

## Curved Forms

Plyform can also be used for curved forms. The following radii have been found to be appropriate minimums for mill-run panels of the thicknesses shown when bent dry. Tighter radii can be developed by selecting panels that are free of knots and short grain, and/or by wetting or steaming. Occasionally, a panel may develop localized failure at these tighter radii.

### MINIMUM BENDING RADII

Plywood Performance Classification	Across the Grain (ft)	Parallel to Grain (ft)
1/4	2	5
5/16	2	6
3/8	3	8
1/2	6	12
5/8	8	16
3/4	12	20

## Recommended Pressures on Plyform

Recommended maximum pressures on Plyform Class I are shown in Tables 3 and 4. Tables 5 and 6 show pressures for Structural I Plyform. Calculations for these pressures were based on deflection limitations of 1/360th or 1/270th of the span, or shear or bending strength: whichever provided the most conservative (lowest load) value. Use unshaded columns for design of architectural concrete forms where appearance is important.

Though not manufactured specifically for concrete forming, grades of plywood other than Plyform have been used for forming when thin panels are needed for curved forms. The recommended pressures shown in Tables 3 and 4 give a good estimate of performance for sanded grades such as APA A-C Exterior and APA B-C Exterior, and unsanded grades such as APA Rated Sheathing Exterior and Exposure 1, provided face grain is across supports. For Group 1

TABLE 3

### RECOMMENDED MAXIMUM PRESSURES ON PLYFORM CLASS I (psf)<sup>(a)(b)</sup> FACE GRAIN ACROSS SUPPORTS<sup>(c)</sup>

Support Spacing (in.)	Plywood Performance Category															
	15/32		1/2		19/32		5/8		11/16		23/32		3/4		1-1/8	
8	885	885	970	970	1195	1195	1260	1260	1360	1360	1540	1540	1580	1580	2295	2295
12	355	395	405	430	540	540	575	575	660	660	695	695	730	730	1370	1370
16	150	200	175	230	245	305	265	325	320	370	345	390	370	410	740	770
19.2	–	115	100	135	145	190	160	210	190	255	210	270	225	285	485	535
24	–	–	–	–	–	100	–	110	100	135	110	145	120	160	275	340
32	–	–	–	–	–	–	–	–	–	–	–	–	–	–	130	170

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

(b) ACI recommends a minimum lateral design pressure of 600 C<sub>w</sub>, but it need not exceed p = wh. (See Table 10.)

(c) Plywood continuous across two or more spans.

TABLE 4

### RECOMMENDED MAXIMUM PRESSURES ON PLYFORM CLASS I (psf)<sup>(a)(b)</sup> FACE GRAIN PARALLEL TO SUPPORTS<sup>(c)</sup>

Support Spacing (in.)	Plywood Performance Category															
	15/32		1/2		19/32		5/8		11/16		23/32		3/4		1-1/8	
8	390	390	470	470	530	530	635	635	665	665	835	835	895	895	1850	1850
12	110	150	145	195	165	225	210	280	235	295	375	400	460	490	1145	1145
16	–	–	–	–	–	–	–	120	100	135	160	215	200	270	710	725
19.2	–	–	–	–	–	–	–	–	–	–	115	125	145	155	400	400
24	–	–	–	–	–	–	–	–	–	–	–	–	–	100	255	255

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

(b) ACI recommends a minimum lateral design pressure of 600 C<sub>w</sub>, but it need not exceed p = wh. (See Table 10.)

(c) Plywood continuous across two or more spans.