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

II.

<table>
<thead>
<tr>
<th>Railway</th>
<th>Principal Chief Engineer</th>
<th>Chief Administrative Officer (Constrn.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central</td>
<td>Mumbai CSMT-400001.</td>
<td>New Administrative Building, Mumbai CSMT-400001</td>
</tr>
<tr>
<td>Eastern</td>
<td>Fairlie Place, Kolkata-700001.</td>
<td>14, Strand Road, Kolkata-700001.</td>
</tr>
<tr>
<td>East Central</td>
<td>Hazipur-844101.(Bihar)</td>
<td>(i) CAO/C/North, Mahendru Ghat, Patna- 800004</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(ii) CAO/C/South, Mahendru Ghat, Patna- 800004</td>
</tr>
<tr>
<td>East Coast</td>
<td>Rail Vihar, Bhubaneswar-751016.</td>
<td>Rail Vihar, Bhubaneswar-751016.</td>
</tr>
<tr>
<td>Northern</td>
<td>Baroda House, New Delhi - 110001.</td>
<td>(i) CAO/C-I, Kashmere Gate, Delhi- 110006.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(ii) CAO/C-II, Kashmere Gate, Delhi- 110006.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(iii) USBRL Project, Satyam Resort Complex,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Trikuta Nagar Extn., Jammu Tawi- 180012</td>
</tr>
<tr>
<td>Southern</td>
<td>Park Town, Chennai-600 003</td>
<td>(i) CAO/C, Egmore, Chennai- 600008</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(ii) CAO/C/ERS, Ernakulam (Kerala)</td>
</tr>
<tr>
<td>South Central</td>
<td>Rail Nilayam, Secunderabad-500371.</td>
<td>Rail Nilayam, Secunderabad-500 371.</td>
</tr>
<tr>
<td>South Eastern</td>
<td>Garden Reach, Kolkata-700 043.</td>
<td>Garden Reach, Kolkata-700 043.</td>
</tr>
<tr>
<td>South East Central</td>
<td>Bilaspur-495004</td>
<td>Bilaspur-495004</td>
</tr>
<tr>
<td>South Western</td>
<td>Hubli-580023</td>
<td>18, Millers Road, Bangalore-560 046.</td>
</tr>
<tr>
<td>Western</td>
<td>Churchgate, Mumbai-400020.</td>
<td>Churchgate, Mumbai-400020.</td>
</tr>
</tbody>
</table>

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


(ii) This office letter of even no. dated 29.08.2019/02.09.2019.

*******

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).
Copy to:

i) OSD/ME for kind information of Member Engineering, Railway Board, Rail Bhawan, New Delhi-110001.


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, Fairie Place, Kolkata-700 001.
4. East-Coast Railway, Bhubaneshwar-751 016 (Orissa).
5. Northern Railway, Baroda House, New Delhi-110 001.
6. North-Central Railway, Allahabad-211 001.
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
15. Western Railway, Mumbai-400 020.
16. West Central Railway, Jabalpur-482 001.

ix) Commissioner of Railway Safety:

1. Central Circle, 2nd Floor, Churchgate Station Building, Mumbai-400020.
2. Eastern Circle, Multistoried Building of Eastern Railway, 12th Floor, Strand Road, Kolkata-700001.
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, 2nd Floor, Churchgate, Station Building Annex, 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., 5th 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)
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:

<table>
<thead>
<tr>
<th>Nominal bolt diameter (mm)</th>
<th>12</th>
<th>14</th>
<th>16</th>
<th>18</th>
<th>20</th>
<th>22</th>
<th>24</th>
<th>27</th>
<th>30</th>
<th>33</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net tensile stress area (mm²)</td>
<td>84</td>
<td>115</td>
<td>157</td>
<td>192</td>
<td>245</td>
<td>303</td>
<td>353</td>
<td>459</td>
<td>561</td>
<td>694</td>
</tr>
</tbody>
</table>

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

By Order

Lucknow
Date, 25.09.2019

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