



Table 9.3A
 Specified strength, stiffness, and rigidity capacities for
 standard constructions of regular grades of
 unsanded Douglas fir plywood (DFP)

Nominal thickness, mm	No. of plies	Bending, m_p , N*mm/mm		Axial tension, t_p , N/mm		Axial compression, p_p , N/mm		Shear through-thickness, v_{ps} , N/mm		Planar shear			
		Orientation of applied force relative to face grain								Bending, v_{ps} , N/mm		Shear in-plane, v_{pt} , MPa	
		0°	90°	0°	90°	0°	90°	0° and 90°	0° and 90°	0°	90°	0°	90°
7.5	3	180	38	97	23	130	40	20	3.7	1.2	0.72	0.72	
9.5	3*	270	51	97	27	130	46	24	3.9	1.3	0.55	0.72	
12.5	3	520	110	170	38	210	66	34	6.3	1.9	0.72	0.72	
	4*	420	130	97	55	130	96	30	5.5	2.8	0.55	0.72	
	5	560	200	130	71	170	79	30	7.3	3.7	0.72	0.72	
15.5	4	610	230	110	72	140	130	37	6.6	3.6	0.55	0.72	
	5*	770	280	130	71	170	79	36	9.4	4.9	0.72	0.72	
	6	730	310	130	71	170	79	36	6.9	4.1	0.55	0.55	
18.5	5	980	460	150	100	190	120	43	9.0	5.0	0.55	0.55	
	6*	930	430	130	71	170	79	43	8.5	5.1	0.55	0.55	
	7	1100	450	160	110	210	120	43	9.7	7.1	0.72	0.72	
20.5	5	1200	740	180	130	230	150	47	10.0	5.7	0.55	0.55	
	6	1100	550	130	71	170	79	47	9.5	5.8	0.55	0.55	
	7	1200	560	160	110	210	120	47	11.0	8.5	0.72	0.72	
22.5	8	1100	560	160	110	210	120	47	8.3	6.4	0.55	0.55	
	6	1500	790	230	110	300	130	52	15.0	7.0	0.72	0.55	
	7*	1300	640	170	110	210	130	51	12.0	9.8	0.72	0.72	
	8	1400	580	160	110	210	120	51	9.3	7.2	0.55	0.55	
	9	1500	730	200	140	250	160	51	12.0	8.8	0.72	0.72	

Table 9.3A (Concluded)

Nominal thickness, mm	No. of plies	Bending stiffness, $B_b = EI$, N·mm ² /mm		Axial stiffness (in tension or compression), $B_a = EA$, N/mm		Shear-through thickness rigidity, B_s , N/mm
		Orientation of applied force relative to face grain				
		0°	90°	0°	90°	0° and 90°
7.5	3	440 000	17 000	70 000	24 000	4 600
9.5	3*	840 000	27 000	70 000	28 000	5 500
12.5	3	2 100 000	79 000	120 000	39 000	7 800
	4*	1 700 000	190 000	70 000	57 000	6 900
	5	1 700 000	350 000	94 000	47 000	6 900
15.5	4	3 100 000	430 000	77 000	75 000	8 500
	5*	3 000 000	630 000	94 000	47 000	8 400
	6	3 000 000	760 000	94 000	47 000	8 400
18.5	5	4 600 000	1 300 000	110 000	69 000	9 800
	6*	4 600 000	1 300 000	94 000	47 000	9 800
	7	4 900 000	1 400 000	120 000	71 000	9 800
20.5	5	6 300 000	2 600 000	130 000	89 000	11 000
	6	5 800 000	1 900 000	94 000	47 000	11 000
	7	6 200 000	2 000 000	120 000	71 000	11 000
22.5	8	6 100 000	2 100 000	120 000	71 000	11 000
	6	8 400 000	3 200 000	160 000	75 000	12 000
	7*	7 600 000	2 500 000	120 000	75 000	12 000