



# The Best Steps for the Best Coat.

Matthews Paint Conventional MAP® Substrate Preparation Guide

Select your substrate from the list below.

<b>Steps to Success</b> .....	2	Wood .....	16
<b>Important Notes</b> .....	3	MDO, MDF, Extira, Scooter Board.....	17
Aluminum.....	4	HDU (Sign Foam) .....	18
Anodized Aluminum .....	5	Fiberglass.....	19
Aluminum Composite .....	6	Limestone .....	20
Luminore .....	6	Granite .....	21
Steel .....	7	Cement.....	21
Powder Coated .....	11	Drywall .....	22
Steel or Aluminum Repairs.....	11	Polypropylene, Polyethylene	23
Painted Surfaces .....	12	Glass and Porcelain .....	23
Bondo .....	12		
Acrylic .....	13	<b>Clear Coats Preparation Recommendations</b>	
PVC .....	14	Matthews Top Coat, Aluminum, .....	24
Photopolymer.....	14	Acrylic, Polycarbonate, .....	25
Vinyl .....	15	Vinyl, Trim Cap, Brass, Copper, Bronze .....	26
Polycarbonate .....	15	Luminore, Wood.....	27
Trim Cap .....	15		
Flexible Face .....	16		
EPS Polystyrene .....	16		





# Steps to Success

## Conventional MAP® Substrate Preparation Recommendations

**Step #1** - Matthews is for Professional Use Only.

**Step #2** - Always follow proper safety precautions when using Matthews's products. Safe usage requires reading, understanding, and following all label, MSDS, and other product literature before use.

**Step #3** - The spray area and substrate must be warm and have adequate airflow. Application of primers, topcoats, and clear coats should never take place in temperatures under 60°F/16°C. Substrates should also be brought to or above this temperature guideline before applying any primer or topcoat.

**Step #4** - Properly clean substrate. Professionals don't even think about priming or painting over any substrate that hasn't been properly cleaned and prepared. Use proper cleaning products and procedures.

**Step #5** - 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 degree edges.

**Step #6** - Use the right primer for every specific substrate. Always use the appropriate primer and application techniques suggested from the Matthews substrate guide.

**Step #7** - "When in doubt, test it out." Recommend testing first, the process for any new product, primer, or first time application procedures before permanent production begins. Remember that the change of seasons effect the temperature and humidity during application so periodic testing on application and adhesion confirm the product and production performance.

**Step #8** - Choose the proper reducer for each application. Review product data sheet for reducer temperature guidance.

**Step #9** - Allow specified times between coats. For both primers, topcoats, and clears, extend flash times between each coat application.

**Step #10** - Contact Matthews Paint Company with any questions. Matthews's customer service and technical assistance are both available for any color formula match, specification, or technical question that may arise.

Call toll free at **1-800-323-6593**

Or visit our web site at **www.matthewspaint.com**



# Important Notes

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.

Recommend to periodically test adhesion on a sample of the substrate you are utilizing to ensure application process in your environment. Perform this test after a full cure of product has been applied (72 hours or more). A Cross-Hatch Adhesion test is the most common system utilized for this process.

Before opening the products listed, be sure you understand the warning messages on the labels of all components, since the mixture will have the hazards of all its parts. Use product technical data sheets for guidance.

Follow spray equipment manufacturer's instructions to prevent personal injury or fire.

Always adhere to directions for proper respirator fit, use, and maintenance.

Wear eye and skin protection at all times when working in the spray area.

Observe all application precautions.

See Material Safety Data Sheets and labels for additional safety information and handling instructions - available on web site at [www.matthewspaint.com](http://www.matthewspaint.com).

Materials described are designed for application by professional, trained personnel using proper equipment and are not intended for sale to the general public. Products mentioned may be hazardous and should only be used according to directions, while observing precautions and warning statements listed on label. Statements and methods described are based upon the best information and practices known to Matthews Paint.

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.

If you require technical assistance - please call toll free at 800-323-6593.



# Aluminum

Shot, sanded, or media blasted.

Prime with Metal Pretreatment, PT Filler, HBPT Filler, HBEF Filler, White or Black Epoxy primer, Polyester Primer Surfacer.

74 734SP Metal Pretreatment may not be the best choice of etching primer for use over Sanded, Shot, or Media blasted due to the products ZERO filling properties.

## Etching Primers:

### Metal Pretreatment:

**74 734SP:** RTS 6.34 VOC

- Clean with 45 330SP Speed Prep Cleaner
- Apply 1 wet coat Metal Pretreatment.
- Allow 15-30 minutes to flash.
- Topcoat.

### PT Filler:

**74 760SP:** RTS 6.4 VOC

- Clean with 45 330SP Speed Prep Cleaner
- Sandblasting or machine sand with 180-220 grit sandpaper to bare substrate.
- Clean again with 45 330SP Speed Prep Cleaner.
- Apply 1 wet coat PT Filler.
- Allow 5 minutes to flash.
- Apply 2nd wet coat PT Filler.
- Allow 20-30 minutes to flash.
- Topcoat.

### HBPT Self-etching Metal Treatment:

**74 770SP:** RTS 6.13 VOC

- Clean with 45 330SP Speed Prep Cleaner
- Sandblasting or machine sand with 120-220 grit sandpaper to bare substrate.
- Clean again with 45 330SP Speed Prep Cleaner.
- Apply 1 wet coat HBPT Filler.
- Allow 5 minutes to flash.
- Apply 2nd wet coat HBPT Filler.
- Allow 20-30 minutes to flash.
- Topcoat.

### HBEF Self-etching Metal Treatment:

**74 780SP:** RTS 6.04 VOC

- Clean with 45 330SP Speed Prep Cleaner
- Sandblasting or machine sand with 180-320 grit sandpaper to bare substrate.
- Clean again with 45 330SP Speed Prep Cleaner.
- Apply 1 wet coat HBEF Filler.
- Allow 3-5 minutes to flash.
- Apply 2nd wet coat HBEF Filler.
- Allow 20-30 minutes to flash.
- Topcoat.



# Aluminum

Shot, sanded, or media blasted.

## White Epoxy Primer or Black Epoxy Primer: 274 908SP or 274 808SP:

Both are RTS 3.90-3.95 VOC

- Clean with 45 330SP Speed Prep Cleaner.
- Sand with 180-320 grit sandpaper.
- Clean again with 45 330SP Speed Prep Cleaner.
- Apply 1 wet coat Epoxy Primer.
- Allow 10-15 minutes to flash.
- Apply 2nd wet coat Epoxy Primer.
- Allow 30-60 minutes to flash.
- Topcoat.

## Polyester Primer Surfacer:

**6001SP:** RTS 1.8 VOC

- Clean with 45 330SP Speed Prep Cleaner.
- Sand with 80-220 grit sandpaper.
- Clean again with 45 330SP Speed Prep Cleaner.
- Mix Polyester Primer according to instructions.
- Apply 1 wet coat.
- Allow 20 minutes to flash.
- Apply 2nd wet coat.
- Allow 20 minutes to flash.
- Apply 3rd coat to cover porosity, if necessary.
- Allow longer flash times between 3rd coats.
- Allow 1.5 hours dry time before sanding, cleaning, and topcoating.
- Topcoat.

When spraying 6001SP Polyester Primer Surfacer, it is important to refer to the technical sheets for spray tip details. We recommend the use of a 2.0 tip in the spray gun. When activated, mix thoroughly and apply immediately.

# Anodized Aluminum

## White Epoxy Primer or Black Epoxy Primer 274 908SP and 274 808SP: Both RTS 3.90-3.95 VOC

- Clean with 45 330SP Speed Prep Cleaner.
- Sand surface with a "dual action" sander using 280-320 grit sandpaper removing all color from the substrate.
- Clean again with 45 330SP Speed Prep Cleaner.
- Apply 1 wet coat of Epoxy Primer.
- Allow 10-15 minutes to flash.
- Apply 2nd wet coat of Epoxy Primer.
- Allow 30-60 minutes to flash.
- Topcoat.

## Spray Bond:

**74 793SP**

- Clean with 45 330SP Speed Prep Cleaner.
- Apply 1 wet coat.
- Flash 5-10 minutes between coats.
- Follow with a second wet coat.
- Do not let dry - let tack up 20 minutes.
- Topcoat.

Sanding must be performed to remove all the Anodized surface from the aluminum.



# Aluminum Composite Sheets

(Aluco Bond, Di-Bond, Allumilite, Alpolic, Alupanel and Ecopanel)

- Clean with 45-330SP Speed Prep Cleaner.
- Uniformly sand with 400-600 grit or scuff substrate with Scotch-Brite pad until sheen has been removed.
- Clean again with 45-330SP Speed Prep Cleaner.
- Topcoat.
- Check Adhesion.
- We recommend the use of the 274-908SP White Epoxy Primer for stronger adhesion.

### White Epoxy Primer:

#### 274-908SP:

- Clean, sand, and clean as written above.
- Apply 1 wet coat of epoxy primer.
- Allow 10-15 minutes to flash.
- Apply 2nd wet coat of epoxy primer.
- Allow 30-60 minutes to flash.
- Topcoat.

# Luminore

Hotter temperatures may cause the Spray Bond to set up faster than the process recommends. Topcoat may need to be applied using shorter flashtimes of the adhesive.

### Spray Bond Adhesive:

#### 74 793SP: RTS 7.12-7.16 VOC:

- Clean with 45 330SP Speed Prep Cleaner.
- Apply 1 wet coat of 74 793SP Spray Bond Adhesive.
- Do not allow 74 793SP Spray Bond Adhesive to dry before clear coating.
- Allow 5-15 minutes to flash.
- Apply 2nd wet coat of Spray Bond Adhesive.
- Allow 5-15 minutes to flash.
- Apply 1 wet coat of MAP Clear.
- Allow 5-15 minutes to flash.
- Apply 2nd wet coat of MAP Clear.
- Verify proper wet film build.
- Allow to dry.
- Check adhesion.



# Steel Pre-Sanded, Shot, or Media Blasted

Prime with Metal Pretreatment, PT Filler, HBPT Filler, HBEF Etching Filler, White or Black Epoxy primers.

### Metal Pretreatment:

#### 74 734SP: RTS 6.34 VOC

- Clean with 45 330SP Speed Prep Cleaner
- Apply 1 wet coat Metal Pretreatment.
- Allow 15-30 minutes to flash.
- Topcoat.

### PT Filler:

#### 74 760SP: RTS 6.4 VOC

- Clean with 45 330SP Speed Prep Cleaner
- Sandblasting or machine sand with 180-220 grit sandpaper to bare substrate.
- Clean again with 45 330SP Speed Prep Cleaner.
- Apply 1 wet coat PT Filler.
- Allow 5 minutes to flash.
- Apply 2nd wet coat PT Filler.
- Allow 20-30 minutes to flash.
- Topcoat

### HBPT Self-etching Metal Treatment:

#### 74 770SP: RTS 6.13 VOC

- Clean with 45 330SP Speed Prep Cleaner
- Sandblasting or machine sand with 120-220 grit sandpaper to bare substrate.
- Clean again with 45 330SP Speed Prep Cleaner.
- Apply 1 wet coat HBPT Filler.
- Allow 5 minutes to flash.
- Apply 2nd wet coat HBPT Filler.
- Allow 20-30 minutes to flash.
- Topcoat.

### HBEF Self-Etching Metal Treatment:

#### 74 780SP: RTS 6.04 VOC:

- Clean with 45 330SP Speed Prep Cleaner.
- Apply 1 wet coat.
- Allow 5 minutes to flash.
- Apply 2nd wet coat.
- Allow 20-30 minutes to flash.
- Topcoat.

Continued...



# Steel

Pre-Sanded, Shot, or Media Blasted

## HBEF Self-Etching Metal Treatment:

### 74 780SP: RTS 6.04 VOC:

- Clean with 45 330SP Speed Prep Cleaner.
- Apply 1 wet coat.
- Allow 5 minutes to flash.
- Apply 2nd wet coat.
- Allow 20-30 minutes to flash.
- Topcoat.

## Polyester Primer Surfacer:

### 6001SP: RTS 1.8VOC:

- Clean with 45 330SP Speed Prep Cleaner.
- Sand with 80-220 grit sandpaper.
- Clean again with 45 330SP Speed Prep Cleaner.
- Mix Polyester Primer according to instructions.
- Apply 1 wet coat.
- Allow 20 minutes to flash.
- Apply 2nd wet coat.
- Allow 20 minutes to dry.
- Topcoat.

## White Epoxy Primer or Black Epoxy Primer:

### 274 908SP or 274 808SP Both are RTS 3.90-3.95 VOC

- Clean with 45 330SP Speed Prep Cleaner.
- Apply 1 wet coat epoxy primer.
- Allow 10-15 minutes to flash.
- Apply 2nd wet coat epoxy primer.
- Allow 30-60 minutes to flash.
- Topcoat.

When spraying 6001SP Polyester Primer Surfacer, it is important to refer to the technical sheets for spray tip details. We recommend the use of a 2.0 tip in the spray gun. When activated, mix thoroughly and apply immediately.



# Steel

Hot Dipped Galvanized Surfaces (Non-Passivated)

Passivators or stabilizers and many galvanized metal manufacturers apply a "passivator" clear coating and treatment to protect galvanized while in storage from stains (White Rust)

## White Epoxy Primer or Black Epoxy Primer:

### 274 908SP or 274 808SP:

- Clean with 45330 Speed Prep Cleaner.
- Scuff surface with Scotch-Brite pad.
- Clean again with 45330 Speed Prep Cleaner.
- Apply 1 wet coat Epoxy Primer.
- Allow 10-15 minutes to flash.
- Apply 2nd wet coat Epoxy Primer.
- Allow 30-60 minutes to flash.
- Topcoat.

# Steel

Hot Dipped Galvanized Surfaces (Passivated)

Painting council and the American Hot-Dipped Galvanized Association both state the this "passivator or stabilizing" pretreatment prohibits adhesion from taking place.

Check with environmental regulations or mechanical restrictions.

## White Epoxy Primer or Black Epoxy Primer:

### 274 908SP or 274 808SP:

- Remove the passivator treatment by brush blasting.
- Clean with 45330 Speed Prep Cleaner.
- Verify all oils and surface contaminants have been removed.
- Sand with 180-320 grit sandpaper.
- Clean again with 45330 Speed Prep Cleaner.
- Apply 1 wet coat Epoxy Primer.
- Allow 10-15 minutes to flash.
- Apply 2nd wet coat Epoxy Primer.
- Allow 30-60 minutes to flash.
- Topcoat.





# Steel

Bonderized, Phosphate Coated

## White Epoxy Primer or Black Epoxy Primer:

**274 908SP or 274 808SP:** *Both are RTS 3.90-3.95 VOC*

- Clean with 45 330SP Speed Prep Cleaner.
- Scuff surface with Scotch-Brite pad.
- Clean again with 45 330SP Speed Prep Cleaner.
- Apply 1 wet coat epoxy primer.
- Allow 10-15 minutes to flash.
- Apply 2nd wet coat epoxy primer.
- Allow 30-60 minutes to flash.
- Topcoat.

# Steel

New Galvanized, Gavaneal, Galvalume, or Zinc Coated.

## White Epoxy Primer or Black Epoxy Primer:

**274 908SP or 274 808SP:** *Both are RTS 3.90-3.95 VOC:*

- Clean with 45 330SP Speed Prep Cleaner.
- Verify all oils and surface contaminants have been removed.
- Sand surface with 180-220 grit sandpaper.
- Clean again with 45 330SP Speed Prep Cleaner.
- Apply 1 wet coat epoxy primer.
- Allow 10-15 minutes to flash.
- Apply 2nd wet coat epoxy primer.
- Allow 30-60 minutes to flash.
- Topcoat.



# Powder Coated

## White Epoxy Primer or Black Epoxy Primer:

**274 908SP or 274 808SP:** *Both are RTS 3.90-3.95 VOC*

- Clean with 45 330SP Speed Prep Cleaner.
- Sand surface thoroughly with a "dual action" sander using 180-220 grit sandpaper.
- Clean again with 45 330SP Speed Prep Cleaner.
- Apply 1 wet coat epoxy primer.
- Allow 10-15 minutes to flash.
- Apply 2nd wet coat epoxy primer.
- Allow 30-60 minutes to flash.
- Topcoat.

# Steel or Aluminum Repairs

next to primed and/or painted surfaces

**!** Inspect existing coating for any delaminating or degradation to determine if existing coating should be removed. If so, repair or strip as necessary.

## White Epoxy Primer or Black Epoxy Primer:

**274 908SP or 274 808SP** *Both are RTS 3.90-3.95 VOC*

- Clean with 45 330SP Speed Prep Cleaner.
- Sand complete surface area with 180-220 grit sandpaper.
- Clean again with 45 330SP Speed Prep Cleaner.
- Apply 1 wet coat epoxy primer over all surface areas.
- Allow 10-15 minutes to flash.
- Apply 2nd wet coat.
- Allow 30-60 minutes to flash.
- Topcoat.



# Painted Surfaces

Not Matthews Paint (Refurbishing work)

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 needed.

## White Epoxy Primer or Black Epoxy Primer:

**274 908SP or 274 808SP Both are RTS 3.90-3.95 VOC**  
*Same procedure for all three Epoxy Primers.*

- Clean with 45 330SP Speed Prep Cleaner.
- Sand with 220-320 grit sandpaper or scotch-bite pad as necessary.
- Clean again with 45 330SP Speed Prep Cleaner.
- Apply 1 wet coat epoxy primer.
- Allow 10-15 minutes to flash.
- Apply 2nd wet coat of epoxy primer.
- Allow 30-60 minutes to flash.
- Topcoat.

# Bondo Filled Areas

## On repaired bare metal area:

- Clean with 45 330SP Speed Prep Cleaner.
- Apply 1-2 wet coats of the 274 908SP White Epoxy Primer or 274 808SP Black Epoxy Primer and allow to dry.
- Clean repaired area with 45 330SP Speed Prep Cleaner.
- Apply sufficient process of Bondo applications for desired filling property.
- Allow to fully dry.
- Sand if necessary.
- Clean with 45 330SP Speed Prep Cleaner all areas surrounding Bondo. Cleaner should never come in contact with Bondo.
- Confirm that Bondo areas are thoroughly cured.
- If necessary, to fill pin holes ONLY, apply spot putty and allow to dry.
- Sand or scuff painted areas around and including Bondo.
- Clean again with 45 330SP Speed Prep Cleaner. Cleaner should never come in contact with Bondo.

Immediately prime with White or Black Epoxy, Polyester Primer Surfacer, or U-Prime. These processes are on the next page.

## White Epoxy Primer or Black Epoxy Primer:

**274 908SP or 274 808SP Both are RTS 3.90-3.95 VOC**

- Apply 1 wet coat Epoxy Primer.
- Allow 10-15 minutes to flash.
- Apply 2nd wet coat Epoxy Primer.
- Allow 30-60 minutes to flash.
- Topcoat.



# Bondo Filled Areas

When spraying 6001SP Polyester Primer Surfacer, it is important to refer to the technical sheets for spray tip details. We recommend the use of a 2.0 tip in the spray gun. When activated, mix thoroughly and apply immediately.

## Polyester Primer Surfacer:

**6001SP: RTS 1.8VOC:**

- Mix Polyester Primer according to instructions.
- Apply 1 wet coat.
- Allow 20 minutes to flash.
- Apply 2nd wet coat.
- Allow 20 minutes to flash.
- Apply 3rd or 4th coat to cover porosity, if necessary.
- Allow longer flash times between 3rd and 4th coats.
- Allow 1.5 hours dry time before sanding.
- Sand repaired area.
- Sand or scuff remaining surface area.
- Clean with 45 330SP Speed Prep Cleaner.
- Topcoat.

## U-Prime application:

**274 685SP: RTS 3.5 or 2.8 VOC:**

- Apply 1 wet coat.
- Allow 10-15 minutes to flash.
- Apply 2nd wet coat.
- Allow 10-15 minutes to flash.
- Apply 3rd coat if necessary.
- Allow to dry 24 hours before sanding, cleaning, and topcoating.

# Acrylic (Acrylite, Crylex, Plexiglas, Lucite, Implex)

Do not allow Tie Bond to dry between coats or before topcoating. Decrease flash time between coats based on temperature if needed. We recommend the use of a 2.0 tip in the spray gun. When activated, mix thoroughly and apply immediately.

Matthews strongly recommends the use of Tie Bond as an adhesive over acrylics to ensure proper adhesion.

## Tie Bond Adhesive:

**74 777SP: RTS 6.4-6.6 VOC:**

- Clean with 6428SP Plastic Prep.
- Can use 6428SP Plastic Prep as an anti-static application, once surface has been cleaned by applying a light mist coat over entire surface area and allow product to evaporate.
- Apply 1 wet coat of Tie Bond Adhesive.
- Allow 5-10 minutes to flash.
- Apply 2nd wet coat of Tie Bond Adhesive.
- Allow 5-10 minutes to flash.
- Topcoat.



# PVC Expanded & Non Expanded (Komatex, Sintra, Celtec, Intacel, EX-Cel, & Trovicel)

## Tie Bond Adhesive:

**74 777SP: RTS 6.4 - 6.6 VOC:**

- Clean with 6428SP Plastic Prep.
- (To remove surface static, apply mist coat of 6428SP Plastic Prep, allow to dry)
- Prime with 1 wet coat 74 777SP Tie Bond Adhesive.
- Allow 5-10 minutes to flash.
- Apply 2nd wet coat of Tie Bond.
- Allow 5-10 minutes to flash.
- Topcoat.

## Side Fill Technique, if desired:

- Apply 1 wet coat of 74 777SP Tie Bond Adhesive.
- Apply 1-3 coats of 6001SP Polyester Primer Surfacer on rough side sections.
- Allow 1 ½ hours to dry.
- Sand to desired smoothness.
- Clean sides and face with 6428SP Plastic Prep.
- Topcoat.

# Photopolymer Jet

- Clean with 6428SP Plastic Prep.
- Can use 6428SP Plastic Prep as an anti-static agent by applying a mist coat and allowing to dry.

## Tie Bond Adhesive:

**74 777SP: RTS 6.4 - 6.6 VOC**

- Prime with 1 wet coat 74 777SP Tie Bond Adhesive.
- Allow 5-10 minutes to flash.
- Apply 1-2 medium coats of 6010SP Flex Sealer, if required.
- Allow 30 minutes to flash between coats.
- Topcoat.

# Photopolymer (Nova) NovEX or NovAcryl

- Clean with 6428 Plastic Prep.
- Can use 6428SP Plastic Prep as an anti-static agent by applying a mist coat and allowing to dry.

## Topcoat Direct:

- Apply 1 medium wet topcoat
- Allow 10-15 minutes to flash.
- Apply 2nd medium wet topcoat

! First surface painting does not require 74777SP Tie Bond Adhesive. Second surface or Subsurface painting may require 74777SP Tie Bond Adhesive for topcoat adhesion.



# Polycarbonate (Lexan)

## Tie Bond Adhesive:

**74 777SP: RTS 6.4 - 6.6 VOC**

- Clean with 6428SP Plastic Prep.
- Can use 6428SP Plastic Prep as an anti-static application, once surface has been cleaned by applying a mist coat over entire surface area and allow product to evaporate.
- Apply 1 wet coat of Tie Bond Adhesive.
- Allow 5-10 minutes to flash.
- Apply 2nd wet coat of Tie Bond Adhesive.
- Allow 5-10 minutes to flash.
- Topcoat.

- OR -

- Apply 1 light coat of MAP topcoat properly mixed with 74 102SP or 74 103SP Converter (makes basecoat).
- Allow 10-15 minutes to flash.
- Apply 1 wet coat of unconverted MAP topcoat.
- Allow 10-15 minutes to flash.
- Apply 2nd wet coat of unconverted MAP topcoat.

! Poly-Carbonate manufacturers recommend that all moisture be heat purged out of substrate before coating application. Use of any MPC primer, adhesive, or topcoat will alter this substrates impact strength.

# Vinyl (3M, Avery, Mactac, Oracal, FDC, & Ultramark)

- Clean with 6428SP Plastic Prep.
- Scuff surface with Scotch-Brite pad.
- Clean again with 6428SP Plastic Prep.
- Apply 1 wet coat of MAP topcoat mixed properly with 47 474SP Flex Additive.
- Allow 10-15 minute to flash.
- Apply 2nd wet coat of MAP topcoat mixed properly with Flex Additive.

# Trim Cap (Jewelite, Silvatrim)

- Clean with 45 330SP Speed Prep Cleaner
- Abrade with Scotch-Brite pad.
- Clean again with 45 330SP Speed Prep Cleaner.
- Apply 1 wet coat of MAP topcoat mixed properly with 47 474SP Flex Additive.
- Allow 10-15 minute to flash.
- Apply 2nd wet coat of MAP topcoat mixed properly with Flex Additive.





# Flexible Face (Cooley)

- Clean with 45 330SP Speed Prep Cleaner.
- Verify that all surface areas are thoroughly cleaned.
- Repeat cleaning process if necessary.
- Apply 1 wet coat of MAP topcoat mixed properly with 47 474SP Flex Additive.
- Allow 10-15 minutes to flash.
- Apply 2nd wet coat of MAP topcoat mixed properly with Flex additive.

# EPS-Polystyrene (Gator Foam)

! Pittsburg Paint's 17-21 Seal Grip Acrylic Latex Primer (water based) works well in this application. Allow at least 60 minutes after application for topcoating.

- Clean substrate with clean compressed air.
- Apply latex exterior primer in order to fill and seal the entire foam surface areas. Allow to dry.
- Scuff surface with Scotch-Brite pad.
- Clean again with 45 330SP Speed Prep Cleaner.
- Topcoat.

# Wood Applying Color

! Test for the moisture content of the wood before any application. Moisture content must be less than 13%. Certain applications using exterior wood as a substrate will expand and/or contract too much for Matthews to be used. All surface areas of the wood must be coated.

- Sand any rough areas with 180-220 grit sandpaper.
- Remove dust with clean compressed air and tack rag.
- Spot prime over knots, cut areas, or ends with 274 908SP White Epoxy Primer or 274 808SP Black Epoxy Primer.
- Allow to dry 30-60 minutes.
- Topcoat.

**White Epoxy Primer or Black Epoxy Primer:**  
**274 908SP or 274 808SP**  
*Both are RTS 3.90-3.95 VOC*

- Sand with 180-220 grit sandpaper.
- Remove dust with clean compressed air and tack rag.
- Apply 1 wet coat epoxy primer.
- Allow 5-15 minutes to flash.
- Apply 2nd wet coat epoxy primer.
- Allow 30-60 minutes to flash.
- Topcoat.



# MDO, MDF, and Extira

## Epoxy priming:

! Ensure that moisture content of the substrate is less than 13%.

**White Epoxy Primer or Black Epoxy Primer:**  
**274 908SP or 274 808SP:** *Both are RTS 3.90-3.95 VOC*

- Remove dust with clean compressed air and tack rag.
- Sand, if necessary.
- Remove dust with clean compressed air and tack rag.
- Apply 1 wet coat epoxy primer.
- Allow 5-15 minutes to flash.
- Apply 2nd wet coat epoxy primer.
- Allow 30-60 minutes to flash.
- Topcoat.
- All surfaces must be sealed.
- Check adhesion.

**Polyester Primer Surfacer:**  
**6001SP:** *RTS 1.8 VOC*

- Remove dust with clean compressed air and tack rag.
- Sand, if necessary.
- Remove dust with clean compressed air and tack rag.
- Apply 1 wet coat polyester primer.
- Allow 20 minutes to flash.
- Apply 2nd wet coat polyester primer.
- Allow 20 minutes to flash.
- Apply 3rd coat to cover porosity, if necessary.
- Allow 1.5 hours dry time before sanding, cleaning, and topcoating.

! When spraying 6001SP Polyester Primer Surfacer, it is important to refer to the technical sheets for spray tip details. We recommend the use of a 2.0 tip in the spray gun. When activated, mix thoroughly and apply immediately.

# Scooter Board

! Check with local EPA rules regarding the use of Tie Bond Adhesive.

- Clean with 45330SP Speed Prep Cleaner.
- Scuff surface with Scotch-Brite pad.
- Clean again with 45330SP.
- Prime with one wet coat 74777SP Tie Bond Adhesive.
- Allow 5-10 minutes to flash
- Apply second wet coat of 74777SP Tie Bond Adhesive.
- Allow 5-10 minutes to flash
- Topcoat.



# HDU or Polyurethane Foam Board

Poly Board, Sign Foam, Precision Board, Jasper Board.

When spraying 6001SP Polyester Primer Surfacer, it is important to refer to the technical sheets for spray tip details. We recommend the use of a 2.0 tip in the spray gun. When activated, mix thoroughly and apply immediately.

## Polyester Primer Surfacer:

### 6001SP: RTS 1.8 VOC:

- Clean substrate with clean compressed air.
- Mix Polyester Primer according to instructions.
- Apply 1 wet coat.
- Allow 20 minutes to flash.
- Apply 2nd wet coat.
- Allow 20 minutes to flash.
- Apply 3rd coat to cover porosity, if necessary.
- Allow longer flash times between 3rd and 4th coats.
- Allow 1.5 hours or more dry time before sanding, cleaning, and topcoating.

## U-Prime application:

### 274 685SP: RTS 2.8 VOC:

- Clean substrate with clean compressed air.
- Apply 1 wet coat of 274 685SP U-Prime.
- Allow 10-15 minutes to flash.
- Apply 2nd wet coat of 274 685SP U-Prime.
- Allow 10-15 minutes to flash.
- Apply 3rd coat, if necessary.
- Allow 24 hours dry time before sanding, cleaning, and topcoating.



# Fiberglass – Non Gel coated

All contaminants must be removed.

Prime with either 274 908SP White Epoxy Primer, 274 808SP Black Epoxy Primer, or 6001 Polyester Primer Surfacer

## White Epoxy Primer or Black Epoxy Primer:

### 274 908SP or 274 808SP Both are RTS 3.90-3.95 VOC

- Clean substrate with clean compressed air.
- Apply 1 wet coat of White or Black Epoxy primer.
- Allow 10-15 minutes to flash.
- Apply 2nd wet coat.
- Allow 30-60 minutes to flash.
- Apply the necessary number of coats to fill the imperfections.
- Extend flash times between each application of epoxy when adding more than two coats to fill fiberglass.
- Topcoat.

When spraying 6001SP Polyester Primer Surfacer, it is important to refer to the technical sheets for spray tip details. We recommend the use of a 2.0 tip in the spray gun. When activated, mix thoroughly and apply immediately.

## Polyester Primer Surfacer primer:

### 6001SP: RTS 1.8 VOC:

- Clean substrate with clean compressed air.
- Apply 1 wet coat polyester primer.
- Allow 20 minutes to flash.
- Apply 2nd wet coat polyester primer.
- Allow 20 minutes to flash.
- Apply 3rd coat to cover porosity, if necessary.
- Allow longer flash times between 3rd and 4th coats.
- Allow 1.5 hours dry time before sanding, cleaning, and topcoating.

# Fiberglass – Gel coated

All contaminants must be removed.

- Inspect Gel Coat to ensure proper coverage of all pre-painted surfaces.
- Clean with 6405SP Low VOC Cleaner.
- Sand surface with 220-320 grit sandpaper.
- Clean with 6405SP Low VOC Cleaner.
- Topcoat.



# Limestone

**White Epoxy Primer or Black Epoxy Primer:**  
**274 908SP or 274 808SP: Both are RTS 3.90-3.95 VOC**

- Clean substrate with compressed air.
- Clean with 5% Muratic acid & water solution. (Follow all safety instructions recommended by Muratic acid manufacturer!)
- Rinse substrate thoroughly with clean water and allow surface to dry.
- Clean again with compressed air.
- Apply 1 wet coat epoxy primer.
- Allow 10-15 minutes to flash.
- Apply 2nd wet coat epoxy primer.
- Allow 30-60 minutes to flash.
- Topcoat.

# Granite

**Polished or Smooth**

**White Epoxy Primer or Black Epoxy Primer:**  
**274 908SP or 274 808SP: Both are RTS 3.90-3.95 VOC**

- Clean surface with water to remove debris.
- Clean with 5% Muratic acid & water solution. (Use recommended safety instructions from Muratic acid manufacturer!)
- Rinse substrate thoroughly with clean water and allow surface to dry completely.
- Apply 1 wet coat epoxy primer.
- Allow 10-15 minutes to flash.
- Apply 2nd wet coat epoxy primer.
- Allow 30-60 minutes to flash.
- Topcoat.



# Granite

**Sandblasted**

- Clean substrate with compressed air.
- Brush away any loose debris.
- Clean again with compressed air.
- Topcoat.

# Cement

**Masonry, Concrete, Concrete Block, Dryvit, Stucco, and Texcoat**

**!** Pay care attention to these instructions, as they are very important to follow properly.

**!** Moisture test level of substrate. Requires less than 13%.

**!** Failure to ensure that moisture and PH levels are within recommended limits will result in apparent or eventual coating failure.

- Pressure clean entire surface with 2000 PSI at 3-5 GPM (Gallons Per Minute).
- PH test 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 <http://www.cole-palmer.com>)

**White Epoxy Primer or Black Epoxy Primer:**  
**274 908SP or 274 808SP: Both are RTS 3.90-3.95 VOC**

- Sand blast surface and remove debris with compressed air.
- Clean surface with a mixture 10% Hydrochloric Acid and water solution. (Use recommended safety instructions from acid manufacturer!)
- Rinse well with water.
- Allow to dry completely.
- Apply 1 wet coat epoxy primer.
- Allow 10-15 minutes to flash.
- Apply 2nd wet coat epoxy primer.
- Allow 30-60 minutes to flash.
- Topcoat.



# Cement

Masonry, Concrete,  
Concrete Block-Previously Coated.

**White Epoxy Primer or Black Epoxy Primer:**  
**274 908SP or 274 808SP: RTS 3.90-3.95 VOC**

- Inspect coating to ensure a sound and secure finish.
- Sand blast away any loose coating from surface.
- Remove debris with compressed air.
- Rinse well with water and allow to dry.
- Sand surface with 180-220 grit sandpaper.
- Clean with water and allow to dry completely.
- Apply 1 wet coat epoxy primer.
- Allow 10-15 minutes to flash.
- Apply 2nd wet coat epoxy primer.
- Allow 30-60 minutes to flash.
- Topcoat.

# Drywall

Masonry, Concrete,  
Concrete Block-Previously Coated.

**White Epoxy Primer:**  
**274 908SP**

- Surface needs to be vacuumed clean of all dust.
- Wipe surface with tack cloth.
- Apply 1 medium coat of 274 908SP White Epoxy Primer
- Allow 30 minutes to flash.
- Apply 2nd wet coat epoxy primer.
- Allow to dry overnight.
- Sand with 220-320 grit sandpaper.
- Clean with 45 330SP Speed Prep Cleaner.
- Topcoat.



# Polypropylene or Polyethylene

! Extremely difficult to paint even when flame or corona treatment process is used.

- Requires Flame or Corona treatment in order to alter the surface molecular structure, which allows a limited time period for the substrate to be paint receptive. All propylene and ethylene structures are different, so test for adhesion.
- Clean with 6428SP Plastic Prep.
- Topcoat.

# Glass & Porcelain

! We do not recommend coating glass or porcelain with Matthews.

- No recommendation at this time.





# Clear Coat Preparation Recommendations

These are substrate guidelines to be used as a recommendation only.

## Matthews Topcoat (Color)

- Allow topcoat 30 minutes to flash (or 15 minutes with 287 437SP Accelerator).
- Apply 1 wet coat of MAP Clear.
- Allow 5-10 minutes to flash.
- Apply 2nd wet coat MAP Clear.

## Matthews Topcoat After 24 Hours

- Clean with 45 330SP Speed Prep Cleaner.
- Scuff surface with Scotch-Brite pad or sand with 320-600 grit sandpaper.
- Clean again with 45 330SP Speed Prep Cleaner.
- Apply 1 wet coat MAP Clear.
- Allow 5-10 minutes to flash.
- Apply 2nd wet coat MAP Clear.

## Aluminum

**Spray Bond Adhesive:**  
74 793SP: RTS 7.12-7.16 VOC:

- Clean with 45 330SP Speed Prep Cleaner.
- Apply 1 wet coat of 74 793SP Spray Bond Adhesive.
- Do not allow Spray Bond to dry before clear coating.
- Allow 5-10 minutes to flash.
- Apply 2nd wet coat of Spray Bond.
- Allow 5-10 minutes to flash
- Apply 1 wet coat MAP Clear.
- Allow 5-10 minutes to flash.
- Apply 2nd wet coat MAP Clear.



# Acrylic

**Tie Bond Adhesive:**

74 777SP: RTS 6.4-6.6 VOC:

- Clean with 6428SP Plastic Prep. (1st or 2nd surface)
- Apply a mist coat of 6428SP Plastic Prep and allow to dry in order to reduce static surface charge.
- Apply 1 full wet coat 74 777SP Tie Bond Adhesive.
- Do not allow Tie Bond Adhesive to dry before clear coating.
- Allow 5-10 minutes to flash.
- Apply 2nd wet coat of Tie Bond.
- Allow 5-10 minutes to flash.
- Apply 1 wet coat MAP Clear.
- Allow 5-10 minutes to flash.
- Apply 2nd wet coat of MAP Clear.

## Polycarbonate (Lexan)

**Tie Bond Adhesive:**

74 777SP: RTS 6.4-6.6 VOC:

- Clean with 6428SP Plastic Prep. (1st or 2nd surface)
- Apply a mist coat of 6428SP Plastic Prep and allow to dry to reduce static surface charge.
- Apply 1 full wet coat 74 777SP Tie Bond Adhesive.
- Do not allow Tie Bond Adhesive to dry before clear coating.
- Allow 5-10 minutes to flash.
- Apply 2nd wet coat of Tie Bond Adhesive.
- Allow 5-10 minutes to flash.
- Apply 1 wet coat MAP Clear.
- Allow 5-10 minutes to flash.
- Apply 2nd wet coat of MAP Clear.

**Optional Converted Basecoat Application:**

- Clean with 6428SP Plastic Prep. (1st or 2nd surface)
- Apply a mist coat of 6428SP Plastic Prep and allow to dry to reduce static surface charge.
- Apply 1 light coat of MAP Clear mixed with 74 102SP MAP Converter (basecoat).
- Allow 10-15 minutes to flash.
- Apply 1 wet coat MAP Clear.
- Allow 5-10 minutes to flash.
- Apply 2nd wet coat MAP Clear.

Some Polycarbonate substrates can be too solvent sensitive for use of the preferred Tie Bond Adhesive. The application of a "converted" coat as a primer may provide the adhesion required and not adversely affect the substrate. PolyCarbonate manufacturers recommend that all moisture be heat purged out of substrate before any coating application. Use of any MPC primer or topcoat may alter the substrates impact strength.

Excludes Tactile Clear and HP Clear. These can not be converted.



# Vinyl

(3M, Avery, Mactac, Ultramark)

- Clean with 6428SP Plastic Prep.
- Apply 1 wet coat MAP Clear mixed with 47 474SP Flex Additive.
- Allow 5-10 minutes to flash.
- Apply 2nd wet coat MAP Clear.

# Trim Cap

(Jewelite, Silvertrim)

- Clean with 6428SP Plastic Prep.
- Scuff surface with Scotch-Brite pad.
- Clean again with 6428SP Plastic Prep.
- Apply 1 wet coat MAP Clear mixed with 47474SP Flex Additive.
- Allow 5-10 minutes to flash.
- Apply 2nd wet coat of MAP Clear.

# Brass, Copper, or Cast Bronze

! Substrate must be completely cleaned to ensure all contaminants have been removed.

## Spray Bond Adhesive: 74 793SP: RTS 7.12-7.16 VOC:

- Clean substrate to remove oils, contaminants, oxidation, and watermarks.
- Clean surface with 45 330SP Speed Prep Cleaner.
- Wipe substrate with a chamois dampened with 74 737SP Braco Anti-Tarnish Pre-Treatment and allow to dry. Do not streak.
- Apply 1 wet coat of 74 793SP Spray Bond Adhesive.
- Do not allow 74 793SP Spray Bond Adhesive to dry before clear coating.
- Allow 5-10 minutes to flash.
- Apply 2nd wet coat of Spray Bond Adhesive.
- Allow 5-10 minutes to flash.
- Apply 1 wet coat MAP Clear.
- Allow 5-10 minutes to flash.
- Apply 2nd wet coat MAP Clear.



# Luminore

! Hotter temperatures may cause the Spray Bond to set up faster than the process recommends. Topcoat may need to be applied using shorter flash times of the adhesive.

## Spray Bond Adhesive: 74 793SP: RTS 7.12-7.16 VOC:

- Clean with 45 330SP Speed Prep Cleaner. Apply 1 wet coat of 74 793SP Spray Bond Adhesive.
- Do not allow 74 793SP Spray Bond Adhesive to dry before clear coating.
- Allow 5-10 minutes to flash.
- Apply 2nd wet coat of Spray Bond Adhesive.
- Allow 5-10 minutes to flash.
- Apply 1 wet coat MAP Clear.
- Allow 5-10 minutes to flash.
- Apply 2nd wet coat MAP Clear.

# Wood

! Test for the moisture content of the wood before any application. Moisture content must be less than 13%. Certain applications using exterior wood as a substrate will expand and/or contract too much for Matthews to be used. All surface areas of the wood must be coated.

- Sand any rough areas with 400-600 grit sand paper.
- Remove dust with clean compressed air and/or tack cloth.
- Apply 1 wet coat MAP Clear.
- Allow 5-10 minutes to flash.
- Apply 2nd wet coat MAP Clear.