

Hole location is minimum distance from inside face of support to nearest edge of hole.

DO NOT cut or drill flanges.
Allowable Hole Location for all BLI Joists (Simple or Multiple Span)

| Joist | Joist | Hole Diameter |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Depth | Clear Span | 2" | $3^{\prime \prime}$ | 4" | 5" | 61/4" | 7" | 8'1 | 85/81 | 9' | $10^{\prime \prime}$ | 103/4" | 11" | 12" | 123/4" |
| $91 / 2^{\prime \prime}$ | $10^{\prime}$ | 0'-6' | 0'-6' | 0'-9'1 | $1^{\prime \prime}-9^{\prime \prime}$ | $3^{\prime}-3^{\prime \prime}$ |  |  |  |  |  |  |  |  |  |
|  | $12^{\prime}$ | 0'-6' | $1^{\prime}-3{ }^{\prime \prime}$ | 2'-3'' | $3^{\prime}-3^{\prime \prime}$ | 4'-6' |  |  |  |  |  |  |  |  |  |
|  | $14^{\prime}$ | 0'-6' | $1^{\prime}-0^{\prime \prime}$ | $2^{\prime}-3^{\prime \prime}$ | $3^{\prime}-6{ }^{\prime \prime}$ | 5'-6'1 |  |  |  |  |  |  |  |  |  |
|  | $16^{\prime}$ | 0'-6' | $0^{\prime}-6{ }^{\prime \prime}$ | 2'-0' | $3^{\prime}-6{ }^{\prime \prime}$ | 5'-9'1 |  |  |  |  |  |  |  |  |  |
|  | $18^{\prime}$ | $0^{\prime}-6{ }^{\prime \prime}$ | $0^{\prime}-6{ }^{\prime \prime}$ | $0^{\prime}-9^{\prime \prime}$ | $2^{\prime}-6^{\prime \prime}$ | $5^{\prime}-0^{\prime \prime}$ |  |  |  |  |  |  |  |  |  |
| 117/8" | $12^{\prime}$ | 0'-6' | 0'-6' | 0'-9'' | 1'-0'' | 1'-9'' | $2^{\prime \prime}-6{ }^{\prime \prime}$ | $3^{\prime}-9^{\prime \prime}$ | $4^{\prime}-6{ }^{\prime \prime}$ |  |  |  |  |  |  |
|  | $14^{\prime}$ | 0'-6' | $0^{\prime}-6{ }^{\prime \prime}$ | 0'-9'' | $1^{\prime}-9^{\prime \prime}$ | $3^{\prime}-3^{\prime \prime}$ | $4^{\prime}-0^{\prime \prime}$ | $5^{\prime}-3^{\prime \prime}$ | $6^{\prime}-0^{\prime \prime}$ |  |  |  |  |  |  |
|  | $16^{\prime}$ | 0'-6' | $1^{\prime}-3^{\prime \prime}$ | 2'-3' | $3^{\prime}-3^{\prime \prime}$ | $4^{\prime}-6{ }^{\prime \prime}$ | 5'-6' | $6^{\prime}-6{ }^{\prime \prime}$ | $7^{\prime}-6{ }^{\prime \prime}$ |  |  |  |  |  |  |
|  | $18^{\prime}$ | $1^{\prime}-6{ }^{\prime \prime}$ | $2^{\prime}-6{ }^{\prime \prime}$ | $3^{\prime}-6{ }^{\prime \prime}$ | $4^{\prime}-6^{\prime \prime}$ | $6^{\prime}-0^{\prime \prime}$ | $6^{\prime}-9^{\prime \prime}$ | $8^{\prime}-0^{\prime \prime}$ |  |  |  |  |  |  |  |
|  | $20^{\prime}$ | 0'-9'' | $2^{\prime}-0^{\prime \prime}$ | $3^{\prime}-3^{\prime \prime}$ | 4'-6" | $6^{\prime}-3^{\prime \prime}$ | 7'-3' | 8'-9'1 |  |  |  |  |  |  |  |
|  | $22^{\prime}$ | $1^{\prime}-6{ }^{\prime \prime}$ | 2'-9' | 4'-0'1 | 5'-6' | $7^{\prime}-3^{\prime \prime}$ | 8'-3'1 | $9^{\prime}-9^{\prime \prime}$ |  |  |  |  |  |  |  |
|  | $24^{\prime}$ | 0'-6' | 1'-9'' | $3^{\prime}-3^{\prime \prime}$ | 4'-9'' | 7'-0' | 8'-3'1 | 10'-0' | 11'-3' |  |  |  |  |  |  |
| 14" | $14^{\prime}$ | 0'-6' | $0^{\prime}-6{ }^{\prime \prime}$ | 0'-9'' | $1^{\prime}-0^{\prime \prime}$ | $1^{\prime}-0^{\prime \prime}$ | $1^{\prime}-6{ }^{\prime \prime}$ | $2^{\prime}-6{ }^{\prime \prime}$ | $3^{\prime}-3^{\prime \prime}$ | $3^{\prime}-9^{\prime \prime}$ | 4'-9'1 | $5^{\prime}-9^{\prime \prime}$ |  |  |  |
|  | $16^{\prime}$ | 0'-6' | $0^{\prime}-6{ }^{\prime \prime}$ | 0'-9'' | $1^{\prime}-0^{\prime \prime}$ | $2^{\prime}-0^{\prime \prime}$ | 2'-9'' | 4'-0'1 | $4^{\prime}-6{ }^{\prime \prime}$ | $5^{\prime}-0^{\prime \prime}$ | $6^{\prime}-3^{\prime \prime}$ | $7^{\prime}-3^{\prime \prime}$ |  |  |  |
|  | $18^{\prime}$ | 0'-6' | $0^{\prime}-6{ }^{\prime \prime}$ | $1^{\prime}-0^{\prime \prime}$ | $2^{\prime}-0^{\prime \prime}$ | $3^{\prime}-3^{\prime \prime}$ | 4'-3'1 | $5^{\prime}-3^{\prime \prime}$ | $6^{\prime}-0^{\prime \prime}$ | 6'-6' | $7{ }^{\prime}-9^{\prime \prime}$ |  |  |  |  |
|  | $20^{\prime}$ | 0'-6' | $0^{\prime}-6{ }^{\prime \prime}$ | 0'-9'' | $1^{\prime}-6{ }^{\prime \prime}$ | $3^{\prime}-0^{\prime \prime}$ | 4'-0'' | 5'-3'1 | $6^{\prime}-3^{\prime \prime}$ | 6'-9'' | 8'-6' |  |  |  |  |
|  | $22^{\prime}$ | 0'-6' | $0^{\prime}-6{ }^{\prime \prime}$ | 1'-6' | $2^{\prime}-9^{\prime \prime}$ | $4^{\prime}-3^{\prime \prime}$ | 5'-6" | $6^{\prime}-9^{\prime \prime}$ | 7'-9'' | 8'-3'1 | $10^{\prime}-0^{\prime \prime}$ |  |  |  |  |
|  | $24^{\prime}$ | 0'-6' | $1^{\prime}-0^{\prime \prime}$ | $2^{\prime}-3^{\prime \prime}$ | $3^{\prime}-6{ }^{\prime \prime}$ | $5^{\prime}-3^{\prime \prime}$ | $6^{\prime}-3{ }^{\prime \prime}$ | 7'-9'' | 8'-9'' | $9^{\prime}-3^{\prime \prime}$ | 10'-9' |  |  |  |  |
|  | $26^{\prime}$ | $0^{\prime}-6{ }^{\prime \prime}$ | $0^{\prime}-6{ }^{\prime \prime}$ | $1^{\prime}-0^{\prime \prime}$ | $2^{\prime}-6^{\prime \prime}$ | $4^{\prime}-6^{\prime \prime}$ | 5'-9'1 | $7^{\prime}-6^{\prime \prime}$ | 8'-6' | $9^{\prime}-3^{\prime \prime}$ | $11^{\prime}-3^{\prime \prime}$ |  |  |  |  |
|  | $28^{\prime}$ | 0'-6' | 0'-9' | $2^{\prime}-3^{\prime \prime}$ | $3^{\prime}-9^{\prime \prime}$ | 5'-9'' | 7'-0'1 | 8'-9'1 | 10'-0' | 10'-6' | $12^{\prime}-6^{\prime \prime}$ |  |  |  |  |
| $16^{\prime \prime}$ | $14^{\prime}$ | 0'-6' | $0^{\prime}-6{ }^{\prime \prime}$ | 0'-9'' | $1^{\prime}-0^{\prime \prime}$ | $1^{\prime}-0^{\prime \prime}$ | $1^{\prime}-0^{\prime \prime}$ | $1^{\prime}-0^{\prime \prime}$ | $1^{\prime}-0^{\prime \prime}$ | $1^{\prime}-3^{\prime \prime}$ | 2'-6' | $3^{\prime}-3^{\prime \prime}$ | $3^{\prime \prime}-6{ }^{\prime \prime}$ | $4^{\prime}-9^{\prime \prime}$ | $5^{\prime}-6^{\prime \prime}$ |
|  | $16^{\prime}$ | 0'-6' | $0^{\prime}-6{ }^{\prime \prime}$ | 0'-9'' | $1^{\prime}-0^{\prime \prime}$ | $1^{\prime}-0^{\prime \prime}$ | $1^{\prime}-0^{\prime \prime}$ | $1^{\prime}-6{ }^{\prime \prime}$ | $2^{\prime}-3^{\prime \prime}$ | 2'-9'' | $3^{\prime}-9^{\prime \prime}$ | $4^{\prime}-6^{\prime \prime}$ | 5'-0'' | $6^{\prime}-3^{\prime \prime}$ | 7'-0' |
|  | $18^{\prime}$ | 0'-6' | 0'-6' | 0'-9'' | $1^{\prime}-0^{\prime \prime}$ | $1^{\prime}-0^{\prime \prime}$ | $2^{\prime}-0^{\prime \prime}$ | $3^{\prime}-0^{\prime \prime}$ | $3^{\prime}-6^{\prime \prime}$ | $4^{\prime}-0^{\prime \prime}$ | 5'-3' | $6^{\prime}-0^{\prime \prime}$ | 6'-3' | 7'-6' |  |
|  | $20^{\prime}$ | 0'-6' | $0^{\prime}-6{ }^{\prime \prime}$ | 0'-9'' | $1^{\prime}-3^{\prime \prime}$ | $2^{\prime}-6{ }^{\prime \prime}$ | $3^{\prime}-3^{\prime \prime}$ | $4^{\prime}-3^{\prime \prime}$ | $5^{\prime}-0^{\prime \prime}$ | $5^{\prime}-6{ }^{\prime \prime}$ | $6^{\prime}-6^{\prime \prime}$ | 7'-6' | 7'-9'' | 9'-0'' |  |
|  | $22^{\prime}$ | $0^{\prime}-6{ }^{\prime \prime}$ | $0^{\prime}-6{ }^{\prime \prime}$ | 0'-9'' | $1^{\prime}-0^{\prime \prime}$ | $1^{\prime}-9^{\prime \prime}$ | 2'-9'1 | $4^{\prime}-0^{\prime \prime}$ | $4^{\prime}-9^{\prime \prime}$ | $5^{\prime}-3^{\prime \prime}$ | $6^{\prime}-9^{\prime \prime}$ | 7'-9' | $8^{\prime}-3^{\prime \prime}$ | 9'-9'1 |  |
|  | $24^{\prime}$ | 0'-6' | $0^{\prime}-6{ }^{\prime \prime}$ | 0'-9'' | $1^{\prime}-6{ }^{\prime \prime}$ | $3^{\prime}-0^{\prime \prime}$ | 4'-0'1 | 5'-3'1 | $6^{\prime}-0^{\prime \prime}$ | 6'-9'' | $8^{\prime}-0^{\prime \prime}$ | 9'-3' | 9'-9'' | 11'-3' |  |
|  | $26^{\prime}$ | 0'-6' | $0^{\prime}-6{ }^{\prime \prime}$ | 0'-9'' | $2^{\prime}-0^{\prime \prime}$ | $3^{\prime}-9^{\prime \prime}$ | 4'-9'1 | $6^{\prime}-0^{\prime \prime}$ | 7'-0' | 7'-6' | $9^{\prime}-0^{\prime \prime}$ | 10'-3' | 10'-6' | $12^{\prime}-3^{\prime \prime}$ |  |
|  | $28^{\prime}$ | 0'-6' | $0^{\prime}-6{ }^{\prime \prime}$ | 0'-9'' | $1^{\prime}-0^{\prime \prime}$ | 2'-6' | $3^{\prime}-6{ }^{\prime \prime}$ | $5^{\prime}-3^{\prime \prime}$ | $6^{\prime}-3^{\prime \prime}$ | 7'-0' | 8'-9'' | 10'-3' | 10'-9'' | 12'-9'' |  |
|  | $30^{\prime}$ | 0'-6' | $0^{\prime}-6{ }^{\prime \prime}$ | 0'-9'' | $1^{\prime}-9^{\prime \prime}$ | $3^{\prime}-9^{\prime \prime}$ | $5^{\prime}-0^{\prime \prime}$ | $6^{\prime}-6^{\prime \prime}$ | $7^{\prime}-6{ }^{\prime \prime}$ | 8'-3' | 10'-0'' | 11'-6' | 11'-9'' | $13^{\prime}-9^{\prime \prime}$ |  |
|  | $32^{\prime}$ | 0'-6' | $0^{\prime}-6{ }^{\prime \prime}$ | 0'-9'' | $1^{\prime}-0^{\prime \prime}$ | $2^{\prime}-3^{\prime \prime}$ | $3^{\prime}-6{ }^{\prime \prime}$ | 5'-6'' | 6'-9' | 7'-6' | $9^{\prime}-6{ }^{\prime \prime}$ | 11'-0'' | 11'-6" | 13'-9'' |  |
| 18" | $16^{\prime}$ | 0'-6' | $0^{\prime}-6{ }^{\prime \prime}$ | 0'-9'' | $1^{\prime}-0^{\prime \prime}$ | $1^{\prime}-0^{\prime \prime}$ | $1^{\prime}-0^{\prime \prime}$ | $1^{\prime}-0^{\prime \prime}$ | $1^{\prime}-0^{\prime \prime}$ | $1^{\prime}-0^{\prime \prime}$ | $1^{\prime}-6{ }^{\prime \prime}$ | $2^{\prime}-3^{\prime \prime}$ | 2'-6' | $3^{\prime}-6^{\prime \prime}$ | $4^{\prime}-6^{\prime \prime}$ |
|  | $18^{\prime}$ | 0'-6' | $0^{\prime}-6{ }^{\prime \prime}$ | 0'-9'' | $1^{\prime}-0^{\prime \prime}$ | 1'-0'' | $1^{\prime}-0^{\prime \prime}$ | $1^{\prime}-0^{\prime \prime}$ | $1^{\prime}-0^{\prime \prime}$ | 1'-6' | $2^{\prime}-6{ }^{\prime \prime}$ | $3^{\prime}-3^{\prime \prime}$ | 3'-9'' | 4'-9'' | 5'-9'' |
|  | $20^{\prime}$ | 0'-6' | $0^{\prime}-6{ }^{\prime \prime}$ | 0'-9'' | $1^{\prime}-0^{\prime \prime}$ | $1^{\prime}-0^{\prime \prime}$ | $1^{\prime}-0^{\prime \prime}$ | $1^{\prime}-9^{\prime \prime}$ | $2^{\prime}-3^{\prime \prime}$ | 2'-9'' | $3^{\prime}-9^{\prime \prime}$ | $4^{\prime}-9^{\prime \prime}$ | 5'-0' | $6^{\prime}-3^{\prime \prime}$ | 7'-3' |
|  | $22^{\prime}$ | 0'-6' | $0^{\prime}-6{ }^{\prime \prime}$ | 0'-9'' | $1^{\prime}-0^{\prime \prime}$ | 1'-0'' | $1^{\prime}-0^{\prime \prime}$ | 1'-0' | $1^{\prime}-6{ }^{\prime \prime}$ | 2'-0' | $3^{\prime}-6{ }^{\prime \prime}$ | $4^{\prime}-6{ }^{\prime \prime}$ | 4'-9' | $6^{\prime}-3^{\prime \prime}$ | 7'-6' |
|  | $24^{\prime}$ | $0^{\prime}-6{ }^{\prime \prime}$ | $0^{\prime}-6{ }^{\prime \prime}$ | 0'-9'' | $1^{\prime}-0^{\prime \prime}$ | $1^{\prime}-0^{\prime \prime}$ | $1^{\prime}-0^{\prime \prime}$ | $2^{\prime}-0^{\prime \prime}$ | $3^{\prime}-0^{\prime \prime}$ | $3^{\prime}-3^{\prime \prime}$ | 4'-9'1 | $5^{\prime}-9^{\prime \prime}$ | $6^{\prime}-3^{\prime \prime}$ | 7'-9'' | 8'-9'1 |
|  | $26^{\prime}$ | 0'-6' | 0'-6' | 0'-9'' | $1^{\prime}-0^{\prime \prime}$ | $1^{\prime}-0^{\prime \prime}$ | $1^{\prime}-0^{\prime \prime}$ | 2'-0'1 | $2^{\prime}-9^{\prime \prime}$ | 3'-3' | 4'-9'' | $6^{\prime}-0^{\prime \prime}$ | $6^{\prime}-3^{\prime \prime}$ | 8'-0'' | $9^{\prime}-3{ }^{\prime \prime}$ |
|  | $28^{\prime}$ | $0^{\prime}-6{ }^{\prime \prime}$ | $0^{\prime}-6{ }^{\prime \prime}$ | 0'-9'' | $1^{\prime}-0^{\prime \prime}$ | $1^{\prime}-0^{\prime \prime}$ | $1^{\prime}-0^{\prime \prime}$ | $1^{\prime}-3^{\prime \prime}$ | $2^{\prime}-3^{\prime \prime}$ | $3^{\prime}-0^{\prime \prime}$ | 4'-9'' | $6^{\prime}-0^{\prime \prime}$ | $6^{\prime}-6{ }^{\prime \prime}$ | $8^{\prime}-3^{\prime \prime}$ | $9^{\prime}-9^{\prime \prime}$ |
|  | $30^{\prime}$ | 0'-6' | $0^{\prime}-6{ }^{\prime \prime}$ | 0'-9'' | $1^{\prime}-0^{\prime \prime}$ | $1^{\prime}-0^{\prime \prime}$ | $1^{\prime}-0^{\prime \prime}$ | 2'-6' | $3^{\prime}-9^{\prime \prime}$ | 4'-3' | $6^{\prime}-0^{\prime \prime}$ | 7'-3' | 7'-9' | 9'-9'' | 11'-3' |
|  | $32^{\prime}$ | 0'-6' | 0'-6' | 0'-9'' | $1^{\prime}-0^{\prime \prime}$ | $1^{\prime}-0^{\prime \prime}$ | $1^{\prime}-0^{\prime \prime}$ | $1^{\prime}-0^{\prime \prime}$ | 1'-9'' | 2'-6" | 4'-6' | $6^{\prime}-0^{\prime \prime}$ | 6'-6' | 8'-9'1 | 10'-6' |
|  | $34^{\prime}$ | 0'-6' | $0^{\prime}-6{ }^{\prime \prime}$ | $0^{\prime}-9^{\prime \prime}$ | $1^{\prime}-0^{\prime \prime}$ | $1^{\prime}-0^{\prime \prime}$ | $1^{\prime}-0^{\prime \prime}$ | $1^{\prime}-0^{\prime \prime}$ | $2^{\prime}-0^{\prime \prime}$ | 2'-9'' | 4'-9'' | $6^{\prime}-6^{\prime \prime}$ | 7'-0' | $9^{\prime}-3^{\prime \prime}$ | 11'-3' |

NOTES:

1. Hole locations are based on uniform loads of 40 psf live and 10 or 20 psf dead, and worst case of simple or multiple spans from page 7.
2. For joist clear spans between those shown, check minimum distance for both spans adjacent to that span, and use the larger distance. Example: 7" diameter hole in 16" joist clear spanning $21^{\prime}-9{ }^{\prime \prime}$. At $20^{\prime}$, tabulated distance is $3^{\prime}-3^{\prime \prime}$; at 22 ', distance is $2^{\prime}-$ $9^{\prime \prime}$. Use $3^{\prime}-3^{\prime \prime}$ as minimum distance.
3. For multiple span applications, use longest span to determine permissible hole locations in either span.
4. Holes may be placed vertically anywhere in web, but a minimum clearance of $1 / 8^{\prime \prime}$ must be maintained from flange.
5. To determine locations for rectangular holes, multiply longest side of rectangular hole by 1.33 and use table to find location for that round hole diameter. Then add (round hole diameter - rectangular hole length) / 2. Example: for a rectangular hole 4" long and 6" high, the longest side is $6^{\prime \prime}$, so the round hole diameter to look up would be $1.33 \times 6$, or $8^{\prime \prime}$. Say the tabulated minimum distance for the $8^{\prime \prime}$ hole is $10^{\prime}-0$ ". Adding ( $8^{\prime \prime}-4^{\prime \prime}$ ) / 2 , or $2^{\prime \prime}$ gives a minimum distance of $10^{\prime}-2^{\prime \prime}$ for the rectangular hole.
6. Small holes ( $1 \frac{1}{2 \prime \prime}$ diameter and less) may be located anywhere in web if: A) Spaced a
minimum horizontal clear distance of 2 diameters, but no less than 1 ", from any hole, B) No more than 2 small holes are placed next to each other and/or adjacent to larger holes, and C) Adjacent groups of small holes are spaced a minimum horizontal clear distance of $12^{\prime \prime}$.
7. Holes larger than $1 \frac{1}{2} / 2$ diameter must meet the following requirements for minimum clear distance between holes: A) Two round holes - 2 times the larger hole diameter. B) A rectangular hole and a round hole -2 times the hole diameter or 2 times the rectangular hole width, whichever is greater.
8. Multiple round holes grouped closely together may be considered as a single hole circumscribing them.
9. For other conditions, or for more precise hole locations, use Doma Sizer ${ }^{\top M}$ software.

## EXAMPLE:

Determine the allowable location for an $8^{\prime \prime}$ round hole in an $117 / 8^{\prime \prime}$ BLI 60 joist spanning $17^{\prime}-4^{\prime \prime}$. In the leftmost column locate the joist depth of $11^{\prime} / 8^{\prime \prime}$. In the next column, find both the $16^{\prime}$ row and the $18^{\prime}$ row. Following the $16^{\prime}$ row across to the column for an $8^{\prime \prime}$ diameter hole yields a distance of $6^{\prime}-66^{\prime \prime}$. The $18^{\prime}$ row yields a distance of $8^{\prime}-0^{\prime \prime}$. The larger distance controls, so $8^{\prime}-0^{\prime \prime}$ is the minimum clear distance for an 8" round hole.

