

Hard Surface Application Guide

Updated March 2013 Supersedes all previous versions.

Conditions:

Recommended painting conditions: 70-75°F / 21-24°C in a dry, dust-free environment. When painting in humid or colder conditions, allow for extended drying time. Use of air flow decreases drying time and is recommended as the primary means to cure paint. Avoid painting in humidity over 75% and temperatures below 60°F / 15°C.

Compatibility:

Auto Air Colors and Wicked Colors are inter-mixable and inter-coatable. Each may be reduced with either Auto Air 4012 / Wicked W500 High Performance Reducer, Auto Air 4011 / Wicked W100 Reducers or Auto Air 4004 / Wicked W200 Transparent Base. Auto Air Colors and Wicked Colors are universally compatible with most any primer, paint and clear type. When applying over other type primer or base paint, allow under-lying coating to cure, then scuff with 600-grit, prior to applying Auto Air or Wicked Colors. Urethane clears recommended as top-coat, however, many other clear types are also compatible, test first.

Set-Up & Reduction:

Full Sized Spray Gun -

1.2mm tip size operated about 35 psi inlet

Touch – Up (mini) Spray Gun -

0.8mm to 1.0mm tip-size, operated about 30 - 35 psi

Reduce 10% per volume with either Auto Air 4012 / Wicked W500 High Performance Reducer.

Reduction with other reducers such as Auto Air 4011 Flash Reducer or Wicked W100 Reducer is not recommended for use with spray guns.

Auto Air 4600 Series Candy - Pigment Colors - reduce 3:1 4012 High Performance Reducer

ANEST IWATA™ Spray Guns -

Model	Nozzle Size	psi
LPH400 LV / LVX	1.1 or 1.3mm	17 - 20
LS400 Supernova	1.1 or 1.3mm	20 - 23
LS400H Supernova Hybrid	1.1, 1.2 or 1.3mm	25 - 30
LPH80	1.0 or 1.2mm	15 - 19

Tests made courtesy of ANEST IWATA™. Paint not reduced. Metallics and pearlescent colors may require slightly higher PSI. Test for best atomization.

Touch- Up Gun -

0.8mm to 1.0mm tip-size

30 - 35 psi inlet

Reduction generally not required. If touch-up gun has 0.8mm or smaller tip-size and a heavier, pigmented color such as 4300 Series Metallic Colors is sprayed, reduce in small increments of 2 - 3% until best atomization is achieved.

Reduce as needed to achieve best flow and atomization using Auto Air 4012 / Wicked W500 High Performance Reducer. Reduce in any ratio to achieve optimum flow and atomization. Generally, the lower the psi and the smaller the tip-size, the more paint is reduced.

Airbrush -

0.5mm tip - works with all colors and should be the primary tip-size for:

- Auto Air 4100 Series Aluminum Base 4102 Medium and 4103 Coarse
- Auto Air 4200 Series Semi-Opaques
- Auto Air 4300 Series Pearlized, Metallic and Iridescent Colors
- Auto Air 4400 Series Gem-Color Shifts
- Auto Air 4500 Series Sparklescent and Hot Rod Sparkle Colors
- Wicked Pearlescent and Metallic Colors

Reduction & PSI Guidelines

Auto Air 4200 Series Transparent Colors, 4600 Series Candy-Pigment Colors, Wicked Colors and Wicked Detail Colors work best with all tip-sizes and may be reduced for use with small tip-sizes and low psi settings.

- 0.5mm: Reduce as needed, generally 25% per volume. Operate 40 - 50 psi
- 0.35mm: Reduce 25 - 35% per volume. Operate 25 - 35 psi
- 0.2mm and smaller: 50% per volume and greater. Auto Air Colors and Wicked Colors may be generously over-reduced.

For best results, reduction with new Auto Air 4012 / Wicked W500 High Performance Reducer is recommended. High Performance Reducer achieves the best flow and least amount of tip-dry compared to using other reducers such as 4011 Flash Reducer. Auto Air 4012 / Wicked W500 High Performance Reducers assist drying times faster than when reducing with 4011 Flash Reducer or not reducing.

Material Usage Guide:	Motorcycle Tank & Fender	Small / Average Auto inc. Door Jambs	Truck / SUV inc. Door Jambs
Auto Air 4000 Sealers	1 Pint	2 Quarts	3 Quarts
Auto Air 4100 Aluminum Bases	1 Pint	2 Quarts	3 Quarts
Auto Air 4200 Semi-Opaque Colors	1 Pint	2 Quarts	3 Quarts
Auto Air 4200 Transparent Colors	1 Pint - 1 Quart	3 - 4 Quarts	4 - 5 Quarts
Auto Air 4200 Fluorescent Colors	1 Quart	3 - 4 Quarts	4 - 5 Quarts
Auto Air 4300 Series	1 Pint	2 Quarts	3 Quarts
Auto Air 4400 Series	8 oz. - 1 Pint	1 Pint - 1 Quart	1 - 2 Quarts
Auto Air 4500 Hot Rod & Cosmic Sparkle Colors	8 oz. - 1 Pint	1 Pint - 1 Quart	1 - 2 Quarts
Auto Air 4500 Sparklescent Colors	1 Pint - 1 Quart	3 - 4 Quarts	4 - 5 Quarts
Auto Air 4600 Candy - Pigment Colors	1 Pint - 1 Quart	3 - 4 Quarts	4 - 5 Quarts
Auto Air 4700 Auto-Borne Colors	1 Pint - 1 Quart	3 - 4 Quarts	4 - 5 Quarts
Wicked Colors	1 Pint - 1 Quart	3 - 4 Quarts	4 - 5 Quarts
Wicked Detail Colors	1 Pint - 1 Quart	3 - 4 Quarts	4 - 5 Quarts
Wicked Fluorescent Colors	1 Pint - 1 Quart	3 - 4 Quarts	4 - 5 Quarts
Wicked Pearlescent & Metallic Colors	1 Pint	2 Quarts	3 Quarts

On average, one 4oz. bottle of Auto Air Colors covers 3 square feet and a 2 oz. bottle of Wicked Colors 1.5 square feet.

Tinting Auto Air 4000 Series Sealer to color-key with the base color applied over it will reduce the amount of the base color required to achieve full coverage (color saturation). This is especially helpful when working with lighter hues of transparent colors. For example, tinting 4001 Sealer White with 4205 Flame Orange or 4233 Transparent Orange when applying a base of 4580 Sparklescent Mango will save a significant amount of material and help achieve a smoother finish due to less material build compared to applying over 4001 Sealer White without tinting.

Reducing paint for use with an airbrush is, ultimately, a matter of subjective preference. There are no rigid set of reduction ratios. Technique and preference as well as airbrush type and color type all factor into how much to reduce. The key is to achieve good atomization and flow. For many, paint is reduced to a viscosity similar to skim milk. For optimum performance, we highly recommend reducing with Auto Air 4012 / Wicked W500 High Performance Reducer.

Preparation: Proper preparation is crucial to ensuring a successful paint job. Prepare surface using standard methods suitable for automotive refinishing with attention to the following:

- Clean the surface thoroughly before & after sanding. Use both soap & water and a degreaser to remove oil.
- Scuff with 600 - 800 grit sandpaper or equivalent grade scuff pad to ensure a flat surface, use a sanding block.
- Scuff thoroughly to remove all gloss areas from the surface, especially crevices, edges and areas difficult to reach as this is where paint will often peel.

Auto Air Colors and Wicked Colors are compatible with all urethane primers, paint & clears as well as epoxy and water-based primers. Scuffing with 400 - 800 grit sandpaper is required prior to applying paint over other primer or paint type. For all other type of primers such as lacquers, test compatibility prior to use on a panel.

Start with Auto Air 4000 Series Sealers

Auto Air and Wicked Colors lay down flatter, without cratering due to surface tension when applied over Auto Air Sealers. Auto Air Sealers do not have to be scuffed prior to paint as opposed to using a urethane or epoxy sealer for which scuffing is required. Auto Air Sealers adhere direct to all substrates (aluminum, wood, glass, treated & non-corrosive metals, fiberglass, carbon fiber, existing finishes and many more) except hard plastics such as ABS, for which a plastic, adhesion promoter is required. For untreated metal, apply a DTM, etching primer followed by Auto Air Sealer.

Strain Colors Use a nylon meshed-filter to strain colors prior to each usage especially when painting with a spray gun using a transparent or metallic color. We strain colors prior to packaging, however, dried paint may after develop inside the bottle and dislodge into the paint.

Plastics

While Auto Air and Wicked adhere excellent to softer plastics, slick plastics may require use of an adhesion promoter. Bulldog® Adhesion Promoter is recommended. Perform a simple tape test to determine whether an adhesion promoter is required. Scuff, clean and paint a small portion of the plastic. Allow paint to thoroughly dry and cure. Next, apply tape direct to the paint then peel off. If paint peels up with the tape, an adhesion promoter is required. Apply adhesion promoter followed by Auto Air Sealer.

Application:

1. Use the correct tip-size and psi setting. With a full sized spray gun, a 1.2mm tip operated at 35 psi works best. Use of larger tip-sizes will under-atomize paint creating texture and result in prolonged drying times. If necessary, use a tip-size smaller than 1.2mm on a full sized spray gun rather than a larger size. With some colors such as 4200 Series Transparent Colors and 4600 Series Candy-Pigment Colors, a 1.1mm tip atomizes works well.
2. Work in light coats. Full color saturation should require no less than 3 coats, 5 - 6 coats with transparent colors such as 4500 Sparklescent and 4600 Series Candy - Pigment Colors. Applying heavy coats results in a textured finish, extended drying times and possible loss of adhesion. Apply each coat lightly, especially first coat which should appear as light as a guide coat.
3. Allow each coat to air dry tack free to a matte finish prior to applying the next coat. Do not use heat to force dry paint. Use air movement from a fan or other source such as an air gun to decrease drying times and assist curing. For best drying times, set air blowers and fans to 200 feet per minute (FPM).
4. A variety of spray patterns may be used when painting large panels with a spray gun or touch-up gun. Make sure even coverage is achieved by using a consistent pattern throughout the paint job. Traditional 50/50 overlapping patterns may be used so long as they are consistent and material is not flooded on. Auto Air Colors nor Wicked Colors are designed to be applied with a flow as are urethane paints. Make sure paint is applied from the best atomized portion of the spray fan. Reducing with Auto Air 4012 / Wicked W500 High Performance Reducer allows paint to be applied with slightly more material build compared to reducing with 4011 Flash Reducer without the risk of developing craters.
5. Orientation of the Auto Air 4300 Series and Wicked Pearlescent, Metallic, Iridescent Colors and Auto Air 4500 Series Colors will benefit from a drop-coat or control coat after full coverage has been achieved. Reduce psi by approximately 7 - 10 psi. Apply either by a single pass or a cross coat pattern. Allow control coat to air dry without use of forced air.
6. Set gun so paint is finely atomized. If large paint drops are noticeable, the paint is under-atomized. Dial in fluid adjustment knob to 1/4 to 1/2 turn from full shut-off.

Dry Times & Curing:

There are no pre-set drying times. Auto Air Colors and Wicked Colors are water-based paints which dry according to a variety of factors such as temperature & humidity levels of the spray environment and the amount of material applied per coat.

1. 75 - 80 degrees F and humidity levels of 50% and below are ideal for painting with water-based paints, especially for larger paint jobs.
2. Using the correct tip size not only atomizes paint properly, but decreases the drying times. Properly atomized paint dries much quicker compared to paint applied heavily or under-atomized.
3. Reducing with Auto Air 4012 / Wicked W500 High Performance Reducer creates the most durable coating. High Performance Reducer cures colors through air drying alone; colors dry to noticeable matte finish compared to a semi-gloss coating which is semi-cured when colors are not reduced or reduced with 4011 Flash Reducer.
4. Work in light coats. Allow each coat to air dry tack free prior to applying the next coat. This is the quickest time to tape and clear. Recommend film build with non-metallic colors is 0.8 - 1.0 mils per coat.
5. Use air movement to assist curing, not heat. Wind from a fan works excellent to decrease drying times, especially when paint is applied lightly without excessive material. Avoid force drying with heat as this may create a latex-like film which easily peels up.
6. For best drying times, set air blowers and fans to 200 feet per minute (FPM).
7. Auto Air Colors and Wicked Colors air dry to a cured film suitable for direct taping and top-coating with a catalyzed, urethane clear. Use of heat as a final cure after paint has thoroughly air dried is only essential when painting textiles or other substrates which will be washed.
8. There are no time windows when painting with Auto Air Colors and Wicked Colors. Additional coats of paint and the top-coat clear may be applied at any time after the underlying coat has air dried. Scuffing is not required. Colors or top-coat may be applied direct to paint any time after it has air dried. When cleaning colors soon after they've dried but before they're fully cured, use odorless mineral spirits as post-sanding degreaser may cause color loss whereas mineral spirits do not.

Dry Times

In between coats should be approximately 2 - 4 minutes. It is best to wait until the paint dries to a matte finish.

Time to tape and handle is approximately 15 - 20 minutes.

Time to top-coat with a clear is approximately 30 minutes at a minimum. Best to wait 60 minutes or longer.

These times are approximate. Temperature, humidity, and film build of material applied per coat affect drying times significantly. Best results are achieved with increased temperatures and air movement along with working in light coats with minimal film build.

Taping & Masking:

After colors have thoroughly dried, they are safe to directly tape on without the use of an inter-coat, including Auto Air 4600 Series Candy - Pigment Colors.

- Auto Air 4004 and Wicked W200 Transparent Base may be used as a light, protective inter-coat over paint on which to tape over. Urethane inter-coat clears and bases may also be applied as an inter-coat.
- Custom tip: To create clean edges along tape lines, apply another light coat of the base color along the graphic edge prior to applying the graphic's color(s). The additional coat of the base color will fill-in any open space under the tape and crawl in slightly under the tape line, creating a crisper line when the graphic color is next applied.
- Paper and high to medium tack tape work best.
- Colors dry to a matte and flat coating when reduced with Auto Air 4012 / Wicked W500 High Performance Reducer compared to a semi-gloss coating when not reduced or reduced with 4011 Flash Reducer. Although each is perfectly good to tape on, tape will lay down flatter with less peeling up when High Performance Reducer is used.

Cleaning:

Cleaning Auto Air Colors and Wicked Colors prior to top-coating with a clear is not absolutely essential. Often, it is best not to clean if paint job has been kept free of contaminants and has not sat open for an extended time.

Odorless mineral spirits work excellent to clean Auto Air and Wicked Colors. Odorless mineral spirits can be used to clean color soon after they dry compared to post-sanding, solvent-based degreasers which may only be applied after colors have thoroughly dried as they may remove color if applied sooner.

Sanding:

Dry sand colors only. Do not wet sand with water. If wet sanding is preferred use odorless mineral spirits as sanding lubrication, not water.

- Dry sand using 800-grit sandpaper. Generally, Auto Air and Wicked Colors sand better with a coarser grade of sandpaper than what is commonly used for solvent-based paints. Drying times to effectively sand paint with finer shave particles requires extended drying times.
- If sanding paint, a re-coat must be applied prior to top-coating with a clear to hide scratch marks.

Clearing:

Auto Air Colors and Wicked Colors are compatible with all urethane and polyurethane clears. A slower, higher temperature reducer is recommended as the longer flow time allows not only better acclimation with the paint but also minimizes any texturing when top-coating over metallic bases, pearl flakes and pearl graphic colors.

- In addition to urethane clear, many other types of clears are also compatible including nitrocellulose lacquer clears, waterborne clears and enamels.
- Always test first. A test panel is highly recommended anytime using a new clear type to determine the resulting finish prior to the actual paint job. This is especially important when attempting to use a clear other than a urethane for the first time.
- Avoid use of hyper-cure additives as well as low temperature reducers, especially with spot panel and speed production clears.
- There are no time windows to work with when deciding to top-coat Auto Air or Wicked Colors. Clear may be applied at any time after paint has thoroughly dried. Scuffing prior to clearing is never required.

Cleaning Equipment:

Clean all spray guns and airbrushes immediately after use. Auto Air 4008 Restorer works excellent to clean all parts and partially dissolve any dried or cured paint, making clean up with water and a brush effective and easy. Flush with water after using Restorer. Final rinse with Auto Air 4012 and Wicked W500 High Performance Reducer.

Safety:

Although Auto Air Colors and Wicked Colors are ultra-low V.O.C., the user or any persons who may be exposed to the airborne particulates are required to wear a NIOSH / MSHA approved respirator. Protect from contact with skin or eyes. Use standard safety and handling procedures to minimize potential hazards. See Material Safety Data Sheets for complete safety and handling information.

Water-based waste should be segregated from solvent-based waste and disposed of in accordance with all federal, state, provincial and local laws and regulations.



Createx Colors
14 Airport Park Road
PO Box 120
East Granby, CT 06026
(860) 653.5505
info@createxcolors.com



Visit autoaircolors.com and createxcolors.com for more information