

Thermex® is a very economical temperature indicating sensor paper that reveals a relative temperature profile between contacting surfaces. The paper turns a gray/black color at the low end of the temperature range and develops the maximum color at the high end of the temperature range. However, it will not change unless there is pressure, so the picture shows both temperature and pressure variations in the seal. **For best results place the paper between the surfaces being sealed.** It is not necessary to break the web; tape the paper to the web passing through the machine. The material being sealed will insulate and cushion the Thermex® paper from the heat source just as the actual seal is insulated.

TWO AREAS OF USE

Vertical Form and Fill Machines

To check the back seam seal of a vertical form and fill machine, feed a 2" or 3" wide strip of Thermex® paper into the back seam, between the two layers of film, while the machine is running.

To check horizontal seams, tape a sheet of Thermex® paper to the forming web. Center the paper between the edges of the web. If the Thermex® paper is wider than the "lay flat inches" of the final package there will be tow thicknesses of Thermex® paper in the ends of the seal. If this causes a problem, cut the Thermex® paper to lay flat across the width of the final package.

The Thermex® paper should be taped all the way across the leading edge. If it jams going between the forming collar and the fill tube, cut the paper at an angle as is done when threading the machine. Position the paper down the web by using the eye spot of the design. If there is no eye spot, use an idler as a "bench mark" to measure where the paper should be placed, to have it in the horizontal seal area.

Vacuum and Flat Web Machines

To check these machines, tape the Thermex® paper to the formed web, or one of the flat webs just before the top web, or the second web is sealed. The object is to get the paper between the surfaces being sealed. The sheets can be overlapped if they are too small to cover the entire seal area. Fasten down the leading edges with small pieces of tape and run the paper through the machine so that the second web is sealed to the Thermex® paper. If the Thermex® paper is run through the knives, the alignment of the knives and the seals can be checked. The paper responds very quickly, 0.1 second or less, depending upon heat and pressure.

If the Thermex® paper does not change color:

- ❶ The temperature of the surface is less than the minimum temperature of the Thermex® paper.
- ❷ There is insufficient pressure to transfer the heat from the heat source to the paper.
- ❸ There was insufficient time for the heat to soak through the materials being used.

A misaligned, nicked, or dirty die will reduce the heat or pressure and this area will show up as a white spot, or a lighter colored area in the seal. If the material being sealed, sticks to the paper so that the color cannot be observed in the heat seal area, fold the paper over on itself and it will break apart at the paper/paper interface.

SPECIFICATIONS	
Temperature Range	200° F to 300° F (90° C to 149° C)
Dimensions	18 x 13 in (45.7 x 30.5 cm)
Thickness	2 mil (0.05 mm)