

Changing the Shape of Light<sup>™</sup>

# Basic Equipment Required on All Trucks, Buses, & MPVs

DESC	RIPTION		MANDATORY REQUIREMENTS				
Equipment	(SAE Lens Coding)	Functional Pur- pose	QTY	Color	Location	Height (in) From Ground	
Headlamps - Lower Beam -US requires "DOT" lettering on lens -US & Canada require light source code on lens	(H, HR)	Forward road illumination	Min 2	White	On front - symmetrical - as far apart as practicable - 4 lamp system - outboard or above upper beams	22"- 54"	
Headlamps - Upper Beam -US requires "DOT" lettering on lens -US & Canada require light source code on lens	(H, HR)	Forward road illumination	Min 2	White	On front - symmetrical - 4 lamp system - inboard or below lower beams	22"- 54"	
Parking Lamps -Vehicles less than 80" wide	(P)	Indicate parked vehicle	Min 2	White/ Amber		15"- 72"	
Daytime Running Lamps -US - Optional - requires "DRL" lettering if not headlamp -Canada - Required	(Y2)	Indicate in use vehicle	Min 2	White/ Amber	On the front - symmetrical - as far apart as practicable	15" minimum *Max depends on type	
Front Turn Signal/ Hazard Warning Lamps	(1)	Indicates direction of turn/identify disabled vehicle	Min 2	Amber	On the front - symmetrical - as far apart as practicable	15"- 83"	
Front Clearance Lamps -Vehicles 80" wide or wider	(P2, PC* or P3, PC2*)	Show vehicle's width	Min 2	Amber	At widest point - symmetrical - as far forward as practicable - facing forward	As high as practicable	
Front Identification Lamps (ID) -Vehicles 80" wide or wider	(P2 or P3)	Indicate presence of a wide vehicle	Exactly 3	Amber	On the front - center - horizontally spaced 6"- 12" apart	As high as practicable or on top of the cab	
a Front Side Marker Lamps	(P2, PC* or P3, PC2*)	Indicate vehicle	Min 2	Amber	Each side at front - as far forward as practicable	15" minimum	
b Front Side Reflex Reflectors	(A)	presence & length	Min 2	Amber	Each side at front - as far forward as practicable facing sidewards	15"- 60"	
a Rear Side Marker Lamps	(P2, PC* or P3, PC2*)	Indicate vehicle presence	Min 2	Red	Each side at rear - as far back as practicable	15" minimum	
Rear Side Reflex Reflectors	(A)	& length	Min 2	Red	Each side at rear - as far back as practicable facing sidewards	15"- 60"	
6 Rear Clearance Lamps -vehicles 80" wide or wider -Not required on truck tractors	(P2, PC* or P3, PC2*)	Shows veh. width- MAY NOT be combined with tail lamps	Min 2	Red	At widest point - symmetrical - on the rear or near the rear - facing Rearward	15" minimum	
Rear Identification Lamps -vehicles 80" wide or wider -Not required on truck tractors	(P2 or P3)	Indicate Presence of Long Vehicle	Exactly 3	Red	On the rear - center, facing rearward - horizontally spaced 6"- 12" apart	15"- 60"	
Tail Lamps	(T)	Indicate vehicle's presence and width	Min 2	Red		15"- 72"	
Stop Lamps	(S)	Indicate Braking	Min 2	Red	On the rear - symmetrical	10-72	
Rear Turn Signal/ Hazard Warning Lamps	(I)	Indicate direction of turn/ identify disabled vehicle	Min 2	Red/ Amber	as far apart as practicable	15"- 83"	
Rear Reflex Reflectors	(A)	Show vehicle's presence and width	Min 2	Red		15"- 60"	
Backup Lamp	(R)	Illuminates ground behind the vehicle and alert road users	Min 1	White	Rear	No requirement	
• License Plate Lamp(s)	(L)	Illuminates license plate	Min 1	White	On the rear - above or at the sides of license plate	No requirement	
1 Center High Mounted Stop Lamp	(U3)	Indicates Braking	Min 1	Red	On the rear - centerline of the vehicle	34" minimum	

\*Photometrically certified at installation angle

#### Length - 30' or longer

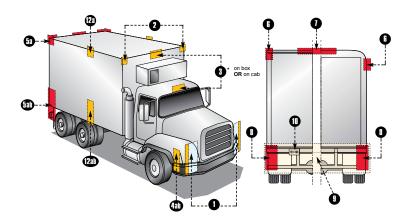
	DESCR	RIPTION		MANDATORY REQUIREMENTS				
	Equipment (SAE Lens Coding)		Functional Pur- pose	QTY	Color	Location	Height (in) From Ground	
12a	Intermediate Side Marker Lamps	(P2 or P3)	Indicate presence of long vehicle	Min 2	Amber	Each side near center	15" minimum	
12b	Intermediate Side Reflex Reflectors	(A)	Indicate presence of long vehicle	Min 2	Amber	Each side near center - Facing Sidewards	15"- 60"	

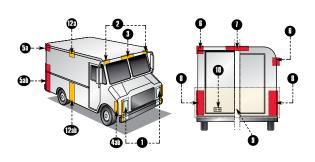
#### **Truck Tractors**

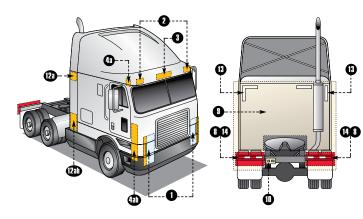
	DESCRIPTION			MANDATORY REQUIREMENTS				
	Conspicuity Treatment	DOT Cod- ing	QTY	Color	Location	Height (in) From Ground	Options	
9	Rear Upper Body Marking	DOT-C, DOT-C2.	Exactly 2 pairs of 300mm (11.8") long strips	White	On the rear upper corners of cab - facing rearward	At the top	Rear lower body and side conspicuity	
11	Rear Marking	DOT-C3, DOT-C4 Exactly 2 sections of min 600mm (24") long strips Red/White Rear - facing rearway on fenders, on mud brackets, or within 30		Rear - facing rearward - on fenders, on mud flap brackets, or within 300mm	As horizontal and as close to the range of 15"- 60" from ground as practicable	treatment may also be solid white, solid amber, or white and amber		
					below top of mudflaps			

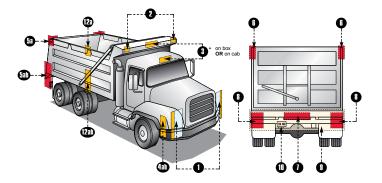


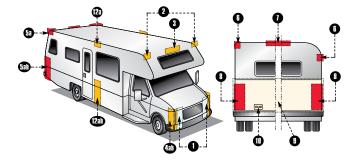
# **Truck, Bus, & MPV Requirements**

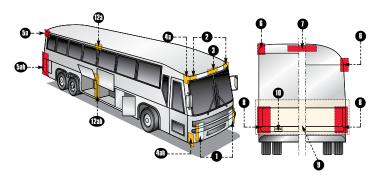


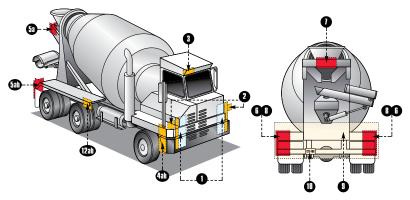














### **Basic Equipment Required on All Trailers**

	DESCRIPTION			MANDATORY REQUIREMENTS				
Equipment	Equipment (SAE Lens Cod- ing)		QTY	Color	Location	Height (in) From Ground		
Tail Lamps	(T)	Indicate vehicle presence & width	Min 2	Red		15"- 72"		
Stop Lamps	(S)	Indicate braking	Min 2	Red	On the rear - symmetrical -	15"- 72"		
Rear Turn Signal Lamps	(I)	Indicate direction of turn	Min 2	Red/ Amber	as far apart as practicable	15"- 83"		
Rear Reflex Reflectors	(A)	Indicate vehicle presence & width	Min 2	Red		15"- 60"		
2 License Plate Lamps	(L)	Illuminate license plate	Min 1	White	On the rear - above or at the sides of license plate	No requirement		
Rear Side Marker Lamps	(P2, PC* or P3, PC2*)	Indicate vehicle	Min 2	Red	Each side at rear - as far back as practicable	15"- 60" (no max for vehicles under 80" wide)		
Rear Side Reflex Reflectors	(A)	presence & length	Min 2	Red	Each side at rear - as far back as practicable facing sidewards	15"- 60"		
4a Front Side Marker Lamps	(P2, PC* or P3, PC2*)	Indicate vehicle	Min 2	Amber	Each side at front - as far forward as practicable	15" minimum		
4b Front Side Reflex Reflectors	(A)	presence & length	Min 2	Amber	Each side at front - as far forward as practicable facing sidewards	15"- 60"		

\*Photometrically certified at installation angle

#### Length - 30' or longer

		DESCRIPTION		MANDATORY REQUIREMENTS			
	Equipment	(SAE Lens Cod- ing)	Functional Pur- pose	QTY	Color	Location	Height (in) From Ground
5a	Intermediate Side Marker Lamps		Indicate presence of long vehicle	Min 2	Amber	Each side near center -	15" minimum
5b	Intermediate Side Reflex Reflectors	(A)	Indicate presence of long vehicle	Min 2	Amber	Facing Sidewards	15"- 60"

### Width - 80" or wider

	DESCRIPTION					MANDATORY REQUIREMENTS				
	Equipment (SAE Lens Cod- ing) pose		QTY	Color	Location	Height (in) From Ground				
6	Rear Clearance Lamps	(P2, PC* or P3, PC2*)	Shows veh. width- MAY NOT be combined with tail lamps	Min 2	Red	At widest point - symmetrical - on or near the rear - facing Rearward	15" minimum			
7	Rear Identification Lamps	(P2 or P3)	Indicate Presence of Long Vehicle	Exactly 3	Red	On the rear - center, facing rearward - horizontally spaced 6"- 12" apart	15"- 60"			
8	Front Clearance Lamps	(P2, PC* or P3, PC2*)	Show Vehicle's Width	Min 2	Amber	At widest point - symmetrical - as far forward as practicable - facing forward	As high as practicable			

\*Photometrically certified at installation angle

## Width - 80" or wider AND GVWR of 10,000 lbs or MORE

	DESCRIPTION			MAN	DATORY REQUIREN	IENTS	
	Conspicuity Treatment	DOT Cod- ing	QTY	Color	Location	Height (in) From Ground	Options
9	Rear Upper Body Marking		Exactly 2 pairs of 300mm (11.8") long strips	White	On the rear upper corners - facing rearward	At the top	
10	Bumper Bar Marking		Continuous	Red/White	On the rear bumper bar's horizontal element - full width - facing rearward	No requirement	Rear lower body and side conspicuity treatment may also be solid white, solid amber,
11	Rear Lower Body Marking	DOT-C, DOT-C2, DOT-C3,	Continuous	Red/White (see options)	On the rear - full width of the vehicle - facing rearward	As horizontal and as	
12	Side Marking	DOT-C4	See location	Red/White (see options)	Each side - facing sidewards - continuous, or evenly spaced over minimum of 50% of length, starts and ends as close to the front and rear of vehicle as practicable	to the range of 15"- 60" from ground as practicable	or white and amber
	- Reflex reflectors may not be required if they are replaced, in their required location, with conspicuity treatment (Optional in Canada)						



# **Trailer Requirements**

