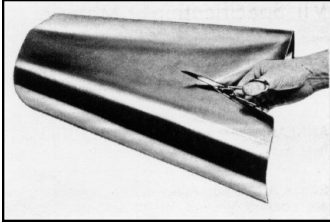


# MAGNETIC SHIELDING

## MAGNETIC SHIELDING FOIL

"The Best Material Available for Shielding DC, ELF & VLF Magnetic Fields"



Used for years in industry to shield delicate electronic components from EMFs, now available at affordable prices for home and office use. This 80% nickel alloy is easy to trim with scissors and shape by hand. Can be formed into magnetic barriers on cellular phones, microwave ovens, doorbell transformers, VDTs, buried wiring, and more. With snug fitting shapes, get as much as 75% attenuation of the magnetic field with one thickness. Use multiple layers for even greater reduction. **Foil is 15" wide by either**

**0.004" or 0.010" thick and can be ordered in any length.** (We recommend the use of a gaussmeter to determine the proper shape and positioning of the shielding, and to confirm that the fields have been adequately reduced.)

*CAUTION: Foil has sharp edges!*

### SPECIFICATIONS:

Thickness: 0.004"  
Temper: Annealed  
Specification: MIL N 14411c, comp 1  
Grain Size: 10  
Hardness: HV 0.3 = 188  
Coercive Force: HC = 0.005 Oersteds  
Max. Permeability: MUMAX = 444000  
Saturation Induction: B (10 OE) = 7600G

### Chemical Analysis:

Ni: 80%, Fe: 15%, Mo: 5%  
trace amounts of S, C, Mn, Si, & P

**.004 (Cat. #D276-15) .. \$21.95/lin ft**

**.010 (Cat. #D276-10) .. \$31.95/lin ft**

### Quantity Pricing:

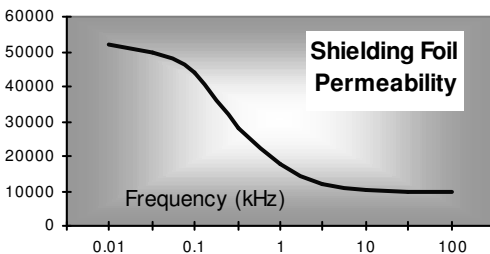
Order 100 lin feet (or more) and take 20% off!

### Shielding Foil Installation Notes:

- Enclosure shapes are much more effective than flat shielding or partial enclosures
- Cylindrical shapes generally provide more shielding than sharp angle bends.
- You can enclose either the source of the offending field, or the object(s) you wish to protect.
- Allow at least 1" overlap & achieve good foil-to-foil contact at all seams.
- Do not solder or weld. Heating permanently reduces shielding effectiveness.
- Spacer shims of 1/16" to 1/2" between layers improves shielding effectiveness.
- Avoid sharp angle bends in the alloy.
- Foil can be glued, screwed, nailed, taped, riveted or stapled to a supporting surface.
- Apply protective covering to all exposed edges. Edges are SHARP!

## HOW MUCH SHIELDING CAN I EXPECT?

Attenuation is the ratio of the magnetic field strength on one side of the foil compared to the field strength on the other side.



You can estimate the amount of magnetic field reduction (Attenuation) produced by a cylinder of Magnetic Shielding Foil of a given Diameter (D, in inches) if you know the Permeability (P), and foil thickness (T) with this formula:

$$\text{Attenuation} = T \times P \div D$$

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