THERMOFORMABLE FILMS

Estiko-Plastar's choice of flexible thermoformable films offer a very wide range of sophisticated packaging materials for nearly all your packaging needs.

The range includes several different modifications which include also high barrier and retort films and are all described in the table below. You can easily assemble your own custom film for us to produce for your specific need. As an extra, you have six sealing layer options to choose from. Among those six you will find a new "seal through contamination" layer that is the result of constant R&D activity and has proven to work very well even under most severe conditions.

Films	Sub type	Recommended forming depth(mm)	Thickness range	Properties	Sealing
Estform		20-120	60-200	Estform films are series of high-performance multilayer PA/PE coex films that consist of 5-layers and are constructed with the best materials on the market. The aim is to offer superb deep-draw characteristics in combination with great optics and sealing properties. These films are a good option for down-gauging due to good mechanical strength and superior puncture resistance.	K1; K2; K3; PE PEEL
	Estform 2	20	60-200		
	Estform 3	30	70-200		
	Estform 4	40	80-200		
	Estform 6	60	100-200		
	Estform 8	80	120-200		
	Estform 10	100	120-200		
	Estform 12	120	130-200		
Estform_X		100-160	200-400	Estform_X films enable enhanced thermoforming performance and give increased mechanical properties. The thickness range is shifted higher to allow these films to be used for deeper and bigger trays.	К1;К2;К3
	Estform_10X	100	200-400		
	Estform_12X	120	200-400		
	Estform_16X	160	200-400		
Estform_HB		20-120	40-200	Estform_HB films are a step forward from regular PE/PA coex films in the terms of product safety and shelf life. HB films have an integrated EVOH layer that enables the highest barrier properties (MAP) which guarantees the longest shelf life for your products.	K1; K2; K3; PE PEEL
	Estform_2HB	20	40-200		
	Estform_4HB	40	60-200		
	Estform_6HB	60	80-200		
	Estform_8HB	80	100-200		
	Estform_10HB	100	120-200		
	Estform_12HB	120	140-200		
Estform_RT		20-100	40-200	Estform_RT films, though similar to Estform HB films, combine in its structure retortable materials. RT films have great optics and deep draw characteristics that are combined with excellent barrier properties to gases to extend the self life of the packaged product.	K4; PP peel
	Estform_2RT	20	40-200		
	Estform_4RT	40	60-200		
	Estform_6RT	60	80-200		
	Estform_8RT	80	100-200		
	Estform_10RT	100	120-200		





Extra options:

- <u>Tinting and coloring</u> We can tint or color all the structures in the tone you need. We have a choice of standard pigments but the tone can be changed by your preferences by using special masterbatched ordered specifically for your needs.
- Sealing layers You can choose from six different sealing layers:
 - Standard (K1) A very versatile sealing layer that has proven itself well over the years. It has low seal initiation temperature and excellent hot-tack. The sealing temperature can often be lowered compared to your regular film and you will still receive a fully hermetic package. Thermoformable films with this sealing layer can handle heat treatment up to 3h at 95-100 degrees.
 - Premium (K2) For more demanding products, we have an enhancement of the standard layer which offers an even wider sealing window and better hot-tack. We suggest to use this one if you pack a hot product, have a very fast machine or need to reduce the sealing temperature even further. Thermoformable films with this sealing layer can handle heat treatment up to 3h at 95-100 degrees.
 - "Seal through contamination" (K3) This new sealing layer has the lowest seal initiation temperature, has the highest hot-tack, gives the best seal integrity and as the name states, is perfect for sealing through contaminants like saline solution, oil/grease and dust. Thermoformable films with this sealing layer can handle heat treatment up to 1/2h at 95-100 degrees.
 - PP sealing layer (K4) gives a tight lock-up seal for regular and retort applications. This sealing layer will be compatible with most other PP sealing layers and offers an excellent package integrity.
 - PE PEEL Easy-open solution is available for Estform and Estform_HB films. This sealing layers enables to use a regular top web and still get a peelable package. It is also an option if you want to keep the same top film and use several bottom films.
 - PP PEEL Easy-open solution is available for Estform-RT film and enables as well as the regular PP sealing layer, a pasteurization and sterilisation treatment for the package. This sealing layer enables to use a regular top web and still get a peelable package. It is also an option if you want to keep the same top film and use several bottom films.



