

---

## Checkpoint Design Tips

All of this information is in the [Checkpoint Design Guide \(CDG\)](#) however we wanted to highlight a few lessons learned that may help expedite your design approval and construction.

- 1) Please when emailing drawings to the TSA designer include the [airport identifier in the subject line](#) of the email.
- 2) [Start with the AutoCAD blocks](#) – The CAD blocks are already prepared and come in different combinations of equipment. They come in single lane or two lane configurations. They represent the optimal design. Simply insert the block(s) into your design.
- 3) [Dimension properly](#) – Please dimension the drawing in accordance with [page 100 of the CDG](#) or example provided by the checkpoint designer. A properly dimensioned drawing helps to expedite review.
- 4) [Know your equipment](#) - If you are relocating equipment, make sure that you use the correct equipment. Below are a few things to check
  - a. [X-Ray](#) – For the new design, make sure the number of left-handed bump outs (when looking at the X-Ray from the non-sterile to sterile side the bump out is on the left) and right-handed bump outs match the existing equipment.
  - b. [AVS](#) – Each AVS is associated with a specific X-Ray, so when you are relocating equipment, make sure you keep the AVS with the correct X-Ray.
  - c. [ADA gates](#) – There are left-handed and right-handed ADA gates. They can be switched, but it requires additional work. If you are switching ADA gates, make the contractor aware of it.
  - d. [AIT](#) – Be aware of the location of the power leg and touch control operator screen on the existing AITs to ensure that it will work with your new design.
- 5) [Know the Power and Data Requirements](#) – Ensure the power and data are the correct type and in the correct position per [page 86 of CDG](#). The Checkpoint designers may request to review your electrical drawings, but if they do not, please feel free to ask the designer for a review of the drawing. Prior to the relocation or installation date, walk through the site and check that all power and data are located appropriately and are the correct type. [Do not just follow what is at the existing checkpoint!](#) Below are a few things to look for, but refer to the CDG for a complete list of power and data requirements.
  - a. [Supervisor and TDC podiums](#) - full flush underneath podium power and data
  - b. [Private Screening room](#) must have power and data in and outside the room.



- 6) **Know your space** - The new space must meet certain requirements to allow the equipment and TSA to do their job properly.
- a. **Ceiling height** – The AIT requires a minimum of 9 foot ceilings.
  - b. **Slopes** – If your floor has a slope, check the CDG for specific slope limitations.
  - c. **Infrastructure under the floor including floor joints** – The WTMD may not work properly if it located adjacent to metal objects or objects with an electrical field (page 40 CDG).
  - d. **Lighting** – The CDG recommends minimum luminance level of 30 foot-candle (fc) at the checkpoint. We understand that some relocation projects are temporary and it may be difficult to provide this amount of light. However, there are specific areas where this level of lighting is essential. At the TDC and the bag search areas, task lighting can be added to ensure that TSA has adequate lighting to perform their job.
  - e. **Glare** – Glare is a concern for TSA staff, particularly those viewing the monitors. Any glare issues should be mitigated.
  - f. **Heating and ventilation** – Make sure the new space (even if temporary) will have proper heating and cooling to keep TSA and travelers comfortable.
- 7) **Be prepared** – Relocations and installations have a quick turn-around. It is imperative to do a walk through prior to the start of the relocation or installation to ensure that everything is ready. Below are a few things that should be considered.
- a. **Power and Data** – Make sure the power and data are installed properly prior to the relocation.
  - b. **Rigging path** – The rigging path must be unobstructed and provide the appropriate clearance to allow the equipment to be moved and installed.
  - c. **Tape out the location of the equipment** – To ensure that the installation follows the design and moves quickly it is a good idea to tape out the location of all equipment.
- 8) **Plan for the future** – A flexible design and good infrastructure will allow you to be prepared for future changes in checkpoint equipment, design and passenger demand. Make sure you ask your checkpoint designer about any future initiatives that you should consider in your design.

**Consult the CDG frequently throughout the process**

**Contact your Checkpoint Designer for clarifications**

Dale Mason	<a href="mailto:Dale.Mason@tsa.dhs.gov">Dale.Mason@tsa.dhs.gov</a>	(201) 401-0482
Jennifer Dermody	<a href="mailto:Jennifer.Dermody@tsa.dhs.gov">Jennifer.Dermody@tsa.dhs.gov</a>	(571) 227-1729

---