations (even without external features)</p> <p>Dominant, single Federal facility in a community or rural area</p> <p>Nongovernmental commercial laboratory or research facility that may be symbolic to single-interest radicals</p>	<p>Signage stating "Federal Office Building," Great Seal of the United States, seals of departments and agencies on exterior</p> <p>Social Security Administration field office</p> <p>U.S. Department of Veterans Affairs clinic</p> <p>Animal testing facility</p>
Low	1	No external features or public contact readily identifying it as a U.S. Government facility	Classified locations, small offices in leased commercial buildings

## Facility Security Level Scoring Criteria

### Facility Population

Value	Points	Criteria
Very High	4	Greater than 750 or facilities with Child-Care Centers
High	3	251 to 750
Medium	2	101 to 250
Low	1	Less than 100

### Facility Size

Value	Points	Criteria
Very High	4	Greater than 250,000 square feet
High	3	100,000 to 250,000 square feet
Medium	2	10,000 to 100,000 square feet
Low	1	Up to 10,000 square feet

## Facility Security Level Scoring Criteria

### Threat to Tenants

Value	Points	Criteria	Examples
Very High	4	<p>Tenant mission and interaction with certain segments of the public is adversarial in nature</p> <p>Tenant mission is controversial in nature and routinely draws the attention of organized protest groups</p> <p>Located in a high-crime area</p> <p>Significant history of violence directed at or occurring in the facility. More than 10 incidents per year requiring law enforcement/security response for unruly or threatening persons onsite</p>	<p>Criminal and bankruptcy courts, high-risk law enforcement, including those who routinely contact or attract the attention of dangerous groups (Federal Bureau of Investigation, Drug Enforcement Agency, Bureau of Alcohol, Tobacco, Firearms and Explosives)</p> <p>Environmental Protection Agency, Department of Energy, courthouses, World Banks</p> <p>As determined by a characterization established by local law enforcement</p> <p>As determined by security organization or tenant incident records</p>
High	3	<p>Public contact is occasionally adversarial based on the nature of business conducted at the facility</p> <p>History of demonstrations at the facility</p> <p>Located in a moderate-crime area</p> <p>History of violence directed at the facility or the occupants; 5–10 incidents per year requiring law enforcement/security response for unruly or threatening persons onsite</p>	<p>Non-criminal/administrative courts where privileges or benefits may be suspended or revoked, general law enforcement operations, National Labor Relations Board offices</p> <p>U.S. Department of State headquarters</p> <p>As determined by a characterization established by local law enforcement</p> <p>As determined by security organization or tenant incident records</p>
Medium	2	<p>Generally non-adversarial public contact based on the nature of business conducted at the facility</p> <p>History of demonstrations against the tenant agency (not at the facility)</p> <p>Located in a low-crime area</p> <p>History of violence directed at tenant agencies/companies (not at the facility).</p>	<p>General/internal investigations, inspection services for the U.S. Department of Agriculture, Department of State passport office</p> <p>U.S. Nuclear Regulatory Commission, U.S. Citizenship and Immigration Services</p> <p>As determined by a characterization established by local law enforcement</p> <p>Internal Revenue Service, Social Security Administration offices</p>
Low	1	<p>Generally little-to-no public contact</p> <p>No history of demonstrations at the facility</p> <p>No history of violence directed at the facility or the occupants</p>	<p>Government warehouses or storage facilities, Federal Trade Commission</p> <p>As determined by security organization or tenant incident records</p> <p>As determined by security organization or tenant incident records</p>

**LIFE SAFETY Requirements apply to the following Facility Types:**

Accessory Non-Building Structures  
Auditorium  
Biomedical Engineering (Equip & Wheelchair Repair)  
Canteen - Cafeteria  
Canteen - Retail Store  
Cemetery Administration  
Cemetery Chapel  
Cemetery Maintenance  
Child Care  
Clinical Services Administration Office  
Community-Based Outpatient Clinic (CBOC)  
Community Living Centers (CLC) (W/MC Utility/System Req)  
Connecting Corridor Concourse and Bridge  
General Administration Office  
Greenhouses  
Laundry  
Library/Museum  
Maintenance Facility (Shops)  
Maintenance Storage (Equipment)  
Material Management Storage  
Office  
Plant Outbuilding  
Post Office  
Quarters (Residential)  
Recreational  
School  
Student Housing  
Temporary Buildings  
Toilets (Outhouses)  
Training/Education  
Veterans Services  
Warehouse  
Waste Management (Incinerator and Recycle)  
Waste Storage

1.2.1 VA Owned Facility

1.2.2 VA Medical-Related Leased Facility

1.2.2.1 LEASE built-to-suit: Up to 150,000 sq ft is **Life Safety PSDM**

1.2.2.2 LEASE built-to-suit greater than 150,000 sq ft **follows Facility Type Requirement**

1.2.3.1 LEASE of an EXISTING Bldg up to 150,000 nuf shall comply with the **Risk Management Process: An Interagency Security Committee (ISC) Standard dated Aug 2013**

1.3.1.1 **The FIRST point of Control:** Campus Perimeter fence, Control gates , Guard personnel with screening of persons and vehicles

1.3.1.2 **The SECOND point of Control:** Bldg Perimeter (access control hardware, intrusion detection, surveillance, entry screening and control of personnel)

1.3.1.3 **The THIRD Point of Control** (use barriers and door hardware to segregate public and patient areas from staff only areas )

1.3.1.4 **The FOURTH Point of Control** (use barriers and access control to segregate authorized from unauthorized staff areas )

1.3.1.4 **The FIFTH Point of Control** (restrict access to restricted areas with card readers, video surveillance, intrusion detection alarms & forced entry resistant construction.

1.3.2 Crime Prevention Through Environmental Design (elements of Natural surveillance, access control and territorial enforcement)

1.3.3 Facilities in Floodplains (Construction or Equipment in an area NOT subject to Flooding)

1.5.1 Physical Security Specialist on Design Team Certified CPP or PSP

1.5.2 Structural Blast Specialist on Design Team who meets experience and education of 1.5.2

1.6 Budgeting and Programming for Physical Security (Total Estimated Cost of Business Case/Project Application includes the requirement)

Multilevel?

Number of Parking Spaces associated with Project / Lease