

February 12, 2021

In the event of any discrepancy between this Weights and Dimensions Guide and the Highway Traffic Act (HTA) or the Vehicle Weights and Dimensions on Classes of Highways Regulation (MR 155/2018), the HTA and MR 155/2018 will take precedence.

Updates to this Guide will be available on

Manitoba Infrastructure's website for motor carriers at: www.gov.mb.ca/mit/mcd/

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Terms Used in this Guide

Aerodynamic device: Means auxiliary equipment that is designed and used to improve the aerodynamic performance of a vehicle and is mounted at the rear of a truck, trailer or semi-trailer;

A-Train: A combination of vehicles composed of a truck tractor, a lead semi-trailer followed by an A-dolly and either a semi-trailer or a full trailer.

Auxiliary equipment: Means equipment that is permanently mounted at the front, at the rear, or on the side of a vehicle, and is not designed nor intended to be used to increase the vehicle's load-carrying capacity.

Axle Group: A tandem axle or tridem axle. (See tandem axle and tridem axle definitions, below.)

Axle Spread: The distance between the centers of the axles in an axle group.

Axle Unit: A single axle, or a tandem or tridem axle group.

B-Train: A combination of vehicles composed of a truck tractor and a lead semi-trailer, followed by another semi-trailer, attached to a fifth wheel coupler mounted on the rear of the first semi-trailer.

Box Length: Applies to the distance from the front of the load-carrying area to the rear of the load-carrying area, and the load. Auxiliary equipment is not included in this measurement.

Class A1: Applies to one of the three highway classifications – RTAC, A1 and B1.

Class B1: Applies to one of the three highway classifications – RTAC, A1 and B1.

Converter Dolly: A dolly equipped with one or two axles and designed to connect to a tow bar on the rear of the truck or trailer in front. An A-dolly has a single drawbar with a centered coupling, and a C-dolly has two separate couplings side-by-side.

C-Train: A combination of vehicles composed of a truck tractor and a semi-trailer, followed by another semi-trailer, attached to the first semi-trailer by the means of a C-dolly.

Dimension A: The measurement from the centre of the last axle on the lead semi trailer to the centre of the first axle on the converter dolly or second trailer.

Drawbar: Is a solid coupling between a hauling vehicle and its hauled load. It is the structural part of a full trailer, pony trailer or trailer converter dolly used for the purpose of coupling with a hitching device or fifth wheel coupler.

Drawbar Length: Applies to distance measured from the hitching device of the towing vehicle to:

- the front of the load carrying portion of a pony trailer, or
- the centre of the front axle unit of the full trailer, or
- the centre of the lower fifth wheel coupler locking device of a trailer converter dolly on an A-train or C-train.

Drive Axle: An axle that is connected to the power source of a motor vehicle and sends the power to the wheels.

Fifth Wheel Coupler: A coupling device securely attached to the chassis of a vehicle which will accept a semi-trailer kingpin inserted through the device and will lock the kingpin in position to allow rotation.

Full Trailer: A trailer without motive power that is designed to be towed by another vehicle and is designed so that all of its weight and load is carried on its own axles.

Gross Axle Weight: The gross weight carried by an axle unit and transferred to the road by the wheels of that axle.

Gross Vehicle Weight or **GVW:** Means the total weight of a vehicle or combination of vehicles, including its load, transmitted to the road by its axles.

Hitch Offset: The distance from the turn centre to the articulation point of the hitching device or fifth wheel coupler used to tow the following vehicle.

Interaxle Spacing: The distance between two axle units, determined by measuring from the centre of the last axle in the first axle group to the centre of the first axle of the next axle group.

Kingpin Setback: The horizontal distance from the vertical axis through the centre of the kingpin to any point on the semi-trailer ahead of the kingpin including any load. This measurement excludes any auxiliary equipment attached to the front of the semi-trailer that is not designed for the transport of goods.

Lift Axle: An axle controlled by a device designed for raising or lowering a single axle unit or for varying the load on an axle unit.

Maximum Weights: All maximum axle weights are subject to minimum tire size. The maximum weight per tire shall not exceed the lesser of the tire manufacturer's weight rating or the width of the tire stamped on the sidewall multiplied by 10 kg/mm.

Overall Height: The vertical distance between the surface of the road and the highest point on a vehicle or combination of vehicles, including load.

Overall Length: The distance from the foremost point of a vehicle or combination of vehicles to the rearmost point of the vehicle or combination of vehicles, including load. Auxiliary equipment is not included in this measurement.

Overall Width: The widest dimension of a vehicle or combination of vehicles, including load and auxiliary equipment.

Pony Trailer: A vehicle without motive power that is equipped with a rigid drawbar and is designed to be towed by another vehicle and is designed to carry all or most of its gross vehicle weight on its axles.

RTAC: (Acronym for "Road Transportation Association of Canada, now known as Transportation Association of Canada or "TAC".)

• RTAC is one of the weight loading classifications on Manitoba's Highways. RTAC highways are allowed more weight than A1 and B1 classified highways.

Rear Effective Overhang: The distance from the turn centre of the last axle unit to the rearmost point including load on the truck, trailer or semi-trailer.

Semi-Trailer: A trailer designed so that a substantial part of its weight and load rests on and is carried by the truck tractor, another semi-trailer or a trailer converter dolly which it is attached by a fifth wheel coupler.

Single Axle: One axle or two consecutive axles having an axle spread of less than 1.0 m.

Steering Axle: The articulated axle or axle group of a vehicle that is controlled by the driver in managing the direction travelled by the vehicle, or an articulated axle on a trailer or semi-trailer where the direction of travel of the trailer is controlled by the towing unit.

Tandem Axle: Two or more equally spaced consecutive axles, having an axle spread of not less than 1.0 m but not more than 1.85 m, that are designed to automatically distribute the load.

Track Width: The distance from the outside face of the outermost tire on one end of an axle to the outside face of the outermost tire on the axle's opposite end, measured at any point above the lowest point of the rim.

Trailer Converter Dolly: A vehicle without motive power that is designed to be used to convert a semi-trailer to a full trailer, and has one or more axles, the lower half of a fifth wheel coupler, and a drawbar assembly.

Tridem Axle: Three equally spaced consecutive axles, having an axle spread of not less than 2.4 m but not more than 3.7 m, which are designed to automatically distribute the load.

Tridem Drive Axle Group: A tridem axle group in which all three axles are connected to a power source that transmits tractive power to all wheels on those axles.

Trailer Length:

- on a *pony trailer*, applies to the distance measured from the articulation point of the hitching device to the rear of the pony trailer or any load carried on the trailer, whichever is the greater distance from the front of the pony trailer, or
- on a *full trailer*, is the distance measured from the front of the trailer, excluding any auxiliary equipment attached to the front of the full trailer to the rear of the full trailer or any load carried on the trailer whichever is the greater distance from the front of the full trailer, or
- on a *semi-trailer*, is the distance measured from the front of the semi-trailer, excluding any auxiliary equipment attached to the front of the semi-trailer that is not designed for the transportation of goods, to the rear of the semi-trailer or any load carried on it, whichever is the greater distance from the front of the semi-trailer.

Truck Tractor: A motor vehicle having a net weight of more than 4000 kg, and equipped with the lower half of a fifth wheel coupler designed to be used to pull a semi-trailer by coupling to the kingpin attached to the semi-trailer.

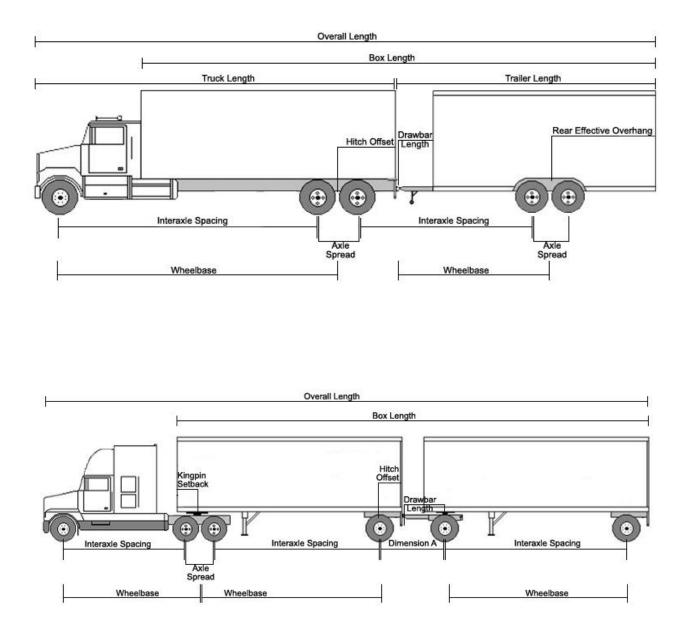
Wheelbase: As it applies to

- a *full trailer*, is the distance from the centre of the trailer's turntable to the trailer's turn centre,
- a *pony trailer*, is the distance from the centre of the trailer's hitching device to the trailer's turn centre,
- a *semi-trailer*, is the distance from the centre of the trailer's kingpin to the trailer's turn centre,
- a *truck, truck tractor, bus or motor home*, is the distance from the centre of the vehicle's steering axle unit to the vehicle's turn centre.

Wide-Base Single Tire: A non-steering tire that has a width of 445 mm or greater and meets the requirements of the *Motor Vehicle Tire Safety Regulations, 1995* (Canada).

Width of Tire: Means the width of the tire as customarily measured and rated by manufacturers of motor vehicles and tires (the amount of space across the tread pattern from sidewall to sidewall).

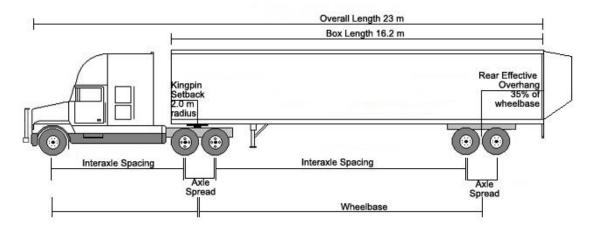
Wildlife bumper: A heavy duty bumper or device designed to reduce the impact of wildlife collisions that is mounted on the front of a truck or truck tractor.



Units of Measure Used in this Guide

For descriptions of the measures used above, please see "Terms Used in this Guide."

Auxiliary Devices



For descriptions of wildlife bumpers and aerodynamic devices, please see "Terms Used in this Guide."

Conversions: Imperial/Metric

Metric to Imperial	Imperial to Metric
1 kg = 2.2046 pounds	1 pound = 0.4536 kg
1 m = 3.2808 feet	1 foot = 0.3048 m = 304.8 mm
1 m = 39.37 inches	1 inch = 0.0254 m = 25.4 mm

Wide-base Single Tire Chart

	Weight for axle groups other than steer axles			
Maximum Wide Base Single Tire Weight	RTAC	Class A1	Class B1	
Maximum per tire	N/A	3,850 kg	3,850 kg	
Single Axle Maximum	9,100 kg	7,700 kg	7,700 kg	
Tandem Axle Unit				
Tandem Axle Maximum	17,000 kg	15,200 kg	13,800 kg	
Tridem Semi-trailer Axle Unit				
Axle spread 2.4 m to less than 3.0 m	21,000 kg	20,000 kg	19,000 kg	
Axle spread 3.0 m to less than 3.6 m	23,000 kg ¹	22,000 kg	19,000 kg	
Axle spread 3.6 m to 3.7 m	24,000 kg	22,000 kg	19,000 kg	
Tridem Drive Axle Unit				
Axle spread 2.4 m to less than 2.7 m	21,000 kg	20,000 kg	19,000 kg	
Axle spread 2.7 m to 2.8 m	22,000 kg	20,000 kg	19,000 kg	
Tridem Drive Axle Unit (on a vehicle with a tandem steer axle group)				
Axle spread 2.4 m to less than 2.7m*	21,000 kg	20,000 kg	19,000 kg	
Axle spread 2.7 m to less than 3.0 m**	22,000 kg	20,000 kg	19,000 kg	
Axle spread 3.0 m to 3.1 m***	22,000 kg	20,000 kg	19,000 kg	

¹A trailer tridem axle group with an axle spread of 3.0 m or more but less than 3.6 m is allowed 24000 kg on routes with a designated maximum GVW of 63500 kg.

* Requires a minimum wheelbase of 7.7 m

** Requires a minimum wheelbase of 7.8 m

*** Requires a minimum wheelbase of 7.9 m

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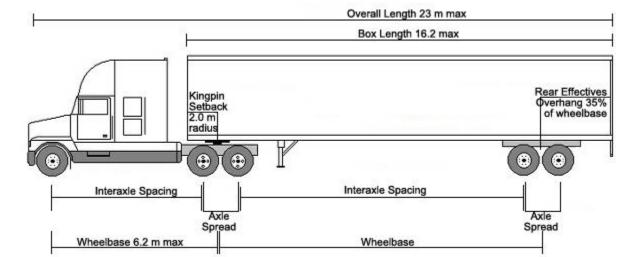
Note: Refer to Section 11 of *M.R. 155/2018* for track width on semi trailers, pony trailers and full trailers equipped with wide-base single tires.

Vehicle	Weiaht an	d Dimension	Limits i	in Manitoba

LEGAL CONFIGURATIONS IN MANITOBA

In the event of any discrepancy between this Weights and Dimensions Guide and the Highway Traffic Act (HTA) or the Vehicle Weights and Dimensions on Classes of Highways Regulation (MR 155/2018), the HTA and MR 155/2018 will take precedence.

SINGLE STEER TRUCK TRACTOR/TRAILER COMBINATION



DIMENSION	LIMIT
Overall Length	Maximum 23.0 m
Overall Width	Maximum 2.6 m
Overall Height	Maximum 4.15 m
Tractor	
Wheelbase	Maximum 7.2 m*
Tandem Axle Spread	Minimum 1.0 m/Maximum 1.85 m
Semi Trailer	
Box Length	Maximum 16.2 m
Wheelbase ¹	Minimum 6.25 m/Maximum 12.5 m*
Single, Tandem or Tridem Axle Group	Minimum 6.25 m/Maximum 12.5 m*
Kingpin Setback	Maximum 2.0 m radius
Rear Effective Overhang	Maximum 35% of wheelbase
Tandem Axle Spread	Minimum 1.0 m/Maximum 1.85 m
Tridem Axle Spread	Minimum 2.4 m/Maximum 3.7 m
Track Width ²	Minimum 2.5 m/Maximum 2.6 m
Interaxle Spacing	
Steering Axle to Drive Axle	Minimum 3.0 m
Tandem Axle to Tandem Axle	Minimum 5.0 m
Tandem Axle to Tridem Axle	Minimum 5.5 m

Vehicle Weight and Dimension Limits in Manitoba					
SINGLE STEER TRUCK TRACTOR/TRAILER COMBINATION (contine	SINGLE STEER TRUCK TRACTOR/TRAILER COMBINATION (continued)				
Axle Spread					
MAXIMUM WEIGHT	RTAC	Class A1	Class B1		
Tractor	-				
Steering Axle	6000 kg	6000 kg	6000 kg		
Single Axle (dual tires) ³	9100 kg	9100 kg	8200 kg		
Tandem Axle:		· · · · · · · · · · · · · · · · · · ·			
Axle Spread 1.0 m - 1.85 m	17000 kg	16000 kg	14500 kg		
Semi Trailer					
Single Axle (dual tires)	9100 kg	9100 kg	8200 kg		
Tandem Axle:					
Axle Spread 1.0 m - 1.85 m	17000 kg	16000 kg	14500 kg		
Tridem Axle:					
Axle Spread 2.4 m to less than 3.0 m	21000 kg	21000 kg	20000 kg		
Axle Spread 3.0 m to less than 3.6 m	23000 kg ⁴	23000 kg	20000 kg		
Axle Spread 3.6 m to 3.7 m	24000 kg	23000 kg	20000 kg		
Maximum Gross Vehicle Weight Limits (Combination)				
3 Axles	24200 kg	24200 kg	22400 kg		
4 Axles	32100 kg	31100 kg	28700 kg		
5 Axles	40000 kg	38000 kg	35000 kg		
6 Axle with Tridem Semi Trailer:	6 Axle with Tridem Semi Trailer:				
Axle Spread 2.4 m to less than 3.0 m	44000 kg	43000 kg	40500 kg		
Axle Spread 3.0 m to less than 3.6 m	46000 kg	45000 kg	40500 kg		
Axle Spread 3.6 m to 3.7 m	47000 kg	45000 kg	40500 kg		

¹In the case of a truck tractor coupled to a semi trailer equipped with a single axle, the wheelbase of the semi trailer is not controlled.

²Semi trailers manufactured prior to July 1, 1988 that have not had their axle units totally replaced may have a track width of less than 2.5 m. Refer to Section 11 of *M.R. 155/2018* for track width on semi trailers, pony trailers and full trailers equipped with wide-base single tires.

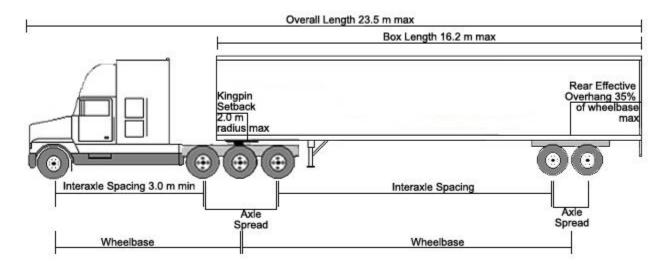
³Semi trailers equipped with two single axle units with an interaxle spacing of 1.86 m to 3.70 m inclusive cannot exceed the maximum allowable gross axle weight for a single axle unit.

⁴A trailer tridem axle group with an axle spread of 3.0 m or more but less than 3.6 m is allowed 24000 kg on routes with a designated maximum GVW of 63500 kg.

*For truck tractor wheelbase exceeding 6.2 m to not more than 7.2 m refer to maximum semi-trailer wheelbase chart

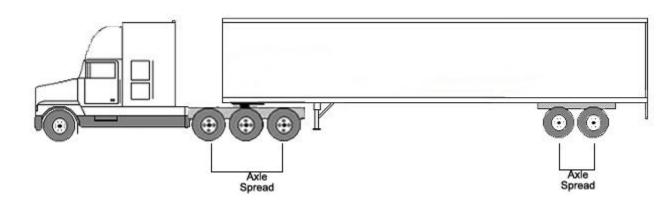
Tractor Wheelbase (m)	Max Trailer Wheelbase (m)	Tractor Wheelbase (m)	Max Trailer Wheelbase (m)
Up to 6.2	12.50	over 6.7 to 6.8	12.13
over 6.2 to 6.3	12.47	over 6.8 to 6.9	12.07
over 6.3 to 6.4	12.40	over 6.9 to 7.0	12.00
over 6.4 to 6.5	12.33	over 7.0 to 7.1	11.93
over 6.5 to 6.6	12.27	over 7.1 to 7.2	11.87
over 6.6 to 6.7	12.20		

TRIDEM DRIVE TRUCK TRACTOR/TRAILER COMBINATION



DIMENSION	LIMIT	
Overall Length	Maximum 23.5 m	
Overall Width	Maximum 2.6 m	
Overall Height	Maximum 4.15 m	
Tractor		
Wheelbase	Minimum 6.6 m/Maximum 7.2 m	
Tridem Drive Axle Spread ⁴	Minimum 2.4 m/Maximum 2.8 m	
Tridem Drive Axle Track Width	Minimum 2.5 m/Maximum 2.6 m	
Semi Trailer ⁵		
Box Length	Maximum 16.2 m	
Wheelbase Single, Tandem or Tridem ¹	Minimum 6.25 m/Maximum 12.27 m	
Kingpin Setback	Maximum 2.0 m radius	
Rear Effective Overhang	Maximum 35% of wheelbase	
Tandem Axle Spread	Minimum 1.0 m/Maximum 1.85 m	
Tridem Axle Spread	Minimum 2.4 m/Maximum 3.7 m	
Track Width ²	Minimum 2.5 m/Maximum 2.6 m	
Interaxle Spacing		
Steering Axle to Drive Axle	Minimum 3.0 m	
Tridem Axle to Tandem Axle	Minimum 5.5 m	
Tridem Axle to Tridem Axle	Minimum 6.0 m	

Tridem Drive Truck Tractor/TRAILER COMBINATION (continued)



MAXIMUM WEIGHT	RTAC	Class A1	Class B1	
Tractor				
Steering Axle ⁶	7300 kg	7300 kg	7300 kg	
Tridem Drive Axle (tractor)				
Drive Axle Spread 2.4 m to less than 2.7 m	21000 kg	21000 kg	20000 kg	
Drive Axle Spread 2.7 m - 2.8 m	22000 kg	21000 kg	20000 kg	
Semi Trailer				
Single Axle (dual tires) ³	9100 kg	9100 kg	8200 kg	
Tandem Axle:				
Axle Spread 1.0 m - 1.85 m	17000 kg	16000 kg	14500 kg	
Tridem Axle				
Axle Spread 2.4 m to less than 3.0 m	21000 kg	21000 kg	20000 kg	
Axle Spread 3.0 m to less than 3.6 m	23000 kg ⁷	23000 kg	20000 kg	
Axle Spread 3.6 m to 3.7 m	24000 kg	23000 kg	20000 kg	
Maximum Gross Vehicle Weight Limits (Combination)				
5 Axles	38400 kg	37400 kg	35500 kg	
6 Axles	46300 kg	44300 kg	41800 kg	
7 Axles	53300 kg	51300 kg	47300 kg	

¹In the case of a truck tractor coupled to a semi trailer equipped with a single axle, the wheelbase of the semi trailer is Not controlled.

²Semi trailers manufactured prior to July 1, 1988 that have not had their axle units totally replaced may have a track width of less than 2.5 m. Refer to Section 11 of *M.R. 155/2018* for track width on semi trailers, pony trailers and full trailers equipped with wide-base single tires.

³Semi trailers equipped with two single axle units with an interaxle spacing of 1.86 m to 3.70 m inclusive cannot exceed the maximum allowable gross axle weight for a single axle unit.

⁴All three axles in tridem group must drive (no pusher, tag or lift axles allowed). Drive axle locking devices must be unlocked while operating on a highway.

⁵Semi trailer may be equipped with a single, tandem or tridem axle.

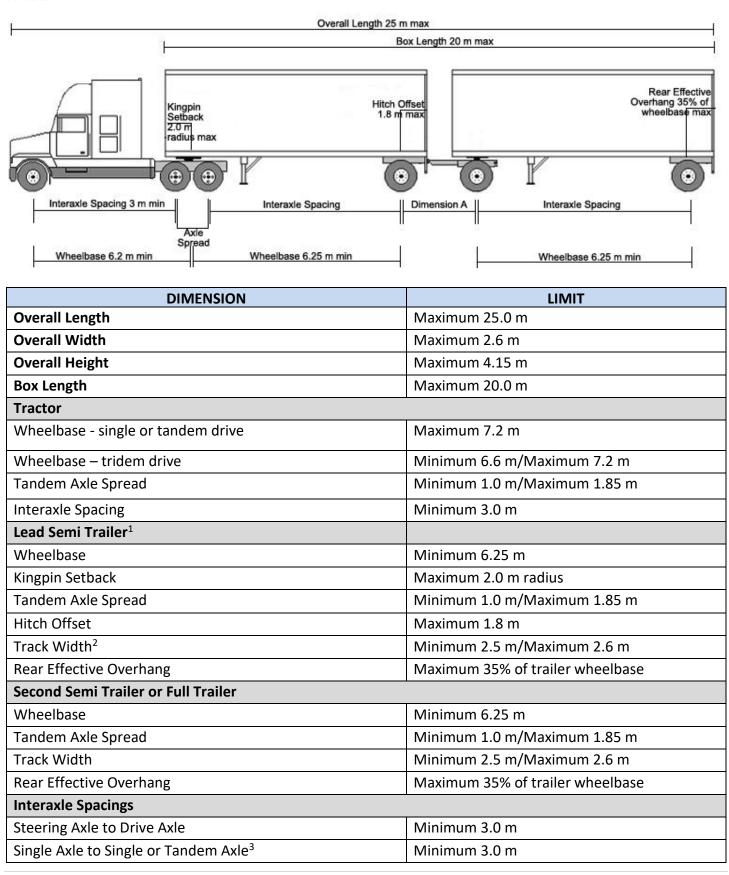
⁶Minimum 27% of drive axle weight at all times - maximum 7300 kg.

⁷A trailer tridem axle group with an axle spread of 3.0 m or more but less than 3.6 m is allowed 24000 kg on routes with a designated maximum GVW of 63500 kg.

*For tridem drive truck tractor wheelbase exceeding 6.6 m to not more than 7.2 m refer to maximum semitrailer wheelbase chart below

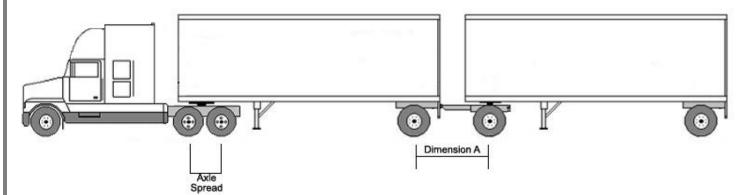
Tractor Wheelbase (m)	Max Trailer Wheelbase (m)	Tractor Wheelbase (m)	Max Trailer Wheelbase (m)
6.6	12.27	over 6.9 to 7.0	12.00
over 6.6 to 6.7	12.20	over 7.0 to 7.1	11.93
over 6.7 to 6.8	12.13	over 7.1 to 7.2	11.87
over 6.8 to 6.9	12.07		

A-TRAIN



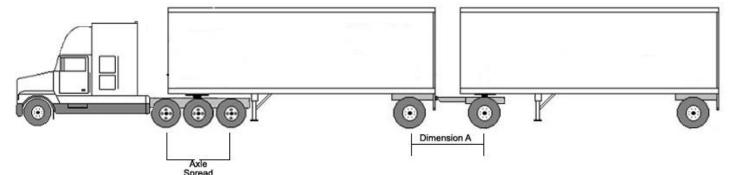
Single Axle to Tridem Axle ³	Minimum 3.0 m
Tandem Axle to Tandem Axle	Minimum 5.0 m
Tandem Axle to Tridem Axle	Minimum 5.5 m
Tridem Axle to Tridem Axle	Minimum 6.0 m
Dimension "A" - (from the centre of last axle on the lead Semi Trailer to the centre of the first axle on the converter dolly or second trailer)	Not controlled

A-train with Tandem Drive Axle (continued)



MAXIMUM WEIGHT	RTAC	Class A1	Class B1	
Tractor				
Steering Axle	6000 kg	6000 kg	6000 kg	
Tandem Axle:				
Axle Spread 1.0 m - 1.85 m	17000 kg	16000 kg	14500 kg	
Semi Trailer				
Single Axle (dual tires)	9100 kg	9100 kg	8200 kg	
Tandem Axle:				
Axle Spread 1.0 m - 1.85 m	17000 kg	16000 kg	14500 kg	
Tridem Axle:				
Axle Spread 2.4 m to less than 3.0 m	21000 kg	21000 kg	20000 kg	
Axle Spread 3.0 m to less than 3.6 m	23000 kg ⁷	23000 kg	20000 kg	
Axle Spread 3.6 m to 3.7 m	24000 kg	23000 kg	20000 kg	
Maximum Gross Vehicle Weight Limits (Combination) ⁴			
5 Axles	42400 kg	42400 kg	38800 kg	
6 Axles	50300 kg	49300 kg	45100 kg	
7 Axles	53500 kg	53500 kg	47630 kg	
8 Axles	53500 kg	53500 kg	47630 kg	
Weight Restriction 1: Sum of axle	If Dimension "A" is less than	n 3 metres, the we	eight of the axle(s)	
weights of lead semi trailer plus weight	on the lead semi trailer plus the weight of the converter dolly			
of converter dolly axle	axle(s) is limited to a maximum of 17000 kg for a two axle group			
	or a maximum of 23000 kg for a three axle group.			
Weight Restriction 2: Sum of axle	The weight of the second trailer must not exceed the weight of			
weights of full trailer or second semi	the drive axle(s) plus the weight of the axle(s) on the first semi			
trailer	trailer.			

A-train with Tridem Drive Axle (continued)



RTAC	Class A1	Class B1
Tractor		
7300 kg	7300 kg	7300 kg
Minimu	um 6.6 m/Maximum	7.2 m
Minimu	um 2.4 m/Maximum 2	2.8 m
Minim	um 2.5m/Maximum 2	2.6m
21000 kg	21000 kg	20000 kg
22000 kg	21000 kg	20000 kg
Semi Trailer		
9100 kg	9100 kg	8200 kg
17000 kg	16000 kg	14500 kg
21000 kg	21000 kg	20000 kg
23000 kg ⁷	23000 kg	20000 kg
24000 kg	23000 kg	20000 kg
Maximum Gross Vehicle Weight Limits (Combination)		
53500 kg	53500 kg	47630 kg
53500 kg	53500 kg	47630 kg
	7300 kg Minimu Minimu Minimu 21000 kg 22000 kg 22000 kg 22000 kg 21000 kg 21000 kg 23000 kg ⁷ 24000 kg bination) 53500 kg	7300 kg 7300 kg Minimum 6.6 m/Maximum 1 Minimum 2.4 m/Maximum 1 Minimum 2.5m/Maximum 1 Minimum 2.5m/Maximum 1 21000 kg 21000 kg 22000 kg 21000 kg 9100 kg 9100 kg 17000 kg 16000 kg 21000 kg 21000 kg 9100 kg 21000 kg 9100 kg 21000 kg 17000 kg 16000 kg 21000 kg 21000 kg 21000 kg 21000 kg 21000 kg 21000 kg 53500 kg 53500 kg

¹ Semi trailers equipped with two single axle units with an interaxle spacing of 1.86 m to 3.70 m inclusive cannot exceed the maximum allowable gross axle weight for a single axle unit.

²Semi trailers manufactured prior to July 1, 1988 that have not had their axle units totally replaced may have a track width of less than 2.5 m. Refer to Section 11 of *M.R. 155/2018* for track width on semi trailers, pony trailers and full trailers equipped with wide-base single tires.

³This minimum applies to the interaxle spacing between the axle unit on a semi trailer and the adjacent axle unit on a trailer converter dolly. Spacing less than 3.0 m is allowed provided: the sum of the weights of a single axle semi trailer and the converter dolly does not exceed the maximum allowable gross axle weight of a tandem axle unit; the sum of the weights of a tandem axle semi trailer and the converter dolly does not exceed the maximum allowable gross axle weight of a tandem axle unit; the sum of the weights of a tandem axle semi trailer and the converter dolly does not exceed the maximum allowable gross axle weight of a tandem axle unit with an axle spread of 3.0 m to less than 3.6 m. The use of a trailer converter dolly equipped with a tandem or tridem axle is not permitted.

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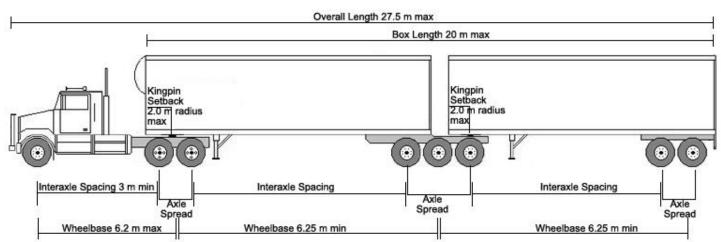
⁴A-Trains with trailer equipment manufactured prior to July 1, 1988 are allowed a maximum allowable gross vehicle weight of 56,500 kg.

⁵Minimum 27% of drive axle weight at all times - maximum 7300 kg.

⁶All three axles in tridem group must drive (no pusher, tag or lift axles allowed). Drive axle locking devices must be unlocked while operating on a highway.

⁷A trailer tridem axle group with an axle spread of 3.0 m or more but less than 3.6 m is allowed 24000 kg on routes with a designated maximum GVW of 63500 kg.

B-train



DIMENSION	LIMIT	
Overall Length ¹	Maximum 27.5 m	
Overall Width	Maximum 2.6 m	
Overall Height	Maximum 4.15 m	
Box Length	Maximum 20.0 m	
Tractor		
Wheelbase – single or tandem drive	Maximum 6.2 m	
Wheelbase – tridem drive	Minimum 6.6 m/Maximum 7.2 m	
Tandem Axle Spread	Minimum 1.0 m/Maximum 1.85 m	
Lead Semi Trailer		
Wheelbase	Minimum 6.25 m	
Kingpin Setback	Maximum 2.0 m radius	
Tandem Axle Spread	Minimum 1.0 m/Maximum 1.85 m	
Tridem Axle Spread	Minimum 2.4 m/Maximum 3.1 m	
Track Width ²	Minimum 2.5 m/Maximum 2.6 m	
Fifth Wheel Position	No more than 0.3 m behind the centre of the rearmost	
	axle on the Semi Trailer	
Second Semi Trailer		
Wheelbase	Minimum 6.25 m	
Kingpin Setback	Maximum 2.0 m radius	
Tandem Axle Spread	Minimum 1.0 m/Maximum 1.85 m	
Tridem Axle Spread	Minimum 2.4 m/Maximum 3.1 m	
Track Width	Minimum 2.5 m/Maximum 2.6 m	
Sum of Semi Trailer Wheelbases	Maximum 17.0 m*	

Interaxle Spacings		
Steering Axle to Drive Axle	Minimum 3.0 m	
Tandem Axle to Tandem Axle	Minimum 5.0 m	
Tandem Axle to Tridem Axle	Minimum 5.5 m	
Tridem Axle to Tridem Axle	Minimum 6.0 m	

*For truck tractor wheelbase exceeding 6.2 m to not more than 6.8 m refer to maximum semi-trailer wheelbase chart

Tractor Wheelbase (m)	Max Trailer Wheelbase (m)
Up to 6.2	17.00
over 6.2 to 6.3	16.53
over 6.3 to 6.4	16.44
over 6.41 to 6.5	16.36
over 6.5 to 6.6	16.27
over 6.6 to 6.7	16.19
over 6.7 to 6.8	16.10

B-train with Tandem Drive Axle (continued)

Axie Spread	Axle Spread		Axle Spread
MAXIMUM WEIGHT	RTAC	A1	B1
Tractor		T	-
Steering Axle	6000 kg	6000 kg	6000 kg
Single Axle (dual tires)	9100 kg	9100 kg	8200 kg
Tandem Axle:			
Axle Spread 1.0 m - 1.85 m	17000 kg	16000 kg	14500 kg
Semi Trailer			
Single Axle (dual tires) ³	9100 kg	9100 kg	8200 kg
Tandem Axle			
Axle Spread 1.0 m - 1.85 m	17000 kg	16000 kg	14500 kg
Tridem Axle			
Axle Spread 2.4 m to less than 3.0 m	21000 kg	21000 kg	20000 kg
Axle Spread 3.0 m to less than 3.6 m	23000 kg ⁴	23000 kg	20000 kg
Axle Spread 3.6 m to 3.7 m	24000 kg	23000 kg	20000 kg
Maximum Gross Vehicle Weight Limits (Combination)			
5 Axles	41200 kg	40200 kg	36900 kg
6 Axles	49100 kg	47100 kg	43200 kg
7 Axles	57000 kg	54000 kg	47630 kg
8 Axles	62500 kg ⁴	56500 kg	47630 kg
More than 8 Axles	62500 kg ⁴	56500 kg	47630 kg

B-train with Tridem Drive Axle (continued)

Axie Spread	Axle Spread		Axle Spread
MAXIMUM WEIGHT	RTAC	Class A1	Class B1
Tractor			
Steering Axle ⁵	7300 kg	7300 kg	7300 kg
Tridem Drive Axle (tractor) ⁶			
Drive Axle Spread 2.4 m to less than 2.7 m	21000 kg	21000 kg	20000 kg
Drive Axle Spread 2.7 m - 2.8 m	22000 kg	21000 kg	20000 kg
Semi Trailer	·		
Single Axle (dual tires)	9100 kg	9100 kg	8200 kg
Tandem Axle			
Axle Spread 1.0 m - 1.85 m	17000 kg	16000 kg	14500 kg
Tridem Axle		•	·
Axle Spread 2.4 m to less than 3.0 m	21000 kg	21000 kg	20000 kg
Axle Spread 3.0 m to less than 3.6 m	23000 kg ⁴	23000 kg	20000 kg

24000 kg

55400 kg

62500 kg⁴

62500 kg⁴

23000 kg

53400 kg

56500 kg

56500 kg

20000 kg

47630 kg

47630 kg

47630 kg

²Semi trailers manufactured prior to July 1, 1988 that have not had their axle units totally replaced may have a track width of less than 2.5 m. Refer to Section 11 of *M.R. 155/2018* for track width on semi trailers, pony trailers and full trailers equipped with wide-base single tires.

³Semi trailers equipped with two single axle units with an interaxle spacing of 1.86 m to 3.70 m inclusive cannot exceed the maximum allowable gross axle weight for a single axle unit.

⁴A trailer tridem axle group with an axle spread of 3.0 m or more but less than 3.6 m is allowed 24000 kg on routes with a designated maximum GVW of 63500 kg.

¹Overall length on a B-train includes any auxiliary device designed to reduce the impact of wildlife collisions.

⁵Minimum 27% of drive axle weight at all times - maximum 7300 kg.

Maximum Gross Vehicle Weight Limits (Combination)

⁶All three axles in tridem group must drive (no pusher, tag or lift axles allowed). Drive axle locking devices must be unlocked while operating on a highway.

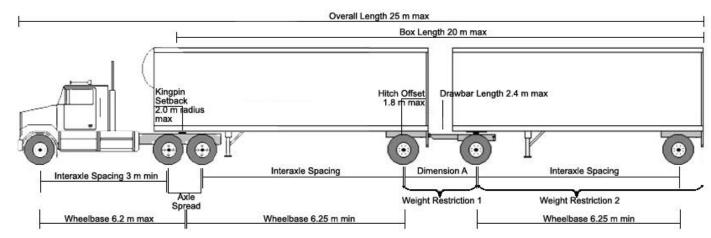
7 Axles

8 Axles

More than 8 Axles

Axle Spread 3.6 m to 3.7 m

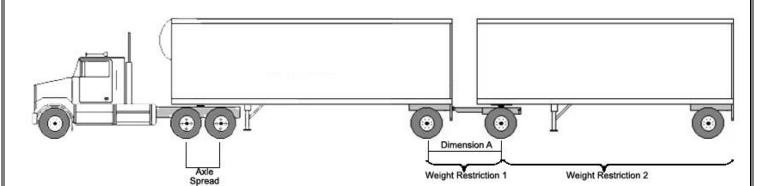
C-TRAIN



DIMENSION	LIMIT
Overall Length	Maximum 25.0m
Overall Width	Maximum 2.6 m
Overall Height	Maximum 4.15 m
Box Length	Maximum 20.0 m
Tractor	
Wheelbase – single or tandem drive	Maximum 7.2 m
Wheelbase – tridem drive	Minimum 6.6 m/Maximum 7.2 m
Tandem Axle Spread	Minimum 1.0 m/Maximum 1.85 m
Lead Semi Trailer	
Wheelbase	Minimum 6.25 m
Kingpin Setback	Maximum 2.0 m radius
Tandem Axle Spread	Minimum 1.0 m/Maximum 1.85 m
Hitch Offset	Maximum 1.8 m
Track Width ¹	Minimum 2.5 m/Maximum 2.6 m
Rear Effective Overhang	Maximum 35% of trailer wheelbase
Second Semi Trailer or Full Trailer	
Wheelbase	Minimum 6.25 m
Tandem Axle Spread	Minimum 1.0 m/Maximum 1.85 m
Track Width ¹	Minimum 2.5 m/Maximum 2.6 m
Drawbar Length	Maximum 2.4 m

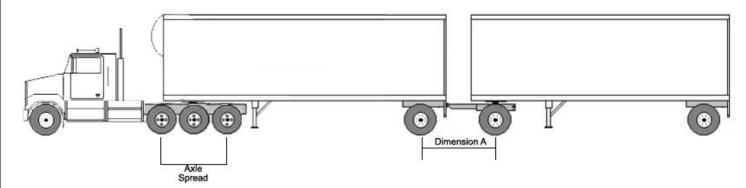
Interaxle Spacings	
Steering Axle to Drive Axle	Minimum 3.0 m
Single Axle to Single or Tandem Axle ²	Minimum 3.0 m
Single Axle to Tridem Axle ²	Minimum 3.0 m
Tandem Axle to Tandem Axle	Minimum 5.0 m
Tandem Axle to Tridem Axle	Minimum 5.5 m
Tridem Axle to Tridem Axle	Minimum 6.0 m
Dimension "A" (from the centre of last axle on the lead	Not controlled
Semi Trailer to centre of the first axle on the converter dolly	

C-train with Tandem Drive Axle (continued)



MAXIMUM WEIGHT	RTAC	Class A1	Class B1
Tractor			
Steering Axle	6000 kg	6000 kg	6000 kg
Single Axle	9100 kg	9100 kg	8200 kg
Tandem Axle			
Axle Spread 1.0 m - 1.85 m	17000 kg	16000 kg	14500 kg
Semi Trailer			
Single Axle ³	9100 kg	9100 kg	8200 kg
Tandem Axle			
Axle Spread 1.0 m - 1.85 m	17000 kg	16000 kg	14500 kg
Tridem Axle			
Axle Spread 2.4 m – less than 3.0	21000 kg	21000 kg	20000 kg
Axle Spread 3.0 m – less than 3.6	23000 kg	23000 kg	20000 kg
Axle Spread 3.6 m – 3.7 m	24000 kg	23000 kg	20000 kg
Sum of Lead Trailer & C-Dolly	23000 kg	23000 kg	22700 kg
Maximum Gross Vehicle Weight Limits (Combination) ⁴			
5 Axles	42400 kg	42400 kg	38800 kg
6 Axles	50300 kg	49300 kg	45100 kg
7 Axles	53500 kg	53500 kg	47630 kg
8 Axles	53500 kg	53500 kg	47630 kg
Weight Restriction 1: Sum of axle weights of lead semi trailer plus weight of converter dolly axle	If Dimension "A" is less than 3 metres, the weight of the axle(s) on the lead semi trailer plus the weight of the converter dolly axle(s) is limited to a maximum of 17000 kg for a two axle group or a maximum of 23000 kg for a three axle group.		
Weight Restriction 2: Sum of axle weights of full trailer or second semi trailer	The weight of the second trailer must not exceed the weight of the drive axle(s) plus the weight of the axle(s) on the first semi trailer.		

C-train with Tridem Drive Axle (continued)



MAXIMUM WEIGHT	RTAC	Class A1	Class B1
Tractor:			
Steering Axle ⁵	7300 kg	7300 kg	7300 kg
Tridem Drive Axle (tractor) ⁶			
Drive Axle Spread 2.4 m to less than 2.7	21000 kg	21000 kg	20000 kg
Drive Axle Spread 2.7 m - 2.8 m	22000 kg	21000 kg	20000 kg
Semi Trailer			
Single Axle (dual tires)	9100 kg	9100 kg	8200 kg
Tandem Axle:			·
Axle Spread 1.0 m - 1.85 m	17000 kg	16000 kg	14500 kg
Tridem Axle:			·
Axle Spread 2.4 m to less than 3.0 m	21000 kg	21000 kg	20000 kg
Axle Spread 3.0 m to less than 3.6 m	23000 kg	23000 kg	20000 kg
Axle Spread 3.6 m to 3.7 m	24000 kg	23000 kg	20000 kg
Maximum Gross Vehicle Weight Limits (Combination)			
7 Axles	53500 kg	53500 kg	47630 kg
8 Axles	53500 kg	53500 kg	47630 kg

¹Semi trailers manufactured prior to July 1, 1988 that have not had their axle units totally replaced may have a track width of less than 2.5 m. Refer to Section 11 of *M.R. 155/2018* for track width on semi trailers, pony trailers and full trailers equipped with wide-base single tires.

²This minimum applies to the interaxle spacing between the axle unit on a semi trailer and the adjacent axle unit on a trailer converter dolly. Spacing less than 3.0 m can be allowed, provided: the sum of the weights on a single axle semi trailer and converter dolly does not exceed the maximum allowable gross axle weight of a tandem axle unit; the sum of the weights of a tandem axle semi trailer and converter dolly does not exceed the maximum allowable gross axle weight of a tandem axle unit; the sum of the weight of a tridem axle unit with an axle spread of 3.0 m to less than 3.6 m. ³ Semi trailers equipped with two single axle units with an interaxle spacing of 1.86 m to 3.70 m inclusive cannot exceed the maximum allowable gross axle weight for a single axle unit. The use of a trailer converter dolly equipped with a tandem or tridem axle is not permitted.

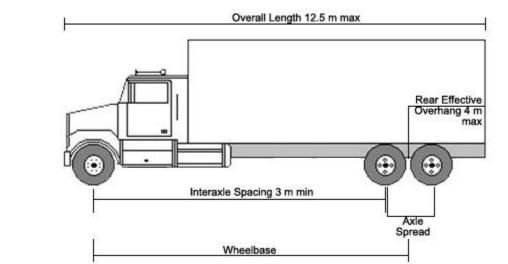
⁴C-Trains with trailer equipment manufactured prior to July 1, 1988 are allowed a maximum allowable gross vehicle weight of 56,500 kg. The gross vehicle weight shall not exceed 60,500 kg on an RTAC Route where a C-train with a C-dolly: satisfies testing requirements determined by the National Research Council (Canada);

displays, in a conspicuous place on both sides of the C-dolly, a label from the manufacturer certifying satisfaction of those requirements.

⁵Minimum 27% of drive axle weight at all times - maximum 7300 kg.

⁶All three axles in tridem group must drive (no pusher, tag or lift axles allowed). Drive axle locking devices must be unlocked while operating on a highway.

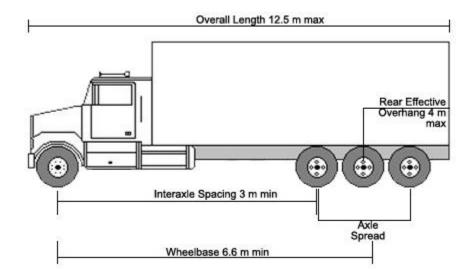
STRAIGHT TRUCK



DIMENSION	LIMIT
Overall Length	Maximum 12.5 m
Overall Width	Maximum 2.6 m
Overall Height	Maximum 4.15 m
Box Length	Not Controlled
Wheelbase	Not controlled
Tandem Axle Spread	Minimum 1.0 m/Maximum 1.85 m
Rear Effective Overhang	Maximum 4.0 m
Interaxle Spacings	
Steering Axle to Drive Axle	Minimum 3.0 m

MAXIMUM WEIGHT	RTAC	Class A1	Class B1
Steering Axle	7300 kg	7300 kg	7300 kg
Single Axle (dual tires)	9100 kg	9100 kg	8200 kg
Tandem Axle:			
Axle Spread 1.0 m - 1.85 m	17000 kg	16000 kg	14500 kg
Maximum Gross Vehicle Weight Limits (Combination)			
2 Axles	16400 kg	16400 kg	15500 kg
3 Axles	24300 kg	23300 kg	21800 kg

TRIDEM DRIVE STRAIGHT TRUCK



DIMENSION	LIMIT
Overall Length	Maximum 12.5 m
Overall Width	Maximum 2.6 m
Overall Height	Maximum 4.15 m
Box Length	Not controlled
Wheelbase	Minimum 6.6 m
Tridem Drive Axle Spread ¹	Minimum 2.4 m/Maximum 2.8 m
Tridem Drive Axle Track Width	Minimum 2.5 m/Maximum 2.6 m
Rear Effective Overhang	Maximum 4.0 m
Interaxle Spacings	
Steering Axle to Drive Axle	Minimum 3.0 m

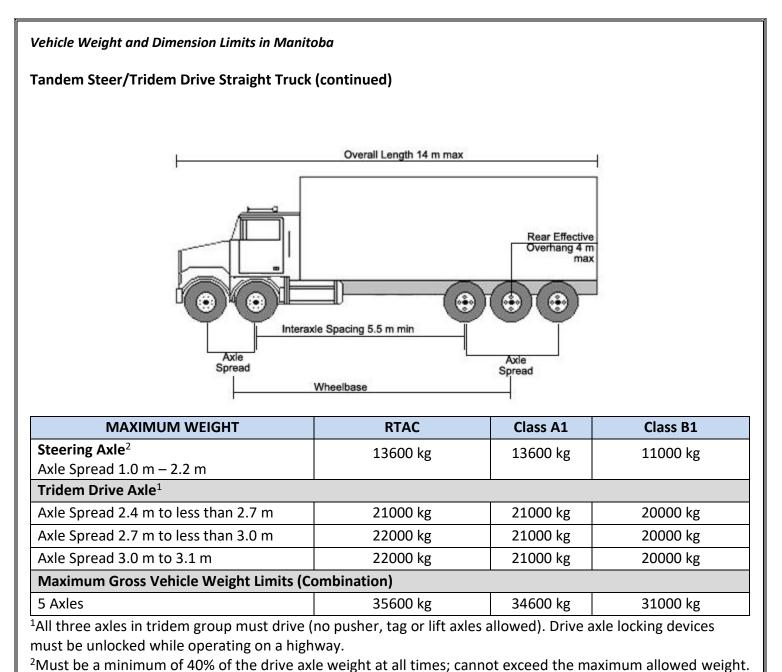
MAXIMUM WEIGHT	RTAC	Class A1	Class B1
Steering Axle ²	7300 kg	7300 kg	7300 kg
Tridem Drive Axle			
Axle Spread 2.4 m to less than 2.7 m	21000 kg	21000 kg	20000 kg
Axle Spread 2.7 m to 2.8 m	22000 kg	21000 kg	20000 kg
Maximum Gross Vehicle Weight Limits (Combination)			
4 Axles	29300 kg	28300 kg	27300 kg

¹All three axles in tridem group must drive (no pusher, tag or lift axles allowed). Drive axle locking devices must be unlocked while operating on a highway.

²Minimum 27% of drive axle weight at all times - maximum 7300 kg.

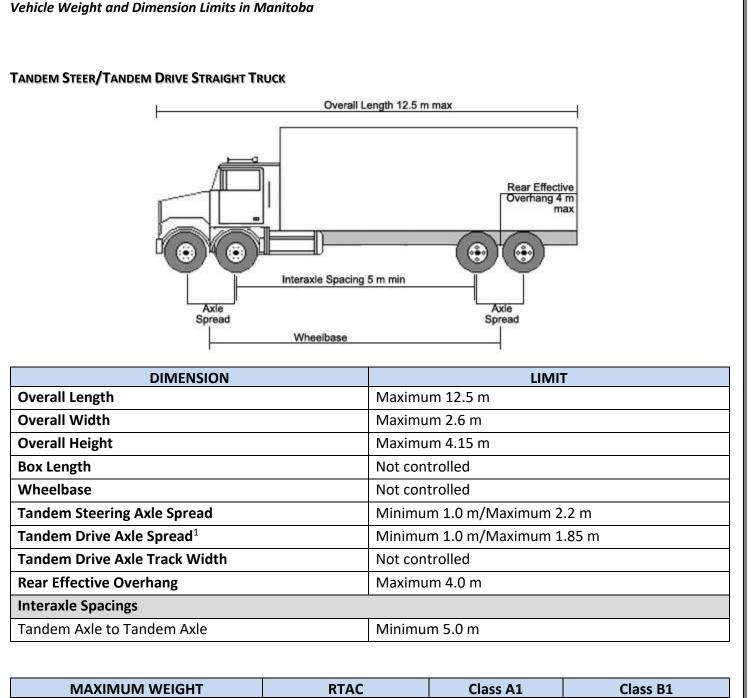
Note: Tridem drive straight trucks cannot tow trailers.

Vehicle Weight and Dimension Limits in Manitoba			
TANDEM STEER/TRIDEM DRIVE STRAIGHT TRUCK			
TANDEM STEER/TRIDEM DRIVE STRAIGHT TRUCK			
DIMENSION	LIMIT		
Overall Length	Maximum 14 m		
Overall Width	Maximum 2.6 m		
Overall Height	Maximum 4.15 m		
Box Length	Not controlled		
Wheelbase			
Axle Spread 2.4 m to less than 2.7 m	Minimum 7.7 m		
Axle Spread 2.7 m to less than 3.0 m	Minimum 7.8 m		
Axle Spread 3.0 m to 3.1 m Minimum 7.9 m			
Tandem Steering Axle Spread Minimum 1.0 m/Maximum 2.2 m			
Tridem Drive Axle Track Width Minimum 2.5 m/Maximum 2.6 m			
Rear Effective Overhang Maximum 4.0 m			
Interaxle Spacings			
Tandem Steering Axle to Tridem Drive Axle	Minimum 5.5 m		



Nust be a minimum of 40% of the unveasile weight at an times, cannot exceed the maximum anowed

Note: Tridem drive straight trucks cannot tow trailers.



RIAC	Class A1	Class B1	
13600 kg	13600 kg	11000 kg	
17000 kg	16000 kg	14500 kg	
Maximum Gross Vehicle Weight Limits (Combination)			
30600 kg	29600 kg	25500 kg	
i	13600 kg 17000 kg its (Combination)	13600 kg 13600 kg 17000 kg 16000 kg its (Combination)	

¹Both axles in tandem group must drive (no pusher, tag or lift axles allowed).

STRAIGHT TRUCK AND PONY TRAILER

Overall Length 23 m max			
Box Length 20 m max			
Truck Length 12.5 m max	Trailer Length 12.5 m max		
Interaxle Spacing 3.0 m min			
DIMENSION	LIMIT		
Overall Length	Maximum 23.0 m		
Overall Width	Maximum 2.6 m		
Overall Height	Maximum 4.15 m		
Box Length	Maximum 20.0 m		
Truck			
Length	Maximum 12.5 m		
Wheelbase	Not controlled		
Tandem Axle Spread	Minimum 1.0 m/Maximum 1.85 m		
Rear Effective Overhang	Maximum 4.0 m		
Hitch Offset	Maximum 1.8 m		
Pony Trailer ¹			
Length	Maximum 12.5 m		
Wheelbase	Minimum 6.25 m		
Tandem Axle Spread	Minimum 1.0 m/Maximum 1.85 m		
Tridem Axle Spread	Minimum 2.4 m/Maximum 2.5 m		
Track Width ²	Minimum 2.5 m/Maximum 2.6 m		
Rear Effective Overhang	Maximum 4.0 m		
Interaxle Spacings			
Steering Axle to Drive Axle	Minimum 3.0 m		
Single Axle to Single, Tandem or Tridem Axle ³	Minimum 3.0 m		
Tandem Axle to Tandem Axle	Minimum 5.0 m		
Tandem Axle to Tridem Axle	Minimum 5.5 m		



Straight Truck and Pony Trailer (continued)

	Axle Spread		Axle Spread	
MAXIMUM WEIGHT	RTAC	Class A1	Class B1	
Steering Axle	7300 kg	7300 kg	7300 kg	
Tandem Steering Axle	13600 kg	13600 kg	11000 kg	
Single Axle (dual tires)	9100 kg	9100 kg	8200 kg	
Tandem Axle				
Axle Spread 1.0 m - 1.85 m	17000 kg	16000 kg	14500 kg	
Tridem Axle (trailer):				
Axle Spread 2.4 m - 2.5 m ⁴	21000 kg	21000 kg	20000 kg	
Maximum Gross Vehicle Weight Limits (Combination)				
3 Axles	25500 kg	25500 kg	23700 kg	
4 Axles	33400 kg	32400 kg	30000 kg	
5 Axles	41300 kg	39300 kg	36300 kg	
6 Axles	45300 kg	44300 kg	41800 kg	

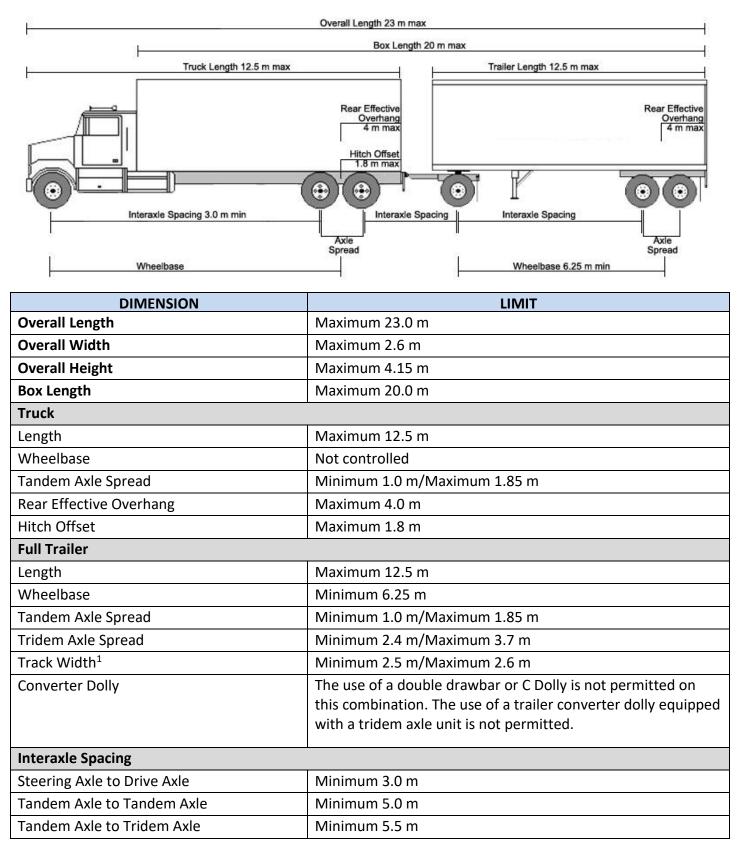
¹Limits not applicable to pony trailers with Gross Vehicle Weight Rating of less than 10000 kg.

²Refer to Section 11 of *M.R. 155/2018* for track width on semi trailers, pony trailers and full trailers equipped with wide-base single tires.

³This minimum applies to the interaxle spacing between adjacent axle units of a truck in combination with a pony trailer.

⁴The maximum spread permitted for a tridem axle group on a pony trailer is 2.5 m.

STRAIGHT TRUCK AND FULL TRAILER



Straight Truck and Full Trailer (continued)

	Axle Spread	• ľ	Axle Spread
MAXIMUM WEIGHT	RTAC	Class A1	Class B1
Single Steering Axle	7300 kg	7300 kg	7300 kg
Tandem Steering Axle	13600 kg	13600 kg	11000 kg
Single Axle (dual tires)	9100 kg	9100 kg	8200 kg
Tandem Axle (dual tires)			
Axle Spread 1.0 m - 1.85 m	17000 kg	16000 kg	14500 kg
Sum of Axle Weights of Full Trailer			
2 axle full trailer	17000 kg	17000 kg	16400 kg
3 axle full trailer	24000 kg	24000 kg	22700 kg
4 or more axle full trailer	31000 kg	31000 kg	29000 kg
Maximum Gross Vehicle Weight Limits (Combi	ination)		
4 Axles (2 axle full trailer)	33400 kg	33400 kg	31900 kg
5 Axles (3 axle full trailer)	40400 kg	40400 kg	38200 kg
5 Axles (2 axle full trailer)	41300 kg	40300 kg	38200 kg
6 Axles (4 axle full trailer)	47400 kg	47400 kg	44500 kg
6 Axles (tandem steer, 2 axle full trailer)	47600 kg	46600 kg	41900 kg
6 Axles (3 axle full trailer)	48300 kg	47300 kg	44500 kg
7 Axles (tandem steer, 3 axle full trailer)	54600 kg	53600 kg	47630 kg
7 Axles (4 axle full trailer)	55300 kg	54300 kg	47630 kg
8 Axles (5 axle full trailer)	55300 kg	54300 kg	47630 kg
8 Axles (tandem steer, 4 axle full trailer)	61600 kg	56500 kg	47630 kg
9 Axles (tandem steer, 4 or more axle full	61600 kg	56500 kg	47630 kg

track width of less than 2.5 m. Refer to Section 11 of *M.R. 155/2018* for track width on semi trailers, pony trailers and full trailers equipped with wide-base single tires.

Vehicle Weight and Dimension Limits in Manitoba		
INTERCITY BUS AND RECREATIONAL VEHICLES		
Overall Length 14 m max		
Interaxle Spacing Wheelbase		
DIMENSION	LIMIT Maximum 14.0 m	
Overall Length Overall Width	Maximum 14.0 m	
Overall Height	Maximum 2.0 m Maximum 4.15 m	
Wheelbase	Not controlled	
Tandem Axle Spread	Minimum 1.0 m/Maximum 1.85 m	
Rear Effective Overhang	Maximum 4.0 m	
Axle Requirements		
Overall length 12.5 m or less	Not controlled	
Overall length greater than 12.5 m	Minimum 3 axles	
MAXIMUM WEIGHT LIMIT		
Axle Weights		
Steering Axle	Maximum 7300 kg	
Single Axle (dual tires) ¹	Maximum 9100 kg	
Single Axle (single tires) ¹	Maximum 6000 kg	
Tandem Axle ¹	Maximum 17000 kg	
Maximum Gross Vehicle Weight Limits (Combination)		
Two axles	Maximum 16400 kg	
Three axles (8 tires)	Maximum 22400 kg	

¹When there is more than one axle at the rear of the bus, the load carried by the group must be distributed between axles in a ratio corresponding to the number of tires on each

Maximum 24300 kg

Three axles (10 tires)

END

Updates to this Guide will be available on the Manitoba Infrastructure's website for motor carriers at: www.gov.mb.ca/mit/mcd/