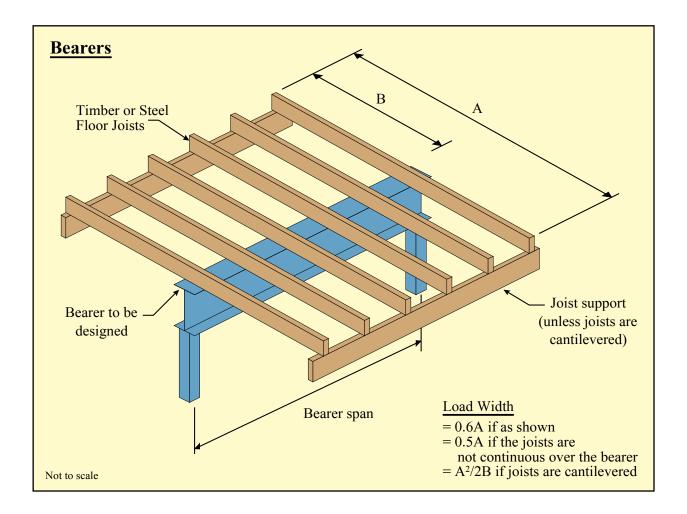
BEARERS

| | Load | l (kg/m²) | Deflection Limit (mm) | | | |
|--|-----------|------------------------------|-----------------------|-------------------|--|--|
| | Dead Load | Live Load | Dead & Live Load | Live Load | | |
| Bearers supporting a timber floor & non load-bearing wall | 90 | 150 (or 180kg point load) | span/240 to 15 | span/360 to 10 | | |



Notes:

- 1. Allowance has been made in the table for a non-load bearing stud wall (not shown) within the floor area supported by the Bearer
- 2. The single span Bearer case is shown. For continuous Bearers over multiple spans, the variation in span between supports should not be more than 10%
- 3. The top flange of the bearer is assumed to be continuously laterally supported by floor joists spaced at 450mm centres

| Section | | | 1 | .oad Width (| m) | | | |
|-------------------------------|-----|-----|-----|--------------|-----|-----|-----|--|
| Designation | 1.2 | 1.8 | 2.4 | 3.0 | 3.6 | 4.2 | 4.8 | |
| MAXIMUM SPAN OF BEARER (m) | | | | | | | | |
| 100TFB | 3.0 | 3.0 | 2.7 | 2.5 | 2.4 | 2.2 | 2.1 | Example: |
| 125TFB | 4.4 | 4.1 | 3.8 | 3.6 | 3.4 | 3.2 | 3.1 | Refer to Fig. page 6 |
| 150UB14.0 | 4.9 | 4.5 | 4.2 | 4.0 | 3.8 | 3.7 | 3.6 | Joists continuous over bearer |
| 150UB18.0 | 5.3 | 4.8 | 4.6 | 4.3 | 4.1 | 4.0 | 3.8 | Span of bearer=5.0m |
| 180UB16.1 | 5.5 | 5.1 | 4.7 | 4.5 | 4.3 | 4.1 | 4.0 | A=7.6m |
| 180UB18.1 | 5.7 | 5.2 | 4.9 | 4.6 | 4.4 | 4.3 | 4.1 | B=3.6m |
| • 180UB22.2 | 6.0 | 5.5 | 5.2 | 4.9 | 4.7 | 4.5 | 4.4 | Load width =0.6A =0.6x7.6 |
| 200UB18.2 | 6.1 | 5.6 | 5.2 | 5.0 | 4.7 | 4.6 | 4.4 | |
| 200UB22.3 | 6.4 | 5.9 | 5.6 | 5.3 | 5.1 | 4.9 | 4.7 | =4.6m Use a load width of 4.8 |
| 200UB25.4 | 6.6 | 6.1 | 5.7 | 5.5 | 5.2 | 5.0 | 4.9 | |
| • 200UB29.8 | 6.9 | 6.4 | 6.0 | 5.7 | 5.5 | 5.3 | 5.1 | in the adjacent table: a 250UB25.7 will span 5.4m |
| 250UB25.7 | 7.3 | 6.7 | 6.3 | 6.0 | 5.8 | 5.6 | 5.4 | a 2500b25.7 will spail 5.411 |
| 250UB31.4 | 7.6 | 7.0 | 6.6 | 6.3 | 6.1 | 5.9 | 5.7 | This is lighter than a 200UB29.8 |
| 250UB37.3 | 7.9 | 7.4 | 7.0 | 6.7 | 6.4 | 6.2 | 6.0 | |
| 310UB32.0 | 8.3 | 7.7 | 7.3 | 6.9 | 6.7 | 6.4 | 6.2 | |
| 310UB40.4 | 8.8 | 8.2 | 7.7 | 7.4 | 7.1 | 6.9 | 6.7 | |
| 310UB46.2 | 9.0 | 8.4 | 8.0 | 7.6 | 7.4 | 7.1 | 6.9 | |
| 75PFC | 2.4 | 2.3 | 2.1 | 1.9 | 1.8 | 1.7 | 1.7 | |
| 100PFC | 3.2 | 3.1 | 2.9 | 2.7 | 2.5 | 2.4 | 2.3 | |
| 125PFC | 4.2 | 4.0 | 3.7 | 3.5 | 3.3 | 3.1 | 3.0 | |
| 150PFC | 5.2 | 4.8 | 4.5 | 4.2 | 4.0 | 3.9 | 3.8 | |
| 180PFC | 5.9 | 5.4 | 5.1 | 4.8 | 4.6 | 4.4 | 4.3 | |
| 200PFC | 6.3 | 5.8 | 5.4 | 5.2 | 5.0 | 4.8 | 4.6 | |
| 230PFC | 6.8 | 6.3 | 5.9 | 5.6 | 5.4 | 5.2 | 5.0 | |
| 250PFC | 7.6 | 7.0 | 6.6 | 6.3 | 6.1 | 5.9 | 5.7 | |
| 300PFC | 8.4 | 7.9 | 7.4 | 7.1 | 6.8 | 6.6 | 6.4 | |

BEARER SUPPORTING A TIMBER FLOOR AND NON LOAD BEARING STUD WALL - SINGLE SPAN

BEARER SUPPORTING A TIMBER FLOOR AND NON LOAD BEARING STUD WALL -CONTINUOUS SPAN

| Section Designation | | | L | .oad Width (I | n) | | | |
|-------------------------------|------|------|---------|---------------|----------|-----|-----|----------------------------------|
| | 1.2 | 1.8 | 2.4 | 3.0 | 3.6 | 4.2 | 4.8 | |
| | | | MAXIMUM | SPAN OF BE | ARER (m) | | | _ |
| 100TFB | 3.4 | 3.4 | 3.1 | 2.8 | 2.5 | 2.3 | 2.2 | |
| 125TFB | 4.9 | 4.7 | 4.4 | 4.2 | 3.9 | 3.6 | 3.4 | Example: |
| 150UB14.0 | 5.6 | 5.2 | 4.9 | 4.6 | 4.4 | 4.0 | 3.8 | Refer to Fig. page 6 |
| 150UB18.0 | 6.2 | 5.7 | 5.3 | 5.0 | 4.8 | 4.6 | 4.4 | Joists cantilevered |
| 180UB16.1 | 6.5 | 5.9 | 5.5 | 5.2 | 5.0 | 4.7 | 4.4 | Span of bearer=5.0m |
| 180UB18.1 | 6.7 | 6.1 | 5.7 | 5.4 | 5.1 | 4.9 | 4.7 | A=5.6m |
| • 180UB22.2 | 7.1 | 6.4 | 6.0 | 5.7 | 5.4 | 5.2 | 5.1 | B=3.4m |
| 200UB18.2 | 7.2 | 6.5 | 6.1 | 5.7 | 5.5 | 5.3 | 5.0 | Load width $=A^{2}/2B$ |
| 200UB22.3 | 7.7 | 7.0 | 6.5 | 6.2 | 5.9 | 5.7 | 5.5 | $=5.6^{2}/(2x3.4)$ |
| 200UB25.4 | 7.8 | 7.2 | 6.7 | 6.3 | 6.1 | 5.8 | 5.6 | =4.6m |
| • 200UB29.8 | 8.2 | 7.5 | 7.0 | 6.7 | 6.4 | 6.1 | 5.9 | Use a load width of 4.8 |
| 250UB25.7 | 8.7 | 7.9 | 7.4 | 7.0 | 6.7 | 6.5 | 6.2 | in the adjacent table: |
| 250UB31.4 | 9.0 | 8.4 | 7.8 | 7.4 | 7.1 | 6.8 | 6.6 | a 200UB18.2 will span 5.0m |
| 250UB37.3 | 9.4 | 8.8 | 8.2 | 7.8 | 7.5 | 7.2 | 7.0 | |
| 310UB32.0 | 9.9 | 9.1 | 8.5 | 8.1 | 7.7 | 7.5 | 7.2 | This is lighter than a 180UB22.2 |
| 310UB40.4 | 10.5 | 9.7 | 9.2 | 8.7 | 8.3 | 8.0 | 7.8 | |
| 310UB46.2 | 10.7 | 10.0 | 9.5 | 9.0 | 8.6 | 8.3 | 8.1 | |
| 75PFC | 2.6 | 2.6 | 2.5 | 2.2 | 2.0 | 1.9 | 1.7 | |
| 100PFC | 3.6 | 3.6 | 3.4 | 3.0 | 2.8 | 2.6 | 2.4 | |
| 125PFC | 4.7 | 4.6 | 4.3 | 4.0 | 3.7 | 3.4 | 3.2 | |
| 150PFC | 6.1 | 5.5 | 5.2 | 4.9 | 4.7 | 4.5 | 4.3 | |
| 180PFC | 6.9 | 6.3 | 5.9 | 5.6 | 5.3 | 5.1 | 4.9 | |
| 200PFC | 7.5 | 6.8 | 6.3 | 6.0 | 5.7 | 5.5 | 5.4 | |
| 230PFC | 8.1 | 7.4 | 6.9 | 6.5 | 6.3 | 6.0 | 5.8 | |
| 250PFC | 9.0 | 8.4 | 7.8 | 7.4 | 7.1 | 6.8 | 6.6 | |
| 300PFC | 10.0 | 9.3 | 8.8 | 8.3 | 8.0 | 7.7 | 7.5 | |

Notes on Tables:

1. The tables apply for 300PLUS[®] steel only. For details of your nearest 300PLUS[®] structural steel supplier, call OneSteel Direct toll free on 1800 1 STEEL (1800 1 78335), or visit our website at www.onesteel.com



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