

PLASTIFORM® 1316 and 1317 Magnet Tape

Pressure-sensitive adhesive, high energy level magnetic material

- 16 oz/in² minimum holding force
- Easy application with pressure-sensitive adhesive backing
- Easily cut with scissors or knife
- Adheres and remains flexible at low temperatures
- Available in two thicknesses and in widths from 1/4 in. to 23 in. (6.3 mm to 584 mm)

PLASTIFORM® Magnet Tape is a flexible, polymer-bonded product coated on one side with the pressure-sensitive adhesive. The magnetic material is made using a special process that orients strontium ferrite crystals in the polymer binder during manufacture. This orientation process yields a magnet with excellent magnetic properties.

The high energy magnet tape is then permanently magnetized with multiple north and south poles along its length, providing a minimum holding force of 16 ounces per square inch.

The strong holding power of PLASTIFORM® Magnet Tape allows its use in relatively narrow widths where it combines economy with exceptional performance capabilities.

PLASTIFORM® Magnet Tape can be bent, twisted and flexed without loss of magnetic energy. The product conforms readily to irregular surfaces without cracking. It will not lose its magnetic strength when dropped or struck. PLASTIFORM® Magnet Tape is, indeed, permanently magnetic.

Self-sticking, pressure sensitive adhesive

PLASTIFORM® Magnet Tape has a high-tack, pressure-sensitive adhesive layer on one side, protected by a peel-away backing. The adhesive will adhere to a wide variety of surfaces including most plastics, wood and metal. The nonadhesive side may be used to hold small ferrous objects such as small screw drivers and other tools. The product also saves time by holding small parts during assembly. PLASTIFORM® Magnet Tape is a versatile holding material, which can be used effectively on both metal and nonmetal surfaces.

Temperature resistance

PLASTIFORM® Magnet Tape retains its flexibility even in cold weather. The product performs well, indoors or out, in hot or cold climates. Extensive testing at temperatures ranging from -40°F to 160°F (-40°C to 71°C) has documented the broad range of capability of both the adhesive and the magnetic holding force.

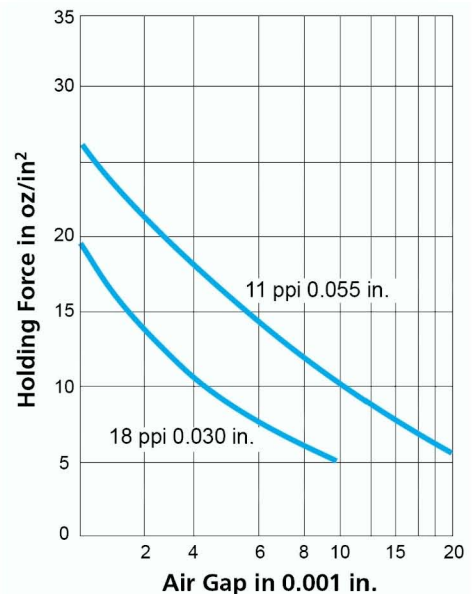
Application

PLASTIFORM® Magnet Tape is easily cut with a scissors or knife. Adhesive mounting surfaces should be free of dirt, grease, oil and solvent. Following placement, the magnet tape should be pressed down firmly with a roller.

Clean, safe handling

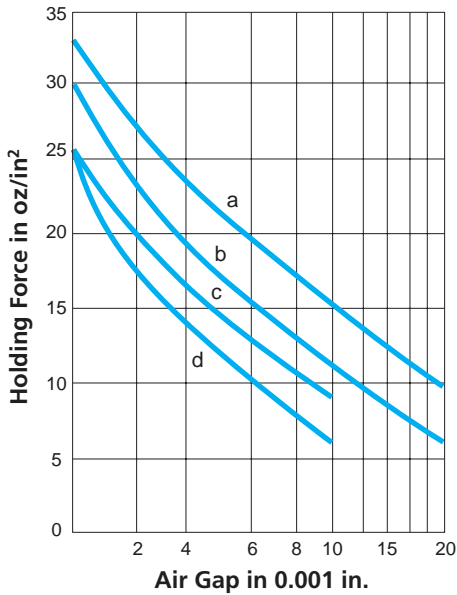
The magnetic side of PLASTIFORM® Magnet Tape is specially coated to ensure clean attachment. This coating also resists the external physical conditions that might otherwise result in adhesive bonding between magnet and application surface. Newly painted surfaces should be allowed adequate drying time before application of magnet tape.

Typical holding force without steel backup



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Typical holding force with steel backup (0.010 in. steel)



*Steel used in magnetic circuit was SAE 1010-1020.

- (a) 8 ppi 0.055 in. (non-std.)
- (b) 11 ppi 0.055 in.
- (c) 11 ppi 0.030 in. (non-std.)
- (d) 18 ppi 0.030 in.

Availability

Thickness:	1316: 0.035 in. (0.84 mm) (approximately 3/64 in.) 1317: 0.060 in. (1.55 mm) (approximately 1/16 in.)
Width:	1/2 in., 3/4 in. and 1 in. (12.7, 19 and 25 mm) are standard widths. Product is available in widths up to 23 in. (584 mm) on special order.
Length:	Standard length is 100 feet (30.5 m) long. Special lengths are available on special quotation.
Magnetization:	1316: 18 poles per inch of width (ppi) 1317: 11 poles per inch of width (ppi) Either product can be magnetized 18, 11 or 8 poles per inch of width, subject to special quotation. Custom thickness, width and magnetization are available on special quotation.

Typical Physical and Magnetic Properties*

Magnetic Holding Force:	16 oz/in² (70 g/cm²) to bare steel. Because of its greater reach out capabilities, the thicker magnet (0.055) is suggested where greater air gaps are required.
Sliding Force:	8 oz/in² (35 g/cm²) to polished steel
Peel Adhesion:	60 oz/inch (7.6N/10 mm)
Temperature Range:	-40°F to +160°F (-40°C to +71°C)
Flexibility:	1316: 0.035 in. (0.89 mm) thick—Bend around 1/8 in. (3.2 mm) diameter mandrel 1317: 0.060 in. (1.5 mm) thick—Bend around 1/4 in. (6.3 mm) diameter mandrel
Chemical Resistance:	Weather: Excellent Water: Excellent Ozone: Excellent Dilute Acids: Good Dilute Bases: Good Oils and Common Solvents: Poor
Shelf Life:	1 year from delivery date

* All values shown are typical and are not intended for specification purposes. Specification values will be provided upon request. Substrate variation causes wide variations in adhesive values.