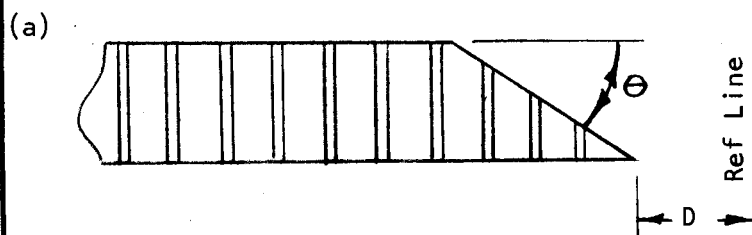




STANDARDS SHEET

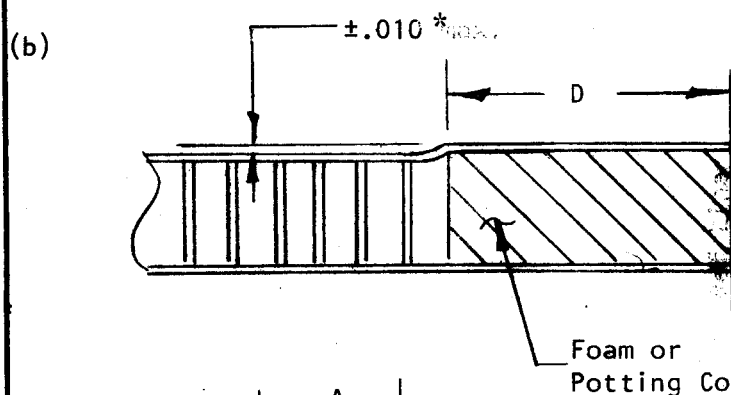
The tolerances specified in this document represent manufacturing tolerances and shall be considered standard tolerances by Engineering unless otherwise specified on drawing.



$\theta \pm 2\frac{1}{2}^\circ$ on any machined angle in honeycomb core

When angle of chamfer is not specified it shall be $30^\circ \pm 2\frac{1}{2}^\circ$.

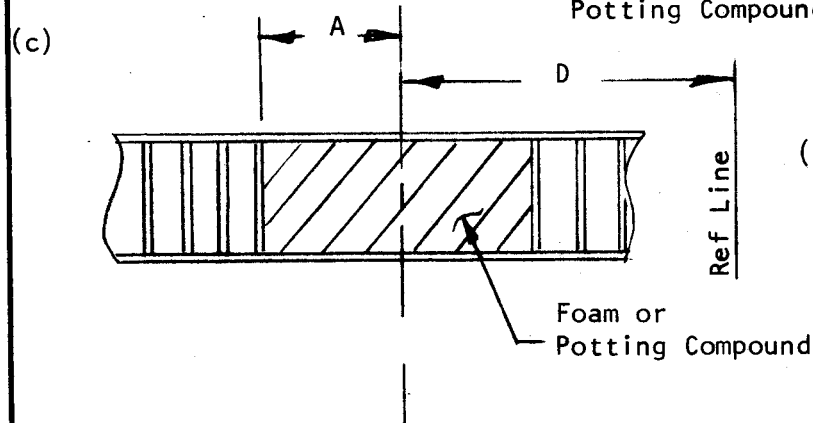
$D \pm .100$ on position of chamfered edge.



(i) $D \pm .100$ on foam position and $\pm 1/-0$ cells for potting compound.

(ii) Thickness deviation between honeycomb core and foam fill shall be $\pm .010$.

* For bagging operations only, $\pm .002$ for platten press.



(i) $D \pm .100$ on hard point centres.

(ii) $A \pm .100$ foam and $\pm 2/-0$ cells for potting compound.

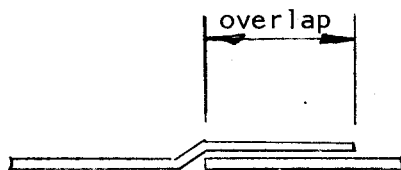
DRAWN	KRONKAMP	CLASSIFICATION	STANDARD
CHECKED	P. Persaud	TOLERANCES FOR COMPOSITE MANUFACTURE	DS 99
STRESSED	P. Persaud		
APPROVED	A. Monte		

31 JAN 84



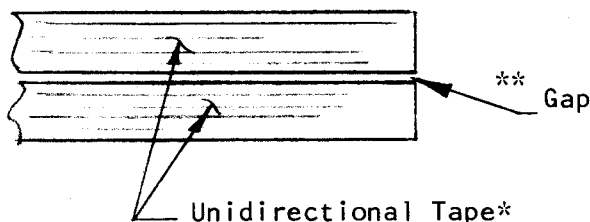
STANDARDS SHEET

(d)



For ply splices, Kevlar & glass prepreg fabric (or fabric), overlap shall be .750" to 1.25" and for aluminized glass cloth lay-up overlap shall be 2.00" to 2.50".

(e)

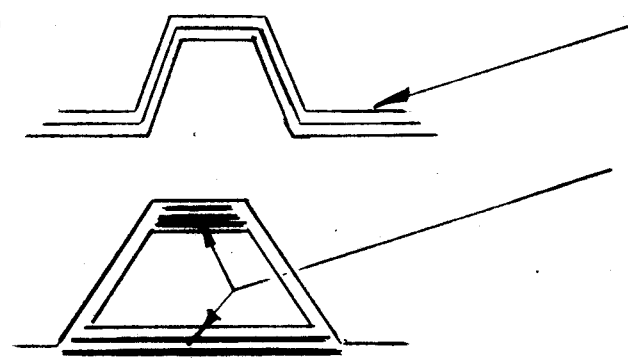


To achieve the necessary ply width for unidirectional tape the max. allowable gap between parallel runs of tape shall be .000" to .030" (no overlap permitted).

** Gap parallel to fibre direction.

* Tape must be continuous (1 piece), no butts or overlaps allowed.

(f)



(i) For contour forming reinforcing plies the edge of ply position tolerance shall be $\pm .125$ ".

(ii) For flat reinforcing plies the edge of ply position tolerance shall be $\pm .062$ ".

(g) The tolerance on core ribbon direction shall be $\pm 5^\circ$.

(h) During lay-up, the tolerance on specified warp direction of fabrics is $\pm 5^\circ$ and on ply orientation of unidirectional tape $\pm 3^\circ$. These tolerances apply in the area of the orientation symbols and shall extend as far as the contour allows. Where applicable, in areas where the warp of the fabric or the ply orientation is uncontrollable, multi-orientation symbols shall be used.

④

(j) The tolerance on lofted profiles of composite components shall be $\pm .030$.

DRAWN	KRONKAMP	CLASSIFICATION	STANDARD
CHECKED	P. Persaud	TOLERANCES FOR COMPOSITE MANUFACTURE	DS 99
STRESSED	P. Persaud		
APPROVED	P. Persaud		

31 JAN 84

NOTE J added
21 NOV 84