

Emerging Proficient



Commercial Driver Program

Weight Distribution and Fixed Tandems

Advanced Competencies Curriculum

EPCD Collaboration of Construction Businesses

Thanks to the advisory committee for your review and approval and to Fortified Development for the development of this curriculum.

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Let's Get Started



Overview

The weight distribution of your load is important in improving safety and to help extend the life of your equipment. Properly distributing the weight in your trailer can improve safety by decreasing excessive sway or loss of control. It will also ensure you are in compliance with weight laws and federal safety standards.

Basic Principles

- Gross Vehicle Weight (GVW), Gross Vehicle Weight Rating (GVWR), Gross Combination Weight (GCW), Axle Weight, Tire Load
- Weight Distribution Relative to Trucks

Additional Topics

- Center-of-Gravity
- Weight Distribution and Axle Loading
- Risk of Overloading Your Trailer
- **Training Hour(s): Classroom 4 hrs. /20 hrs. OJL**

Basic Principles

Definitions

- **Gross Vehicle Weight (GVW)**
Base Curb Weight plus actual Cargo Weight and passengers
- **Gross Vehicle Weight Rating (GVWR)**
Maximum amount of weight the vehicle can weigh when fully loaded with occupants and cargo
- **Gross Combination Weight (GCW)**
Maximum loaded weight of a truck/tractor plus the trailer or semitrailer designed for use with the truck tractor
- **Gross Axle Weight (GAW)**
Total weight supported by each axle (front or rear)
- **Tire Load Index**
A numerical value for the maximum weight the tire can handle when it is inflated to its recommended pressure

Risk of Overloading Your Trailer

- Causes stress on mechanical components of the truck
- Reduced stopping power
- Can damage the brakes
- Makes it difficult to steer
- Can cause tire blowouts
- Fines for FMCSA violations



Let's hit the road!

Concepts that Will be Covered OJL

- Weight distribution relative to trucks
- Center of gravity
- Weight distribution and axle loading