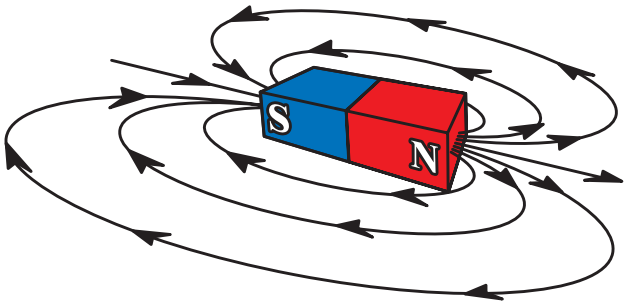
What is a Magnet?

A magnet is an object crafted of special materials which produces a magnetic field. The field is invisible, yet it creates an attraction to ferrous metals and an attraction and repulsion to other magnets. All magnets have a minimum of two poles that create this magnetic field, a north and a south pole. Typically, a bar magnet would have its poles on opposite ends (see illustration to the right). But, did you know that if you were able to break that bar in half that you would not end up with just one pole on each of the two halves? You would end up with a north and a south pole on each of the halves. Magnets can also have more than two sets of poles. In fact, flexible magnets are magnetized with many poles (imagine 8-12 stripes per inch) on one side only. These can be seen with a handy device called magnetic field viewing film. It works on all types of magnet material.



Types of Magnets

Neodymium magnets are composed of neodymium, iron, boron and a few transition metals. These magnets are extremely strong for their small size, metallic in appearance and found in shapes such as rings, blocks and discs. These magnets can be expensive and prices can fluctuate.

Ceramic (ferrite) magnets are composed of strontium carbonate and iron oxide. They are charcoal gray in color and usually appear in the forms of discs, rings, blocks, cylinders, and sometimes arcs for motors. These magnets are not as strong as neodymium but are generally priced more affordably.

Flexible magnetic sheeting typically ranges in thickness from .009" to .060". For this industry, we offer .015", .020" and .030". Thickness measurements are taken before laminates are applied. The thicker the flexible magnet, the stronger it is. Suggested thickness of .015" and .020" are best for mailings or indoor use. We recommend .030" thick material for vehicle sign magnets. With proper care and maintenance, .030" magnetic sheeting should never fall off the vehicle.

Relative Magnetic Strength Chart

Using a 1" diameter x .25" thick disc shape.