

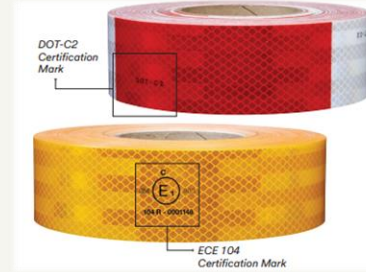


Fitment of Reflective Tapes for Commercial Vehicles





Fitment of Conspicuity Tape & Rear Marking Tape as per CMVR 1989 rule 104 - 104D at various state level



Rear Marking Tapes (RMT) & Conspicuity Tapes (CT)



RMT C3 and C4 : These are used on heavy load carrying commercial Vehicles to gauge the dimension of the vehicle for the approaching vehicles. It indicates and establishes the estimated velocity of the moving vehicle and its presence on the road.

Conspicuity Tape (CT) : An economical way to introduce this enhanced reflectivity on vehicles are conspicuity markings (sometimes called “contour markings”). These tapes are generally used on rear and sides of the HMV to establish and provide dimensions of the applied vehicle with certainty to approaching vehicles and road users around.



Central Motor Vehicle (amendment) Rules 1989 / Rule 104 – 104D

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104. Fitment of reflectors.—(1) Every motor vehicle including trailers and semi-trailers other than three wheelers of engine capacity not exceeding 500 cc and motor cycle shall be fitted with two red reflectors, one each on both sides at the rear. The reflecting area of each reflector shall not be less than 28.5 sq. cms. in the case of vehicles where the overall length is more than 6 metres, and 7 sq. centimetres, in case of vehicles where the overall length is less than 6 metres. Every motorcycle shall be fitted with one red reflex reflector at the rear having the reflecting area of not less than 7 square centimetres:

Provided that one year from the date of commencement of Central Motor Vehicles (Amendment) Rules, 1993, a reflective tape or reflective paint of not less than 20 millimetres width and running across the width of the body shall be affixed/ painted at the front and rear of every goods carriage.

(2) Every goods carriage vehicle including trailers and semi-trailers other than three wheeler of engine capacity not exceeding 500 cc shall be fitted with two white

1. Subs. by G.S.R. 214 (E), dated 18th March, 1999 (w.e.f. 18-3-1999).
2. Subs. by G.S.R. 642 (E), dated 28th July, 2000 (w.e.f. 28-7-2000).
3. Subs. by G.S.R. 116 (E), dated 27th February, 2002 (w.e.f. 27-8-2002).
4. Subs. by G.S.R. 338 (E), dated 26th March, 1993 (w.e.f. 26-3-1993).

reflectors one each at the extreme right and left bottom corners in the front of the vehicle and facing to the front. The reflecting area of each reflector shall not be less than 28.5 sq. centimetres, in the case of vehicles with overall length of more than 6 metres, and not less than 7 sq. centimeters in case of other vehicles.]

[(3) All trailers including semi-trailers, other than those drawn by three wheeled tractors of engine capacity not exceeding 500 cc shall be fitted with the following reflex reflectors, namely:

- (i) two white reflex reflectors in the front, one each at right and left corners at a height not exceeding 1500 mm above the ground;
- (ii) two red reflex reflectors in the rear, one each at the right and left corners at a height not exceeding 1500 mm. above the ground; and
- (iii) the area of the reflectors referred to above shall not be less than 28.5 sq.cm. in the case of trailers with overall length exceeding 6 metres and shall not be less than 7 sq. cm in case of other trailers.]

[(4) On and after expiry of one year from the date of commencement of the Central Motor Vehicles (Amendment) Rules, 1999, the reflectors referred to in this rule and in rule 110 shall be of reflex type conforming to the Indian Standards IS:8339-1993 specified by the Bureau of Indian Standards.]

[(5) On and from the date of commencement of the Central Motor Vehicles Rules, 1993 every motor vehicle and trailer of length exceeding 6 metres shall be fitted with two amber coloured reflex reflectors on each left hand and right hand of the vehicle, one set as close to the front end as possible and the other set as close to the rear end as possible. The height of the side reflectors above the ground shall not be more than 1500 mm. The area of each reflector shall not be less than 28.5 sq. cm.:

Provided that in case the distance between the two side reflectors is more than 3 metres, additional intermediate side reflectors shall be fitted so that the distance between any adjacent side reflector is not more than 3 metres.]



CMVR Rules / Guidelines in Gist

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- ✓ **As per the CMVR Rule 104 the list of vehicles which are mandated to put reflective tapes and rear marking tapes are mentioned below:**
 1. *Two-wheeler vehicle (if commercial).*
 2. *Goods vehicles (along with three wheelers) bearing 3.5 tons GW*
 3. *Goods vehicles weighing 3.5 tons to 7.5 tons.*
 4. *Goods vehicle weighing 7.5 tons.*
 5. *Motorcars, Omni bus and passenger vehicle (3 Wheeler etc.) which can carry up to 8 passengers (Commercial Category).*
 6. *Goods vehicle weighing gross vehicle weight of 5 tons and capacity of carrying 9 or more than 9 passengers.*
 7. *Goods vehicle weighing gross vehicle weight more than 5 tons and capacity*
 8. *of carrying 9 or more than 9 passengers.*
 9. *Agricultural tractor*
 10. *Power Tiller I I*
 11. *Trailer attached with Power tiller.*
 12. *Construction equipment vehicle*
- ✓ **As per the provision of the above law, the reflective tapes and rear marking plates should confirm to AIS 090 and AIS 089 standards respectively. These reflective tapes and rear marking plates should be clearly visible at night from all the sides of the car.**
- ✓ **The Office of Transport Commissioner, may get its sample tested from any one of the Testing Agencies mentioned in rule 126 of Motor Vehicles Rules, 1989.**
- ✓ **After sticking reflectors, reflective tapes of empanelled manufacturers (OEM), the vehicle owner will be issued an installation certificate with QR Code from MIS (Management Information system). At the time of fitness, the vehicle owners should submit such installation certificate generated from MIS. At the time of fitness of the vehicle, the concerned authorized testing centre/ MVI should verify the authenticity of the installation certificate. Fitness certificate will not be issued to such Vehicles on which the reflective tapes and rear marking tapes are not as per AIS Standards as mentioned above.**

●●● Duplicity and Its Effects on Purpose of Usage

- Due to the physical nature and characteristic of Reflective tapes , Duplicity of tapes and its usage is highly possible and a burning fact in reality
- Duplicate tapes looks similar but lack in its durability and strength in longer run to reflect, due to its make
- This makes them highly vulnerable on Road Usage and completely defeats the purpose of the various guidelines issued and mentioned on usage of Reflective Marking tapes
- There are significant price difference between certified / empaneled material of usage and other material as durability , reflection strength and adhesive strength w.r.t vehicle are being compromised in second tier material
- Since the inception of use of reflective tapes , market miscreants have been able to role and distribute the duplicate material effected in use to which governments and OEMs have implemented issue of **digital certificates** and **QR Codes** to authenticate the OEMs product.
- These implementation have been efficient and popular tool to fight the duplicity and catch hold at ground tier for any illegal use of RMT.
- We , **Asian Management Services**, provide holistic solution towards original product distribution and digital implementation at state level for RMT usage.

Statistics

Chart 3.12: State wise distribution of number of Fatal accident on National Highways during 2019-2020

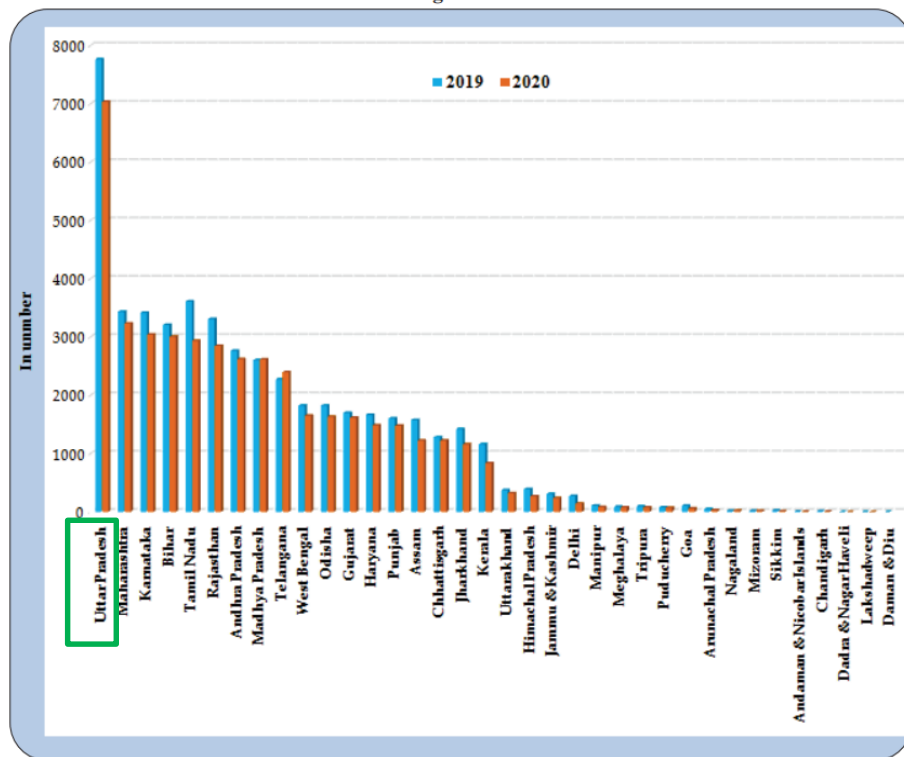


Table. 3.4: Top 10 States in number of accidents on National Highways

S. No.	States/UTs	2016	2017	2018	2019	2020
1	Tamil Nadu	22,573 (15.9)	20,696 (14.6)	19,583 (13.9)	17,633 (12.9)	15,269 (13.1)
2	Uttar Pradesh	13,078 (9.2)	14,333 (10.1)	16,198 (11.5)	16,181 (11.8)	13,695 (11.8)
3	Karnataka	14,933 (10.5)	14,217 (10.0)	13,638 (9.7)	13,363 (9.7)	11,230 (9.6)
4	Madhya Pradesh	10,709 (7.5)	11,150 (7.9)	9,967 (7.1)	10,440 (7.6)	9,866 (8.5)
5	Andhra Pradesh	8,171 (5.7)	8,544 (6.0)	8,122 (5.8)	7,682 (5.6)	7,167 (6.2)
6	Telangana	6,166 (4.3)	6,211 (4.4)	6,487 (4.6)	7,352 (5.4)	6,820 (5.9)
7	Kerala	9,209 (6.5)	8,993 (6.4)	9,161 (6.5)	9,459 (6.9)	6,594 (5.7)
8	Maharashtra	10,364 (7.3)	9,237 (6.5)	9,355 (6.6)	8,360 (6.1)	6,501 (5.6)
9	Rajasthan	6,567 (4.6)	6,851 (4.8)	6,726 (4.8)	6,883 (5.0)	5,764 (4.9)
10	Bihar	3,138 (2.2)	3,883 (2.7)	4,016 (2.9)	4,526 (3.3)	4,101 (3.5)
	Total	1,04,908 (73.7)	1,04,115 (73.6)	1,03,253 (73.3)	1,01,879 (74.3)	87,007 (74.7)
	Total NH	1,42,359	1,41,466	1,40,843	1,37,191	1,16,496
	All India Total	4,80,652	4,64,910	4,67,044	4,49,002	3,66,138
	% share of NH in Total	29.6	30.4	30.2	30.6	31.8

Figures in the parentheses represents percentage share in the total of respective columns.

Statistics

Table 3.7: Road Accidents and Fatalities on different categories of NH by Traffic rule violations (2019 -2020)

Category	2019		2020		% Change	
	Accidents	Fatalities	Accidents	Fatalities	Accidents	Fatalities
Over-speeding	98,294	36,566	85,616	32,873	-12.9	-10.1
Drunken driving/consumption of alcohol & drug	5,122	2,376	3,416	1,862	-33.3	-21.6
Driving on wrong side	7,076	2,726	6,050	3,099	-14.5	13.7
Jumping red light	984	266	919	476	-6.6	78.9
Use of mobile phone	3,660	1,585	2,697	1,389	-26.3	-12.4
Others	22,055	10,353	16,753	7,971	-24.0	-23.0
All India	1,37,191	53,872	1,15,451	47,670	-15.8	-11.5

Table 3.9: Road user category wise Road Accident Deaths on different categories of NH in 2020

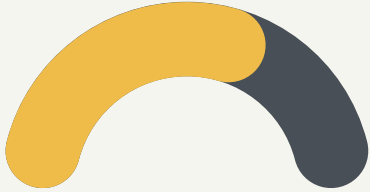
Category	Accidents	Death	Accident % share in Total	Death% share in Total
Pedestrians	13,882	7,753	12.0	16.3
Bicycles	2,468	1,232	2.1	2.6
Two wheelers	44,784	18,200	38.8	38.2
Auto Rickshaws	4,741	1,836	4.1	3.9
Cars,Taxis,Vans	23,589	8,081	20.4	17.0
Trucks/Lorries	12,752	5,213	11.0	10.9
Buses	3,578	1,367	3.1	2.9
Others	9,657	3,988	8.4	8.4
Total	1,15,451	47,670	100	100

Direct Impact of RMT Usage in India



Fatality

Reduced by 30%



60%

Decrease in road accidents at night due to usage of RMT



10,000+

Lives saved each year

Market Players

Asian Management Services, Pune

We are one of the leading distributor in state of Maharashtra having corporate office at Pune, Maharashtra. We are having a broad Network to supply Genuine Retro Reflective and rear marking tapes along with Genuine QR Codes over PAN India.

We are Actively Operating in the state of Maharashtra and Chattisgarh and further increasing our footprint across PAN India. Objective of Asian Management Services: Respecting the order issued by the Supreme Court and various state govt guidelines for implementation of RMT and CT tapes at RTO level. We Asian Management Services aim to regulate genuine practices across India to reduce fatal accident being occurred due to low reflection of reflective tape / reflectors in the night.

Successfully dealing and distributing RMT & different reflective products for following brands in India :-



Asian Mangement Team



Mahesh Khedkar

Co-Founder

mdk@skspl.com

+91 9822198692



CA Aditya Kothari

Principal Consulnt

aditya@aka.firm.in

+91 9823111191



Thank you!

