

Rajeev Verma  
राजीव वर्मा  
Executive Director/B&S  
कार्यकारी निदेशक/पुल एवं संरचना



भारत सरकार-रेल मंत्रालय  
अनुसंधान अभिकल्प और मानक संगठन  
लखनऊ- 226011  
Government of India-Ministry of Railways  
Research Designs & Standards Organisation  
Lucknow- 226011  
Rly. : 032-42120 Phone / Fax : 0522-2450398  
Email : [edbsrdso@gmail.com](mailto:edbsrdso@gmail.com)

No.CBS/PSB

Dated: 25.09.2019

- I. General Manager (Con.) N. F. Railway, Maligaon, Guwahati-781011.  
II.

Railway	Principal Chief Engineer	Chief Administrative Officer (Constn.)
Central	Mumbai CSMT-400001.	New Administrative Building, Mumbai CSMT-400001
Eastern	Fairlie Place, Kolkata-700001.	14, Strand Road, Kolkata-700001.
East Central	Hazipur-844101.(Bihar)	(i) CAO/C/North, Mahendru Ghat, Patna- 800004 (ii) CAO/C/South, Mahendru Ghat, Patna- 800004
East Coast	Rail Vihar, Bhubaneshwar-751016.	Rail Vihar, Bhubaneshwar-751016.
Northern	Baroda House, New Delhi - 110001.	(i) CAO/C-I, Kashmere Gate, Delhi- 110006. (ii) CAO/C-II, Kashmere Gate, Delhi- 110006. (iii) USBRL Project, Satyam Resort Complex, Trikuta Nagar Extn., Jammu Tawi- 180012
North Central	Subedar Ganj, Allahabad-211001.	Subedar Ganj, Allahabad-211001.
North Eastern	Gorakhpur- 273 001.	Gorakhpur- 273001.
Northeast Frontier	Maligaon, Guwahati - 781011.	Maligaon, Guwahati-781011.
North Western	Jaipur- 302017.	Jaipur-302017.
Southern	Park Town, Chennai-600 003	(i) CAO/C, Egmore, Chennai- 600008 (ii) CAO/C/ERS, Ernakulam (Kerala)
South Central	Rail Nilayam, Secunderabad-500371.	Rail Nilayam, Secunderabad-500 371.
South Eastern	Garden Reach, Kolkata-700 043	Garden Reach, Kolkata-700 043
South East Central	Bilaspur-495004	Bilaspur-495004
South Western	Hubli-580023	18, Millers Road, Bangalore-560 046.
Western	Churchgate, Mumbai-400020.	Churchgate, Mumbai-400 020.
West Central	Jabalpur -482001	Jabalpur -482001

**Sub:** Addendum and Corrigendum Slip no. 22 to IRS Steel Bridge Code

**Ref:** (i) Railway Board's letter no. 2017/37/CE-III/BR/BSC/85/Seminar dated 18.09.2018.  
(ii) This office letter of even no. dated 29.08.2019/02.09.2019.

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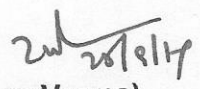
With reference to above subject, Addendum and Corrigendum Slip no. 22 to IRS Steel Bridge Code related to the effective area of bearing type bolt has been approved by Railway Board.

This Addendum and Corrigendum Slip can also be accessed through rail net at following link:

<http://10.100.2.4/drawing/index.aspx> → Codes/Manuals → Steel Bridge Code.

This is for your information and further necessary action.

**Encl:** Copy of A&C no. 22 to IRS Steel Bridge Code (01 Page).

  
(Rajeev Verma)  
Executive Director/(B&S)

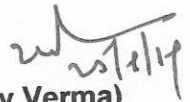
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**Copy to:**

- i) OSD/ME for kind information of Member Engineering, Railway Board, Rail Bhawan, New Delhi-110001.
- ii) Chief Commissioner of Railway Safety, N.E.Railway Office Compound, Ashok Marg, Lucknow-226001.
- iii) Additional Member (Civil Engg.), Railway Board, Rail Bhawan, New Delhi-110001.
- iv) Additional Member (Works), Railway Board, Rail Bhawan, New Delhi-110001.
- v) Director, IRICEN, Pune-411001
- vi) Executive Director (Civil Engg.) B&S, Railway Board, New Delhi-110001.
- vii) Chief Engineer, Metro Railway, Jawahar Lal Nehru Road, Kolkata-700 071.
- viii) Chief Bridge Engineer:
  1. Central Railway, Mumbai CST-400 001.
  2. Eastern Railway, Fairlie Place, Kolkata-700 001.
  3. East Central Railway, Hazipur-844 101.
  4. East-Coast Railway, Bhubaneswar-751 016 (Orissa).
  5. Northern Railway, Baroda House, New Delhi- 110 001.
  6. North-Central Railway, Allahabad-211 001.
  7. North Eastern Railway, Gorakhpur-273 001.
  8. Northeast Frontier Railway, Maligaon, Guwahati-781 011.
  9. North western Railway, Jaipur-302017.
  10. Southern Railway, Park Town, Chennai-600 003.
  11. South Central Railway, Rail Nilayam, Secunderabad-500 371.
  12. South East Central Railway, Bilaspur-495 004
  13. South Eastern Railway, Garden Reach, Kolkata-700 043
  14. South West Railway, Hubli-580 023.
  15. Western Railway, Mumbai-400 020.
  16. West Central Railway, Jabalpur-482 001.
- ix) Commissioner of Railway Safety:
  1. Central Circle, 2<sup>nd</sup> Floor, Churchgate Station Building, Mumbai-400020.
  2. Eastern Circle, Multistoried Building of Eastern Railway, 12<sup>th</sup> Floor, Strand Road, Kolkata-700001.
  3. Northern Circle, near Centre for Railway Information System, Safdarjung Railway Station, New Delhi-110021.
  4. North Eastern Circle, DRM Compound, Northern Railway, Hazratganj, Lucknow-226001.
  5. Northeast Frontier Circle, 12 Strand Road, Multistoried Building of Eastern Railway, Kolkata-700001.
  6. Southern Circle, 7 Seshadri Road, Gandhi Nagar, Bangalore-560009.
  7. South Central Circle, Sarojini Devi Road, Secunderabad-500 003.

8. South Eastern Circle, 14 Strand Road, Multistoried Building of Eastern Railway, Kolkata-700043.
  9. Western Circle, 2<sup>nd</sup> Floor, Churchgate, Station Bulding Annexe, Maharishi Karve Road, Mumbai-400020.
- x) Director General, Railway Staff College, Vadodara-390004.
  - xi) General Manager, Delhi Metro Rail Corporation Ltd., NBCC Place, Bhisma Pitamah Marg, Pragati Vihar, New Delhi-110003
  - xii) Managing Director, RITES LTD, RITES Bhawan, Sector-XIII, R.K.Puram, New Delhi-110066.
  - xiii) Managing Director, IRCON, Palika Bhawan, Sector-XIII, R K Puram, New Delhi-110066.
  - xiv) Chairman & Managing Director, Konkan Railway Corporation Ltd., Belapur Bhavan, Plot no. 6, Sect.-II CBD Belapur, Navi Mumbai-400614.
  - xv) Managing Director, RVNL, C-2/10, Safdarjang Development Area, Arvindo Marg, New Delhi-110016.
  - xvi) Managing Director, Dedicated Freight Corridor Corporation of India Ltd., 5<sup>th</sup> Floor, Pragati Maidan, Metro Station Building Complex, New Delhi-110001.
  - xvii) The Chairman & Managing Director, Mumbai Railway Vikas Corporation Ltd (MRVC Ltd) , Churchgate Mumbai-400020

Encl: Copy of A&C no. 22 to IRS Steel Bridge Code (01 Page)

  
(Rajeev Verma)  
Executive Director/(B&S)

GOVERNMENT OF INDIA  
MINISTRY OF RAILWAYS  
(RAILWAY BOARD)

**INDIAN RAILWAY STANDARD  
CODE OF PRACTICE FOR THE DESIGN OF  
STEEL OR WROUGHT IRON BRIDGES**

**(STEEL BRIDGE CODE)**

**Adopted-1941**

**Revised-1962**

**Reprinted in 2017**

**(Incorporating A&C Slips Nos. 1 to 21)**

**Addendum & Corrigendum Slip No. 22 dated 25.09.2019**

Heading of Clause 7.1 to be changed as below and existing clause 7.1.1 to be replaced by following new clause 7.1.1:

**Clause 7.1 Effective area in Shear and Bearing of Rivets, Bolts and Pins**

**Clause 7.1.1** In calculating the number of rivets, bolts or pins required, the effective area shall be taken as:

For rivets: the area of hole.

For pins: the gross cross section area of pin.

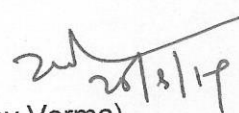
For bolts: the gross cross section area of the bolt (where thread cannot occur in the shear plane) and the net tensile stress area (where thread can occur in the shear plane). For bolts where the net tensile stress area is not defined, the net tensile stress area shall be taken as the area at the root of threads as given below:

Nominal bolt diameter (mm)	12	14	16	18	20	22	24	27	30	33
Net tensile stress area (mm <sup>2</sup> )	84	115	157	192	245	303	353	459	561	694

Rivets, bolts or pins in double shear shall be considered as having twice the shear area of those in single shear

By Order

Luck now  
Date. 25.09.2019

  
(Rajeev Verma)  
Executive Director/(B&S)