TWELFTH PRINTING (Updated December 6, 2016)

CHAPTER 23 WOOD

TABLE 2306.6

ALLOWABLE SHEAR VALUES (plf) FOR WIND OR SEISMIC LOADING ON SHEAR WALLS OF FIBERBOARD SHEATHING BOARD CONSTRUCTION FOR TYPE V CONSTRUCTION ONLY a, b, c,

THICKNESS AND GRADE	FASTENER SIZE	ALLOWABLE SHEAR VAI (pounds per linear foot) NAIL SPACING AT PANE EDGES (inches) ^a		foot) PANEL
		4	3	2
1/" 25/22"	No. 11 gage galvanized roofing nail 1-1/2" long for 1/2", 1-3/4" long for 25/32" with 3/8" head	170	230	260
½" or 25/32" Structural	No. 44 16 gage galvanized stable, 7/16" crown	150	200	225
	No. 44 16 gage galvanized stable, 1" crown	220	290	325

SIXTH PRINTING (Updated October 3, 2012)

CHAPTER 23 WOOD

TABLE 2308.10.3(2) (Correct title as follows:)

RAFTER SPANS FOR COMMON LUMBER SPECIES (Roof Live Load = 20 pounds per square foot, Ceiling Not Attached to Rafters, L/\(\Delta\) = 240) (No change to table)

THIRD PRINTING (Updated February 18, 2011)

CHAPTER 23 WOOD

TABLE 2306.7

ALLOWABLE SHEAR FOR WIND OR SEISMIC FORCES FOR SHEAR WALLS OF LATH AND PLASTER OR GYPSUM BOARD WOOD FRAMED WALL ASSEMBLIES

TYPE OF MATERIAL	THICKNESS OF MATERIAL	WALL CONSTRUCTION	FASTENER SPACING ^b MAXIMUM (inches)	SHEAR VALUE ^{a,e} (plf)	MINIMUM FASTENER SIZE ^{c,d,j,k}
3.Gypsum sheathing	½" x 2' <u>x 8'</u>	<u>Unblocked</u>	<u>4</u>	<u>75</u>	No. 11 gage, 1 ¾" long, 7/16" head,
Sheathing	½" x 4'	Blocked ^d Unblocked	<u>4</u> <u>7</u>	<u>175</u> 100	diamond-point, galvanized 16 Ga. Galv. Stable, 1 3/4" long
	<u>5/8" x 4'</u>	<u>Blocked</u>	4" edge/ 7" field	<u>200</u>	6d galvanized 0.120" Nail, min. 3/8" head, 1 ¾" long

Remainder of Table unchanged.

2009 International Building Code Errata

(Portions of text and tables not shown are unaffected by the errata)

THIRD PRINTING (Updated December 14, 2010)

CHAPTER 23 WOOD

Errata Note: An erratum was issued for the 2nd printing that was corrections for large portions of this table. Portions of the table not shown were to remain unchanged. Unfortunately, in the 3rd printing this erratum was used to replace the table rather than just modify it. Rows for 3/8" and 7/16" Structural I Sheathing were left out of the 3rd printing only. These rows are correct in the 1st ad 2nd printings. Therefore, the following is an errata to the 3rd printing only.

TABLE 2306.3
ALLOWABLE SHEAR (POUNDS PER FOOT) FOR WOOD STRUCTURAL PANEL SHEAR WALLS WITH FRAMING OF DOUGLAS-FIR-LARCH, OR SOUTHERN PINE a FOR WIND OR SEISMIC LOADING b, h, i, j, I

PANEL GRADE	MINIMUM NOMINAL	MINIMUM FASTENER	PANELS APPLIED DIRECT TO FRAMING			PANELS A or 5/8" GY						
	PANEL THICKNESS (inch)	PENETRA- TION IN FRAMING (inches)	NAIL (common or	nmon panel edges			(common or	Fastener spacing at panel edges (inches)				
		(inches)	galvanized box) or staple size ^k	6	4	3	2e	galvanized box) or staple size ^k	6	4	3	2e
Structural Sheathing	<u>3/8</u>	<u>1 3/8</u>	8d (2-1/2" x 0.131" common, 2-1/2" x 0.113" galvanized box)	23 0 ^d	360 d	460 d	610 d	10d (3" x 0.148" common, 3" x 0.128" galvanized box)	<u>28</u> <u>0</u>	43 0	<u>550</u>	<u>73</u> <u>0</u>
		<u>1</u>	1 ½ 16 Gage	<u>15</u> <u>5</u>	<u>235</u>	<u>315</u>	<u>400</u>	2 16 Gage	<u>15</u> <u>5</u>	<u>23</u> <u>5</u>	310	<u>40</u> <u>0</u>
	<u>7/16</u>	<u>1 3/8</u>	8d (2-1/2" x 0.131" common, 2-1/2" x 0.113" galvanized box)	25 5 ^d	395 d	505 d	670 d	10d (3" x 0.148" common, 3" x 0.128" galvanized box)	<u>28</u> <u>0</u>	<u>43</u> <u>0</u>	550 f	73 0
		1	1 ½ 16 Gage	<u>17</u> <u>0</u>	<u>260</u>	<u>345</u>	<u>440</u>	2 16 Gage	<u>15</u> <u>5</u>	<u>23</u> <u>5</u>	<u>310</u>	<u>40</u> <u>0</u>
	15/32	1 3/8	8d (2-1/2" x 0.131" common, 2-1/2" x 0.113" galvanized box)	28 0	430	550	730	10d (3" x 0.148" common, 3" x 0.128" galvanized box)	0	0	550	73
		1	1 ½ 16 Gage	18 5	280	375	475	2 16 Gage	15 5	23 5	300	40 0
		1 1/2	10d (3" x	34	510	665f	870		_	_	_	—

0.14	8" 0				
comm	non,				
3" x 0.					
galvar	ized				
box	()				

(Portions of table not shown remain as indicated in the errata to the 2nd edition)

2009 International Building Code Errata

(Portions of text and tables not shown are unaffected by the errata)

SECOND PRINTING (Updated March 22, 2010)

CHAPTER 23 WOOD

2303.2.4 Labeling. Fire-retardant-treated lumber and wood structural panels shall be labeled. The *label* shall contain the following items:

- 1. The identification *mark* of an *approved agency* in accordance with Section 1703.5.
- 2. Identification of the treating manufacturer.
- 3. The name of the fire-retardant treatment.
- 4. The species of wood treated.
- 5. Flame spread and smoke-developed index.
- 6. Method of drying after treatment.
- 7. Conformance with appropriate standards in accordance with Sections <u>2303.2.2</u> <u>2303.2.5</u> through <u>2303.2.5</u> 2303.2.8.
- 8. For *fire-retardant-treated wood* exposed to weather, damp or wet locations, include the words "No increase in the *listed* classification when subjected to the Standard Rain Test" (ASTM D 2898).

TABLE 2306.3 ALLOWABLE SHEAR (POUNDS PER FOOT) FOR WOOD STRUCTURAL PANEL SHEAR WALLS WITH FRAMING OF DOUGLAS FIR-LARCH OR SOUTHERN PINE FOR WIND SEISMIC LOADING b, h, l, j, l

	MINIMUM	MINIMUM	PANELS APPLIED DIRECT TO FRAMING					PANELS APPLIED OVER ½" OR 5/8" GYPSUM SHEATHING				8"	
PANEL GRADE			galvanized box) or			spacir ges (inc		NAIL (common or		Fastener spacing at pan e edges (inches			
			staple size ^{k*}	6 6	4	3	2 ^e	galvanized box) or staple size ^k	6	4	3	2 ^e	
Structural I sheathing	15/32	1 ½	10d (3" x 0.148" common. 3" x 0.128" galvanized box)	340	510	665 ^f	870	10d (3" x 0.148" common. 3" x 0.128" galvanized box)	-1		-1		
	5/16° or 1/4°		6d (2"x0.113" common, 2"x0.099" galvanized box)	180	270	350	450	8d (2 ½" x 0.131" common, 2 ½" x 0.113" galvanized box)	180	270	350	450	
		1	1 ½ 16 Gage	145	220	295	375	2 16 Gage	110	165	220	285	
		<u>1 ¼</u>	6d (2"x0.113" common, 2"x0.099" galvanized box)	<u>200</u>	<u>300</u>	<u>390</u>	<u>510</u>		<u>200</u>	<u>300</u>	<u>390</u>	<u>510</u>	
Sheathing, plywood siding ^{g e}	<u>3/8</u>	<u>1 3/8</u>	8d (2 ½" x 0.131" common, 2 ½" x 0.113" galvanized box)	220 ^d	320 ^d	410 ^d	530 ^d	10d (3" x 0.148" common, 3" x 0.128" galvanized box)	<u>260</u>	<u>380</u>	490 ^f	640	
except		<u>1</u>	1 ½ 16 Gage	140	<u>210</u>	<u>280</u>	<u>360</u>	<u>2 16 Gage</u>	140	210	280	360	
Group 5 species	<u>7/16</u>	<u>1 3/8</u>	8d (2 ½" x 0.131" common, 2 ½" x 0.113" galvanized box)	240 ^d	350 ^d	450 ^d	<u>585</u> ^d	10d (3" x 0.148" common, 3" x 0.128" galvanized box)				640	
		<u>1</u>	<u>1 ½ 16 Gage</u>	<u>155</u>	<u>230</u>	<u>310</u>	<u>395</u>	<u> 2 16 Gage</u>	140	210	280	360	
	45/22	<u>1 3/8</u>	8d (2 ½" x 0.131" common, 2 ½" x 0.113" galvanized box)	<u>260</u>	<u>380</u>	<u>490</u>	<u>640</u>	10d (3" x 0.148" common, 3" x 0.128" galvanized box)	260	380	490 ^f	640	
<u>15/32</u>		1 ½	10d (3" x 0.148" common, 3" x 0.128" galvanized box)	310	<u>460</u>	600 ^f	<u>770</u>	=	- 1	-1	- 1	<u> </u>	

2009 International Building Code Errata

(Portions of text and tables not shown are unaffected by the errata)

	1	1 ½ 16 Gage	170	255	335	430	2 16 Gage	140	210	280	360
			170	200	<u> </u>	430	<u> 2 10 Gaye</u>	140	210	200	300
		10d (3" x 0.148"									
	1 ½	common,					_				
<u>19/32</u>	1 /2	3" x 0.128" galvanized			,		-				
		box)	340	<u>510</u>	665 ^t	<u>870</u>				-	_
	<u>1</u>	1 3/4 16 Gage	185	<u>280</u>	<u>375</u>	<u>475</u>	<u>=</u>		_	-	_
		Nail Size (galvanized					Nail Size (galvanized				
		casing)					<u>casing)</u>				
5/16 ^c	1 1/4	6d (2" x 0.099")	140	210	275	360	8d (2 ½" x 0.113")	140	210	275	360
3/8 ^c	1 3/8	8d (2 ½" x 0.113")	160	240	310	410	10d (3" x 0.128")	160	240	310 ¹	410

(Portions of table and notes not shown remain unchanged)

TABLE 2306.6 ALLOWABLE SHEAR VALUES (plf) FOR WIND OR SEISMIC LOADING ON SHEAR WALLS OF FIBERBOARD SHEATHING BOARD CONSTRUCTION FOR TYPE V CONSTRUCTION ONLY a, b, c,

	u, c					
THICKNESS AND GRADE	FASTENER SIZE	ALLOWABLE SHEAR VALUE (pounds per linear foot) NAIL SPACING AT PANEL EDGES (inches) ^a				
		4	3	2		
½" or 25/32" Structural	No. 11 gage galvanized roofing nail 1-1/2" long for 1/2", 1-3/4" long for 25/32" with 3/8" head	170	230	260		

(Portions of table and notes not shown remain unchanged)

2308.11.2 Concrete or masonry. Concrete or masonry walls and stone or masonry veneer shall not extend above a basement.

Exceptions:

- 1. (no change)
- 2. (no change)
- 3. (no change)
 - 3.1. (no change)
 - 3.2. (no change)
- 3.3. Hold-down connectors shall be provided at the ends of each braced wall panel for the second story to first story connection with an allowable design of 2,000 pounds (8896 N). Hold-down connectors shall be provided at the ends of each braced wall panel for the first story to foundation connection with an allowable capacity of 3,900 pounds (17 347 N). In all cases, the hold-down connector force shall be transferred to the foundation.
 - 3.4. (no change)

FIRST PRINTING (Updated April 20, 2009)

CHAPTER 23 WOOD

TABLE 2306.2.1(1)

ALLOWABLE SHEAR (POUNDS PER FOOT) FOR WOOD STRUCTURAL PANEL DIAPHRAGMS WITH FRAMING OF DOUGLAS FIR-LARCH, OR SOUTHERN PINE FOR WIND OR SEISMIC LOADING^h

PANEL GRADE			MINIMAL NOMINAL PANEL THICKNESS (inch)
Sheathing, single floor and other grades	6d ^e (2" x 0.113")_	1 1/4	
covered in DOC PS 1 and PS 2	8d (2 1/2" x 0.131")	1 3/8	3/8
	1 ½ 16 Gage	1	

(Portions of table not shown are unchanged)