

भारत सरकार (GOVERNMENT OF INDIA)  
रेल मंत्रालय (MINISTRY OF RAILWAYS)  
रेलवे बोर्ड (RAILWAY BOARD)

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EF No. 2021/CE-II/CS/IRPWM2020

New Delhi, dated 21.10.2021

**The General Managers (Engg.)-** CR, ER, ECR, ECoR, NR, NCR, NER, NFR, NWR, SR, SCR, SER, SECR, SWR, WR, WCR and Metro Railway/Kolkata.

**The General Manager (Const.), N.F. Railway, Guwahati.**

**The General Manager/CORE/Allahabad.**

Principal Financial Advisor, All Indian Railways

The CAO/Const. All Indian Railways.

The General Managers (Engg.) – ICF/Chennai, RCF/Kapurthla, DLW/Varanasi, CLW/Chittranjan, Rail Wheel Factory /Yelahanka, Bangalore & DMW/Patiala.

The Director General (Track), RDSO/Alambagh, Lucknow.

Chief Commissioner of Railway Safety, Lucknow.

Managing Director, IRCON, New Delhi.

Managing Director, RITES Bhawan, 1, Leisure Valley Rd, Sector 29, Gurugram, Haryana

Managing Director, DMRC, Metro Bhawan, Barakhamba lane, New Delhi.

Managing Director, CONCOR, New Delhi.

Managing Director, RVNL, August Kranti Bhawan, Bhikaji Cama Place, New Delhi.

Managing Director, DFCCIL, Pragati Maidan, Metro Station, New Delhi.

Managing Director, PIPAVAV Railway Corp. Ltd., 14th Floor, B-Wing, Statesman House 148, Barakhamba Road, Canaught Place New Delhi Central Delhi

Managing Director, MRVC, Church Gate station Building 2nd Floor, Mumbai – 400020.

Managing Director, RLDA, Unit No.702-B, 7<sup>th</sup> Floor, Konnectus Tower-2, DMRC Building, Ajmeri Gate Deelhi 110002

Managing Director, Konkan Railway Corporation Ltd, Belapur Bhawan, Sector-11, CBD Belapur. Mumbai. Pin - 400614.

Director General, IRICEN, Pune.

Director General, IRIEEN, Nasik.

Director, IRISSET, Secunderabad.

Director, IRIMEE, Jamalpur.

Director General, IRITM, Vill. Kanausi, Hardoi, Manik Nagar, Lucknow.

Director General, Railway Staff College, Vadodara.

Genl. Secretaries, AIRF, NFIR, IRPOF, FROA, DAI (Railways) Rail Bhawan, New Delhi.

**Sub: Correction Slip No. 3 to the Indian Railways Permanent Way Manual 2020.**

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Ministry of Railways (Railway Board) has decided that correction/addition as indicated in the enclosed Correction Slip No.3 dated 21.10.2021, to relevant para of IRPWM-2020 be made.

Receipt of this letter may please be acknowledged.

(Pradeep Nagar)

Director Civil Engg.(P)

Railway Board

Copy to:-

Sr. PPS/PS to CRB & CEO, MF, MI, M(T&RS), M(O&BD), Secretary.  
AM(CE), AM(Works), AM(Budget), AM(Traction), AM(Fin.), AM(Sig.), AM(Plg.),  
AM(Staff), AM(Mech.&Engg.), AM(PU.), AM(Tele.), AM(TT), PED(Bridge), PED(Vigilance),  
PED(Safety), AM(M&BD), AM(T&C), AM(Comml.).

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ED(Project Monitoring), ED(Safety), EDF(X)I, EDF(X)II,  
DTK(MC), DTK(M), DCE(B&S), DCE(B&S)II, Dir(Works)-I, Dir(Project Monitoring), DVE-  
I & DVE-II,

ED/C&IS - for uploading on Railway Board website.

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**INDIAN RAILWAYS PERMANENT WAY MANUAL 2020  
ADDENDUM AND CORRIGENDUM SLIP NO. 3 DATED 21.10.2021**

Heading of **Para 228. "Provision of Guard Rails on Bridges"** shall be read as **"Provision of Guard Rails on Bridges and Tunnels"**

A new Para 228 (4) to Indian Railways Permanent Way Manual shall be added as under:

**Para 228 (4) Provision of Guard Rails/ Derailment Guard in Tunnels:**

**(I) For speed above 110 kmph**

**(A) Tunnel with Single track**

- (a) On approach of tunnel :** 200 m from portal face outside the tunnel to 25 m inside the tunnel.
- (b) Inside Tunnel:** In addition to 25 m from face of portal as stipulated under item (a) above, guard rail/derailment guard shall be provided inside tunnels as under:
  - (i) Ballastless Track:** Throughout the length of ballastless track.
  - (ii) Ballasted Track:** Curves with radius upto 500m along with transition portion but excluding locations provided with check rails. Guard rail would also cover critical locations like sub-station, column/structure etc

**(B) Tunnel with Double tracks**

- (a) On approach of tunnel :** 200 m from portal face outside the tunnel.
- (b) Inside Tunnel:** Throughout the length of tunnel but excluding locations provided with check rails.

**(II) For speed above 60 kmph and upto 110 kmph**

**(A) Tunnel with Single track**

- (a) On approach of tunnel:** 100 m from portal face outside the tunnel to 25 m inside the tunnel.
- (b) Inside Tunnel:** In addition to 25 m from face of portal as stipulated under item (a) above, guard rail/derailment guard shall be provided inside tunnels as under:
  - (i) Ballastless Track:** Throughout the length of ballastless track.
  - (ii) Ballasted Track:** Curves with radius upto 500m along with transition portion but excluding locations provided with check rails. Guard rail would also cover critical locations like sub-station, column/structure etc


**(B) Tunnel with Double tracks**

- (a) On approach of tunnel :** 100 m from portal face outside the tunnel.
- (b) Inside Tunnel:** Throughout the length of tunnel but excluding locations provided with check rails.

**(III) For speed upto 60 kmph**

**(A) Tunnel with Single track**

- (a) On approach of tunnel :** No Guard rail/derailment guard is required.
- (b) Inside Tunnel:**
  - (i) Ballastless Track:** Throughout the length of ballastless track.

  
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(ii) **Ballasted Track:** Curves with radius upto 500m along with transition portion but excluding locations provided with check rails. Guard rail would also cover critical locations like sub-station, column/structure etc

**(B) Tunnel with Double tracks**

**(a) On approach of tunnel :** 25 m from portal face outside the tunnel.

**(b) Inside Tunnel:** Throughout the length of tunnel but excluding locations provided with check rails.

**Note:**

- (a) The top table of guard rail should not be lower than that of the running rail, by more than 25 mm. In case of curves, the difference should be measured with reference to a straight line connecting the running tables of inner and outer rails.
- (b) Fixing of Guard rails to be done as per para 228(3) above.
- (c) Splaying of Guard rails need to be done on both sides in Single Line and only on facing direction in Double Line section. The non-splayed end should be bent downwards beyond the end of stipulated length of Guard rails and provided with wooden block.
- (d) Derailment Guard shall be designed such that in case of derailment, the wheels of-derailed vehicle moving at maximum speed are retained by the Derailment Guard.
- (e) Typical arrangement of guard rail with applicable dimensions (“a” and “L2”) is shown in the sketch and table in Para 228 (2) above.
- (f) Provision of Guard rails is for ballasted track and Derailment guard for ballast less track.

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*Handwritten signature and date:*  
21/10/21