

Mural Installation Guide

City of Frankfort, Kentucky

This guide is intended to provide answers to basic questions anyone must answer about creating a mural, from how to prepare a wall surface, to what kind of approvals you will need, to appropriate materials to use. The information here has been culled from best practices that have been documented by artists and mural organizations throughout the country.

While this guide provides a roadmap, every project will have its own unique circumstances. Anyone taking on a mural project should look for guidance from artists, curators, arts organizations or others who are experienced with the details of mural production. At the end of this publication there is a Resource Guide that provides additional information and tips about where to find help.

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Part One – Evaluating a Wall

The best type of surface to receive paint is one that is a raw, unpainted brick, concrete or stone material that is free of the defects described below. However, keep in mind that the unpainted masonry requires special approval from the Architectural Review Board. Painting unpainted masonry in the historic district is generally not permitted. Wood, metal and other materials that are in new or good condition can also be satisfactory if properly prepared and sealed. Here is a checklist of things to look for.

- Are the bricks and mortar sound, or are they crumbling, powdery, cracked or broken?
- Is the wall dry, or do you see water seepage, stains or rust?
- Is the wall already painted? If so, is the paint sound or is it peeling, chipping or blistering?
- Is the wall structurally sound, or is it cracked or leaning?
- Is the wall a storefront or principal façade? If so you may need to consider a different wall.
- Does the wall contain significant architectural features that the mural will obscure or detract from? If so, perhaps look for a wall with a larger flat surface and fewer architectural features.

If any of these conditions exist, you may need to repair the wall before you paint, or there may be problems that cannot be repaired and will damage the mural. Consult a reputable artist, mason, or painting contractor for further assessment and recommended treatment.

Roof Conditions

The long-term viability of an exterior wall – and your mural – is also dependent on the condition of the roof, parapets and flashing. As above, consult with a reputable contractor for further assessment and recommended treatment.

Surrounding Conditions

The area directly surrounding the wall should be evaluated regarding issues that might affect installation.

- Is there a safe area where you can work on painting the mural?
- Is there a safe workspace immediately adjacent to the wall, and how is it used?
- Is it a clear lot? Is it used for parking? Is there debris or overgrown brush?
- Is the ground stable, sound or level enough for scaffolding, ladders or boom lift?
- Is there a sidewalk or street space that could be used?
- Are there any overhead wires nearby? These may interfere with the installation, particularly if you use a scaffold or lift. If you see wires, consult with your scaffold or lift contractor.
- Does the work site have access to storage, water and restrooms, or will those have to be provided?
- Are there cameras on the site or security personnel nearby?

Wall Orientation

The orientation of your wall can impact the longevity of the mural. Walls that face south (even interior walls that face south-facing windows) will receive more direct sunlight and the mural will fade more rapidly.

- Evaluate the direction the wall faces and the amount of sunlight it will get. Avoid walls with too much direct sunlight.

Measuring a Wall

A key factor in budgeting is the size of your wall. This will impact the amount of paint you need, the amount of time it will take to paint, and the costs for scaffolding, lifts or similar equipment. Accurate measurements are also important for you to create a scale drawing on which you can base your design.

You can take wall measurements using a tape measure; have a colleague help with the other end. To measure the height of a building, the best approach is to go to the roof and drop a tape measure or a rope, which you measure later; you can also approximate the height from a photo- graph if you know the dimension of the width. Be sure to accurately measure and place windows, doors and other architectural features.

Wall Preparation

If your wall needs repair before painting or installing a cloth mural, obtain an assessment and an estimate from a licensed contractor. Consider cleaning the wall before you paint. If you are painting on a historic building, cleaning shall be completed by the least damaging method available, ranging from washing with a mild detergent and soft bristle brushes to chemical cleaning. Select a test patch before cleaning to ensure the chosen method will not cause damage to historic materials. Start with a low pressure washing and a soft, natural bristle brush when cleaning is necessary. Abrasive cleaning methods such as high pressure water washing and sandblasting, which can damage historic materials and lead to additional deterioration, shall not be used.

Painting on Walls Versus Painting on Fabric

There are two basic ways of painting a mural – painting directly on a wall or painting on a fabric and applying it to a wall. There are pros and cons for each approach. The decision about painting on a wall versus painting on fabric will impact your budget, so plan accordingly. This guide focuses on painting directly to wall, which is more common.

Part Two – Approvals and Permissions

Permission to Use a Wall

You will need to obtain permissions and approvals to paint on a wall. Below is a list of key factors to consider before you settle on a wall, and references to help you find more information.

- Who owns the proposed mural site and what permission do they require?
- The wall owners may require review and approval of the design, insurance policies, or demonstrated community review and approval of the mural before you start painting.
- Are there any special permissions required; for example, historic preservation approvals? Or permits for street or sidewalk closures?

Privately-Owned Walls

If the wall is privately owned, the artist and the owner should sign a wall agreement. A wall agreement gives permission for the artist to paint on the wall and sets out the terms and conditions for the project, including processes for cleaning, repair and removal of the mural. If the wall owner is directly commissioning the mural from the artist, these terms can be covered in the artist contract. *A wall agreement is a legal agreement. Anyone entering into a legal agreement should consult with legal counsel.*

Installation Permits

If you are installing the mural from a sidewalk or street, then a City or State permit for street and sidewalk closures will be necessary to work in those areas. If you are installing the mural from an adjacent property, you will need permission from that property owner.

Historic Preservation Approvals

A Certificate of Appropriateness may be needed in certain situations for properties located with Frankfort's Historic Districts. Contact Planning Department staff and review the City's Historic District Guidelines to be sure that you are meeting the City's approval process. Check the Resource Guide at the end of this document on where to find this information.

Part Three – Creating a Design

Once you have a wall in mind, it's time to work on the design. This is first and foremost the artist's job. There are several general considerations in creating a design:

- The Context
- Artistic Approaches
- Collaborative Approaches
- Developing a Theme and a Concept
- If "Commercial Speech" is used or the mural is meant to serve as commercial signage, then the mural will require a sign permit and must comply with the City's Sign Regulations.

The Context

A muralist should strive to create an artwork that transcends its context and adds to its surroundings. These are different contexts for an artist to consider while making a design:

- The most straightforward context is visual, which relates to the building and landscape around the site. Architectural design, building color and materials, plantings and incidental elements like drainage infrastructure all create a backdrop for the mural.
 - Will the mural stand out or meld with the landscape of the area? How will your design play off the existing colors of the neighborhood?
- Another context is the activity at the site. Is it a location that people just pass by? Is it place where people stay for formal or informal activities, such as a garden, a playground, or a park? Or does the mural occupy a prominent entry into a neighborhood?
- There are also hidden contexts to consider — historical, social, environmental. The artist should strive to understand these conditions. A mural is ultimately an artistic expression created by the artist, but since a mural is a work of public art, the artist should be sensitive to how the community wants its culture, history and neighborhood identity to be represented.
- Viewer sight lines should also be considered. How will people actually view the mural?
 - Detail: For instance, one should not include a lot of delicate, intricate design work on a mural that is located 30 feet above the heads of viewers—they won't be able to read it. But on walls that face pedestrian walkways, the mural can have detail that can be appreciated by passersby.
 - Perspective: How will the mural look from different angles? How can you play with the architecture of the space or the way people have to see the wall into your design?

Part Four – Prep Work

Murals in Historic Zoning Districts

The City of Frankfort Mural Guidelines are meant to help staff regulate the placement of murals within our National Historic Districts in Downtown Frankfort. By virtue of the historic nature of the area and of the structures themselves the guidelines (along with our Historic District Design Guidelines) are meant to provide protection to our historic architecture. Some murals may not be able to be administratively approved by Planning Staff and may have to be reviewed by the Architectural Review Board for approval. Please consult staff to see if your design or its location will comply with the various regulations.

A Mural or Signage?

The City of Frankfort Mural Guidelines are meant to regulate murals within our National Historic Districts Downtown NOT to regulate signage. A mural might be considered a sign if it includes text, imagery, symbols or colors that might be construed to be “commercial speech”. If you have any concerns about whether your design would be considered a sign, contact Planning Staff for an informal review.

What are Those Wires?

Before you start work, check to see what electrical wires are connected to your building or overhead in the vicinity of your workspace. This is especially critical if you are using metal ladders, lifts or scaffolding.

Check with an electrical contractor or the Frankfort Plant Board about putting temporary insulation on the wires to ensure a safe work environment.

Wall Preparation

Wall preparation is an essential step to ensure the stability of your mural. Wall preparation must be done whether you are painting directly on a wall or applying fabric.

- Your surface should be clean, dry and free of loose material, including flaking layers of paint. Make any patches or repairs that are required before you paint. If you are not certain about the condition of your wall, check with an experienced contractor.
- The wall should be washed to remove loose dirt and dust. If you are painting on a historic building, cleaning shall be completed by the least damaging method available, ranging from washing with a mild detergent and soft bristle brushes to chemical cleaning. Select a test patch before cleaning to ensure the chosen method will not cause damage to historic materials. Start with a low pressure washing and a soft, natural bristle brush when cleaning is necessary. Abrasive cleaning methods such as high pressure water washing and sandblasting, which can damage historic materials and lead to additional deterioration, shall not be used. The wall should be rinsed clean and allowed to dry.
 - On some wall materials water cleaning may be undesirable so as not to unnecessarily introduce moisture to the material.

- Old paint can be removed through various means. However, before removing old paint, consult with a licensed contractor. There are numerous environmental considerations to consider, including the potential presence of lead paint, the containment of dust and debris, and the materials used in stripping paint.
- Make sure the roof, parapets and flashing are in good condition and make minor repairs necessary to keep water from seeping into the mural.

Priming

The mural wall should be well primed before you begin drawing and painting on it. Be sure primer is applied to a well-prepared, well-cleaned wall. There are different materials to consider, and different application methods to consider, such as painting and spraying. You will need to be sure that the primer used is compatible with the paints, coatings, or (in the case of a mural painted on fabric) adhesives that will be used for the mural. If a paint system has not yet been selected for the mural, it is advised that this be done before preparing the wall. Murals painted with the same type of products and from the same manufacturer for the primer, pigment, and coating layers may be less prone to flaking, bubbling and fading.

Carefully read manufacturers' directions and ensure that the primer is applied in the manner and under the conditions it recommends.

Note: Primer and paint generally should only be applied in temperatures warmer than 50° F (ideally between 65-85°) and only in dry weather and to a wall that is thoroughly dry.

Note: If the mural is to be painted on a masonry or concrete wall, the primer should not be a vapor barrier. It will be necessary for moisture to escape through the surface of the mural or it will cause paint loss.

For more on primer, consult the Resource Guide at the end of this publication, as well as a local paint retailer. Now that the wall is prepared, it is time to start painting the mural. The next step is to transfer your design to the wall.

Methods of Transferring Designs

There are three main approaches to converting a design sketch to a wall or fabric panels:

- Using a projector to project your design onto wall or fabric
- Use a gridding system
- Directly draw your image onto the wall.

Projecting the Drawing

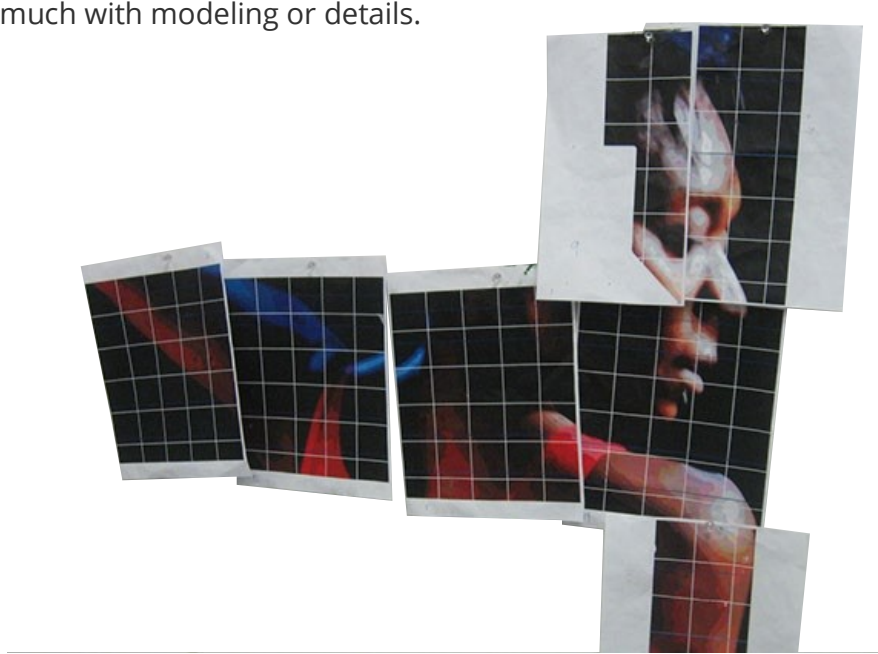
Projecting outlines onto the wall is probably the fastest way to transfer the design. If you have a very complex design with lots of small detailed areas, the projector can eliminate the need for meticulous drawing and multiple corrections.

To project a mural, scan your concept drawing into a digital file formatted for a program like Photoshop. Add a grid on top of the drawing so that you can be certain the image is being projected squarely onto the wall and is not distorted at an angle or elongated by height or width.

Gridding the Drawing

Create a grid of squares on your small design and a corresponding grid of squares on the wall. The grid on the design can be drawn on an acetate overlay to avoid damaging your original drawing. After priming the wall, create a grid on it as well.

The squares on your small design might be one inch by one inch while the squares on the wall might be one foot by one foot. By copying onto the wall what is in each square of your design, you can reconstruct your mural design at a large scale. You will want to render the basic outlines of your mural first and not involve yourself too much with modeling or details.



Drawing on the Wall

Finally, you can copy your design freestyle on the wall. Drawing can be done with large charcoal sticks, chalk, or a paint brush and thinned acrylic paint. Acrylic is recommended because it will dry and not fade or smear into the paint while you are working. Charcoal or chalk lines might be mistakenly wiped away or washed away by rain. Also, consider attaching a brush or chalk to a long stick so you can draw from the ground with some distance and see what you are doing.

Part Five – Paint and Supplies

Materials

When starting your painting, you should put together a list of all the materials you will need. A checklist of the supplies that are commonly used can be found in Part Seven of this document.

Selecting Primers, Paints and Coatings

Choosing quality materials is essential to creating a vibrant and long-lived mural. The artist will have to consider three different elements of the “paint system:” primer, paint, and final clear coat.

Primer

Primers are essential for making sure your wall is prepared to accept paint.

- Choose a primer appropriate to the surface that you are painting. Primers will be labeled as to which surface types they are conducive.
- A primer that is 100 percent acrylic, water-based or “water borne” is always preferred for longevity, clean up and environmental concerns.
- Paint stores typically will tint the primer to any color. A light neutral grey, for instance, is typically preferred to a bright white — simply for an easier painting experience, or for a particular effect of the subsequent artwork.

Paint

Most murals are painted with acrylic paint, though spray paint is popular with artists working in street art styles. Enamel and oil paints are not recommended for outdoor use because they are moisture impermeable and do not allow the wall to breathe.

Here are some tips in considering paints:

- Quality is important. The preferred type of paint is 100 percent artist-grade acrylic. Try to avoid using commercial-grade paint, the type of paint that is tinted on site at the retail store using a base paint and sometimes called “house paint.”
- Make sure you use the right paint for the surface. Interior latex will not last over time outside.
- Make sure you use the right paint finish. If the mural is not going to be sealed with a clear coat, consider semi-gloss acrylic because it provides protection from being scratched or nicked. If the mural will be sealed, consider flat acrylic, because flat goes on smoothly with less ridges and the colors pop more when it is sealed.
- Be careful to select colors that have good lightfastness ratings. Consult paint charts for the brand of paint you are using. Colors that conform to “ASTM I” are ideal, but “ASTM II” are also acceptable. If using acrylic dispersion paints, the statement “conforms to D5098” is an indication of colorfastness.

- Be sure to order a few gallons of gloss or semi-gloss acrylic medium to mix with paints to thin them. Thinning acrylic paints with more than a few drops of water is not recommended as this will affect the longevity of your mural.

The above information is condensed from the Chicago Public Art Group community mural making guide, which is referenced in the Resource Guide at the end of this publication. For more on paint, consult the Resource Guide at the end of this publication, as well as a local paint retailer.

Clear Coats

Clear coats are applied after the mural is completed and provide extra protection for the mural. Clear coats don't prevent vandalism, but they make a mural a lot easier to clean or repair when necessary. Some clear coats include UV filters that help keep the mural from fading in the sunlight.

- The most common type of clear coat used on murals is simply a 100% clear acrylic, which is the same composition as the primer and paint that was used on the mural itself. Retouching can be done directly upon the surface, with a subsequent retouch of clear coat.
- Acrylic clear coats can be applied by spray, brush or lint-free rollers (always try for the lowest nap for clear coat) and are typically applied in one to two coats.
- Only use products labeled as "non-yellowing."
- Clear coat with UV protection may not be necessary or cost effective when lightfast paint is used. Consult with your paint supplier.

If your mural is in a highly vandalized area, you might want to explore an "anti-graffiti" type of clear coat.

- "Sacrificial coatings" are typically water-borne acrylics that create a protective layer between the final paint and any graffiti that is applied to it. To remove the graffiti, the sacrificial coating is also removed. If you choose to use a sacrificial coating, always test it on a sample area or mock-up to make sure that the removal technique works without damaging the mural.
- "Non-sacrificial" coatings create a scrubbable barrier between the artwork and the graffiti. This allows graffiti to be removed without removing the coating. However, these coatings can contain harsh chemicals and should be used with caution as they can be highly toxic and may even be illegal. If the use of these coatings is permitted, they should be applied only by a certified professional, and the manufacturer's instructions should be followed.

Application Methods

Primer, paint and clear coats can be applied to the surface by spray, roller, and/or brush.

- Roller, combined with brush, is the most typical and usually most effective method.
- Choose a roller type and wale (depth) based on the surface texture you will be painting.
- Spraying can be a better solution for rougher surfaces, or surfaces that have deep grooves or mortar lines. Spray rigs can be rented and/or implemented by a paint contractor.

Part Six – Maintenance, Repair, Conservation

Maintenance

Maintenance activities may include removing graffiti, removing surface dirt (especially along the base of the mural), reapplying coating and removing or trimming vegetation that grows in front of the mural. The artist should prepare a maintenance and repair manual for the wall owner. To the extent possible, the manual should include a list of materials used on the project, including paints (colors) and sealers, as well as sources.

Repair

Repairs to a mural are necessary when the mural becomes vandalized or damaged. Typically, the artist should be given the first opportunity to repair the mural. If that is not possible, the agreements should establish a process for the mural owner to have the mural repaired by others. Whatever the process, it is important to remove or paint over graffiti as soon as possible, to avoid the sense that the mural and the neighborhood are not being cared for.

Conservation

Conservation of a mural occurs when it has become faded or damaged to the point where it does not represent the intention of the artist or the sponsor anymore. Typically, the artist should be given the first opportunity to repaint the mural. If that is not possible, the agreements should establish a process for the mural owner to have the mural conserved by others, or for the mural to be decommissioned and removed.

Decommissioning

Decommissioning of a mural occurs when the wall can no longer be used for a mural, or when the mural has degraded to the point where it needs to be removed. These circumstances should be contemplated and a process for agreeing to decommission a mural should be included in a wall agreement. Typically, an owner will agree to keep a mural for a certain amount of time, then request the right to remove the mural at their own discretion.

All parties should consult with legal representation before entering into any agreement regarding VARA rights.

Note: Before decommissioning a mural you will need to obtain a Removal Permit from the City of Frankfort Planning & Community Development Department!

Part Seven – Checklist of Commonly Used Items

- Empty containers with lids (coffee cans, cups, etc.) for mixing colors
- Milk crates or other sturdy boxes to store paint cans
- Metal scrapers to clean dried paint off palettes
- Painting palettes or trays for mixing colors
- Extension handles for your rollers
- Rags and/or paper towels
- Eye protection (goggles)
- Brushes in many sizes
- Paint spraying system
- Brooms and shovels
- Chalk line snapper
- Parachute cloth
- Stirring sticks
- Chalk/pencils
- Masking tape
- Wire brushes
- First Aid Kit
- Drop cloths
- Utility Knife
- Roller pads
- Scaffolding
- Clear coats
- Knee Pads
- Yardsticks
- Ladders
- Buckets
- Rollers
- Primer
- Paints
- Masks
- Level
- Gels



Part Eight – Resource Guide

Codes and Permits

- City of Frankfort Central Business Zoning District Design Guidelines
<http://www.frankfort.ky.gov/DocumentCenter/View/1651/Central-Business-Design-Guidelines>.
- City of Frankfort Historic Preservation
<http://www.frankfort.ky.gov/164/Historic-Preservation>
- City of Frankfort Sign Information
<http://www.frankfort.ky.gov/512/Signs>
- City of Frankfort Zoning Information
<http://www.frankfort.ky.gov/507/Zoning-Land-Use>
- Planning & Community Development Applications & Forms
<http://www.frankfort.ky.gov/510/Applications-Forms>
- Public Works – Work in City Right-of-Way Permit
<http://www.frankfort.ky.gov/DocumentCenter/View/1216/Permit-Application-Work-On-City-ROW>

General

- American Institute for Conservation, Muralmaking Guide
www.conservation-us.org/docs/default-source/resource-guides/mural-creation-best-practices-full-document.pdf?sfvrsn=2
- Canadian Conservation Institute, Debra Daly Hartin, Planning a New Mural
<https://www.canada.ca/en/conservation-institute/services/care-objects/fine-art/conservation-guidelines-outdoor-murals/planning-new-mural.html>
- Chicago Public Art Group: Community Public Art Guide: Community Murals
www.cpag.net/guide/2/2_pages/2.htm
- City of Albuquerque, Public Art Handbook
<http://www.cabq.gov/culturalservices/public-art/for-artists/public-art-handbook>
- Greater Pittsburgh Arts Council: Mural Making 101
<https://www.pittsburghartscouncil.org/programs/grants/20-general/4295-mural-making-101>
- A Guide to Making Murals in Nashville
<https://www.nashville.gov/Portals/0/SiteContent/ArtsCommission/docs/public%20art/Art%20for%20Wall.compressed.pdf>
- Planning, Preparing and Painting Your Mural
www.resene.co.nz/pdf/Mural-Info-Book.pdf
- Redwood City: A Handbook for Public Mural
<https://www.morganmurals.com/Public-Mural-Handbook.pdf>
- Stevens, Greg, From Start to Finish: How to Create and Operate a Mural Project. Global Mural Arts and Cultural Tourism
http://www.globalartsandtourism.net/global/html/pop-ups/city_guide.html

Materials and Installation

- Sherwin Williams
www.sherwin-williams.com/property-facility-managers/education
- Nova Color
www.novacolorpaint.com/PDF/How_to_Paint_a_Mural_with_Acrylic_Paint_08-2013.pdf
- Jose Loza Artist Web Site (painting with parachute cloth)
www.jmloza.com/loza-blog/mural-fabric

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