

A Guide To Coating Plastic

Plastics are used in many areas of architectural construction, such as piping, trim, decorative items, window frames and siding.

Plastics are inherently difficult to successfully paint, due to the composition of the various materials. Conventional paints have difficulty 'wetting' the surface due to surface tension effects. This often results in poor adhesion. For this reason, 'bonding primers' are used to promote adhesion.

A test area is advised when coating plastic surfaces in order to determine if any special surface preparation is required prior to application.

Dark colors should be applied with caution where the plastic surface may be exposed to sunlight, as the increased heat absorption resulting from the dark color may be sufficient to cause warping of the substrate. This is particularly significant when painting vinyl siding.



Plastic siding

Coating Products and Systems

Recommended coating systems for plastics are similar to those for fiberglass:

- Waterborne acrylic/latex systems with a water-borne or solvent-borne bonding primer as the first coat.
- For horizontal surfaces such as those encountered with plastic lumber decks, the higher performance provided by epoxy products may be preferred.
- For steps and decks, a non-skid aggregate may need to be added to the paint or broadcast into the wet film.

The coating Systems referenced have a track record of successful application to vinyl, ABS, PVA, and PVC surfaces. While these systems may certainly work well on other plastic compositions, a test panel should always be prepared prior to commencing work

The following systems are generally shown in descending order of performance, suitable for normal conditions.

For Exterior Plastics

SYSTEM: EXT 6.8 PLASTIC

Systems #	Systems Name	Performance
EXT 6.8D	HIGH PERFORMANCE ARCHITECTURAL LATEX (over w.b. bonding primer)	Intermediate Performance
EXT 6.8DD	HIGH PERFORMANCE ARCHITECTURAL LATEX (over s.b. bonding primer)	Intermediate Performance
EXT 6.8A	LATEX (over w.b. bonding primer)	Performance
EXT 6.8AA	LATEX (over s.b. bonding primer)	Performance
EXT 6.8B	ALKYD (over w.b. bonding primer)	Performance
EXT 6.8BB	ALKYD (over s.b. Bonding primer)	Performance
EXT 6.8C	W.B. LIGHT INDUSTRIAL COATING (over w.b. bonding primer)	Performance
EXT 6.8CC	W.B. LIGHT INDUSTRIAL COATING (over s.b. bonding primer)	Performance

For Interior Plastics

SYSTEM: INT 6.8 PLASTIC

Systems #	Systems Name	Performance
INT 6.8B	ALKYD (over s.b. bonding primer)	High Performance
INT 6.8A	HIGH PERFORMANCE ARCHITECTURAL LATEX (over s.b. bonding primer)	Intermediate Performance
INT 6.8AA	HIGH PERFORMANCE ARCHITECTURAL LATEX (over w.b. bonding primer)	Intermediate Performance
INT 6.8F	INSTITUTIONAL LOW ODOR/LOW VOC (over w.b. bonding primer)	Moderate Performance
INT 6.8E	LATEX (over s.b. bonding primer)	Performance
INT 6.8EE	LATEX (over w.b. bonding primer)	Performance

For more information on the MPI Coating Systems please refer to the [MPI Manuals](#)

Surface Preparation

Surface preparation protocols for preparing plastics are similar to those for fiberglass:

- Remove any surface contamination such as dirt, oil and grease, mold, mildew, or other foreign matter by means of hand cleaning, pressure water cleaning, or with an appropriate solvent wash.
- Caution should be used when carrying out surface preparation, as some plastics could be damaged, specifically when pressure washing.
- It is advisable to prepare a test patch before proceeding with the entire job.
- A light sanding to roughen the surface is strongly recommended to assure good adhesion of the applied coating.



Products tested to MPI Green Performance and MPI Extreme Green have the lowest VOC, with proven high-performance. Look for these logo's on the paint cans.

[CLICK HERE](#) for more information.