

Maximum container weights for class "A" & "B" highways

In addition to the specification and dimensions that are listed on the reverse side of M.E. Dey's map handout, there is other information that is useful to importers of full container loads.

The maximum class A highway limit for any ocean container drayage vehicle is approx. 80,000 lbs. This includes the tractor, chassis, container, and payload (cargo weight). The reason this is relevant is because the steamship lines list the maximum payload of a container at much higher than what the class A highway limit is once you remove the weight of the tractor, chassis and container (tare weight). When relaying this information to the customer, our intermodal providers work with the following standards:

A 40' std. container can have no more than 44,000 lbs. of cargo weight to operate on a class A highway. This is 16,000 lbs. less than what is rated as the maximum payload for carriage on a vessel. This is obviously a significant difference.

A 20' container can have no more than 45,500 lbs. of cargo weight to operate on a Class A highway. The reason a 20' can have a heavier payload is due to the use of a tri-axle chassis (or Pratt tri-axle) and the fact that the 20' container is 2425 lbs. lighter than that of a 40'. In addition to the use of a tri-axle, the cargo must be distributed in a manner that the weight of the payload is supported by the chassis. There is a formula that our providers use to determine this.

The maximum class A payload for a 20' container before it is required to have the tri-axle chassis is 38,500 lbs. of cargo. A tri-axle is required between 38,500 and 45,500 lbs. of cargo.

Some special tri-axle chassis exist for the use of 40' containers, however, adding a tri-axle to a 40' would defeat the purpose due to the fact that the tri-axle increases the weight of the total vehicle substantially (the 80,000 lb. rule). Also, since the 40' steel container is 2425 lbs. heavier than the 20', we reach the empirical 80,000 lbs. sooner than with a 20'. Occasionally, a chassis other than a steamship provided slider chassis is used (like a "45' bridge") that allows a 40' std. at maximum payload to be drayed due to the distribution of the weight of the cargo (payload) distribution over the chassis. This is referred to as the "bridge law".

The maximum operation on a class B highway is 72,000 lbs. For class B weights, the payload must be 8,000 lbs. less than in the above examples for class A highway limits. This is relevant in the occasion of a delivery of a container to other than an industrialized area.

A note about container weights ("tare weight" on our map handout): Most containers are made out of steel. This is what the handout and the above information is based on. Occasionally, a container will be made out of aluminum, thus reducing its weight and allowing the importer to reach a greater payload. Disregard this - I have not yet devised a way to control whether a carrier can find (much less book) a rare aluminum container instead of a steel one. Always assume the container is made of steel, and you will help you customer stay within class A and B highway limits.