

**Holocom PDS Quality Assurance Checklist**

**Project Name and Number: Building #**  
**Project Location:**  
**Project Date:**

**Checklist Objectives**

This checklist is provided as a basic guideline for both the installer and the Quality Assurance inspector to facilitate a good, physical inspection of the Holocom PDS both during and at the end of a project installation.

This checklist accompanies use of a correctly conducted physical site survey, a technically correct installation layout “red line”, a correct bill of materials BOM and properly trained and certified installers.

The objective for this checklist is to ensure that the end user gets the quality installation expected and that the Holocom PDS installation meets both National and Service PDS guidelines when the system is “activated”. Make sure the system is right before it is activated.

✓ **Check completed items**

	<b><u>Scope of the Project</u></b>	<b><u>Comments</u></b>
	1. Has the project been installed and completed at the specified location and IAW the design specification and performance work statement (PWS) agreed to between the end-user and the team doing the installation?	
	2. Were any changes in design specifications driven by on-site engineering issues?	
	3. Were any Change Orders agreed upon and executed?	
	4. Are there any “open items” that cannot be completed due to other project delays? (E.g. Cabling components were not provided, etc.)	

	<b><u>GFE Safes</u></b>	<b><u>Comments</u></b>
	1. Safe shall be properly grounded.	
	2. If applicable, ¼ inch steel plate will be placed under safe.	
	3. The safe shall be 3’ away from walls and electrical panels.	
	4. The safe will house the RED switch, TACLANE, patch panel, cable management panel, and contractor furnished 2200VA UPS.	

	<b>5. All equipment inside the safe shall be properly mounted. The equipment shall be level and professionally installed.</b>	
	<b>6. Safe shall have internal brackets for mounting the equipment.</b>	
	<b>7. No drilling shall be performed on the safe.</b>	
	<u>Conduits</u>	<u>Comments</u>
	<b>1. Epoxy all connectors and exposed threads.</b>	
	<b>2. Bushings shall be installed inside the enclosures.</b>	
	<b>3. Conduits must meet the cable bend radius.</b>	

	<u>Raceways</u>	<u>Comments</u>
	<b>1. Raceway runs should be approximately 1” off the wall using the provided spacers. In special instances, this separation may be exceeded, but in no case should the raceway be mounted flush with the wall.</b>	
	<b>2. Raceway runs should be at least 4” down from the ceiling in order to facilitate visual inspection as part of the PDS mitigation plan for a command or facility. Installations that vary from this (at ceiling height or below the 4” point) must be covered by the mitigation plan.</b>	
	<b>3. Raceway spans over 10’ must be supported with a 6” suspended raceway bridge.</b>	
	<b>4. End to end raceway joints must be supported with the supplied 2” bridge, the seam sealed with epoxy and the bridge sealed to the back of the raceway with epoxy as well for inspection purposes. Gaps over 1/8” are not acceptable.</b>	
	<b>5. Raceway spans between connectors should be at least 18 inches in length to allow for proper functioning of lock mechanisms and top cap space requirements. An exception to this is when two Universal Connectors are used to span a pillar corner.</b>	
	<b>6. All raceway seam line cuts must be flush with no more than a 1/8” visible gap in between.</b>	
	<b>7. Any raceway that is not constantly viewable (e.g. placed in a plenum) should be alarmed in order to pass DOD security requirements.</b>	
	<b>8. There should be no more than ½ inch play on all vertical top-cap and span cuts. This is very important as a series of loose cuts over a span can actually allow the system to</b>	

	be opened up if top-cap sections and connectors can be physically slid to one side. Checking this requires the installer to ensure accurate measuring and cutting, and the inspector to physically try to move top-cap sections from side to side.	
	9. All raceway must be steel.	

<u>Enclosures &amp; Connectors</u>		<u>Comments</u>
	1. End to end connectors for the top cap must have the opposing stainless steel pins and a four point raceway connection. Ensure that the pins securely snap under the raceway lips and that both the raceway and top-cap are firmly seated with a rubber mallet to ensure a proper gap free and secure fit.	
	2. Any exposed conduit/pipe from a Through Wall Kit must be sealed with epoxy at each seam. This should only happen when a Through Wall Kit is used to exit the back of a raceway or an internal connector.	
	3. All Enclosures or Universal Connectors should be mounted flush to the wall, particularly those which have a Through Wall Kit connected to them. All gaps shall be epoxy for aesthetic appearance.	
	4. Enclosures used as “pull boxes” as a rule is not required in a Holocom PDS installation. Additional enclosures may be specified if needed as a “breakdown point” for locks or to be used to achieve better system alignment by allowing small adjustments for positive or negative wall offsets and minor elevation changes.	
	5. All INF’s should be physically inspected to ensure that they are tight and cannot turn. If INF’s are loose, turning these will sometimes reveal openings that are not permitted.	
	6. Steel connectors are used for all raceway applications should be physically checked for proper installation by the inspector by grabbing the connector and making a sweeping motion from left to right. This will immediately disengage any that are not correctly installed and preclude any false positives.	
	7. Bushings shall be installed inside the enclosures.	
	8. Enclosures shall be lock with S&G locks.	

Lock Assemblies

Comments

	<p>1. Holocom PDS Raceway Lock Assemblies now use a tamper proof cable assembly for locking and unlocking. A proper Holocom PDS design should ensure that these cables can be accessed from an enclosure and will make training for installation and actual installation easier.</p>	
	<p>2. Although Holocom has redesigned its Lock Assemblies to prevent any “false positive” locking, each installed lock must be carefully checked. The installer or Q/A inspector should place both hands on the lock cover and move it from side to side while attempting to lift it off of the raceway. Doing this will ensure that the locking pins and the cover are fully seated.</p>	

Through-Wall Kits

Comments

	<p>1. When installing Through Wall Kits, installers should provide a core hole not larger than 3” for a 2” Through Wall Kit and a core hole not larger than 1 ½” for a 1” Through Wall Kit. In each case, a concealer patch should be used and if the core holes are larger than described above the excess space needs to be filled in and around the Through Wall Kit to ensure both a complete Fire Stop and a more aesthetic appearance.</p>	
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Epoxy & Miscellaneous Applications

Comments

	<p>1. Lock nuts must be securely tightened and epoxy applied so that enclosures and connectors cannot swivel around loosely.</p>	
	<p>2. All exposed screws or bolts must be sealed with epoxy.</p>	
	<p>3. Drywall screws must not be used to mount the Holocom SDS system. These will not physically support the enclosures properly to the wall and will fail security checks. The installer needs to ensure that the proper Raceway Installation Kit is used and the inspector needs only to actually pull on an installed section to ensure that it is properly completed.</p>	
	<p>4. Any exposed conduit/pipe from a Through Wall Kit must be sealed with epoxy at each seam. This should only happen when a Through Wall Kit is used to exit the back of a raceway or an internal connector.</p>	
	<p>5. End to end raceway joints must be supported with the supplied 2” bridge, the seam sealed with epoxy and the bridge sealed to the back of the raceway with grey epoxy as well. Gaps over 1/8” are not acceptable.</p>	

	<b>6. All conduits connectors shall be epoxy.</b>	
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**Certification**

**QA/QC Inspector:**

**QA/QC Signature:** \_\_\_\_\_

**Date:**