

MAXIMUM LEGAL TRUCK LOADINGS AND DIMENSIONS

Regulations pertaining to the operation of trucks and trailers according to Act 300 P.A. of 1949, as amended.

NOTE: When restricted loadings are in effect, the normal maximum axle weights allowable on **rigid** pavements shall be reduced 25% and the maximum wheel load shall not exceed 525 pounds per inch width of tire.

When restricted loadings are in effect, the normal maximum axle weights allowable on **flexible** pavements shall be reduced 35% and the maximum wheel load shall not exceed 450 pounds per inch width of tire.

MAXIMUM OVERALL DIMENSIONS

- Height 13 feet, 6 inches
- Length of combination of truck-tractor and semitrailer with or without loadNo limitation
(Provided semitrailer lengths do not exceed limits for non-designated and designated highways)
- Length of any other vehicle with or without load (excluding impact absorbing bumpers).....40 feet
- Length of pickup truck and semitrailer designed for recreational living purposes, and additional trailer or semitrailer...65 feet
(75 feet with CDL)
- Length of semitrailers longer than 50 feet shall have a wheelbase of 37 feet to 41 feet (measured from the kingpin coupling to the center of the rear axle or to the center of the rear axle assembly).
- Length of semitrailers longer than 50 feet shall operate on designated highways only.
- Length of semitrailers and trailers shall be measured from the front vertical plane of the foremost transverse load supporting structure to the rearmost transverse load supporting structure.
- Length shall not include safety and energy conservation devices including, but not limited to, impact absorbing bumpers, rear view mirrors, turn signal lamps, marker lamps, steps and hand holds for entry and egress, flexible fender extensions, mud flaps or splash and suppressant devices, load induced tire bulge, refrigeration or heating units, or air compressors. A device shall be excluded from a determination of length only if it is not designed or used for the carrying of cargo.
- Projection beyond front of vehicles3 feet
- Overhang beyond rear of vehiclesAny amount is permissible if the legal length is not exceeded. However, if this overhang is 4 feet or more, there shall be displayed on the extreme rear of such a load a 12 - inch red square flag in the daytime and a red light or lantern at night.
- Axle limitationA combination of vehicles shall not exceed 11 axles.
- Length of truck-tractor and lowboy semitrailer combination.....No max overall

Non-Designated Highways

- Width96 inches
- Length of semitrailer (including load).....50 feet
- Length of truck and semitrailer.....59 feet
- Length of a combination of truck-tractor, semitrailer, and trailer OR truck-tractor and 2 semitrailers OR truck and semitrailer or trailer with or without load (see exceptions)59 feet

Designated Highways

- Width.....102 inches
- Length of semitrailer (including load).....53 feet
- Length of truck and semitrailer (designated highways)..... 65 feet
- Length of a combination of truck-tractor, semitrailer, and trailer OR truck-tractor and 2 semitrailers OR truck and semitrailer or trailer with or without load (see exceptions)65 feet

EXCEPTIONS:WIDTH:

Unprocessed Logs, Pulpwood, Wood Bolts, Agricultural Products, and Concrete Pipe: 108 inches for load only

Bus, trailer coach, trailer, semitrailer, truck camper, or motor home: 102 inches

Implements of Husbandry: A person may only operate or tow an implement of husbandry of any width on a highway as required for normal farming operations.

LENGTH:

Truck-Tractor, Semitrailer, and Trailer OR Truck-Tractor and 2 Semitrailers: No overall length limitation providing the length of each semitrailer and trailer including load does not exceed 28 feet 6 inches or the overall length of the semitrailer and trailer or 2 semitrailers as measured from the front of the first towed unit to the rear of the second towed unit while the units are coupled together does not exceed an overall length of 58 feet, including load. Vehicles and combinations of vehicles shall not be operated on a designated highway of this state in excess of these lengths.

Truck-Tractor, Semitrailer, and Trailer, OR Truck-Tractor and 2 Semitrailers: No semitrailer or trailer is more than 28 1/2 feet long: not to exceed an overall length of 65 feet including truck-tractor. This only applies while the vehicle is being used for a business purpose reasonably related to picking up or delivering a load and only if each semitrailer or trailer is equipped with a device or system capable of mechanically dumping construction materials or dumping construction materials by force of gravity. Vehicles and combinations of vehicles shall not be operated on a highway in this state in excess of these lengths.

Truck and Trailer or Semitrailer: Designed and used to transport saw logs, pulpwood, and tree length poles that does not exceed an overall length of 70 feet or a crib vehicle and semitrailer or trailer designed and used to transport saw logs that does not exceed an overall length of 75 feet. A crib vehicle and semitrailer or trailer designed to and used to transport saw logs shall not exceed a gross vehicle weight of 164,000 pounds. A person may operate a truck tractor and semitrailer designed and used to transport saw logs, pulpwood, and tree length wooden poles with a load overhang to the rear of the semitrailer which does not exceed 6 feet if the semitrailer does not exceed 50 feet in length. Vehicles and combinations of vehicles shall not be operated on a designated highway of this state in excess of these lengths.

Truck and Semitrailer or Trailer, OR Truck-Tractor, Semitrailer, and Trailer, OR Truck Tractor and Semitrailer or Trailer designed and used exclusively to transport assembled motor vehicles or bodies, recreational vehicles, or boats, that does not exceed a length of 65 feet. Stinger-steered combinations shall not exceed a length of 75 feet. The load on any such combination of vehicles may extend an additional 3 feet beyond the front and 4 feet beyond the rear of the combination of vehicles. Retractable extensions used to support and secure the load that do not extend beyond the allowable overhang for the front and rear shall not be included in determining length of a loaded vehicle or vehicle combination. ("Stinger-steered combinations" means a truck tractor and semitrailer combination in which the fifth wheel is located on a drop frame located behind and below the rearmost axle of the power unit.)

Articulated Busses: Articulated busses operated by a local public transit system funded by Act No. 51 of the Public Acts of 1951, as amended, may operate with a maximum length of 65 feet.

Motor vehicles wholly or partially assembled transported by utilizing 1 tow bar or 3 saddle mounts with full mount mechanisms and using the motor power of 1 vehicle. Any such combination of vehicles may not exceed the maximum length of 75 feet. Any combination that exceeds 55 feet in length may be operated only on such highways and routes as designated by appropriate authorities.

Mobile Homes: 45 feet in body length, 60 feet when in combination with a towing unit 8 feet 6 inches in width, 12 feet 6 inches in height.

Truck-tractor and lowboy semitrailer: A lowboy semitrailer wheelbase shall not exceed 55 feet as measured from the kingpin coupling to the center of the rear axle. A lowboy semitrailer more than 59 feet in length shall not operate with more than any combination of 4 axles on the lowboy unless an oversized load permit is issued by the state transportation department or a local authority with respect to highways under its jurisdiction.

MAXIMUM ALLOWABLE GROSS AXLE LOADINGS				
Spacing Between Axles	Normal Loadings When Seasonal Load Limitations Are Not In Force		Seasonal Load Limitations (Speed Limit 35 MPH)	
	Vehicles Exceeding 80,000 lbs. Gross Weight	† Vehicles 80,000 lbs. OR Under Gross Weight	Rigid 25% reduction	Flexible 35% reduction
9 feet or over	18,000 lbs.	20,000 lbs.	13,500 lbs.	11,700 lbs.
More than or equal to 3 ½ feet but less than 9 feet	13,000 lbs.		9,750 lbs.	8,450 lbs.
When part of a tandem axle assembly	*16,000 lbs.	34,000 lbs. on tandem	**12,000 lbs.	***10,400 lbs.
When less than 3 ½ feet	9,000 lbs.		6,750 lbs.	5,850 lbs.
Maximum load on any wheel shall not exceed: (lbs. per inch of tire width)	700 lbs.	700 lbs.	525 lbs.	450 lbs.

† Gross vehicle weight may not exceed 80,000 lbs. and the Bridge Gross Weight Formula as follows: An overall gross weight on a group of 2 or more consecutive axles equaling: $W = 500 [(LN / (N - 1)) + 12N + 36]$

Where W = overall gross weight on a group of 2 or more consecutive axles to the nearest 500 pounds

L = distance in feet between the extreme of a group of 2 or more consecutive axles

N = number of axles in the group under consideration with the following exceptions:

- 2 consecutive sets of tandem axles may carry a gross load of 34,000 lbs. each if the first and last axles of the consecutive sets of tandem axles are not less than 36 feet apart, and the gross vehicle weight does not exceed 80,000 lbs. including all enforcement tolerances.
- 5-axle truck tractor, semitrailer combinations having 2 consecutive sets of tandem axles, vehicles having a gross weight in excess of 80,000 lbs. or in excess of the vehicle gross weight, determined by application of the formula in this subsection, shall be subject to the maximum axle loads specified in column 2 (Normal Loadings When Seasonal Load Limitations Are Not In Force).

A vehicle or combination of vehicles, when operating within 5 miles from a "Special Designated Highway" for access to or from points of origin or destination, must reduce to the following weights when the route being traveled is under seasonal load limitations:

- Rigid route – 13,500 lbs. on a single axle, 12,000 lbs. per axle on a tandem axle assembly.
- Flexible route - 11,700 lbs. on a single axle, 10,400 lbs. per axle on a tandem axle assembly.

* On any legal combination of vehicles, only one (1) tandem axle assembly shall be permitted at the gross weight of 16,000 lbs. per axle and no other tandem axle assembly in such combination of vehicles shall exceed a gross weight of 13,000 lbs. per axle. On a combination of a truck tractor and semitrailer having not more than 5 axles, two (2) consecutive tandem axle assemblies shall be permitted at a gross permissible weight of 16,000 lbs. per axle, if there is no other axle within 9 feet of any axle of the assembly.

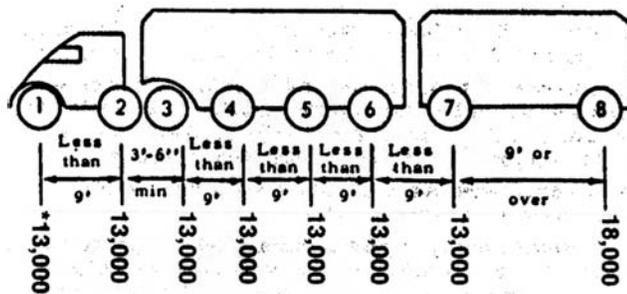
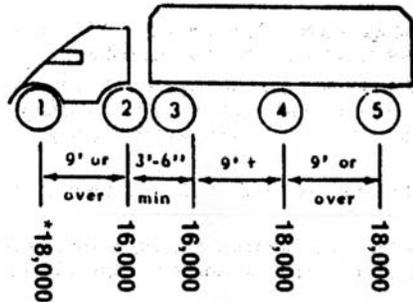
** On any legal combination of vehicles, only one (1) tandem axle assembly shall be permitted at the gross weight of 12,000 lbs. per axle and no other tandem axle assembly in such combination of vehicles shall exceed a gross weight of 9,750 lbs. per axle. On a combination of a truck tractor and semitrailer having not more than 5 axles, two (2) tandem axle assemblies shall be permitted at a gross weight of 12,000 lbs. per axle, if there is no other axle within 9 feet of the axle of the assembly.

*** On any legal combination of vehicles, only one (1) tandem axle assembly shall be permitted at the gross weight of 10,400 lbs. per axle and no other tandem axle assembly in such combination of vehicles shall exceed a gross weight of 8,450 lbs. per axle. On a combination of a truck tractor and semitrailer having not more than 5 axles, two (2) tandem axle assemblies shall be permitted at a gross weight of 10,400 lbs. per axle, if there is no other axle within 9 feet of the axle of the assembly.

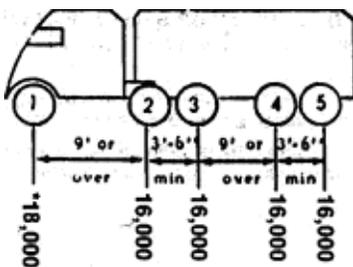
The following examples are shown as a guide for figuring the maximum allowable gross axle loads on all state trunk lines during all periods of the year.

Michigan Weight and Axle Load Limits

The maximum load on any wheel shall not exceed 700 lbs. per inch of tire width.



Public Act #300, 1949, Sec. 257.722, Paragraph 3



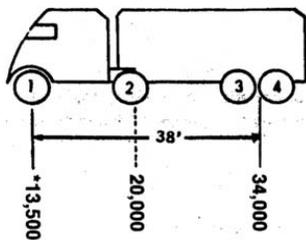
“On a combination of a truck tractor and semitrailer having not more than 5 axles, 2 consecutive tandem axle assemblies shall be permitted at a gross permissible weight of 16,000 lbs., if there is no other axle within 9 feet of any axle of the assembly.”

Steering Axle Weights - Can be the maximum of 18,000 lbs. (11,700 lbs. frost restrictions) if equipped with high pressure pneumatic or balloon tires. (never to exceed 700 lbs. per inch of tire width)

Other Tandem Axles and Multi Axles - On any other combinations of vehicles exceeding a gross weight of 80,000 lbs., only one (1) tandem axle assembly shall be permitted at this weight (16,000 lbs. per axle). No other tandem axle assembly shall exceed 13,000 lbs. per axle.

Bridge Gross Weight Formula

Public Act #300, 1949 Sec. 257.722, Paragraph 12

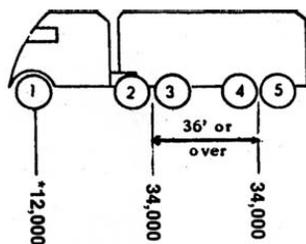


$$W = 500 [(LN / (N - 1)) + 12N + 36]$$

$$W = 500 [(38 \times 4) / (4 - 1) + (12 \times 4) + 36]$$

$$W = 500 \times 134.6$$

$$W = 67,300 \text{ lbs., or rounded off to nearest 500 lbs.} = 67,500$$



The State Transportation Commission, or a local authority with respect to highways under its jurisdiction, may designate a highway, or section of a highway, for the operation of vehicles having a gross vehicle weight of not more than 80,000 lbs. which do not exceed any of the following:

- (i.) 20,000 lbs. on any 1 axle.
- (ii.) A tandem axle weight of 34,000 lbs. including all enforcement tolerances
- (iii.) An overall gross weight on a group of 2 or more consecutive axles equaling:

$$W = 500 [(LN / (N - 1)) + 12N + 36]$$

* The bridge formula allows up to 20,000 lbs. per single axle, if the vehicle is equipped with large enough tires. Steering axle weights will vary depending on the gross weight of the vehicle.

SPECIAL PERMIT INFORMATION

Vehicles or the loads thereon which exceed the legal dimensions or weights as listed, require a SPECIAL TRANSPORT PERMIT for travel. SPECIAL TRANSPORT PERMITS are issued only for the occasional movement of oversize or overweight vehicles or loads which cannot be dismantled, reduced, or otherwise rearranged to come within the legal limits. Applications for permits are to be made through the Michigan Transport Routing and Internet Permitting (MiTRIP) computer program or through a permit service. No overweight permits are issued when spring thaw weight restrictions are in affect.

SPECIAL DESIGNATED HIGHWAYS

These routes are highlighted in green and gold on MDOT's Truck Operators' Map. (Available at MDOT Transportation Service Centers, Michigan Weight Stations and www.michigan.gov/mdot.)