TABLE R602.3(1)
FASTENER SCHEDULE FOR STRUCTURAL MEMBERS

DESCRIPTION OF BUILDING ELEMENTS		NUMBER AND TYPE OF FASTENER[a,b,c,d]	SPACING OF FASTENERS
Joist to sill or girder, toe nail		3-8d	—
1" × 6" subfloor or less to each joist, face nail		2-8d 2 staples, $1^3/_4$	— —
2" subfloor to joist or girder, blind and face nail		2-16d	—
Sole plate to joist or blocking, face nail		16d	16" o.c.
Top or sole plate to stud, end nail		2-16d	—
Stud to sole plate, toe nail		3-8d or 2-16d	—
Double studs, face nail		10d	24" o.c.
Double top plates, face nail		10d	24" o.c.
Sole plate to joist or blocking at braced wall panels		3-16d	16" o.c.
Double top plates, minimum 48-inch offset of end joints, face nail in lapped area		8-16d	—
Blocking between joists or rafters to top plate, toe nail		3-8d	—
Rim joist to top plate, toe nail		8d	6" o.c.
Top plates, laps at corners and intersections, face nail		2-10d	—
Built-up header, two pieces with $1/_2$" spacer		16d	16" o.c. along each edge
Continued header, two pieces		16d	16" o.c. along each edge
Ceiling joists to plate, toe nail		3-8d	—
Continuous header to stud, toe nail		4-8d	—
Ceiling joist, laps over partitions, face nail		3-10d	—
Ceiling joist to parallel rafters, face nail		3-10d	—
Rafter to plate, toe nail		2-16d	—
1" brace to each stud and plate, face nail		2-8d 2 staples, $1^3/_4$	— —
1" x 6" sheathing to each bearing, face nail		2-8d 2 staples, $1^3/_4$	— —
1" x 8" sheathing to each bearing, face nail		2-8d 3 staples, $1^3/_4$	— —
Wider than 1" x 8" sheathing to each bearing, face nail		3-8d 4 staples, $1^3/_4$	— —
Built-up corner studs		10d	24" o.c.
Built-up girders and beams, 2-inch lumber layers		10d	Nail each layer as follows: 32" o.c. at top and bottom and staggered. Two nails at ends and at each splice.
2" planks		2-16d	At each bearing
Roof rafters to ridge, valley or hip rafters: toe nail face nail		4-16d 3-16d	— —
Rafter ties to rafters, face		3-8d	—
Wood structural panels, subfloor, roof and wall sheathing to framing, and particleboard wall sheathing to framing			
$^5/_{16}$-$^1/_2$	6d common nail (subfloor, wall) 8d common nail (roof)[f]	6	12[g]
$^{19}/_{32}$ -1	8d common nail	6	12[g]
$1^1/_8$-$1^1/_4$	10d common nail or 8d deformed nail	6	12

(continued)

TABLE R602.3(1)—continued
FASTENER SCHEDULE FOR STRUCTURAL MEMBERS

DESCRIPTION OF BUILDING MATERIALS	DESCRIPTION OF FASTENER[b,c,d,e]	SPACING OF FASTENERS	
		Edges (inches)[i]	Intermediate supports[c,e] (inches)
Other wall sheathing[h]			
$^1/_2$" regular cellulosic fiberboardsheathing	$1^1/_2$ galvanized roofing nail 6d common nail staple 16 ga., $1^1/_2$ long	3	6
$^1/_2$ structural cellulosic fiberboard sheathing	$1^1/_2$ galvanized roofing nail 8d common nail staple 16 ga., $1^1/_2$ long	3	6
$^{25}/_{32}$ structural cellulosic fiberboard sheathing	$1^3/_4$ galvanized roofing nail 8d common nail staple 16 ga., $1^3/_4$ long	3	6
$^1/_2$ gypsum sheathing	$1^1/_2$ galvanized roofing nail; 6d common nail; staple galvanized, $1^1/_2$ long; $1^1/_4$ screws, Type W or S	4	8
$^5/_8$ gypsum sheathing	$1^3/_4$ galvanized roofing nail; 8d common nail; staple galvanized, $1^5/_8$ long; $1^5/_8$ screws, Type W or S	4	8
Wood structural panels, combination subfloor underlayment to framing			
$^3/_4$ and less	6d deformed nail or 8d common nail	6	12
$^7/_8$-1	8d common nail or 8d deformed nail	6	12
$1^1/_8$-$1^1/_4$	10d common nail or 8d deformed nail	6	12

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 mile per hour = 1.609 km/h.

a. All nails are smooth-common, box or deformed shanks except where otherwise stated.

b. Staples are 16 gage wire and have a minimum $^7/_{16}$-inch on diameter crown width.

c. Nails shall be spaced at not more than 6 inches on center at all supports where spans are 48 inches or greater.

d. Four-foot-by-8-foot or 4-foot-by-9-foot panels shall be applied vertically.

e. Spacing of fasteners not included in this table shall be based on Table R602.3(1).

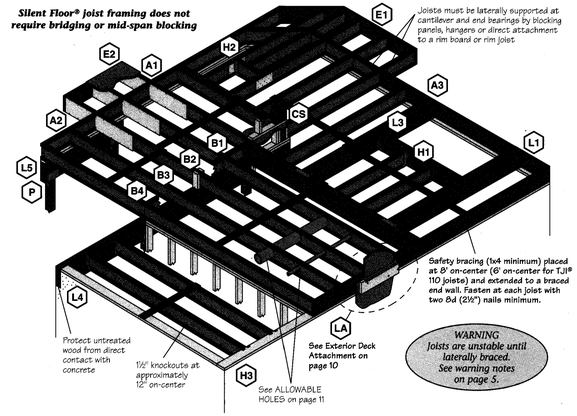
f. For regions having basic wind speed of 110 mph or greater, 8d deformed nails shall be used for attaching plywood and wood structural panel roof sheathing to framing within minimum 48-inch distance from gable end walls, if mean roof height is more than 25 feet, up to 35 feet maximum.

g. For regions having basic wind speed of 100 mph or less, nails for attaching wood structural panel roof sheathing to gable end wall framing shall be spaced 6 inches on center When basic wind speed is greater than 100 mph, nails for attaching panel roof sheathing to intermediate supports shall be spaced 6 inches on center for minimum 48-inch distance from ridges, eaves and gable end walls; and 4 inches on center to gable end wall framing.

h. Gypsum sheathing shall conform to ASTM C 79 and shall be installed in accordance with GA 253. Fiberboard sheathing shall conform to either AHA 194.1 or ASTM C 208.

i. Spacing of fasteners on floor sheathing panel edges applies to panel edges supported by framing members and at all floor perimeters only. Spacing of fasteners on roof sheathing panel edges applies to panel edges supported by framing members and at all roof plane perimeters. Blocking of roof or floor sheathing panel edges perpendicular to the framing members shall not be required except at intersection of adjacent roof planes. Floor and roof perimeter shall be supported by framing members or solid blocking.

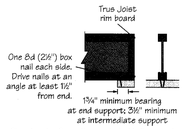
Silent Floor® joist framing does not require bridging or mid-span blocking



WARNING
Joists are unstable until laterally braced. See warning notes on page 5.

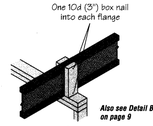
TJI® Joist Nailing Requirements at Bearing

TJI® Joist to Bearing Plate



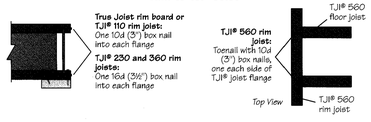
***Shear transfer:** Connections equivalent to floor panel nailing schedule*

Squash Blocks to TJI® Joist
(Load bearing wall above)

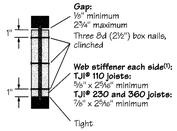


Also see Detail B2 on page 9

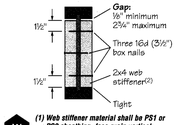
Rim to TJI® Joist



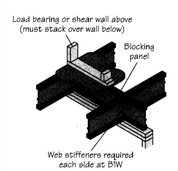
Web Stiffener Attachment



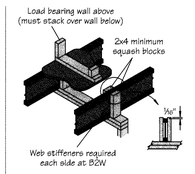
TJI® 560 joists only



W *(1) Web stiffener material shall be PS1 or PS2 sheathing, face grain vertical*
(2) 2x4 construction grade or better

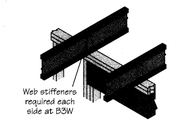


B1 **B1W**

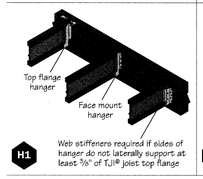


B2 **B2W** ***Blocking panels may be required with shear walls above or below—see detail B1***

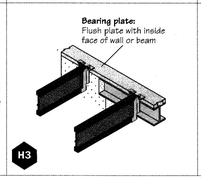
Intermediate Bearing – No Load Bearing Wall Above



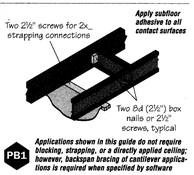
B3 **B3W** ***Blocking panels may be required with shear walls above or below—see detail B1***



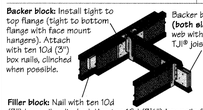
H1



H3



PB1 ***Applications shown in this guide do not require blocking, strapping, or a directly applied ceiling; however, backspan bracing of cantilever applications is required when specified by software***

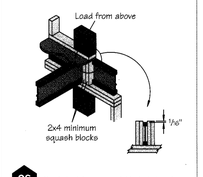


H2 ***With top flange hangers, backer block required only for downward loads exceeding 250 lbs or for uplift conditions***

Filler and Backer Block Sizes

TJI®	110		230 or 360		560	
Depth	9½" or 11⅞"	14"	9½" or 11⅞"	14" or 16"	11⅞"	14" or 16"
Filler Block* (Detail H2)	2x6	2x8	2x6 + ½" sheathing	2x8 + ½" sheathing	Two 2x6	Two 2x8
Cantilever Filler (Detail E4)	2x6 4'-0" long	2x10 6'-0" long	2x6 + ½" sheathing 4'-0" long	2x10 + ¼" sheathing 6'-0" long	Not applicable	
Backer Block* (Detail F1 or H2)	¼" or ¾"		1" net		2x6	2x8

** If necessary, increase filler and backer block height for face mount hangers and maintain ¼" gap at top of joist; see detail W. Filler and backer block dimensions should accommodate required nailing without splitting.*



CS ***Use 2x4 minimum squash blocks to transfer load around TJI® joist***

Fastening of Floor Panels to TJI® Joist Flanges and Trus Joist Rim Board

Nail Size	Closest On-Center Spacing per Row			
	TJI®		Trus Joist Rim Board	
	110	230, 360, and 560	1"	1¼"
8d (2½") box	2½"	2"	6"	4"
8d (2½") common	3½"	2"	6"	4"
10d (3"), 12d (3¼") box	3"	2"	6"	4"
10d (3"), 12d (3¼") common	4½"	3"	6"	4"
16d (3½") common	N.A.	4"	16"	6"(1)

(1) Can be reduced to 4" on-center with maximum nail penetration of 1¼" into the narrow edge.

General Notes

- Maximum spacing of nails is 18" on-center for TJI® 110 joists, and 24" on-center for TJI® 230, 360, and 560 joists.
- If more than one row of nails is used, the rows must be offset at least ½" and staggered.
- 14 ga. staples may be substituted for 8d (2½") nails if minimum penetration of 1" is achieved.
- Table also applies for the attachment of TJI® rim joists and blocking panels to the wall plate.

1 8–19–13 MISCELLANEOUS REVISIONS

NO	DATE	REVISIONS

PROPOSED NEW HOME FOR :

MR. & MRS. ILAN REICH

29 CLIVE HILL ROAD
SHORT HILLS, N.J. 07078

FASTENER NOTES AND FRAMING DETAILS
-

JAMES S. KARAS, ARCHITECT

27 BRIAR HILLS CIRCLE
SPRINGFIELD, N.J. 07081
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JAMES S. KARAS
N.J. C-09697

DATE	JOB NO
JULY 14, 2013	13-0606
SCALE: AS NOTED	DWN. BY: J.K.
DWG. NO: A-10	
CHECKED: J.K.	12 OF 12