

**TABLE 2306.3.1a
RECOMMENDED SHEAR (POUNDS PER FOOT) FOR NAILED WOOD STRUCTURAL PANEL DIAPHRAGMS
WITH FRAMING OF SPRUCE-PINE-FIR (SPECIFIC GRAVITY = 0.42) FOR WIND OR SEISMIC LOADING**

PANEL GRADE	MINIMUM NOMINAL PANEL THICKNESS	COMMON NAIL SIZE	MINIMUM FASTENER PENETRATION IN FRAMING (inches)	MINIMUM NOMINAL WIDTH OF FRAMING MEMBER (inches)	BLOCKED DIAPHRAGMS Fastener spacing (inches) at diaphragm boundaries (all cases) at continuous panel edges parallel to load (Cases 3, 4), and at all panel edges (Cases 5 and 6) ^b				UNBLOCKED DIAPHRAGMS	
					6	4	2-1/2 ^c	2 ^c	Fasteners spaced 6" max. at supported edges ^b	
					Fastener spacing (inches) at other panel edges (Cases 1, 2, 3 and 4) ^b				Case 1 (No unblocked edges or continuous joints parallel to load)	All other configurations (Cases 2, 3, 4, 5 and 6)
					6	6	4	3		
Structural 1 Grades	5/16	6d ^e	1 1/4	2	0	0	0	0	0	0
				3	0	0	0	0	0	0
	3/8	8d	1 3/8	2	0	0	0	0	0	0
				3	0	0	0	0	0	0
	15/32	10d ^d	1 1/2	2	0	0	0	0	0	0
				3	0	0	0	0	0	0
Sheathing, Single Floor and Other Grades Covered in DOC PS I and PS 2	5/16	6d ^e	1 1/4	2	0	0	0	0	0	0
				3	0	0	0	0	0	0
	3/8	6d ^e	1 1/4	2	0	0	0	0	0	0
				3	0	0	0	0	0	0
		8d	1 3/8	2	0	0	0	0	0	0

PANEL GRADE	THICKNESS (inch)	LENGTH AND GAGE	SPACING IN FRAMING (inches)	MEMBER R (inches)	(Cases 1, 2, 3 and 4) ^b				S joints parallel to load)	(Cases 2, 3, 4, 5 and 6)
					6	6	4	3		
Structural 1 Grades Sheathing, Single Floor and Other Grades Covered in DOC PS I and PS 2	5/16	1 1/2	1	2	0	0	0	0	0	
		16 Gage		3	0	0	0	0	0	
	3/8	1 1/2	1	2	0	0	0	0	0	
		16 Gage		3	0	0	0	0	0	
	15/32	1 1/2	1	2	0	0	0	0	0	
	16 Gage		3	0	0	0	0	0	0	
For SI: 1 inch 25.4 mm, 1 pound per foot = 14.5939 N/m.										
For foot notes, see Table 2306.3.1										