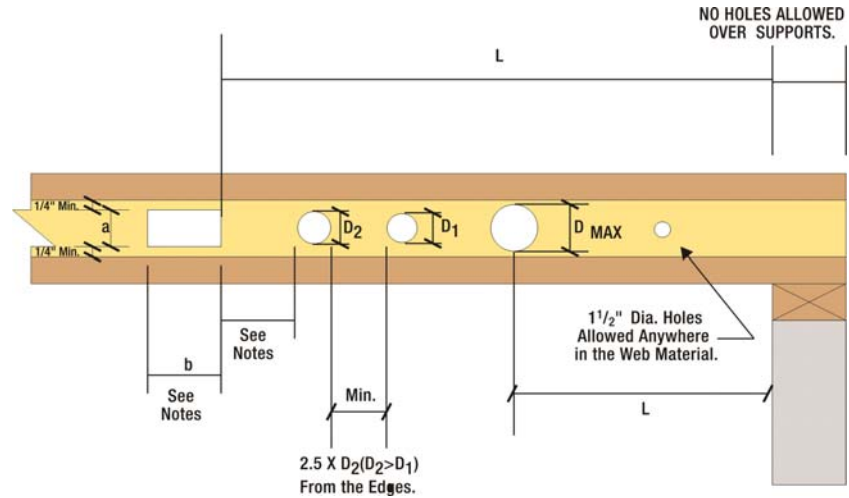


WEB HOLE SPECIFICATIONS

1. THE DISTANCE BETWEEN THE EDGE OF THE NEAREST SUPPORT AND THE CENTRELINE OF A ROUND HOLE SHALL NOT BE LESS THAN THAT SHOWN IN EITHER THE NJ OR NJH SERIES TABLES. THE DISTANCE BETWEEN THE EDGE OF THE NEAREST SUPPORT AND THE EDGE OF A RECTANGULAR/SQUARE HOLE SHALL NOT BE LESS THAN THAT SHOWN IN EITHER THE NJ OR NJH SERIES TABLES.
2. TABLES ARE BASED UPON MAXIMUM UNIFORMLY DISTRIBUTED SPECIFIED LOADS OF 40 PSF LIVE AND 25 PSF DEAD, AND ONLY APPLICABLE TO SIMPLE SPAN. HOLES MAY BE POSSIBLE UNDER CONDITIONS IN THE CELL MARKED AS "-" WITH FURTHER ANALYSIS BY A DESIGN PROFESSIONAL.
3. TABLES CAN BE USED FOR JOIST SPACING OF 24 INCHES OR LESS. JOIST SPANS IN HOLE TABLES HAVE NOT BEEN VERIFIED FOR THESE JOISTS AND ARE SHOWN FOR INFORMATIONAL PURPOSE ONLY. VERIFY THAT THE JOIST SELECTED WILL WORK FOR THE SPAN AND LOADING CONDITIONS NEEDED BEFORE CHECKING HOLE LOCATION.
4. THE MAXIMUM SIZE ROUND OR RECTANGULAR HOLE PERMITTED TO BE INSTALLED IN THE WEBS SHALL LEAVE A MINIMUM OF 1/4-INCH OF WEB MATERIAL BETWEEN THE TOP AND BOTTOM OF THE HOLE AND THE ADJACENT FLANGE.
5. THE MAXIMUM LENGTH OF A RECTANGULAR HOLE, MEASURED PARALLEL TO FLANGES, SHALL BE 1-1/2 TIMES THE HOLE HEIGHT.
6. A 1-1/2-INCH DIAMETER ROUND HOLE CAN BE INSTALLED ANYWHERE IN THE WEB EXCEPT DIRECTLY OVER A SUPPORT. SEE NOTE 7 FOR FURTHER INSTRUCTIONS RELATED TO INSTALLING MULTIPLE HOLES.
7. WHEN INSTALLING MULTIPLE HOLES IN THE WEB THE SPACING BETWEEN THE EDGES OF THE HOLES MUST BE AS FOLLOWS:
 - A. THE SPACING REQUIRED BETWEEN THE EDGES OF ROUND HOLES MUST BE 2-1/2 TIMES THE DIAMETER OF THE LARGEST HOLE.
 - B. THE SPACING REQUIRED BETWEEN THE EDGES OF RECTANGULAR HOLES MUST BE 5 TIMES THE LENGTH OF THE LARGEST HOLE.
 - C. THE SPACING BETWEEN THE EDGES OF A ROUND AND RECTANGULAR HOLE MUST BE 5 TIMES THE LENGTH OF THE LARGEST HOLE OR 5TIMES THE DIAMETER OF THE ROUND HOLE, WHICHEVER IS GREATER.
8. DO NOT CUT OR NICK FLANGES WHEN CUTTING HOLES IN THE WEB.
9. WHENEVER POSSIBLE, INSTALLED HOLES SHALL BE CENTERED VERTICALLY IN THE WEB.
10. CUTTING A RADIUS ON THE CORNERS OF A RECTANGULAR HOLE IS RECOMMENDED.
11. FOR SPANS THAT ARE INTERMEDIATE TO THOSE GIVEN IN THE TABLE, THE USER MUST SELECT THE GREATER DISTANCE OF THE TWO ADJUCENT SPANS.

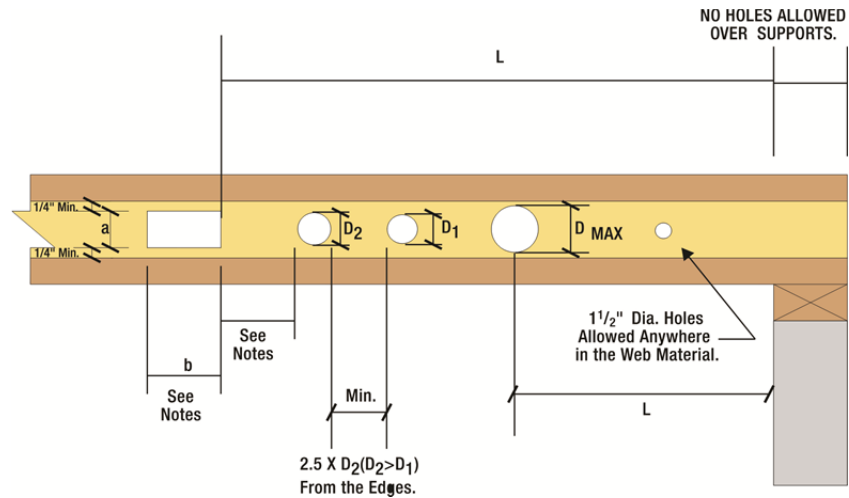
NJ SERIES – ALLOWABLE ROUND HOLE LOCATIONS



Simple Span for Live Loads up to 40 psf and Dead Loads up to 25 psf

Joist Series	Clear Span (ft)	Hole Diameter (in.)									
		2	2 1/2	3	3 1/2	4	4 1/2	5	5 1/2	6	6 3/8
		Minimum Distance from The Inside Edge of The Support to Center of The Hole (ft-in)									
NJ10	6	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"					
	8	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"					
	10	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"					
	12	1'-0"	1'-0"	1'-0"	1'-2"	1'-8"					
	14	1'-0"	1'-5"	1'-10"	2'-3"	2'-9"					
	16	2'-1"	2'-6"	2'-11"	3'-4"	3'-10"					
NJ12	6	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"
	8	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"
	10	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"
	12	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-2"	1'-7"
	14	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-5"	1'-10"	2'-3"	2'-8"
	16	1'-0"	1'-0"	1'-1"	1'-4"	1'-8"	2'-1"	2'-6"	2'-11"	3'-5"	3'-9"
	18	1'-7"	1'-10"	2'-1"	2'-5"	2'-9"	3'-2"	3'-7"	4'-0"	4'-6"	4'-11"
	20	2'-8"	2'-11"	3'-2"	3'-6"	3'-10"	4'-3"	4'-8"	5'-2"	5'-8"	6'-1"

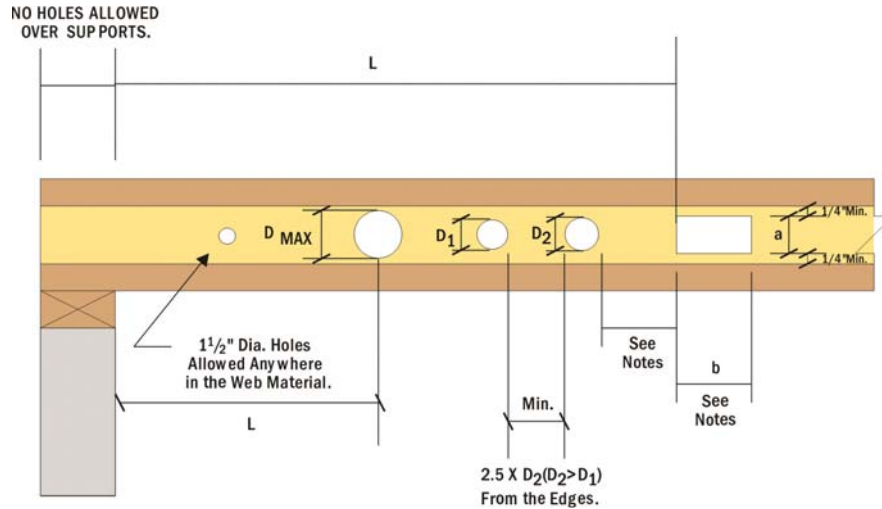
NJ SERIES – ALLOWABLE RECTANGULAR HOLE LOCATIONS



Simple Span for Live Loads up to 40 psf and Dead Loads up to 25 psf

Joist Series	Clear Span (ft)	Hole Height (in.)										
		2	2 1/2	3	3 1/2	4	4 1/2	5	5 1/2	6	6 3/8	
Minimum Distance from The Inside Edge of The Support to Edge of The Hole (ft-in)												
NJ10	6	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"						
	8	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"						
	10	1'-0"	1'-0"	1'-1"	1'-4"	1'-6"						
	12	1'-4"	1'-9"	2'-2"	2'-5"	2'-7"						
	14	2'-5"	2'-11"	3'-3"	3'-6"	3'-8"						
	16	3'-6"	4'-0"	4'-5"	4'-8"	4'-10"						
NJ12	6	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"
	8	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-2"
	10	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-2"	1'-6"	1'-9"	2'-1"	2'-3"	
	12	1'-0"	1'-0"	1'-0"	1'-5"	1'-10"	2'-3"	2'-7"	2'-11"	3'-2"	3'-5"	
	14	1'-1"	1'-7"	2'-1"	2'-6"	2'-11"	3'-4"	3'-8"	4'-0"	4'-4"	4'-7"	
	16	2'-2"	2'-8"	3'-2"	3'-8"	4'-1"	4'-6"	4'-10"	5'-2"	5'-6"	5'-9"	
	18	3'-3"	3'-9"	4'-3"	4'-9"	5'-3"	5'-8"	6'-0"	6'-4"	6'-8"	6'-11"	
	20	4'-4"	4'-11"	5'-5"	5'-11"	6'-4"	6'-10"	7'-2"	7'-7"	7'-11"	8'-1"	

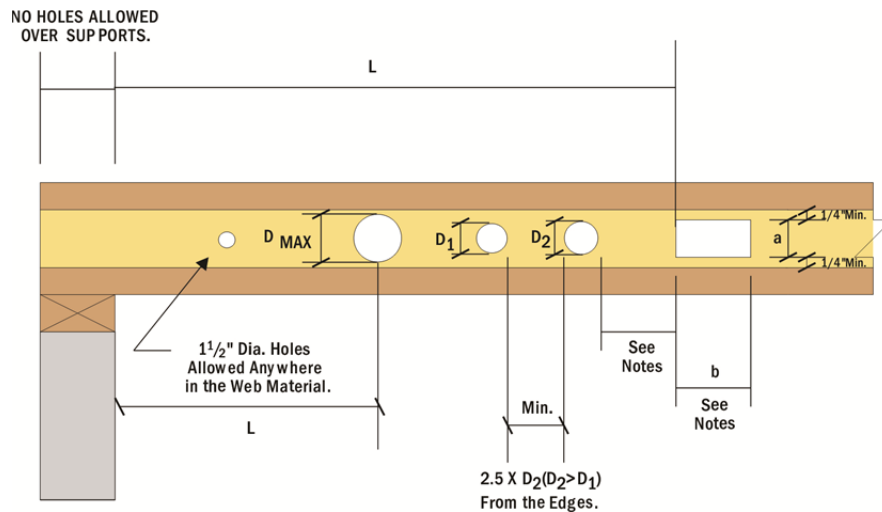
NJH SERIES – ALLOWABLE ROUND HOLE LOCATIONS



Simple Span for Live Loads up to 40 psf and Dead Loads up to 25 psf

Joist Series	Clear Span (ft)	Hole Diameter (in.)											
		2	4	5	6	7	8 3/8	9	10	10 1/2	11	12	12 1/2
Minimum Distance from The Inside Edge of The Support to Center of The Hole (ft-in)													
NJH10	10	1'-0"	1'-0"	1'-0"	1'-7"								
	12	1'-0"	1'-5"	2'-0"	2'-8"								
	14	1'-0"	2'-6"	3'-2"	3'-9"								
	16	2'-1"	3'-7"	4'-3"	4'-11"								
	18	3'-2"	4'-8"	5'-5"	6'-1"								
NJH12	10	1'-0"	1'-0"	1'-0"	1'-0"	1'-2"	1'-8"						
	12	1'-0"	1'-0"	1'-2"	1'-9"	2'-3"	2'-9"						
	14	1'-0"	1'-8"	2'-3"	2'-10"	3'-4"	3'-10"						
	16	1'-2"	2'-9"	3'-5"	4'-0"	4'-6"	5'-0"						
	18	2'-3"	3'-10"	4'-6"	5'-1"	5'-8"	6'-2"						
	20	3'-4"	4'-11"	5'-8"	6'-3"	6'-10"	7'-4"						
NJH14	12	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-7"	2'-2"	3'-3"	3'-10"			
	14	1'-0"	1'-0"	1'-0"	1'-0"	1'-5"	2'-8"	3'-3"	4'-5"	5'-0"			
	16	1'-0"	1'-0"	1'-0"	1'-7"	2'-5"	3'-9"	4'-5"	5'-7"	6'-2"			
	18	1'-0"	1'-2"	1'-10"	2'-8"	3'-7"	4'-11"	5'-7"	6'-9"	7'-4"			
	20	1'-0"	2'-2"	2'-11"	3'-9"	4'-8"	6'-1"	6'-9"	7'-11"	8'-7"			
	22	1'-11"	3'-3"	4'-0"	4'-11"	5'-10"	7'-3"	7'-11"	9'-1"	9'-9"			
	24	3'-0"	4'-4"	5'-2"	6'-0"	6'-11"	8'-5"	9'-1"	10'-4"	11'-0"			
NJH16	12	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-4"	1'-9"	2'-3"	2'-7"	2'-10"	3'-3"	3'-6"
	14	1'-0"	1'-0"	1'-0"	1'-0"	1'-6"	2'-5"	2'-10"	3'-5"	3'-8"	3'-11"	4'-5"	4'-8"
	16	1'-0"	1'-0"	1'-1"	1'-10"	2'-7"	3'-6"	3'-11"	4'-7"	4'-10"	5'-1"	5'-7"	5'-10"
	18	1'-0"	1'-3"	2'-1"	2'-11"	3'-8"	4'-8"	5'-1"	5'-8"	6'-0"	6'-3"	6'-9"	7'-0"
	20	1'-0"	2'-4"	3'-2"	4'-0"	4'-10"	5'-10"	6'-3"	6'-10"	7'-2"	7'-5"	8'-0"	8'-3"
	22	1'-7"	3'-5"	4'-4"	5'-2"	5'-11"	7'-0"	7'-5"	8'-1"	8'-4"	8'-8"	9'-2"	9'-5"
	24	2'-7"	4'-6"	5'-5"	6'-3"	7'-1"	8'-2"	8'-7"	9'-3"	9'-7"	9'-10"	10'-4"	10'-7"
	26	3'-8"	5'-8"	6'-7"	7'-5"	8'-3"	9'-4"	9'-9"	10'-5"	10'-9"	11'-0"	11'-7"	11'-10"

NJH SERIES – ALLOWABLE RECTANGULAR HOLE LOCATIONS



Simple Span for Live Loads up to 40 psf and Dead Loads up to 25 psf

Joist Series	Clear Span (ft)	Hole Height (in.)											
		2	4	5	6	7	8 3/8	9	10	10 1/2	11	12	12 1/2
		Minimum Distance from The Inside Edge of The Support to Edge of The Hole (ft-in)											
NJH10	10	1'-0"	1'-6"	2'-3"	2'-10"								
	12	1'-0"	2'-7"	3'-4"	4'-0"								
	14	1'-10"	3'-9"	4'-6"	5'-2"								
	16	2'-11"	4'-11"	5'-8"	6'-4"								
	18	4'-0"	6'-1"	6'-11"	7'-7"								
NJH12	10	1'-0"	1'-0"	1'-7"	2'-4"	2'-11"	3'-7"						
	12	1'-0"	1'-10"	2'-9"	3'-6"	4'-1"	4'-9"						
	14	1'-0"	2'-11"	3'-10"	4'-8"	5'-3"	5'-11"						
	16	1'-11"	4'-1"	5'-0"	5'-10"	6'-6"	7'-2"						
	18	3'-0"	5'-3"	6'-2"	7'-0"	7'-8"	8'-4"						
	20	4'-1"	6'-4"	7'-4"	8'-2"	8'-10"	-						
NJH14	12	1'-0"	1'-0"	1'-3"	2'-1"	2'-11"	3'-10"	4'-2"	4'-8"	4'-10"			
	14	1'-0"	1'-5"	2'-4"	3'-3"	4'-0"	5'-0"	5'-4"	5'-10"	6'-1"			
	16	1'-0"	2'-5"	3'-5"	4'-4"	5'-2"	6'-2"	6'-7"	7'-1"	7'-3"			
	18	1'-4"	3'-7"	4'-7"	5'-6"	6'-4"	7'-4"	7'-9"	8'-3"	-			
	20	2'-4"	4'-8"	5'-9"	6'-8"	7'-7"	8'-7"	8'-11"	-	-			
	22	3'-5"	5'-10"	6'-10"	7'-10"	8'-9"	9'-9"	10'-2"	-	-			
	24	4'-6"	6'-11"	8'-0"	9'-0"	9'-11"	11'-0"	11'-4"	-	-			
NJH16	12	1'-0"	1'-0"	1'-0"	1'-10"	2'-9"	3'-9"	4'-2"	4'-8"	4'-11"	5'-1"	5'-3"	-
	14	1'-0"	1'-0"	2'-0"	3'-0"	3'-10"	4'-11"	5'-4"	5'-10"	6'-1"	6'-3"	-	-
	16	1'-0"	1'-11"	3'-1"	4'-1"	5'-0"	6'-1"	6'-6"	7'-1"	7'-3"	-	-	-
	18	1'-0"	3'-0"	4'-2"	5'-3"	6'-2"	7'-4"	7'-9"	8'-3"	-	-	-	-
	20	1'-6"	4'-1"	5'-4"	6'-5"	7'-4"	8'-6"	8'-11"	-	-	-	-	-
	22	2'-6"	5'-3"	6'-5"	7'-7"	8'-7"	9'-8"	10'-2"	-	-	-	-	-
	24	3'-7"	6'-4"	7'-7"	8'-9"	9'-9"	10'-11"	11'-4"	-	-	-	-	-
	26	4'-8"	7'-6"	8'-9"	9'-11"	10'-11"	12'-1"	-	-	-	-	-	-