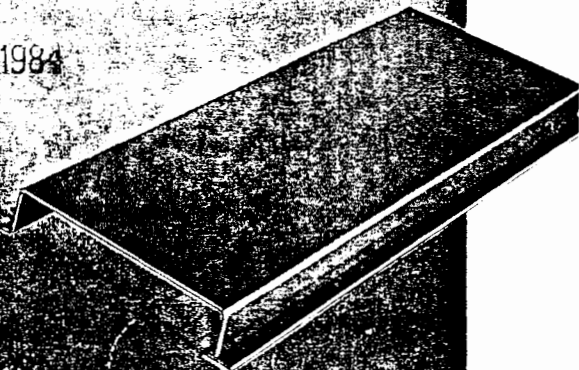
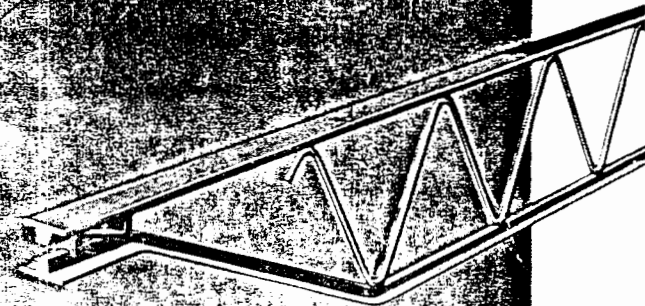


AUG 24 1984

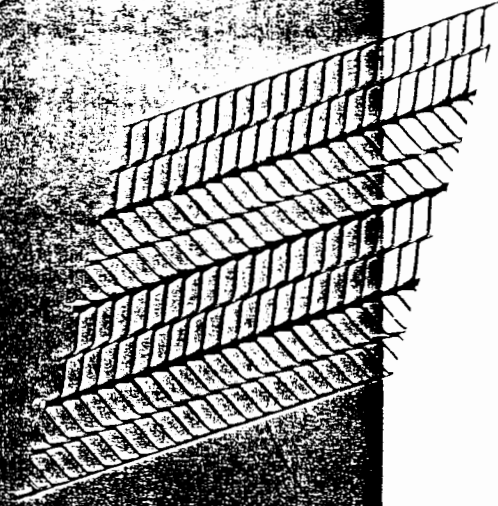
# TRUSCON



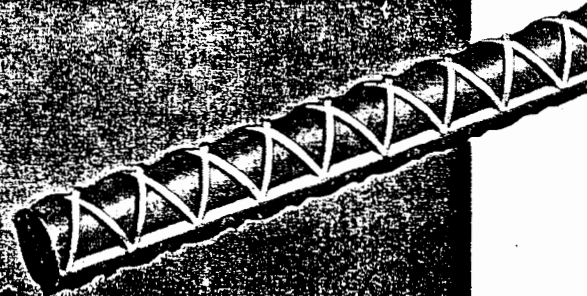
*Ferrobord Steeldeck*



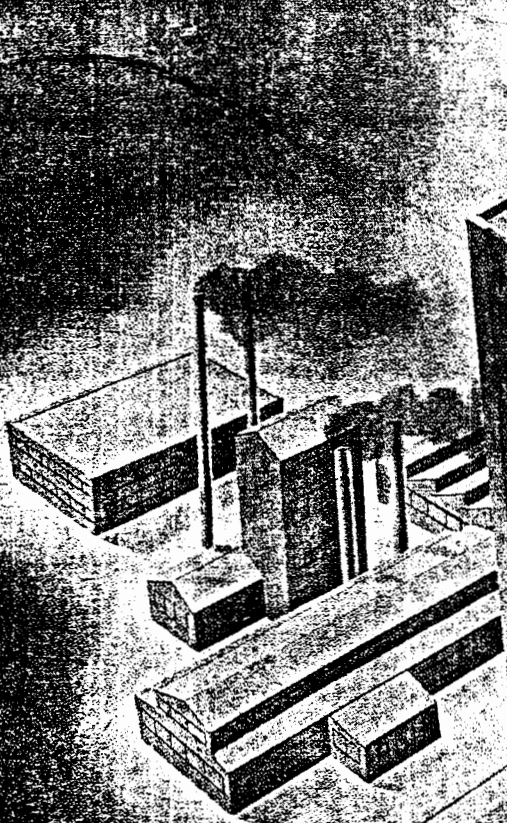
*Steel Joists*



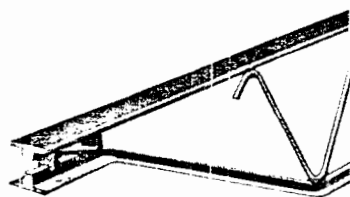
*Metal Lath and Accessories*



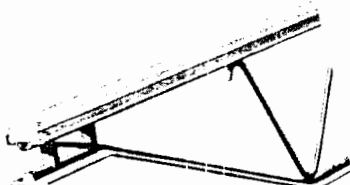
*Reinforcing*



1954 CATALOG



"O-T" Open Truss Steel Joist

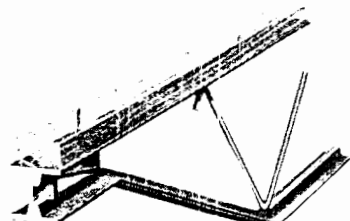


Nailer Joist

Wood strip (2 1/8" x 1 1/2")  
secured by top chord for

Types — 82W,  
102W, 103W, 104W,  
123W, 124W, 125W,  
145W

As manufactured at the  
Youngstown Plant

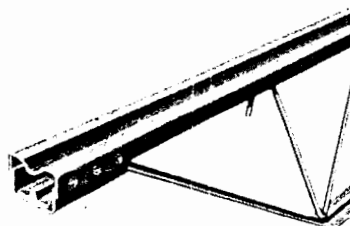


Nailer Joist

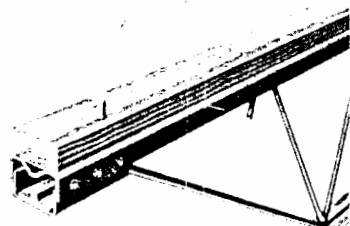
Wood strip (2 1/8" x 1 1/2")  
secured by lag screws for

Types — 126W,  
146W, 147W,  
166W, 167W

As manufactured at the  
Youngstown Plant and for all  
types (82W through 167W) as  
manufactured at the  
Gadsden Plant



"O-T" Open Truss Steel Joist  
18" and 20" type  
manufactured at the  
Youngstown Plant only



Nailer Joist  
18" and 20" type  
manufactured at the  
Youngstown Plant only



While Open Truss Steel Joists were primarily developed to provide a more rigid, fire-resistant, economical and light weight floor construction, their use through the past years has proved their dependability in every type of construction. These joists are designed according to the best engineering practice and offer many distinctive advantages.

Fundamentally, the Truscon "O-T" Open Truss Steel Joist is a Warren truss having top and bottom chords of wide tee-shaped members and a plain round continuous web member. The bottom chord is continuous from end to end of joist and bent up at the ends to form the bearings. Steel joists are fabricated by means of electric machine welding under pressure, making positive connections at all joints.

The underslung design of the bearing permits maximum head-room under the supporting girders. The open web allows the passage of pipes and conduits in any direction.

In practical use, Truscon "O-T" Open Truss Steel Joists are very simple to install, being completely shop fabricated and reaching the job ready for placing. Each joist is marked to correspond with the erection diagram, thus greatly simplifying and speeding construction work.

### Advantages of TRUSCON "O-T" Open Truss Steel Joists

**Fire-Resistant** — Fire tests prove that 3/4 in. of cement or gypsum ceiling plaster protects Truscon "O-T" Open Truss Steel Joist Construction against high temperatures. The majority of insurance rating bureaus have recognized the merits of this construction and have accordingly given it a first-class fireproof classification.

**Vermine-Resistant** — All members of the Truscon "O-T" Open Truss Steel Joists are steel and impregnable to the attacks of insects.

**Sound-Resistant** — The greatly increased use of Truscon "O-T" Open Truss Steel Joist Construction in larger and more expensive types of building, and its acceptance by Architects and Engineers in all parts of the country prove that this construction fully meets the essentials of soundproofness.

**Pipe and Conduit** — Easily Installed — The open web of the joists permits the passage of pipes and electric conduits, within the depth of the floor, thereby making such installations very economical.

**Radiant Heating** — The Open Web of these joists will permit unobstructed flow of air current in any direction, and this feature is of important consideration when planning a radiant heating system.

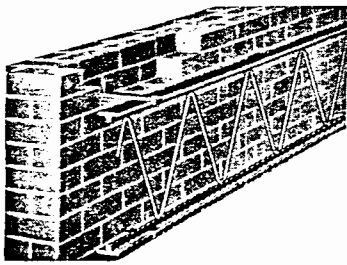
**Light Weight** — Easily Installed — Another feature of Open Truss Steel Joist Construction is its light weight and speed of erection. The complete shop fabrication, the absence of form work and the minimum of field work — all contribute to make steel joists the most rapidly erected fire-resistant construction.

### Details of CONSTRUCTION "O-T" Joist Roof Purlins

Open Truss Steel Joists have proved to be very economical and practical for use as roof purlins supporting steel deck roofs. The method of attaching the roof to the steel joists is very simple and positive, either with the use of clips or by welding the deck to the joists.

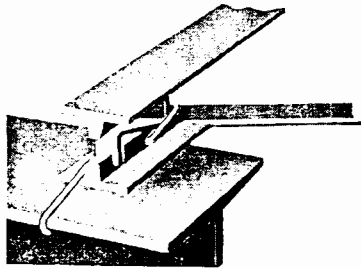
Occasionally it is desired to attach a wood roof deck to Truscon "O-T" Open Truss Steel Joists used as roof purlins. Truscon Nailers Joists can be provided to meet this requirement.

A MEMBER OF THE STEEL JOIST INSTITUTE



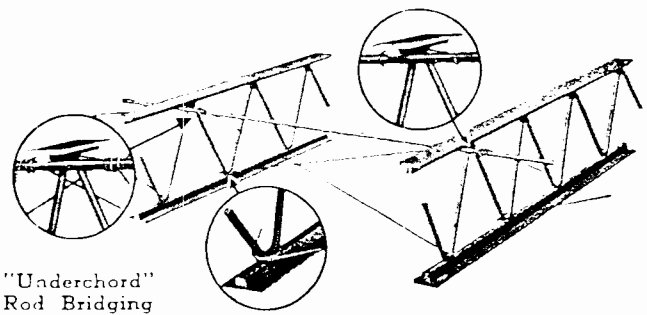
**Wall Anchor P-3101**

Affords additional bond between floor and wall construction when wall is of such a height or nature as to be not self-sustaining. Ends of each third joist should be anchored.



**Beam Anchor P-3099**

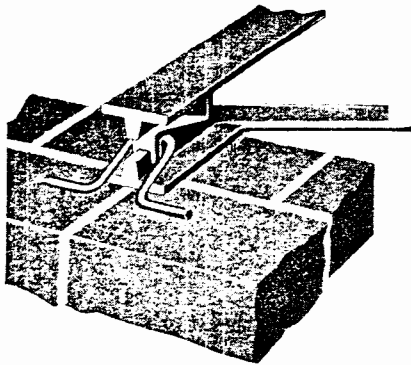
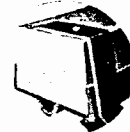
Ends of all steel joists resting on structural steel beams should be anchored by means of beam anchors P-3099.



**"Underchord" Rod Bridging**

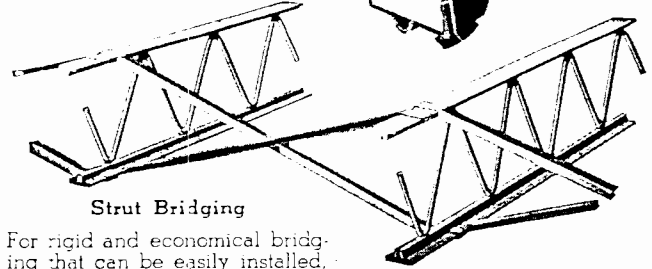
This type of bridging is very practical and will permit of a slight variation in joist spacings as is frequently necessary in order that joists can be spaced to avoid interference with bolt or rivet heads in supporting members, vent ducts, soil pipes, etc.

Insert shows method of attaching this bridging to top chord of Nailers Joists.



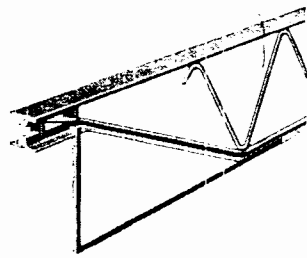
**Wall Anchor P-3098**

Joists parallel to masonry walls should have their top and bottom chords anchored by means of wall anchors P-3098 where each row of bridging occurs. The top anchor is not required with Nailers Joists since the top chord is braced by the wood subfloor.



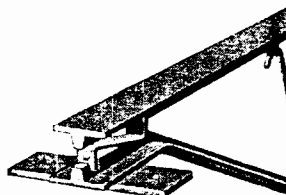
**Strut Bridging**

For rigid and economical bridging that can be easily installed, this type has proved very popular. It is made of  $\frac{3}{4}$ " x  $\frac{3}{4}$ " x 18 ga. box channels and cut to lengths to meet the exact spacing of the joists. This strut bridging holds the joists in a vertical plane, assuring accurate spacing and distribution of loads by acting in both tension and compression.



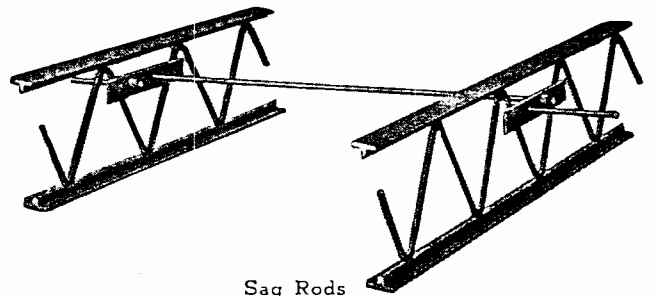
**Ceiling Extension P-3100**

When plastered ceilings are to be attached directly to the joists, ceiling extensions of the proper size must be provided at the ends of the joists.



**Bolted Connection P-3194**

Where steel joist must be bolted to a supporting steel member, plates are shop-welded to joist ends and provided with necessary bolt holes.



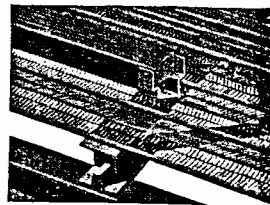
**Sag Rods**

When steel joists are used as purlins on inclined roofs and are placed at right angles to the slope, sag rods generally are necessary and these require sag rod plates attached to the joists. The plates are arc welded to the web members of the joists.



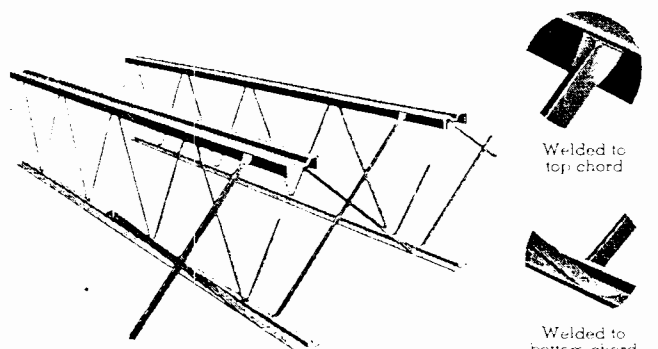
**Lath Clips**

Made in different sizes to meet the different widths of chord flanges and used for attaching either top or ceiling lath. The clips should straddle the nose of the lath.



**Screenshot Clip P-3106**

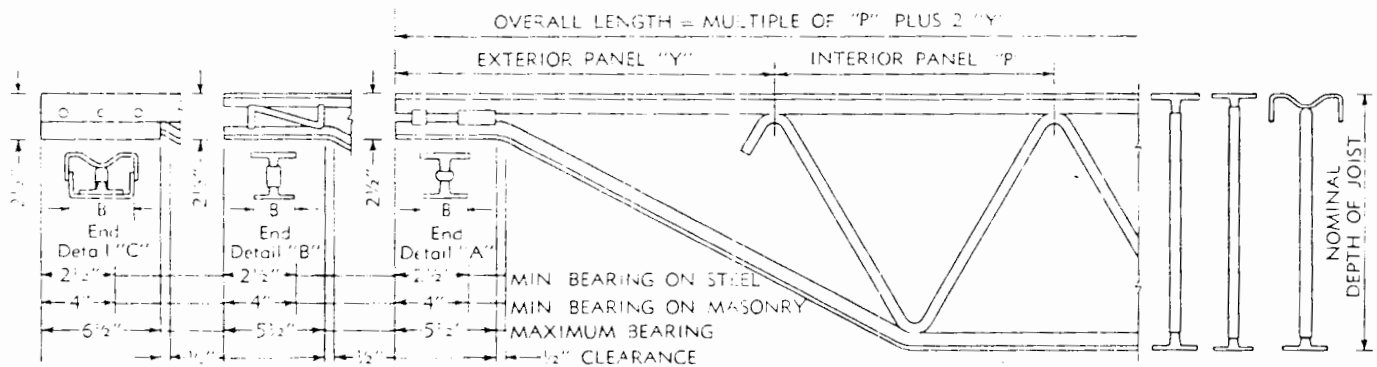
Screenshot Clips are used when it is desired to hold the screeds at right angles to the joists and to elevate them so that concrete can be poured beneath them. Lath clips of proper size are used to hold the screenshot clips in place.



**Strut Bridging for 18" and 20" Joists**

Bridging members are made from 1" x 1" x  $\frac{1}{8}$ " angles. The ends of these bridging angles are flattened to provide a flat surface for welding to the top and bottom chord members of the joists. All bridging must be field welded in place. Four lines of bridging should be used with these steel joists for all spans over 32' in length.

# TRUSCON "O-T" OPEN TRUSS STEEL JOISTS — DIMENSIONS AND SECTIONS



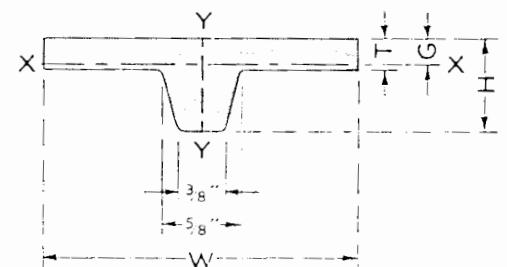
## DIMENSIONS AND SECTIONS

| Joist Designation | D Nominal Depth | Effective Depth | Top Chord   | Bottom Chord | End Detail | B      | All Webb Members One Rd. Bar |        | P       | Exterior Panel Lengths Are Made in the Following Variable "Y" Dimensions, and with These Suffix Letters |         |         |         |         |         |         |       |
|-------------------|-----------------|-----------------|-------------|--------------|------------|--------|------------------------------|--------|---------|---------------------------------------------------------------------------------------------------------|---------|---------|---------|---------|---------|---------|-------|
|                   |                 |                 |             |              |            |        | Diam.                        | Area   |         | A                                                                                                       | B       | C       | D       | E       | F       | G       | H     |
|                   | Inches          | Inches          | Section No. | Section No.  | Inches     | Inches | Inches <sup>2</sup>          | Inches | Ft.-In. | Ft.-In.                                                                                                 | Ft.-In. | Ft.-In. | Ft.-In. | Ft.-In. | Ft.-In. | Ft.-In. |       |
| 81                | 8               | 7.619           | 421         | 421          | B          | 1.625  | .378                         | .11    | 9.000   | 1- 2½                                                                                                   | 1- 4    | 1- 5½   |         |         |         |         |       |
| 82                | 8               | 7.766           | 422         | 421          | B          | 1.625  | .438                         | .150   | 9.000   | 1- 2½                                                                                                   | 1- 4    | 1- 5½   |         |         |         |         |       |
| 102               | 10              | 9.610           | 422         | 421          | B          | 1.625  | .438                         | .150   | 11.125  | 1- 4⅝                                                                                                   | 1- 6⅝   | 1- 7⅝   | 1- 9⅝   |         |         |         |       |
| 103               | 10              | 9.725           | 423         | 422          | B          | 2.250  | .438                         | .150   | 11.125  | 1- 4⅝                                                                                                   | 1- 6⅝   | 1- 7⅝   | 1- 9⅝   |         |         |         |       |
| 104               | 10              | 9.737           | 424         | 423          | B          | 2.250  | .500                         | .196   | 11.250  | 1- 4¾                                                                                                   | 1- 6¾   | 1- 7¾   | 1- 9¾   |         |         |         |       |
| 123               | 12              | 11.537          | 423         | 422          | B          | 2.250  | .500                         | .196   | 13.625  | 1- 7⅞                                                                                                   | 1- 8⅝   | 1- 10⅞  | 1- 11⅝  | 2- 1⅝   |         |         |       |
| 124               | 12              | 11.675          | 424         | 423          | B          | 2.250  | .500                         | .196   | 13.625  | 1- 7⅞                                                                                                   | 1- 8⅝   | 1- 10⅞  | 1- 11⅝  | 2- 1⅝   |         |         |       |
| 125               | 12              | 11.382          | 425         | 424          | B          | 2.250  | .563                         | .249   | 13.375  | 1- 6⅞                                                                                                   | 1- 8⅝   | 1- 9⅞   | 1- 11⅝  | 2- 0⅞   |         |         |       |
| 126               | 12              | 11.602          | 426         | 425          | A          | 2.500  | .563                         | .249   | 13.375  | 1- 6⅞                                                                                                   | 1- 8⅝   | 1- 9⅞   | 1- 11⅝  | 2- 0⅞   |         |         |       |
| 145               | 14              | 13.445          | 425         | 424          | B          | 2.250  | .563                         | .249   | 15.750  | 1- 9¼                                                                                                   | 1- 10¾  | 2- 0¼   | 2- 1¾   | 2- 3¼   | 2- 4¾   |         |       |
| 146               | 14              | 13.664          | 426         | 425          | A          | 2.500  | .563                         | .249   | 15.750  | 1- 9¼                                                                                                   | 1- 10¾  | 2- 0¼   | 2- 1¾   | 2- 3¼   | 2- 4¾   |         |       |
| 147               | 14              | 13.428          | 427         | 426          | A          | 2.500  | .625                         | .307   | 15.250  | 1- 8¾                                                                                                   | 1- 10¼  | 1- 11¼  | 2- 1¼   | 2- 2¾   |         |         |       |
| 166               | 16              | 15.446          | 426         | 425          | A          | 2.500  | .625                         | .307   | 17.875  | 1- 11⅞                                                                                                  | 2- 0⅞   | 2- 2⅜   | 2- 3⅜   | 2- 5⅜   | 2- 6⅞   |         |       |
| 167               | 16              | 15.678          | 427         | 426          | A          | 2.500  | .625                         | .307   | 17.875  | 1- 11⅞                                                                                                  | 2- 0⅞   | 2- 2⅜   | 2- 3⅜   | 2- 5⅜   | 2- 6⅞   |         |       |
| 186               | 18              | 17.242          | A           | 425          | C          | 3.563  | .688                         | .371   | 20.500  | 2- 2                                                                                                    | 2- 3½   | 2- 5    | 2- 6½   | 2- 8    | 2- 9½   | 2- 11   |       |
| 187               | 18              | 17.298          | B           | 426          | C          | 4.625  | .688                         | .371   | 20.500  | 2- 2                                                                                                    | 2- 3½   | 2- 5    | 2- 6½   | 2- 8    | 2- 9½   | 2- 11   |       |
| 207               | 20              | 19.298          | B           | 426          | C          | 4.625  | .750                         | .442   | 22.750  | 2- 4¼                                                                                                   | 2- 5¾   | 2- 7¼   | 2- 8¾   | 2- 10¼  | 2- 11¾  | 3- 1¼   | 3- 2¾ |

All dimensions subject to slight mill and manufacturing tolerances.

## TOP AND BOTTOM CHORDS — DIMENSIONS AND PROPERTIES

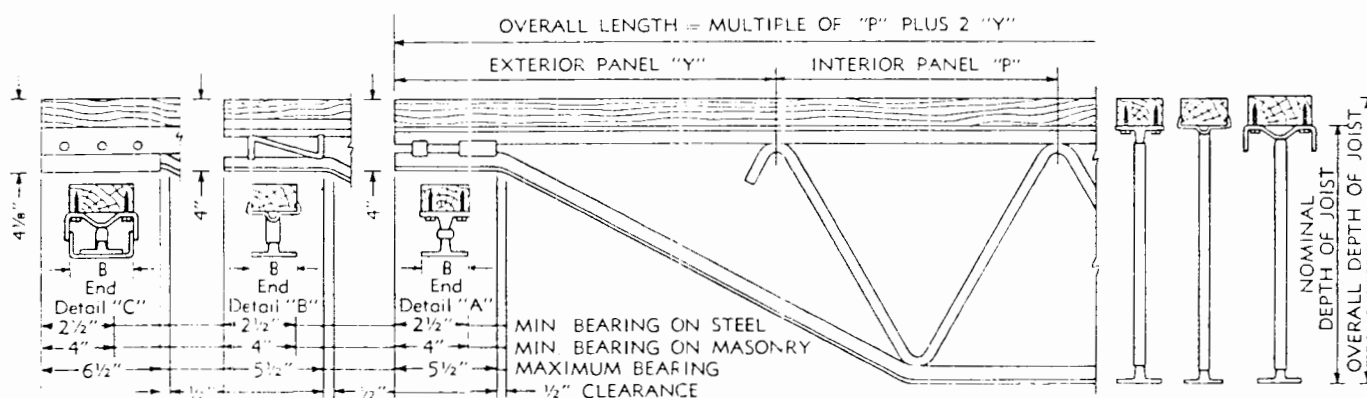
| Sec. No. | Area             | G    | H     | K    | T    | W     | About Axis X-X |      | About Axis Y-Y |       |
|----------|------------------|------|-------|------|------|-------|----------------|------|----------------|-------|
|          |                  |      |       |      |      |       | I              | r    | I              | r     |
|          | In. <sup>2</sup> | In.  | In.   | In.  | In.  | In.   |                |      |                |       |
| 421      | .391             | .175 | .500  | .... | .125 | 1.625 | .008           | .141 | .049           | .469  |
| 422      | .478             | .157 | .504  | .... | .129 | 2.250 | .009           | .137 | .127           | .649  |
| 423      | .572             | .203 | .643  | .... | .143 | 2.250 | .018           | .179 | .141           | .649  |
| 424      | .707             | .218 | .703  | .... | .203 | 2.250 | .024           | .186 | .198           | .649  |
| 425      | .870             | .226 | .748  | .... | .248 | 2.500 | .031           | .187 | .328           | .722  |
| 426      | 1.020            | .303 | 1.008 | .... | .258 | 2.500 | .074           | .269 | .344           | .722  |
| 427      | 1.234            | .308 | 1.062 | .... | .312 | 2.750 | .089           | .269 | .550           | .794  |
| A        | 1.140            | .515 | 1.510 | .... | .172 | 4.000 | .179           | .396 | 2.374          | 1.443 |
| E        | 1.240            | .611 | 2.060 | .... | .141 | 5.000 | .423           | .584 | 4.372          | 1.878 |
| 412      | .574             | .036 | .563  | .624 | .125 | 3.000 | .041           | .267 | .579           | 1.004 |
| 413      | .826             | .004 | .718  | .875 | .156 | 3.063 | .121           | .382 | .916           | 1.053 |



Detail No. 1  
Sections 421-427 inclusive

Additional data will be provided upon request.

# TRUSCON "O-T" OPEN TRUSS **NAILER** JOISTS — DIMENSIONS AND SECTIONS

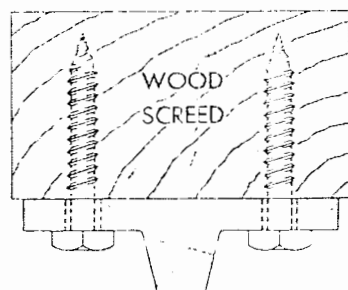


## DIMENSIONS AND SECTIONS

| Joist Designation | D<br>Nom-<br>inal<br>Depth | Effec-<br>tive<br>Depth | Top<br>Chord   | Bottom<br>Chord | End<br>Detail | B      | All Webb<br>Members<br>One Rd. Bar |        | P       | Exterior Panel Lengths Are Made in the Following<br>Variable "Y" Dimensions, and with These Suffix Letters |         |         |         |         |         |           |   |
|-------------------|----------------------------|-------------------------|----------------|-----------------|---------------|--------|------------------------------------|--------|---------|------------------------------------------------------------------------------------------------------------|---------|---------|---------|---------|---------|-----------|---|
|                   |                            |                         |                |                 |               |        | Diam.                              | Area   |         | A                                                                                                          | B       | C       | D       | E       | F       | G         | H |
|                   | Inches                     | Inches                  | Section<br>No. | Section<br>No.  | Inches        | Inches | Inches <sup>2</sup>                | Inches | Ft.-In. | Ft.-In.                                                                                                    | Ft.-In. | Ft.-In. | Ft.-In. | Ft.-In. | Ft.-In. | Ft.-In.   |   |
| 81-W<br>82-W      | (No. 8)                    | Manufactured<br>7.949   | 412            | 421             | B             | 1.625  | .438                               | .150   | 9.000   | 1- 2½                                                                                                      | 1- 4    | 1- 5½   |         |         |         |           |   |
| 102-W             | 10                         | 9.792                   | 412            | 421             | B             | 1.625  | .438                               | .150   | 11.125  | 1- 4⅝                                                                                                      | 1- 6⅝   | 1- 7⅝   | 1- 9⅝   |         |         |           |   |
| 103-W             | 10                         | 9.814                   | 412            | 422             | B             | 2.250  | .438                               | .150   | 11.125  | 1- 4⅝                                                                                                      | 1- 6⅝   | 1- 7⅝   | 1- 9⅝   |         |         |           |   |
| 104-W             | 10                         | 9.966                   | 413            | 423             | B             | 2.250  | .500                               | .196   | 11.250  | 1- 4¾                                                                                                      | 1- 6¼   | 1- 7¾   | 1- 9¾   |         |         |           |   |
| 123-W             | 12                         | 11.627                  | 412            | 422             | B             | 2.250  | .500                               | .196   | 13.625  | 1- 7⅞                                                                                                      | 1- 8⅝   | 1-10⅞   | 1-11⅞   | 2- 1⅞   |         |           |   |
| 124-W             | 12                         | 11.904                  | 413            | 423             | B             | 2.250  | .500                               | .196   | 13.625  | 1- 7⅞                                                                                                      | 1- 8⅝   | 1-10⅞   | 1-11⅞   | 2- 1⅞   |         |           |   |
| 125-W             | 12                         | 11.574                  | 413            | 424             | B             | 2.250  | .563                               | .249   | 13.375  | 1- 6⅞                                                                                                      | 1- 8⅜   | 1- 9⅞   | 1-11⅜   | 2- 0⅞   |         |           |   |
| 126-W             | 12                         | 11.602                  | 426            | 425             | A             | 2.500  | .563                               | .249   | 13.375  | 1- 6⅞                                                                                                      | 1- 8⅜   | 1- 9⅞   | 1-11⅜   | 2- 0⅞   |         |           |   |
| 145-W             | 14                         | 13.635                  | 413            | 424             | B             | 2.250  | .563                               | .249   | 15.750  | 1- 9¼                                                                                                      | 1-10¾   | 2- 0¼   | 2- 1¾   | 2- 3¼   | 2- 4¾   |           |   |
| 146-W             | 14                         | 13.661                  | 426            | 425             | A             | 2.500  | .563                               | .249   | 15.750  | 1- 9¼                                                                                                      | 1-10¾   | 2- 0¼   | 2- 1¾   | 2- 3¼   | 2- 4¾   |           |   |
| 147-W             | 14                         | 13.423                  | 427            | 426             | A             | 2.500  | .625                               | .307   | 15.250  | 1- 8¾                                                                                                      | 1-10¼   | 1-11¾   | 2- 1¼   | 2- 2¾   |         |           |   |
| 166-W             | 16                         | 15.445                  | 426            | 425             | A             | 2.500  | .625                               | .307   | 17.875  | 1-11⅜                                                                                                      | 2- 0⅞   | 2- 2⅜   | 2- 3⅞   | 2- 5⅜   | 2- 6⅞   |           |   |
| 167-W             | 16                         | 15.673                  | 427            | 426             | A             | 2.500  | .625                               | .307   | 17.875  | 1-11⅜                                                                                                      | 2- 0⅞   | 2- 2⅜   | 2- 3⅞   | 2- 5⅜   | 2- 6⅞   |           |   |
| 186-W             | 18                         | 17.242                  | A              | 425             | C             | 3.563  | .688                               | .371   | 20.500  | 2- 2                                                                                                       | 2- 3½   | 2- 5    | 2- 6½   | 2- 8    | 2- 9½   | 2-11      |   |
| 187-W             | 18                         | 17.293                  | B              | 426             | C             | 4.625  | .688                               | .371   | 20.500  | 2- 2                                                                                                       | 2- 3½   | 2- 5    | 2- 6½   | 2- 8    | 2- 9½   | 2-11      |   |
| 207-W             | 20                         | 19.293                  | B              | 426             | C             | 4.625  | .750                               | .442   | 22.750  | 2- 4¼                                                                                                      | 2- 5¾   | 2- 7¼   | 2- 8¾   | 2-10¼   | 2-11¾   | 3-1¼ 3-2¾ |   |

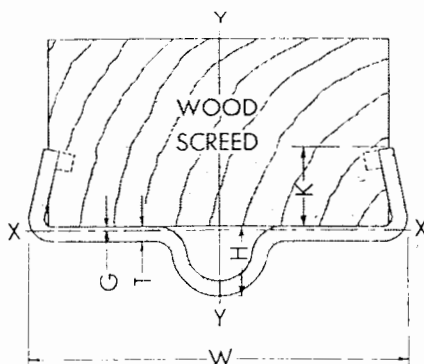
All dimensions subject to slight mill and manufacturing tolerances.

## TOP AND BOTTOM CHORDS — DIMENSIONS AND PROPERTIES



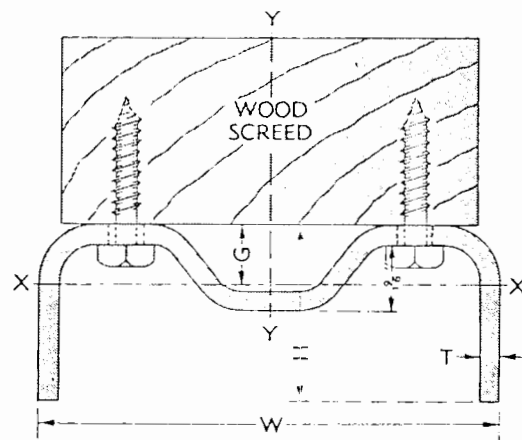
Detail No. 2

Showing wood screed attached to Sections 422 to 427 inclusive



Detail No. 3

Showing wood screed attached to Sections 412 and 413



Detail No. 4

Showing wood screed attached to Sections A and B

Additional data will be provided upon request.

# LOADING TABLE

The following table includes all the sizes of open web steel joists that have been adopted by the Steel Joist Institute as standards.

Truscon's joist designs have been checked and approved by the Steel Joist Institute as being in strict conformity with the Institute's adopted standards and specifications. They are also in strict conformity with the Simplified Practice Recommendation 94-53 on "Open Web Steel Joists" as issued by the U.S.

Department of Commerce, Bureau of Standards.

The following table gives the TOTAL safe uniformly distributed load-carrying capacities of Truscon "O.T." Open Truss Steel Joists and Nailor Joists at various spacings. The weight of DEAD loads must in all cases be deducted to determine the LIVE load-carrying capacities of the joists. When Nailor Joists (those with suffix W) are used, they should not be spaced farther apart than the safe span of the wood deck or other material used over them.

TABLE ONE

| Clear Span | Joist Type | Total Safe Load Pounds | TOTAL SAFE LOADS IN POUNDS PER SQUARE FOOT FOR VARIOUS JOIST SPACINGS |     |     |     |     |     |     |     |     |     |     |       |       |       |       |       |
|------------|------------|------------------------|-----------------------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|-------|-------|-------|-------|
|            |            |                        | 12"                                                                   | 14" | 16" | 17" | 18" | 19" | 20" | 21" | 22" | 23" | 24" | 2'-6" | 3'-0" | 3'-6" | 4'-0" | 5'-0" |
| 7'-0"      | 81         | 2810                   | 401                                                                   | 344 | 301 | 283 | 268 | 253 | 241 | 229 | 219 | 209 | 201 | 161   | 134   | 115   | 100   | 80    |
| 8'-0"      | 81         | 2460                   | 307                                                                   | 263 | 230 | 217 | 205 | 194 | 184 | 176 | 168 | 160 | 154 | 123   | 102   | 88    | 77    | 61    |
|            | 82 82W     | 3800                   | 475                                                                   | 407 | 356 | 335 | 317 | 300 | 285 | 271 | 259 | 248 | 238 | 190   | 158   | 136   | 119   | 95    |
| 9'-0"      | 81         | 2180                   | 243                                                                   | 206 | 182 | 171 | 162 | 153 | 146 | 139 | 132 | 127 | 121 | 97    | 81    | 69    | 61    | 49    |
|            | 82 82W     | 3800                   | 422                                                                   | 362 | 317 | 298 | 281 | 267 | 253 | 241 | 230 | 220 | 211 | 169   | 141   | 121   | 106   | 84    |
| 10'-0"     | 81         | 1970                   | 197                                                                   | 169 | 148 | 139 | 131 | 124 | 118 | 112 | 107 | 103 | 98  | 79    | 66    | 56    | 49    | 39    |
|            | 82 82W     | 3500                   | 350                                                                   | 300 | 263 | 247 | 233 | 221 | 210 | 200 | 191 | 183 | 175 | 140   | 117   | 100   | 88    | 70    |
|            | 102, 102W  | 3800                   | 380                                                                   | 326 | 285 | 268 | 253 | 240 | 228 | 217 | 207 | 198 | 190 | 152   | 127   | 109   | 95    | 76    |
|            | 103, 103W  | 3900                   | 390                                                                   | 334 | 293 | 275 | 260 | 246 | 234 | 223 | 213 | 203 | 195 | 156   | 130   | 111   | 98    | 78    |
|            | 104, 104W  | 4400                   | 440                                                                   | 377 | 330 | 311 | 293 | 278 | 264 | 251 | 240 | 230 | 220 | 176   | 147   | 126   | 110   | 88    |
| 11'-0"     | 81         | 1780                   | 163                                                                   | 139 | 122 | 115 | 108 | 103 | 98  | 93  | 89  | 85  | 81  | 65    | 54    | 46    | 41    | 33    |
|            | 82 82W     | 3180                   | 289                                                                   | 248 | 217 | 204 | 193 | 183 | 174 | 165 | 158 | 151 | 145 | 116   | 96    | 83    | 72    | 58    |
|            | 102, 102W  | 3600                   | 345                                                                   | 296 | 259 | 244 | 230 | 218 | 207 | 197 | 188 | 180 | 173 | 138   | 115   | 99    | 86    | 69    |
|            | 103, 103W  | 3900                   | 355                                                                   | 304 | 266 | 250 | 236 | 224 | 213 | 203 | 193 | 185 | 177 | 142   | 118   | 101   | 89    | 71    |
|            | 104, 104W  | 4400                   | 400                                                                   | 343 | 300 | 282 | 267 | 253 | 240 | 229 | 218 | 209 | 200 | 160   | 133   | 114   | 100   | 80    |
| 12'-0"     | 81         | 1635                   | 137                                                                   | 117 | 102 | 96  | 91  | 86  | 82  | 78  | 74  | 71  | 68  | 55    | 46    | 39    | 34    | 27    |
|            | 82 82W     | 2920                   | 243                                                                   | 203 | 182 | 172 | 162 | 154 | 146 | 139 | 133 | 127 | 122 | 97    | 81    | 69    | 61    | 49    |
|            | 102, 102W  | 3500                   | 292                                                                   | 250 | 219 | 206 | 194 | 184 | 175 | 167 | 159 | 152 | 146 | 117   | 97    | 83    | 73    | 58    |
|            | 103, 103W  | 3900                   | 325                                                                   | 273 | 244 | 229 | 217 | 205 | 195 | 186 | 177 | 170 | 163 | 130   | 108   | 93    | 81    | 65    |
|            | 104, 104W  | 4400                   | 367                                                                   | 314 | 275 | 259 | 244 | 232 | 220 | 210 | 200 | 191 | 183 | 147   | 122   | 105   | 92    | 73    |
|            | 123, 123W  | 4400                   | 367                                                                   | 314 | 275 | 259 | 244 | 232 | 220 | 210 | 200 | 191 | 183 | 147   | 122   | 105   | 92    | 73    |
|            | 124, 124W  | 4600                   | 383                                                                   | 323 | 287 | 271 | 256 | 242 | 230 | 219 | 209 | 200 | 192 | 153   | 128   | 110   | 96    | 77    |
|            | 125, 125W  | 5000                   | 417                                                                   | 357 | 313 | 294 | 278 | 263 | 250 | 238 | 227 | 217 | 208 | 167   | 139   | 119   | 104   | 83    |
|            | 126, 126W  | 5400                   | 450                                                                   | 385 | 338 | 318 | 300 | 284 | 270 | 257 | 245 | 235 | 225 | 180   | 150   | 129   | 113   | 90    |
| 13'-0"     | 81         | 1510                   | 116                                                                   | 100 | 87  | 82  | 78  | 74  | 70  | 67  | 63  | 61  | 58  | 47    | 39    | 33    | 29    | 23    |
|            | 82 82W     | 2690                   | 207                                                                   | 173 | 155 | 146 | 138 | 131 | 124 | 118 | 113 | 108 | 104 | 83    | 69    | 59    | 52    | 41    |
|            | 102, 102W  | 3230                   | 249                                                                   | 213 | 186 | 175 | 166 | 157 | 149 | 142 | 136 | 130 | 124 | 99    | 83    | 71    | 62    | 50    |
|            | 103, 103W  | 3900                   | 300                                                                   | 257 | 225 | 212 | 200 | 189 | 180 | 171 | 164 | 157 | 150 | 120   | 100   | 86    | 75    | 60    |
|            | 104, 104W  | 4400                   | 338                                                                   | 290 | 254 | 239 | 226 | 214 | 203 | 193 | 185 | 177 | 169 | 135   | 113   | 97    | 85    | 68    |
|            | 123, 123W  | 4400                   | 338                                                                   | 290 | 254 | 239 | 226 | 214 | 203 | 193 | 185 | 177 | 169 | 135   | 113   | 97    | 85    | 68    |
|            | 124, 124W  | 4600                   | 354                                                                   | 303 | 265 | 250 | 236 | 223 | 212 | 202 | 193 | 185 | 177 | 142   | 118   | 101   | 88    | 71    |
|            | 125, 125W  | 5000                   | 385                                                                   | 330 | 288 | 271 | 256 | 243 | 231 | 220 | 210 | 201 | 192 | 154   | 128   | 110   | 96    | 77    |
|            | 126, 126W  | 5400                   | 415                                                                   | 356 | 312 | 293 | 277 | 262 | 249 | 237 | 227 | 217 | 208 | 166   | 138   | 119   | 104   | 83    |
| 14'-0"     | 81         | 1400                   | 100                                                                   | 86  | 75  | 71  | 67  | 63  | 60  | 57  | 55  | 52  | 50  | 40    | 33    | 29    | 25    | 20    |
|            | 82 82W     | 2500                   | 179                                                                   | 153 | 134 | 126 | 119 | 113 | 107 | 102 | 97  | 93  | 89  | 71    | 60    | 51    | 45    | 36    |
|            | 102, 102W  | 3000                   | 214                                                                   | 184 | 161 | 151 | 143 | 135 | 129 | 122 | 117 | 112 | 107 | 86    | 71    | 61    | 54    | 43    |
|            | 103, 103W  | 3900                   | 279                                                                   | 239 | 209 | 197 | 186 | 176 | 167 | 159 | 152 | 145 | 139 | 111   | 93    | 80    | 70    | 56    |
|            | 104, 104W  | 4400                   | 314                                                                   | 269 | 236 | 222 | 210 | 198 | 189 | 180 | 171 | 164 | 157 | 126   | 105   | 90    | 79    | 63    |
|            | 123, 123W  | 4380                   | 313                                                                   | 268 | 235 | 221 | 209 | 198 | 188 | 179 | 171 | 163 | 156 | 125   | 104   | 89    | 78    | 63    |
|            | 124, 124W  | 4500                   | 329                                                                   | 282 | 246 | 232 | 219 | 208 | 197 | 188 | 179 | 171 | 164 | 131   | 110   | 94    | 82    | 66    |
|            | 125, 125W  | 5000                   | 357                                                                   | 306 | 268 | 252 | 238 | 226 | 214 | 204 | 195 | 186 | 179 | 143   | 119   | 102   | 89    | 71    |
|            | 126, 126W  | 5400                   | 386                                                                   | 331 | 289 | 272 | 257 | 244 | 231 | 220 | 210 | 201 | 193 | 154   | 129   | 110   | 96    | 77    |
|            | 145, 145W  | 5800                   | 414                                                                   | 355 | 311 | 292 | 276 | 262 | 249 | 237 | 226 | 216 | 207 | 166   | 138   | 118   | 104   | 83    |
|            | 146, 146W  | 6200                   | 443                                                                   | 380 | 332 | 313 | 295 | 280 | 266 | 253 | 242 | 231 | 221 | 177   | 148   | 127   | 111   | 89    |
|            | 147, 147W  | 6800                   | 486                                                                   | 416 | 364 | 343 | 324 | 307 | 291 | 278 | 265 | 253 | 243 | 194   | 162   | 139   | 121   | 97    |
| 15'-0"     | 81         | 1310                   | 87                                                                    | 75  | 66  | 62  | 58  | 55  | 52  | 50  | 48  | 46  | 44  | 35    | 29    | 25    | 21    | 17    |
|            | 82 82W     | 2330                   | 156                                                                   | 133 | 117 | 110 | 104 | 98  | 93  | 89  | 85  | 81  | 78  | 62    | 52    | 44    | 39    | 31    |
|            | 102, 102W  | 2810                   | 187                                                                   | 160 | 140 | 132 | 124 | 118 | 112 | 107 | 102 | 97  | 93  | 75    | 62    | 53    | 47    | 37    |
|            | 103, 103W  | 3640                   | 243                                                                   | 208 | 182 | 172 | 162 | 153 | 146 | 139 | 133 | 127 | 121 | 97    | 81    | 69    | 61    | 49    |
|            | 104, 104W  | 4400                   | 293                                                                   | 251 | 220 | 207 | 196 | 185 | 176 | 168 | 160 | 153 | 147 | 117   | 98    | 84    | 73    | 59    |
|            | 123, 123W  | 4090                   | 273                                                                   | 234 | 204 | 192 | 182 | 172 | 164 | 156 | 149 | 142 | 136 | 109   | 91    | 78    | 68    | 55    |
|            | 124, 124W  | 4600                   | 307                                                                   | 263 | 230 | 216 | 204 | 194 | 184 | 175 | 167 | 160 | 153 | 123   | 102   | 88    | 77    | 61    |
|            | 125, 125W  | 5000                   | 333                                                                   | 286 | 250 | 235 | 222 | 211 | 200 | 190 | 182 | 174 | 167 | 133   | 111   | 95    | 83    | 67    |
|            | 126, 126W  | 5400                   | 360                                                                   | 309 | 270 | 254 | 240 | 227 | 216 | 206 | 196 | 188 | 180 | 144   | 120   | 103   | 90    | 72    |
|            | 145, 145W  | 5800                   | 387                                                                   | 331 | 290 | 273 | 258 | 244 | 232 | 221 | 211 | 202 | 193 | 155   | 129   | 110   | 97    | 77    |
|            | 146, 146W  | 6200                   | 413                                                                   | 354 | 310 | 292 | 276 | 261 | 248 | 236 | 225 | 216 | 207 | 165   | 138   | 118   | 103   | 83    |
|            | 147, 147W  | 6800                   | 453                                                                   | 389 | 340 | 320 | 302 | 286 | 272 | 259 | 247 | 237 | 227 | 181   | 151   | 130   | 113   | 91    |

In "Steel Joist Construction" floors, the joists should not be spaced more than 24 inches on centers, as indicated by figures to the left of heavy line in above table.

Truscon does not manufacture a joist type 81W.

LOADING TABLE ONE (Continued)

| Clear Span | Joist Type | Total Safe Load Pounds | TOTAL SAFE LOADS IN POUNDS PER SQUARE FOOT FOR VARIOUS JOIST SPACINGS |       |     |     |     |     |     |     |     |     |     |       |       |       |       |       |       |       |  |
|------------|------------|------------------------|-----------------------------------------------------------------------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|-------|-------|-------|-------|-------|-------|--|
|            |            |                        | 12"                                                                   | 14"   | 16" | 17" | 18" | 19" | 20" | 21" | 22" | 23" | 24" | 2'-6" | 3'-0" | 3'-6" | 4'-0" | 5'-0" | 6'-0" | 7'-0" |  |
| 16'-0"     | 81         | 1230                   | 77                                                                    | 66    | 58  | 54  | 51  | 49  | 46  | 44  | 42  | 40  | 38  | 31    |       |       |       |       |       |       |  |
|            | 82, 82W    | 2190                   | 137                                                                   | 117   | 103 | 97  | 91  | 86  | 82  | 78  | 75  | 71  | 68  | 55    | 46    | 39    | 34    |       |       |       |  |
|            | 102, 102W  | 2630                   | 164                                                                   | 141   | 123 | 116 | 109 | 104 | 98  | 94  | 89  | 86  | 82  | 66    | 55    | 47    | 41    | 33    |       |       |  |
|            | 103, 103W  | 3420                   | 214                                                                   | 183   | 160 | 151 | 142 | 135 | 128 | 122 | 116 | 111 | 107 | 85    | 71    | 61    | 53    | 43    | 36    | 31    |  |
|            | 104, 104W  | 4170                   | 260                                                                   | 223   | 195 | 184 | 174 | 164 | 156 | 149 | 142 | 136 | 130 | 104   | 87    | 74    | 65    | 52    | 43    | 37    |  |
|            | 123, 123W  | 3840                   | 240                                                                   | 205   | 180 | 169 | 160 | 151 | 144 | 137 | 131 | 125 | 120 | 96    | 80    | 68    | 60    | 48    | 40    | 34    |  |
|            | 124, 124W  | 4600                   | 288                                                                   | 246   | 216 | 203 | 192 | 182 | 173 | 164 | 157 | 150 | 144 | 115   | 96    | 82    | 72    | 58    | 48    | 41    |  |
|            | 125, 125W  | 5000                   | 313                                                                   | 268   | 234 | 221 | 208 | 197 | 188 | 179 | 170 | 163 | 156 | 125   | 104   | 89    | 78    | 63    | 52    | 45    |  |
|            | 126, 126W  | 5400                   | 338                                                                   | 289   | 253 | 238 | 225 | 213 | 203 | 193 | 184 | 176 | 169 | 135   | 113   | 96    | 84    | 68    | 56    | 48    |  |
|            | 145, 145W  | 5800                   | 363                                                                   | 311   | 272 | 256 | 242 | 229 | 218 | 207 | 198 | 189 | 181 | 145   | 121   | 104   | 91    | 73    | 60    | 52    |  |
|            | 146, 146W  | 6200                   | 388                                                                   | 332   | 291 | 274 | 258 | 245 | 233 | 221 | 211 | 202 | 194 | 155   | 129   | 111   | 97    | 78    | 65    | 55    |  |
|            | 147, 147W  | 6800                   | 425                                                                   | 364   | 319 | 300 | 283 | 268 | 255 | 243 | 232 | 222 | 213 | 170   | 142   | 121   | 106   | 85    | 71    | 61    |  |
|            | 166, 166W  | 6400                   | 400                                                                   | 343   | 300 | 282 | 267 | 253 | 240 | 229 | 218 | 209 | 200 | 160   | 133   | 114   | 100   | 80    | 67    | 57    |  |
|            | 167, 167W  | 7200                   | 450                                                                   | 386   | 338 | 318 | 300 | 284 | 270 | 257 | 245 | 235 | 225 | 180   | 150   | 129   | 113   | 90    | 75    | 64    |  |
| 17'-0"     | 102, 102W  | 2470                   | 145                                                                   | 125   | 109 | 103 | 97  | 92  | 87  | 83  | 79  | 76  | 73  | 58    | 48    | 42    | 36    | 29    |       |       |  |
|            | 103, 103W  | 3220                   | 189                                                                   | 162   | 142 | 134 | 126 | 119 | 113 | 108 | 103 | 99  | 95  | 76    | 63    | 54    | 47    | 38    | 32    |       |  |
|            | 104, 104W  | 3920                   | 231                                                                   | 198   | 173 | 163 | 154 | 146 | 138 | 132 | 126 | 120 | 115 | 92    | 77    | 66    | 58    | 46    | 38    | 33    |  |
|            | 123, 123W  | 3610                   | 212                                                                   | 182   | 159 | 150 | 141 | 134 | 127 | 121 | 116 | 111 | 106 | 85    | 71    | 61    | 53    | 42    | 35    | 30    |  |
|            | 124, 124W  | 4510                   | 265                                                                   | 227   | 199 | 187 | 177 | 168 | 159 | 152 | 145 | 138 | 133 | 106   | 88    | 76    | 66    | 53    | 44    | 38    |  |
|            | 125, 125W  | 5000                   | 294                                                                   | 252   | 221 | 208 | 196 | 186 | 176 | 168 | 160 | 153 | 147 | 118   | 98    | 84    | 74    | 59    | 49    | 42    |  |
|            | 126, 126W  | 5400                   | 318                                                                   | 272   | 238 | 224 | 212 | 201 | 191 | 182 | 173 | 166 | 159 | 127   | 106   | 91    | 79    | 64    | 53    | 45    |  |
|            | 145, 145W  | 5800                   | 341                                                                   | 292   | 256 | 241 | 227 | 215 | 205 | 195 | 186 | 178 | 171 | 136   | 114   | 98    | 85    | 68    | 57    | 49    |  |
|            | 146, 146W  | 6200                   | 365                                                                   | 313   | 274 | 257 | 243 | 230 | 219 | 208 | 199 | 190 | 182 | 146   | 122   | 104   | 91    | 73    | 61    | 52    |  |
|            | 147, 147W  | 6800                   | 400                                                                   | 343   | 300 | 282 | 267 | 253 | 240 | 229 | 218 | 209 | 200 | 160   | 133   | 114   | 100   | 80    | 67    | 57    |  |
|            | 166, 166W  | 6400                   | 376                                                                   | 323   | 282 | 266 | 251 | 238 | 226 | 215 | 205 | 198 | 188 | 151   | 125   | 108   | 94    | 75    | 63    | 54    |  |
|            | 167, 167W  | 7200                   | 424                                                                   | 363   | 318 | 299 | 282 | 267 | 254 | 242 | 231 | 221 | 212 | 169   | 141   | 121   | 106   | 85    | 75    | 61    |  |
|            | 18'-0"     | 102, 102W              | 2330                                                                  | 130   | 111 | 97  | 92  | 86  | 82  | 78  | 74  | 71  | 68  | 65    | 52    | 43    | 37    | 32    |       |       |  |
|            |            | 103, 103W              | 3040                                                                  | 169   | 145 | 127 | 119 | 112 | 107 | 101 | 96  | 92  | 88  | 84    | 67    | 56    | 48    | 42    | 34    |       |  |
| 104, 104W  |            | 3710                   | 206                                                                   | 176   | 154 | 145 | 137 | 130 | 123 | 118 | 112 | 107 | 103 | 82    | 69    | 59    | 51    | 41    | 34    | 29    |  |
| 123, 123W  |            | 3410                   | 189                                                                   | 162   | 142 | 134 | 126 | 120 | 114 | 108 | 103 | 99  | 95  | 76    | 63    | 54    | 47    | 38    | 32    | 27    |  |
| 124, 124W  |            | 4260                   | 237                                                                   | 203   | 177 | 167 | 158 | 149 | 142 | 135 | 129 | 123 | 118 | 95    | 79    | 68    | 59    | 47    | 39    | 34    |  |
| 125, 125W  |            | 5000                   | 278                                                                   | 238   | 208 | 196 | 185 | 175 | 167 | 159 | 152 | 145 | 139 | 111   | 93    | 79    | 69    | 56    | 46    | 40    |  |
| 126, 126W  |            | 5400                   | 300                                                                   | 257   | 225 | 212 | 200 | 189 | 180 | 171 | 164 | 157 | 150 | 120   | 100   | 86    | 75    | 60    | 50    | 43    |  |
| 145, 145W  |            | 5780                   | 321                                                                   | 275   | 241 | 227 | 214 | 203 | 193 | 183 | 175 | 167 | 160 | 128   | 107   | 92    | 80    | 64    | 53    | 46    |  |
| 146, 146W  |            | 6200                   | 344                                                                   | 295   | 258 | 243 | 230 | 218 | 207 | 197 | 188 | 180 | 172 | 138   | 115   | 98    | 86    | 69    | 57    | 49    |  |
| 147, 147W  |            | 6800                   | 378                                                                   | 324   | 283 | 267 | 252 | 239 | 227 | 216 | 206 | 197 | 189 | 151   | 126   | 108   | 94    | 76    | 63    | 54    |  |
| 166, 166W  |            | 6400                   | 356                                                                   | 305   | 267 | 251 | 237 | 225 | 213 | 203 | 194 | 186 | 178 | 142   | 119   | 102   | 89    | 71    | 59    | 51    |  |
| 167, 167W  |            | 7200                   | 400                                                                   | 343   | 300 | 282 | 267 | 253 | 240 | 229 | 218 | 209 | 200 | 160   | 133   | 114   | 100   | 80    | 67    | 57    |  |
| 186, 186W  |            | 7200                   | 400                                                                   | 343   | 300 | 282 | 267 | 253 | 240 | 229 | 218 | 209 | 200 | 160   | 133   | 114   | 100   | 80    | 67    | 57    |  |
| 187, 187W  |            | 7600                   | 422                                                                   | 362   | 317 | 298 | 281 | 267 | 253 | 241 | 230 | 220 | 211 | 169   | 141   | 121   | 106   | 84    | 70    | 60    |  |
| 19'-0"     | 102, 102W  | 2210                   | 116                                                                   | 100   | 87  | 82  | 78  | 73  | 70  | 66  | 63  | 61  | 58  | 47    | 39    | 33    | 29    |       |       |       |  |
|            | 103, 103W  | 2880                   | 151                                                                   | 130   | 114 | 107 | 101 | 96  | 91  | 87  | 83  | 79  | 76  | 61    | 50    | 43    | 38    | 30    |       |       |  |
|            | 104, 104W  | 3510                   | 185                                                                   | 158   | 139 | 130 | 123 | 117 | 111 | 106 | 101 | 96  | 92  | 74    | 62    | 53    | 46    | 37    | 31    |       |  |
|            | 123, 123W  | 3230                   | 170                                                                   | 146   | 127 | 120 | 113 | 107 | 102 | 97  | 93  | 89  | 85  | 68    | 57    | 49    | 42    | 34    | 28    |       |  |
|            | 124, 124W  | 4040                   | 212                                                                   | 182   | 159 | 150 | 142 | 134 | 127 | 121 | 116 | 111 | 106 | 85    | 71    | 61    | 53    | 42    | 35    |       |  |
|            | 125, 125W  | 4990                   | 262                                                                   | 225   | 197 | 185 | 175 | 166 | 157 | 150 | 143 | 137 | 131 | 105   | 87    | 75    | 66    | 52    | 44    | 37    |  |
|            | 126, 126W  | 5400                   | 284                                                                   | 244   | 213 | 201 | 189 | 180 | 171 | 162 | 155 | 148 | 142 | 114   | 95    | 81    | 71    | 57    | 47    | 41    |  |
|            | 145, 145W  | 5480                   | 288                                                                   | 247   | 216 | 203 | 192 | 182 | 173 | 165 | 157 | 150 | 144 | 115   | 96    | 82    | 72    | 58    | 48    | 41    |  |
|            | 146, 146W  | 6200                   | 326                                                                   | 280   | 245 | 230 | 218 | 206 | 196 | 186 | 178 | 170 | 163 | 131   | 109   | 93    | 82    | 65    | 54    | 47    |  |
|            | 147, 147W  | 6300                   | 358                                                                   | 307   | 268 | 253 | 239 | 226 | 215 | 205 | 195 | 187 | 179 | 143   | 119   | 102   | 89    | 72    | 60    | 51    |  |
|            | 166, 166W  | 6400                   | 337                                                                   | 289   | 253 | 238 | 225 | 213 | 202 | 192 | 184 | 176 | 168 | 135   | 112   | 96    | 84    | 67    | 56    | 48    |  |
|            | 167, 167W  | 7200                   | 379                                                                   | 325   | 284 | 267 | 253 | 239 | 227 | 217 | 207 | 198 | 189 | 152   | 126   | 108   | 95    | 76    | 63    | 54    |  |
|            | 186, 186W  | 7200                   | 379                                                                   | 325   | 284 | 267 | 253 | 239 | 227 | 217 | 207 | 198 | 189 | 152   | 126   | 108   | 95    | 76    | 63    | 54    |  |
|            | 187, 187W  | 7500                   | 400                                                                   | 343   | 300 | 282 | 267 | 253 | 240 | 229 | 218 | 209 | 200 | 160   | 133   | 114   | 100   | 80    | 67    | 57    |  |
| 20'-0"     | 102, 102W  | 2100                   | 105                                                                   | 90    | 79  | 74  | 70  | 66  | 63  | 60  | 57  | 55  | 53  | 42    | 35    | 30    |       |       |       |       |  |
|            | 103, 103W  | 2730                   | 137                                                                   | 117   | 103 | 96  | 91  | 86  | 82  | 78  | 75  | 71  | 68  | 55    | 46    | 39    | 34    |       |       |       |  |
|            | 104, 104W  | 3340                   | 167                                                                   | 143   | 125 | 118 | 111 | 105 | 100 | 95  | 91  | 87  | 83  | 67    | 56    | 48    | 42    | 33    |       |       |  |
|            | 123, 123W  | 3060                   | 153                                                                   | 131   | 115 | 108 | 102 | 97  | 92  | 88  | 84  | 80  | 77  | 61    | 51    | 44    | 38    | 31    |       |       |  |
|            | 124, 124W  | 3330                   | 192                                                                   | 164   | 144 | 135 | 128 | 121 | 115 | 110 | 105 | 100 | 96  | 77    | 64    | 55    | 48    | 38    | 32    |       |  |
|            | 125, 125W  | 4740                   | 237                                                                   | 203   | 178 | 167 | 158 | 149 | 142 | 135 | 129 | 123 | 118 | 95    | 79    | 68    | 59    | 47    | 39    | 34    |  |
|            | 126, 126W  | 5400                   | 270                                                                   | 231   | 203 | 191 | 180 | 171 | 162 | 154 | 147 | 141 | 135 | 108   | 90    | 77    | 68    | 54    | 45    | 39    |  |
|            | 145, 145W  | 5200                   | 260                                                                   | 223   | 195 | 184 | 173 | 164 | 156 | 149 | 142 | 136 | 130 | 104   | 87    | 74    | 65    | 52    | 43    | 37    |  |
|            | 146, 146W  | 6200                   | 310                                                                   | 266   | 233 | 219 | 207 | 196 | 186 | 177 | 169 | 162 | 155 | 124   | 103   | 89    | 78    | 62    | 52    | 44    |  |
|            | 147, 147W  | 6300                   | 340                                                                   | 291</ |     |     |     |     |     |     |     |     |     |       |       |       |       |       |       |       |  |

LOADING TABLE ONE (Continued)

| Clear Span | Joist Type | Total Safe Load Pounds | TOTAL SAFE LOADS IN POUNDS PER SQUARE FOOT FOR VARIOUS JOIST SPACINGS |     |     |     |     |     |     |     |     |     |     |       |       |       |       |       |       |       |
|------------|------------|------------------------|-----------------------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|-------|-------|-------|-------|-------|-------|
|            |            |                        | 12"                                                                   | 14" | 16" | 17" | 18" | 19" | 20" | 21" | 22" | 23" | 24" | 2'-6" | 3'-0" | 3'-6" | 4'-0" | 5'-0" | 6'-0" | 7'-0" |
| 21'-0"     | 123, 123W  | 2920                   | 139                                                                   | 119 | 104 | 98  | 93  | 85  | 83  | 79  | 76  | 73  | 70  | 56    | 46    | 40    | 35    | ...   | ...   | ...   |
|            | 124, 124W  | 3650                   | 174                                                                   | 149 | 130 | 123 | 116 | 110 | 104 | 99  | 95  | 91  | 87  | 70    | 58    | 50    | 43    | 35    | 29    | ...   |
|            | 125, 125W  | 4510                   | 215                                                                   | 184 | 161 | 152 | 143 | 136 | 129 | 123 | 117 | 112 | 107 | 86    | 72    | 61    | 54    | 43    | 36    | 31    |
|            | 126, 126W  | 5400                   | 257                                                                   | 220 | 193 | 182 | 171 | 162 | 154 | 147 | 140 | 134 | 129 | 103   | 86    | 73    | 64    | 51    | 43    | 37    |
|            | 145, 145W  | 4950                   | 236                                                                   | 202 | 177 | 166 | 157 | 149 | 141 | 135 | 129 | 123 | 118 | 94    | 79    | 67    | 59    | 47    | 39    | 34    |
|            | 146, 146W  | 6200                   | 295                                                                   | 253 | 221 | 208 | 197 | 186 | 177 | 169 | 161 | 154 | 148 | 118   | 98    | 84    | 74    | 59    | 49    | 42    |
|            | 147, 147W  | 6800                   | 324                                                                   | 278 | 243 | 229 | 216 | 205 | 194 | 185 | 177 | 169 | 162 | 130   | 108   | 93    | 81    | 65    | 54    | 46    |
|            | 166, 166W  | 6400                   | 305                                                                   | 261 | 229 | 215 | 203 | 192 | 183 | 174 | 166 | 159 | 152 | 122   | 102   | 87    | 76    | 61    | 51    | 44    |
|            | 167, 167W  | 7200                   | 343                                                                   | 294 | 257 | 242 | 229 | 217 | 206 | 196 | 187 | 179 | 171 | 137   | 114   | 98    | 86    | 69    | 57    | 49    |
|            | 186, 186W  | 7200                   | 343                                                                   | 294 | 257 | 242 | 229 | 217 | 206 | 196 | 187 | 179 | 171 | 137   | 114   | 98    | 86    | 69    | 57    | 49    |
|            | 187, 187W  | 7600                   | 362                                                                   | 310 | 271 | 255 | 241 | 229 | 217 | 207 | 197 | 189 | 181 | 145   | 121   | 103   | 90    | 72    | 60    | 52    |
| 207, 207W  | 7800       | 371                    | 318                                                                   | 279 | 262 | 248 | 235 | 223 | 212 | 203 | 194 | 186 | 149 | 124   | 106   | 93    | 74    | 62    | 53    |       |
| 22'-0"     | 123, 123W  | 2790                   | 127                                                                   | 109 | 95  | 89  | 84  | 80  | 76  | 72  | 69  | 66  | 63  | 51    | 42    | 36    | 32    | ...   | ...   | ...   |
|            | 124, 124W  | 3480                   | 158                                                                   | 136 | 119 | 112 | 106 | 100 | 95  | 91  | 86  | 83  | 79  | 63    | 53    | 45    | 40    | 32    | ...   | ...   |
|            | 125, 125W  | 4300                   | 196                                                                   | 168 | 147 | 138 | 130 | 124 | 117 | 112 | 107 | 102 | 98  | 78    | 65    | 56    | 49    | 39    | 33    | ...   |
|            | 126, 126W  | 5300                   | 241                                                                   | 207 | 181 | 170 | 161 | 152 | 145 | 138 | 131 | 126 | 121 | 96    | 80    | 69    | 60    | 48    | 40    | 34    |
|            | 145, 145W  | 4730                   | 215                                                                   | 184 | 161 | 152 | 143 | 136 | 129 | 123 | 117 | 112 | 107 | 86    | 72    | 61    | 54    | 43    | 36    | 31    |
|            | 146, 146W  | 6200                   | 282                                                                   | 242 | 211 | 199 | 188 | 178 | 169 | 161 | 154 | 147 | 141 | 113   | 94    | 81    | 70    | 56    | 47    | 40    |
|            | 147, 147W  | 6800                   | 309                                                                   | 265 | 232 | 218 | 206 | 195 | 185 | 177 | 169 | 161 | 155 | 124   | 103   | 88    | 77    | 62    | 52    | 44    |
|            | 166, 166W  | 6400                   | 291                                                                   | 249 | 218 | 205 | 194 | 184 | 175 | 166 | 159 | 152 | 145 | 116   | 97    | 83    | 73    | 58    | 48    | 42    |
|            | 167, 167W  | 7200                   | 327                                                                   | 281 | 245 | 231 | 218 | 207 | 196 | 187 | 179 | 171 | 164 | 131   | 109   | 94    | 82    | 65    | 55    | 47    |
|            | 186, 186W  | 7200                   | 327                                                                   | 281 | 245 | 231 | 218 | 207 | 196 | 187 | 179 | 171 | 164 | 131   | 109   | 94    | 82    | 65    | 55    | 47    |
|            | 187, 187W  | 7600                   | 345                                                                   | 296 | 259 | 244 | 230 | 218 | 207 | 197 | 188 | 180 | 173 | 138   | 115   | 99    | 86    | 69    | 58    | 49    |
| 207, 207W  | 7800       | 355                    | 304                                                                   | 266 | 250 | 236 | 224 | 213 | 203 | 193 | 185 | 177 | 142 | 118   | 101   | 89    | 71    | 59    | 51    |       |
| 23'-0"     | 123, 123W  | 2670                   | 116                                                                   | 99  | 87  | 82  | 77  | 73  | 70  | 66  | 63  | 60  | 58  | 46    | 39    | 33    | 29    | ...   | ...   | ...   |
|            | 124, 124W  | 3330                   | 145                                                                   | 124 | 109 | 102 | 97  | 92  | 87  | 83  | 79  | 75  | 72  | 58    | 48    | 41    | 36    | 29    | ...   | ...   |
|            | 125, 125W  | 4120                   | 179                                                                   | 153 | 134 | 126 | 119 | 113 | 107 | 102 | 98  | 93  | 89  | 72    | 60    | 51    | 45    | 36    | 30    | ...   |
|            | 126, 126W  | 5060                   | 221                                                                   | 189 | 163 | 156 | 147 | 139 | 132 | 126 | 120 | 115 | 110 | 88    | 74    | 63    | 55    | 44    | 37    | 32    |
|            | 145, 145W  | 4520                   | 197                                                                   | 169 | 147 | 139 | 131 | 124 | 118 | 112 | 107 | 103 | 98  | 79    | 66    | 56    | 49    | 39    | 33    | 28    |
|            | 146, 146W  | 5940                   | 258                                                                   | 221 | 194 | 182 | 172 | 163 | 155 | 148 | 141 | 135 | 129 | 103   | 86    | 74    | 65    | 52    | 43    | 37    |
|            | 147, 147W  | 6800                   | 296                                                                   | 253 | 222 | 209 | 197 | 187 | 177 | 169 | 161 | 154 | 148 | 118   | 99    | 84    | 74    | 59    | 49    | 42    |
|            | 166, 166W  | 6400                   | 278                                                                   | 239 | 209 | 196 | 186 | 176 | 167 | 159 | 152 | 145 | 139 | 111   | 93    | 80    | 70    | 56    | 46    | 40    |
|            | 167, 167W  | 7200                   | 313                                                                   | 268 | 235 | 221 | 209 | 198 | 188 | 179 | 171 | 163 | 157 | 125   | 104   | 89    | 78    | 63    | 52    | 45    |
|            | 186, 186W  | 7200                   | 313                                                                   | 268 | 235 | 221 | 209 | 198 | 188 | 179 | 171 | 163 | 157 | 125   | 104   | 89    | 78    | 63    | 52    | 45    |
|            | 187, 187W  | 7600                   | 330                                                                   | 283 | 248 | 233 | 220 | 209 | 198 | 189 | 180 | 172 | 165 | 132   | 110   | 94    | 83    | 66    | 55    | 47    |
| 207, 207W  | 7800       | 339                    | 291                                                                   | 254 | 239 | 226 | 214 | 203 | 194 | 185 | 177 | 170 | 136 | 113   | 97    | 85    | 68    | 57    | 48    |       |
| 24'-0"     | 123, 123W  | 2550                   | 106                                                                   | 91  | 80  | 75  | 71  | 67  | 64  | 61  | 58  | 56  | 53  | 43    | 35    | 30    | ...   | ...   | ...   | ...   |
|            | 124, 124W  | 3190                   | 133                                                                   | 114 | 100 | 94  | 89  | 84  | 80  | 76  | 73  | 69  | 67  | 53    | 44    | 38    | 33    | ...   | ...   | ...   |
|            | 125, 125W  | 3950                   | 164                                                                   | 141 | 123 | 116 | 110 | 104 | 99  | 94  | 90  | 86  | 82  | 66    | 55    | 47    | 41    | 33    | ...   | ...   |
|            | 126, 126W  | 4860                   | 203                                                                   | 174 | 152 | 143 | 135 | 128 | 122 | 116 | 110 | 106 | 101 | 81    | 68    | 58    | 51    | 41    | 34    | ...   |
|            | 145, 145W  | 4340                   | 181                                                                   | 155 | 135 | 127 | 120 | 114 | 108 | 103 | 98  | 94  | 90  | 72    | 60    | 52    | 45    | 36    | 30    | ...   |
|            | 146, 146W  | 5690                   | 237                                                                   | 203 | 178 | 167 | 158 | 150 | 142 | 136 | 129 | 124 | 119 | 95    | 79    | 68    | 59    | 47    | 40    | 34    |
|            | 147, 147W  | 6800                   | 283                                                                   | 243 | 212 | 200 | 189 | 179 | 170 | 162 | 155 | 148 | 142 | 113   | 94    | 81    | 71    | 57    | 47    | 40    |
|            | 166, 166W  | 6400                   | 267                                                                   | 229 | 200 | 188 | 178 | 168 | 160 | 152 | 145 | 139 | 133 | 107   | 89    | 76    | 67    | 53    | 44    | 38    |
|            | 167, 167W  | 7200                   | 300                                                                   | 257 | 225 | 212 | 200 | 189 | 180 | 171 | 164 | 157 | 150 | 120   | 100   | 86    | 75    | 60    | 50    | 43    |
|            | 186, 186W  | 7080                   | 295                                                                   | 253 | 221 | 208 | 197 | 186 | 177 | 169 | 161 | 154 | 148 | 118   | 98    | 84    | 74    | 59    | 49    | 42    |
|            | 187, 187W  | 7600                   | 317                                                                   | 271 | 238 | 224 | 211 | 200 | 190 | 181 | 173 | 165 | 158 | 127   | 106   | 90    | 79    | 63    | 53    | 45    |
| 207, 207W  | 7800       | 325                    | 279                                                                   | 244 | 229 | 217 | 205 | 195 | 186 | 177 | 170 | 163 | 130 | 108   | 93    | 81    | 65    | 54    | 46    |       |
| 25'-0"     | 145, 145W  | 4160                   | 166                                                                   | 143 | 125 | 117 | 111 | 105 | 100 | 95  | 91  | 87  | 83  | 67    | 55    | 48    | 42    | 33    | ...   | ...   |
|            | 146, 146W  | 5430                   | 219                                                                   | 187 | 164 | 154 | 146 | 138 | 131 | 125 | 119 | 114 | 109 | 87    | 73    | 62    | 55    | 44    | 36    | 31    |
|            | 147, 147W  | 6560                   | 262                                                                   | 225 | 197 | 185 | 175 | 166 | 157 | 150 | 143 | 137 | 131 | 105   | 87    | 75    | 66    | 52    | 44    | 37    |
|            | 166, 166W  | 6180                   | 247                                                                   | 212 | 186 | 175 | 165 | 156 | 148 | 141 | 135 | 129 | 124 | 99    | 82    | 71    | 62    | 49    | 41    | 35    |
|            | 167, 167W  | 7200                   | 288                                                                   | 247 | 216 | 203 | 192 | 182 | 173 | 165 | 157 | 150 | 144 | 115   | 96    | 82    | 72    | 58    | 48    | 41    |
|            | 186, 186W  | 6800                   | 272                                                                   | 233 | 204 | 192 | 181 | 172 | 163 | 155 | 148 | 142 | 136 | 109   | 91    | 78    | 68    | 54    | 45    | 39    |
|            | 187, 187W  | 7600                   | 304                                                                   | 261 | 228 | 215 | 203 | 192 | 182 | 174 | 166 | 159 | 152 | 122   | 101   | 87    | 76    | 61    | 51    | 43    |
|            | 207, 207W  | 7800                   | 312                                                                   | 267 | 234 | 220 | 208 | 197 | 187 | 178 | 170 | 163 | 156 | 125   | 104   | 89    | 78    | 62    | 52    | 45    |
| 26'-0"     | 145, 145W  | 4000                   | 154                                                                   | 132 | 115 | 109 | 103 | 97  | 92  | 88  | 84  | 80  | 77  | 62    | 51    | 44    | 38    | 31    | ...   | ...   |
|            | 146, 146W  | 5250                   | 202                                                                   | 173 | 152 | 143 | 135 | 128 | 121 | 116 | 110 | 105 | 101 | 81    | 67    | 58    | 51    | 40    | 34    | ...   |
|            | 147, 147W  | 6300                   | 243                                                                   | 208 | 182 | 171 | 162 | 153 | 146 | 139 | 132 | 127 | 121 | 97    | 81    | 69    | 61    | 49    | 40    | 35    |
|            | 166, 166W  | 5950                   | 229                                                                   | 196 | 172 | 162 | 153 | 145 | 137 | 131 | 125 | 119 | 114 | 92    | 76    | 65    | 57    | 46    | 38    | 33    |
|            | 167, 167W  | 7200                   | 277                                                                   | 237 | 208 | 195 | 185 | 175 | 166 | 158 | 151 | 144 | 138 | 111   | 92    | 79    | 69    | 55    | 46    | 40    |
|            | 186, 186W  | 6540                   | 251                                                                   | 216 | 189 | 178 | 168 | 159 | 151 | 144 | 137 | 131 | 126 | 101   | 84    | 72    | 63    | 50    | 42    | 36    |
|            | 187, 187W  | 7600                   | 292                                                                   | 251 | 219 | 206 | 195 | 185 | 175 | 167 | 159 | 153 | 146 | 117   | 97    | 84    | 73    | 58    | 49    | 42    |
|            | 207, 207W  | 7800                   | 300                                                                   | 257 | 225 | 212 | 200 | 189 | 180 | 171 | 164 | 157 | 150 | 120   | 100   | 86    | 75    | 60    | 50    | 43    |

In "Steel Joist Construction" for floors, the joists should not be spaced more than 24 inches on centers, as indicated by figures to the left of heavy line in above table.

LOADING TABLE ONE (Continued)

| Clear Span | Joist Type | Total Safe Load Pounds | TOTAL SAFE LOADS IN POUNDS PER SQUARE FOOT FOR VARIOUS JOIST SPACINGS |     |     |     |     |     |     |     |     |     |     |       |       |       |       |       |       |       |
|------------|------------|------------------------|-----------------------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|-------|-------|-------|-------|-------|-------|
|            |            |                        | 12"                                                                   | 14" | 16" | 17" | 18" | 19" | 20" | 21" | 22" | 23" | 24" | 2'-6" | 3'-0" | 3'-6" | 4'-0" | 5'-0" | 6'-0" | 7'-0" |
| 27'-0"     | 145, 145W  | 3850                   | 143                                                                   | 122 | 107 | 101 | 95  | 90  | 86  | 82  | 78  | 74  | 71  | 57    | 48    | 41    | 36    | 29    | ...   | ...   |
|            | 146, 146W  | 3050                   | 187                                                                   | 161 | 141 | 132 | 125 | 118 | 112 | 107 | 102 | 98  | 94  | 75    | 62    | 54    | 47    | 37    | 31    | ...   |
|            | 147, 147W  | 6070                   | 225                                                                   | 193 | 169 | 159 | 150 | 142 | 135 | 129 | 123 | 117 | 112 | 90    | 75    | 64    | 56    | 45    | 37    | 32    |
|            | 166, 166W  | 5730                   | 212                                                                   | 182 | 159 | 150 | 141 | 134 | 127 | 121 | 116 | 111 | 106 | 85    | 71    | 61    | 53    | 42    | 35    | 30    |
|            | 167, 167W  | 6940                   | 257                                                                   | 220 | 193 | 181 | 171 | 162 | 154 | 147 | 140 | 134 | 128 | 103   | 86    | 73    | 64    | 51    | 43    | 37    |
|            | 186, 186W  | 6300                   | 233                                                                   | 200 | 175 | 165 | 155 | 147 | 140 | 133 | 127 | 122 | 117 | 93    | 78    | 67    | 58    | 47    | 39    | 33    |
|            | 187, 187W  | 7600                   | 281                                                                   | 241 | 211 | 199 | 188 | 178 | 169 | 161 | 154 | 147 | 141 | 113   | 94    | 80    | 70    | 56    | 46    | 40    |
|            | 207, 207W  | 7800                   | 289                                                                   | 248 | 217 | 204 | 193 | 182 | 173 | 165 | 158 | 151 | 144 | 116   | 96    | 83    | 72    | 58    | 48    | 41    |
| 18'-0"     | 145, 145W  | 3720                   | 133                                                                   | 114 | 99  | 94  | 88  | 84  | 80  | 76  | 72  | 69  | 66  | 53    | 44    | 38    | 33    | ...   | ...   | ...   |
|            | 146, 146W  | 4880                   | 174                                                                   | 149 | 131 | 123 | 116 | 110 | 105 | 100 | 95  | 91  | 87  | 70    | 58    | 50    | 44    | 35    | 29    | ...   |
|            | 147, 147W  | 5850                   | 209                                                                   | 179 | 157 | 148 | 139 | 132 | 126 | 120 | 114 | 109 | 105 | 84    | 70    | 60    | 52    | 42    | 35    | 30    |
|            | 166, 166W  | 5520                   | 197                                                                   | 169 | 148 | 139 | 132 | 125 | 118 | 113 | 108 | 103 | 99  | 79    | 66    | 56    | 49    | 39    | 33    | 28    |
|            | 167, 167W  | 6690                   | 239                                                                   | 205 | 179 | 169 | 159 | 151 | 143 | 137 | 130 | 125 | 119 | 96    | 80    | 68    | 60    | 48    | 40    | 34    |
|            | 186, 186W  | 6070                   | 217                                                                   | 186 | 163 | 153 | 145 | 137 | 130 | 124 | 118 | 113 | 108 | 87    | 72    | 62    | 54    | 43    | 36    | 31    |
|            | 187, 187W  | 7380                   | 264                                                                   | 226 | 198 | 186 | 176 | 166 | 158 | 151 | 144 | 138 | 132 | 105   | 88    | 75    | 66    | 53    | 44    | 38    |
|            | 207, 207W  | 7800                   | 279                                                                   | 239 | 209 | 197 | 186 | 176 | 167 | 159 | 152 | 145 | 139 | 111   | 93    | 80    | 70    | 56    | 46    | 40    |
| 29'-0"     | 166, 166W  | 5340                   | 184                                                                   | 158 | 138 | 130 | 123 | 116 | 110 | 105 | 100 | 96  | 92  | 74    | 61    | 53    | 46    | 37    | 31    | ...   |
|            | 167, 167W  | 6460                   | 223                                                                   | 191 | 167 | 157 | 149 | 141 | 134 | 127 | 122 | 116 | 111 | 89    | 74    | 64    | 56    | 45    | 37    | 32    |
|            | 186, 186W  | 5860                   | 202                                                                   | 173 | 152 | 143 | 135 | 128 | 121 | 116 | 110 | 105 | 101 | 81    | 67    | 58    | 51    | 40    | 34    | 29    |
|            | 187, 187W  | 7130                   | 246                                                                   | 211 | 184 | 173 | 164 | 155 | 147 | 140 | 134 | 128 | 123 | 98    | 82    | 70    | 61    | 49    | 41    | 35    |
|            | 207, 207W  | 7800                   | 269                                                                   | 231 | 202 | 190 | 179 | 170 | 161 | 154 | 147 | 140 | 134 | 108   | 90    | 77    | 67    | 54    | 45    | 38    |
| 30'-0"     | 166, 166W  | 5150                   | 172                                                                   | 147 | 129 | 121 | 115 | 109 | 103 | 98  | 94  | 90  | 86  | 69    | 57    | 49    | 43    | 34    | ...   | ...   |
|            | 167, 167W  | 6240                   | 208                                                                   | 178 | 156 | 147 | 139 | 131 | 125 | 119 | 114 | 109 | 104 | 83    | 69    | 59    | 52    | 42    | 35    | 30    |
|            | 186, 186W  | 5670                   | 189                                                                   | 162 | 142 | 133 | 126 | 119 | 113 | 108 | 103 | 99  | 94  | 76    | 63    | 54    | 47    | 38    | 31    | ...   |
|            | 187, 187W  | 6890                   | 230                                                                   | 197 | 172 | 162 | 153 | 145 | 138 | 131 | 125 | 120 | 115 | 92    | 77    | 66    | 57    | 46    | 38    | 33    |
|            | 207, 207W  | 7560                   | 252                                                                   | 216 | 189 | 178 | 168 | 159 | 151 | 144 | 137 | 131 | 126 | 101   | 84    | 72    | 63    | 50    | 42    | 36    |
| 31'-0"     | 166, 166W  | 4990                   | 161                                                                   | 138 | 121 | 114 | 107 | 102 | 97  | 92  | 88  | 84  | 80  | 64    | 54    | 46    | 40    | 32    | ...   | ...   |
|            | 167, 167W  | 6050                   | 195                                                                   | 167 | 146 | 138 | 130 | 123 | 117 | 111 | 106 | 102 | 97  | 78    | 65    | 56    | 49    | 39    | 32    | ...   |
|            | 186, 186W  | 5480                   | 177                                                                   | 152 | 133 | 123 | 118 | 112 | 106 | 101 | 96  | 92  | 88  | 71    | 59    | 51    | 44    | 35    | 29    | ...   |
|            | 187, 187W  | 6670                   | 215                                                                   | 184 | 161 | 152 | 143 | 136 | 129 | 123 | 117 | 112 | 108 | 86    | 72    | 61    | 54    | 43    | 36    | 31    |
|            | 207, 207W  | 7310                   | 236                                                                   | 202 | 177 | 166 | 157 | 149 | 142 | 135 | 129 | 123 | 118 | 94    | 79    | 67    | 59    | 47    | 39    | 34    |
| 32'-0"     | 166, 166W  | 4840                   | 151                                                                   | 129 | 113 | 107 | 101 | 95  | 91  | 86  | 82  | 79  | 76  | 60    | 50    | 43    | 38    | 30    | ...   | ...   |
|            | 167, 167W  | 5860                   | 183                                                                   | 157 | 137 | 129 | 122 | 116 | 110 | 105 | 100 | 95  | 91  | 73    | 61    | 52    | 46    | 37    | 30    | ...   |
|            | 186, 186W  | 5310                   | 166                                                                   | 142 | 125 | 117 | 111 | 105 | 100 | 95  | 91  | 87  | 83  | 66    | 55    | 47    | 42    | 33    | 28    | ...   |
|            | 187, 187W  | 6460                   | 202                                                                   | 173 | 151 | 142 | 135 | 127 | 121 | 115 | 110 | 105 | 101 | 81    | 67    | 58    | 50    | 40    | 34    | 29    |
|            | 207, 207W  | 7080                   | 221                                                                   | 190 | 166 | 156 | 148 | 140 | 133 | 126 | 121 | 115 | 111 | 89    | 74    | 63    | 55    | 44    | 37    | 32    |
| 33'-0"     | 186, 186W  | 5550                   | 156                                                                   | 134 | 117 | 110 | 104 | 99  | 94  | 89  | 85  | 81  | 78  | 62    | 52    | 45    | 39    | 31    | ...   | ...   |
|            | 187, 187W  | 6260                   | 190                                                                   | 163 | 142 | 134 | 127 | 120 | 114 | 108 | 104 | 99  | 95  | 76    | 63    | 54    | 47    | 38    | 32    | 27    |
|            | 207, 207W  | 6870                   | 208                                                                   | 178 | 156 | 147 | 139 | 131 | 125 | 119 | 114 | 109 | 104 | 83    | 69    | 59    | 52    | 42    | 35    | 30    |
| 34'-0"     | 186, 186W  | 5000                   | 147                                                                   | 126 | 110 | 104 | 98  | 93  | 88  | 84  | 80  | 77  | 74  | 59    | 49    | 42    | 37    | 29    | ...   | ...   |
|            | 187, 187W  | 6080                   | 179                                                                   | 153 | 134 | 126 | 119 | 113 | 107 | 102 | 98  | 93  | 89  | 72    | 60    | 51    | 45    | 36    | 30    | ...   |
|            | 207, 207W  | 6670                   | 196                                                                   | 168 | 147 | 138 | 131 | 124 | 118 | 112 | 107 | 102 | 93  | 78    | 65    | 56    | 49    | 39    | 33    | 28    |
| 35'-0"     | 186, 186W  | 4360                   | 139                                                                   | 119 | 104 | 98  | 93  | 88  | 83  | 79  | 76  | 72  | 69  | 56    | 46    | 40    | 35    | 28    | ...   | ...   |
|            | 187, 187W  | 5900                   | 169                                                                   | 145 | 127 | 119 | 112 | 107 | 101 | 96  | 92  | 88  | 84  | 67    | 56    | 48    | 42    | 34    | 28    | ...   |
|            | 207, 207W  | 6480                   | 185                                                                   | 159 | 139 | 131 | 123 | 117 | 111 | 106 | 101 | 97  | 93  | 74    | 62    | 53    | 46    | 37    | 31    | ...   |
| 36'-0"     | 186, 186W  | 4720                   | 131                                                                   | 112 | 98  | 93  | 87  | 83  | 79  | 75  | 72  | 68  | 66  | 52    | 44    | 37    | 33    | ...   | ...   | ...   |
|            | 187, 187W  | 5740                   | 159                                                                   | 137 | 120 | 113 | 106 | 101 | 96  | 91  | 87  | 83  | 80  | 64    | 53    | 46    | 40    | 32    | 27    | ...   |
|            | 207, 207W  | 6300                   | 175                                                                   | 150 | 131 | 123 | 117 | 110 | 105 | 100 | 95  | 91  | 87  | 70    | 58    | 50    | 44    | 35    | 29    | ...   |
| 37'-0"     | 207, 207W  | 6130                   | 166                                                                   | 142 | 124 | 117 | 110 | 105 | 99  | 95  | 90  | 86  | 83  | 66    | 55    | 47    | 41    | 33    | 28    | ...   |
| 38'-0"     | 207, 207W  | 5960                   | 157                                                                   | 135 | 118 | 111 | 105 | 99  | 94  | 90  | 86  | 82  | 78  | 63    | 52    | 45    | 39    | 31    | ...   | ...   |
| 39'-0"     | 207, 207W  | 5810                   | 149                                                                   | 128 | 112 | 105 | 99  | 94  | 89  | 85  | 81  | 78  | 75  | 60    | 50    | 43    | 37    | 30    | ...   | ...   |
| 40'-0"     | 207, 207W  | 5670                   | 142                                                                   | 121 | 106 | 100 | 94  | 89  | 85  | 81  | 77  | 74  | 71  | 57    | 47    | 40    | 35    | 28    | ...   | ...   |

In "Steel Joist Construction" for floors, the joists should not be spaced more than 24 inches on centers, as indicated by figures to the left of heavy line in above table.

## For Floor and Roof Construction

**General** — Where "Steel Joist Construction" is specified, it shall be understood to mean that type of construction in which decks or top slabs are supported by Truscon "C-T" Steel Joists spaced not more than 24 in. on centers in floors or 30 in. on centers in roofs.

**Joists** — Steel joists shall be made of hot rolled steel shapes in the form of a Warren truss having top and bottom chords of single tee-shaped members and a plain round continuous web member. The bottom chord shall be continuous from end to end of joist and bent up at the ends to form the bearings. Steel joists shall be fabricated by means of electric machine welding under pressure making positive connections at all joints.

All steel used shall conform to the American Society for Testing Materials Standard Specifications for Steel for Bridges and Buildings Designation A-7 of latest adoption.

All steel joists shall be spray painted with one shop coat of asphalt base metal protective paint.

**NOTE:** Years of study have convinced us that a shop coat of black asphalt base paint provides the most practical protective coating for Open-Truss Steel Joists. It must be remembered, however, that if joists are to be exposed in a building, without a protective ceiling attached, this paint will bleed through any second coat of paint that might be applied.

**Design** — The design and details of all joists shall meet the requirements of the Steel Joist Institute Specifications.

**Location and Spacing of Joists** — Steel joists shall be spaced not more than 24 inches on centers in floors or 30 inches on centers in roofs except they may be used to support roof-decks, provided the deck is securely attached to the top chords to prevent any lateral deflection.

There shall be one typical joist spaced not more than four inches in the clear from each end wall or bearing wall parallel to the joists. Structural steel tie beams shall not be used to take the place of joists unless architectural or structural plans indicate same are to be used as supporting members.

Where a partition is parallel to joists and the length of the partition exceeds fifty per cent of the joist span, one extra joist shall be provided under the partition or, if necessary, double joists shall be provided under the partition to safely support the additional partition load. Where partitions extend over joists at right angles to same, the additional partition load must be included in computations as part of the dead load.

**Anchorage** — The ends of steel joists shall extend a distance of at least four inches on concrete or masonry, and at least 2½ inches on structural steel supports. Ends of every third joist supported on concrete or masonry shall be anchored thereto with a ¾-in. round wall anchor and each end of every joist supported on structural steel shall be anchored thereto by means of a ¾-in. round beam anchor or two welds each one inch long.

Steel joists parallel to walls shall have the top and bottom chords anchored to the wall where each row of bridging occurs.

**Span** — The span of steel joists shall not exceed 24 times the depth of the steel portion of the steel joist.

**Bridging** — As soon as steel joists have been erected, bridging of an approved Steel Joist Institute type shall be installed between them before the application of construction loads. Bridging rows shall be spaced as follows:

Clear spans 0 to 14 feet — One bridging row  
Clear spans 14 to 21 feet — Two bridging rows  
Clear spans 21 to 32 feet — Three bridging rows

**Ceilings** — Where fire resistive construction is required, steel joists shall be protected on the underside with a fire resistive ceiling consisting of plaster or metal lath and shall have a reinforced concrete or gypsum top slab, all, as is necessary to provide the required degree of fire resistance, provided that where wood joist construction is permitted steel joists may have a wood nailing strip attached to the top chord and a wood floor may be used, and provided further that where steel joists are used in places where unprotected wood joists are permitted no ceiling protection need be provided.

Where directly attached ceilings occur, ceiling extensions shall be provided at the ends of the steel joists.

Metal ceiling lath for directly attached ceilings shall be ¾-in. rib lath weighing 3.4 lbs. per square yard for joist spacings up to 24 inches. The rib lath shall be placed under the joists with the ribs up and at right angles to the joists. Ceiling lath shall be attached to the bottoms of the joists by means of lath clips spaced 8 inches apart, placed over the ribs of the lath.

**Decks or Top Slabs** — A concrete top slab 2 in. thick shall be used for floor and roof construction. The concrete top slab shall be reinforced and supported by ¾-in. rib lath weighing 4.0 lbs. per square yard for joist spacings up to 24 in. and ¾-in. rib lath weighing .60 lb. per square foot for joist spacings from 24 in. to 30 in. The rib lath shall be placed over the joists with the ribs up and at right angles to the joists. Top lath shall be attached to the top chords of joists by means of lath clips spaced 8 in. apart. The ends of all the sheets shall be lapped at least 2 in. when the laps occur directly over joists and 4 in. when between joists. All laps shall be securely wired together. Where the floor finish is other than wood, the structural slab shall be reinforced against temperature stresses with 6 x 6 10.10 welded wire fabric reinforcement placed near the top of the slab.

Precast concrete top slabs, precast gypsum top slabs, wood decks, or steel decks may be used over steel joists provided they are securely attached to the top chords to prevent any lateral deflection.

**NOTE:** It is obviously impossible for Truscon to be responsible for differences in level between the tops of adjacent joists, whether due to slight inaccuracies which may occur in manufacturing or to the methods employed in installing the joists. Provision must be made by others, when necessary, to insure a uniform and level bearing for precast slabs placed over steel joists. This may be done by the use of shims.

**Wood Floors** — Where wood floors are required over concrete top slab, screed clips shall be attached to the top chord of the joists to receive 2-in. by 3-in. (1 ⅝-in. by 2 ⅝-in. actual size) wood screeds. The screed clips shall raise the bottom of the wood screeds 1 in. above the joists.

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## TRUSCON "O-T" OPEN TRUSS NAILER JOISTS

Truscon Open Truss Nailer Joists provide all the advantages of permanent floor construction for homes, apartments and other light occupancy buildings at a cost comparable with ordinary floors.

In them are incorporated the basic features of Truscon "O-T" Open Truss Steel Joists so extensively used in important buildings throughout the country. Unusual strength and rigidity result from their superior design and construction. Easy installation follows a complete and accurate fabrication in the Truscon plant.

Wide, specially formed members for top and bottom chords impart stiffness to the Nailer Joists and keep them true to line. The continuous steel web member of uniform diameter throughout its entire length is securely welded to the chords by means of high pressure electric automatic welding.

The end construction — a vital point in steel joist design — is unusually strong and rigid. Bearings for the joists are wide and ample. The underslung design of the supports not only insures stability of the joists during installation but provides additional head room under the supporting girders.

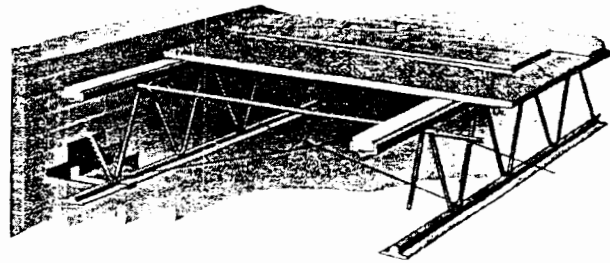
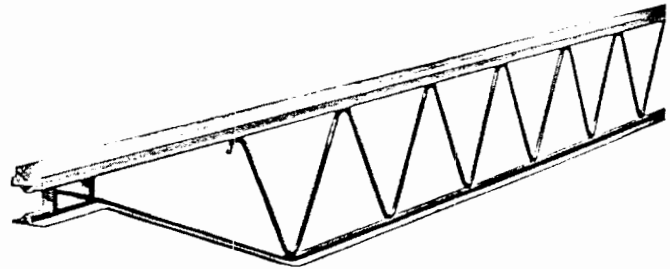
### ADVANTAGES OF NAILER JOISTS

Truscon "O-T" Open Truss Nailer Joists reach the job ready for placing without cutting or fitting. The wood flooring is nailed directly to the wood nailing strips which are securely attached to the top chords of the joists.

The light weight of nailer joist construction lessens the time and labor required for erection and also saves materials in the supporting framework and foundations. Every detail of joists and attachments has been perfected by practical experience to simplify installation and assure dependable results.

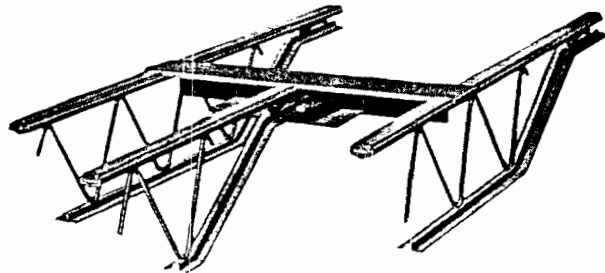
With a metal lath plastered ceiling attached to the lower chord of the joists, the construction provides fire-safety to a substantial degree, preventing the spread of fire from below.

With Truscon "O-T" Open Truss Nailer Joists available it is no longer necessary, from either a practical or economical standpoint, to use wood joist construction in any building.



"UNDERCHORD" ROD BRIDGING

Truscon "Underchord" Rod Bridging, as illustrated, is very effective and is easily installed. It is practical and will permit of a slight variation in joist spacing as is frequently necessary in order that joists can be spaced to avoid interference with other structural members, vent ducts, soil pipes, etc. This bridging does not interfere in any way with the top surface of the joist and permits the sub-floor to be laid in perfect contact with the nailing strip of the joist.



FRAMING AROUND SMALL OPENINGS

When it is necessary to frame around small openings such as required for dumb waiters, this framing can be very readily done in "O-T" Open Truss Nailer Joist construction by the introduction of a header angle to support the joist. The wood nailing strip, in these cases, must be notched in the field. We recommend that large openings be framed entirely with structural steel.

### SPECIFICATIONS

**General** — Where Nailer Joist floor construction is specified, it is understood to mean Truscon "O-T" Open Truss Nailer Joists of the size and spacing as shown on the drawings, together with a wooden floor over the joists and, unless otherwise specified, a metal lath and plaster ceiling directly beneath the joists.

The Nailer Joists shall be made of rolled steel shapes fabricated by high pressure electric automatic welding. The web member shall be a continuous plain round bar of constant diameter bent cold. The top chord shall be straight and the bottom chord bent up to form the bearing. The design and details of all members shall meet the requirements of the Steel Joist Institute Specifications. The wood nailer strip shall not be considered in determining the carrying capacity of the joist.

**Nailer Strip** — The wood nailer strip shall be first quality yellow pine or fir and shall be held securely to the top chord by pressure embedment of the flanges of the top chord into its sides or by the use of lag screws.

**Painting** — All Nailer Joists shall be spray or dip painted with one shop coat of good black asphalt metal protective paint.

**Bearing and Anchorage** — The ends of joists shall extend a distance of at least four (4") in. on masonry or reinforced concrete supports and at least two and one-half (2 1/2") in. on steel sup-

ports. Every third joist bearing on masonry walls shall be anchored. Joists parallel to walls shall have the bottom chords anchored at the line of the rows of bridging. Every joist bearing on structural steel beams shall be fastened by an anchor (or welding).

**Bridging** — As soon as joists have been erected and before the application of construction loads, joists shall be bridged with a tension type of "underchord" rod bridging consisting of a 1/2-in. rod placed underneath the top chords of the joists and transversely to them and held in place by means of spring clips engaging the rod and the web members at a panel point. This transverse rod shall be supplemented by 3/8-in. diagonally placed rods securely welded to both the transversely placed rod and the web members where they meet the bottom chords of joists. For residential construction, diagonal steel type bridging, welded to the top and bottom chord members of the joists, is recommended. For spans up to 14 ft. 0 in. one row of bridging is required; two rows between 14 ft. 0 in. and 21 ft. 0 in.; and three rows over 21 ft. 0 in.

**Ceilings** — Where directly attached ceiling occurs, Ceiling Extensions shall be provided.

**Note:** The spacing of the Nailer Joists must not be more than the safe span of the flooring over the joists.

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# TRUSCON "CLERESPAN" JOISTS

## TOTAL SAFE UNIFORM LOAD TABLE

The following table gives the total safe uniformly-distributed load-carrying capacities of Truscon "Clerespan" Joists in pounds per lineal foot of span.

"Clerespan" Joists when employed in their construction can be used advantageously in buildings for all types of occupancy regardless of their location. In many types of buildings their use will automatically eliminate all members from the structure with the exception of those in the outer walls. Greater floor areas are thus provided without constructing columns than has ever heretofore been accomplished. When used in roof construction "Clerespan" Joists meet all requirements of every type of building.

"Clerespan" Joists made of hot rolled structural steel shapes are designed in accordance with standard engineering practices. Top chords are designed for bending between panel point as well as direct compression.

"Clerespan" Joists all have a camber built in them. They are fabricated by welding in a modern shop noted for its welding equipment and developments in automatic welding.

"Clerespan" Joists possess unusual lateral stiffness. This is due to the high radius of gyration about the vertical axis.

"Clerespan" accessories, such as anchors, lath clips, screed clips, bearing plates, etc., are similar to those used with open truss joists. Diagonal bracing or bridging is provided by hot rolled angles. Lines of bracing are about 10 ft. apart.

### Notes Regarding Table

The weight of dead loads must in all cases be deducted to determine the live load-carrying capacities which must be reduced for concentrated loads.

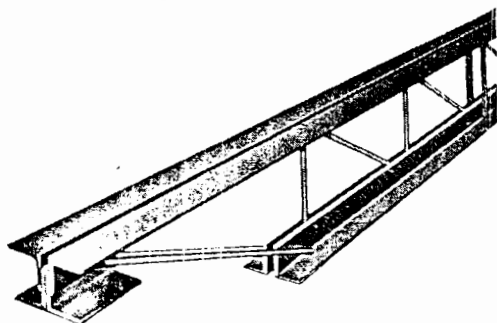
When holes are required in top or bottom chords the carrying capacities must be reduced in proportion to reduction of chord areas.

Figures printed in columns to right of heavy vertical line are for roof construction only.

Loads below horizontal zig-zag line are limited by end reaction.

Illustration below shows "Underslung" Clerespan with top chord parallel to bottom. However, they can also be made with square ends. The top chord can be parallel to bottom chord or pitched in one or two directions.

The carrying capacities of "Clerespan" with top chords pitched, is determined by the nominal depth of the "Clerespan" Joists at the center of the span.



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| Joist Types | Weight Lbs./Ft. | Max. End Reaction | Clear Opening or Net Span |        |        |        |        |        |        |        |        |        |        |        |     |  |  |  |
|-------------|-----------------|-------------------|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----|--|--|--|
|             |                 |                   | 25'-0"                    | 26'-0" | 27'-0" | 28'-0" | 29'-0" | 30'-0" | 31'-0" | 32'-0" | 33'-0" | 34'-0" | 35'-0" | 36'-0" |     |  |  |  |
| 18" Depths  | 1801            | 11                | 3,775                     | 302    | 285    | 269    | 252    | 236    | 221    | 208    | 196    | 184    | 174    | 165    | 156 |  |  |  |
|             | 1802            | 12                | 4,213                     | 337    | 320    | 298    | 277    | 259    | 242    | 226    | 212    | 200    | 188    | 178    | 168 |  |  |  |
|             | 1803            | 13                | 4,700                     | 376    | 356    | 337    | 319    | 302    | 283    | 265    | 248    | 234    | 220    | 208    | 196 |  |  |  |
|             | 1804            | 15                | 5,625                     | 450    | 422    | 392    | 364    | 340    | 317    | 297    | 278    | 262    | 247    | 233    | 220 |  |  |  |
|             | 1805            | 17                | 6,111                     | 489    | 462    | 437    | 414    | 392    | 366    | 343    | 322    | 303    | 285    | 269    | 254 |  |  |  |
|             | 1806            | 19                | 6,965                     | 557    | 536    | 516    | 480    | 448    | 418    | 392    | 368    | 346    | 326    | 307    | 291 |  |  |  |
|             | 1807            | 21                | 7,279                     | 582    | 560    | 539    | 520    | 502    | 470    | 442    | 415    | 391    | 369    | 349    | 330 |  |  |  |
|             | 1808            | 23                | 7,635                     | 611    | 587    | 566    | 545    | 527    | 509    | 478    | 449    | 423    | 399    | 377    | 357 |  |  |  |
|             | 1809            | 25                | 8,144                     | 650    | 626    | 603    | 582    | 561    | 542    | 525    | 509    | 479    | 452    | 426    | 404 |  |  |  |
|             | 1810            | 27                | 8,531                     | 682    | 656    | 632    | 609    | 588    | 568    | 550    | 533    | 517    | 487    | 460    | 434 |  |  |  |
| 1811        | 29              | 8,768             | 701                       | 674    | 649    | 626    | 605    | 584    | 566    | 548    | 531    | 516    | 501    | 473    |     |  |  |  |
| 1812        | 32              | 9,258             | 743                       | 714    | 688    | 663    | 640    | 619    | 598    | 580    | 563    | 546    | 531    | 516    |     |  |  |  |
| 20" Depths  | 2001            | 11                | 3,655                     | 250    | 238    | 226    | 215    | 203    | 192    | 182    | 172    | 163    | 155    | 148    | 141 |  |  |  |
|             | 2002            | 12                | 4,021                     | 278    | 267    | 253    | 237    | 223    | 210    | 198    | 187    | 177    | 168    | 160    | 152 |  |  |  |
|             | 2003            | 13                | 4,510                     | 311    | 296    | 282    | 269    | 257    | 246    | 232    | 219    | 208    | 197    | 187    | 178 |  |  |  |
|             | 2004            | 15                | 5,449                     | 373    | 354    | 332    | 312    | 293    | 276    | 261    | 246    | 233    | 221    | 210    | 199 |  |  |  |
|             | 2005            | 17                | 5,838                     | 404    | 385    | 367    | 350    | 334    | 319    | 301    | 284    | 269    | 255    | 242    | 230 |  |  |  |
|             | 2006            | 19                | 7,091                     | 489    | 464    | 439    | 412    | 387    | 363    | 344    | 325    | 308    | 292    | 277    | 264 |  |  |  |
|             | 2007            | 21                | 7,560                     | 521    | 501    | 479    | 456    | 433    | 409    | 387    | 366    | 347    | 330    | 314    | 299 |  |  |  |
|             | 2008            | 23                | 7,934                     | 550    | 532    | 515    | 499    | 471    | 441    | 420    | 398    | 377    | 358    | 340    | 324 |  |  |  |
|             | 2009            | 25                | 8,517                     | 587    | 568    | 549    | 532    | 510    | 501    | 474    | 449    | 426    | 404    | 385    | 366 |  |  |  |
|             | 2010            | 27                | 8,995                     | 619    | 598    | 580    | 562    | 544    | 528    | 514    | 487    | 462    | 438    | 416    | 395 |  |  |  |
| 2011        | 29              | 9,366             | 642                       | 620    | 600    | 582    | 564    | 547    | 532    | 517    | 503    | 477    | 453    | 431    |     |  |  |  |
| 2012        | 32              | 9,810             | 681                       | 658    | 637    | 617    | 598    | 581    | 564    | 549    | 534    | 520    | 493    | 469    |     |  |  |  |
| 2013        | 34              | 10,023            | 691                       | 668    | 647    | 626    | 607    | 590    | 573    | 557    | 542    | 528    | 514    | 489    |     |  |  |  |
| 2014        | 36              | 10,650            | 735                       | 710    | 688    | 665    | 646    | 627    | 608    | 592    | 576    | 561    | 547    | 533    |     |  |  |  |
| 22" Depths  | 2201            | 11                | 3,498                     | 212    | 203    | 194    | 186    | 178    | 169    | 161    | 154    | 147    | 140    | 134    | 128 |  |  |  |
|             | 2202            | 12                | 3,911                     | 237    | 227    | 218    | 207    | 196    | 186    | 176    | 168    | 160    | 152    | 145    | 139 |  |  |  |
|             | 2203            | 13                | 4,340                     | 263    | 252    | 242    | 232    | 223    | 214    | 206    | 196    | 187    | 178    | 170    | 162 |  |  |  |
|             | 2204            | 15                | 5,214                     | 316    | 302    | 288    | 273    | 258    | 245    | 233    | 221    | 210    | 200    | 191    | 183 |  |  |  |
|             | 2205            | 17                | 5,613                     | 342    | 328    | 315    | 302    | 290    | 279    | 268    | 255    | 242    | 231    | 220    | 210 |  |  |  |
|             | 2206            | 19                | 6,848                     | 415    | 396    | 379    | 360    | 341    | 323    | 307    | 292    | 278    | 265    | 252    | 241 |  |  |  |
|             | 2207            | 21                | 7,442                     | 451    | 431    | 412    | 394    | 378    | 361    | 344    | 327    | 312    | 298    | 285    | 272 |  |  |  |
|             | 2208            | 23                | 8,181                     | 514    | 486    | 460    | 436    | 414    | 393    | 374    | 356    | 340    | 324    | 310    | 296 |  |  |  |
|             | 2209            | 25                | 8,855                     | 537    | 521    | 506    | 484    | 464    | 443    | 421    | 401    | 383    | 365    | 349    | 334 |  |  |  |
|             | 2210            | 27                | 9,380                     | 568    | 552    | 536    | 521    | 507    | 481    | 458    | 436    | 416    | 397    | 379    | 362 |  |  |  |
| 2211        | 29              | 9,750             | 594                       | 574    | 557    | 542    | 527    | 513    | 500    | 476    | 454    | 433    | 413    | 395    |     |  |  |  |
| 2212        | 32              | 10,260            | 628                       | 609    | 592    | 575    | 560    | 545    | 531    | 518    | 494    | 471    | 450    | 429    |     |  |  |  |
| 2213        | 34              | 10,558            | 640                       | 621    | 603    | 587    | 571    | 556    | 541    | 528    | 515    | 491    | 468    | 447    |     |  |  |  |
| 2214        | 36              | 10,987            | 666                       | 646    | 625    | 610    | 594    | 578    | 563    | 549    | 536    | 523    | 511    | 488    |     |  |  |  |
| 24" Depths  | 2401            | 12                | 3,774                     | 204    | 197    | 190    | 183    | 175    | 167    | 159    | 152    | 145    | 139    | 133    | 128 |  |  |  |
|             | 2403            | 13                | 4,300                     | 227    | 219    | 211    | 203    | 196    | 187    | 179    | 172    | 165    | 158    | 151    | 144 |  |  |  |
|             | 2404            | 15                | 5,069                     | 275    | 263    | 253    | 243    | 233    | 220    | 209    | 200    | 191    | 183    | 176    | 168 |  |  |  |
|             | 2405            | 17                | 5,458                     | 295    | 284    | 274    | 264    | 255    | 246    | 238    | 229    | 220    | 211    | 202    | 194 |  |  |  |
|             | 2406            | 19                | 6,012                     | 359    | 345    | 331    | 318    | 305    | 290    | 277    | 264    | 253    | 242    | 232    | 222 |  |  |  |
|             | 2407            | 21                | 7,215                     | 390    | 374    | 360    | 346    | 333    | 321    | 309    | 296    | 283    | 271    | 260    | 250 |  |  |  |
|             | 2408            | 23                | 8,298                     | 448    | 427    | 406    | 387    | 369    | 353    | 337    | 322    | 309    | 296    | 284    | 272 |  |  |  |
|             | 2409            | 25                | 8,362                     | 479    | 460    | 442    | 426    | 409    | 394    | 379    | 363    | 347    | 333    | 320    | 307 |  |  |  |
|             | 2410            | 27                | 9,937                     | 537    | 523    | 498    | 475    | 453    | 432    | 415    | 395    | 378    | 363    | 348    | 334 |  |  |  |
|             | 2411            | 29                | 10,360                    | 560    | 545    | 531    | 518    | 494    | 471    | 450    | 431    | 413    | 395    | 379    | 364 |  |  |  |
| 2412        | 32              | 10,773            | 582                       | 567    | 552    | 539    | 526    | 513    | 490    | 469    | 449    | 430    | 413    | 396    |     |  |  |  |
| 2413        | 34              | 11,073            | 598                       | 583    | 568    | 554    | 540    | 527    | 515    | 492    | 470    | 450    | 431    | 413    |     |  |  |  |
| 2414        | 36              | 11,543            | 624                       | 608    | 592    | 577    | 563    | 550    | 537    | 525    | 513    | 491    | 470    | 451    |     |  |  |  |
| 26" Depths  | 2601            | 15                | 4,920                     | 210    | 226    | 223    | 216    | 208    | 201    | 193    | 185    | 178    | 171    | 165    | 159 |  |  |  |
|             | 2605            | 17                | 5,310                     | 259    | 250    | 242    | 234    | 227    | 220    | 213    | 206    | 199    | 191    | 184    | 178 |  |  |  |
|             | 2606            | 19                | 6,478                     | 316    | 304    | 294    | 283    | 273    | 263    | 252    | 242    | 232    | 223    | 214    | 206 |  |  |  |
|             | 2607            | 21                | 7,011                     | 342    | 330    | 319    | 308    | 297    | 287    | 278    | 269    | 259    | 249    | 240    | 231 |  |  |  |
|             | 2608            | 23                | 8,057                     | 393    | 380    | 364    | 348    | 333    | 319    | 307    | 294    | 283    | 272    | 262    | 252 |  |  |  |
|             | 2609            | 25                | 8,631                     | 421    | 406    | 392    | 378    | 365    | 353    | 342    | 330    | 318    | 306    | 295    | 284 |  |  |  |
|             | 2610            | 27                | 9,984                     | 487    | 466    | 445    | 426    | 408    | 392    | 376    | 361    | 347    | 334    | 321    | 309 |  |  |  |
|             | 2611            | 29                | 10,563                    | 514    | 503    | 484    | 465    | 445    | 427    | 410    | 393    | 378    | 364    | 350    | 337 |  |  |  |
|             | 2612            | 32                | 11,000                    | 537    | 524    | 512    | 500    | 483    | 465    | 446    | 428    | 411    | 396    | 381    | 367 |  |  |  |
|             | 2613            | 34                | 11,543                    | 563    | 550    | 537    | 523    | 513    | 491    | 470    | 451    | 432    | 415    | 399    | 384 |  |  |  |
| 2614        | 36              | 12,032            | 587                       | 573    | 560    | 547    | 535    | 523    | 512    | 491    | 471    | 452    | 435    | 418    |     |  |  |  |
| 28" Depths  | 2804            | 15                | 4,815                     | 214    | 207    | 200    | 194    | 187    | 180    | 175    | 169    | 162    | 156    | 151    | 145 |  |  |  |
|             | 2805            | 17                | 5,153                     | 229    | 223    | 216    | 210    | 204    | 198    | 190    | 184    | 177    | 171    | 165    | 160 |  |  |  |
|             | 2806            | 19                | 6,323                     | 281    | 272    | 263    | 254    | 247    | 239    | 232    | 223    | 214    | 206    | 199    | 192 |  |  |  |
|             | 2807            | 21                | 6,840                     | 304    | 294    | 285    | 276    | 268    | 259    | 252    | 244    | 237    | 230    | 222    | 215 |  |  |  |
|             | 2808            | 23                | 7,875                     | 350    | 338    | 326    | 315    | 303    | 292    | 281    | 271    | 261    | 252    | 243    | 235 |  |  |  |
|             | 2809            | 25                | 8,415                     | 374    | 362    | 351    | 340    | 329    | 319    | 310    | 300    | 291    | 283    | 273    | 264 |  |  |  |
|             | 2810            | 27                | 9,765                     | 434    | 419    | 403    | 387    | 372    | 358    | 345    | 332    | 320    | 309    | 298    | 288 |  |  |  |
|             | 2811            | 29                | 10,163                    | 465    | 449    | 434    | 420    | 405    | 390    | 376    | 362    | 349    | 337    | 325    | 314 |  |  |  |
|             | 2812            | 32                | 11,103                    | 497    | 481    | 465    | 450    | 436    | 422    | 409    | 394    | 379    | 366    | 353    | 341 |  |  |  |
|             | 2813            | 34                | 12,190                    | 542    | 530    | 509    | 488    | 468    | 449    | 432    | 416    | 400    | 385    | 371    | 358 |  |  |  |
| 2814        | 36              | 12,495            | 555                       | 543    | 532    | 521    | 510    | 489    | 470    | 452    | 436    | 420    | 404    | 390    |     |  |  |  |
| 30" Depths  | 3004            | 15                | 4,703                     | 192    | 187    | 181    | 176    | 171    | 166    | 161    | 156    | 151    | 146    | 141    | 136 |  |  |  |
|             | 3005            | 17                | 5,024                     | 205    | 200    | 193    | 187    | 182    | 175    | 170    | 166    | 161    | 156    | 151    | 146 |  |  |  |
|             | 3006            | 19                | 6,174                     | 252    | 244    | 237    | 231    | 224    | 218    | 211    | 206    | 199    | 192    | 186    | 180 |  |  |  |
|             | 3007            | 21                | 6,689                     | 273    | 265    | 257    | 250    | 243    | 236    | 230    | 223    | 217    | 211    | 205    | 199 |  |  |  |
|             | 3008            | 23                | 7,718                     | 315    | 305    | 296    | 287    | 278    | 269    | 259    | 250    | 242    | 234    | 227    | 219 |  |  |  |
|             | 3009            | 25                | 8,232                     | 336    | 326    | 316    | 307    | 299    | 291    | 282    | 275    | 267    | 259    | 251    | 243 |  |  |  |
|             | 3010            | 27                | 9,553                     | 390    | 378    | 367    | 354    | 341    | 329    | 318    | 307    | 297    | 287    | 278    | 269 |  |  |  |
|             | 3011            | 29                | 10,241                    | 418    | 405    | 393    | 381    | 370    | 359    | 347    | 335    | 324    | 313    | 303    | 293 |  |  |  |
|             | 3012            | 32                | 10,952                    | 447    | 433    | 420    | 408    | 396    | 385    | 374    | 363    | 352    | 340    | 329    | 319 |  |  |  |
|             | 3013            | 34                | 12,103                    | 494    | 479    | 464    | 447    | 430    | 415    | 400    | 386    | 372    | 359    | 347    | 336 |  |  |  |
| 3014        | 36              | 12,825            | 523                       | 513    | 498    | 483    | 468    | 451    | 435    | 420    | 405    | 391    | 378    | 366    |     |  |  |  |
| 32" Depths  | 3208            | 23                | 7,553                     | 285    | 277    | 270    | 263    | 255    | 249    | 241    | 233    | 226    | 219    | 212    | 206 |  |  |  |
|             | 3209            | 25                | 8,056                     | 304    | 296    | 288    | 280    | 272    | 266    | 259    | 252    | 244    | 236    | 229    | 223 |  |  |  |
|             | 3210            | 27                | 8,381                     | 324    | 314    | 304    | 304    | 315    | 305    | 295    | 286    | 277    | 268    | 260    | 253 |  |  |  |
|             | 3211            | 29                | 10,044                    | 379    | 368    | 358    | 348    | 339    | 330    | 321    | 311    | 302    | 293    | 284    | 275 |  |  |  |
|             | 3212            | 32                | 10,733                    | 405    | 394    | 383    | 373    | 363    | 353    | 344    | 335    | 326    | 317    | 308    | 299 |  |  |  |
|             | 3213            | 34                | 11,819                    | 446    | 433    | 422    | 410    | 398    | 385    | 372    | 360    | 348    | 337    | 326    | 316 |  |  |  |
|             | 3214            | 36                | 12,720                    | 480    | 467    | 454    | 442    | 430    | 418    | 404    | 391    | 379    | 366    | 355    | 344 |  |  |  |