

# Retail Rollout!

Specified Laminates

Chemetal #353

Treefrog #64907

InteriorArts #2005

Magnetic | Dry Erase | Chalk | Image Projection | Paintable | Custom

**CHEMETAL**<sup>®</sup>

# Magnetic & Dry Erase Product Reference

## Key Benefits:

- Feature a thin sheet of iron (ferrous, magnetic metal) in the HPL backer.
- Makes these more magnetic than “powdered” (ferrous powder sprinkled onto HPL backer) magnetic laminates.
- Easy to cut and fabricate like laminate.



**150**  
HPL Magnetic Board

- Magnetic
- Projection (with light paint)
- Paintable
- Sheet Size: 4' x 8'
- Thickness: .04" (1mm)



**151**  
Black Magnetic Chalkboard

- Magnetic
- Chalk
- Sheet Size: 4' x 8'
- Thickness: .04" (1mm)



**152**  
White Gloss Magnetic Dry Erase

- Magnetic
- Dry Erase
- Sheet Size: 4' x 8', 4' x 10'
- Thickness: .04" (1mm)



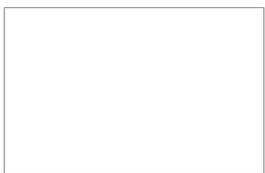
**153**  
White Satin Magnetic

- Magnetic
- Projection
- Dry Erase (Limited, frequent cleaning required)
- Sheet Size: 4' x 8'
- Thickness: .04" (1mm)



**157**  
Lime Gloss Magnetic Dry Erase

- Magnetic
- Dry Erase
- Sheet Size: 4' x 8'
- Thickness: .04" (1mm)



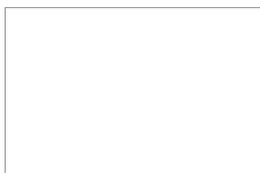
**160**  
White Gloss Magnetic Dry Erase Steel

- Magnetic
- Dry Erase
- Sheet Size: 4' x 8', 4' x 10', custom
- Thickness: .023", .05" with backer
- Metal fab. equip. for cutting



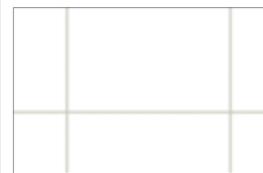
**Custom Magnetic Laminate**

We can apply any Chemetal 400, 500, 800 (metal only), 900 or Tints Series Solid Aluminum design to #150 Magnetic Board to create a custom magnetic laminate.  
Sheet Size: 4' x 8'  
Thickness: .05"



**1030**  
Marker Board, from InteriorArts.

- **Non Magnetic**
- Dry Erase
- Economically priced
- Sheet Size: 4' x 8'
- Thickness: .03"



**1031**  
GraphMarker Board, from InteriorArts.

- **Non Magnetic**
- Dry Erase
- Economically priced
- Sheet Size: 4' x 8'
- Thickness: .03"

## Cleaning Instructions for Chemetal #152, #153, #157 and #160.



Sheets must be cleaned when protective mask is removed  
to eliminate residue and ensure best functionality.

For this, and regular cleaning of Chemetal #152, #153, #157 and #160, we recommend Expo® White Board Care, or a similar white board specific cleaner found at office supply stores and online. Ethyl (rubbing) alcohol, found at most drugstores, and hand sanitizer that contains ethyl alcohol are also recommended. Regular use of these cleaners can help minimize “ghosting” that can occur on high use white boards. Sponge and water, dry cloths and dry erase erasers are suitable for lighter cleaning requirements.

Do not use washing detergents or abrasive detergents that can scratch and pit the dry erase surface and leave an oily film that makes future cleaning difficult.

### Cleaning Instructions for other magnetic laminates:

**Chemetal #150:** This laminate backer is meant for surface customization (paint, etc.)  
Follow cleaning recommendations of surface material.

**Chemetal #151:** Chalk Magnetic Board. Clean with sponge and water.

**Chemetal #153:** Projection Magnetic Board. Requires frequent cleaning as described at top when used with dry erase markers. This product is designed for projection use.

Other Chemetal finishes are recommended for regular dry erase use. Sponge and water may be used.

If you have questions about cleaning magnetic laminates, please contact us.

# Technical Information Chemetal Magnetic Laminates

## Product Numbers #150-157

### Application:

Chemetal Magnetic Laminates are HPL (High Pressure Laminates) that contain a thin foil layer of iron sandwiched in the HPL Backer, creating a magnetic effect when used with magnets. For best magnetic functionality, we recommend earth or industrial magnets. We recommend obtaining a sample of material for testing prior to installation. Surface is melamine.

**Application:** Vertical interior application.

### Material Specifications:

Sheet size: 4' x 8' feet (48" in x 96" in)

Thickness: .04" (1 mm)

Weight Per Sheet: 18 LBS.

### Ideal Usage Per Product:

Dry Erase: Chemetal #152, #157

Chalkboard: Chemetal # 151

Image Projection: Chemetal #153

Paintable: Chemetal #150

Custom: Any Chemetal 400, 500, 600, 800 (metal only), 900 or Tints Series designs may be applied.

See Product Chart in Magnetic Laminate Brochure for more product info.

### Shipping:

Chemetal Magnetic Laminates must be stored and transported FLAT to avoid surface cracks.

### Cutting and Machining:

Please note that sparks may occur during cutting and machining due to the iron layer in the HPL laminate. Best cutting results are achieved with Carbide-tipped circular saw blades. SPECS: 12" (305 mm) diameter, .07" to .086" (1.8-2.2 mm) thickness. Z60 RPM: 1500 FEED: 26 feet per minute. When cutting double-sided Magnetic Laminates the bottom side must first be slitted for a clean cut.

### Use:

Chemetal Magnetic Laminates should be used in well air-conditioned rooms. Overly dry room conditions or direct heat influence should be avoided (risk of cracking). A short-term temperature influence on the laminate up to 140°F, 60°C is possible.

### Bonding:

When applying dampness impermeable materials on top of Chemetal #150 never use water-containing adhesive as the dampness of the adhesive cannot escape and the adhesive bonding can consequently not dry.

### Environmental:

Laminate Components: 54% iron, 26% paper, 20% synthetic resin (irreversible hardened). The raw materials and production processes guarantee that the boards are free of substances that are harmful to the environment. According to transportation regulations, Chemetal Magnetic Laminates are not classified as hazardous materials, a marking is not necessary. They are physiologically recognized as safe, emission free, insoluble in water and suitable for contact with food stuffs. Waste material can be disposed in accordance with the local waste regulations on controlled waste disposal sites.

### Note on Dry Erase Markers:

Quality, age, operating time and storage of dry erase markers have an enormous impact on the dry erase ability. It is necessary to store board markers horizontally. Please observe the storage directions of the manufacturers.

**For cleaning information please refer to the Cleaning Instructions page in this PDF.**

**Lamination instructions and guidelines on the last page.**



# Technical Information #160 Magnetic Dry Erase Steel

## Application:

Chemetal #160 Magnetic Dry Erase Steel is a steel based magnetic laminate with a painted on dry erase coating. Because it is steel, Chemetal offers cut-to-size pieces.

For best magnetic functionality, we recommend earth or industrial magnets. We recommend obtaining a sample of material for testing prior to installation.

**Application:** Vertical interior application.

**Base Material:** Steel containing varied alloys.

## Material Specifications:

Sheet Size: 4' x 8', 4' x 10', custom  
Thickness: .023" (.6mm), .05 (1.27mm) with backer  
Weight Per Sheet: 30 LBS.

## Shipping:

Material should be shipped flat, with adequate protection on all sides, faces and corners.

## Appearance:

The surface of the sheet is a white dry erase coating.

## Surface Resistance:

The surface is not resistant to scratching. It may be used in horizontal applications, but must be considered light duty. It should be used in vertical or horizontal applications where temperatures don't exceed 160°F. Maximum heat resistance temperature is 160°F.

## How to Process:

The sheets are shipped with a protective mask. Quality checks should be carried out on the sheets beforehand.

## Cutting and Machining:

The steel can be processed utilizing various types of metal working equipment and hand tools. Additionally, Chemetal can provide cut-to-size-pieces to aid installation. Charges and minimums

apply. Because alloys in steel can create sparks, dust collection systems must be turned off or disengaged.

Examples of hand tools include circular, band, or jig saws equipped with Bimetal blades such as the Lenox Bimetal Jig Saw Blades, Lenox Metal Cutting Circular Saw Blades, Lenox Bimetal Hole Saws, and Lenox Air Saw Blades for use in pneumatic machine cutting. Examples of metal working equipment include shears, brakes, rolls, water jet cutting, and plasma arc cutting. NOTE: If a torch or plasma arc cutting system is used to cut the parts, the protective mask should be removed and moved away from the work area prior to cutting to avoid potential fire from the heat and sparks generated.

## Safety Note:

When handling this material always utilize safe lifting and carrying practices. When working with or cutting the materials always utilize proper Personnel Protective Equipment specified by the manufacturer of the equipment or cutting tool manufacturers.

## Backer Materials:

The steel may be laminated to materials such as fiberboard, particleboard, veneer plywood, plywood, and plaster boards, as well as rigid foams and metals.

## Bonding:

Conventional glues and adhesives and special purpose thermosetting resins or solvent based contact adhesives may be used for lamination. Material may also be fastened mechanically. Pinch rolling the material is also recommended. If necessary, balancing should be done with sheets of equivalent shrinking and expanding ratios.

**For cleaning information please refer to the Cleaning Instructions page in this PDF.**

**Lamination instructions and guidelines on the last page.**



# Lamination

## Environment:

It is recommended that all substrates, adhesives and Chemetal laminates be stored at room temperature (75°F) with a relative humidity of 45 to 50% for at least 48 hours prior to lamination. All materials should be stored in the same environment where fabrication or installation will take place under the above conditions. A five to seven day period of time is recommended for optimal pre-conditioning in a warm and dry environment. Lamination performed in cold temperatures may affect long-term results.

## Balancing Sheets:

We recommend the use of balancing sheets. They act as a moisture barrier and help ensure balanced construction. If possible, balanced construction should be used with sheets of equivalent expansion and shrinkage ratios.

## Fabrication:

The fabricated parts should be stored for at least 48 hours before exposure to extreme temperature or humidity changes. (Most contact adhesives require this minimum time to reach initial bond strength). Following these procedures allows the metal to bond firmly to the substrate. The above procedures should be followed when the lamination is to be completed on the job site. Any lamination that is completed in conditions that are different than the expected day to day living conditions may result in failure of the application as noted above. All heating and air conditioning systems should be operating to achieve expected living conditions before any lamination or installation takes place on a job site.

Please note that metal laminates experience minimal if any change in dimension, unlike many wood products with higher moisture content. Most substrates experience a change in dimension that may be significantly different than that of metal. This difference may cause the metal to pull away from the substrate or buckle at the weakest point of adhesion.

Sufficient spacing must be provided between and at each end of sheets or strips to accommodate possible linear expansion from the ambient temperature range at the installation site. Minimum spacing of 1/32" is recommended but a more accurate determination can be made by allowing 1/100" for each 96" of metal surface for each 10 degrees Fahrenheit of anticipated temperature change.

If you are not sure how any Chemetal will work for your particular application, we suggest you test the application system you have selected under production and/or installation site conditions.

## Substrates:

Proper substrates must be used and careful bonding procedures must be observed. Substrates should be of good quality plywood, high density particleboard, MDF, or high quality fiberboard. The more resistant the substrate is to dimensional change (shrinkage and/or expansion from changes in humidity and temperature) the better the long-term results will be.

**Do not apply directly to drywall**, as imperfections in drywall surface may project onto laminate surface. Additionally, moisture issues with drywall, and expansion/contraction may cause metal laminate to bubble or pop off.

The face of the substrate must be smooth and free of grease, wax, dust, chips and other foreign matter.

For best results, it is recommended that the back of any solid metal be scratched with Scotch Brite pads prior to lamination.

## Adhesion:

To ensure a good bond, consult and follow the adhesive manufacturer's instructions on preparation of substrates, surfaces and adhesive application. All types of adhesive must be applied evenly and uniformly. There must be no bridging and positive bonding pressure must be applied uniformly and progressively over the entire surface. To bond metal to your substrate after gluing, pressure must be firmly and evenly applied over the entire surface using a rotary or platen press. The use of hand or "J" rollers is not recommended for laminating metallic laminate sheets. They can be used for laminating strips as long as firm, even pressure is applied to the entire length. Once you have started to lay down a piece of metallic laminate do not try to realign it. While you may be able to force it into position, you will put stress into the metal, which may cause buckling and bond failure after a short period of time.

Chemetal's metallic laminates will readily conform to the surface of your substrate. For a smooth, flat surface appearance, extra care may be required in surface preparation and lamination. A phenolic backer sheet is available upon request for finishes that are not already supplied with one if you determine that your application requires the additional support.

**Failure to comply with these recommendations may cause failure of your installation. If you have installation questions, please contact us.**

