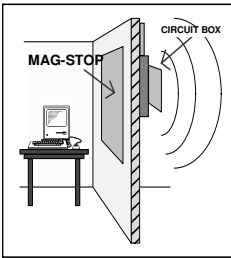


# MAGNETIC SHIELDING

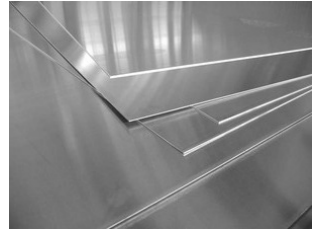
## MAG-STOP™ PLATES

Flat Magnetic Field Shielding For Large Or Small Areas



Now achieve excellent and affordable magnetic field shielding in difficult situations! Mag-Stop Plates are extra thick high efficiency magnetic alloy (Mumetal®) plates, specially designed to provide superior shielding for electric circuit boxes, side by side computer users, and any situation where you need a flat shielding material on a wall, floor, or ceiling. Can be mounted with ordinary nails or screws, or sandwiched between the studs and drywall. Use zinc chromate primer before painting. In one application, we were able to achieve almost 95% attenuation of a 200 mG field!

The 24" wide "stress annealed" plates offer good shielding and are well suited for forming into complicated shapes. The 30" wide "fully hydrogen annealed" plates offer the best shielding available (up to 10 times the shielding effectiveness of stress annealed alloy) and should not be soldered, welded, or heated in any way. Hydrogen annealed plates have 2 small holes pre-drilled near one end which can be used for mounting. Because of size/wt, additional shipping charges apply. **We can pre-cut plates into 2 or more pieces for you!**



| Cat. #    | Size (W x L x T) inches | Approx. Weight | Anneal Type | Price   |
|-----------|-------------------------|----------------|-------------|---|
| R277-0229 | 30 x 29 x .020"         | 6 lbs.         | Hydrogen    | Price fluctuates!<br>Call us or<br>check website<br>for current pricing |
| R277-0259 | 30 x 59 x .020"         | 12 lbs.        |             |   |
| R277-0429 | 30 x 29 x .040"         | 11 lbs.        |             |   |
| R277-0459 | 30 x 59 x .040"         | 23 lbs.        |             |   |
| R277-0629 | 30 x 29 x .062"         | 17 lbs.        |             |   |
| R277-0659 | 30 x 59 x .062"         | 35 lbs.        |             |   |
| R277-0224 | 24 x 120 x .020"        | 19 lbs.        | Stress      |   |
| R277-0424 | 24 x 120 x .040"        | 38 lbs.        |             |   |
| R277-0624 | 24 x 120 x .062"        | 57 lbs.        |             |   |

### General Information:

The material exhibits an aesthetically clean and bright metallic surface. The annealing process leaves the alloy "dead soft" so it should be protected from denting and scratches. Bending is possible, but gently rounded bends are favorable to sharp creases or acute angles. Great care should be taken to avoid heating this material above 400° C since heating will affect the grain size and deteriorate shielding properties. Unfinished edges may be sharp so care should be taken during handling, and proper finishing or covering of edges is required to protect end user.

### Maintenance:

Because of its high nickel content, this alloy is highly corrosion resistant. Cleaning is simple with a soft cloth, or you can use mild soapy water (be sure to rinse well and dry). If required for cosmetic purposes, this material can be spray painted or adhesive veneers may be applied.

### Hydrogen Annealed Plates

#### Mechanical Specifications:

|                                 |   |
|---------------------------------|---|
| Specific Gravity:               | 8.74  |
| Coefficient of Expansion:       | 12.6 x 10 <sup>6</sup> per °C                     |
| Tensile Strength:               | 64 x 10 <sup>3</sup> PSI                          |
| Yield Strength:                 | >18.5 x 10 <sup>3</sup> PSI                       |
| Mod. of Elasticity:             | 25 x 10 <sup>3</sup> PSI                          |
| Hardness (Rockwell B):          | 50 Ref.   |
| Melting Point:                  | 1454°C  |
| Thermal Conductivity (at 20°C): | 0.138 cal/sec/cm <sup>2</sup> /cm <sup>2</sup> °C |
| Minimum Operating Temp:         | 4°K   |
| Curie Temp:                     | 400 °C  |

#### Electromagnetic Specifications:

|                         |                       |
|-------------------------|-----------------------|
| Electrical Resistivity: | 330 ohms/cir mil-foot |
| Saturation Induction:   | 8000 Gauss            |
| Initial Permeability:   | 30,000                |
| Permeability at 40 B:   | 75,000                |
| Permeability at 200 B:  | 135,000               |
| Maximum Permeability:   | 450,000               |
| Induction at m max.:    | 3000                  |
| Coercive Force:         | .015 Hc, Oersteds     |

Mumetal® is a registered trademark of Magnetic Shielding Corp.

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