

TABLE 5

RECOMMENDED MAXIMUM PRESSURES ON STRUCTURAL I PLYFORM (psf)^{(a)(b)} FACE GRAIN ACROSS SUPPORTS^(c)

Support Spacing (in.)	Plywood Performance Category															
	15/32		1/2		19/32		5/8		11/16		23/32		3/4		1-1/8	
8	890	890	980	980	1225	1225	1310	1310	1515	1515	1590	1590	1680	1680	2785	2785
12	360	395	410	435	545	545	580	580	675	675	705	705	745	745	1540	1540
16	155	205	175	235	245	305	270	330	325	380	350	400	375	420	835	865
19.2	–	115	100	135	145	190	160	215	195	260	210	275	230	290	545	600
24	–	–	–	–	–	100	–	110	105	135	110	150	120	160	310	385
32	–	–	–	–	–	–	–	–	–	–	–	–	–	–	145	190

(a) Deflection limited to 1/360th of the span, 1/270th where shaded.

(b) ACI recommends a minimum lateral design pressure of 600 C_w, but it need not exceed p = wh. (See Table 10.)

(c) Plywood continuous across two or more spans.

TABLE 6

RECOMMENDED MAXIMUM PRESSURES ON STRUCTURAL I PLYFORM (psf)^{(a)(b)} FACE GRAIN PARALLEL TO SUPPORTS^(c)

Support Spacing (in.)	Plywood Performance Category															
	15/32		1/2		19/32		5/8		11/16		23/32		3/4		1-1/8	
8	470	530	605	645	640	720	800	865	840	905	1190	1190	1275	1275	2640	2640
12	130	175	175	230	195	260	250	330	270	360	440	545	545	675	1635	1635
16	–	–	–	–	–	110	105	140	115	155	190	255	240	315	850	995
19.2	–	–	–	–	–	–	–	100	–	110	135	170	170	210	555	555
24	–	–	–	–	–	–	–	–	–	–	–	–	–	115	340	355

(a) Deflection limited to 1/360th of the span, 1/270th where shaded.

(b) ACI recommends a minimum lateral design pressure of 600 C_w, but it need not exceed p = wh. (See Table 10.)

(c) Plywood continuous across two or more spans.

sanded grades, use the tables for Plyform Class I. For unsanded grades use the Plyform Class I tables assuming Performance Category 15/32 Plyform for 32/16 span-rated panels, Performance Category 19/32 for 40/20 span rating and Performance Category 23/32 for 48/24 span rating.

Textured plywood has been used to obtain various patterns for architectural concrete. Many of these panels have some of the face ply removed due to texturing. Consequently, strength and stiffness will be reduced. As textured plywood is available in a variety of patterns and wood species, it is impossible to give exact factors for strength and stiffness reductions. For approximately equivalent strength, specify the desired grade in Group 1 species and determine the thickness assuming Plyform Class I. When Performance Category 3/8 textured plywood is used as a form liner, assume that the plywood backing must carry the entire load.

In some cases, it may be desirable to use two layers of plywood. The recommended pressures shown in Tables 3 through 6 are additive for more than one layer of the same approximate Performance Category.

Tables 3 through 6 are based on the plywood acting as a continuous beam which spans between joists or studs. No blocking is assumed at the unsupported panel edges. Under conditions of high moisture or sustained load to the panel however, edges may have greater deflection than the center of the panel and may exceed the calculated deflection unless panel edges are supported. For this reason, and to minimize differential deflection between adjacent panels, some form designers specify blocking at the unsupported edge, particularly when face grain is parallel to supports.