GENERAL CONVERSION INFORMATION (fluted boards)

COROPLAST™

SIZE
When describing sheet sizes of Coroplast (an extrusion) we always give the across flutes dimension first, the length of the flute second.

REGISTRATION
As a result of the manufacturing process by Coroplast Inc. it is not possible to guarantee square cut sheets "off the line". THE two edges that run the length of the flutes are parallel, but the cross flute edges may be up to 3/8" out of square. For this reason it is important to guide the sheets into conversion equipment by means of the parallel edges. The diagram (Coming Soon) shows an exaggerated view.

Note: The full size of the sheet ordered should always come out after squaring.

SURFACE TREATMENT (CORONA DISCHARGE)
Both surfaces are treated full width to accept certain types of inks and adhesives. Some care should be taken in storage and handling to protect this treatment. Handle the sheets as little as possible and keep them well covered to prevent dust and dirt from accumulating. Dirty or finger market sheets may result in adhesion problems.

TEMPERATURE
Coroplast sheets are easier to convert when at room temperature -- always allow sheets which have been at low temperatures to warm up.

Printing: Cold sheets may cause condensation if not allowed to warm up. This will cause adhesion problems.

Die Cutting: Cutting and creasing becomes easier as the temperature increases. At very low temperatures cutting and creasing properties are severely impaired.

SCREEN PROCESS PRINTING
Coroplast is a polyolefin copolymer. This means that it is a nonabsorbent material which requires inks formulated for this type of product.

LETTERPRESS PRINTING
Many converters have obtained good results on Coroplast using this process. Specially formulated oil-based inks are required. Printing speeds are much reduced from the speeds normally associated with corrugated cardboard and the sheets must be stacked vertically after printing until the inks cure in order to prevent offsetting.

We recommend that you discuss this type of ink with your supplier to locate a product compatible with your equipment.

FLEXOGRAPHIC PRINTING
There have been dramatic developments in the area of Flexo printing of polyolefins. Please contact your suppliers of Flexo inks and explain your specific needs. The correct inks are also used for printing polyethylene bag film material. An additional air/ heat drying source may be required to achieve production speed drying of these inks. Regular rubber plates are appropriate.

GUILLOTINING AND DIE CUTTING
Coroplast can be die cut or guillotined on standard conversion equipment. Depending on the length of the cut on a guillotine (and flute direction) it may be necessary to reduce the hold down pressure to a very low setting or to block the travel to allow it to just hold. Ten to 15 sheets can be cut at a time on most equipment.

Flat bed die cutters have been very successful with Coroplast. Rotary dies may require experimentation with rule types and high durometer blankets. Unlike paperboard, twin-wall plastic sheets must be cut through. Sharp beveled rule requires less pressure for the same cut. A good make-ready that will allow even cutting at minimum pressure will extend die life noticeably. The primary cause of a dull rule on Coroplast dies is the application of excess pressure to a whole die to make a problem spot cut better. Coroplast is more resilient that paperboard and generally requires a wider than usual creasing rule for across flute creasing. The height differential between cutting and creasing rule should also be less than normally used for cardboard especially across the flutes. To "set" a crease, the two skins must crush to touch each other and then have additional pressure applied.

Many successful converters have suggested the following "rule" choices:

Cut -0.937" regular hard, long bevel or double bevel
Length crease-- .900" - 6pt.
Cross crease -- .912"-.918" 6pt. or 4pt. depending on required bend angle
(Crease suggestions are for regular 4mm and should be adjusted for other thicknesses).

These discussions are intended as initial guidelines for the conversion of Coroplast. Individual machinery could require conditions or settings that vary from these suggestions. We recommend that customers should carry out their own trials to ascertain the best machine conditions and printing inks for their particular requirements.