

You Know It's Right . . . When It's



## Phenolic Thickness Tolerances

Sheet Thickness Tolerances														
Nominal Thickness	All Glass Grades				All Paper Grades		CE Canvas Grade		C Canvas Grade		LE Linen Grade		L Linen Grade	
	fractions	inches	mm	inches	mm	inches	mm	inches	mm	inches	mm	inches	mm	
		+ / -		+ / -		+ / -		+ / -		+ / -		+ / -		
	0.010	0.254	0.0020	0.0508	0.0020	0.0508	-	-	-	-	-	-	0.0030	0.0762
1/64	0.015	0.381	0.0030	0.0762	0.0025	0.0635	-	-	-	-	0.0035	0.0889	0.0035	0.0889
	0.020	0.508	0.0040	0.1016	0.0030	0.0762	-	-	-	-	0.0040	0.1016	0.0040	0.1016
	0.025	0.635	0.0050	0.1270	0.0035	0.0889	0.0050	0.1270	-	-	0.0045	0.1143	0.0045	0.1143
1/32	0.031	0.787	0.0065	0.1651	0.0035	0.0889	0.0065	0.1651	0.0065	0.1651	0.0050	0.1270	0.0050	0.1270
3/64	0.047	1.194	0.0075	0.1905	0.0045	0.1143	0.0075	0.1905	0.0075	0.1905	0.0055	0.1397	0.0055	0.1397
			+ / -	+ / -	+ / -	+ / -	+ / -	+ / -	+ / -	+ / -	+ / -	+ / -	+ / -	+ / -
1/16	0.062	1.575	0.0075	0.1905	0.0050	0.1270	0.0075	0.1905	0.0075	0.1905	0.0060	0.1524	0.0060	0.1524
3/32	0.093	2.362	0.0090	0.2286	0.0070	0.1778	0.0090	0.2286	0.0090	0.2286	0.0070	0.1778	0.0070	0.1778
1/8	0.125	3.175	0.0120	0.3048	0.0080	0.2032	0.0100	0.2540	0.0100	0.2540	0.0080	0.2032	0.0080	0.2032
5/32	0.156	3.962	0.0150	0.3810	0.0090	0.2286	0.0120	0.3048	0.0120	0.3048	0.0090	0.2286	0.0090	0.2286
3/16	0.187	4.750	0.0190	0.4826	0.0100	0.2540	0.0125	0.3175	0.0125	0.3175	0.0100	0.2540	0.0100	0.2540
7/32	0.219	5.563	0.0210	0.5334	0.0110	0.2794	0.0140	0.3556	0.0140	0.3556	0.0110	0.2794	0.0110	0.2794
			+ / -	+ / -	+ / -	+ / -	+ / -	Plus Only	Plus Only	Plus Only	+ / -	Plus Only	Plus Only	Plus Only
1/4	0.250	6.350	0.0220	0.5588	0.0120	0.3048	0.0150	0.3810	0.0300	0.7620	0.0120	0.3048	0.0240	0.6096
5/16	0.312	7.925	0.0260	0.6604	0.0140	0.3556	0.0170	0.4318	0.0350	0.8890	0.0145	0.3683	0.0290	0.7366
3/8	0.375	9.525	0.0300	0.7620	0.0170	0.4318	0.0200	0.5080	0.0400	1.0160	0.0170	0.4318	0.0340	0.8636
7/16	0.438	11.125	0.0330	0.8382	0.0190	0.4826	0.0220	0.5588	0.0440	1.1176	0.0190	0.4826	0.0380	0.9652
1/2	0.500	12.700	0.0360	0.9144	0.0210	0.5334	0.0240	0.6096	0.0480	1.2192	0.0210	0.5334	0.0420	1.0668
5/8	0.625	15.875	0.0400	1.0160	0.0240	0.6096	0.0270	0.6858	0.0530	1.3462	0.0240	0.6096	0.0480	1.2192
			+ / -	+ / -	+ / -	+ / -	+ / -	Plus Only	Plus Only	Plus Only	+ / -	Plus Only	Plus Only	Plus Only
3/4	0.750	19.050	0.0430	1.0922	0.0270	0.6858	0.0290	0.7366	0.0580	1.4732	0.0270	0.6858	0.0540	1.3716
7/8	0.875	22.225	0.0460	1.1684	0.0300	0.7620	0.0310	0.7874	0.0620	1.5748	0.0300	0.7620	0.0600	1.5240
1	1.000	25.400	0.0490	1.2446	0.0330	0.8382	0.0330	0.8382	0.0650	1.6510	0.0330	0.8382	0.0650	1.6510
1 1/8	1.125	28.575	0.0530	1.3462	0.0350	0.8890	0.0350	0.8890	0.0690	1.7526	0.0350	0.8890	0.0690	1.7526
1 1/4	1.250	31.750	0.0550	1.3970	0.0370	0.9398	0.0370	0.9398	0.0730	1.8542	0.0370	0.9398	0.0730	1.8542
1 3/8	0.375	34.925	0.0580	1.4732	0.0390	0.9906	0.0390	0.9906	0.0770	1.9558	0.0390	0.9906	0.0770	1.9558
			+ / -	+ / -	+ / -	+ / -	+ / -	Plus Only	Plus Only	Plus Only	+ / -	Plus Only	Plus Only	Plus Only
1 1/2	1.500	38.100	0.0610	1.5494	0.0410	1.0414	0.0410	1.0414	0.0810	2.0574	0.0410	1.0414	0.0820	2.0828
1 5/8	1.625	41.275	0.0640	1.6256	0.0430	1.0922	0.0430	1.0922	0.0850	2.1590	0.0430	1.0922	0.0850	2.1590
1 3/4	1.750	44.450	0.0670	1.7018	0.0450	1.1430	0.0450	1.1430	0.0890	2.2606	0.0450	1.1430	0.0890	2.2606
1 7/8	1.875	47.625	0.0700	1.7780	0.0470	1.1938	0.0470	1.1938	0.0930	2.3622	0.0470	1.1938	0.0930	2.3622
2	2.000	50.800	0.0730	1.8542	0.0490	1.2446	0.0490	1.2446	0.0970	2.4638	0.0490	1.2446	0.0970	2.4638

### Sheet Tolerance Thickness:

At least 90% of the area of the sheet shall be within the tolerances listed above.

### Sheet Tolerance Length and Width:

The length and width of the manufactured sheet will be within +/- 1.000" \ 25.4mm of the nominal sheet size.

### Sheet Tolerance Warp and Twist:

In case of warp, the % is stated in terms of the lateral dimension (length or width).

In the case of twist, the % is stated in terms of the dimension from one corner to the diagonally opposite corner.

### Maximum Warp & Twist Sheet Tolerances

Nominal Thicknesses		Maximum warp & twist %
inches	mm	
.031" - .062"	.787 - 1.575	5.00%
.063" - .125"	1.600 - 3.175	2.50%
.126" .250"	3.200 - 6.350	1.00%
.251" - .750"	6.375 - 19.050	0.50%
.751" - Max.	19.075 - Max.	0.25%

For the method of measuring warp and twist, refer to ASTM D-229.

Authorized Distributor:

Aetna Plastics Corp. 1702 St. Clair Ave. Cleveland, Ohio 44114 • Tel: 800-634-3074  
216-781-4421 • Fax: 216-781-4474 • sales@aetnaplastics.com • www.aetnaplastics.com