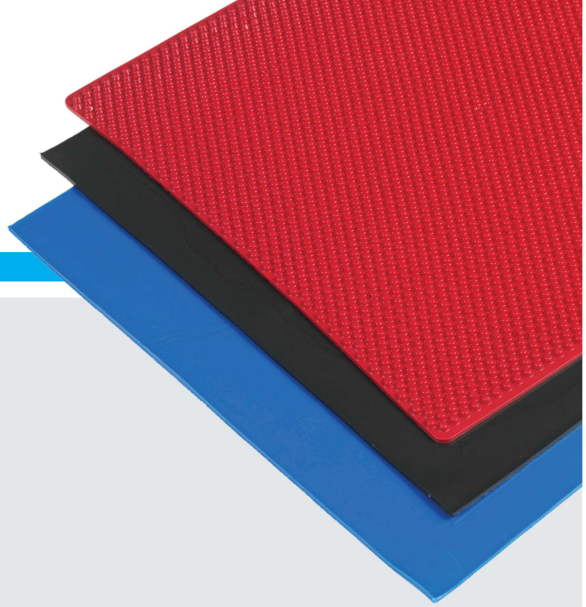
Sorbothane®

Sheet Stock



CUSTOMIZING SHEET STOCK

Die Cutting

Sheet Stock up to 0.25-inch thick, with or without PSA can be die cut at additional cost. Die cut materials will have a concave edge. Consult factory on costs.

Water Jet Cutting

Sheet Stock of any thickness can be water jet cut. Water jet cut materials will have a clean edge. Consult factory on costs.

Gaskets

Sorbothane is a popular material for gaskets because of its chemical resistance, conformability to irregular surfaces, low creep and reusability. Its natural tackiness makes it easy to install.

Gaskets can be knife-cut, scissor-cut, die cut, molded or water jet cut.

X-Tra Flex Sheet

X-Tra Flex Sheet is molded with hemispherical bumps. The hemispheres permit the material to flex more easily and allow for soft deformation under load. Overall sheet thickness is approximately 0.185-inch. The hemispheres are approximately 0.09 high and 0.12 diameter. X-Tra Flex sheets are easier to apply to curved and irregular surfaces and provide a softer spring rate.

Special Sizes, Colors and Thicknesses

The factory can pour special shapes, colors and thicknesses.

Available colors include:

BLACK | BLUE | DARK BLUE | RED

ORANGE | GREEN | YELLOW | GRAY

Please contact factory for pricing & minimums

Sheet Stock for Vibration Applications

In designing your own vibration mounts from sheet stock keep the following in mind:

- **More is not better.** A large, lightly loaded sheet will have a high spring rate and will not deflect enough to provide good isolation. Over compression will lead to short service life. The proper compression range is 3 to 20 percent depending on the "Shape Factor." Shape factor is the ratio of contact surface (one side) divided by perimeter area. See page 5 for calculation of shape factors.
- **Geometry matters.** Small circular pieces and rings "bulge" better than squares and rectangles. "Bulgeability" makes for better isolation. Use many small discs rather than a few large rectangles for best vibration isolation performance.
- **Thickness matters.** The thicker the sheet, the lower the natural frequency. You need a sheet at least one-inch thick to get your natural frequency down to 10 Hertz. (10 Hertz is your target natural frequency for a 900 RPM motor.)
- **Do not "bolt through" your Sorbothane sheet.** The bolt will carry the vibration to the base. Use the natural tackiness of Sorbothane, or apply adhesives to glue the Sorbothane to metal plates on both sides, or consider a custom design with molded-in stud mounts.
- **Use vibration-rated connections.** Where bolted connections are used, use high-quality (thread deforming) lock nuts or doubled jam nuts to prevent connections from vibrating loose.