



Global Thermoset Composite Solutions

## Sheet Thickness Tolerances

Nominal Thickness	Glass Grades	Cotton Fabric Grades				Paper Grades	Aramid & Nylon Grades
	NP500 Series	NP310	NP310E	NP320	NP320E	NP600 Series	NP100 Series
Inches	( ± )	( ± )	( ± )	( ± )	( ± )	( ± )	( ± )
0.010	0.002	--	--	0.003	--	0.002	0.003
0.015	0.003	--	--	0.0035	0.0035	0.0025	0.0035
0.020	0.004	--	--	0.004	0.004	0.003	0.004
0.025	0.005	--	0.005	0.0045	0.0045	0.0035	0.0045
0.031	0.0065	0.0065	0.0065	0.005	0.005	0.0035	0.0065
0.047	0.0075	0.0075	0.0075	0.0055	0.0055	0.0045	0.0075
0.062	0.0075	0.0075	0.0075	0.006	0.006	0.005	0.0075
0.094	0.009	0.009	0.009	0.007	0.007	0.007	0.009
0.125	0.012	0.010	0.010	0.008	0.008	0.008	0.010
0.156	0.015	0.011	0.011	0.009	0.009	0.009*	0.011
0.188	0.019	0.0125	0.0125	0.010	0.010	0.010*	0.0125
0.219	0.021	0.014	0.014	0.011	0.011	0.011*	0.014
	( ± )	( + only )	( ± )	( + only )	( ± )	( ± )	( ± )
0.250	0.022	0.030	0.015	0.024	0.012	0.012*	0.015
0.312	0.026	0.035	0.017	0.029	0.0145	0.014*	0.024
0.375	0.030	0.040	0.020	0.034	0.017	0.017*	0.032
0.438	0.033	0.044	0.022	0.038	0.019	0.019*	0.040
0.500	0.036	0.048	0.024	0.042	0.021	0.021*	0.048
0.625	0.040	0.053	0.027	0.048	0.024	0.024*	0.054
0.750	0.043	0.058	0.029	0.054	0.027	0.027*	0.058
0.875	0.046	0.062	0.031	0.060	0.030	0.030*	0.062
1.000	0.049	0.065	0.033	0.065	0.033	0.033*	0.066
1.125	0.053	0.069	0.035	0.069	0.035	0.035*	--
1.250	0.055	0.073	0.037	0.073	0.037	0.037*	--
1.375	0.058	0.077	0.039	0.077	0.039	0.039*	--
1.500	0.061	0.081	0.041	0.081	0.041	0.041*	--
1.625	0.064	0.085	0.043	0.085	0.043	0.043*	--
1.750	0.067	0.089	0.045	0.089	0.045	0.045*	--
1.875	0.070	0.093	0.047	0.093	0.047	0.047*	--
2.000	0.073	0.097	0.049	0.097	0.049	0.049*	--

Note a: At least 90% of the area of the sheet shall be within the tolerances given, and at no point shall the thickness vary from the nominal by a value greater than 125% of this specified tolerance. For nominal thicknesses not listed, the tolerance shall be the same as that for the next greater thickness. For nominal thicknesses greater than 2.0 inches please contact the Customer Service Department.

\* For paper based grades NP600, NP602 and NP605, use glass tolerances for thicknesses over 0.125".

## Sheet Length and Width Tolerances

All sheet sizes: The tolerance in length and width shall be plus or minus 1.0 inch from the nominal trimmed dimensions

Panels or strips: the tolerance of cut pieces is entirely dependent upon the cutting equipment.

Shearing, sawing and rotary cutting operations achieve different tolerances. Therefore, the tolerances pertaining to an order will depend upon the cutting operation required.

Close tolerances may be possible, but require special attention and equipment.

## Sheet Bow or Twist Tolerance

Nominal Thickness Inches	All Grades Except NP193P Maximum Bow or Twist Percent*	NP193P Maximum Bow or Twist Percent*
0.031 - 0.061	5.00%	5.00%
0.062 - 0.124	2.50%	5.00%
0.125 - 0.249	1.00%	5.00%
0.250 - 0.750	0.50%	5.00%
0.751 and over	0.25%	5.00%

\* Percentage of bow is stated in terms of the length or width dimensions;  
Percentage of twist is stated in terms to the dimensions from one corner to the diagonally opposite corner.