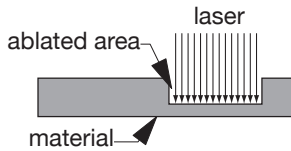




Cutting Terminology

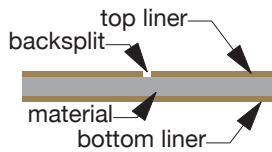
ABLATION



- Material is burned away to an approximate depth by having repeated laser cuts side by side.
- Large areas of ablation can be problematic due to the heating and distortion of material during the process.

LASER ONLY

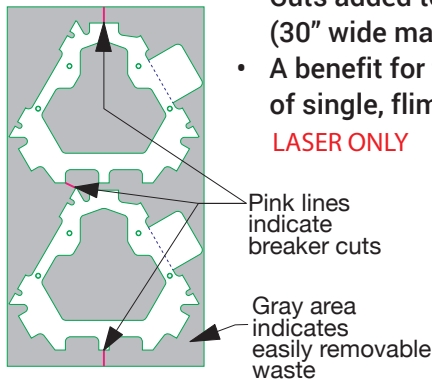
BACKSPLIT



- Cuts top liner only. Helps with assembly when positioned near the edge of material, allows for small piece of liner to be removed so other layers can be positioned and attached before lamination.

LASER / ZUND / DIECUT / BACKSPLITTER / ROLT DIECUTTING / NEW FOIL

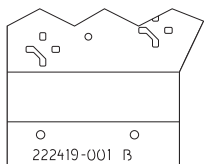
BREAKER CUTS



- Cuts added to the laser file to separate sheets into smaller, more manageable pieces. (30" wide material goes into laser and 6-5" pieces come out)
- A benefit for the customer to receive sturdy sheets they can easily break apart instead of single, flimsy pieces.

LASER ONLY

BURNING #'S



- Numbers/symbols can be burned into the material and used for identification and tracking throughout production and customer inventory.

LASER ONLY

COMBO CUT

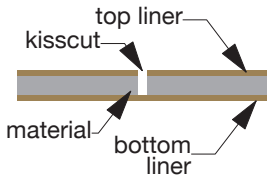
- A combination of any of the listed cuts.

LASER / ZUND / DIECUT / BACKSPLITTER / ROLT DIECUTTING / NEW FOIL





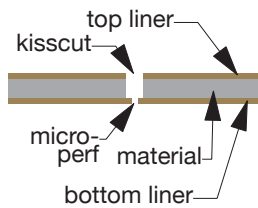
KISSCUT



- Cuts down to bottom liner.
- Allows for easy removal of only the useable part while leaving most of the sheet integrity intact.

LASER / ZUND / DIECUT / BACKSPLITTER / ROLT DIECUTTING / NEW FOIL

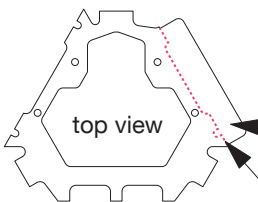
KISSCUT MICROPERF



- Easy to tear.
- Can be used for spacers, VHB, etc.
- Provides window protection by allowing cutouts to remain in place during other stages of production and can then be easily removed before shipment.
- Provides stable application of spacers by keeping weak portions of cutout areas tied together during assembly lamination. Cutouts can easily be removed after lamination.
- Allows parts to remain in multi up sheet form during production which speeds up laser and packaging, can then be easily separated by customer/end user. Can speed up customers inventory counting.
- Allows us to sell "Sets" of parts that can easily be separated by the end user.

LASER ONLY

KISSCUT TAB

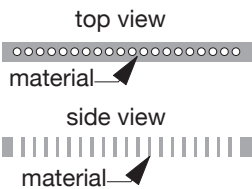


- Helps assembly and customer/end user to remove liner for assembly of a circuit or gasket or decoration to be applied.

LASER / ZUND / DIECUT / ROLT DIECUTTING

tab material remains intact to aid in application of part
kisscut line

MICROPERF



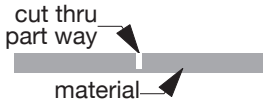
- Fine perf.
- Microperfs have 1 cut or more per .029" / 0.74mm.
- Microperfs do not usually require a fold before you tear.
- Easy to tear.
- Microperf will show a cleaner edge than strong perf after separation.
- Microperf will easily fold if not supported properly and are more likely to tear with just the weight of the material after being folded.

LASER ONLY





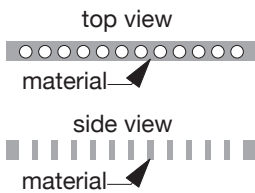
PARTIAL THRU CUT



- Best used on foam only. Stronger materials will have undesirable edges when torn on partial thru cut lines. Most plastics will ignore partial thru cut lines.
- Not as consistent on other materials.
- Holds parts in place, enabling customer to receive in sheet form.
- Used only on single layer material or the last layer of an assembly of materials.
- Used during laser spacer cutting as a hangup “just” strong enough to get trim pieces too large for sweeper off the work support.
- Not consistent enough for use away from laser (except for foam).
- Could also be used as a fold line for some end user applications or in house assembly.

LASER ONLY

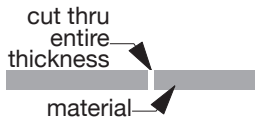
STRONG PERF



- Harder to tear
- Strong perfs have 1 cut or less per .0295" / 0.75mm.
- A strong perf will hold up better during collating and packaging and through to a customers assembly line.
- A strong perf usually requires you to fold before you tear.

LASER / DIE CUT / ROLT DIE CUTTING / NEW FOIL

THRU CUT



- Complete cut through material with no remaining attachment points.
- Cutouts will fall away from parent material.

LASER / ZUND / DIE CUT

