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About Sculpt Nouveau

Sculpt Nouveau provides artists, tradesmen, and visionaries with tools to make their spaces come to life with rich surfaces and vivid colors. Founded by artists, Sculpt Nouveau merges ancient design traditions with modern science to provide users with solutions to create any metal surface effect that they can imagine.

Metal Coatings

Sculpt Nouveau has perfected a line of strong, durable liquid metal coatings. Our metal coatings are natural blends of real copper, bronze, brass, iron, and pewter in a binder solution that can be applied to nearly any solid surface. Once applied, the coatings will react to chemical processes just like solid metal to create an infinite variety of rust, color, and patina finishes. Our metal coatings have been in the field for over 25 years, and are designed to withstand harsh outdoor environments with proper application.

Often simpler to work with and more cost effective than real metal, our metal coatings provide design flexibility to designers and architects looking to offer unique finishes to their spaces.

The Sculpt Nouveau Color Suite

Sculpt Nouveau is the leading expert in achieving custom finishes on metal surfaces. We have developed a suite of patinas and coatings that allow you to achieve nearly any surface color that you can imagine through controlled science that is simple to apply. We feature products that unlock the reactive potential of metal to create color, and we also have developed stains to create the appearance of a reaction in an even more consistent manner.

Let Sculpt Nouveau help you to unlock the potential of your surfaces with the Sculpt Nouveau Color Suite.

Sealers

No matter the job, most surfaces require a sealer. Sculpt Nouveau's expertise with metal finishing in indoor and outdoor applications led us to develop the strongest, most durable clear coats on the market. Apply our clear coats at the end of your job to lock in your desired surface effect. In most environments and with proper application, our coatings will hold up for years and your work will continue to shine.

Safety

Safety Measures

Personal protective equipment is extremely important when working with these strong materials!

Goggles and protective clothing function as a physical barrier between you and the material.

If some of our materials get on your bare hands it could take a week to wear off. Please be very careful and always remember to wear gloves! In every case, skin and eye protection must be selected on the basis of the nature of the hazards presented by the product and procedure used. Since vapors and spray mists should not be inhaled, suitable ventilation must be provided or respiratory protection devices should be used.

Specific safety and health regulations regarding personal protective equipment are covered by the Occupational Safety and Health Act. #29CFR 1910/132-140.

Important

Volatile solvents may make the products flammable. Your work area must be clean and properly designed for use and storage of flammable liquids or solids. They should be kept away from all sources of ignition, including but not limited to heat, sparks, flames, motors, burners, heaters, or pilot lights. All products and solvents should be stored in a flameproof metal cabinet.

BE VERY CAREFUL WHEN USING THESE PRODUCTS and KEEP OUT OF THE REACH OF CHILDREN!

Products purchased from Sculpt Nouveau are warranted "Free From Manufacturing Defects" only to the extent of replacing the defective material. Sculpt Nouveau believes these products may be used under conditions over which we have no control, or in ways we cannot anticipate. Therefore, we give no warranty either expressed or implied, and assume no responsibility for any damages to persons, property, or business arising from such use. Moreover, it is the responsibility of the purchaser or user of these products to ensure that they are properly and safely used. No claim will be honored after 60 days from the invoice date. Sculpt Nouveau is not responsible for any data, information, or special markings not requested by the buyer at the time of order.

Important Note: All color swatches in this booklet are the closest representation, of the true color, that could be achieved on printed material. Results always vary by the methods used to apply any and all Sculpt Nouveau's products.

Defining Terms and Phrases

Patina: The color of the surface of metal caused by natural weathering or chemical application of acids.

Cold Patina: A process of applying patina chemical solutions directly to the unheated surface of the metal. “Cold Patina” is a term used for applying patinas without heating the metal. The best room or air temperature for these patinas is between 65°F and 75°F. Some cold patinas, once applied to the metal, may require hours or days to react. Often they involve cycles of applications involving layers of patina. The four basic techniques of applying the patina are to use a brush, roller, sponge, or spray bottle. A characteristic of most cold patinas is that they are opaque. There are also some very interesting ancient techniques where the metal object is buried in substances soaked with the patina or wrapped in cloth soaked with a patina.

Hot Patina: This is the most widely used technique. The surface of the metal is heated with a torch to open its pores, usually to around 200°F, then the patina chemical solutions are applied with a brush or spray. As the metal cools, the patina is locked in when the pores of the metal close. An easy test for the correct temperature is to sprinkle a few drops of distilled water from a spray bottle onto the hot metal surface. If the water steams, it is the correct temperature. If the water runs off, the metal is too cold. If the water balls up, it is too hot. A characteristic of some hot patinas is that they are transparent. Metal may be heated a few ways, the most common being to use a propane torch. Other ways include using a heat gun or paint peeler or placing the object in the sun or oven. The best method is to use a torch.

Torch: An instrument for bringing together and properly mixing of propane gases so that, when ignited, the heat of the flame is controlled.

Ferrous: A word used to describe compounds that contain iron, from the Latin word ferrum or iron.

Burnish: To rub back or polish by rubbing. Usually done with a fine “steel” wool, copper wool or Scotch-Brite™ pad.

Oxide: A naturally occurring agent that causes the surface of metal to change color.

Metal Surface Prep

The surface of the material you are working on should be clean and free of any dirt or grease. When working with iron, steel or aluminum you may want to remove rust and fire scale. When applying the Solvent Dyes or Metal Coatings to resins, epoxies, glass, or any polished surface you may need to not only clean the surface but also slightly abrade it. The best method for cleaning most materials is to sandblast. Different types of blasting material may be used in order to keep the surface as you want it. Wire wheels or Scotch-Brite™ pads are another method of cleaning.

For surface prep and cleaning, **DO NOT** use solvent based cleaners, including but not limited to, acetone, paint thinners, solvent thinners or products such as Simple Green®. Be careful not to leave any polishing compound on the surface. A good metal cleaner is a great way to get the surface ready to work on. Sometimes mild acids are used but often they can interfere with the patina process to come later. Sculpt Nouveau's Metal Cleaner/Degreaser is a great metal cleaner. It works on both ferrous and non-ferrous metals.

METAL CLEANER/DEGREASER - by Sculpt Nouveau

This metal cleaner has built-in corrosion inhibitors that protect the metal surfaces while cleaning.

Instructions for Cleaning Bronze, Brass, and Copper:

- 1) Apply the metal cleaner with a brush, sponge, rag or by spraying.
- 2) Let it sit on the metal for approximately 5 minutes.
- 3) Rub with a green or gray Scotch-Brite™ pad.
- 4) Rinse with water.
- 5) Repeat if necessary.
- 6) Dry the surface.

Instructions for Cleaning Iron, Steel, and Aluminum:

- 1) Repeat steps above but dry quickly and thoroughly so rust does not begin to form. Do not clean your metal until just before you are ready to apply the patina.



GRAFFITI REMOVER/METAL CLEANER - by Sculpt Nouveau

This cleaner is a multipurpose, powerful, and natural cleaner and degreaser.

Instructions for Graffiti Remover/Metal Cleaner:

- 1) Test in a small inconspicuous area prior to use.
- 2) Apply to a dry surface and allow to soak for a few minutes. Scrub with a soft brush, Scotch-Brite™ pad or a clean rag. Rinse with clean water.
- 3) Repeat if necessary.

On ferrous metals, use just before you apply your patina.



Patina Groups

There are two main categories of patina:

- 1) Those which contain acids (Traditional, Vista & Birchwood).
- 2) Those which do not contain acids (Non-traditional).

This is important to know if you are wishing to patina iron, steel, or aluminum as acids will cause rust or oxidation.

Types of Patinas Sculpt Nouveau makes:

- 1) Traditional Patinas - All contain acids
- 2) Birchwood Patinas (made by Birchwood Technologies) - All contain acids
- 2) Vista Patinas - All contain acids
- 3) Universal Patinas - Do not contain acids
- 4) Dye-Oxide Patinas - Do not contain acids
- 5) Patina Stains and Smart Stains - Do not contain acids

Each type of patina is available in a range of colors. The colors may be mixed together within the group to form a different shade, except for the Traditional and Birchwood patinas which should be applied one over the other. The different types may be applied over each other or mottled around areas to make the patina more interesting.

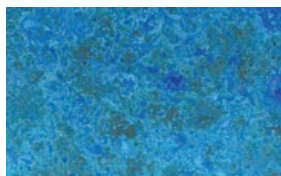
Note: When layering the different patinas it's best to apply the types with acids first.

Traditional Patinas - All Contain Acids

Light Green	Tiffany Green
Mint Green (*)	Powder Blue & Original Blue
Mahogany	Jade Green (*)
Tan (**)	Ferric Nitrate/Ferric Chloride (*)
Antiquing	Cupric Nitrate (**)
Darkening	Ferric Nitrate (**)
Black Magic	Japanese Brown (*)
Slate Black	All Birchwood Patinas
Zinc Grey	Stainless Steel Black

Some patinas (*) may be applied hot or cold, while some (**) should be applied to heated metal. Ferric Nitrate applied cold to steel will create a beautiful orange rust, but applied hot on bronze will result in a brown to reddish brown. Ferric Nitrate/Ferric Chloride applied cold will only have a slight reaction. Japanese Brown applied hot on steel will give a dark plum brown, but a rusty brown when applied cold.

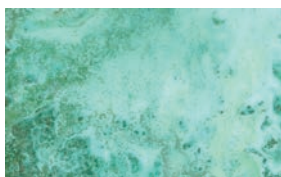
Traditional Blue & Green Patinas for Bronze, Brass & Copper (and Metal Coatings)



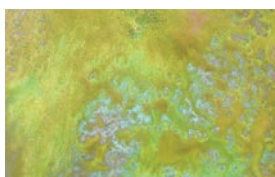
Powder Blue



Original Blue



Tiffany Green



Light Green



Mint Green



Cupric Nitrate



Jade Green

***Allow the cold patinas days to fully develop before applying a clear sealer.**

Powder Blue (Cold Patina)

This is a very opaque blue patina. Clean the metal first as with any other patina. Spray, brush, or sponge on the patina. Do not apply in the sun. Let the reaction work for 2 - 6 hours. Reapply if a deeper color is desired. No rinsing is necessary. This patina may also be used on our Metal Coatings. It is not recommended for iron or steel, because rust will occur. Don't use on aluminum. Set with a clear sealer when done.

Original Blue (Cold Patina)

Use in the same manner as the Powder Blue. This is the original Blue Patina. It will form a beautiful pale natural blue color.

Tiffany Green (Cold Patina)

Use in the same manner as the Powder Blue. This is a beautiful green patina. It is an old formula developed by Tiffany for Tiffany lamp bases. If it is overlapped or applied heavily it may "pop off" and will tend to go a little blue. Tiffany Green tends to be slow to react, but worth the wait. Let it sit overnight to see the results.

Light Green (Cold Patina)

Use in the same manner as the Powder Blue. This is a beautiful fast reacting green patina. It may tend to “pop off” if applied too heavily. Mist on lightly and let it react, then reapply if necessary to deepen the color. This patina tends to have some yellows mixed with different shades of green.

Mint Green (Hot or Cold Patina)

This is a great hardworking patina. It is an exception in that it may be applied hot or cold. This patina will not cause Red Bronze Disease. It is a good substitute for Cupric Nitrate - Statue of Liberty color. Set with clear sealer when done



Light Green applied to brass with plastic wrap.

Cupric Nitrate (Hot Patina)

Clean the metal first as with any other patina. Spray, brush or sponge on quite a few layers of the Cupric Nitrate onto the heated metal (220°F). Rinsing the patina is optional; it will “smooth” out the patina. This patina looks great directly on the metal, as well as over a base brown or black patina such as Liver of Sulfur, Birchwood’s M-20, M-24, or Ferric Nitrate. If used on iron or steel, rust will occur. Don’t use on aluminum. Applying wax directly to the patina will darken it significantly and is not recommended. It is always best to spray a sealer on after the patina has cooled.

Note: This patina may cause “Red Bronze Disease” if it is applied on silicon bronze that will be outdoor. To help eliminate this, add a pinch of zinc dust to the patina.

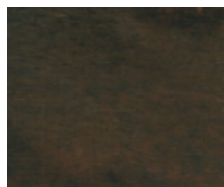
Jade Green (Hot Patina)

This patina is a hot or cold patina for bronze, brass, and copper. If applied cold, the color develops into kelly green in about 12 hours. If applied hot, the color will be jade green when used over the Universal Black or Black Dye-Oxide Patinas. The finish should be protected with 2 coats of Clear Guard.

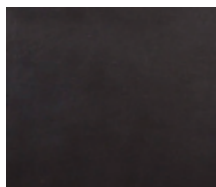


Liver of Sulfur applied first to this bronze alligator. Tiffany and Original Blue patinas were layered over the base patina.

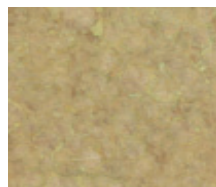
Traditional Brown on Bronze, Brass & Copper



Liver Of Sulfur
Bronze - Cold



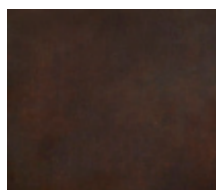
Liver Of Sulfur
Bronze - Hot



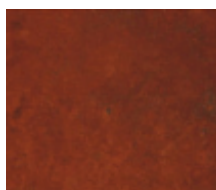
Tan
Bronze - Hot



Mahogany
Copper - Cold



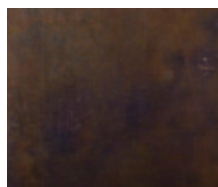
Darkening
Brass - Cold



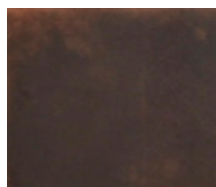
Ferric Nitrate/Ferric
Chloride - Bronze Hot



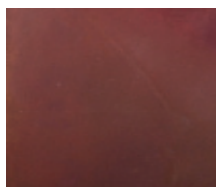
Ferric Nitrate
Bronze - Hot



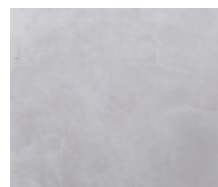
Deep Brown
Copper - Cold



Antiquing
Copper - Cold



Copper Rust
Copper - Cold



White Bismuth
Copper - Hot

Liver of Sulfur (Hot or Cold Patina)

This is a very old base patina. It even works well for large outside bronzes because it is relatively easy to apply and provides an attractive and relatively warm brown. You must mix this solution fresh each time you patina because it does not keep well. Store in a cool dry area. Combine 1 teaspoon with 1 pint of distilled water. Liver of Sulfur must be washed thoroughly before any other patinas are applied.

Cold Technique: Using a brush, spray bottle, or sponge, evenly cover the surface of the metal. Let the patina sit for 5 minutes, then wash the metal in cold water to neutralize the patina. This patina must be neutralized. You may wish to use steel wool or a gray 3M pad to highlight the sculpture. Liver of Sulfur applied cold will be brown. For a darker color, sparingly apply more Liver of Sulfur. If you want black, apply hot.

Hot Technique: Heat the metal with a torch until it is between 180°F-220°F. Then apply the Liver of Sulfur solution sparingly with a brush, using circular or stippling motions and working across the surface until the desired color is established. This will be a black patina and will turn dark very fast when the metal is hot, so if you require a light brown, apply it cold. You may need to burnish the surface with steel wool or Scotch-Brite™ to even out the patina. Rinse with water to neutralize.

Mahogany (Cold Patina)

Mahogany is a patina best used on copper. When used on a polished surface, a beautiful transparent brown patina will form with swirls of color. On a non-polished surface, a nice brown will appear. On bronze or brass, this patina turns a nice brown. Mahogany works well as a base patina under traditional greens or blues as it will make these colors more vibrant. Apply a clear sealer or wax after the patina is dry.

Darkening (Cold Patina)

This patina may also be used on bronze, brass and copper. It creates a beautiful brown color. This patina is oftentimes diluted with distilled water; otherwise the patina will be very dark. For a nice transparent brown, it may also be applied on iron and steel. Apply a clear sealer or wax after the patina is dry.

Antiquing (Cold Patina)

Antiquing patina beautifully and easily ages bronze, brass, copper, iron and steel. Apply a clear sealer or wax within a few hours after the patina is dry.

Ferric Nitrate/Ferric Chloride (Hot or Cold Patina)

Ferric Nitrate/Ferric Chloride can be used for bronze, brass, and copper and will result in a very beautiful rich brown color when used hot. Clean the metal first as with any other patina. Heat the metal to about 180°F-220°F. Apply with a brush, spray bottle or sponge. If applied full strength, it will create a dark brown. If diluted by 50% distilled water it will create a rust/brown. If applied cold on iron or steel it will create rust. Don't use on aluminum. Apply a clear sealer or wax after the patina is dry.

Tan (Hot Patina)

Tan is a hot patina for all metals. You'll get an opaque brownish white color and works well with Ferric Nitrate applied hot. Heat your metal to about 180°F-220°F. Apply with a brush, sponge or by spraying. Do not rinse. Apply a clear sealer or wax after the patina is dry.

Ferric Nitrate (Hot or Cold Patina)

This patina is a hot patina for bronze, brass, and copper. In addition, it creates a beautiful stable orange rust on iron and steel. For a hot application, heat the bronze, brass or copper to about 180°F-220°F. Apply the solution sparingly with a brush by working across the surface, or with a spray bottle in a fine mist. The bronze, brass or copper will first turn gold and then darken to a light brown. If the solution is strong and more heat is applied, a darker shade from red/brown to dark brownish purple can also be obtained. Depending on the surface you begin with, the effect could be either opaque or shiny. If applying on steel, apply to clean cold steel. Leave alone because it takes a long time to react. When applied on steel, the patina will be chalky. Seal thoroughly with a clear coat.

Japanese Brown (Hot or Cold Patina)

This patina may also be used on bronze, brass and copper but is mainly used on iron and steel. If applied to bronze, brass or copper, a golden color will result. On iron and steel, a brown rust will form when applied cold. When applied to heated steel, a dark chocolate brown will form. Clean the metal surface before application. If the metal is smooth it will be a shinier patina. If the metal surface is sandblasted it will look more satin. Heat will darken the color as well as make it less mottled. Rinsing is not mandatory. If you don't rinse, leave the patina alone for 24 hours before applying a clear sealer. Do not use on aluminum, galvanized or stainless.

Japanese Brown applied cold on cold rolled steel. Sealed with Ever Clear two part acrylic urethane clear coat. Patina by Israel Garcia.



Japanese Brown and Ferric Nitrate applied to steel panels at the Fairbanks Alaska Airport.

Traditional Black Patinas for Bronze, Brass, Copper, Iron, Steel, Stainless Steel & Zinc

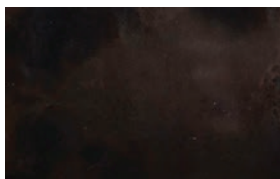
Black Magic (Cold Patina)

This patina instantly creates a beautiful rich black patina on clean iron & steel. Rust will not occur immediately as with other darkening patinas. Before applying this patina, sandblasting or sanding and cleaning is required to remove the oil, oxides, and residues. Water rinsing is a good neutralizer and will not cause rust. Dry after rinsing and between applications. Rust will occur after 12 hours if a clear sealer is not applied. Black Magic may also be applied on bronze, brass, copper and galvanized.

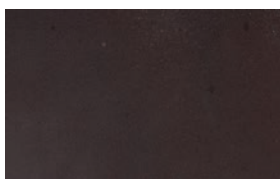
Slate Black (Hot or Cold Patina)

This is a very versatile patina that will produce a unique finish on iron, steel, stainless steel, aluminum, bronze, brass, or copper. Applied hot, Slate Black will create a deep brown patina on aluminum and a reddish brown finish on stainless steel. On iron, steel, and nonferrous metals, Slate Black will form a black or brownish-black patina when applied cold. Before applying this patina, sandblasting or sanding and cleaning is required to remove the oil, oxides, and residues. Slate Black may be applied as a spray or in an immersion process. Depending on the application method chosen, the results will range from a uniform solid color to a layered textured appearance. Slate Black Patina may be diluted up to 50% with distilled water depending on the desired strength of finish. The finish may be burnished wet or dry. Additional patinas can be layered over a Slate Black base. When dry, protect the finish with multiple coats of a clear sealer.

Slate Black Patina - Applied Hot and Cold



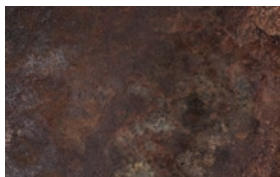
Slate Black
Cold Rolled Steel - Cold



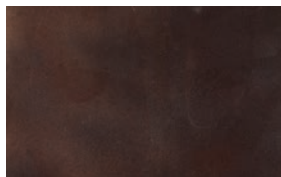
Slate Black
Brass - Cold



Slate Black
Aluminum - Cold



Slate Black
Stainless Steel - Hot



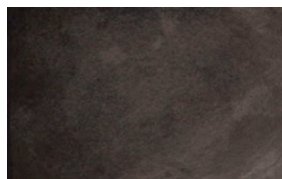
Slate Black
Aluminum - Hot

Stainless Black (Cold Patina)

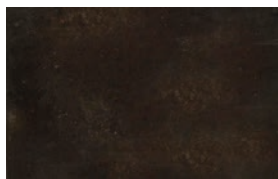
In order for this patina to react, you must remove the nickel and chrome from the surface before applying the patina. Sandblasting is the recommended method but you may also use an orbital sander with 80 to 120 grit sandpaper, or the metal can also be soaked in muriatic acid. Apply by spray or emersion. Stainless Black patina works best used full strength. After application, rinse to neutralize. Tinted clear stains are beautiful when applied over this patina. When completely dry, apply a clear sealer.

Zinc Grey (Cold Patina)

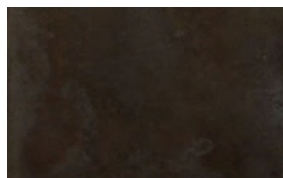
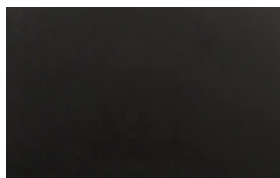
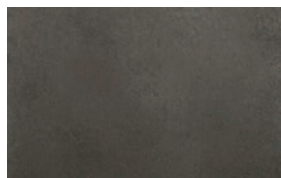
Creates a gray patina finish on zinc or galvanized steel. The patina will be black if applied full strength. Before applying this patina, light sanding and cleaning is required to remove the surface of oil, oxides, and residues. Dilute with 50% or more distilled water for a lighter finish. Rinse to neutralize. Seal when dry with Metal Oil, Sculpt Nouveau's Wax or clear coat.

Patinas for Zinc/ Galvanized - Applied Cold

Antiquing on Zinc



Black Magic on Zinc

Birchwood M-38
on ZincZinc Grey on Zinc
Full StrengthZinc Grey on Zinc
Diluted 50%

Darkening on Zinc



Ferric Nitrate on Zinc



Zinc White on Zinc

Birchwood Patinas for Bronze, Brass, Copper, Iron, Steel, Aluminum & Pewter

These patina solutions come concentrated (except the gels) and are then diluted from 1 part distilled water to 1 part Birchwood to 3 parts of distilled water to one part Birchwood. Using the solution too strong may cause problems.

ANTIQUÉ BLACK® M-20 - Immersion Concentrate - For dark brown, black on bronze, brass, and copper.

ANTIQUÉ BLACK® M-24 - Spray or Brush-On Concentrate - For dark brown, black on bronze, brass, and copper. Fast reaction. Easy to use.

ANTIQUÉ BLACK® M-24 Gel - Brush-On blackening for bronze, brass, and copper. Thickened formula slows reaction and prevents runs, and drips. Ideal for large surfaces and sculptures.

ANTIQUÉ BROWN® M-38 - Immersion/Brush-On/Spray Concentrate - For golden to chocolate browns, Oil-rubbed finishes on bronze, brass, and copper.

ANTIQUÉ BROWN® M-38 Gel - For Brush-On browning of bronze, brass and copper. Thickened formula slows reaction and prevents runs and drips. Ideal for large surfaces, and sculptures.

PEWTER BLACK™ PB-1 - Immersion/Brush-On/Spray Concentrate - For blackening tin and pewter or lead and pewter alloys, castings,terneplate, and stained glass.

PRESTO BLACK® PC-9 - Spray or Brush-On Concentrate - For blackening on iron and steel surfaces. Fast reaction is ideal for tools or small decorative surfaces. Gunmetal bluing.

PRESTO BLACK® PC-9 Gel - For Brush-On blackening of large iron and steel surfaces. Thickened formula slows reaction and prevents runs and drips. For gunmetal or "distressed pewter" finish.

PRESTO BLACK® BST-4 - Spray or Brush-On Liquid - For blackening on iron and steel surfaces. Fast reaction is ideal for tools or small decorative surfaces

ALUMA BLACK® A-14 - Spray or Brush-On Liquid - For instant blackening of aluminum. Dark black for engravings and simulated pewter finishes.

PLUM BROWN™ Barrel Finish - Spray or Brush-On Liquid applied to heated metal. Produces a rich, authentic, old-style brown finish for original or replica firearms.



M-38 on Copper



PC-9 on Steel



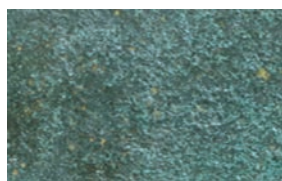
M-24 on Copper

Vista Patinas for Bronze, Brass, Copper and Metal Coatings

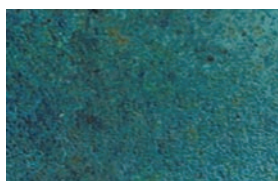
Vista Patinas contain acids as well as oxides. They are exclusively cold patinas. Vista Patinas were designed to give a consistent patina color. Often with an acid patina, the color will vary depending on the weather or other variables. The consistent color of the oxide is pulled into the acid reaction and a somewhat predictable, mottled patina is formed.

When used on bronze, brass and copper, the Vista Patina creates a two-part, marbled effect of a green patina plus the Vista color. It is best to use only one Vista color. If you want to introduce other colors to your patina, apply a non-acid patina over it. As with all cold patinas, try to apply out of direct sunlight and in moderate temperatures. Vista patinas react better when cool and stop reacting when warm. The reaction may not take place if the patina dries too fast. Allow 2-12 hours to react. Reapply if the color is not intense enough. The patina will be chalky. Apply a clear sealer when finished. Make sure the sealer is thinned enough to soak into the patina completely.

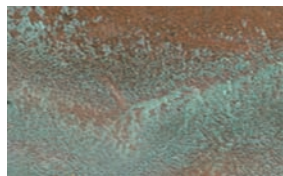
Vistas are not recommend for iron and steel because rust forms and is hard to arrest. To achieve this marbelized look on iron and steel, first apply Japanese Brown. Allow it to react a day, then apply a Universal Patina color over the top. Seal with a clear coat when dry.



Vista Black



Vista Blue



Vista Brown



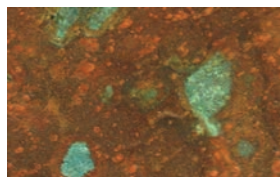
Vista Burgundy



Vista Green



Vista Red

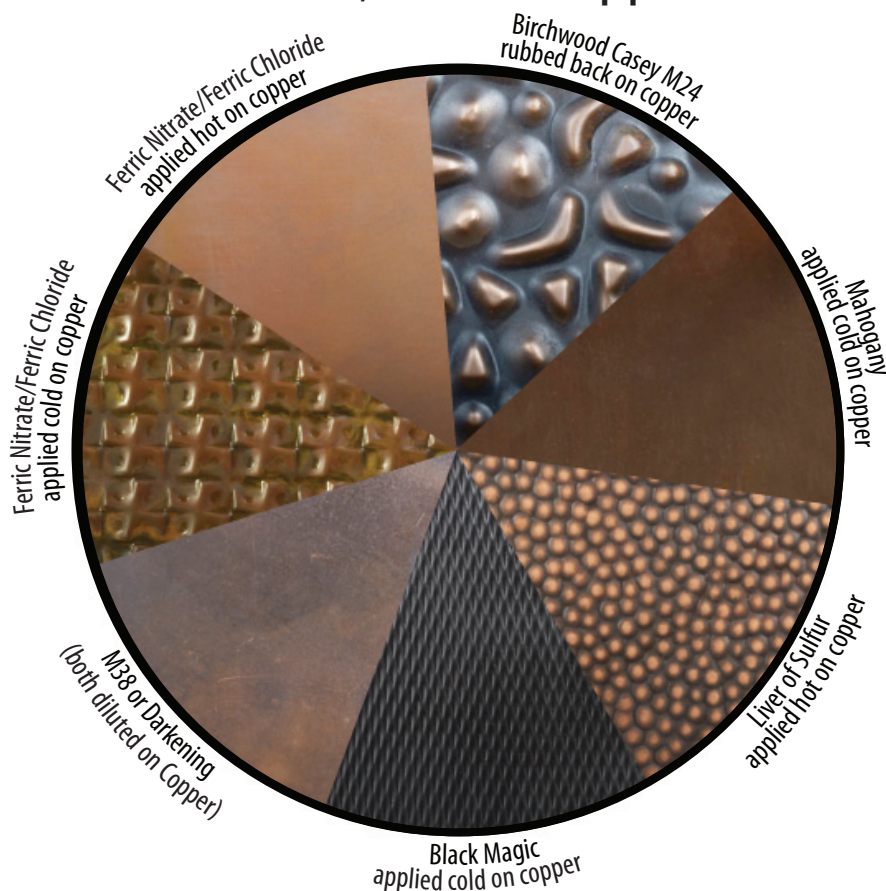


Vista Rust



Vista Yellow

Blacks & Browns Bronze, Brass & Copper



TRADITIONALS FOR BLACK: Birchwood's M-20 & M-24, Slate Black, Black Magic (cold); Liver of Sulfur (hot).

TRADITIONALS FOR BROWN: Birchwood's M-38, Darkening, Mahogany, Deep Brown, and Antiquing (cold).

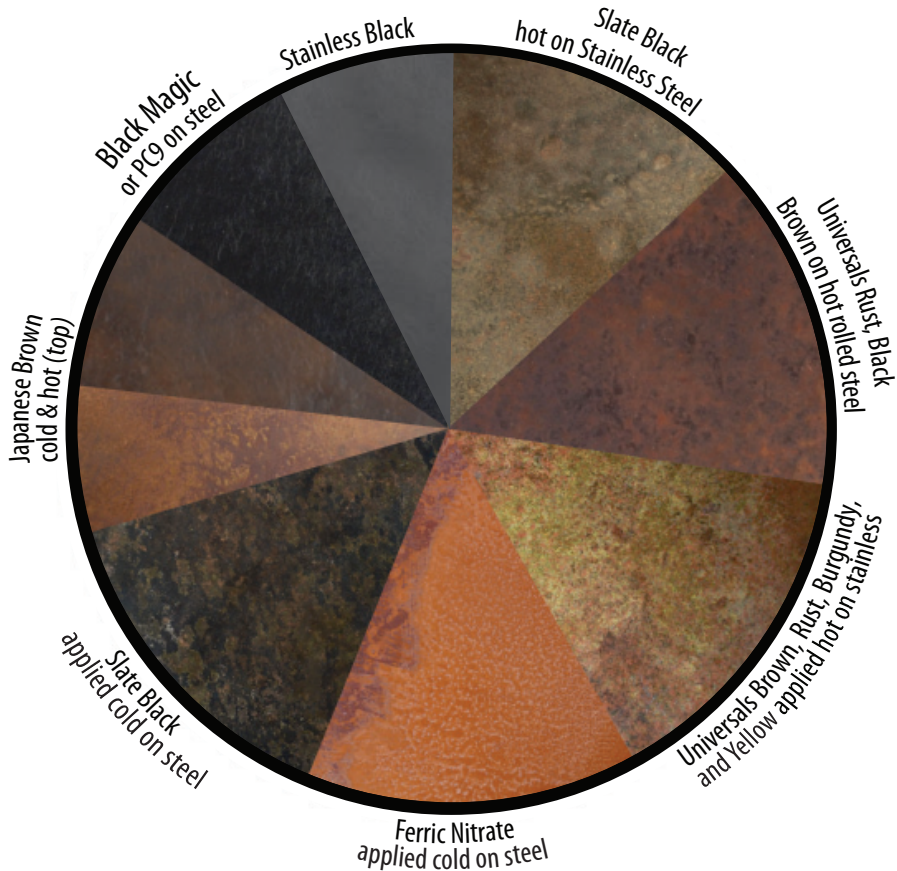
NON-TRADITIONALS FOR BLACK & BROWN: Universals, Dye-Oxides (hot); Solvent Dyes, Smart Stains, and Patina Stains (cold).

WAXES & OILS: Brown & Black

Note: The higher the copper content in the metal, the better it will take a patina. Brass is an alloy of copper and zinc and has the least amount of copper. Bronze is an alloy consisting mostly of copper and tin and has more copper than brass.

Blacks & Browns

Iron, Steel, Stainless, Aluminum, Zinc



IRON & STEEL: Slate Black (brownish black), Black Magic (black), Birchwood's PC-9 (black), Darkening (transparent brown) (all cold); Japanese Brown (rusty brown) (cold); Japanese Brown (dark brown) (hot).

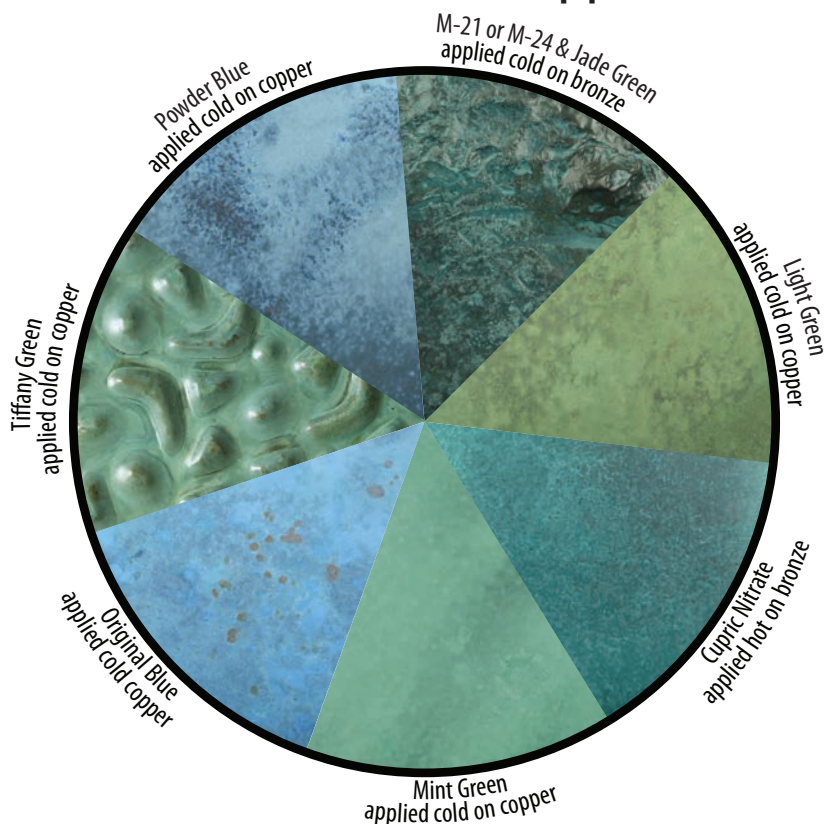
STAINLESS STEEL: Stainless Black (gray to black) (cold); Slate Black (reds and browns) (hot).

ALUMINUM: Birchwood's A-14 (gray to black) (cold); Slate Black (brown) (hot).

GALVANIZED/ZINC: Zinc Grey (gray to black), Darkening (black), Slate Black (dark brown), Antiquing (brownish), Birchwood's M-38 (dark brown), Zinc White (white), Black Magic (brownish black), Ferric Nitrate/Ferric Chloride (light golden brown) (all cold).

BROWN & BLACK FOR ALL METALS: Smart Stains, Solvent Dyes & Patina Stains (all cold); Dye-Oxides & Universals (hot); also black and brown Waxes and Oils.

Blues & Greens Bronze, Brass & Copper



TRADITIONAL PATINAS FOR BLUES & GREENS

JADE GREEN: Applied cold, the color develops into kelly green in about 12 hours. Applied hot, the color will be jade green when used over the Universal Black or Black Dye-Oxide patinas.

LIGHT GREEN: Creates a yellowish/green and takes 2-12 hours to completely react with the metal (cold).

CUPRIC NITRATE: Creates a blue/green finish. Takes quite a few applications to make the color pop. Works great over a dark base patina such as M-24 or Liver (hot).

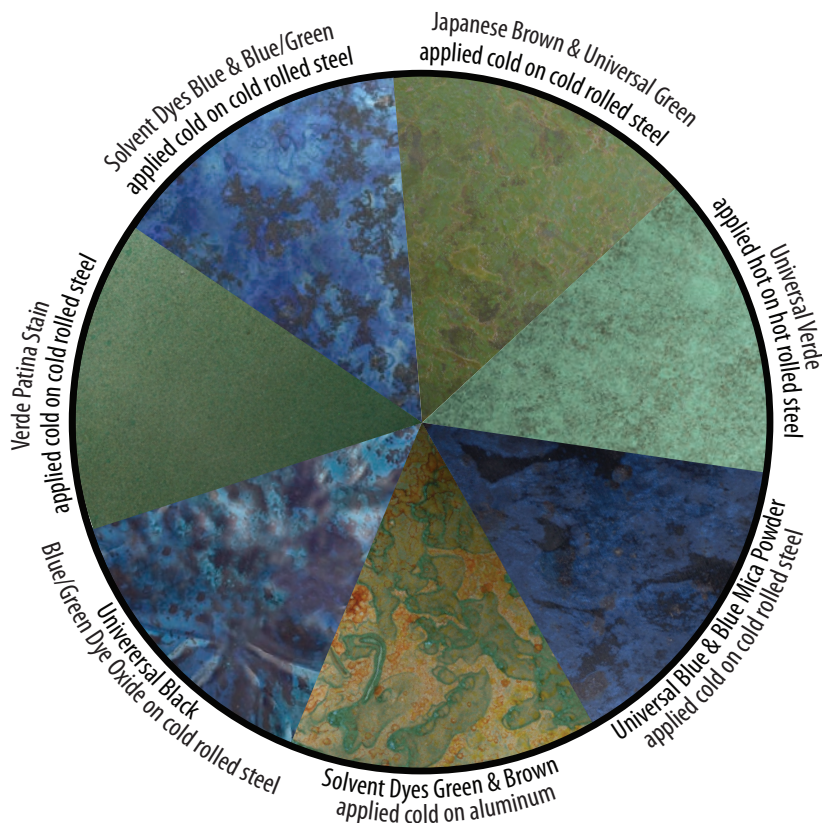
MINT GREEN: This patina will create a beautiful green while in the full sun and is recommended when working outdoors on copper roofs and gutters (hot or cold).

ORIGINAL BLUE, POWDER BLUE: Let react 2-6 hours. Original blue is a pale natural blue. Powder Blue is a stronger opaque blue (cold).

TIFFANY GREEN: Creates a bluish green. It is slow to react, so let it sit overnight. Reacts better in humid conditions (cold).

Blues & Greens

Iron, Steel, Aluminum, Stainless & Zinc



NON-TRADITIONALS FOR BLUES & GREENS

UNIVERSALS: Green, Verde, and Blue (hot).

SOLVENT DYES: Blue, Blue/Green, Green (cold).

SMART STAINS: Blue, Blue/Green, Green, Green/Blue, Stealth Green, Pea Green & Verde (cold or warm).

DYE OXIDES: Blue, Blue/Green, Green, Green/Blue, Stealth Green & Pea Green (hot).

VISTAS: Vistas are not recommended for use on iron or steel. Instead apply Japanese Brown first, then a Universal Patina on top. Not for aluminum, zinc or stainless (cold).

PATINA STAINS: Verde, Blue (cold).

METAL WAXES: Blue, Green, Verde

METAL OILS: Blue & Green

****Hot patinas - heat metal to 180°F-200°F**

**** All of these patinas , waxes and oils may also be applied to non-ferrous metals.**

Universals (Hot for all metals)

For **any metal surface**, Sculpt Nouveau's Universal Patinas come in numerous patina colors, including metallics, allowing for an unlimited variety of finishes. These patinas may be used on all metals and the Metal Coatings. They may be blended with each other to create new colors, although shouldn't be mixed with other patinas.

Universal Patinas are non-reactive, UV safe, do not contain acids and are environmentally friendly with no VOC's.

Any metal surface needs to be cleaned before application. For best adhesion, Universals should be applied hot. Heat the metal to approximately 180°F-220°F. Universals are heat tolerant, scratch resistant, and may be used as a base for other patinas. A clear sealer is always recommended to protect your finish.



Black



Blue



Brass



Bronze



Brown



Burgundy



Green



Red



Rust



Verde



White



Yellow



Zinc

Dye-Oxides (Hot for all metals)

For **any metal surface**, the Dye-Oxide Patinas do not contain acids so they do not react with the metal. The color of these transparent patinas will remain the same. They will not change as with an acid patina. They are UV safe indoor or outdoor, and have no VOC's. They can be applied hot to any metal including iron, steel, and aluminum and will not cause rust. The metal surface needs to be clean and abraded before application. Heat the metal to about 200°F. Apply by spray or brush. Reapply if the color is not intense enough. Finish with a clear sealer when finished.



Smart Stains (Cold or warm for all metals)

Smart Stains are a strong, non-hazardous, fast drying patina system. They have no VOC's and no odor. Smart Stains contain UV inhibitors and will not fade outdoors if maintained properly. They will clean up with warm, soapy water.

Smart Stains are very versatile. They are made by combining finely ground, naturally occurring colored oxides with a water based polymer/resin binder. They are a cross between the water based Dye-Oxides and a patina. All colors are transparent (except white and metallics) and may be blended or layered onto any metal including iron, steel and aluminum. We recommend when applying Smart Stains onto a bare surface that the surface be oil-free and slightly abraded. To alter or enhance the color, Smart Stains may be applied over another patina surface or metal coatings once dry. They are sold concentrated and may be diluted with an unlimited amount of Smart Coat to increase transparency. Also available in aerosol spray cans.



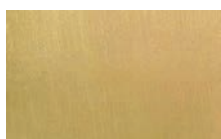
Black



Blue



Blue-Green



Brass



Brown



Copper



Green



Green-Blue



Orange



Pea Green



Red



Silver



Stealth Green



Verde



Violet



White



Yellow

Instructions for Smart Stain application:

- 1) Shake well. Metallics should be stirred as well.
- 2) Clean surface of material and sand if possible. Make sure it is completely dry before applying Smart Stain.
- 3) Apply by spray, sponge, roller, or brush. Apply as many coats as needed to achieve the desired color. If applying over a patina, make sure the first layer of Smart Stain saturates the rust or patina. Allow 1 hour to fully cure between coats.

Note: Smart Stains may be applied to warmed metal. Heat metal with a heat gun or torch up to 120°F. Apply by any method to achieve desired effect. Seal when dry.

For exterior applications, Smart Stains should be sealed with three layers of Smart Coat, Clear Guard or Ever Clear. Maintenance requirements will vary by location. In most environments, regular application of Sculpt Nouveau's Metal Wax or Metal Oil, over the clear coat, is sufficient to maintain this finish.



Above: Smart Stains used on "Pacific Breath". Inspired by the proximity to the ocean. San Francisco, CA by artist Bryan Tedrick.



Left: Bronze fountain restoration with Smart Stains at the Westlake Promenade, Westlake Village, CA. Restoration by Brett Fiore, Signature Sculpture.

Patina Stains (Cold for all metals)

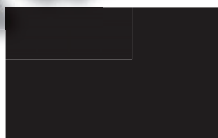
Patina Stains are blended to match chemical or Traditional Patinas without the fuss. They are pre-blended Solvent Dyes and Clear Guard. Thin Patina Stain with Sculpt Nouveau's Clear Guard, Solvent Thinner or Xylene to lighten the color. Patina Stains are very concentrated, so dilution is usually desired.

One gallon covers approximately 300 sq/ft. Patina Stains are UV stable. Spray, rag or brush onto any clean metal. Also available in ready-to-use aerosol spray cans.

Note: Color swatches below are from multiple coats of Patina Stain.



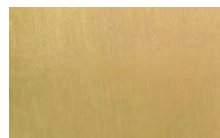
Patina stains, yellow, brown and a light spray of black on cold rolled steel. Sealed with Clear Guard EF Matte.



Black



Blue



Brass



Bronze



Brown



Brown for Copper



Copper



Hot Rolled



Red



Rust (light)



Rust (dark)



Silver



Verde



Violet



Yellow

Instructions for Patina Stain application:

- 1) If working on non-patinaed metal, clean the surface as needed. Sand or bur-nish with a Scotch-Brite™ pad, and clean with Sculpt Nouveau's Graffiti Remover or Metal Cleaner.
- 2) Make sure that the surface is completely dry by air drying or heating with a heat gun or patina torch.
- 3) Applying with a sprayer will give the most consistent results. You may also apply with a brush or sponge for a different look.
- 4) Let the Patina Stain dry a minimum of 1 hour and apply more coats if desired. You may also layer on different colors of Patina Stain.
- 5) Apply as many coats as needed, making sure the first layer of stain saturates the rust or patina if this is on your surface.
- 6) Apply at least 2 layers of clear finish.
- 7) If desired, apply clear or colored wax 24 hours after the last layer of clear sealer.

Solvent Dyes (Cold for all metals)

Sculpt Nouveau developed the Solvent Dyes because of the need to match finishes while doing restorations. These dyes may be applied over a new or an existing surface treatment or over a patina. If you apply a patina and it doesn't have the look you want, just touch it up with the desired Solvent Dye color. These dyes were designed as a tool to enable you to apply a difficult color (violet, red...) to a difficult material (steel, glass, resin....), to change or enhance an existing color, or to repair a damaged finish. The dyes can be blended with each other to create the colors you want. There is no color or shade that cannot be made with these dyes. All the primary and secondary colors are transparent with the exception of white, which is opaque. Adding white to the transparent colors will make opaque colors and pastels. The colors are very concentrated, so dilute the dyes with Sculpt Nouveau's Solvent Dye Thinner to obtain the desired transparency. To make a very faint or extremely transparent color, add the dye to Sculpt Nouveau's Clear Guard. When the dyes are thinned with Solvent Dye Thinner or Clear Guard they remain UV stable.

The Solvent Dyes can be used to tint epoxies, resins, clear coats, and waxes. They may be used directly on any material, including glass. The surface may need to be slightly abraded, if it is too smooth, to help the dye bind. The dyes may be applied directly on galvanized metal, non-ferrous metal, ferrous metal, and aluminum without corrosion occurring. The dyes will duplicate any chemical patina color directly on the metal surface, or create a new look. The dyes look great over any leaf product or non-reactive metal like gold or silver. The dye may be applied over dry metal coatings and may also be applied over a patinaed surface. This makes altering a

patina-gone-wrong very easy.

The dyes may be applied in

any manner. Each different

application technique will

change the way the dyes

appear. Sponging will give

texture as with a cold patina.

Airbrushing will create an even

coloring as with a hot patina.

The dyes are very easy to mani-

pulate and can be applied

directly on any surface. This is

especially important when working

with ferrous metals. The Solvent Dyes

contain the best binders and UV inhibitors available. Once dry and sealed, the Sol-

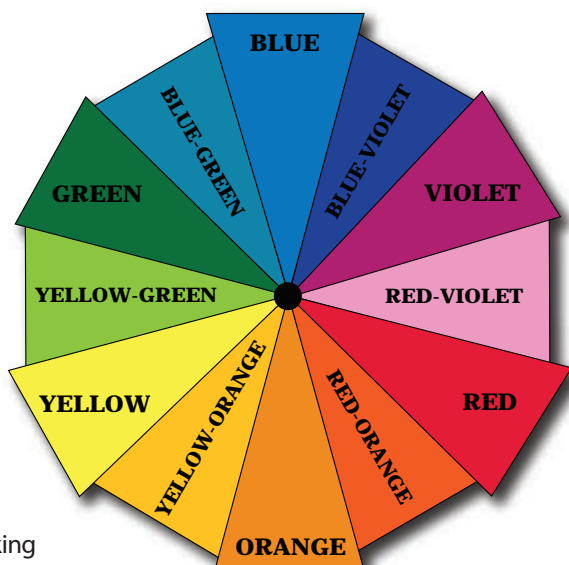
vent Dye is long lasting and may be used on exterior work. While you are applying

the dye, it may be lifted off with alcohol and can be tacked down with the clear wood

finish, Deft®. A protective clear sealer is necessary after the dye has dried, unless the

sealer was the majority of the mix applied. Always spray on the final protective clear

sealer, instead of brushing, because there is a risk of disturbing the dye finish.



COLOR MIXING

To make colors lighter, add white or a

lighter value of the same color. To make

colors darker, add a deeper value of the

basic color. Most colors may be made

darker by mixing them with their

complementary color.



Blue-Green



Brown



Green



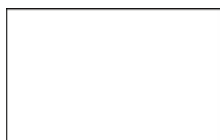
Orange



Red



Violet



White



Yellow

COLOR HARMONY

Yellow + Red = Orange
 Yellow + Blue = Green
 Blue + Red = Purple or Violet
 Red + Green = Brown
 White + Black = Gray
 Gray + Yellow = Citron
 Gray + Red = Russet
 Gray + Blue = Olive
 Red + White = Pink or flesh tone
 White + any color = lighter tint
 Brown or Black + any color =
 Darker shades of that color



Above: "Exotic Bowl" by Andrew Baxter. This copper spun bowl has Solvent Dyes, fully concentrated, dripped down the sides and left to puddle in the bottom. It was then coated with Clear Guard Satin lacquer.

TO LIGHTEN:

Yellow + Lighter Yellow or White
 Orange + Lighter Yellow or White
 Red + Lighter Red or White
 Violet + Lighter Blue, Red, or White
 Green + Lighter Green or White
 Black + Lighter Gray or White

TO DARKEN:

Yellow + Deeper Yellow or Violet
 Orange + Deeper Orange or Blue
 Red + Deeper Red or Green
 Violet + Deeper Violet, Blue or Red
 Blue + Deeper Blue
 Green + Deeper Green or Red

PRIMARY, SECONDARY & TERTIARY COLORS

PRIMARY COLORS: The primaries are blue, red, and yellow. These three colors are impossible to produce by mixing other colors. To create a secondary color, mix two primaries - blue and red to make violet, blue and yellow to make green, red and yellow to make orange, and so on. The six tertiary colors are blue-green, yellow-green, blue-violet, red-orange, and yellow-orange. The tertiary colors are created by mixing a primary and a secondary color. Red and orange produce red-orange, yellow and orange produce yellow-orange, etc. You can also produce tertiary colors by mixing uneven amounts of two primaries. A lot of red and a little yellow will make red-orange. A lot of blue and a little yellow will make a blue-green, and so forth.

COMPLEMENTARY COLORS: The colors that are opposite one another on the color wheel are called complementary colors or just complements. Blue and orange are complements. Blue-violet and yellow-orange are complements. Violet and yellow are complements.

Metal Coatings



Cabazon Outlet Mall - Cabazon, CA
Coated with Copper B Metal Coating.

Sculpt Nouveau makes two different formulas of "Metal Coatings", B & C. Both Metal Coating formulas are made of water based, acrylic and strong, long lasting, outdoor binders with real metal powders suspended in them. Different metal powders are used to create the different metal coatings, Bronze, Brass, Copper, Iron, Pewter and Silver.



The reason for using the Metal Coatings would be to make something that was not made of metal look as if it were made of metal. For example, a ceramic or plaster object would appear to be made of bronze if the Bronze Metal Coating was applied on it. Another application would be to change one metal into a different metal. For example, if you apply the Copper Metal Coating over steel, the steel will appear to be copper. Another popular use is to apply the Iron Metal Coating over iron or steel. This allows you to completely rust the Metal Coating surface without compromising the base metal. Since the coating is an outdoor product, there will be no further disintegration, even outdoors.



2175 Market San Francisco - Aluminum panels coated with Iron B Metal Coating and rusted with Light Green Patina.



Pasadena Playhouse - Fiberglass panels coated with special mix Darkened Bronze B Metal Coating and aged with Original Blue Patina.

The main difference between the Metal Coating "B" & "C":

Metal Coating "B": The metal powder remains on the surface while it is wet allowing patinas and colors to be applied only when the coating is wet. You can, however, patina the Metal Coating after it is dry, but you must first burnish with '0000' steel wool. Be very careful not to burnish through the coating (the 'B' Coating cannot be burnished very aggressively). If applying an acid patina after the coating has dried and has been burnished, the patina will be faint.

Metal Coating "C": Contains more metal powder than Type B. Type C comes with a catalyst and hardener. Patina can be applied either while the coating is wet or dry, but preferably wet. This is still a water based formula, but comes with a mild catalyst. It is very hard when cured and may be polished with steel wool. Both metal coating formulas adhere very well to most surfaces with the exception of some polyurethane, highly polished or mirror surfaces. Test the coating in a small area on the material. Let it dry for at least 12 hours and then check for adhesion. If your surface is not accepting the coating, use some type of abrasion technique such as sand blasting, wire brush, sanding, etc. Then try applying the coating again. Applying a primer is not necessary on most materials with the very important exception of GALVANIZED METAL, FERROUS METAL, and or ALUMINUM. With these materials, first apply a strong, well-tested acid resistant primer like Sculpt Nouveau's Prime-It. (See primer information, page 35) The purpose of a primer for these materials is twofold. First, the primer separates the Metal Coating, which is non-ferrous, from the ferrous metal, eliminating any possible galvanic reaction. And secondly, the primer will keep any chemical acids used as patinas from reaching the metal and causing oxidation.



Above: Ceramic mask with Copper C Metal Coating and Tiffany Green Patina.

Left: Ceramic mask with Iron B Metal Coating and Tiffany (to cause rust) and Tan Patinas.

A light primer for porous material like ceramic or plaster is recommended to keep the first layer of Metal Coating from being absorbed. If the Metal Coating is going to be applied to a porous material that will be exposed to water, like concrete, or an outdoor sculpture, we suggest a more aggressive primer, such as a concrete sealer, be applied first. If moisture is allowed to enter the material it can force the Metal Coating off the surface from the back or underside.

IMPORTANT INSTRUCTIONS for WET and DRY APPLICATIONS:

Wet Application on Metal Coatings:

Applying acid patinas (Traditionals, Birchwoods & Vistas) while the Metal Coating is wet is the preferred application because this allows time for the patina to react. You can always burnish the Metal Coating back after it is fully cured to create highlights. Applying non acid patinas while the Metal Coating is damp is also preferable as this allows a better bond of the patina to the Metal Coating.

Dry Application on Metal Coatings:

When applying acid patinas, (Traditionals, Birchwoods & Vistas), on dry Metal Coating, it **MUST BE** burnished back after it is fully cured. This will allow the patinas to react with the metal in the Metal Coating. If applying non acid patinas (Universals & Dye-Oxides) to a dry Metal Coating, you must burnish it back and heat the surface with a hair dryer prior to applying the patina. It is not necessary to warm the Metal Coating if applying Solvent Dyes, Patina Stains or Smart Stains, but the Metal Coatings must be burnished back in any case. Non acid patinas may be a bit chalky. It is important to apply a clear top coat.

Instructions for Metal Coating "B":

- 1) Stir well.
- 2) Apply the Metal Coatings by any technique such as air sprayer, roller, sponge, brush, etc. If an air gun type sprayer is used, the coating should be filtered first and sprayed at 40 - 60 psi with a 1.5 orifice tip. Always apply at least two coats allowing some drying time in-between. The drying time will vary depending on the weather. If you need more time, you can spray isopropyl alcohol on the surface of the Metal Coating. This will give you about 20 more minutes of working time in order to keep your metal coating damp until you are ready to apply the patina.
- 3) Apply the desired patina to the damp Metal Coating. Spraying is the preferred application method. You can apply the patina when the coating is dry but you must burnish the surface, after it is fully cured, with '0000', or a more coarse steel wool to expose the metal in the coating. You must be very careful not to burnish through the coating.
- 4) The best effects are achieved by burnishing 6-7 hours after applying the patina.

This will allow some of the metal to be exposed. Another layer of Metal Coating may always be applied over the top. In fact, by layering many coats you can achieve some very interesting finishes.

5) When completely dry, apply a clear protective sealer. As with a piece of metal, this will protect and prevent unwanted changes. Wait a full 12 hours before applying a clear sealer. If you already applied your protective coat, and you are unhappy with your results, you can still put the Metal Coatings right over the sealer. You can't, however, put the Metal Coatings over our waxes.

Metal Coating Process Over Surface



Bare clean hot rolled steel

2 coats Prime-It primer, cured
for 24 hours

Bronze B Metal Coating (2 coats)
applied over cured Prime-It

Original Blue Patina applied onto
last coat of Bronze B while still wet

Instructions for Metal Coating "C":

Metal Coating C is a three part product – body, hardener and catalyst. Four layers or more of the Metal Coating C is recommended for best results.

- 1) Mix the Body well before adding the other ingredients or pouring any off into a smaller container. The best way to mix is with a squirrel cage mixing blade. This works best with a drill. Do not go over 300 RPM when mixing. Also make sure the C coating, hardener and catalyst are not too warm or cold.
- 2) Add the Hardener to the Body while stirring. Shaking is a good way to mix if possible. Stir or shake for at least 30 seconds.
- 3) Add the Catalyst while stirring briskly. Continue about a minute. Be careful when mixing the catalyst in the coating and hardener. Mix very slowly. Do not mix with a drill blade over 300 RPM.

4) The Metal Coating C is now ready to be applied to the surface of an object. The coating will stay liquid for 5 to 6 hours. Thickening will take place in about 1 to 8 hours, depending on the temperature of the room you are working in. If you put the closed container in a refrigerator you will get an added day.

5) Keep the mixture in suspension while you are working with it by stirring or shaking every few minutes.

6) The coating will need to be strained before spraying. This is very important. If an air gun type sprayer is used, the coating should be filtered first and sprayed at 40 - 60 psi with a 1.5 orifice tip.

Metal Coating C Proportions:

By volume - 16 oz Metal Coating Body, 1 oz Hardener & 1/2 oz Catalyst. By weight (16 oz body by volume) - Metal Coating Body 677 grams (23.8 oz), Hardener 28 grams (1.3 oz) & Catalyst 19 grams (.65 oz)

Application of "C" Coating

1) Application may be by brush, sponge, roller or spray gun.

2) Apply multiple coats of the Metal Coating (3-4 if the surface is very irregular) letting the coating harden somewhat between applications. You may use the Metal Coating B as the first two base coats. This will save money, as it is a less expensive product.

Techniques to Dry the Metal Coating

Before using any of the below drying techniques, let the Metal Coating sit for 5 to 10 minutes or bubbles will occur. Do not apply heat or take the piece into the sun for 5 to 10 minutes.

1) Using the heat from the sun is the preferred technique.

2) Apply the coating, and then heat the surface with a hair dryer.

3) The coating may dry on its own or it may be cured in an oven or kiln at very low temperatures.

Applying a Patina to the Final Layer of "C" Coating

1) A patina should be sprayed on while Metal Coating C is wet but may be sprayed on while it is drying or after it has dried. If the Metal Coating is dry, it must be burnished to expose the metal and then apply the patina.

2) A patina containing acid such as Sculpt Nouveau's Light Green, Tiffany, Powder or Original Blue, or any of the Vista Series will help harden the coating if it is sprayed on while the Coating is drying. When the last layer of Metal Coating C has cured for at least 1 hour, before applying your patina, you may burnish the surface with 00 to 0000 steel, bronze, or copper wool, or a fine Scotch-Brite™ pad.

Polishing the Metal Coating

- 1) When the surface has cured for at least 24 hours, it may be polished with a felt wheel (no stitching) and a buffing compound. Do not exceed 1200 RPM's. (600 to 1200 RPM is best)
- 2) A sanding block may be used on a flat surface - 220 grit.
- 3) For aggressive polishing on a rough surface or one with sharp edges - use "Type B" Metal Coating for the first two coats- let dry between coats, then apply two or more coats of "Type C".

Note: When applying the Metal Coating to iron, steel, or aluminum and the patina that will be applied to the Metal Coating contains acids, (Traditionals, Birchwoods, or Vista Patinas) a strong primer is necessary. The primer will insure that the acids in the patina will not oxidize the iron, steel, or aluminum, which would ruin the surface.



Ceremonial Bowl by Ron Young, Ceramic with Copper Metal Coating, blue and green Traditional Patinas, brass leaf and brass Metal Coating applied over dry patinas.

Texture Paint for Metal Coatings

The Texture Paint is an incredible way to obtain texture on your material before applying the liquid Metal Coating. It is water based and easy to manipulate with any tool you find, much like clay. We recommend this product for indoor and outdoor work. The Texture Paint seems to bond to any surface so whatever material you are working on, you will be able to add texture to it. As always though, if you are working on ferrous metals you must first apply an additional primer. Sculpt Nouveau's Prime-It would work best. Allow the Prime-It to cure 24 hours before applying Texture Paint. Always allow each product to dry completely before applying the next.



Primers

A primer will only be needed if you are applying the Metal Coating. It is critical to use a primer when the substrate you are applying the Metal Coating to is iron, steel, galvanized metal or aluminum. When working with a ceramic type of material, the primer is used only to keep the first coat of metal coating from being absorbed. The primer is also used to help with adhesion of the Metal Coating on certain surfaces.

WATER-BASED CERAMIC PRIMER - by Sculpt Nouveau

This primer is used to prepare porous material before applying the Metal Coating. If the surface of the material is not porous, you don't need a primer. The only reason for using this primer is to stop the substrate from absorbing the first coat of metal coating. It will not do any harm to apply the primer if you are unsure of the porosity. This primer is not good enough to use as a primer for iron, steel, or aluminum.

Instructions for Application:

- 1) Make sure the surface of your material is clean.
- 2) Apply 2 coats of the primer with a brush, sponge or airbrush.

Note: If your project is going to be placed outside, seal all sides so moisture will not be able to enter. A commercial concrete sealer would be advisable for material that is going to be lying directly on the ground.

PRIME-IT - by Sculpt Nouveau



Prime-It is a tough and durable water-based primer. Sculpt Nouveau's primer may be applied to all metal surfaces and also to resin castings and shiny plastics. Prime-It is a great product to use over polyurethane products before using the Metal Coatings. It is very tough and durable, is water-based and has no VOCs. Available in red, white, black, yellow and rust.

Instructions for Application:

- 1) Clean metal first with a good quality metal cleaner/degreaser, then sand if possible.
- 2) Clean metal again, then rinse again. (No special prep is needed for other substrates, other than cleaning, although some sanding is recommended.)
- 3) Apply Sculpt Nouveau's Prime-It by brush, roller, sponge or spray. If an air gun type sprayer is used, the primer should be filtered first and sprayed at 40 - 60 psi with a 1.5 orifice tip. Dilution with 10% distilled water is recommended when spraying. Apply two layers of primer. Wait 1 hour between coats. Wait 24 hours before applying the Metal Coating. Waiting longer than 24 hours will not affect the process.

****NOTE:** Sculpt Nouveau's Vinyl Resin is also a very good primer. (See page 42)

Protective Clear Sealers

A protective clear sealer would be used to protect material from the environment or to set a finish. Iron, steel and aluminum need a protective coating to keep from oxidizing or rusting. A polished surface on bronze, brass, or copper will tarnish without protection. After achieving a patina or color on your material, the protective coating will help it last longer and help to keep it from changing. We suggest applying a clear coating in almost every instance. The best way to apply any brand of clear sealer is to spray it on. Spraying reduces bubbles and ridges formed by the brush, which help to break down the product faster. Small propellant applicators are available, made by Badger or Crown, if you do not have a compressor. Two or three light coats are preferable to one heavy coat, letting each dry before applying the next. No protective sealer will last forever. A regular maintenance program is needed and should be scheduled according to the individual conditions. Wax may be applied over the clear sealer to add even more protection.

CLEAR GUARD - by Sculpt Nouveau

Clear Guard is a clear, durable, fast drying lacquer that results in a hard, and tarnish resistant film. It has excellent adhesion to bronze, brass, copper, and other metals as well as to patinas and rusted metal. Clear Guard is suitable for use with all types of application equipment including sprayers.



Clear Guard

Because of its unique chemistry, orange peel is virtually non-existent. Clear Guard is UV stable and highly resistant to weather, water, and chemical damage. It also resists marring and perspiration better than most solvent lacquers.

Clear Guard is also available in Environmentally Friendly and Ready To Spray formulas, all in satin and matte sheens. Also available in convenient spray cans.

Handling/Mixing:

Loosen lid carefully. Container may be under slight pressure. Mix thoroughly before use. Use Sculpt Nouveau's Solvent Thinner to thin if necessary for your application - usually 20% - be careful not to over thin.

Application:

Apply 2 - 3 coats, making sure the first layer of lacquer saturates the rust or patina. If spraying, use a HVLP sprayer at approximately 20 psi with a 1.2 - 1.4 orifice tip. Allow 1 hour to dry between coats.

EVER CLEAR - by Sculpt Nouveau



EVER CLEAR

2 PART SOLVENT URETHANE RESIN

Ever Clear is a low VOC, clear, air drying two part acrylic urethane coating designed to provide the best and strongest protection for most surfaces and finishes. Ever Clear tacks up quickly and should

be used for the difficult finishes such as countertops and ocean environments. It works extremely well on all metals, wood, terracotta, ceramics, and concrete. Ever Clear provides unusually strong under-film tarnish protection. When deciding which two part clear coating to choose, Ever Clear would be the best in all circumstances as it will be compliant with the EPA, it is strong, clear, and has a fast tack time. Full cure time is 5 to 7 days.

Handling/Mixing:

Thoroughly mix Part A, then mix Part A with Part B, in the required 3:1 ratio, for 10 minutes. It is important to mix thoroughly to fully blend the two parts. It is recommended to mix Ever Clear with a paddle mixer on a drill at low speed. Allow a 10 to 15 minute sweat-in period, in an opaque covered container, before using the coating. (sweat-in period is the time between mixing the two parts together and the time you can start applying) Allow the mix to adjust to room temperature (70°F - 85°F). Filter with supplied 18 micron filter. Part B is sensitive to air and light. Do not open and close can often if not using entire amount. Pot life is 6 to 10 hours. **DO NOT USE AFTER THIS AMOUNT OF TIME.**

Surface Prep:

The life and quality of a coating depends greatly upon the preparation of the receiving surface. Surfaces to be coated should be dry and free of contaminants and oils. Careful selection of commercial metal cleaners is crucial because of the possibility of introducing harmful residues. Sculpt Nouveau's Metal Cleaner Degreaser is the recommended cleaner. **NEVER USE ACETONE OR ANY TYPE OF SOLVENT FOR SURFACE PREP OR TREATMENT.** The Ever Clear and metal surface should be normalized to room temperature (70°F- 85°F).

NOTE: Unseen moisture may be on the metal surface, and in some cases, for example, on humid days, the coating can trap moisture underneath the film. This trapped moisture will manifest itself as a "cloudy" coating and/or create a possible bonding problem. Such cloudy coatings can be prevented by heating the metal surface with a heat gun or torch to remove surface moisture before applying the Ever Clear.

Application:

Spray application is the preferred method. Although brushing or flow coating may

be used, spraying will achieve the best results. If applying with a brush, use a high quality natural bristle brush. It is not recommended to brush apply the matte formula. Any dust collected on the cleaned metal should be blown or wiped off with a clean cloth before coating is applied. Coating is applied in full coats. The second coat should be applied in about an hour. If you are unable to apply the second coat in a timely manner, you may lightly sand the first coat, so that the second coat will adhere. Take measures to minimize dust and debris falling on your coated products. Metal surfaces should be room temperature (70°F – 85°F). Do not use when the temperature is over 85°F or under 50°F.

SPRAY: For best results use a good quality HVLP sprayer. Make sure the spray equipment is clean and at room temperature. Thinning is not recommended for spray application. If you must thin, use Sculpt Nouveau Solvent Thinner no more than 20%.

DRYING TIME: The coating air dries to the touch in less than 1 hour, depending on room temperature, and may be forced dried faster at 250°F. The coating will air dry solid/hard film within 4 hours, depending on coating thickness, temperature, etc. Full cure dry time is 5 to 7 days.

SOLVENT THINNER

Sculpt Nouveau's Solvent Thinner has no VOC's and is a very effective replacement for Xylene. It may be used to thin all solvent products. For best results when spraying a solvent lacquer (except Ever Clear - no thinning necessary), thin with up to 20% Sculpt Nouveau Solvent Thinner. Wear gloves, goggles protective clothing and mask or respirator.



SMART COAT - by Sculpt Nouveau

Smart Coat is a strong yet non-hazardous, zero VOC, no odor, one part, self hardening, non-yellowing, and non-cracking top coat. Smart Coat works well over patinas, rust-oxides, as well as all clean polished metals. It may be diluted slightly with distilled water to allow for a penetration of heavy oxides. Smart Coat is a polymer/resin, yet cleans up with water and is eco friendly. Smart Coat tacks up and hardens quickly to a beautiful hard, thin coating that is fast drying.

Application Conditions:

Use when the temperature is between 50°F (10°C) to 90°F (32°C) and humidity is below 85% to ensure proper drying. This sealer is self leveling and may be brush applied. You may put the Smart Coat into your own sprayer (like a Crown, or Preval) or a HVLP sprayer. No dilution is necessary to spray apply. May be



diluted up to 25% with distilled water. Avoid applying in very windy, dusty conditions. Cover surrounding area to protect from spray mist.

Instructions for Application:

- 1) Preparation: For new bare metal, sand with 180 grit (or below) sandpaper to slightly abrade surface. Clean metals with Sculpt Nouveau's Metal Cleaner or Graffiti Remover to remove all dust and oils making sure to remove all polishing compounds.
- 2) Apply thin coats to all metal surfaces. Works best if sprayed in a fine mist. If using a brush do not apply too thick or create puddles. Do not roll on.
- 3) Patina surfaces (acid base, phosphates, sulfides and oxides): Ensure patina is dry with a good adhesion to the metal substrate. Neutralize patina when necessary. Allow 24 hours for most patinas to stabilize (6 hours minimum). Test in a small area. If finish wrinkles, lifts, or turns white while drying, strip to bare metal and abrade surface further. Repeat patina process. Smart Coat may be safely used over all plated surfaces such as nickel or zinc after they have been cleaned thoroughly with Sculpt Nouveau Metal Cleaner or Graffiti Remover.
- 4) Dry and recoat times based on 70°F- 50% relative humidity: Allow to dry at least 1 hour and up to 6 hours in cooler temperatures. Dries to touch in less than 25 minutes, safe to handle in 1 hour and fully dry in 24 hours. Add additional dry time for multiple coats. Full cure in 72 hours from last application.
- 5) Clean up wet Smart Coat with warm soapy water.

SHIELDS UP - Anti-Graffiti Coating by Sculpt Nouveau

Shields Up is an easy to use, single component anti-graffiti coating. It is a non-hazardous, water based solution with no odor. Shields Up produces a strong, high performance, weather resistant, protective finish for all metals, rigid plastics, concrete, and wood. Once fully cured, Shields Up will protect from graffiti and marker damage. Crosslinking of the polymer occurs during the drying cycle, and approximately 90% of the film properties develop after overnight drying with full cure in 5 days. To remove graffiti from cured Shields Up, use Sculpt Nouveau's Graffiti Remover. See Page 5.



Surface Preparation:

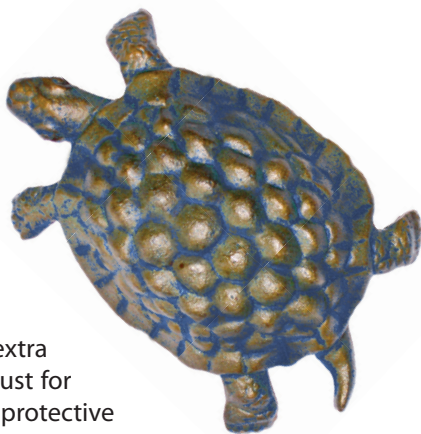
Surfaces to be coated must be sound, clean, dry and free from oil, grease and other contaminants. To achieve good bonding and drying, the ambient temperature should be 50°F - 85°F and humidity below 85%.

Application:

Mix well. Let sit for 5 minutes. Apply 2 coats. Allow 1 hour or more between coats. If spraying, use a HVLP sprayer at about 20 psi.

Metal Wax

This is the first and only wax made for metal surfaces. Sculpt Nouveau's Wax is made with binders, UV inhibitors and rust inhibitors. It is ideal for all metals. The wax is available in clear as well as many colors. Our Solvent Dye may be added for extra color. We have blended the finest waxes we know of for finishing metal along with the most effective inhibitors, and then we added extra hardeners to create the first wax that is made just for metal. The wax creates a very beautiful, hard protective coating once cured. It will be soft in the container.



Instructions:

Apply the wax to a warm or cool surface. Wax should only be used on a blue or green cold patina after you have applied at least two coats of either a solvent or water based clear coating. Allow each layer of clear coat to dry fully before applying the wax to the surface. This wax works well when applied over another clear protective coating or used alone. It also is effective over a rusted surface or patina - although for outdoor rusted metal we recommend applying Sculpt Nouveau Metal Oil, then a clear top coat over the oil, and then apply the wax. Stippling with a brush

may be the preferred method of application so as to not create streaking on the surface. Apply a smooth film of wax

to the surface. Try not to let the clear wax fill up in the recessed areas as it may turn white.

Use a toothbrush or soft brush to remove the excess wax from these areas. When using the colored waxes the build-up in the recessed areas is desirable. Allow wax to dry approximately 1 hour. A good rule of thumb is, if wax comes off when you rub your finger over the surface, it is too early to buff. When ready, buff with a terry cloth type rag. Use a rag to smooth out the ridges. If you are applying the wax to a hot surface, let the surface cool down some. Do not apply the wax to extremely hot surfaces. Do not wait longer than about 1 hour to buff in most circumstance as the wax soon dries very hard. To apply multiple layers of wax, apply them very thinly and let each layer



harden, after buffing, for a few hours before applying the next. For bronze, brass, copper, or the Metal Coatings with a crusty patina, you may choose not to use a clear coat at all because lacquers and waxes can alter the color. In that case, a light spray of Sculpt Nouveau's EF Clear Guard lacquer will do.

Wax for hot patinas:

Wax may be applied immediately after finishing the patina, while the metal is still warm. Apply the wax with a brush. Allow the wax to cool, dry, and harden for up to 4 hours. Polish with a terry cloth rag and repeat with a second thin coat of the wax, this time the surface will be cool. After about an hour, buff again.

As with the cold patinas you will not want to apply wax immediately to some (cupric-green/blue) patinas as it may change the look. Let the patina cool, then spray on a lacquer. Let this dry 24 hours then apply the wax as usual.

Maintenance:

Lightly clean the surface every six months or as needed with a non-ionic soap like Ivory® Soap. Dry completely and reapply a new layer of wax with a brush. When dry, buff as before. If the wax is maintained regularly there is a good chance the clear sealer will last a long time.

Metal Oil

Our Metal Oils come in black, brown, clear, red, blue, green and yellow. They can be used on all metals. They have UV and corrosive inhibitors. Apply Metal Oil with a soft cloth or brush, to the clean metal or dry patinaed surface. Rub in well and allow 3 to 12 hours to dry. Apply two coats. Metal wax or a clear top coat may be applied over a single coat of oil in 3 days after it is dry and cured. It is very important to stir the oil before and while using. For indoor or outdoor use.



Above: Brown Metal Oil applied to brass knob.



Left: Clear Metal Oil applied over left side of steel with a black patina.

Vinyl Resin



We are pleased to offer the finest quality of Vinyl Resin Paint which does not need any pre-treatment or primer. Two coats will give a long lasting finish. The surface must be clean before applying.

Spray application is recommended. Benefits include *Fast drying *Excellent adhesion to hot dipped galvanizing *Superior rust protection *Suitable for aluminum and structural steel *Chip resistant.

Today, most ironwork for outside use is hot dipped galvanized. This helps to prevent rust and greatly increases the life of the ironwork. Over time however, the zinc or galvanized metal will be chemically changed and will become corroded by the atmosphere. In order to prevent this, zinc or galvanized coated surfaces should be painted. Conventional paints will not adhere without pre-treatment and can chip or flake away. Vinyl Resin is a one process application with long lasting results.

Metal Rubs

Our Metal Rubs contain real metal and may be applied over patinas or bare surfaces. This is an excellent way to highlight certain areas of your piece. These rubs are available in darkened bronze, brass, copper, and silver. General instructions: Apply with a soft cloth or gloved fingertips then buff after 12 hours. After 24 hours, apply clear wax, or after 3 days, a clear coat can be applied to protect the finish.

Iridescent Powders

Sculpt Nouveau's Iridescent Powders are available in many different colors. These powders may be mixed into all patinas, Solvent Dyes, Dye-Oxides, or clear coatings to add a little sparkle. If mixed with water and sprayed on after the piece is finished, the iridescent sparkle will be more vibrant. Apply a clear sealer to protect the finish.

Age-It

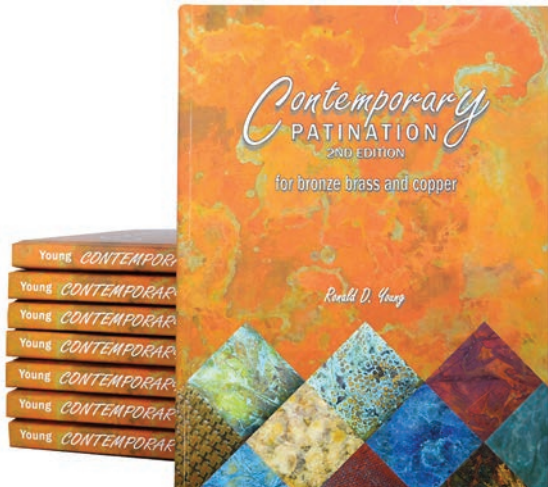
Age-It instantly alters the color of new green or blue patinas to make them appear old and weathered. Easy to apply. Apply by spray or brush over new green or blue patinas to make them look like they have been outside for many years.

Books by Ron Young

NEW!!

CONTEMPORARY PATINATION 2nd EDITION FOR BRONZE, BRASS & COPPER

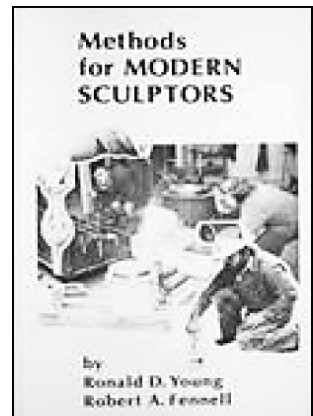
Many techniques for coloring metal with chemicals are as old as the formulas for metal alloys are themselves. Today, patination is the application of chemicals to the surface of metal in order to transform its appearance. In this edition of his book, *Contemporary Patination*, Ron Young shares step by step instructions for creating, applying, and protecting over 50 classic patina formulas. Nearly every patina method is covered including hot, cold, buried, wrapped, fumed and paste patinas. Full



color plates are provided for each patina formula to assist in the visualization of each finish. Also detailed is proper metal preparation, recommended equipment, application tips and methods, and sealing considerations for both indoor and outdoor environments. In over 200 pages, Ron Young reveals his extensive knowledge of the patina process taken from over 45 years of experience.

METHODS FOR MODERN SCULPTORS

Methods for Modern Sculptors is a "how to" book for the hands on type of sculptor who wants to learn to cast their own metal. Authored by Ron Young, who is highly experienced in art and metal casting, the book covers waxes, sprues, mold making, ceramic shell casting, de-waxing, melting and pouring metal, welding, chasing, cleaning, and polishing. Complete details on formulation and handling of ceramic shell slurries are included along with how to build kilns and furnaces.

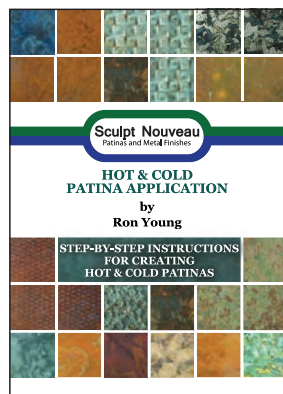


DVD's and Videos

In each complete video, Ron Young covers the tools and equipment needed, surface preparation, primers, sealers, all the formulas, do's and don'ts, and techniques. Each patina and finish is thoroughly explained and demonstrated.

Hot & Cold Patina Application

Learn the essential steps to creating beautiful hot or cold reactive patinas on steel and copper alloys. Begin with surface preparation for steel. Then, learn surface preparation for patinas and then preparation for cold patinas. Japanese Brown, Cupric and Ferric Nitrate, Rainbow and Universal Black patinas are covered in the hot patina category. In the cold patina category, Liver of Sulfur, Slate Black, Birchwood's M-24, Light Green and Japanese Brown are covered. Many advanced techniques are also shown including Red Patina, Silver Nitrate, Pink Granite and multi layered patinas.



Introduction to Metal Coatings & Patinas

This is an introduction how-to for Metal Coatings and cold patinas. Shown in this video are applications of Metal Coating on a plastic rain gutter, over clay, plaster and steel and over foam. Ron will demonstrate using cold patinas on the Metal Coatings and will show when and how to use the Prime-It primer. You'll enjoy learning how to change the appearance of a substrate to make it look like a metal and you can apply patinas to this new surface.

Included is a bonus DVD featuring the use of Metal Coatings to make props and for set design.

