

TRAILERS: FEDERAL LIGHTING EQUIPMENT LOCATION REQUIREMENTS

IMPORTANT NOTE: Every lamp, reflex reflector, and conspicuity treatment (device) must be permanently attached in the location specified below and must comply with all applicable requirements prescribed for it by FMVSS/CMVSS 108. The face of any device on the front/rear and sides should be, respectively perpendicular and parallel to vehicle centerline, unless it is photometrically certified at installation angle. No part of the vehicle shall prevent any device from meeting its prescribed requirements unless an auxiliary device meeting all prescribed requirements is installed. In Canada: Manufacturers and importers of vehicles must have the proper certification test records demonstrating compliance of lighting components with all prescribed requirements.

BASIC EQUIPMENT REQUIRED ON ALL TRAILERS

DESCRIPTION				MANDATORY REQUIREMENTS			
Area	Equipment	(SAE Lens Coding)	Functional Purpose	Quantity	Color	Location	Height mm (in.) from the ground
1	Tail Lamps	(T)	Indicate vehicle's presence and width	Minimum 2	Red	On the rear - symmetrical - as far apart as practicable	380-1830 (15-72)
	Stop Lamps	(S)	Indicate braking	Minimum 2	Red	On the rear - symmetrical - as far apart as practicable	380-1830 (15-72)
	Rear Turn Signal Lamps	(I)	Indicate direction of turn	Minimum 2	Red or Yellow	On the rear - symmetrical - as far apart as practicable	380-2110 (15-83)
	Rear Reflex Reflectors	(A)	Indicate vehicle's presence and width	Minimum 2	Red	On the rear - symmetrical - as far apart as practicable-facing rearward	380-1530 (15-60)
2	License Plate Lamp(s)	(L)	Illuminates license plate	Minimum 1	White	On the rear - above or at the sides of license plate	No requirement
3	Rear Side Marker Lamps	(P2,PC* or P3, PC2*) <i>*photometrically certified at installation angle</i>	Front and rear side marker lamps / side reflex reflectors indicate vehicle's presence and length	Minimum 2	Red	Each side at rear - as far back as practicable	380-1530 (15-60) no max. for veh. under 2.032m(80") wide
	Rear Side Reflex Reflectors	(A)		Minimum 2	Red	Each side at rear - as far back as practicable facing sideward	380-1530 (15-60)
4a	Front Side Marker Lamps	(P2, PC* or P3, PC2*) <i>* photometrically certified at installation angle</i>		Minimum 2	Yellow	Each side at front - as far forward as practicable	380 (15) minimum
4b	Front Side Reflex Reflectors	(A)		Minimum 2	Yellow	Each side at front - as far forward as practicable facing sideward	380-1530 (15-60)

ADDITIONAL EQUIPMENT FOR TRAILERS EXCEEDING THE FOLLOWING PARAMETERS

LENGTH 9.1 m (30 ft.) OR LONGER

DESCRIPTION				MANDATORY REQUIREMENTS			
Area	Equipment	(SAE Lens Coding)	Functional Purpose	Quantity	Color	Location	Height mm (in.) from the ground
5a	Intermediate Side Marker Lamps	(P2 or P3)	Indicate presence of a long vehicle	Minimum 2	Yellow	Each side near center - facing sideward	380 (15) minimum
5b	Intermediate Side Reflex Reflectors	(A)	Indicate presence of a long vehicle	Minimum 2	Yellow	Each side near center - facing sideward	380-1530 (15-60)

WIDTH 2.032 m (80 in.) OR WIDER

DESCRIPTION				MANDATORY REQUIREMENTS			
Area	Equipment	(SAE Lens Coding)	Functional Purpose	Quantity	Color	Location	Height
6	Rear Clearance Lamps	(P2, PC*or P3, PC2*) <i>* photometrically certified at installation angle</i>	Show vehicle's width - MAY NOT be combined with tail lamps	Minimum 2	Red	At widest point - symmetrical - on the rear or near the rear - facing rearward	As high as practicable - may be lower only if ID lamps are at the top
7	Rear Identification Lamps	(P2 or P3)	Indicate presence of a wide vehicle	Exactly 3	Red	On the rear - center, facing rearward - horizontally spaced 150 mm (6 in.) to 300 mm (12 in.) apart	<i>in Canada</i> : at the top - maybe lower if door header narrower than 25 mm <i>in USA</i> : as high as practicable
8	Front Clearance Lamps	(P2, PC*or P3, PC2*) <i>* photometrically certified at installation angle</i>	Show vehicle's width	Minimum 2	Yellow	At widest point - symmetrical - as far forward as practicable - facing forward	As high as practicable

WIDTH 2.032 m (80 in.) OR WIDER AND GVWR 4536 kg (10,000 lb.) OR MORE

DESCRIPTION		MANDATORY REQUIREMENTS					
Area	Conspicuity Treatment	DOT Coding	Quantity	Color	Location	Height	OPTIONS
9	Rear Upper Body Marking	DOT-C, DOT-C2, DOT-C3, or DOT-C4	Exactly 2 pairs of 300mm long strips	White	On the rear upper corners - facing rearward	At the top	Reflex reflectors may not be required if they are replaced, in their required location, with conspicuity treatment <u>Optional in Canada</u>
10	Bumper Bar Marking		Continuous	Red/White	On the rear bumper bar's horizontal element - full width - facing rearward	No requirement	
11	Rear Lower Body Marking		Continuous	Red/White <i>see options</i>	On the rear - full width of the vehicle - facing rearward	As horizontal as practicable and as close as practicable to the range of 375 to 1525 mm from the ground	Rear lower body and side conspicuity treatment may also be solid white, solid yellow, or white and yellow.
12	Side Marking		<i>see location</i>	Red/White <i>see options</i>	Each side - facing sideward - continuous, or evenly spaced over minimum of 50% of length, starts and ends as close to the front and rear of vehicle as practicable	As horizontal as practicable and as close as practicable to the range of 375 to 1525 mm from the ground	

Diagram – Position of Required Lighting for Trailers



