

4 December 2023

Philadelphia Historical Commission

1515 Arch Street

Philadelphia, PA 19102

Dear Dr. Farnham and the Philadelphia Historical Commission,

Mural Arts Philadelphia (MAP) is currently seeking formal review in order to proceed with its proposed project to honor William and Letitia Still. If permitted upon review, this project will be located on the south-facing wall of their historic home at 625 S Delhi St, Philadelphia, PA 19147, which is presently owned by John Del Rossi. Bella Vista Neighbors Association (BVNA) is the Registered Community Organization for this property and has expressed support for this project.

The purpose of this mural is to commemorate the life and legacy of William Still, the chairman of the Vigilance Committee of the PA Ant-Slavery Society, a key agent of the Underground Railroad, and a co-founder of the first Black YMCA.

PROCESS: Mural Arts proposes a flexible, scalable process in collaboration with our partners. Budget and timeline estimates may require adjustments as specific choices are scale and depth or engagement are navigated.

ARTIST & DESIGN: The artist selection and mural design processes will be a partnership between Mural Arts, the Philadelphia Historic Commission, community members, and other stakeholders.

MURAL METHODS:

Option One: This mural could be painted directly onto the stucco south wall of the residence. This would not require any alterations or preparations to the wall surface. However, the paint would need to be sealed with Corotech, a waterborne acrylic urethane coating, which

will affect, but not completely prevent, the stucco's breathability. This method would be difficult to remove in the event of a decommissioning.

Option Two: Alternatively, a more breathable, less invasive option would be to install aluminum panels called 'Alumalite.' The mural would be painted on cloth and attached to these panels, which would be attached to the wall with carefully placed and selected masonry screws. These panels are thin, have a corrugated core, and are not fully flush with the wall, all of which improve breathability. If the mural ever needed to be removed, the panels could simply be unscrewed and the original wall would be intact.

Additional Information: It is our intent to honor the legacy of this structure and respect its history. Therefore, key aspects, such as the star bolts will be factored into our decision-making, depending on the chosen attachment methods. If the mural is painted directly to the stucco, the bolts may be incorporated into the design. If the Alumalite approach is selected, the bolts will be safely untouched behind the panels.

The size of the mural is also dependent on which method of attachment is chosen. Please see the images below for a visual depiction.

SITE EVALUATION: The Mural Arts Operations Team conducted a site evaluation at 625 S Delhi Street in September 2023. Following this evaluation, they identified some cracks in the stucco that will require some repairs, but are confident that the structure can hold a mural project and support both methods outlined above.

Please contact the project manager, Phil Asbury, at phil.asbury@muralarts.org or 215-901-1891 with any questions or concerns.

Thank you for your consideration.

PROPOSED SITE:



Head-on view of the proposed mural site, the south-facing wall of 625 S Delhi Street.



Proposed mural area for AlumaLite approach.



Proposed mural area for painting directly on the stucco.



View of the proposed site from across Bainbridge Street, which the wall faces.



Another view of the proposed site, including the front facade of the building on S Delhi Street.



A view of the front facade of 625 S Delhi Street.

Site evaluation by Mural Arts Operations Team

Site Evaluation Form Responses

Row 36

Notes

Request
Complete?

Site Address

625 S Delhi Street Philadelphia, PA 19147

Project Manager

Ellie Clark

Project Manager
Phone #

3053942222

Illustrate Mural
Placement In
Picture Attached

Assigned To

Job Date

Completion Date

Request
Completed By?

Request Date

08/04/23 7:34 AM

On-Site Start Date

Project Type

Project

Project #

152

Project Name

Williams Still House

Is an on-site
contact required
for eval?Site Contact Name
& Role

John Delrossi

Site Contact
Phone #

Site Contact email

john.delrossi.work@gmail.com

Artist Name

Artist Phone #

Artist Email	
Wall Dimensions	Refer to attached photo
How Much is The Budget for Operations/ Repair?	
Project Lifespan	Non-Temporary
Location Type	Exterior - Wall
Method / Materials	Direct paint onto surface
Building Use	Residence
Additional Information	Good morning Morgan!! I would love to know the date that you are visiting the site so that I can attend as well. My email is not in the project manager database. This is the email that you can reach me at if need be: arshaylar@gmail.com. Thank you love.
Surface Type: Brick, Stone, Cement, Rou	Rough Stucco
Surface Type: Notes	
Describe Surface Damage	Rough stucco with some cracks that will require repair
Describe Water Damage	
Describe Flashing Condition: poor, fair, decent	OK flashing, repairs recommended - especially at the front top left corner by the chimney
Describe Lot Condition: fenced- in yard, sidewalk..	Parking lot for homeowners and renters
Can Vehicles Access Site?	Yes
Suitability: Describe Scaffolding / Lift Obstacles	Trimming required of the euonymous shrubs at the bottom right corner of the wall to access the wall. Lift MUST have a slide out deck on it to get over the Japanese maple tree at the wall.
Suitability: Ground Level?	No
Cars Normally Parked In Front of	Yes

Wall?

Suitability - Mural Visible to Oncoming Traffic? Yes

Suitability - Wall Facing Direction South

Suitability - Electric Wire Hazard? Yes

Suitability - Date PECO Must Be Notified

Suitability - Objects on Mural Surface?

Final Assess. & Rec.- Overall Site Recommendations *NOTE - the lot is a parking lot for homeowners and renters and therefore the individuals parked in front of the wall would lose their parking spaces during mural installation. Additionally, the car over (1) spot will need to be covered with drop cloth daily so that no paint falls on the vehicle. PECO hardcover is required, however, only at the front left, top corner


Wall Prep: (powerwash, primer, wall repair costs) Powerwash and prime with Nova gel if parachute cloth is being installed

Water Source

Lift / Scaffolding: costs for PM Budget 40' rough terrain scissor lift with outriggers necessary and it MUST have a slide out deck on it to get over the Japanese maple tree at the wall

Artwork Installation Recommendations Recommend direct paint as parachute cloth would require ALOT of Nova gel

Artwork Finishing: (sealer, MSA varnish, etc.)

Vendor Quote Needed 

Vendor Type

Neighborhood Bella Vista

Request Canceled? ☐

Request ID 08/04/2023_se_0471



LAMINATORS

Composite Panel Solutions

HIGH PERFORMANCE COMPOSITE PANELS

Customizable Panels for Your Application



Icehouse Shanties
Truck Bed Covers
Exhibits Boating
Gaming
Motorsports Kiosks
Garage Doors
Equipment Enclosures Dividers
Art Surfaces Tradeshow Marine Theatrical Sets
Clean Rooms Agricultural Centers
Race Car Splitters
POP Displays Partitions
Recreational Vehicles Shipping Containers
Theatrical Props Industrial Packaging
Grow Rooms

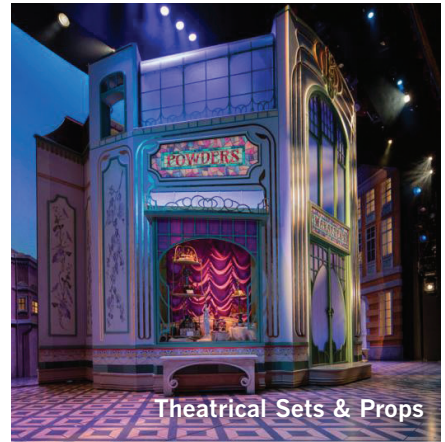
Customizable to the Task at Hand

While our composites are best known in the architectural and sign industries, Laminators Incorporated also works with manufacturers to provide high-quality, customizable composite panels that are used for their specific interior and exterior applications.

Our composite panels are comprised of aluminum or vinyl sheets bonded to various high-grade cores (high-density corrugated polypropylene, solid polyethylene, insulated foam, or wood), making them strong, lightweight, and water-resistant.

These panels have material bonded to both sides, providing excellent rigidity, strength, and durability. They will not swell, corrode, rot, wick water, or delaminate—perfect for all your application needs.

Unique in the composite panel industry, Laminators is a full-service manufacturing and fabrication company offering innovative turnkey solutions to our customers. We believe in providing value and superior customer service. Our forward-thinking processes and forward-looking products have made us a leading manufacturer for over 50 years.



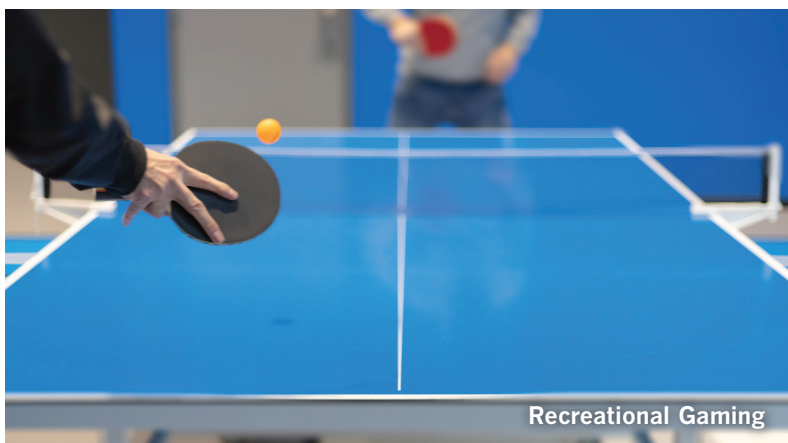
Theatrical Sets & Props



Fabricated Accent Walls



Garage Doors



Recreational Gaming




Truck Bed Covers

APPLICATIONS & INDUSTRIES

Beyond their renowned use in architectural and signage systems, Laminators' high-performing customizable composite panels are attractive, durable, versatile components used within dozens of industries.

Whether you work in the auto racing industry, need to construct a high-end grow room, or specialize in aftermarket truck accessories, our panels offer a flexible, water- and weather-resistant design material with a long list of uses. Specific industries and applications include:

- Clean Rooms
- Grow Rooms
- Agricultural Centers
- Industrial Packaging
- Shipping/Storage Containers
- Equipment Enclosures
- Icehouse Shanties
- Art Surfaces
- Theatrical Sets & Props
- Partitions/Dividers/Barriers
- Displays & Exhibits
 - POP
 - Tradeshow
 - Kiosks
- Recreational Gaming
 - Pool Tables
 - Ping Pong Tables
- Garage Doors
- Marine/Boating
- Auto Aftermarket
 - Truck Bed Covers
 - Motorsports
 - Race Car Splitters
 - Recreational Vehicles (RVs)



Clean Rooms



Displays & Exhibits

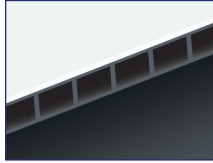
PANEL PRODUCTS

Laminators' array of cores (corrugated plastic, solid plastic, furniture-grade exterior plywood, insulated foam) as well as various thicknesses, sheet sizes, and double-/single-sided sheets give you the ability to satisfy any project requirements.

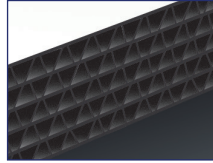
CORRUGATED PLASTIC CORE PANELS



Alupalite® Standard
Strong, durable panel with a high-density corrugated polypropylene core

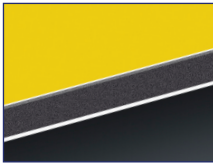


Alupalite® Economy
Redesigned Econolite!
Now an economical version of Alupalite Standard



Alupalite® Ultra
Available in 15mm and 25mm thicknesses for maximum rigidity and flatness!

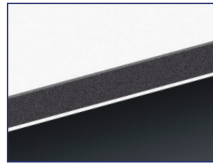
SOLID CORE PANELS



Omega-Bond® Standard
Same color and finish on both sides



Omega-Bond® Economy
One side gloss white, one side matte white



Omega-Bond® Premium
Designed specifically for fabrication applications

PLYWOOD CORE PANELS

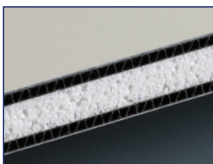


Omega SignBoard™
Exterior high-gloss vinyl over plywood core

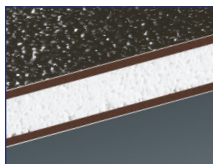


LusterBoard™
Painted aluminum bonded to one or both sides of plywood core

INSULATED/FOAM CORE PANELS



Thermolite™
High-tech look with energy-saving properties



Omega Foam-Ply®
Excellent solution for budget-conscious applications

LET US DO THE FABRICATION FOR YOU!

Save on time and labor costs by having Laminators fabricate your panel products. As manufacturers and fabricators, we understand the subtle nuances of fabricating for time- and cost-efficiency. In many cases you may not need to use the entirety of a panel. Let us fabricate your panels to the exact specifications of your project—we can cut, rout, bend, add fastener holes, and so much more!

Visit LaminatorsInc.com to learn more about our fabrication services.

FEATURES & BENEFITS

Laminators' customizable composite panels are made from aluminum or vinyl sheets bonded to high-grade cores. Panels are available in multiple colors—our Kynar or factory-baked polyester painted aluminum faces add high-gloss brilliance and rigidity, and are warranted not to crack, chip, flake, or peel.

With a multitude of colors and finishes, your design options are endless. Our standard colors are coil-coated for a consistent, long-lasting finish. We also offer custom colors to match your exact specifications.

- Standard panel thicknesses range from 2mm to 25mm (5/64" to 1"). Insulated panels range from 5/8" to 3-1/2".
- Sheet sizes range from 4' x 8' to 5' x 12'
- Finishes include smooth, stucco-embossed, mill, anodized, matte, and metallic
- Moisture-, corrosion-, and chemical-resistant
- Weather-resistant with a "Class A" flame spread rating*
- Field-tested through extensive freeze/thaw cycling tests with no significant structural panel failure
- Wind-resistant: can withstand winds over 120 mph
- Strong and lightweight
- Digital print-ready*
- Double-sided panels for modular/freestanding rooms
- Rout and cut easily using standard carpentry tools... or have Laminators fabricate your panels
- Can bend around corners; v-groove and bend for perfect 90° corners
- UL Recognized Component*
- Excellent alternative to aluminum honeycomb panels
- Interior and exterior applications

Note: Laminators products have been tested for architectural and signage uses only. Samples are available for testing purposes of your specific application.

Not all products are available in the thicknesses, sizes, or finishes listed above. All standard products can be customized and fabricated to your specifications. Please contact Laminators for product details.

Call 800-523-2347 today to see which Laminators panel product is best for your next application.

*Some exclusions may apply.



Race Car Splitters



3255 Penn Street, Hatfield, PA 19440-1731

800.523.2347

| [LaminatorsInc.com](https://www.LaminatorsInc.com)

©2022 Laminators Inc. All rights reserved. (05/22)



CLEAR ACRYLIC SEALER V027

Features

- Rapid dry
- Can be used over a variety of substrates
- Blister and alkali fume resistant
- Soap and water clean-up

Recommended For

Unpainted masonry, Weathered masonry, Topcoat over low gloss latex coatings, Interior wood, Tilt-up walls, Sealer under elastomeric coatings, plaster, and brick.

General Description

Clear Acrylic Sealer is a waterborne, fast drying, clear acrylic coating formulated as an easy-to-apply seal coat on bare concrete floors and other masonry surfaces. This product is designed to allow for easy sweep up of dust and to reduce water penetration or erosion, efflorescence, spalling, and chalking without changing the natural appearance of the substrate. Areas exposed to heavy-duty industrial traffic or severe exterior conditions may require multiple coats.

Limitations

- Do not exceed recommended dry film thickness when used on floors
- Appears milky when applied; dries clear
- Not resistant to strong chemicals
- Latex paint must be fully cured prior to top coating with V027

Product Information

Labor Saving Benefits

- Rapid dry, soap and water clean up.
- Can be used over a variety of substrates.
- Longer substrate life and less maintenance can be achieved by applying a topcoat of V027 to low gloss latex coatings.

Colors — Standard:

Clear (00)

— Tint Bases:

N/A

— Special Colors:

Contact your retailer.

Certifications & Qualifications:

Suitable for use in USDA inspected facilities

VOC REGION	COMPLIANT
FEDERAL	YES
OTC	YES
OTCII	YES
CARB	YES
CARB07	YES
UTAH	YES
AZMC	YES
SCAQMD	NO

Technical Assistance:

Available through your local authorized independent Benjamin Moore retailer. For the location of the retailer nearest you, call 1-866-708-9180 or visit www.benjaminmoore.com

Technical Data◇

Clear

Vehicle Type	Acrylic
Pigment Type	Clear
Volume Solids	11.9%

Coverage per Gallon	275 sq. ft./ gallon
at Recommended Film Thickness	when used as a sealer/primer
	350 sq. ft./gallon
	when used as a protective top coat

Recommended Film Thickness	– Wet	4.6 – 5.8 mils
	– Dry	0.5 – 0.7 mils

Depending on surface texture and porosity. Be sure to estimate the right amount of paint for the job. This will ensure color uniformity and minimize the disposal of excess paint.

Dry Time @ 77 °F (25 °C) @ 50% RH	– To Touch	1 Hours
	– To Recoat	2 Hours
	– Cure Time	10 – 14 Days

Painted surfaces can be washed after two weeks. High humidity and cool temperatures will result in longer dry, recoat and service times.

Dries By	Coalescence
----------	-------------

Dry Heat Resistance	N/A
---------------------	-----

Viscosity	80 KU
-----------	-------

Flash Point	None
-------------	------

Gloss/Sheen	40 @ 60°
-------------	----------

Surface Temperature at application	– Min.	50 °F
	– Max.	90 °F

Thin With	Clean Water
-----------	-------------

Clean Up Thinner	Clean Water
------------------	-------------

Weight Per Gallon	8.5 lbs.
-------------------	----------

Storage Temperature	– Min.	40 °F
	– Max.	90 °F

Volatile Organic Compounds (VOC)

164 Grams / Liter 1.37 Lbs. / Gallon

◇Reported values are for Clear. Contact retailer for values of other bases or colors

Surface Preparation

Surfaces must be clean and sound, free of chalk, peeling paint, form oils, efflorescence, and mildew. Remove chalk, surface deposits, and loose or scaling paint by scraping, sanding, and preferably power washing. Repair all cracks and structural defects which could allow the intrusion of moisture. A common exterior paint failure on masonry construction is peeling and scaling, often caused by painting over heavy chalk deposits. The most practical and efficient way to remove this substance is by power washing. Multiple coats of paint that are in an advanced state of deterioration or prior applications of cement based coatings must be removed to a sound substrate. Sand blasting or using a mechanical grinder are effective means of preparation.

WARNING! If you scrape, sand, or remove old paint, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a NIOSH approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find out how to protect yourself and your family by contacting the National Lead Informational Hotline at 1-800-424-LEAD or log on to www.epa.gov/lead.

Primer/Finish Systems

Unpainted and Weathered Masonry

Loose, sandy masonry should be dry-brushed.

New Cured Masonry

Prime with V027. Finish with necessary coats of V027 for a uniform finish. In hot weather, dampen porous masonry with water just before painting.

Uncoated Concrete and Masonry Floors

When used as a dust controller, V027 must be applied to a clean, porous, uncoated substrate.

Application

Care must be taken to achieve the specified wet and dry film thicknesses. Uniform, even coats must be obtained. Large horizontal surfaces should be spray applied; however, roller application can be performed.

Application Equipment

Conventional or airless spray, brush, or roller.

Spray, Airless: Fluid Pressure —1,000 to 1,500 PSI;

Tip — .011 - .015 Orifice

Thinning/Clean Up

Clean all equipment immediately after use with clean water. Spray equipment should be given a final rinse with mineral spirits to prevent rusting if compliant with local requirements.

Environmental Health & Safety Information

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS).

Keep container closed when not in use. In case of spillage, absorb with inert material and dispose of in accordance with local regulations. Wash thoroughly after handling. Refer to Safety Data Sheet for additional health and safety information.



WARNING: Cancer and Reproductive Harm - www.P65warnings.ca.gov

WARNING: This product contains isothiazolinone compounds at levels of <0.1%. These substances are biocides commonly found in most paints and a variety of personal care products as a preservative. Certain individuals may be sensitive or allergic to these substances, even at low levels.

This document represents hazards of the product referenced above. Refer to the individual Safety Data Sheet for hazards of the specific product you will be using.

**KEEP OUT OF REACH OF CHILDREN
PROTECT FROM FREEZING
FOR PROFESSIONAL USE ONLY**

**Refer to Safety Data Sheet for additional
health and safety information.**

PRODUCT INFORMATION SHEET



PRODUCT REVIEW - GELS & MEDIUMS

Products typically used by Mural Arts,
each may potentially be used
depending on the final mural design

Golden Artist Colors, Inc.

188 Bell Road
New Berlin, NY 13411-9527
USA

Toll Free: 800-959-6543

Fax: 607-847-6767

techsupport@goldenpaints.com

www.goldenpaints.com



Printer Friendly Version

PRODUCT DESCRIPTION

Gels and Mediums range in thickness from watery to paste-like consistencies and allow artists to manipulate their acrylic paint systems. Even though acrylic colors are offered in various different consistencies and finishes, the use of gels and mediums in conjunction with such colors broadens the working properties and expands on the possible results. GOLDEN Gels and Mediums are extremely versatile, and can be used for:

- Altering Consistency
- Altering Sheen
- Gluing/Laminating
- Increasing Film Integrity
- Transparency
- Cost Effectiveness
- Adding Texture
- Priming Supports
- Paint-Making Binders

Below are some answers to commonly asked questions about these products.

Why Are There So Many Gels and Mediums?

Over the years, artists have continuously requested new gels and mediums that behave and handle differently than those existing at the time. Golden Artist Colors has always listened very carefully to the requests of our customers. Through working directly with these professional artists, we have been able to formulate the desired products. As a result, GOLDEN is recognized as the leader in the field of gels and mediums, and has an exceptionally broad range of such products.

Admittedly, such a large number of different gels and mediums to choose from may often seem confusing to artists. However, with at least a general understanding of the various products available, and an inclination towards experimentation, artists can create new ways in which to express themselves, and probably apply materials in a way that GOLDEN has not even thought about.

What Are Gels and Mediums Made Of?

The gels and mediums can be thought of as colorless paints, as they are composed of the same polymers as GOLDEN Acrylic paints. Essentially, they are the "glue" or binder that dry to form continuous, durable films. They are made of 100% acrylic polymers, which are proven to have excellent flexibility and chemical, water and ultraviolet radiation resistance.

What Do Gels and Mediums Do?

GOLDEN offers a wide selection of gels and mediums, but this doesn't mean that each one has limited uses. Because of their very nature, most gels and mediums can function in a variety of ways, yielding numerous results. The section that follows lists the most traditional use of such products, but by no means is this intended to be an all-encompassing and exhaustive list. There are always new and different ways in which these products can be successfully applied.

GELS & MEDIUM DIFFERENCES

With so many products to be aware of, it becomes quite a task to keep them all straight. However, there are a few general distinctions that can make the whole group of gels and mediums seem much less difficult to understand.

Viscosity

The main property that differentiates a majority of products is viscosity - that is, how thick or thin a product is. This is what actually separates the gels from the mediums. The mediums are thinner than the gels, which have much higher viscosities. Mediums are thin enough to be pourable, while the gels are not.

Within the gel grouping, the names reflect the scale of viscosity, and not any differences in feel of dry films. Soft Gels are thinner than Regular Gels, which are thinner than Heavy Gels, which in turn are thinner than Extra-Heavy Gels. Heavy Gels do not weigh more, and Soft Gels do not feel spongier or more flexible when dry.

Leveling Differences

Perhaps the least understood of all paint characteristics is leveling. Leveling, also referred to as rheology, has a direct relationship to viscosity. It controls the way a paint feels and how it is best applied. This "feel" is dictated by the type of thickener used during the paint-making process.

There are two types of rheologies used in acrylic paint-making: short and long.

Short rheology refers to the way the paint "breaks short," that is to say it imparts a buttery feel to the paint. Short rheology is used in our Soft, Regular, Heavy and Extra Heavy Gels, and is produced by the same type of thickener used in our Heavy Body line of paints. It allows paint to retain brush strokes, sometimes referred to as "memory". Soft Gels hold softer impasto peaks, and Extra Heavy Gels hold stiffer, more distinct peaks. The GAC Mediums are produced with the same thickener, but they are much thinner in viscosity and show less brush strokes than a gel does.

Long rheology, on the other hand, refers to the "syrupy" quality of certain paints, gels and mediums. These products offer better leveling and less brush strokes. GOLDEN Clear Tar Gel is the extreme long rheology product, and conceivably could be poured from a three-story building as one long strand! Polymer Medium has this property as well. Although Soft Gel and Self-Leveling Clear Gel are the same viscosity, they react much differently due to the long rheology thickener added to the Clear Gel formula. Long rheology products can be used to thicken a paint to the proper viscosity while imparting a certain leveling quality.

Reflectance

Another key property is reflectance or sheen. This is the most important difference between Polymer Medium Gloss and Matte Medium. Nearly all the GOLDEN Gels are available in Gloss, Semi-Gloss and Matte finishes. Hence, a Heavy Gel Gloss and Heavy Gel Matte will feel very similar in consistency, but will dry with different sheens. The Semi-Gloss gels dry with an appearance similar to wax, and this aspect has been used extensively to create wax-like impressions.

Textural Qualities

Over the years, many artists have wanted to add texture to their media. Sand, sawdust and other gritty material have been mixed with acrylic mediums. Problems arise from this, ranging from impurities causing discoloration to overloaded systems cracking and falling apart. The GOLDEN textural gels have been thoroughly researched and developed to ensure their status as archival products.

There are several products that impart a texture to the paint. Pumice Gels are composed of pumice (volcanic lava) and are ideal for creating rough, granular surfaces. Clear Granular Gel has the same textural qualities as Extra Coarse Pumice Gel, but the solids are clear acrylic, allowing for new transparent possibilities with texture.

Unique Characteristics

GOLDEN also produces specialty products that do not fit into the above differentiations. These are products that have some other unique property, requiring a different naming convention. In such cases, GOLDEN has tried to assign a name that has significance to the product's most unique feature. For instance, High Solid Gels have higher levels of polymer solids than the other gels (approximately 60%, versus 45-50%), and Light Molding Paste allows for thick films to be built up without accumulating a lot of weight.

PRODUCT APPLICATION

Getting The Most From Acrylic Paints

One of the primary roles of gels and mediums is to extend the paint for economical reasons. One can actually create his or her own "student grade" paint by adding a gel or medium into our existing paints. For this purpose, there are basically no limitations as to minimum or maximum levels of gels or mediums that can be safely (from an archival viewpoint) added into the paint system.

Changing Paint Consistency

Gels and mediums have also been used to alter the consistency or body of the acrylic paints. When one needs GOLDEN Heavy Body or Matte Acrylics to be thinner or to flow better, the addition of nearly any one of the Mediums or the Soft Gels will prove helpful. Better leveling and less brush strokes can be attained quickly by adding the Clear Tar Gel. When additional body is required in the Heavy Body and/or Matte Acrylics, the Heavy Gels, Extra-Heavy Gels or High Solid Gels may be added. The gels and mediums can be used with any other acrylic paint line, such as GOLDEN Fluid Acrylics, for similar purposes.

Additionally, an artist can thin paints down for spray-application. GOLDEN Airbrush Medium and Airbrush Transparent Extender both thin paint for this purpose without loss of film strength. Thinning with water only will result in a weaker overall film and an increased risk of other poor film qualities such as sagging and runs. Paint thinned with water also clogs spray equipment much more frequently.

Controlling Sheen

The gels and mediums offer a variety of reflectance properties (Matte, Semi-Gloss and Gloss), enabling artists to control sheen in their artwork by blending the appropriate gel or medium with acrylic paints. The typical higher gloss of GOLDEN Heavy Body or Fluid Acrylics can be reduced by adding any of the matte gels or mediums. Similarly, to increase gloss of GOLDEN Matte or High Load Acrylics, the addition of a gloss gel or medium will prove effective. More subtle modifications can be created using the semi-gloss products, or a combination of a matte and gloss gel or medium.

Use as a Glue

Gels and mediums are also frequently used as a glue for collaging materials together. This technique is valuable when collaging any materials that water-based acrylics have no difficulty bonding with. Certain materials, such as glass and certain metals and plastics, should be avoided. The Gloss products are usually preferred for this purpose, since they offer the greatest transparency; however, the other sheens work just as well as a glue. Generally, we recommend the Soft Gel Gloss for this purpose, although the choice of medium or gel can be as exacting as the artist wishes.

Increasing Film Integrity

Because the majority of gels and mediums are nearly pure binder, they can be utilized to increase the dry film integrity of weakened systems. When an excessive amount of dry pigment or extender has been added into a paint (typically observed as cracking or chalky quality in the dry paint film), the addition of a gel or medium can correct the problem. Another weakened paint system is a paint/water blend, in which there is more water than paint. If such a mixture is to be applied on non-absorbent supports (i.e. in non-stain applications), then a gel or medium should be added so that no more than half of the entire mixture is water. Note that Gloss products work best for these sort of requirements.

Controlling Transparency

To increase the transparency of acrylic paints, gels and mediums are useful tools. Nearly all gels and mediums are effective for this purpose, with the exception of those that are opaque (the Pumices and Molding Pastes). The Gloss Gels are most effective, especially when highly transparent glazes are desired or when the glazes are to be applied thickly (greater than 1/8 inch wet film thickness). The Matte and Semi-Gloss products will increase the

translucency of the paint, but will not yield genuinely transparent glazes. This is the result of the matting agents in such products detracting from the overall transparency. Remember: the milky acrylic emulsion eventually dries translucent, and this must be kept in mind when determining the amount of color to add to the gels and mediums.

When the desired outcome is to extend the paint without increasing transparency, or specifically to increase opacity, then the addition of Molding Paste is beneficial. While there are some products available that are marketed specifically to increase opacity of paints, GOLDEN Molding Paste works equally well for this purpose. It must be understood that the addition of such products will result in a color shift to a lower chroma (and possibly lighter value) color.

Adding Dimensionality to Acrylic Paints

A standard use of the thicker gels is to build relief, or 3-dimensionality onto the support. For this, GOLDEN Heavy Gels, Extra-Heavy Gels, High Solid Gels and Molding Pastes are valuable tools. The Light Molding Paste holds the highest peaks and retains structure, and is also the best choice when building very thick applications (least weight buildup). GOLDEN Pumice Gels are suitable when generating granular or pebbled surfaces (either 3-dimensional or flat).

Use as a Support Primer

A final conventional application of the gels and mediums is to prime and prepare various supports. This is beneficial whenever one wants a translucent primer instead of an opaque gesso to allow the nature of the support to show through. For this purpose, the most commonly used products are the Matte Medium and GAC 100. The thicker gels can be used, but one must be careful in application to avoid holdout (the lack of adequate bonding between gel and support). Use of sufficient pressure during application, to force the gel into the tooth of the support, can overcome this problem. GAC 100 is also useful for stopping S.I.D. (See the below specific description for GAC 100).

Making Paint

When making one's own paint from dry pigment, the various Gloss, Semi-Gloss and Matte gels or mediums serve well as the binder that forms a continuous film, encasing the pigment. The Gloss products have the greatest binding capabilities, while that of the Matte and Semi-Gloss products is somewhat reduced (the result of already containing the matting agents responsible for the lower sheen).

ADDITIONAL INFORMATION

Learning the Rules

As implied from the extensive list of uses above, there is not a lot of limitation or restriction on the use of gels and mediums. An artist can mix any quantity of Gel with GOLDEN Acrylic colors, or other Gels and Mediums. However, the following are rules that should be obeyed:

- To thin, add a thinner GOLDEN Medium or water.
- When blending thin products into a gel, add in small portions with thorough and careful stirring at each addition.
- For slower drying, add GOLDEN Retarder, but do not exceed 15%, as it will result in a surface that will not lose its tack. Acrylic Glazing Liquid can be used in place of straight Retarder, and there are no restrictions on amounts.
- Do not mix with oils.
- Abrade non-absorbent surfaces for increased adhesion.
- Minimum film formation temperature is 49oF/9oC. Avoid freezing.
- Paint on any non-oily surface.
- Clean tools and brushes with soap and water.

Controlling Foam

Be aware that nearly all acrylics have a propensity to foam and get air trapped within them. This can be most dramatic when applying glazes and various translucent effects. Therefore, it is important to take proper precautions and to handle the materials carefully. This includes: avoid shaking, do not whip or stir excessively, refrain from generating a vortex during mechanical mixing and pour and handle slowly and carefully. Refer to the article in Just Paint Issue # 4, entitled "Taming the Foam Monster in Acrylic Paint," for more complete information on foam.

Drying Acrylic Films

Drying times are influenced by many factors. The most important factors are the thickness of application and the temperature, humidity and air flow conditions in the working area. While acrylics surface dry, or skin over, very quickly (sometimes within minutes), they typically take much longer, sometimes months, to thoroughly dry. Obviously, the thicker the film, the slower it is to dry. The development of clarity in the film does not occur until the gel or medium is fairly dry. A 1/4 inch thick film of a Gloss Gel will take a week or two, even in ideal conditions (70-80°F, relative humidity of 50% or less and a moderate flow of air in drying area) to develop clarity. When humidity pushes over 80%, that same Gloss Gel may remain cloudy for several months. (For more information on drying considerations, refer to GOLDEN Information Sheet: "Technical Notes on Drying").

Stopping Support Induced Discoloration (SID)

Common supports (e.g. cotton canvas, linen, masonite) contain water-extractable materials that can cause discoloration in transparent glazes. This manifests itself as a yellow or brown tone, and is especially of concern when the glazes are thickly applied (greater than 1/16 inch wet film thickness). To minimize Support Induced Discoloration (SID), seal support with GOLDEN GAC 100 or GAC 700, followed by gesso. Note that multiple coats of gesso alone will not be sufficient to protect from SID.

True Varnishes vs. Acrylic Gels and Mediums

One final point to make about the use of gels and mediums is that all of these products are NOT recommended as final picture varnishes. Generally speaking, these products do not have proper balance of properties for such application. They are all either too soft, too hard, or they simply foam up too much to be a clear topcoat. They also all lack the property of removability. None of the gels or mediums are removable in a manner that would not harm the underlying paint films, and this is an important consideration for final varnishes.

Soft Gel Gloss, thinned 2:1 with water, on the other hand, is recommended as an "isolation coat". An isolation coat has several functions. Applied after completion of an acrylic painting, it seals the surface, lowers the absorbency of the surface, allows for a more uniform varnish application and serves to protect the acrylic paint during varnish removal. Not applying this coat can cause serious side effects, such as the varnish absorbing into a porous support. For spray application of an isolation coat, a mixture of GAC 500 (2:1) with Airbrush Transparent Extender is well suited.

(For more information on varnishing and isolation coats, refer to the GOLDEN Varnish Product & Application Guide).

CONCLUSION

While fully understanding gels and mediums does take time, with some experimentation and an open mind, artists can achieve painting effects that they would have never have dreamed of. There are certainly a few dos and don'ts, but there is still a great degree of freedom on the use of each member of this grouping, with each able to be used in a broad range of applications and techniques. It is important to remember that the applications that we as manufacturers have suggested for these products are simply starting points. Through each artist's own unique vision, the gels and mediums will continue to be utilized in new and exciting ways, to create effects that we would have never imagined possible.

INDIVIDUAL GOLDEN GEL PRODUCT DESCRIPTIONS

Clear Tar Gel

This product is the extreme in leveling. It is designed to produce an even film with excellent clarity. The gel has a unique resinous, stringy consistency and dries to a flexible, high gloss film.

Clear Tar Gel can be used increase transparency and sheen while imparting a leveling quality to other GOLDEN Acrylic products. Excellent for dripping, drizzling effects that no other product will yield. Blends with all GOLDEN Acrylic colors (though Fluids work best) offering a full range of colors for these techniques.

Self-Leveling Clear Gel

Designed to produce an even film with excellent clarity. This gel has similar qualities to the Clear Tar Gel: it has a

resinous consistency and offers excellent leveling, yet its viscosity is closer to that of the Soft Gel. This product dries to a flexible, high gloss film, which can increase transparency and sheen while imparting a leveling quality to other GOLDEN Acrylic products. Blends with GOLDEN Acrylic colors to produce glazes without brush-strokes.

Soft Gel (Gloss, Matte and Semi-Gloss)

Thinner than GOLDEN Heavy Body Acrylic colors, Soft Gels are moderately pourable and hold only slight peaks.

Soft Gel Gloss is ideal for glazing and other techniques where transparency is desired. Also, the recommended acrylic to function as a glue for collaging. Useful as a non-removable isolation coat, applied over the painting before the varnish layer (must be thinned with water - 2 parts Soft Gel Gloss to 1 parts water).

Regular Gel (Gloss, Matte and Semi-Gloss)

Same creamy consistency as GOLDEN Heavy Body Acrylic colors. Ideal for extending paint and regulating translucency without changing the consistency of the Heavy Body and Matte colors. Holds moderate peaks and texture. The Regular Gel Gloss is ideal for glazing and other techniques where transparency is desired.

Heavy Gel (Gloss, Matte and Semi-Gloss)

Thicker consistency than GOLDEN Heavy Body Acrylic colors. Blend with colors to increase body. Good for holding peaks. Dries translucent.

Extra Heavy Gel (Gloss, Matte & Semi-Gloss)

Thicker consistency than GOLDEN Heavy Body Acrylic colors. GOLDEN's thickest gels, along with the High Solid Gels. Blend with colors to increase body. Excellent for holding peaks and impasto techniques. Dries translucent.

High Solid Gel (Gloss)

Thicker consistency than GOLDEN Heavy Body Acrylic colors, similar to Extra Heavy Gels. Offers higher gloss, lower shrinkage and dries to the touch quicker than most Gels. Good for holding peaks. Blends with colors to make them feel more oil-like and increases retention of brushstrokes.

High Solid Gel (Matte)

Thicker consistency than GOLDEN Heavy Body Acrylic colors, similar to Extra Heavy Gels. Dries to a matte finish. Offers lower shrinkage and dries to touch quicker than most Gels. Good for holding peaks. Blends with colors to make them feel more oil-like and increases retention of brushstrokes.

Fine Pumice Gel

Used to create finely textured surfaces. Dries to a hard film. To increase flexibility, mix in other GOLDEN Gels or Mediums. Blends with GOLDEN Acrylic colors. Useful as a ground for pastels.

Coarse Pumice Gel

Used to create granular textured surfaces. Dries to a hard film. To increase flexibility, mix in other GOLDEN Gels or Mediums. Blends with GOLDEN Acrylic colors. Useful as a ground for pastels.

Extra Coarse Pumice Gel

Used to create granular textured surfaces. Dries to a hard film. To increase its flexibility, mix in other GOLDEN Gels or Mediums. Blends with GOLDEN Acrylic colors.

Clear Granular Gel

The same textural quality as its pumice counterpart, without the gray, opaque grit. Excellent for making translucent, textural glazes. The chroma will not be affected. Blends with GOLDEN Acrylics.

Molding Paste

Excellent for building surfaces and creating textures. Dries to a hard, yet flexible, opaque film. Blends with GOLDEN Acrylic colors.

Light Molding Paste

Offers dramatic weight reductions when building thick layers of acrylic. The density of the wet product is over 50% less than that of GOLDEN regular Molding Paste. This results in a significantly lighter film. This dramatic

weight reduction will be beneficial in creating artworks that are large in size and have thick film build-up. Designed to hold stiff peaks to create a highly textured surface. Dries to an opaque, matte finish. Blends with GOLDEN Acrylic colors.

Extra Heavy Gel/Molding Paste

A blend of Extra Heavy Gel Gloss and Molding Paste. Dries to a satin, semi-opaque finish. Excellent for increasing viscosity and building surfaces. Blends with GOLDEN Acrylic colors.

Hard Molding Paste

Dries to an extremely hard, opaque film. This product is useful for creating tough, durable finishes for smooth or textured surfaces. The dried film can be carved with hand or power tools. Blends with GOLDEN Acrylic colors.

Coarse Molding Paste

A thick, warm white colored medium that is translucent up to about 1/8". Dries to a hard surfaced, stiff but flexible film with a tooth like fine sandpaper. The dry film accepts wet and dry media very well. Mix with GOLDEN Fluid Acrylics or Heavy Body Acrylics to create a dense-feeling paint that holds good peaks and dries with a matte to satin sheen with a finely pebbled surface.

INDIVIDUAL GOLDEN MEDIUM PRODUCT DESCRIPTIONS

Polymer Medium (Gloss)

A general purpose liquid medium useful for creating glazes, extending colors, enhancing gloss and translucency and increasing film integrity. Its unique feel is oil-like or resinous in nature, and promotes flow and leveling.

Fluid Matte Medium

A liquid medium useful for extending colors, decreasing gloss and increasing film integrity. Useful for blending with GOLDEN Fluid Acrylics to decrease the gloss without increasing viscosity.

Matte Medium

A general purpose, pourable medium useful for extending colors, decreasing gloss and increasing film integrity. Can be used as a ground instead of gesso.

Super-Loaded Matte Medium

Same consistency as the regular Matte Medium, but with three times more matting solids. Excellent for lowering sheen of glossy paints and other mediums (the least addition of medium is required). Slightly increases opacity.

Airbrush Medium

Modifies the GOLDEN Fluid Acrylics for airbrush/spray application. Blends easily with the Fluid Acrylics to yield a paint mixture with the proper viscosity for airbrushing. Effectively decreases clogging and tip buildup during spraying, eliminating the largest drawback to airbrushing with acrylics. While designed with the Fluid Acrylics in mind, Airbrush Medium will also reduce the Heavy Body, Matte, High Load, Iridescent/Interference and Fluorescent Acrylics and GOLDEN Mediums and Gessos for spray applications.

Airbrush Transparent Extender

Essentially a "colorless airbrush color" to be used primarily with the GOLDEN High Flow Acrylics. Originally designed for extending GOLDEN Airbrush Colors to increase film hardness for better frisketing and lower the pigmentation of the colors. This allows an artist to achieve a transparent paint without sacrificing spraying properties. Also useful as a topcoat for frisketing on softer acrylics. Blend with GAC 500 (2:1) to Airbrush Transparent Extender for a sprayable isolation coat before varnishing. While designed with the High Flow Acrylics in mind, Airbrush Transparent Extender will also reduce the Fluids, Heavy Body, Matte, High Load, Iridescent/Interference and Fluorescent Acrylics for spray applications.

Silk-Screen Medium

A water-borne system designed to blend with acrylic paints for silk-screen application. Increases working time and retards paint from drying in the screen. Safe to use with minimal odor. Mix 1 part Silk-Screen Medium with 1 part GOLDEN Acrylic colors (Heavy Body, Matte or Fluid) and use this mixture to screen with. The Silk-Screen Medium is not designed to impart opacity, hence the opacity of the mixture will be determined by the nature of

color being used and the ratio of paint to Medium used.

GAC SPECIALTY POLYMER ACRYLIC MEDIUMS

GAC-100 Acrylic

A liquid acrylic polymer emulsion useful for diluting and extending colors as well as increasing flexibility and film integrity. Wets out solids more readily than other polymers and is useful for creating homemade paints. The best Support Induced Discoloration-blocker we make.

GAC-200 Acrylic

A liquid acrylic polymer emulsion that is the hardest and least flexible of GOLDEN acrylics. Useful for increasing film hardness and reducing tack. Improves adhesion to non-porous surfaces; however some surfaces, such as glass and glazed tile, will not allow for a permanent bond. Used in its pure form, it is limited to applications on non-flexible supports. Generally recommend a maximum level of GAC-200 be 75% of the entire paint mixture. Great for increasing durability of GOLDEN Acrylic Paints for mural use.

GAC-400 Acrylic

A liquid acrylic polymer emulsion which dries to a hard, stiff film. When applied over a fabric support, such as cotton, linen or silk, the GAC 400 will serve to dramatically stiffen the support. This allows the artist to transform a lightweight fabric into a free-standing form that will hold its shape.

GAC-500 Acrylic

A liquid acrylic polymer emulsion with leveling ability, that forms a hard, glossy film. Useful for increasing film hardness and reducing tack, while maintaining flexibility. The hardest polymer that is suitable for flexible supports.

GAC-700 Acrylic

A liquid acrylic polymer emulsion that offers excellent film clarity and gloss. Excellent for sealing various supports to protect against Support Induced Discoloration. Useful for glaze applications, but care needs to be exercised to avoid foaming. Offers reduced shrinkage.

GAC-800 Acrylic

A liquid acrylic polymer emulsion that does not craze in pours/puddles. That is to say that it dries with the same uniform surface and dimensional integrity as when wet (other GACs will craze, developing shrinkage crevices running across the surface). Dries with good gloss and flexibility, but only moderate clarity. Useful to increase adhesion to chalky surfaces.

GAC-900 Acrylic

A liquid acrylic polymer emulsion which when heat-set offers a very soft hand and laundering stability. This product is most useful to artists painting on clothing. GAC 900 can be blended with various acrylic colors to produce fabric paints that can be airbrush, hand brush or screen applied.

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.