

Permanently Mounted Equipment

Mobile Concrete Mixers WD 404

Last Amended: January 2022



Definition

Motor vehicles that are equipped with a rotating drum in which concrete is transported and continually mixed while on route to a delivery point.

Permit Limits

1. Tandem Drive units:

- a. Maximum Tandem steering axle spread of 2.2 metres (m).
- b. A single booster axle may be used on a single steer or tandem steer tandem rear mixer truck provided the following conditions are met:
 - i. Booster axle must be a single axle that steers and must be equipped with operational brakes and operational lights (tail, brake and signal).
 - ii. Booster axle shall maintain a minimum tire size of 275 millimetres (mm).
 - iii. All trucks equipped with a booster axle shall be registered for the appropriate amount of weight which would include the single axle booster weight.
 - iv. A minimum inter-axle spacing of 3.0 m is required between the last axle of the drive axle and the center of the booster axle.
 - v. Maximum weight allowed on a single axle booster is 5,500 kilograms (kg).
 - vi. Air control mechanism for booster axle must be located outside the cab of the truck and not accessible to the driver when inside the cab. The maximum length of truck and booster axle is 12.5 m and booster axle shall be locked in an upright position when not in use.

2. Tridem Drive units:

- a. Minimum 254 mm tires on drive axles.
- b. Maximum Tandem steering axle spread of 1.85 m
- c. Tridem drive axles must be equally spaced and all three axles must drive.
- d. The Tridem drive axles must be on a common suspension that equalizes the weight on each axle to within 1,000 kg of the adjacent axle.
- e. Booster axles are not allowed.
- f. Lift, pusher and tag axles are not allowed.
- g. Maximum Tridem drive axle spread of:
 - i. Single steer 2.8 m.
 - ii. Tandem steer 3.1 m
- h. Track width: 2.5 m minimum -- 2.6 m maximum.
- i. Minimum wheelbase for configurations with a single steering axle is 5.8 m.
- j. Axle locking devices must be capable of being disengaged during turning movements.

3. Maximum Weights

The maximum weight is 10 kg/mm tire width on the steering axle and is 9 kg/mm tire width on the drive axle up to the maximums listed in Table 1.

Table 1: Maximum Weights (kg)

Configuration	Axle	Primary	Secondary	Municipal
Single Steer Tandem Drive	Steer	8,200	8,200	8,200
	Drive	17,000	16,000	14,500
	GVW	25,200	24,200	22,700
Single Steer Tridem Drive	Steer ¹	8,200	8,200	8,200
	Drive	23,000 ³	20,000	20,000
	GVW	31,200 ³	28,200	28,200
Tandem Steer Tandem Drive	Steer	16,000	16,000	16,000
	Drive			
	Interaxle spacing:	< 5.0 m	16,000	16,000
		≥ 5.0 m	17,000	14,500
Tandem Steer Tridem Drive	GVW			
	Interaxle spacing:	< 5.0 m	32,000	32,000
		≥ 5.0 m	33,000	30,500
	Steer ²	13,600	13,600	13,600
Tandem Steer Tridem Drive	Drive	24,000 ⁴	20,000	20,000
	GVW			
	Interaxle spacing:	4.5 ~ 5.0 m	35,000 ⁴	33,600
		≥ 5.0 m	37,600 ⁴	33,600

¹ The minimum steering weight must be 27% of the drive axle group weight.

² The minimum steering weight must be 40% of the drive axle group weight.

3 Subject to the maximums listed in Table 2. a)

4 Subject to the maximums listed in Table 2. b)

Table 2: Maximum allowable weights for tridem drive axles.

a) Single steer axle

Tridem Spread (m)	Minimum Wheelbase (m)	Maximum Drive Axle Group Weight (kg)	
		Primary	Secondary and Municipal
2.4 - <2.7	5.8	22,000	20,000
2.7 - 2.8	5.8	23,000	20,000

b) Tandem steer axle

Tridem Spread (m)	Minimum Wheelbase (m)	Maximum Drive Axle Group Weight (kg)	
		Primary	Secondary and Municipal
2.4 - <2.7	7.2	22,000	20,000
2.7 - <2.8	7.2	23,000	20,000
2.8 - <3.0	7.3	23,000	20,000
3.0 - 3.1	7.4	24,000	20,000

Permit Availability

Annual and single trip permits are available up to policy limits.

Permit Conditions

Travel is not allowed on any provincial highway or municipal road upon which the weights are further restricted by an Order of the Minister of Highways or bylaw.

Unless specified otherwise, all weight and dimensions shall conform to legal limits as identified in *The Vehicle Weight and Dimension Regulations, 2010*.