

How to Paint with Metallic Paints

This document contains painting tips and techniques that are specifically applicable to our water-based metallic paints. It does not contain information on preparation and priming of surfaces that must be done prior to the application of the metallic paint. Always prepare and prime as you would for any other water-based Acrylic/PVA paint. We also have Super Adhesion Metallic Paints that can be applied directly to many surface types. If in doubt read our document called "Preparation and Priming", contact us or ask at your local hardware store.

Metallic paints have a fairly high gloss. When painting with glossy paints it is important to "maintain a wet edge".

Metallic pigments tend to align themselves in the direction of brush and roller movement. Metallic pigments that are aligned in different directions look different.

It is important to apply the correct painting techniques which differ from those used for normal paints.

Using a brush or roller

There are some key painting techniques required for painting with glossy metallic paints.

Keep a wet edge.

If you go over paint that has partly dried with a brush or roller then that area will look different in the end result. Rolling or brushing over a partly dried area damages the surface which gives it a distinctly different appearance. To assist here are some things to remember:

- Do not paint in direct sunlight or in windy conditions or onto surfaces that are hot as the paint will dry too quickly. Do not attempt to speed up paint drying.
- Do not paint directly onto porous surfaces as absorption of the paint will make it dry too quickly. Apply a primer or undercoat to porous surfaces first.
- Start at one corner or edge so that you only move in one direction. This results in you only having one edge to keep wet which is far simpler than having multiple edges.
- For large surfaces such as feature walls you require two people to paint. One does the cutting-in on top and bottom and keeps just ahead of the painter using the roller. This means the painter with the roller can make continual progress and the roller can overlap the cut-in areas when they are still wet. There is very little chance that the edge will dry out too much. Carefully roll over as much of the cut-in area as possible to avoid "framing". Proper taping off before painting makes cutting-in faster and allows the roller to get closer to the edges.

Thin the paint a little if required

On smooth surfaces you may get brush or roller marks that are visible. On such surfaces you can thin the paint by mixing it with a little water. You can test the paint first to see if you need to thin it on your specific surface. If thinning is required, we suggest thinning with about 5% water (50ml / litre of paint) or 10% Flow Control Medium (100ml / litre of paint). Always mix well until the paint looks and feels stable. If using one of our Super Adhesion Paints on plastic, wall tiles, metal or rubber then only thin the paint with our Air Spray Medium. Our Air Spray Medium is also a Super Adhesion Product so the super adhesion properties will be retained.

If you over-thin the paint with water, you may get roller spray and air bubbles forming in the paint film as the roller moves. Thinning with our Flow Control Medium or our Air Spray Medium will not create those problems. Thinning may result in you requiring an extra coat as each paint film will be thinner.

Brush and Roller Motion

Move the brush or roller up and down (or left and right only). Do not use haphazard motion. This is because the metallic particles are aligned by the brush or roller movement so haphazard roller movements will lead to the appearance of shade variation in the dry paint.

On a wall start on the left edge and only roll up and down in reasonably straight lines. Once a roller width has been painted always roll the roller fairly lightly from top to bottom to finish off. When one roller width has been completed move to the right and go up and down again with a sufficient overlap of the previously painted area. Again, finish off by rolling from top to bottom. This should be done for every section so that the pigments always align in the same direction. Work quite quickly and complete the wall in the same way. You cannot stop for a tea break until the full coat has been finished.

Wait until the paint is completely dry to touch (at least 2 hours but more in slow drying conditions) and apply the next coat in the same way. Apply a 3rd coat if necessary.

Brush and Roller Quality

Use as soft a brush as you can find. Hard brushes will create more brush marks.

It can be remarkably hard to find very good quality rollers and once a roller has been used, cleaned and left to dry it often goes “off balance”. This is not a problem for normal paints but once a roller is unbalanced you will see evenly spaced ridges throughout the painted surface when using metallic paints. The distance between the ridges (usually seen as thin darker patches of paint) will coincide exactly with the roller diameter. If this happens then change the roller immediately. This is a typical glossy paint issue and the problematic roller will still be fine for normal matt and low sheen paints.

Spray Painting our Metallic Paints

Some thinning of the paint will be required but never add excessive amount of water to paint as the final dry strength may be compromised. We suggest that you never exceed 20% water (200ml water added to 1 litre of paint).

Our **Acrylic Spray Medium** is specifically formulated to significantly thin water-based paint for spray applications without the drawbacks of adding water.

Depending on your spray gun type, pressure and nozzle size you may need to thin our Metallic paints with 55% Acrylic Spray Medium (450ml paint mixed with 550ml Acrylic Spray Medium).

Due to the large particle size of some of the metallic pigments that we use, you may need to remove the in-line filter of your spray equipment. We take great care to formulate without lumps so removing the filter should be successful. Take care not to get lumps into the paint after using it and re-opening it. Dry paint from the lid and rim may fall in but this can be avoided with careful handling.

Using an Airless Spray Gun

Airless spray systems are perfect for water-based acrylic/PVA paints. The paint is pumped to the nozzle and the equipment can handle high viscosity (thick) paints. This equipment is relatively expensive and usually only owned by serious painters. You will easily get excellent results using our paints.

Using an HPLV Spray Guns (High Pressure Low Volume)

These spray guns connect to a compressor and operate at high pressure (5 bar for example). The air volume used is low hence the term HPLV. Thinning the paint with 55% Acrylic Spray Medium (450ml paint mixed with 550ml Acrylic Spray Medium) can give excellent spray results and the adhesion is improved as opposed to being reduced when you dilute with water.

It is advisable to use a nozzle with diameter of around 1.8mm. Smaller nozzles used for automotive type finishes (0.6 - 1.2mm) may not work.

Using an HVLP Spray Guns (High Volume Low Pressure)

These spray guns may connect to a compressor but often have their own air pressure generating system. They operate at low air pressure (0.1 - 0.2 bar for example) and use a high volume of air. Thinning the paint with 55% Acrylic Spray Medium (450ml paint mixed with 550ml Acrylic Spray Medium) may be sufficient if you use a nozzle around 2.3mm. In addition, you may still need to thin the paint further with a little water.

If you have problems, they will probably relate to insufficient pressure to feed the gun rather than the behaviour of the paint in the nozzle.

We got good results with a 2.5mm nozzle. Our paints may not work well with some of these HVLP spray guns.

Some general points about the suitability of our Metallic Paints for spraying

Our metallic paints have been optimised for spraying with air spray systems in numerous ways. Excellent filtration of our paint during manufacture ensures spray gun nozzles don't block due to lumps. You will not get air bubble problems in the sprayed paint film as fast acting air removal chemicals have been optimised in the paint formulation. The thixotropic rheology of the paint ensures it atomises well when leaving the nozzle even if it arrives at the nozzle a little thick. Finally, the rheology is such that when the paint slams into the surface being painted, it is not very runny so runs should not be problem.

Due to the large particle size of some of the metallic pigments that we use, you may need to remove the in-line filter of your spray equipment

Let us know about your painting and spraying experience, we will appreciate hearing for you:
Email: sales@bastionpaint.co.za