

**NO. RW/NH-33041/3/2001-S&R (R)-VOL. III**

***Dated, the 4th August, 2008***

To

Secretary/Chief Engineer/Engineer-in-Chief of State PWDs dealing with National Highways; The Chairman, National Highways Authority of India; Director General, Border Roads; The Secretary General, Indian Roads Congress; The Director, NITHE; The Director, CRRI.

**Subject : Paving Bitumen–Specification (Third Revision) – published by Bureau of Indian Standards in July 2006 – reg. Use of viscosity grade bitumen in road construction**

Bureau of Indian Standards has revised the specifications of paving bitumen with publication of IS 73:2006 (Paving Bitumen-Specification (Third Revision) in July 2006. This Specification, inter-alia, specifies the Grades of Paving Bitumen, based on viscosity as against the previous grading based on penetration in IS 73:1992.

2. As per IS:73-2006, paving grade bitumen have been classified into 4 types, viz. VG-10, VG-20, VG-30 & VG-40. The minimum absolute viscosity (in Poises) of these 4 grades at 60° C are 800, 1600, 2400 & 3200 respectively when tested in accordance with IS:1206 (Part-2). In other words, index of VG multiplied by 80 gives the minimum absolute viscosity (in Poises) of the particular grade of bitumen at 60°C. From the comparison of the requirements for paving bitumen as per IS:73-2006 with that of IS:73-1992 (as amended in 2002), VG-30 may replace 60-70 penetration grade bitumen; similarly, VG-10 & VG-40 may replace 80-100 and 30-40/40-50 penetration grade bitumen respectively. As regards VG-20, this may be considered for special cases only.

3. The Flexible Pavements Committee of the IRC has since given their recommendation for issuing the corrigendum in this regard to Section 500 of the Ministry's Specifications for Road & Bridge Works-2001 (Fourth Revision). Considering the above, it has been decided that all future estimates for road projects in central sector shall provide for viscosity grade bitumen as per IS:73-2006. However, during the transition period, for the ongoing projects/projects sanctioned with a particular penetration/viscosity grade of bitumen, the equivalent viscosity/penetration grade of bitumen as per para 2 above may be allowed depending on availability.

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