

## Mural Paints

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### CPWSM01 – CPWSM64

#### Description

Golden Paintworks® Mural Paints are 100% acrylic architectural coatings pigmented with artist grade colorants, selected for superior quality and strength of color. Mural Paints are suitable for exterior and interior applications, see the Mural Paints Technical Data Sheet for information. Mural Paints may be diluted with water for use as glazes or washes in a wide range of techniques and are compatible with most waterborne products.

#### Key Features

- Strong, opaque colors
- Thins easily for more transparent colors
- Exterior colorants selected for advanced lightfast qualities
- Single component, 100% acrylic waterborne formulation
- < 50 g/l VOC content. Complies with VOC regulations in all jurisdictions
- Meets the criteria for LEED Credit 4.2 (Low Emitting Materials – Paints and Coatings)
- Water clean up

#### Surface Considerations

If the mural is not an existing structure, but will be constructed specifically for the artwork, carefully consider the choice of building materials to be painted. For example, there are many plywood grades available. MDO plywood (Medium Density Overlay), often referred to as "sign painters' board", is high-quality plywood that is made to be used outdoors. It could also be attached to a wooden, metal or brick wall before painting a mural. This would offer the artist a surface that is clean, smooth and can be painted indoors in the studio, rather than on a scaffold at the mural site.

#### Surface Preparation

If factors dictate painting directly onto a pre-existing surface, preparation is a major factor in the longevity of the mural.

#### Surface Cleaning Considerations

If the surface is already painted, then consider what kind of paint it is and its physical condition (any surface that still has the previous coating on it will not be as permanent as one that has been completely stripped and freshly coated).

If the paint is a water-based polymer, chances are good that the Golden Paintworks® Mural Paints will adhere sufficiently. Previously painted high gloss surfaces can be cleaned and dulled in one step by using a household abrasive cleaner. Wash off completely with clean water. If the surface is a high gloss oil paint (or of unknown materials), then it must be abraded (or removed) for good adhesion.

If the existing paint film is deteriorating, then it is best to have it removed (sandblasted, power-washed, scraped, etc.) (See warning below). Stains from water, smoke, ink, pencil, grease, etc. should be sealed with the appropriate primer/sealer.

It is critical to wash any painted surface, even a newly painted surface, with soap and water prior to application of acrylic products.

**WARNING!** Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at –LEAD (in US) or contact your local health authority.



**WARNING!** May cause an allergic skin reaction.

#### Mold and Mildew

Mold and mildew must be removed by hand scrubbing with a mixture of 1 part household bleach to 3 parts water. **CAUTION:** Never add ammonia or ammonia-based cleaners to bleach! Wear goggles and protective equipment while cleaning. After scrubbing with a brush, allow the solution to sit on the surface for 10 minutes before thoroughly rinsing off with clean water.

#### Cracks and Grooves

If there are cracks and grooves in the substrate, the method for filling and smoothing these gaps will depend on the nature of the substrate itself. Artists should consult an area architectural coatings store for recommendations on the best product available.

#### Priming the Surface

*Once the surface has been cleaned, a primer coat will give better adhesion for the paint.* One key feature to look for in a primer is whether or not it can be painted over by latex (waterborne) paints. This should ensure that the primer will be a compatible surface for the adhesion of Golden Paintworks® Mural Paints.

To determine the best primer for a specific surface, contacting a local supplier of architectural coatings. Such companies have extensive experience with priming a broad spectrum of building materials, and typically have specific primers for the surface the mural is to be painted on. Their recommendations will also take the environmental concerns of the area into account. We have found that architectural and maintenance paints are competitively priced, meaning that a product that costs more than a similar product will typically perform better as well. When painting on brick, concrete, or other masonry surfaces, it is recommended to also use a Masonry Conditioner that can be purchased from a commercial coatings supplier.

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#### Environmental Factors

*Temperature, precipitation, and humidity should be considered during application.*

##### Temperature

Ideally, the temperature during application should be between 65°F and 75°F. Higher temperatures can affect application, especially the evenness of the paint films, as they will dry much more quickly. Colder temperatures can harm the film formation of practically all of the coatings, and the absolute minimum temperature is 50°F. Caution should be taken at temperatures approaching this threshold.

##### Precipitation, Humidity and Moisture

Avoid painting in adverse weather conditions, such as rain and fog. This addition of moisture can affect the drying times and will re-introduce water back into recently dried paint films. It is especially important to allow proper drying/curing time between the isolation coat and the varnish layer. Trapped moisture can severely hinder adhesion, and can cause clouding of a clear layer. It should also be noted that sufficient drying time should be allowed between washing the surface and the initial primer or conditioner coats. Architectural coating manufacturers recommend waiting 30 days after washing concrete and cinder-block surfaces under normal drying conditions.

High humidity can also affect the mural's drying times similar to the conditions cited above for precipitation. As the relative humidity climbs above 70%, more caution needs to be taken.

#### Finished Mural Protection

*Although Golden Paintworks® Mural Paints use only the most permanent pigments available within each chemical classification for use on an exterior mural, the application of isolation coats and a suitable varnish or topcoat is highly recommended.*

#### Murals and Architectural Applications

Any paint or topcoat applied to a building, including interior or exterior walls, is considered an architectural coating and subject to regulations limiting the amount of VOC's (Volatile Organic Compounds) a product may have. Murals painted directly onto these surfaces, therefore, will fall under the same guidelines and all paints, mediums, and varnishes being used will need to comply with the same rules. Containers that are 1 Liter (1.05 Quarts) or less in size, however, are currently exempt from these requirements.

#### Specific Guidelines:

##### Murals Painted Directly onto Architectural Surfaces

Always check local and state VOC regulations.

The following Golden Paintworks products are VOC compliant and can be used for murals painted directly onto exterior and interior walls, ceilings, and other architectural surfaces. **Please Note:** They are NOT available through retailers. These are custom products and **MUST** be ordered

directly from Golden. Please call Customer Service at 800-959-6543 / 607-847-6154 for pricing and availability.

#### MSA Varnish – Mural Formula (Semi-Gloss)

##### Product # CPWMV01

A protective, removable varnish that is designed to provide additional protection to the finished mural. Removable with various solvents, allowing for graffiti removal and general maintenance. Must be thinned with MSA Solvent – Mural Formula.

#### MSA Solvent - Mural Formula

##### Product # CPWMV02

This solvent is VOC exempt and is used to thin the CPWMV01 MSA Varnish - Mural Formula (Semi-Gloss) for application and while maintaining VOC compliance. Typical additions are 1 part by volume of MSA Mural Formula Solvent to 2-3 parts MSA Varnish - Mural Formula (Semi-Gloss) to thin varnish to proper application viscosity.

#### Murals Painted onto Canvas, Panel, and Other Supports

Currently there are no restrictions for murals completely painted and varnished on an independent support which is then mounted onto an architectural surface.

Call or email Technical Support for additional information or assistance.

***A final topcoat gives the mural more durability from the environmental factors.***

Another choice for protecting the mural is to use some of the various graffiti-resistant finishes that are commercially available. These range from protective wax coatings that are removed with hot water to the 2-component, solvent-based polyurethane coatings. They tend to have excellent chemical resistance, so that graffiti can be fairly easily stripped off without harming the coating. They also have excellent weatherability, and thus require less maintenance than some of the other choices. As we have not thoroughly evaluated these systems, we suggest you get all the information required from the manufacturers, and/or any mural groups that may share previous experiences, to determine the best choice for your specific application.

#### Application recommendations for GOLDEN MSA Varnish – Mural Formula

We recommend a 2-step system, the first being a permanent isolation coat, followed by GOLDEN MSA Varnish – Mural Formula, a removable varnish. The function of the isolation coat is to physically isolate the paint from the removable varnish (which makes varnish removal much easier and safer to the paint surface). An isolation coat also develops a thicker layer of acrylic, which will give better protection and durability and serves to unify the acrylic paint layer.

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<p><b>Isolation Coat Application</b> Choice of isolation coat should depend upon the artist's application method. Another consideration is the surface texture, as brush-applying the isolation coat and varnish over a highly textured surface can generate foam in the isolation coat. For spray application, we recommend a 2:1 mixture of GAC-500 to Transparent Airbrush Extender. For brush application, we recommend a 2:1 mixture of Soft Gel Gloss to water.</p> <p><b>Varnish Application</b> <b>IMPORTANT: If applying the varnish to a mural painted directly on a wall, ceiling, or similar surface, read the earlier section on <u>Murals and Architectural Applications</u>.</b></p> <p>After the isolation coat is applied and has thoroughly dried (1-2 days, but no more than 1 week for maximum performance), GOLDEN Mineral Spirit Acrylic (MSA) Varnish can be applied. The MSA Varnish w/ UVLS is an excellent choice as a protective finish. This product provides a tough, durable surface that increases resistance to moisture and pollutants. The UV stabilizing system will serve to reduce the destructive potential of ultraviolet radiation from the sun, thus enhancing the life of the system. This varnish is removable in mineral spirits, turpentine and various aromatic solvents, which is a useful property for either graffiti removal or maintenance purposes. Spray application is recommended (1-3 coats). *</p>	<p><b>Note:</b> Breathability is important to the successful adhesion of acrylic products. If a mural encompasses an entire wall made of a masonry product, it is advisable to apply thin coats of MSA Varnish. This will allow interior condensation and evaporating solvents and out-gassings to escape (some artists recommend leaving an uncoated breathing space near the edge of the mural as well). If this is not done, it may lead to premature adhesion failure between the coatings and the surface.</p> <p>GOLDEN only recommends its standard MSA Varnishes for work that will be exposed to the elements, NOT the Polymer Varnish. Polymer Varnish does not have the same exterior durability as the MSA Varnish.</p>
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#### Mural Procedure Quick Reference

Mural Surface	Step 1: Cleaning	Step 2: Priming	Step 3: Painting	Step 4: Isolation & Varnish Coatings
Bare Wood	None	Knots and pitch streaks should be sanded and spot-primed. Apply primer coat (suitable for latex).	Apply Golden Paintworks Mural Acrylic Paints to surface.	Apply isolation coat. Let dry thoroughly (at least 48 hours). Apply Golden MSA Mural Varnish or suitable alternative.
Previously Painted Wood	Remove any loose material, power-wash clean. Abrade non-water-based coatings.	Inspect knots for staining, sand and spot-prime as needed. Apply primer coat (suitable for latex).	Apply Golden Paintworks Mural Acrylic Paints to surface.	Apply isolation coat. Let dry thoroughly (at least 48 hours). Apply Golden MSA Mural Varnish or suitable alternative.
Bare Masonry	None	Apply Masonry Conditioner. Apply water-based latex primer.	Apply Golden Paintworks Mural Acrylic Paints to surface.	Apply isolation coat. Let dry thoroughly (at least 48 hours). Apply Golden MSA Mural Varnish or suitable alternative.
Previously Painted Masonry	Remove any loose material, power-wash clean. Abrade surface.	Apply Masonry Conditioner. Apply water-based latex primer.	Apply Golden Paintworks Mural Acrylic Paints to surface.	Apply isolation coat. Let dry thoroughly (at least 48 hours). Apply Golden MSA Mural Varnish or suitable alternative.
Bare Metal	Remove any grease, dirt, solvents. Abrade surface.	Apply alkyd or latex-based primer.	Apply Golden Paintworks Mural Acrylic Paints to surface.	Apply isolation coat. Let dry thoroughly (at least 48 hours). Apply Golden MSA Mural Varnish or suitable alternative.
Previously Painted Metal	Remove any loose material, rust, grease, dirt. Abrade surface.	Apply alkyd or latex-based primer.	Apply Golden Paintworks Mural Acrylic Paints to surface.	Apply isolation coat. Let dry thoroughly (at least 48 hours). Apply Golden MSA Mural Varnish or suitable alternative.

**Disclaimer**

The above information is based on research and testing done by Golden Artist Colors, Inc., and is provided as a basis for understanding the potential uses of the products mentioned. Due to the numerous variables in methods, materials and conditions of producing art, Golden Artist Colors, Inc. cannot be sure the product will be right for you. Therefore, we urge product users to test each application to ensure all individual project requirements are met. While we believe the above information is accurate, WE MAKE NO EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, and we shall in no event be liable for any damages (indirect, consequential, or otherwise) that may occur as a result of a product application.

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**LIMITED WARRANTY**

In the unlikely event of product failure, and determination by GOLDEN that product did not meet intended quality or published specifications, GOLDEN will, at its discretion, either replace the product or refund the purchase price as the customer's sole remedy. GOLDEN expressly disclaims liability for incidental and consequential damages, to the extent allowed by law.

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