



## Internal Air Transport Certification

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**Date:** 19 April 2018

**Item Nomenclature:** CSC Certified Tricon ISO Container

**File Number:** 2003.01.03 Rev 9

**Requestor:** On File

**Superseded Certification Date:** 18 April 2018

**New Information Summary:** Updated Shoring Requirements and Restraint Procedures.

### Reference Documents:

1. HQ AMC SCOTT AFB IL//A4T//, 20 Jan 2010 message, securing containers to 463L pallets.
2. HQ AMC/A4VX, 11 Dec 2014 Email, Regarding C-5 Roller Load computation.

**Item Description:** The subject item is identified to be a Tricon ISO Cargo Container that has been certified by the Convention for Safe Container (CSC). The containers may have multiple manufacturers (e.g. Sea Box, Inc., Charleston Marine and Med Union to name a few). The approximate dimensions are 77.5" L x 96" W x 96" H or 96"L x 77.5" W x 96"H.

**NOTE:** The listed dimensions are approximations. Actual dimensions can vary as long as aircraft limitations published in applicable cargo loading manuals and the conditions of certification listed below are not violated. Adjustments to shoring and/or loading methods shall be reported to ATTLA.



**Figure 1: Tricon ISO Cargo Container**

**Certified Aircraft:** USAF C-130, C-17 and C-5

### Conditions of Certification:

1. **Maximum Weight for Air Transport:** 14,900 lbs (does not include pallets, shoring or tiedowns)
2. **Item Preparation:**

a. Palletized – The Tricon Container can be placed on a single pallet or a 2-pallet train depending on container orientation. There are four shoring configurations; (1) Up to 10,000 lb if wider lumber is not available; (2) Up to 11,000 lbs when using 4 pieces of shoring under the container; see photo in Figure 2; (3 and 4) for all weights up to 14,900 lbs; see Figure 3 and 5 for illustration.

**NOTE:** The recommended shoring thickness for all configurations is ½” minimum to prevent the corners from contacting the pallet. However, if the shoring is thicker than ½” the palletized Tricon may not be air transportable on some commercial airplanes (e.g. 747).

(1) Up to 10,000 lb container: Place the container on a minimum of two rows of shoring min 60” L x min 3.5” W, inboard against (not under) the ISO corners.

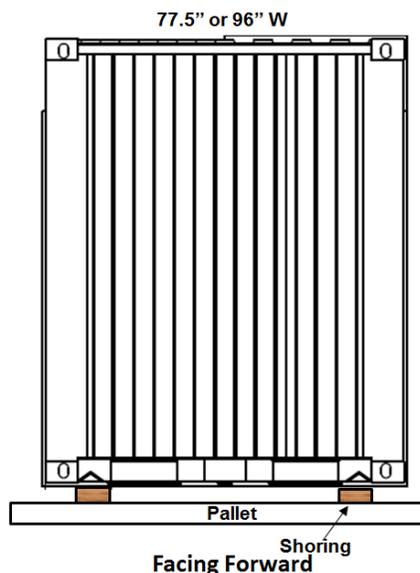
(2) Up to 11,000 lb container: Place the container on a minimum of four pieces of shoring with two sections approximately 60” L x 5” W and two sections approximately 80” L x 5” W. These boards will be inboard of the ISO corners. C-5 roller calculation have been calculated to allow this weight; taking in consideration of open slots for forklift tines. See Figure 2.

**NOTE:** All four sides of the container must be in contact with the shoring as placed (not including fork tine pocket areas). If the sides are not in contact, then new roller load computations will need to be completed to determine the maximum allowable weight.



**Figure 2: Up to 11,000 lb Container Shoring Placement**

(3) Up to 14,900 lbs: Place the container on a minimum of two rows of shoring min 77.5” L x min 5” W (two narrower pieces of lumber side-by-side is acceptable), inboard against (not under) the ISO corners. See Figure 3 below.



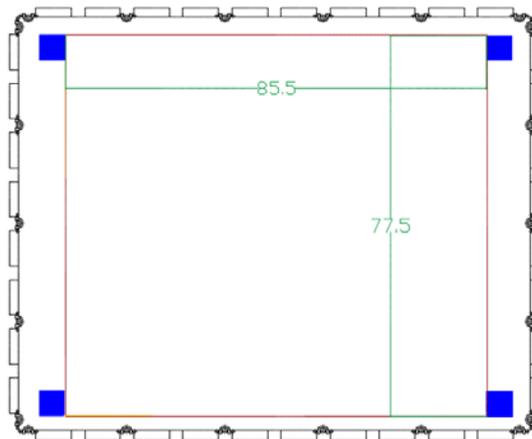
**Figure 3: All Weights up to 14,900 lbs Pallet Shoring—Looking Fwd in Aircraft**

(4) Up to 14,900 lbs; the shoring will be approximately 85.5" Wide by 77.5" Long (minimum) and will fit under the container as depicted in figure 5.

**CAUTION:** Procedure 4 above will only work if the bottom of the container is similar to that of Figure 4 below.



**Figure 4: Typical Bottom of Tricon Container**



**Figure 5: Shoring placement between corners of Tricon (one piece)**

**NOTE:** C-17 Logistic Rails: The container must be in the 77.5" W orientation.

- b. LSA Adapter – When transported with LSA Adapter, utilize airlift certification letter 2002.06.03.
- c. The Tricon ISO Cargo Container is capable of withstanding a rapid in-flight decompression of up to 8.3 PSI within ½ second without endangering the aircraft or personnel.
- d. All hazardous materials (to include fuel level, batteries, etc.) must be prepared and certified for airlift in accordance with TM 38-250/AFMAN 24-204(I). Do not consider this air transport certification as approval for hazardous materials. Authorization for airlifting hazardous material is the responsibility of AFMC/A4RT (DSN 787-4503 or COM (937) 257-4503).

### 3. Loading Instructions:

- a. C-5 & C-130: This item can be loaded using general loading procedures as listed in the respective aircraft loading manual.
- b. C-17: When loading palletized Tricon containers into the logistic rails on the cargo floor, without ramp toes installed, containers will initially be centerline loaded and then shifted to either

the left or right logistic rail system. When loading the containers into the logistics rails on the aircraft ramp, ramp toes with rollers and guide rails shall be installed.

**4. Restraint Requirements:** The Tricon ISO Cargo Container and all accompanying cargo must be restrained to meet air transport requirements of 3G forward, 1.5G aft and lateral, and 2G up. In addition, stored or installed equipment must meet these requirements and be capable of withstanding a 4.5G down load. Approved cargo nets or chains and devices may be used for restraint in accordance with general loading procedures. When attaching chains to the corner fittings, route the chains through the side holes and not the top ones (See Figure 6). If the chains are routed through the top holes, the vertical clearance will be too close for some commercial aircraft (See Figure 6).

**CAUTION:** When the cargo weight exceeds 10,000 lbs the restraint will be attached to the aircraft floor.



**Figure 6: Chain Routing Through Corners of Container**

**Required Distribution:**

1. Shipper shall give a copy of this certification to the ATOC representative when the item is presented for airlift. This memo shall be part of the official cargo manifest documentation package and shall be briefed to the aircraft loadmaster prior to loading this item.
2. AMC/A3V & AMC/A4T.
3. SDDC TEA.

**Point of Contact:** Brian Herriott, at Brian.Herriott.1@us.af.mil or ATTLA@us.af.mil, DSN 986-9954 or Commercial (937) 656-9954. Refer to file number 2003.01.03 Rev 8 to reference this item.

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