Substrate preparation guide

The best steps for the best coat

Select your substrate from the list below.

NOTE: Some substrates such as polypropylene, polyethylene, glass and porcelain are difficult to paint. Matthews Paint does not have product recommendations for these substrates.

MPC® by PPG
MATTHEWS PAINT

T Topcoats | P Primers | CLR Clears | CLN Cleaners | A Additives | TR Training

Important notes

- Materials described are designed for application by professional, trained personnel using proper equipment and are not intended for sale to the general public.
- Before any spray applications, consult your local city, local air quality districts or government office to determine what regulations you must follow to be compliant with VOC regulations in your community.
- Investigate or consult with the substrate manufacturer for information regarding proper cleaning and preparation for specialty coatings. If you cannot find your substrate in this guide, contact the substrate manufacturer.
- Products mentioned may be hazardous. Always follow proper safety precautions when using Matthews Paint products. Safe usage requires reading, understanding and following all labels, Safety Data Sheets (SDS) and Technical Data Sheets (TDSs) before use.
- Procedures for applications mentioned are suggestions only and are not to be construed as representations or warranties as to performance, results or fitness for any intended use, nor does Matthews Paint warrant freedom from patent infringement in the use of any formula or process set forth herein.

Keys to success

- Statements and methods described are based upon the best information and practices known to Matthews Paint.
- The spray area and substrate must be warm and have adequate airflow. Application of primers, topcoats and clearcoats should never take place in temperatures under 60° F / 16° C.
- Knock down sharp edges whether routed or cut. Round any dramatic sharp edges on substrate. Primer and paint topcoat films are weakest on sharp 90° edges.
- Follow the procedures listed for specific substrate in this guide for cleaning, preparation and primer recommendations.
- Follow spray equipment manufacturer's instructions for gun setup and proper air pressure recommendations.
- We recommend testing the process for any new substrate, product or first-time application procedures before permanent production begins. Periodic testing on application and adhesion confirms the product and production performance.
- Review Technical Data Sheet or Matthews Paint Reducer Selection Charts for reducer selection guidance. Remember that the change of seasons affect the temperature and humidity during application.
- Allow proper flash time between coats. Flash times will vary dependent upon film thickness, temperature, solvent selection, spray gun set-up, application, etc. Additional coats may require extended flash time.
- For additional information regarding color formulas, specifications, or technical questions, contact Matthews Paint at **800-323-6593** or visit our web site at **matthewspaint.com.**

Substrates

Aluminum

Use proper Personal Protective Equipment (PPE) during sanding and product application.

Brilliant White Etch Primer:

274535SP/01: RTS 3.5 VOC

- Clean with 45330SP/01 Speed Prep Cleaner or 6410SP/01 Low VOC PreCleaner.
- For interior surfaces, inside channel letters and light boxes, abrading is not required.
- For exterior surfaces, abrade as necessary with 180-320 grit sandpaper, finishing with the finest grit possible.
- Clean again with appropriate cleaner.
- Apply 1-2 wet coats, allowing proper flash time between coats.
- Allow 30 minutes to flash before topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

Non-Chromate Etch Primer:

74350SP/01: RTS 3.5 VOC

- Clean with 45330SP/01 Speed Prep Cleaner or 6410SP/01 Low VOC PreCleaner.
- Abrade as necessary with 180-320 grit sandpaper, finishing with the finest grit possible.
- Clean again with appropriate cleaner.
- Apply 1 full wet coat Non-Chromate Etch Primer only.
- Allow 30 minutes to flash before topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

2.1 Epoxy Primers:

274528SP/01 Gray or 274530SP/01 White or 274531SP/01 Black

- Clean with 45330SP/01 Speed Prep Cleaner or 6410SP/01 Low VOC PreCleaner.
- Abrade as necessary with 180-320 grit sandpaper, finishing with the finest grit possible.
- Clean again with appropriate cleaner.
- Apply 1-2 full wet coats, allowing proper flash time between coats.
- Allow 30 minutes to flash before topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

White Epoxy Primer or Black Epoxy Primer:

274908SP/01 or 274808SP/01: RTS 3.90-3.95 VOC

- Clean with 45330SP/01 Speed Prep Cleaner or 6410SP/01 Low VOC PreCleaner.
- Abrade as necessary with 180-320 grit sandpaper, finishing with the finest grit possible.
- Clean again with appropriate cleaner.
- Apply 2 full wet coats, allowing proper flash time between coats.
- Allow 30 minutes to flash before topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

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Aluminum (continued)

White Epoxy Primer:

MAP-LVU100/01: RTS 0.42 VOC

- Clean with 45330SP/01 Speed Prep Cleaner or 6410SP/01 Low VOC PreCleaner.
- Abrade as necessary with 180-320 grit sandpaper, finishing with the finest grit possible.
- Clean again with appropriate cleaner.
- Apply 1-2 full wet coats allowing proper flash time between coats.
- Allow 30 minutes (spraying) or 1.5-2.5 hours (brush/roll) before topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

High Build Polyester Primer Surfacer:

6002SP/01: RTS 1.07 VOC

- Clean with 45330SP/01 Speed Prep Cleaner or 6410SP/01 Low VOC PreCleaner.
- Abrade as necessary with 180-320 grit sandpaper, finishing with the finest grit possible.
- Clean again with appropriate cleaner.
- Mix High Build Polyester Primer Surfacer according to instructions (see text box).
- Apply 2 full wet coats, allowing proper flash time between coats.
- Apply additional coats as necessary to achieve desired filling.
- Allow 1.5 hours dry time before sanding, cleaning and topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

When spraying Polyester Primer Surfacer, it is important to refer to the technical data sheets for spray tip recommendations, pot life, and application instructions. Once activated, apply primer within the stated pot life and clean equipment immediately.

Polyester Primer Surfacer:

6001SP/01: RTS 2.5 VOC

- Clean with 45330SP/01 Speed Prep Cleaner or 6410SP/01 Low VOC PreCleaner.
- Abrade as necessary with 180-320 grit sandpaper, finishing with the finest grit possible.
- Clean again with appropriate cleaner.
- Mix Polyester Primer Surfacer according to instructions (see text box).
- Apply 2 full wet coats, allowing proper flash time between coats.
- Apply additional coats as necessary to achieve desired filling.
- Allow 1.5 hours dry time before sanding, cleaning and topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

Aluminum-anodized substrate

- Use proper Personal Protective Equipment (PPE) during sanding and product application.
- Sanding must be performed to remove all the anodized coating from the aluminum.

2.1 Epoxy Primers:

274528SP/01 Gray 274530SP/01 White 274531SP/01 Black

- Clean with 45330SP/01 Speed Prep Cleaner or 6410SP/01 Low VOC PreCleaner.
- Abrade as necessary with 180-320 grit sandpaper, finishing with the finest grit possible.
- Clean again with appropriate cleaner.
- Apply 1-2 full wet coats, allowing proper flash time between coats.
- Allow 30 minutes to flash before topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

White Epoxy Primer or Black Epoxy Primer:

274908SP/01 or 274808SP/01: RTS 3.90-3.95 VOC

- Clean with 45330SP/01 Speed Prep Cleaner or 6410SP/01 Low VOC PreCleaner.
- Abrade as necessary with 180-320 grit sandpaper, finishing with the finest grit possible.
- Clean again with appropriate cleaner.
- Apply 2 full wet coats, allowing proper flash time between coats.
- Allow 30 minutes to flash before topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

White Epoxy Primer:

MAP-LVU100/01: RTS 0.42 VOC

- Clean with 45330SP/01 Speed Prep Cleaner or 6410SP/01 Low VOC PreCleaner.
- Abrade as necessary with 180-320 grit sandpaper, finishing with the finest grit possible.
- Clean again with appropriate cleaner.
- Apply 1-2 full wet coats allowing proper flash time between coats.
- Allow 30 minutes (spraying) or 1.5-2.5 hours (brush/roll) before topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

Aluminum-composite sheet

ALUCOBOND®, DIBOND®, ALUMALITE®, ALUPANEL® and ALUPANEL® Eco substrates

- Use proper Personal Protective Equipment (PPE) during sanding and product application.
- Topcoat can be directly applied providing bare aluminum is not exposed after abrading. If bare aluminum is exposed, use epoxy primer application prior to topcoating.

Matthews Paint Topcoat:

- Clean with 45330SP/01 Speed Prep Cleaner or 6410SP/01 Low VOC PreCleaner.
- Abrade as necessary using 320 - 400 grit or equivalent scuff pad until sheen has been removed.
- Clean again with appropriate cleaner.
- Apply topcoat per Technical Data Sheet recommendations.

2.1 Epoxy Primers:

274528SP/01 Gray 274530SP/01 White 274531SP/01 Black

- Clean with 45330SP/01 Speed Prep Cleaner or 6410SP/01 Low VOC PreCleaner.
- Abrade as necessary with 180-320 grit sandpaper, finishing with the finest grit possible.
- Clean again with appropriate cleaner.
- Apply 1-2 full wet coats, allowing proper flash time between coats.
- Allow 30 minutes to flash before topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

Recommendations are for precoated aluminum surfaces only; the polyethylene returns are not paintable.

White Epoxy Primer or Black Epoxy Primer:

274908SP/01 or 274808SP/01: RTS 3.90-3.95 VOC

- Clean with 45330SP/01 Speed Prep Cleaner or 6410SP/01 Low VOC PreCleaner.
- Abrade as necessary with 180-320 grit sandpaper, finishing with the finest grit possible.
- Clean again with appropriate cleaner.
- Apply 2 full wet coats, allowing proper flash time between coats.
- Allow 30 minutes to flash before topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

White Epoxy Primer:

MAP-LVU100/01: RTS 0.42 VOC

- Clean with 45330SP/01 Speed Prep Cleaner or 6410SP/01 Low VOC PreCleaner.
- Abrade as necessary with 180-320 grit sandpaper, finishing with the finest grit possible.
- Clean again with appropriate cleaner.
- Apply 1-2 full wet coats allowing proper flash time between coats.
- Allow 30 minutes (spraying) or 1.5-2.5 hours (brush/roll) before topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

Steel, mild

Use proper Personal Protective Equipment (PPE) during sanding and product application.

2.1 Epoxy Primers:

274528SP/01 Gray 274530SP/01 White 274531SP/01 Black

- Clean with 45330SP/01 Speed Prep Cleaner or 6410SP/01 Low VOC PreCleaner.
- Abrade as necessary with 180-320 grit sandpaper, finishing with the finest grit possible.
- Clean again with appropriate cleaner.
- Apply 1-2 full wet coats, allowing proper flash time between coats.
- Allow 30 minutes to flash before topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

White Epoxy Primer or Black Epoxy Primer:

274908SP/01 or 274808SP/01: RTS 3.90-3.95 VOC

- Clean with 45330SP/01 Speed Prep Cleaner or 6410SP/01 Low VOC PreCleaner.
- Abrade as necessary with 180-320 grit sandpaper, finishing with the finest grit possible.
- Clean again with appropriate cleaner.
- Apply 2 full wet coats, allowing proper flash time between coats.
- Allow 30 minutes to flash before topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

White Epoxy Primer:

MAP-LVU100/01: RTS 0.42 VOC

- Clean with 45330SP/01 Speed Prep Cleaner or 6410SP/01 Low VOC PreCleaner.
- Abrade as necessary with 180-320 grit sandpaper, finishing with the finest grit possible.
- Clean again with appropriate cleaner.
- Apply 1-2 full wet coats allowing proper flash time between coats.
- Allow 30 minutes (spraying) or 1.5 - 2.5 hours (brush/roll) before topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

Brilliant White Etch Primer:

274535SP/01: RTS 3.5 VOC

- Clean with 45330SP/01 Speed Prep Cleaner or 6410SP/01 Low VOC PreCleaner.
- Abrade as necessary with 180-320 grit sandpaper, finishing with the finest grit possible.
- Clean again with appropriate cleaner.
- Apply 1-2 wet coats, allowing proper flash time between coats.
- Allow 30 minutes to flash before topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

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Steel, mild (continued)

Non-Chromate Etch Primer:

74350SP/01: RTS 3.5 VOC

- Clean with 45330SP/01 Speed Prep Cleaner or 6410SP/01 Low VOC PreCleaner.
- Abrade as necessary with 180-320 grit sandpaper, finishing with the finest grit possible.
- Clean again with appropriate cleaner.
- Apply 1 full wet coat Non-Chromate Etch Primer only.
- Allow 30 minutes to flash before topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

High Build Polyester Primer Surfacer:

6002SP/01: RTS 1.07 VOC

- Clean with 45330SP/01 Speed Prep Cleaner, or 6410SP/01 Low VOC PreCleaner.
- Abrade as necessary with 180-320 grit sandpaper, finishing with the finest grit possible.
- Clean again with appropriate cleaner.
- Mix High Build Polyester Primer Surfacer according to instructions (see text box).
- Apply 2 full wet coats, allowing proper flash time between coats.
- Apply additional coats as necessary to achieve desired filling.
- Allow 1.5 hours dry time before sanding, cleaning and topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

When spraying Polyester Primer Surfacer, it is important to refer to the technical data sheets for spray tip recommendations, pot life, and application instructions. Once activated, apply primer within the stated pot life and clean equipment immediately.

Polyester Primer Surfacer:

6001SP/01: RTS 2.5 VOC

- Clean with 45330SP/01 Speed Prep Cleaner or 6410SP/01 Low VOC PreCleaner.
- Abrade as necessary with 180-320 grit sandpaper, finishing with the finest grit possible.
- Clean again with appropriate cleaner.
- Mix Polyester Primer Surfacer according to instructions (see text box).
- Apply 2 full wet coats, allowing proper flash time between coats.
- Apply additional coats as necessary to achieve desired filling.
- Allow 1.5 hours dry time before sanding, cleaning and topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

Steel, specialty

Carbon steel, cast iron, hot-dipped galvanized, galvaneal, GALVALUME® substrate, bonderized, phosphate coated, passivators or stabilizers

- Use proper Personal Protective Equipment (PPE) during sanding and product application.
- Galvanized steel requires special attention:
- Some galvanized steel manufacturers apply an oil treatment to protect the substrate while in storage. This oil must be removed prior to abrading.
- Some galvanized steel has a passivation coating applied designed to protect the substrate while it weathers naturally. This coating must be removed before priming and top coating.
- Be aware that freshly galvanized steel will continue to outgas as it ages. It must be allowed to age (weather) as per manufacturer's recommendation before priming and topcoating.
- For more detailed information regarding painting galvanized steel, refer to ASTM D6386.

2.1 Epoxy Primers:

274528SP/01 Gray | 274530SP/01 White | 274531SP/01 Black

- Clean with 45330SP/01 Speed Prep Cleaner or 6410SP/01 Low VOC PreCleaner.
- Abrade as necessary with 180-320 grit sandpaper, finishing with the finest grit possible.
- Clean again with appropriate cleaner.
- Apply 1-2 full wet coats, allowing proper flash time between coats.
- Allow 30 minutes to flash before topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

White Epoxy Primer or Black Epoxy Primer:

274908SP/01 or 274808SP/01: RTS 3.90-3.95 VOC

- Clean with 45330SP/01 Speed Prep Cleaner or 6410SP/01 Low VOC PreCleaner.
- Abrade as necessary with 180-320 grit sandpaper, finishing with the finest grit possible.
- Clean again with appropriate cleaner.
- Apply 2 full wet coats, allowing proper flash time between coats.
- Allow 30 minutes to flash before topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

White Epoxy Primer:

MAP-LVU100/01: RTS 0.42 VOC

- Clean with 45330SP/01 Speed Prep Cleaner or 6410SP/01 Low VOC PreCleaner.
- Abrade as necessary with 180-320 grit sandpaper, finishing with the finest grit possible.
- Clean again with appropriate cleaner.
- Apply 1-2 full wet coats allowing proper flash time between coats.
- Allow 30 minutes (spraying) or 1.5-2.5 hours (brush/roll) before topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

Steel, stainless

Use proper Personal Protective Equipment (PPE) during sanding and product application.

2.1 Epoxy Primers:

274528SP/01 Gray 274530SP/01 White 274531SP/01 Black

- Clean with 45330SP/01 Speed Prep Cleaner or 6410SP/01 Low VOC PreCleaner.
- Abrade as necessary with 80 grit sandpaper.
- Clean again with appropriate cleaner.
- Apply 1-2 full wet coats, allowing proper flash time between coats.
- Allow 30 minutes to flash before topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

Powder-coated substrate

Use proper Personal Protective Equipment (PPE) during sanding and product application.

2.1 Epoxy Primers:

274528SP/01 Gray 274530SP/01 White 274531SP/01 Black

- Clean with 45330SP/01 Speed Prep Cleaner or 6410SP/01 Low VOC PreCleaner.
- Abrade as necessary with 180-220 grit sandpaper, finishing with the finest grit possible.
- Clean again with appropriate cleaner.
- Apply 1-2 full wet coats, allowing proper flash time between coats.
- Allow 30 minutes to flash before topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

White Epoxy Primer or Black Epoxy Primer:

274908SP/01 or 274808SP/01: RTS 3.90-3.95 VOC

- Clean with 45330SP/01 Speed Prep Cleaner or 6410SP/01 Low VOC PreCleaner.
- Abrade as necessary with 180-220 grit sandpaper, finishing with the finest grit possible.
- Clean again with appropriate cleaner.
- Apply 2 full wet coats, allowing proper flash time between coats.
- Allow 30 minutes to flash before topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

White Epoxy Primer:

MAP-LVU100/01: RTS 0.42 VOC

- Clean with 45330SP/01 Speed Prep Cleaner or 6410SP/01 Low VOC PreCleaner.
- Abrade as necessary with 180-220 grit sandpaper, finishing with the finest grit possible.
- Clean again with appropriate cleaner.
- Apply 1-2 full wet coats allowing proper flash time between coats.
- Allow 30 minutes (spraying) or 1.5-2.5 hours (brush/roll) before topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

Steel or aluminum repairs

Previously primed and/or painted surfaces

- Use proper Personal Protective Equipment (PPE) during sanding and product application.
- Inspect existing coating for any delaminating or degradation to determine if existing coating should be removed. If so, repair or strip as necessary.

2.1 Epoxy Primers:

274528SP/01 Gray 274530SP/01 White 274531SP/01 Black

- Clean with 45330SP/01 Speed Prep Cleaner or 6410SP/01 Low VOC PreCleaner.
- Abrade as necessary with 180-320 grit sandpaper, finishing with the finest grit possible.
- Clean again with appropriate cleaner.
- Apply 1-2 full wet coats, allowing proper flash time between coats.
- Allow 30 minutes to flash before topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

White Epoxy Primer or Black Epoxy Primer:

274908SP/01 or 274808SP/01: RTS 3.90-3.95 VOC

- Clean with 45330SP/01 Speed Prep Cleaner or 6410SP/01 Low VOC PreCleaner.
- Abrade as necessary with 180-320 grit sandpaper, finishing with the finest grit possible.
- Clean again with appropriate cleaner.
- Apply 2 full wet coats, allowing proper flash time between coats.
- Allow 30 minutes to flash before topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

High Build Polyester Primer Surfacer:

6002SP/01: RTS 1.07 VOC

- Clean with 45330SP/01 Speed Prep Cleaner, or 6410SP/01 Low VOC PreCleaner.
- Abrade as necessary with 180-320 grit sandpaper, finishing with the finest grit possible.
- Clean again with appropriate cleaner.
- Mix High Build Polyester Primer Surfacer according to instructions (see text box).
- Apply 2 full wet coats, allowing proper flash time between coats.
- Apply additional coats as necessary to achieve desired filling.
- Allow 1.5 hours dry time before sanding, cleaning and topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

When spraying Polyester Primer Surfacer, it is important to refer to the technical data sheets for spray tip recommendations, pot life, and application instructions. Once activated, apply primer within the stated pot life and clean equipment immediately.

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Steel or aluminum repairs (continued)

Polyester Primer Surfacer:

6001SP/01: RTS 2.5 VOC

- Clean with 45330SP/01 Speed Prep Cleaner or 6410SP/01 Low VOC PreCleaner.
- Abrade as necessary with 180-320 grit sandpaper, finishing with the finest grit possible.
- Clean again with appropriate cleaner.
- Mix Polyester Primer Surfacer according to instructions (see text box).
- Apply 2 full wet coats, allowing proper flash time between coats.
- Apply additional coats as necessary to achieve desired filling.
- Allow 1.5 hours dry time before sanding, cleaning and topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

When spraying Polyester Primer Surfacer, it is important to refer to the technical data sheets for spray tip recommendations, pot life, and application instructions. Once activated, apply primer within the stated pot life and clean equipment immediately.

White Epoxy Primer:

MAP-LVU100/01: RTS 0.42 VOC

- Clean with 45330SP/01 Speed Prep Cleaner or 6410SP/01 Low VOC PreCleaner.
- Abrade as necessary with 180-320 grit sandpaper, finishing with the finest grit possible.
- Clean again with appropriate cleaner.
- Apply 1-2 full wet coats allowing proper flash time between coats.
- Allow 30 minutes (spraying) or 1.5-2.5 hours (brush/roll) before topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

Painted surfaces

Matthews Paint or unidentified finishes

- Use proper Personal Protective Equipment (PPE) during sanding and product application.
- Always test painted surface for compatibility before use of Matthews primers and topcoats.
- Inspect existing coating for any delaminating or degradation to determine if existing coating should be removed. If so, repair or strip as necessary.

Matthews Paint Topcoat option (no primer):

If existing finish is fully cured and sound, Matthews Paint topcoat can be applied directly without primer.

- Clean with 45330SP/01 Speed Prep Cleaner or 6410SP/01 Low VOC PreCleaner.
- Abrade as necessary with 220-320 grit sandpaper, finishing with the finest grit possible.
- Clean again with appropriate cleaner.
- Important: if bare substrate has been exposed, an appropriate Matthews Paint primer must be applied before topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

2.1 Epoxy Primers:

274528SP/01 Gray 274530SP/01 White 274531SP/01 Black

- Clean with 45330SP/01 Speed Prep Cleaner or 6410SP/01 Low VOC PreCleaner.
- Abrade as necessary with 180-320 grit sandpaper, finishing with the finest grit possible.
- Clean again with appropriate cleaner.
- Apply 1-2 full wet coats, allowing proper flash time between coats.
- Allow 30 minutes to flash before topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

White Epoxy Primer or Black Epoxy Primer:

274908SP/01 or 274808SP/01: RTS 3.90-3.95 VOC

- Clean with 45330SP/01 Speed Prep Cleaner or 6410SP/01 Low VOC PreCleaner.
- Abrade as necessary with 180-320 grit sandpaper, finishing with the finest grit possible.
- Clean again with appropriate cleaner.
- Apply 2 full wet coats, allowing proper flash time between coats.
- Allow 30 minutes to flash before topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

White Epoxy Primer:

MAP-LVU100/01: RTS 0.42 VOC

- Clean with 45330SP/01 Speed Prep Cleaner or 6410SP/01 Low VOC PreCleaner.
- Abrade as necessary with 180-320 grit sandpaper, finishing with the finest grit possible.
- Clean again with appropriate cleaner.
- Apply 1-2 full wet coats allowing proper flash time between coats.
- Allow 30 minutes (spraying) or 1.5-2.5 hours (brush/roll) before topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

Acrylic

- Use proper Personal Protective Equipment (PPE) during product application.
- 6410SP/01 can be used as a cleaner in VOC regulated areas but will not provide the same anti-static properties of the non-compliant 6428SP/01 Plastic Prep.
- Matthews Paint strongly recommends the use of Tie Bond as an adhesive over acrylics to ensure proper adhesion.

Tie Bond Adhesive or Spray Bond Adhesive:

274777SP/01 or 274793SP/01: RTS 0 VOC

- Clean with 6428SP/01 Plastic Prep or 6410SP/01 Low VOC PreCleaner.
- Apply a mist coat of 6428SP/01 Plastic Prep and allow to dry in order to reduce static surface charge.
- Apply 2-3 medium wet coats, allowing proper flash time between coats.
- Allow 5-10 minutes to flash before topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

Tie Bond Adhesive:

74777SP/01: RTS 6.4 - 6.6 VOC

- Clean with 6428SP/01 Plastic Prep or 6410SP/01 Low VOC PreCleaner.
- Apply a mist coat of 6428SP Plastic Prep and allow to dry in order to reduce static surface charge.
- Apply 2-3 medium wet coats, allowing proper flash time between coats.
- Allow 5-10 minutes to flash before topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

Acrylic

Laser-cut, Router-cut, Flame-treated

- Use proper Personal Protective Equipment (PPE) during product application.
- 6410SP/01 can be used as a cleaner in VOC regulated areas but will not provide the same anti-static properties of the non-compliant 6428SP/01 Plastic Prep.
- 6428SP/01 may be too aggressive for laser-cut acrylic.
- Matthews Paint strongly recommends the use of Tie Bond as an adhesive over acrylics to ensure proper adhesion.
- To avoid crazing on edges of laser-cut acrylic, use a lower temperature setting.

Tie Bond Adhesive or Spray Bond Adhesive:

274777SP/01 or 274793SP/01: RTS 0 VOC

- Clean with 6410SP/01 Low VOC PreCleaner.
- Apply a mist coat of 6428SP/01 Plastic Prep and allow to dry in order to reduce static surface charge.
- Apply 2-3 medium wet coats, allowing proper flash time between coats.
- Allow 5-10 minutes to flash before topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

Acrylonitrile Butadiene Styrene (ABS)

Banner up

- Use proper Personal Protective Equipment (PPE) during product application.
- 6410SP/01 can be used as a cleaner in VOC regulated areas but will not provide the same anti-static properties of the non-compliant 6428SP/01 Plastic Prep.

Matthews Paint Topcoat:

- Clean with 6428SP/01 Plastic Prep or 6410SP/01 Low VOC PreCleaner.
- Apply topcoat per Technical Data Sheet recommendations.

Body filler

Use proper Personal Protective Equipment (PPE) during sanding and product application.

High Build Polyester Primer Surfacer:

6002SP/01: RTS 1.07 VOC

- Block sand body filler as necessary with 80-180 grit, finishing sanding with the finest grit possible.
- Clean area surrounding the repair with 45330SP/01 Speed Prep Cleaner, or 6410SP/01 Low VOC PreCleaner.
- Sand or scuff areas around repair as necessary with 180-320 grit, finishing sanding with the finest grit possible.
- Clean area surrounding the repair again with appropriate cleaner.
- Mix High Build Polyester Primer Surfacer according to instructions (see text box).
- Apply 2 full wet coats, allowing proper flash time between coats.
- Apply additional coats as necessary to achieve desired filling.
- Allow 1.5 hours dry time before block sanding with 220-320 grit and recleaning
- Apply epoxy primer followed by topcoat per Technical Data Sheet recommendations.

When spraying Polyester Primer Surfacer, it is important to refer to the technical data sheets for spray tip recommendations, pot life, and application instructions. Once activated, apply primer within the stated pot life and clean equipment immediately.

NOTE: Cleaner should never come in contact with body filler.

Polyester Primer Surfacer:

6001SP/01: RTS 2.5 VOC

- Block sand body filler as necessary with 80-180 grit, finishing sanding with the finest grit possible.
- Clean area surrounding the repair with 45330SP/01 Speed Prep Cleaner, or 6410SP/01 Low VOC PreCleaner.
- Sand or scuff areas around repair as necessary with 180-320 grit, finishing sanding with the finest grit possible.
- Clean area surrounding the repair again with appropriate cleaner.
- Mix Polyester Primer Surfacer according to instructions (see text box).
- Apply 2 full wet coats, allowing proper flash time between coats.
- Apply additional coats as necessary to achieve desired filling.
- Allow 1.5 hours dry time before block sanding with 220-320 grit and recleaning
- Apply epoxy primer followed by topcoat per Technical Data Sheet recommendations.

NOTE: Cleaner should never come in contact with body filler.

PVC, expanded and non-expanded

KÖMATEX®, SINTRA®, CELTEC®, INTACEL®, EX-CEL® and TROVICEL® substrates

- Use proper Personal Protective Equipment (PPE) during sanding and product application.
- 6410SP/01 can be used as a cleaner in VOC regulated areas but will not provide the same anti-static properties of the non-compliant 6428SP/01 Plastic Prep.
- For exterior application, it is important to completely encapsulate the entire PVC substrate to prevent warping.

If side fill is required, apply 6001SP/01 or 6002SP/01 Polyester Primer Surfacer on rough sides prior to topcoating:

- Mix Polyester Primer Surfacer per technical data sheet recommendations.
- Using a roller, apply 1-3 coats of Polyester Primer Surfacer on rough side sections only (do not apply to face of the PVC).
- Allow 1.5 hours to dry.
- Sand to desired smoothness.
- Clean with or 6410SP/01 Low VOC PreCleaner.
- Apply Tie Bond Adhesive as per technical data sheet recommendations.
- Apply topcoat per Technical Data Sheet recommendations.

Tie Bond Adhesive or Spray Bond Adhesive:

274777SP/01 or 274793SP/01: RTS 0 VOC

- Clean with 6428SP/01 Plastic Prep or 6410SP/01 Low VOC PreCleaner.
- Apply a mist coat of 6428SP/01 Plastic Prep and allow to dry in order to reduce static surface charge.
- Apply 2-3 medium wet coats, allowing proper flash time between coats.
- Allow 5-10 minutes to flash before topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

Tie Bond Adhesive:

74777SP/01: RTS 6.4 - 6.6 VOC

- Clean with 6428SP/01 Plastic Prep or 6410SP/01 Low VOC PreCleaner.
- Apply a mist coat of 6428SP/01 Plastic Prep and allow to dry in order to reduce static surface charge.
- Apply 2-3 medium wet coats, allowing proper flash time between coats.
- Allow 5-10 minutes to flash before topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

Photopolymer

Nova Polymers (NOVACRYL® PT™ and *Novacryl* ECR™-3 substrates)

- Use proper Personal Protective Equipment (PPE) during product application.
- 6410SP/01 can be used as a cleaner in VOC regulated areas but will not provide the same anti-static properties of the non-compliant 6428SP/01 Plastic Prep.

First surface painting (Tie Bond not needed):

- Clean with 6428SP/01 Plastic Prep or 6410SP/01 Low VOC PreCleaner using a short-bristled brush.
- While surface is still wet, blow dry with compressed air.
- Apply a mist coat of 6428SP/01 Plastic Prep and allow to dry in order to reduce static surface charge.
- Apply topcoat or clearcoat directly per technical data sheet recommendations.

Optional second surface painting of *Novacryl PT* (Tie Bond not needed):

- Clean with 6428SP/01 Plastic Prep or 6410SP/01 Low VOC PreCleaner using a short-bristled brush.
- While surface is still wet, blow dry with compressed air.
- Apply a mist coat of 6428SP/01 Plastic Prep and allow to dry in order to reduce static surface charge.
- Topcoat second surface directly per technical data sheet recommendations.
- Important! When applying paint to second surface *Novacryl PT* substrate, you must clearcoat the first surface to protect the photopolymer. Apply clearcoat per technical data sheet recommendations.

Nova Polymers (*Novacryl* LP™, *Novacryl* AL™ and PERMAGLOW® substrates)

- Use proper Personal Protective Equipment (PPE) during product application.
- 6410SP/01 can be used as a cleaner in VOC regulated areas but will not provide the same anti-static properties of the non-compliant 6428SP/01 Plastic Prep.

First surface coating (Tie Bond not needed):

- Clean with 6428SP/01 Plastic Prep or 6410SP/01 Low VOC PreCleaner using a short-bristled brush.
- While surface is still wet, blow dry with compressed air.
- Apply a mist coat of 6428SP Plastic Prep and allow to dry in order to reduce static surface charge.
- Apply clearcoat directly per Technical Data Sheet recommendations.

Continues next page

Photopolymer (continued)

Nova Polymers (*Novacryl* EX™ substrate)

Use proper Personal Protective Equipment (PPE) during sanding and product application.

Non-Chromate Etch Primer:

74350SP/01: RTS 3.5 VOC

- Clean with a household all-purpose cleaner while gently scrubbing with a short-bristled brush.
- Rinse thoroughly with clean water.
- While surface is still wet, blow dry with compressed air.
- Apply a mist coat of 6428SP/01 Plastic Prep and allow to dry in order to reduce static surface charge.
- Apply 1 full wet coat 74350SP/01 Non-Chromate Etch Primer only.
- Allow 30 minutes to flash before topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

Jet USA

- Use proper Personal Protective Equipment (PPE) during product application.
- 6410SP/01 can be used as a cleaner in VOC regulated areas but will not provide the same anti-static properties of the non-compliant 6428SP/01 Plastic Prep.

Tie Bond Adhesive or Spray Bond Adhesive:

274777SP/01 or 274793SP/01: RTS 0 VOC

- Clean with 6428SP/01 Plastic Prep or 6410SP/01 Low VOC PreCleaner.
- Apply a mist coat of 6428SP/01 Plastic Prep and allow to dry in order to reduce static surface charge.
- Apply 2-3 medium wet coats, allowing proper flash time between coats.
- Allow 5-10 minutes to flash before topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

Tie Bond Adhesive:

74777SP/01: RTS 6.4 - 6.6 VOC

- Clean with 6428SP/01 Plastic Prep or 6410SP/01 Low VOC PreCleaner.
- Apply a mist coat of 6428SP/01 Plastic Prep and allow to dry in order to reduce static surface charge.
- Apply 2-3 medium wet coats, allowing proper flash time between coats.
- Allow 5-10 minutes to flash before topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

3D-printed substrate

MASSIVIT® printed surfaces

- Use proper Personal Protective Equipment (PPE) during product application.
- 6410SP/01 can be used as a cleaner in VOC regulated areas but will not provide the same anti-static properties of the non-compliant 6428SP/01 Plastic Prep.

Matthews Paint Topcoat:

- Clean with 6428SP/01 Plastic Prep or 6410SP/01 Low VOC PreCleaner.
- Apply topcoat per Technical Data Sheet recommendations.

Polycarbonate

- Use proper Personal Protective Equipment (PPE) during product application.
- Polycarbonate manufacturers recommend that all moisture be heat-purged out of substrate before coating application.
- Application of any primer, adhesive, or topcoat will alter this substrate's impact strength.
- 6410SP/01 can be used as a cleaner in VOC regulated areas but will not provide the same anti-static properties of the non-compliant 6428SP/01 Plastic Prep.
- 6428SP/01 may be too aggressive for polycarbonate.
- For translucent finishes, Lacryl 400 Series Translucent Spray Paint should be used (refer to Technical Data Sheet L400).

Tie Bond Adhesive or Spray Bond Adhesive:

274777SP/01 or 274793SP/01: RTS 0 VOC

- Clean with 6428SP/01 Plastic Prep or 6410SP/01 Low VOC PreCleaner.
- Apply a mist coat of 6428SP/01 Plastic Prep and allow to dry in order to reduce static surface charge.
- Apply 2-3 medium wet coats, allowing proper flash time between coats.
- Allow 5-10 minutes to flash before topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

Tie Bond Adhesive:

74777SP/01: RTS 6.4 - 6.6 VOC

- Clean with 6428SP/01 Plastic Prep or 6410SP/01 Low VOC PreCleaner.
- Apply a mist coat of 6428SP/01 Plastic Prep and allow to dry in order to reduce static surface charge.
- Apply 2-3 medium wet coats, allowing proper flash time between coats.
- Allow 5-10 minutes to flash before topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

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Polycarbonate (continued)

Matthews Paint basecoat option (no Tie Bond):

- Clean with 6428SP/01 Plastic Prep or 6410SP/01 Low VOC PreCleaner.
- Apply a mist coat of 6428SP/01 Plastic Prep and allow to dry in order to reduce static surface charge.
- Apply 1 light coat of converted Matthews Paint basecoat (SOA, N or SVOC) as barrier coat (refer to technical data sheet for 287103SP/01 Low VOC Basecoat Converter).
- Allow 10-15 minutes to flash.
- Apply additional coats to achieve desired color and coverage.

Some Polycarbonates can be sensitive to crazing when using 74777SP/01 Tie Bond. Using Matthews Paint converted basecoat (SOA, N or SVOC) instead of 74777SP/01 is a less aggressive option.

NOTE: For first surface painting, apply clearcoat per Technical Data Sheet recommendations.

Vinyl

- Use proper Personal Protective Equipment (PPE) during product application.
- 6410SP/01 can be used as a cleaner in VOC regulated areas but will not provide the same anti-static properties of the non-compliant 6428SP/01 Plastic Prep.
- Flex additive is not required when applying Matthews topcoat to completed pre-applied vinyl.

Tie Bond Adhesive or Spray Bond Adhesive:

274777SP/01 or 274793SP/01: RTS 0 VOC

- Clean with 6428SP/01 Plastic Prep or 6410SP/01 Low VOC PreCleaner.
- Apply 2-3 medium wet coats, allowing proper flash time between coats.
- Allow 5-10 minutes to flash before topcoating.
- SOA, N or SVOC topcoat: mix with 47474SP/04 Flex Additive per technical data sheet recommendations.
- MAP-LV topcoats do not require flex additive.
- Apply topcoat per Technical Data Sheet recommendations.

Tie Bond Adhesive:

74777SP/01: RTS 6.4 - 6.6 VOC

- Clean with 6428SP/01 Plastic Prep or 6410SP/01 Low VOC PreCleaner.
- Apply 2-3 medium wet coats, allowing proper flash time between coats.
- Allow 5-10 minutes to flash before topcoating.
- SOA, N, or SVOC topcoat: mix with 47474SP/04 Flex Additive per technical data sheet recommendations.
- MAP-LV topcoats do not require flex additive.
- Apply topcoat per Technical Data Sheet recommendations.

Matthews Paint Topcoat Option (No Tie Bond):

- Clean with 6428SP/01 Plastic Prep or 6410SP/01 Low VOC PreCleaner.
- Abrade with scuff pad.
- Clean again with appropriate cleaner.
- Apply topcoat per Technical Data Sheet recommendations.

Trim Cap

JEWELITE® substrate

- Use proper Personal Protective Equipment (PPE) during product application.
- 6410SP/01 can be used as a cleaner in VOC regulated areas but will not provide the same anti-static properties of the non-compliant 6428SP/01 Plastic Prep.
- Flex additive is not required when applying Matthews topcoat to completed pre-applied trim cap.

Tie Bond Adhesive or Spray Bond Adhesive:

274777SP/01 or 274793SP/01: RTS 0 VOC

- Clean with 6428SP/01 Plastic Prep or 6410SP/01 Low VOC PreCleaner.
- Apply 2-3 medium wet coats, allowing proper flash time between coats.
- Allow 5-10 minutes to flash before topcoating.
- SOA, N or SVOC topcoat: mix with 47474SP/04 Flex Additive per technical data sheet recommendations.
- MAP-LV topcoats do not require flex additive.
- Apply topcoat per Technical Data Sheet recommendations.

Tie Bond Adhesive:

74777SP/01: RTS 6.4 - 6.6 VOC

- Clean with 6428SP/01 Plastic Prep or 6410SP/01 Low VOC PreCleaner.
- Apply 2-3 medium wet coats, allowing proper flash time between coats.
- Allow 5-10 minutes to flash before topcoating.
- SOA, N or SVOC topcoat: mix with 47474SP/04 Flex Additive per technical data sheet recommendations.
- MAP-LV topcoats do not require flex additive.
- Apply topcoat per Technical Data Sheet recommendations.

EPS-Polystyrene

GATORFOAM® substrate

Use proper Personal Protective Equipment (PPE) during product application.

1 SHOT® Ti-Cote Clear Primer Barrier (no fill):

4331010: RTS 2.48 VOC

- Clean substrate with clean compressed air.
- Apply primer in order to seal the entire foam surface areas.
- Allow to dry for 1-2 hours.
- Apply topcoat or clear per Technical Data Sheet recommendations.

If fill is required, apply one of the following primer options:

1 Shot Universal White Primer (minimal fill):

4411008: RTS 2.34 VOC

- Clean substrate with clean compressed air.
- Apply primer in order to fill and seal the entire foam surface areas.
- Allow to dry for at least 3 hours.
- Apply topcoat per Technical Data Sheet recommendations.

Although both 4411008 Universal Primer and 4411010 High Build Primer can be applied directly to Polystyrene, applying 4331010 Ti-Cote first can improve adhesion to bare Polystyrene.

1 Shot High Build White Primer:

4411010: RTS 1.99 VOC

- Clean substrate with clean compressed air.
- Apply primer in order to fill and seal the entire foam surface areas.
- Allow to dry for at least 8 hours.
- If needed, sand primer with 180–320 grit sandpaper, finishing with the finest grit possible.
- Clean with 6410SP/01 Low VOC PreCleaner.
- Apply topcoat per Technical Data Sheet recommendations.

Matthews Paint polyester or epoxy primer options:

- The polystyrene MUST be completely encapsulated with 4331010 Ti-Cote to prevent the substrate from melting.
- Apply Matthews Paint Polyester or Epoxy Primer per technical data sheet recommendations.

Flexible-face substrate

COOLEY-BRITE® substrate

- Use proper Personal Protective Equipment (PPE) during product application.
- 6410SP/01 can be used as a cleaner in VOC regulated areas but will not provide the same anti-static properties of the non-compliant 6428SP/01 Plastic Prep.

Tie Bond Adhesive or Spray Bond Adhesive:

274777SP/01 or 274793SP/01: RTS 0 VOC

- Clean with 6428SP/01 Plastic Prep or 6410SP/01 Low VOC PreCleaner.
- Apply 2-3 medium wet coats, allowing proper flash time between coats.
- Allow 5-10 minutes to flash before topcoating.
- SOA, N or SVOC topcoat: mix with 47474SP/04 Flex Additive per technical data sheet recommendations.
- MAP-LV topcoats do not require flex additive.
- Apply topcoat per Technical Data Sheet recommendations.

Tie Bond Adhesive:

74777SP/01: RTS 6.4 - 6.6 VOC

- Clean with 6428SP/01 Plastic Prep or 6410SP/01 Low VOC PreCleaner.
- Apply 2-3 medium wet coats, allowing proper flash time between coats.
- Allow 5-10 minutes to flash before topcoating.
- SOA, N or SVOC topcoat: mix with 47474SP/04 Flex Additive per technical data sheet recommendations.
- MAP-LV topcoats do not require flex additive.
- Apply topcoat per Technical Data Sheet recommendations.

Wood

Including MDO, MDF and EXTIRA® substrate

- Use proper Personal Protective Equipment (PPE) during sanding and product application.
- Certain applications using exterior wood as a substrate will expand and/or contract too much for Matthews Paint products to be used.
- For exterior application, it is important to completely encapsulate the entire substrate to prevent moisture penetration.
- For MDO, MDF, and Extira, it is important to completely encapsulate the entire substrate to prevent warping due to expansion and contraction.

General Cleaning and Preparation Steps:

- Test moisture level of substrate. Moisture level should be less than 13%.
- Remove debris with clean compressed air.
- Abrade as necessary with 180-320 grit sandpaper, finishing with the finest grit possible.
- Remove dust with clean compressed air and tack rag.
- If heavy filling/blocking is required to fill grain, knots, or other imperfections, 6002SP/01 High Build Polyester Primer Surfacer provides the most fill. Otherwise, any Matthews Paint epoxy primer can be used.

High Build Polyester Primer Surfacer:

6002SP/01: RTS 1.07 VOC

- Blow off substrate with clean compressed air.
- Mix High Build Polyester Primer Surfacer according to instructions (see text box).
- Apply 2 full wet coats, allowing proper flash time between coats.
- Apply additional coats as necessary to achieve desired filling.
- Allow 1.5 hours dry time before sanding with 220-320 grit.
- Clean with 45330SP/01 Speed Prep or 6410SP/01 Low VOC PreCleaner.
- Apply epoxy primer followed by topcoat per Technical Data Sheet recommendations.

NOTE: Cleaner should never come in contact with exposed wood.

When spraying Polyester Primer Surfacer, it is important to refer to the technical data sheets for spray tip recommendations, pot life, and application instructions. Once activated, apply primer within the stated pot life and clean equipment immediately.

Polyester Primer Surfacer:

6001SP/01: RTS 2.5 VOC

- Blow off substrate with clean compressed air.
- Mix Polyester Primer Surfacer according to instructions (see text box).
- Apply 2 full wet coats, allowing proper flash time between coats.
- Apply additional coats as necessary to achieve desired filling.
- Allow 1.5 hours dry time before sanding with 220-320 grit sandpaper.
- Clean with 45330SP/01 Speed Prep or 6410SP/01 Low VOC PreCleaner.
- Apply epoxy primer followed by topcoat per Technical Data Sheet recommendations.

NOTE: Cleaner should never come in contact with exposed wood.

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Wood (continued)

White Epoxy Primer or Black Epoxy Primer:

274908SP/01 or 274808SP/01: RTS 3.90-3.95 VOC

- Blow off substrate with clean compressed air.
- Apply 2 full wet coats, allowing proper flash time between coats.
- Apply additional coats as necessary to achieve total dry film thickness.
- Allow 30 minutes to flash before topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

2.1 Epoxy Primers:

274528SP/01 Gray 274530SP/01 White 274531SP/01 Black

- Blow off substrate with clean compressed air.
- Apply 1-2 full wet coats, allowing proper flash time between coats.
- Allow 30 minutes to flash before topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

White Epoxy Primer:

MAP-LVU100/01: RTS 0.42 VOC

- Blow off substrate with clean compressed air.
- Apply 1-2 full wet coats allowing proper flash time between coats.
- Allow 30 minutes (spraying) or 1.5-2.5 hours (brush/roll) before topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

Scooter board

Use proper Personal Protective Equipment (PPE) during product application.

Tie Bond Adhesive or Spray Bond Adhesive

274777SP/01 or 274793SP/01: RTS 0 VOC

- Remove dust with clean compressed air and tack rag.
- Abrade as necessary with 220-320 grit sandpaper, finishing with the finest grit possible.
- Remove dust with clean compressed air and tack rag.
- Apply 2-3 medium wet coats, allowing proper flash time between coats.
- Allow 5-10 minutes to flash before topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

Tie Bond Adhesive:

74777SP/01: RTS 6.4 - 6.6 VOC

- Remove dust with clean compressed air and tack rag.
- Abrade as necessary with 220-320 grit sandpaper, finishing with the finest grit possible.
- Remove dust with clean compressed air and tack rag.
- Apply 2-3 medium wet coats, allowing proper flash time between coats.
- Allow 5-10 minutes to flash before topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

Fiberglass, non-gel coated (raw)

Use proper Personal Protective Equipment (PPE) during product application.

High Build Polyester Primer Surfacer:

6002SP/01: RTS 1.07 VOC

- Remove dust with clean compressed air and tack rag.
- Abrade as necessary with 180-320 grit, finishing sanding with the finest grit possible.
- Remove dust with clean compressed air and tack rag.
- Mix High Build Polyester Primer Surfacer according to instructions (see text box).
- Apply 2 full wet coats, allowing proper flash time between coats.
- Apply additional coats as necessary to achieve desired filling.
- Allow 1.5 hours dry time before sanding, cleaning and topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

When spraying Polyester Primer Surfacer, it is important to refer to the technical data sheets for spray tip recommendations, pot life, and application instructions. Once activated, apply primer within the stated pot life and clean equipment immediately.

Polyester Primer Surfacer:

6001SP/01: RTS 2.5 VOC

- Remove dust with clean compressed air and tack rag.
- Abrade as necessary with 180-320 grit sandpaper, finishing with the finest grit possible.
- Remove dust with clean compressed air and tack rag.
- Mix Polyester Primer Surfacer according to instructions (see text box).
- Apply 2 full wet coats, allowing proper flash time between coats.
- Apply additional coats as necessary to achieve desired filling.
- Allow 1.5 hours dry time before sanding, cleaning and topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

2.1 Epoxy Primers:

274528SP/01 Gray 274530SP/01 White 274531SP/01 Black

- Remove dust with clean compressed air and tack rag.
- Abrade as necessary with 180-320 grit sandpaper, finishing with the finest grit possible.
- Remove dust with clean compressed air and tack rag.
- Apply 1-2 full wet coats, allowing proper flash time between coats.
- Apply additional coats as necessary to achieve total dry film thickness.
- Allow 24 hours dry time before sanding, cleaning and topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

White Epoxy Primer or Black Epoxy Primer:

274908SP/01 or 274808SP/01: RTS 3.90-3.95 VOC

- Remove dust with clean compressed air and tack rag.
- Abrade as necessary with 180-320 grit sandpaper, finishing with the finest grit possible.
- Remove dust with clean compressed air and tack rag.
- Apply 2 full wet coats, allowing proper flash time between coats.
- Apply additional coats as necessary to achieve total dry film thickness.
- Allow 24 hours dry time before sanding, cleaning and topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

Fiberglass, gel-coated

- Use proper Personal Protective Equipment (PPE) during sanding and product application.
- 6410SP/01 can be used as a cleaner in VOC regulated areas but will not provide the same anti-static properties of the non-compliant 6428SP/01 Plastic Prep.
- All mold release agent must be removed prior to sanding. Multiple cleaning steps may be required.

Matthews Paint Topcoat:

- Thoroughly clean with 6428SP/01 Plastic Prep or 6410SP/01 Low VOC PreCleaner.
- Abrade as necessary using 320-400 grit sandpaper, finishing with the finest grit possible.
- Clean again with appropriate cleaner.
- Apply topcoat per Technical Data Sheet recommendations.

If primer is needed, apply any Matthews Paint epoxy primer per technical data sheet recommendations.

HDU or polyurethane foam board

Poly Board, Sign Foam, Precision Board, JASPER® DESIGN BOARD®, CORAFOAM®

- Use proper Personal Protective Equipment (PPE) during sanding and product application.
- For HDU, it is important to completely encapsulate the entire substrate to prevent warping due to expansion and contraction.

Polyester Primer Surfacer:

6001SP/01: RTS 2.5 VOC

- Blow off substrate with clean compressed air.
- Mix Polyester Primer Surfacer according to instructions (see text box).
- Apply 2 full wet coats, allowing proper flash time between coats.
- Apply additional coats as necessary to achieve desired filling.
- Allow 1.5 hours dry time before sanding with 220-320 grit sandpaper
- Clean with 45330SP/01 Speed Prep or 6410SP/01 Low VOC PreCleaner.
- Apply epoxy primer followed by topcoat per Technical Data Sheet recommendations.

NOTE: Cleaner should never come in contact with exposed foam.

When spraying Polyester Primer Surfacer, it is important to refer to the technical data sheets for spray tip recommendations, pot life, and application instructions. Once activated, apply primer within the stated pot life and clean equipment immediately.

Granite

Use proper Personal Protective Equipment (PPE) during sanding and product application.

2.1 Epoxy Primers:

274528SP/01 Gray | 274530SP/01 White | 274531SP/01 Black

- Clean with 45330SP/01 Speed Prep Cleaner or 6410SP/01 Low VOC PreCleaner.
- Sandblast or abrade as necessary with 180-320 grit sandpaper, finishing with the finest grit possible.
- Clean again with appropriate cleaner (for sandblasted granite, blow off with clean compressed air only).
- Apply 1-2 full wet coats, allowing proper flash time between coats.
- Allow 30 minutes to flash before topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

White Epoxy Primer or Black Epoxy Primer:

274908SP/01 or 274808SP/01: RTS 3.90-3.95 VOC

- Clean with 45330SP/01 Speed Prep Cleaner or 6410SP/01 Low VOC PreCleaner.
- Sandblast or abrade as necessary with 180-320 grit sandpaper, finishing with the finest grit possible.
- Clean again with appropriate cleaner (for sandblasted granite, blow off with clean compressed air only).
- Apply 2 full wet coats, allowing proper flash time between coats.
- Allow 30 minutes to flash before topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

White Epoxy Primer:

MAP-LVU100/01: RTS 0.42 VOC

- Clean with 45330SP/01 Speed Prep Cleaner or 6410SP/01 Low VOC PreCleaner.
- Sandblast or abrade as necessary with 180-320 grit sandpaper, finishing with the finest grit possible.
- Clean again with appropriate cleaner (for sandblasted granite, blow off with clean compressed air only).
- Apply 1-2 full wet coats, allowing proper flash time between coats.
- Allow 30 minutes to flash before topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

Cement, bare

Use proper Personal Protective Equipment (PPE) during preparation and product application.

General cleaning and preparation steps:

- Pay careful attention to these instructions, as they are very important to follow properly!
- Pressure-clean entire surface with 2000 PSI at 3-5 GPM (gallons per minute).
- Clean with 5% muriatic acid and water solution. Use recommended safety instructions from Muriatic acid manufacturer!
- Rinse well with water and allow to dry.
- Remove debris with compressed air.
- Test PH level of substrate. Proper PH level must be less than 10 and higher than 5, neutral is 7 and preferred. PH test pencils can be purchased at **cole-palmer.com**.
- Test moisture level of substrate. Moisture level should be less than 13%.
- **Important:** Failure to ensure that moisture and PH levels are within recommended limits will result in apparent or eventual coating failure.
- Apply primer and topcoat per recommendations below.

2.1 Epoxy Primers:

274528SP/01 Gray | 274530SP/01 White | 274531SP/01 Black

- Apply 1-2 full wet coats, allowing proper flash time between coats.
- Allow 30 minutes to flash before topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

White Epoxy Primer or Black Epoxy Primer:

274908SP/01 or 274808SP/01: RTS 3.90-3.95 VOC

- Apply 2 full wet coats, allowing proper flash time between coats.
- Allow 30 minutes to flash before topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

White Epoxy Primer:

MAP-LVU100/01: RTS 0.42 VOC

- Apply 1-2 full wet coats, allowing proper flash time between coats.
- Allow 30 minutes to flash before topcoating.
- Apply topcoat per Technical Data Sheet recommendations.

Clearcoat preparation recommendations

Matthews Paint topcoat (color)

Use proper Personal Protective Equipment (PPE) during sanding and product application.

Immediately following the application of Matthews Paint topcoat:

- Allow topcoat 15 minutes to flash.
- Apply 2 full wet coats of Matthews Paint clear, allowing proper flash time between coats.

If topcoat is allowed to dry more than 24 hours:

- Clean with appropriate Matthews Paint cleaner.
- Lightly dry scuff sand with 320-400 grit sandpaper by hand/machine or wet sand with 600 grit sandpaper.
- Clean again with appropriate cleaner.
- Apply 2 full wet coats of Matthews Paint clear, allowing proper flash time between coats.

Aluminum, brass, copper or bronze

- Use proper Personal Protective Equipment (PPE) during sanding and product application.
- Chamfer or knock down all sharp edges before applying Spray Bond.
- For Brass and Copper, 42260SP/01 Braco Clear contains an anti-tarnish agent

Spray Bond Adhesive:

274793SP/01: RTS 0 VOC

- Clean with 45330/01 Speed Prep or 6410SP/01 Low VOC PreCleaner.
- Apply 2-3 light to medium coats, allowing proper flash time between coats.
- Allow 5-10 minutes to flash before clearcoating.
- Clearcoat per technical data sheet recommendations.

Acrylic

- Use proper Personal Protective Equipment (PPE) during product application.
- 6410SP/01 can be used as a cleaner in VOC regulated areas but will not provide the same anti-static properties of the non-compliant 6428SP/01 Plastic Prep.
- 6428SP/01 may be too aggressive for laser-cut acrylic.

Spray Bond Adhesive

274793SP/01: RTS 0 VOC

- Clean with 6428SP/01 Plastic Prep or 6410SP/01 Low VOC PreCleaner.
- Apply a mist coat of 6428SP/01 Plastic Prep and allow to dry in order to reduce static surface charge.
- Apply 2-3 medium wet coats, allowing proper flash time between coats.
- Allow 5-10 minutes to flash before clearcoating.
- Clearcoat per technical data sheet recommendations.

Polycarbonate

- Use proper Personal Protective Equipment (PPE) during product application.
- Polycarbonate manufacturers recommend that all moisture be heat-purged out of substrate before coating application.
- Application of any primer, adhesive, or topcoat will alter this substrate's impact strength.
- 6410SP/01 can be used as a cleaner in VOC regulated areas but will not provide the same anti-static properties of the non-compliant 6428SP/01 Plastic Prep.
- 6428SP/01 may be too aggressive for polycarbonate.

Spray Bond Adhesive:

274793SP/01: RTS 0 VOC

- Clean with 6428SP/01 Plastic Prep or 6410SP/01 Low VOC PreCleaner.
- Apply a mist coat of 6428SP/01 Plastic Prep and allow to dry in order to reduce static surface charge.
- Apply 2-3 medium wet coats, allowing proper flash time between coats.
- Allow 5-10 minutes to flash before clearcoating.
- Apply clearcoat per Technical Data Sheet recommendations.

Vinyl

- Use proper Personal Protective Equipment (PPE) during product application.
- 6410SP/01 can be used as a cleaner in VOC regulated areas but will not provide the same anti-static properties of the non-compliant 6428SP/01 Plastic Prep.
- Flex additive is not required when applying Matthews Paint topcoat to completed pre-applied vinyl.

Spray Bond Adhesive:

274793SP/01: RTS 0 VOC

- Clean with 6428SP/01 Plastic Prep or 6410SP/01 Low VOC PreCleaner.
- Apply 2-3 medium wet coats, allowing proper flash time between coats.
- Allow 5-10 minutes to flash before clearcoating.
- Conventional or Low VOC clears: mix with 47474SP/01 Flex Additive per Technical Data Sheet recommendations.
- MAP-LV topcoats do not require flex additive.
- Apply clearcoat per Technical Data Sheet recommendations.

Matthews Paint clearcoat option (no Spray Bond):

- Clean with 6428SP/01 Plastic Prep or 6410SP/01 Low VOC PreCleaner.
- Abrade with scuff pad.
- Clean again with appropriate cleaner.
- Apply topcoat per Technical Data Sheet recommendations.

Wood

- Use proper Personal Protective Equipment (PPE) during sanding and product application.
- Certain applications using exterior wood as a substrate will expand and/or contract too much for Matthews Paint products to be used.
- For exterior application, it is important to completely encapsulate the entire substrate to prevent moisture penetration.

General cleaning and preparation steps:

- Test moisture level of substrate. Moisture level should be less than 13%.
- Remove debris with clean compressed air.
- Abrade as necessary with 180-320 grit sandpaper, finishing with the finest grit possible.
- Remove dust with clean compressed air and tack rag.
- Seal the wood by applying 2 full wet coats of Matthews Paint gloss clear allowing proper flash time between coats.
- Allow the clear to fully dry before sanding with 320 grit sandpaper or finer to smooth surface.
- Remove debris with clean compressed air.
- Apply 2 full wet coats of Matthews Paint clear allowing proper flash time between coats.

Mixing Matthews Paint products

The two most common methods for mixing Matthews Paint products are a mixing cup or a mixing stick

Using a Matthews Paint mixing cup

1. Thoroughly agitate the paint or stir the mixed color.
2. Locate the “3:1:1” measurement ratio grid printed on the cup.
3. In the “3:1:1” ratio grid, choose the number that represents the volume of paint you need. We will use “4” in our example. See Figure 1.
4. Pour the paint into the cup up to the “4” in the left column.
5. Pour the catalyst into the cup up to the “4” in the middle column.
6. Pour the reducer into the cup up to the “4” in the right column.
7. Optional: Add accelerator (using separate accelerator cup) to the specific volume indicated on the product’s Technical Data Sheet (TDS).
8. Stir the properly measured mixture for 60 seconds or until you can visually see that all ingredients are thoroughly mixed.

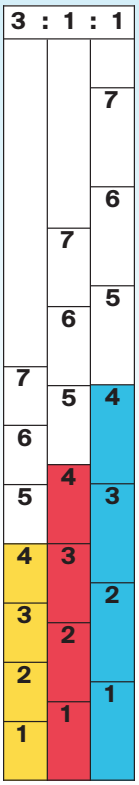


Figure 1
Yellow = Paint
Red = Catalyst
Blue = Reducer

A mixing stick is designed to be used in a straight-sided container.
Never measure paint with a mixing stick in a tapered mixing cup.

Using a Matthews Paint mixing stick

1. Thoroughly agitate the paint or stir the mixed color.
2. Place a Matthews Paint mixing stick into a straight-sided container so that it stands vertically.
3. Choose one of the four columns based on the total ready to spray quantity desired. In this example we are using the left column with the largest increments. See Figure 2.
   NOTE: When using a Mixing Stick, all ingredients are measured in one vertical column.
4. Pour the paint into the cup up to the “3” in the left column.
5. Pour the catalyst into the cup up to the “4” in the same column.
6. Pour the reducer into the cup up to the “5” in the same column.
7. Optional: Add accelerator (using separate accelerator cup) to the specific volume indicated on the corresponding product’s Technical Data Sheet (TDS).
8. Stir the properly measured mixture for 60 seconds or until you can visually see that all ingredients are thoroughly mixed.

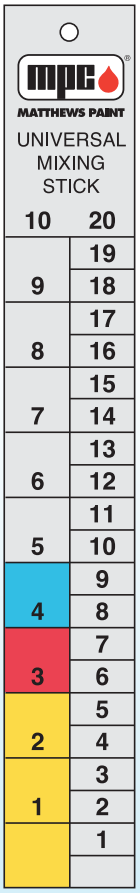


Figure 2
Yellow = Paint
Red = Catalyst
Blue = Reducer

Refurbishment and field repair

Building facades

Construction materials, doors and frames

- Substrate must be completely cleaned to ensure all contaminants have been removed.
- Follow all safety and compliant product usages for exterior applications.

- Consider building facades refurbished from the ground up to approximately 8 feet in height using Matthews Paint products for better durability in these high traffic areas.
- Clean area using a pressure washer along with a cleaning solution to remove all loose paint and foreign matter (mildew, dirt, bird droppings, etc.)
- Let area thoroughly dry before sanding.
- Sand/abrade areas needing to be painted with the correct sandpaper to create good adhesion. Feather existing painted areas that have been chipped/peeled, or areas with loose paint.
- Clean with 6410SP/01 Low VOC PreCleaner.
- Prime all areas that have been sanded through and substrate is exposed, and prime substrates that have been added.
- After primer has been allowed to dry for more than 24 hours, it must be sanded with a 220 grit sandpaper.
- Clean again with appropriate cleaner.
- Apply Matthews Paint color coat to a total of 4.0-4.5 wet mils to achieve 2.0 mils DFT.
- Apply topcoat per Technical Data Sheet recommendations.

Queue lines

Handrails, railings, fences, gates, safety barriers and steel frames

It is important through the cleaning prior to refurbishing to remove all sun tan lotion, oil and dirt residue on all guest-touchable surfaces before sanding.

- Clean with 6410SP/01 Low VOC PreCleaner.
- Sand/abrade areas needing to be painted with the correct sandpaper to create good adhesion. Feather existing painted areas that have been chipped/peeled, or areas with loose paint.
- Completely remove all rust on ferrous metals. On non-ferrous metals, be sure to remove all corrosion (white powder).
- Clean again with appropriate cleaner.
- Prime all exposed areas that have been sanded through to base substrate with a Matthews Paint epoxy primer.
- Sand all areas that have been primed after 24 hours.
- Clean again with appropriate cleaner.
- Apply Matthews Paint color coat to a total of 4.0-4.5 wet mils to achieve 2.0 mils DFT.

Lamp posts

Light poles, ornamental steel and iron

With ornate areas that are difficult to effectively sand use a scuff pad for abrasion after cleaning. Clean before and after any abrasion.

- Clean with 6410SP/01 Low VOC PreCleaner.
- Sand/abrade areas needing to be painted with the correct sandpaper to create good adhesion. Feather existing painted areas the have been chipped/peeled, or areas with loose paint.
- Clean again with appropriate cleaner.
- Prime all exposed areas that were sanded through with a Matthews Paint primer before painting. Prime with Matthews Paint epoxy primer.
- Sand all areas that have been primed after 24 hours.
- Clean again with appropriate cleaner.
- Apply Matthews Paint color coat to a total of 4.0-4.5 wet mils to achieve 2.0 mils DFT.

Ride vehicles

While repairing fiberglass, small cracks may be discovered. Before repairing these breaks with resin or body filler, first drill a small hole on each end of the crack to prevent the fracture from traveling.

- Clean thoroughly with 6410SP/01 Low VOC PreCleaner. If area has heavy amounts of axle grease or motor oil, use a degreaser cleaner first.
- Repair all damaged areas.
- Sand/abrade areas needing to be painted with the correct sandpaper to create good adhesion. Feather existing painted areas the have been chipped/peeled, or areas with loose paint.
- Clean again with appropriate cleaner.
- Prime all areas that have been sanded through and substrate is exposed.
- After primer has been allowed to dry for more than 24 hours, it must be sanded with a 220 grit sandpaper.
- Clean again with appropriate cleaner.
- Apply Matthews Paint color coat to a total of 4.0-4.5 wet mils to achieve 2.0 mils DFT.

Theming, rust effect

To make rust you have to know what it looks like.

- Steel: Dark Brown/Brown/Red
- Iron: Dark Orange/Orange/Brown
- Aluminum/Oxidation: White/Yellow

Tools Needed:

- Multiple Sponges/Sizes
- Rags
- Stiff Acid Brushes
- Soft China Bristle Brush

Making a rust and corrosion effect to show age

- First, decide what type of rust you want to emulate.
- Paint your base color. For best results, let it set overnight.
- Always scuff the surface before you start the theming process for good adhesion.
- Clean with 6410SP/01 Low VOC PreCleaner.
- Pick your first color to make your rust. It is usually the darkest color.
- Let the first color of rust dry, then add clearcoat to ensure next colors don't smudge.
- If clearcoat has sat longer than 24 hours, scuff between coats. Then clean. Pick your second color to make your rust. It is usually the medium color.
- Let the second color of rust dry, then add clearcoat to ensure next color doesn't smudge.
- If clearcoat has sat longer than 24 hours, scuff between coats. Then clean.
- Pick your third color to make your rust. It is usually the lightest color, and is used minimally.
- When painting the final clearcoat, you can use multiple gloss levels to imply the aging process.

Theming, aging effect

- To show more age, you can add mold and mildew by sponging on different shades of green, or you can add dirt and grime.
- To make the aging look more realistic, have the areas that are in the sun faded more, and the areas that are in the shade not as faded and glossier.

Making a paint fade effect to show age

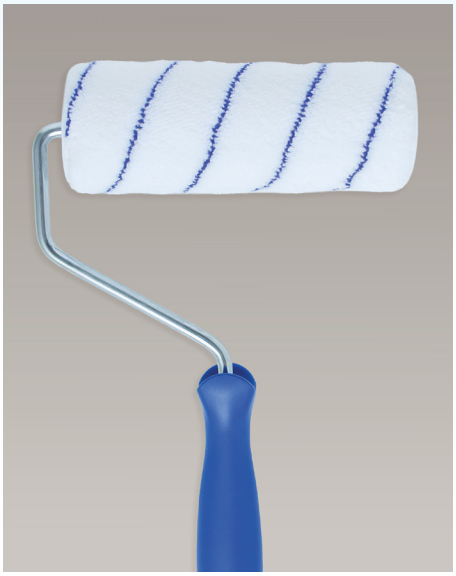
- Clean with 6410SP/01 Low VOC PreCleaner.
- Prime bare areas if needed.
- Paint base color selected.
- After base color has been painted and flashed, add a small amount of white or another color such as a light yellow to base to start fade. (Do not add color to already mixed paint in spray cup. That will change the mix ratio).
- Add color in original base, then mix 3-1-1.
- Start fade from bottom up for a better blend line.
- As soon as second color has been blended, spray a coat of clear to burn in fade line. This will keep paint edge smooth.
- If third color is desired, add more color to your base, then spray from bottom up as before and re-clear complete area.
- To show additional age, you can clear first base color in a semi-gloss, then fade to a satin, and then to a matte finish.

Brush/roller process for field repair

Recommended brushes and rollers

Rollers:

- Should be urethane-compatible foam, velour, woven polyester, mohair or lambswool.
- Other rollers may swell or dissolve.
- Examples:
  - 4” WHIZZ® rollers: #34011 (yellow), #54011 (white with yellow/ black stripe), #54060 (black) or #74011 (white with blue stripe)
  - 4 1/2” WOOSTER® rollers: #RR304 (white), #RR310 (green) or #RR311 (red)



Brushes:

- Use a china bristle or fine bristle nylon/polyester brush.

Cleaning and preparation

Cleaning:

1. Apply a generous amount of cleaner on the surface with a clean cloth or a hand-held spray bottle and wipe the surface.
2. The initial application will float contaminants to the surface. A second wipe using a separate clean dry cloth will remove contaminants.
3. Wipe the surface dry while it is still wet, using a clean white cloth in one direction. This will eliminate the smearing of contaminants. Be sure to change cloths frequently.
4. Never let the cleaner dry on the surface.
5. For best results, clean surface before and after sanding.

Sanding:

1. Abrade as necessary with 180-320 grit sand paper, finishing with the finest grit possible.
2. Be sure to feather edge the original finish surrounding the repair area.

Priming bare metal or repaired areas

Primer product selection

Select an MPC primer that will provide the fill characteristics, dry times and VOC level desired and meets all state and local regulations. Always refer to MPC Substrate Preparation Guide and Product Data Sheets (PDS) for primer recommendations, mixing instructions and dry times.

Notes:

- Avoid overloading the roller or brush.
- Apply coats as evenly as possible. Heavy coats will increase flash times and dry times.
- Even coats will provide better coverage and uniformity than heavy coats.
- Refer to the Matthews Paint PDS for mix recommendations for optimal performance.
- Maintain 50% overlap to avoid lap marks.

Primer rolling process for spot repair:

1. Roll first coat. Start from the center of the repair and roll the primer over the entire repair area using a “flicking” or lifting technique to create a soft edge all around the repair area. This technique will ensure a thin, smooth edge and make sanding easier.
2. Allow the first coat to flash off until it is dry to touch.
3. Using the same application technique, apply the second coat just beyond the first coat to ensure a soft edge.
4. Allow to flash until surface is dry to touch before topcoating.

Primer rolling process for a full panel:

1. Roll first coat edge to edge.
2. Allow to flash until surface is dry to touch.
3. Roll second coat edge to edge.
4. Allow to flash until surface is dry to touch before topcoating.

NOTE: If sanding is required to smooth the primer, allow the primer to dry completely before using 220–320 grit sand paper.

Topcoat rolling process (solid colors only):

1. Mix topcoat being used according to recommendations on PDS
2. Roll first coat.
3. Allow to flash until surface is dry to touch.
4. Roll second coat.
5. Refer to Product Data Sheet for dry time recommendations.

MATTHEWS PAINT

WARNING: Certain products listed may contain chemicals known to the State of California to cause cancer and/or reproductive harm. For more information, go to **P65Warnings.ca.gov**.

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