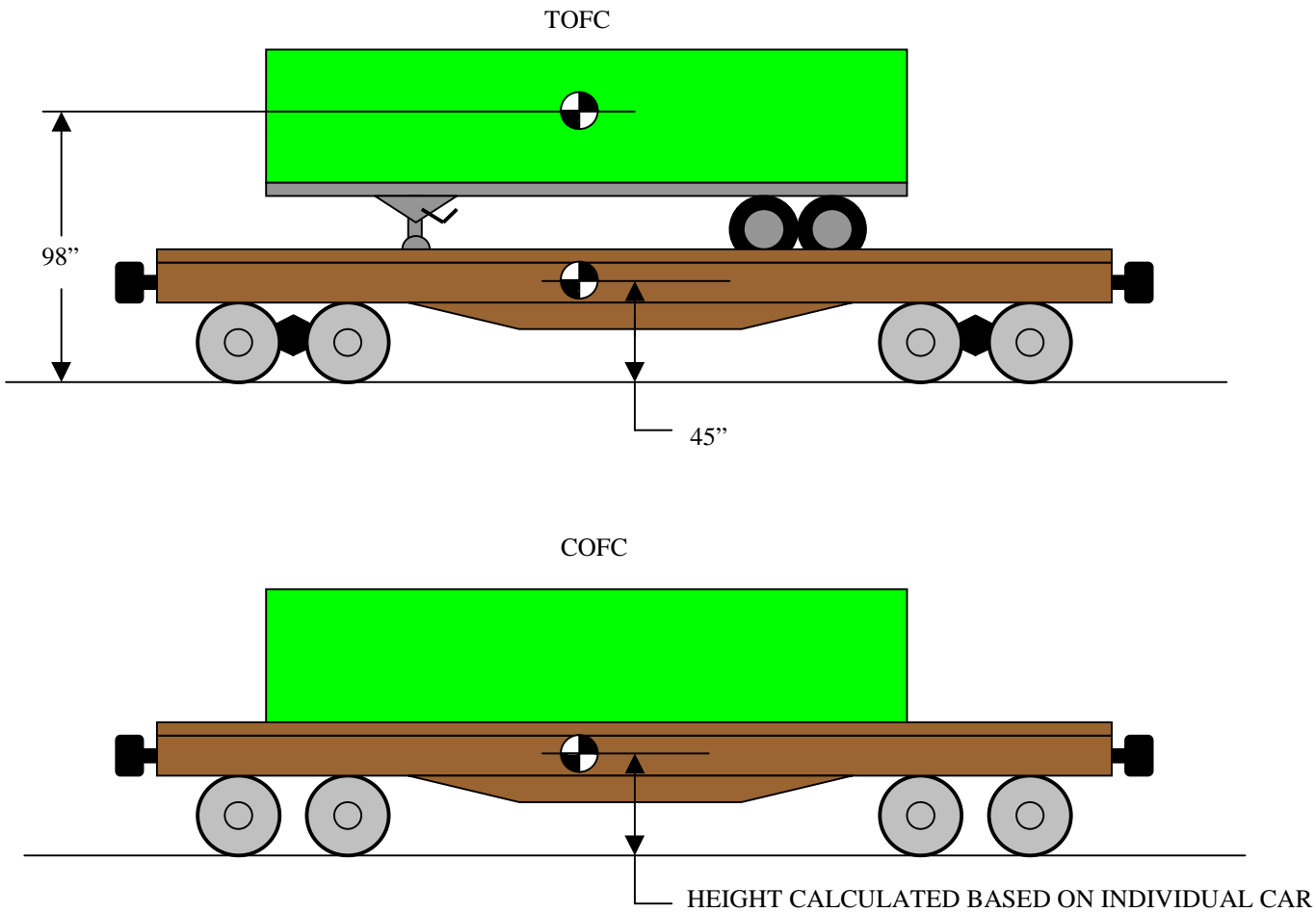


Load and Ride Solutions Loading Assistance

CENTER OF GRAVITY - INTERMODAL MOVEMENTS

Combined center of gravity (measured from top of rail) of car, trailer and load is not to exceed 98”.



Center of gravity should not exceed 98” at top of rail (ATR). In some cases it can exceed 98” ATR to a maximum of 110” ATR, however, the 110” maximum restricts train handling and operations. You may use the following information to figure it:

CGC = Center of gravity of the railcar in inches. TOFC is calculated at 45” ATR when exact information is unknown. COFC or spine cars need to be calculated based on the individual railcar used.

CGL = Center of gravity of the load in inches ATR. This should be calculated and supplied by the shipper and is added to the height of the railcar deck.

CCG = Combined center of gravity in inches, ATR.

$$\text{Formula: } \frac{\text{Light weight of railcar} \times \text{CGC} + \text{net weight of load} \times \text{CGL}}{\text{Gross weight of railcar and lading}}$$