

## NAILING REQUIREMENTS

TJI JOISTS AT BEARINGS: TWO 8D (2 ½") BOX NAILS (1 EACH SIDE), 1 ½" MINIMUM FROM END.  
BLOCKING PANELS, RIM JOIST OR RIM BOARD TO BEARING PLATE:  
TJI BLOCKING PANELS OR RIM JOIST: 10D (3") BOX NAILS AT 6" O.C.  
TRUSS JOIST RIM BOARD: TOENAIL WITH 10D (3") BOX NAILS AT 6" O.C. OR 16D (3 ½") BOX NAILS AT 12" O.C.  
SHEAR TRANSFER CONNCTIONS EQUIVALENT TO DECKING NAIL SCHEDULE.

RIM BOARD, RIM JOIST OR CLOSURE TO TJI JOIST:  
1 ¼" WIDTH OR LESS: TWO 10D (3") BOX NAILS, ONE EACH AT TOP AND BOTTOM FLANGE.  
TJI EACH AT TOP AND BOTTOM FLANGE.  
TWO 16D (3 ½") BOX NAILS, ONE EACH AT TOP AND BOTTOM FLANGE.  
TJI / PRO 550 & 400C RIM JOIST: TOENAIL JOIST TO RIM JOIST WITH ONE 10D(3") BOX NAIL EACH SIDE OF JOIST TOP FLANGE. / PRO 130, 350, 100C & 300C RIM JOIST.

2" x 4" MINIMUM SQUASH BLOCKS: TWO 10D (3") BOX NAILS, ONE EACH AT TOP AND BOTTOM FLANGE.



**DO NOT allow workers to walk on joists until braced.**

**WARNING**  
Joists are unstable until braced laterally  
**Bracing Includes:**

Blocking  
Sheathing  
Hangers  
Rim Board  
Strut  
Lines  
Rim Joist

**WARNING NOTES:**

Lack of proper bracing during construction can result in serious accidents. Under normal conditions if the following guidelines are observed, accidents will be avoided.

1. INSTALL ALL BLOCKING, HANGERS, RIM BOARDS AND RIM JOISTS AT TJI JOIST END SUPPORTS.

2. ESTABLISH A PERMANENT DECK (SHEATHING), NAILED TO THE FIRST 4 FEET OF JOISTS AT THE END OF THE BAY OR BRACED END WALL.

3. SAFETY STRUT LINES OF 1 x 4 (MINIMUM) MUST BE NAILED TO A BRACED END WALL OR SHEATHED AREA.

4. SHEATHING MUST BE PROPERLY NAILED TO EACH TJI JOIST BEFORE ADDITIONAL LOADS CAN BE PLACED ON THE SYSTEM.

5. ENDS OF CANTILEVERS REQUIRE STRUT LINES ON BOTH THE TOP AND BOTTOM FLANGES.

6. TJI JOIST FLANGES MUST REMAIN STRAIGHT WITH A TOLERANCE OF ½" FROM TRUE ALIGNMENT.

WARNING DO NOT ALLOW WORKMENT ON TJI (GNI) ROSEBERG RFP JOISTS UNTIL ALL BLOCKING, RIM JOISTS, HANGERS, AND TEMPORARY BRACING ARE COMPLETED IN ACCORDANCE WITH THE INFORMATION PROVIDED BELOW:

IMPROPER CONCERN FOR BRACING DURING CONSTRUCTION CAN RESULT IN SERIOUS ACCIDENTS. UNDER NORMAL CONDITIONS IF THE FOLLOWING GUIDELINES ARE OBSERVED ACCIDENTS MAY BE AVOIDED:

1. A LATERAL STRENGTH, LIKE A BRACED END WALL OR AN EXISTING DECK MUST BE ESTABLISHED AT THE ENDS OF OF THE BAY. THIS CAN ALSO BE ACCOMPLISHED BY A TEMPORARY OR PERMANENT DECK (SHEATHING) NAILED TO THE FIRST 4 FEET OF JOISTS AT THE END OF THE BAY.

2. ALL BLOCKING, HANGERS AND RIM JOISTS AT THE END SUPPORTS OF THE TJI, GNI AND OR RFP JOISTS MUST BE COMPLETELY INSTALLED AND PROPERLY NAILED.

3. TEMPORARY STRUTS OF 1 X 4 MINIMUM MUST BE NAILED TO THE BRACE END WALL OR SHEATHED AREA AS IN 1 ABOVE AND TO EACH JOIST AT THE ON-CENTER SPACING AS NOTED. WITHOUT THIS BRACING, BUCKLING SIDEWAYS OR ROLLOVER IS HIGHLY PROBABLE UNDER LIGHT CONSTRUCTION LOADS - LIKE TWO WORKMEN AND ONE LAYER OF SHEATHING.

4. SHEATHING MUST BE TOTALLY ATTACHED TO TJI, GNI OR RFP JOISTS BEFORE ADDITIONAL LOADS CAN BE PLACED ON THE SYSTEM.

5. ENDS OF CANTILEVERS REQUIRE STRUT LINES ON BOTH THE TOP AND BOTTOM FLANGES.

6. THE TOP FLANGES MUST REMAIN STRAIGHT WITHIN A TOLERANCE OF ½" FROM TRUE ALIGNMENT.

## ROUGH CARPENTRY NOTES:

1. ALL DIMENSIONAL FRAMING LUMBER SHALL BE STRESS GRADED, KILN DRIED, DOUGLAS FIR, SOUTHERN PINE OR EQUAL (MEET OR EXCEED). ALL JOISTS AND RAFTER SIZES AND SPACING SHALL MEET OR EXCEED THE MINIMUM LOCAL BUILDING CODE REQUIREMENTS FOR LOAD CARRYING CAPACITY.  
NOTE: HEMLOCK FRAMING MEMBERS ARE NOT ACCEPTABLE.

2. DIMENSIONAL LUMBER:  
JOISTS / HEADERS / RAFTERS - #2 DOUGLAS FIR, SOUTHERN PINE (1350 PSI) MINIMUM FLEXURAL STRESS) BLOCKING / BRACING / STIFF BACKS, ETC. #3 D.F. OR S.P.

3. A. EXTERIOR WALLS:  
#2 DOUGLAS FIR OR SOUTHERN PINE / 2" x 6" @ 16" O.C. (STUD GRADE FIR) TREATED MUD SILL TO SET ON SILL SEALER.

B. INTERIOR PARTITIONS:  
#2 DOUGLAS FIR OR SOUTHERN PINE / 2" x 4" STUDS @ 16" O.C. (SEE PLANS FOR 6" LOAD BEARING PARTITIONS 2" x 6" STUDS @ 16" O.C. STUD GRADE FIR.

D. ROOF FRAMING:  
SEE PLANS

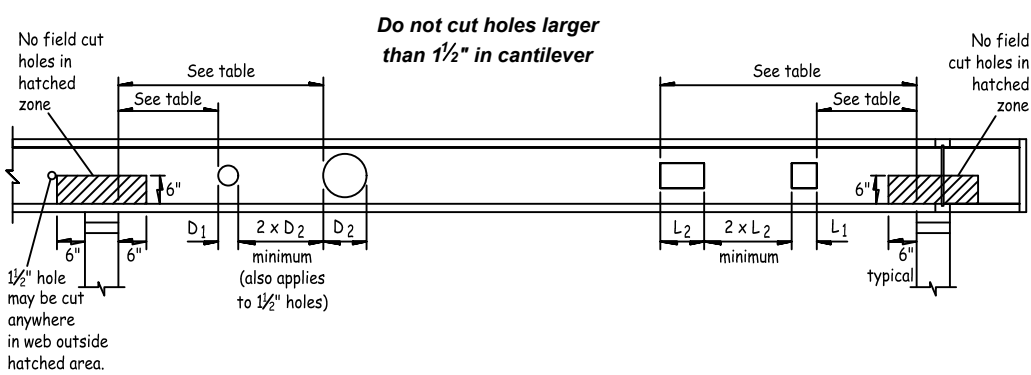
E. ENGINEERED LUMBER  
2.0E LP GANG LAM LVL  
INSTALL PER MANUFACTURER'S SPECIFICATIONS

G. SHEATHING:  
THICKNESS AS NOTED ON DRAWINGS (½" MINIMUM)  
T & G CDX EXTERIOR RATED WALL SHEATHING  
COVERED WITH TYPAR HOUSE WRAP

H. EXTERIOR CLADDING:  
VINYL SIDING WITH INTEGRAL INSULATION BACKING  
COLOR TO BE SELECTED BY OWNER

I. EXTERIOR TRIM:  
FASCIA BOARDS: AZEK TRIM BOARD  
SOFFITS: VENTED VINYL  
ALUM. DRIP EDGE

## ALLOWABLE HOLES - TJI® Joists

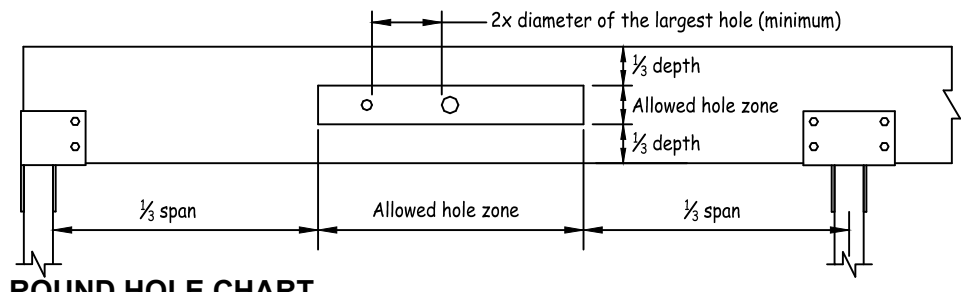


**Minimum Distance from Inside Face of Any Support to Nearest Edge of Hole**  
For other load conditions or hole configurations not included in this table, refer to TJI-Beams software or contact your Trus Joist representative.

JOIST DEPTH	TJI®Pro™	ROUND HOLE SIZE												SQUARE OR RECTANGULAR HOLE SIZE											
		2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"	2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"
9 1/2"	100TS	1-6"	2-0"	2-6"	3-0"	3-6"	4-0"	4-6"	5-0"	5-6"	6-0"	6-6"	7-0"	1-6"	2-0"	2-6"	3-0"	3-6"	4-0"	4-6"	5-0"	5-6"	6-0"	6-6"	7-0"
	130	2-0"	3-0"	3-6"	4-6"	7-0"								2-0"	3-0"	4-0"	4-6"	6-0"	7-0"						
	150	2-0"	3-0"	3-6"	4-6"	6-6"								2-0"	3-0"	4-0"	4-6"	6-0"	6-6"						
	250	2-0"	3-0"	4-6"	5-6"	7-0"								2-0"	3-0"	4-6"	6-0"	6-6"	7-0"						
	350	1-6"	3-6"	5-6"	6-6"	7-0"								1-6"	3-6"	5-6"	6-6"	6-6"	7-0"						
	100C	1-6"	2-0"	2-6"	3-6"	4-6"								1-6"	2-0"	3-0"	4-0"	4-6"	4-6"						
11 1/2"	300C	2-6"	3-0"	4-0"	5-0"	6-0"								2-0"	3-0"	4-0"	5-0"	5-0"	6-0"						
	400C	2-0"	3-0"	4-0"	5-6"	7-6"								3-0"	4-0"	5-6"	7-0"	7-6"							
	100TS	1-6"	1-6"	2-0"	2-6"	3-0"	3-6"	4-0"	4-6"	5-0"	5-6"	6-0"	6-6"	1-6"	2-0"	3-0"	4-0"	4-6"	6-6"	7-0"	7-6"	8-0"	8-6"	9-0"	9-6"
	130	1-6"	2-0"	2-6"	3-6"	4-6"	4-6"	5-0"	5-6"	6-0"	6-6"	7-0"	7-6"	1-6"	2-0"	3-6"	5-0"	7-0"	8-0"	8-6"	9-0"	9-6"	10-0"	10-6"	11-0"
	150	1-6"	1-6"	2-0"	3-0"	4-6"	6-6"	6-6"	6-6"	7-0"	7-6"	8-0"	8-6"	1-6"	2-0"	3-6"	5-0"	7-0"	8-0"	8-6"	9-0"	9-6"	10-0"	10-6"	11-0"
	250	1-6"	1-6"	2-6"	4-0"	5-6"	6-6"	6-6"	6-6"	6-6"	6-6"	6-6"	6-6"	1-6"	2-6"	4-0"	5-6"	6-6"	6-6"	6-6"	6-6"	6-6"	6-6"	6-6"	6-6"
14"	350	1-6"	1-6"	2-6"	3-6"	4-6"	5-6"	6-6"	6-6"	6-6"	6-6"	6-6"	6-6"	1-6"	2-6"	3-6"	4-6"	5-6"	6-6"	6-6"	6-6"	6-6"	6-6"	6-6"	6-6"
	550	1-6"	1-6"	2-6"	3-6"	4-6"	5-6"	6-6"	6-6"	6-6"	6-6"	6-6"	6-6"	1-6"	2-6"	3-6"	4-6"	5-6"	6-6"	6-6"	6-6"	6-6"	6-6"	6-6"	6-6"
	100C	1-6"	1-6"	2-6"	3-6"	4-6"	5-6"	6-6"	6-6"	6-6"	6-6"	6-6"	6-6"	1-6"	2-6"	3-6"	4-6"	5-6"	6-6"	6-6"	6-6"	6-6"	6-6"	6-6"	6-6"
	300C	1-6"	1-6"	2-6"	3-6"	4-6"	5-6"	6-6"	6-6"	6-6"	6-6"	6-6"	6-6"	1-6"	2-6"	3-6"	4-6"	5-6"	6-6"	6-6"	6-6"	6-6"	6-6"	6-6"	6-6"
	400C	1-6"	1-6"	2-6"	3-6"	4-6"	5-6"	6-6"	6-6"	6-6"	6-6"	6-6"	6-6"	1-6"	2-6"	3-6"	4-6"	5-6"	6-6"	6-6"	6-6"	6-6"	6-6"	6-6"	6-6"
	130	1-6"	1-6"	1-6"	1-6"	2-6"	3-6"	4-6"	5-6"	6-6"	6-6"	6-6"	6-6"	1-6"	2-6"	3-6"	4-6"	5-6"	6-6"	6-6"	6-6"	6-6"	6-6"	6-6"	6-6"
16"	250	1-6"	1-6"	1-6"	1-6"	2-6"	3-6"	4-6"	5-6"	6-6"	6-6"	6-6"	6-6"	1-6"	1-6"	1-6"	2-6"	3-6"	4-6"	5-6"	6-6"	6-6"	6-6"	6-6"	6-6"
	350	1-6"	1-6"	1-6"	1-6"	2-6"	3-6"	4-6"	5-6"	6-6"	6-6"	6-6"	6-6"	1-6"	1-6"	1-6"	2-6"	3-6"	4-6"	5-6"	6-6"	6-6"	6-6"	6-6"	6-6"
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	130	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"
18"	250	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"
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	400C	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"
	130	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"
20"	250	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"
	350	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"
	100C	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"
	300C	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"
	400C	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"
	130	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"	1-6"

- Leave ½" web at top and bottom of hole. **DO NOT** cut joist flanges.
- Table is based on uniform load tables in current design literature.
- For simple span (5 foot minimum) uniformly loaded joists not requiring commercial concentrated loads, one maximum size round hole may be located at the center of the joist span **provided no other holes occur in the joist**.

## ALLOWABLE HOLES - Beams and Headers

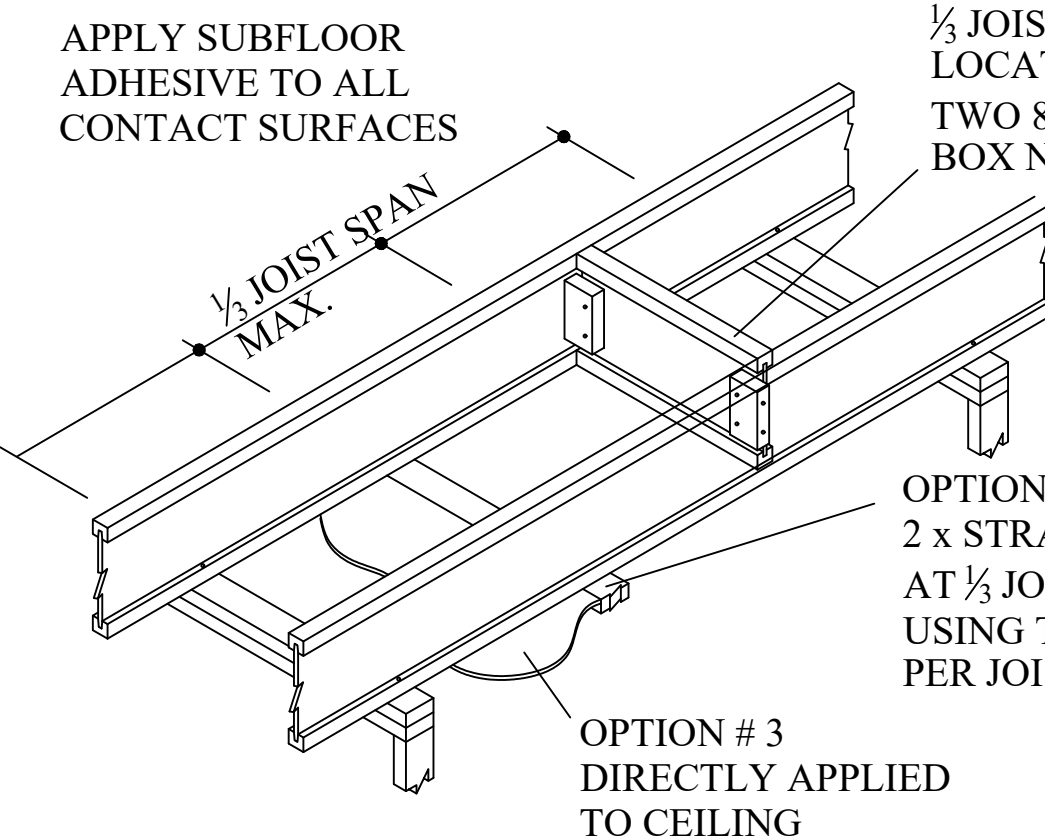
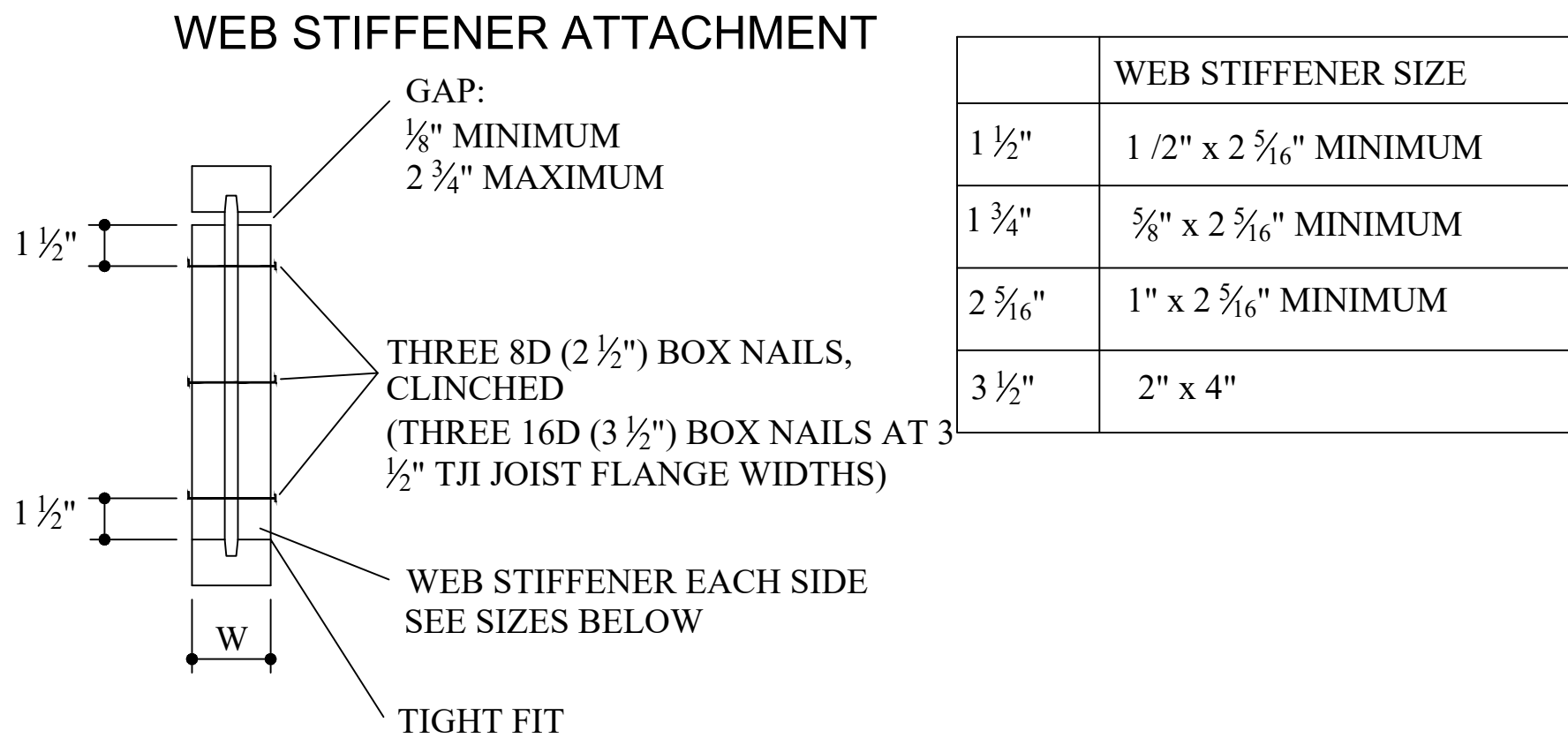
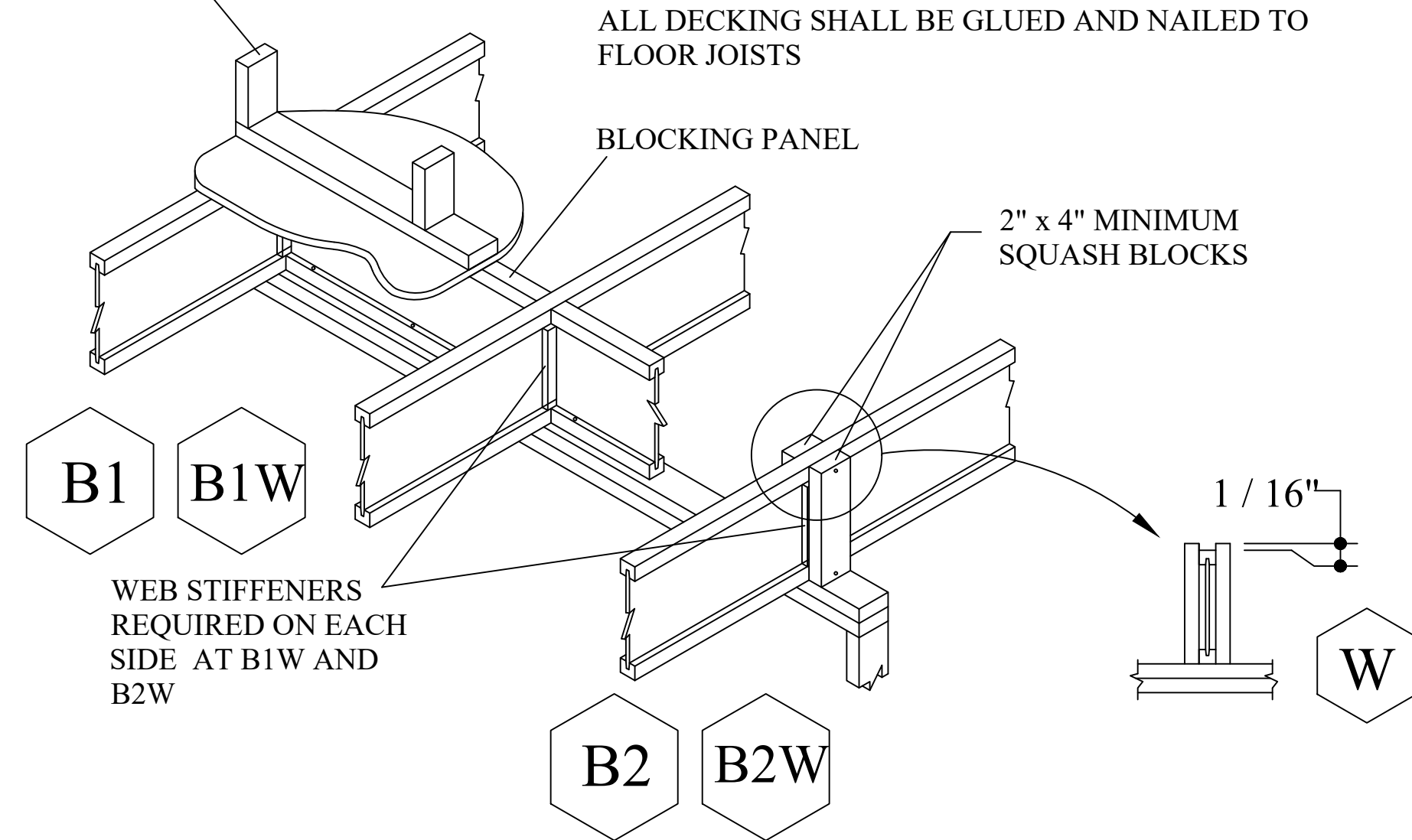


BEAM DEPTH	MAXIMUM ROUND HOLE SIZE
4 1/2"	1"
5 1/2"	1 1/4"
7 1/2" to 20"	2"

See illustration for Allowed Hole Zone

- For uniformly loaded beams only.
- Rectangular holes are not allowed.
- Holes in cantilevers require additional analysis.

LOADING BEARING OR SHEAR WALL ABOVE  
(WALLS MUST STACK OVER WALL BELOW)



OPTION #1:  
TJI JOIST BLOCKING WITH  
END BLOCKS INSTALLED AT  
½ JOIST SPAN  
LOCATIONS USING  
TWO 8D (2 ½")  
BOX NAILS, TYPICAL

OPTION #2  
2 x STRAPPING INSTALLED  
AT ½ JOIST SPAN LOCATIONS  
USING TWO 2 ½" SCREWS  
PER JOIST

OPTION # 3  
DIRECTLY APPLIED  
TO CEILING

**PB1** ONE OR MORE OF THE THREE BRACING  
OPTIONS SHOWN MUST BE INSTALLED

## BRIDGING / BLOCKING DETAIL



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NOTATION 'ALTERED BY' FOLLOWED BY HIS  
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