BSF - CONNECTION SOLUTIONS

CIRCULAR COLUMNS
Note:
Circular columns may be more difficult to align properly during erection. If the column units are not orientated correctly then the BSF elements may not line up correctly. To assist proper alignment, there should be a reference mark at base level indicating where the BSF insert is at higher level. On site, erection crews should use this reference mark as well as visually checking the BSF insert in the column.
INVERTED T-BEAM FORKED AROUND THE COLUMN
CONNECTIONS NOT AT A RIGHT ANGLE

Horizontal anchoring to be evaluated

NOTE: Reduced effective cross section in column.

Horizontal anchoring to be evaluated
CONNECTIONS FROM SEVERAL DIRECTIONS

MINIMUM COLUMN DIMENSION FOR SPACE:
BSF225/300: 400x400
BSF450: 500x500
BSF700: 600x600
Table 1: Plate for splice of threaded bars

**ECCENTRICITY**

For most columns the design will benefit from the greatly reduced eccentricity resulting from using BSF.

The example shown above (BSF225) illustrates how the load eccentricity (e) is more than halved using BSF. This reduces bending and allows a more efficient and cost-effective design.
# REVISION HISTORY

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>17.10.2013</td>
<td>First Edition</td>
</tr>
<tr>
<td>28.11.2013</td>
<td>Included comments from external review.</td>
</tr>
<tr>
<td>07.10.2014</td>
<td>Updated figure page 4. Clarified text: &quot;Minimum column dimension for space.&quot;</td>
</tr>
<tr>
<td>27.02.2015</td>
<td>Included a nut on the front side of the steel plate anchoring the threaded bars. (To ensure correct position of the plate when casting the concrete).</td>
</tr>
<tr>
<td>23.05.2016</td>
<td>New template</td>
</tr>
</tbody>
</table>