

TIPS FOR WORKING WITH PRINTABLE MAGNETS

Printable magnetics are created using a rubber-ferrite media with an ink-receptive top-layer. Printable magnetic substrates are available in coated or uncoated versions. A solvent printer, for example, will have no problem printing onto an uncoated vinyl, but coated versions offer better ink adhesion and higher print quality. Shops doing outdoor applications also laminate over the top, but that's not needed in all cases.

Magnet Thickness: when choosing magnet thickness it is best to choose one that is appropriate for the application. In general, 12 to 20mil thicknesses are best for advertising items. A 30-mil thickness is recommended for magnetic vehicle signage and should be strong enough to resist wind shear at highway speeds. The thicker the magnet, the heavier the stock and the stronger its magnetic pull. For example, a 12mil magnet will have a pull-force of about 30 pounds per square foot, while 20mil will pull at about 60 pounds per square foot, and a 30mil product will pull at 85 pounds per square foot.

Roll Weights: magnet rolls are *heavy*. Wider rolls are often shorter lengths to keep the roll weight down. However, it is important to make sure the roll-weight is not greater than what your printer feed/take-up system can handle.

Print Profiles: Like any substrate, a print profiles should be created to get the best color results from the digital printer. Profile examples can be found here: <https://www.magnummagnetics.com/printer-profiles/>

Handling: Never place a magnetic on the ground with the magnet-side down. Tiny bits of iron debris can become attached that if not wiped away, can damage a vehicle's finish and are hard to remove.

Metal Printer Parts: in cases where the platen bed is metal you can create a gap or barrier with a plastic like Lexan, chip-board, a slip-sheet or even multiple layers of pre-mask tape to keep the magnet from sticking.

Image Distortion: to reduce image distortion it is recommended that heat be kept to a minimum. It is best to turn heaters down on solvent and eco-solvent printers as this will help avoid the creation of distortion in heat-sensitive rubber.

Vehicle Application Notes: it is recommended that you wait at least 90 days to use magnetic signs on newly painted vehicles, or 60 days for clear coat. A 2-day waiting period is recommended after waxing and polishing for wax to cure before re-applying magnets.

Migration: when selling magnets for outdoor applications you need to be aware of a phenomenon called migration that can occur when a rubberized magnet is left on a painted surface for too long. Heat and moisture can cause material from the rubberized surface to migrate onto the surface. It can be very difficult to remove, but can be easily avoided by removing the magnet at regular intervals. Clean both the magnet and metal surface with mild detergent and wipe with a soft cloth and allow to air dry. For vehicle-mounted signs, remove and clean daily for best results.

Roll Storage: Store rolled stock on its end with the vinyl side out to prevent flat spots and attraction of metallic debris.