

No: F- 45/ P&amp;M-II/ Circular/ 05/D- 40

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The works of renewal, strengthening on existing bituminous roads are being taken up at large scale under 13<sup>th</sup> Finance Commission, SHW Plan, NABARD etc. As per the prevailing practice the specifications for improvement of existing BT roads in terms of 50mm BM + 20mm PMC with sand seal coat are being followed. In some of the areas specially, where the traffic volume is high, the performance of the PMC with sand seal coat is not coming up satisfactorily. As per IRC 37-2001 (Guide lines for the design of flexible pavement) and IRC : SP 78-2008, the recommended type of thickness of bituminous wearing courses for flexible pavements under different situations are as under :-

S. No.	Type of base/ binder course	Type of bituminous wearing courses	Annual rain fall Low(L) less than 1500 mm, medium(M) 1500-3000 mm, High(H) more than 3000mm	Design traffic(msa)
1	Bituminous macadam base/ binder course	1.SDBC (25mm) 2.MSS(20mm) – close graded	L, M& H	Less than 10.0
2	Dense bituminous macadam	Bituminous concrete(BC) 1. 25 mm 2. 40 mm 3. 50 mm	L, M& H L, M& H L, M& H	5 to 10 More than 10 More than 100
3	Granular base course & BUSG	(1)20mm PMC + sand seal coat or liquid seal coat (2)MSS(20mm) type B close graded	L, M& H L, M& H	Less than 10 Less than 10

The above recommendations for wearing courses reflect that where the rehabilitation of existing bituminous roads is done with BM, the bituminous wearing courses should be of SDBC or MSS type 'B' close graded. In case of high traffic volume roads the rehabilitation of existing bituminous roads should be with DBM + BC.

It is, therefore, suggested that in future the estimates for rehabilitation of existing bituminous roads in respect of SHW and MDR should be framed with provisions of BM + SDBC, MSS type 'B' close graded or DBM + BC as per traffic requirement of the roads.

 27/2/12  
Chief Engineer & Addl. Secretary

Copy to the following for information and necessary action :-

1. P.S. to Principal Secretary, PWD, Rajasthan, Jaipur
2. P.S. to Secretary, PWD, Rajasthan, Jaipur
3. Chief Engineer (Roads/PMGSY/SS/NH) PWD, Rajasthan, Jaipur
4. Addl. Chief Engineer, PWD, Zone .....(All)
5. Superintending Engineer, PWD Circle .....(All)
6. Executive Engineer, PWD Dn. ....(All)
7. Guard file

 27/2/12  
Chief Engineer & Addl. Secretary