



LimeStrong Artisan plasters are available from select distributors or online at: [www.limestrongartisan.com](http://www.limestrongartisan.com)

# LimeStrong™ Use Instructions

## LIMEWASH

LIMESTRONG LIMEWASH is a mineral-based paint formulated for easy application and simple repair and touch up. Limewash creates a subtle matte finish with a soft and porous feel, integral to the surface onto which it is applied.

### PACKAGING and COVERAGE

LimeStrong Limewash is packaged in 2 lb. bags. Coverage rates will vary depending on the texture and absorbency of the surface/substrate to which it is applied. A good rule of thumb is 100 square feet per gallon at 2 coats.

### SUITABLE SURFACES (SUBSTRATES)

Because limewash creates a thin calcified mineral coating, it can only be applied to certain suitable substrates. There are two main characteristics to consider: the substrate must be ABSORBENT, and the substrate must be OPEN.

An ABSORBENT substrate is one that has the ability to absorb moisture. Because Limewash is not a film-forming coating, and does not contain synthetic binders, it needs to be *drawn into* the substrate. Limewash then becomes part of the substrate, forming an integral bond that will not flake or peel.

An OPEN substrate is one that has some porosity and texture. Technically, it comes back to absorbency: a polished or very smooth surface has been “closed” to the point that it is no longer absorbent enough to work with limewash.

### SUITABLE SUBSTRATES

- ★ LimeStrong Sand (best option; one coat is enough for a coarse limewash finish)
- ★ LimeStrong Stone (unburnished / unpolished)
- ★ Stucco (unsealed / unpainted)
- ★ Brick (porous “soft” brick)
- ★ Stone (soft, open stone, such as limestone or sandstone)
- ★ Plaster (open and porous gypsum plaster, lime plaster, clay plaster)
- ★ Earthen Surfaces (clay plaster, adobe, cob, rammed earth)
- ★ Concrete (open, porous, rough concrete, unsealed)

- ★ Wood (open, porous, rough sawn)
- ★ Concrete Block (unpainted, unsealed)

### UNSUITABLE SUBSTRATES

- ✗ Raw Unprimed Drywall (prime and single-coat with LimeStrong Sand to provide a suitable surface)
- ✗ Primed Drywall (single-coat with LimeStrong Sand to provide a suitable surface)
- ✗ Painted Drywall
- ✗ Painted Stucco
- ✗ Sealed Stucco
- ✗ Painted Plaster
- ✗ Sealed Plaster
- ✗ Polished Plaster
- ✗ Hard-fired Non-absorbent Brick
- ✗ Hard Non-absorbent Stone (granite, marble)
- ✗ Smooth-Poured Concrete

### MIXING LIMEWASH

**STEP 1:** Add the full amount of water to an appropriate mixing container. Water amount is calculated at 3.3 X the dry powder when measured by gram weight.\* For example:

$$2 \text{ lbs} / 907\text{g limewash powder} \times 3.3 = 2993\text{mL} [3 \text{ liters} / 0.8 \text{ gallons}]$$

(1 milliliter volume equals 1 gram weight)

$$10 \text{ lbs} / 4536\text{g limewash powder} \times 3.3 = 14,969\text{mL} [15 \text{ liters} / 4 \text{ gallons}]$$

**STEP 2:** Using a mixing drill and paddle, gently stir the pigment or colorant into the mix water (see *pigmenting*). Some pigments will take more time to fully hydrate. Once all of the pigment is hydrated, mix vigorously for 1 minute.

**STEP 3:** Add the limewash powder to the water while stirring with the mixing drill. For best results, add the limewash incrementally, not all at the same time. Once all of the limewash has been added, mix vigorously for 1 to 2 minutes. The mixed limewash should be the consistency of whole milk.

**OPTIONAL STEP:** Pass the mixed limewash through a bag-type paint strainer. This will sieve out any hardened particles of pigment or lime that have not fully incorporated.

**NOTES:** Once mixed, the limewash keeps forever, as long as it is not allowed to freeze or evaporate. Store tightly covered in a temperature-stable environment.

Mixed limewash has a high solids content; the pigment and lime will settle quickly to the bottom of the bucket. When working with limewash, it is imperative that you continue to stir by hand every few minutes. Continues: page 1 of 2

\*Water and color pigment amount CALCULATORS available online at: [limestrongartisan.com/calculators.html](http://limestrongartisan.com/calculators.html)

## TOOLS

LimeStrong Limewash is best applied the old-fashioned way, using big brushes with absorbent bristles. Look for a “block brush” or a “stain brush;” these are large (up to 8 inch) brushes with natural bristles that can absorb limewash.

It is not recommended to apply limewash with a roller, as there is a good chance you will see lap lines and roller marks. Spraying limewash is also not recommended: because of the high solids content and tendency to settle, limewash will clog spray equipment.

You will also need to have some type of stir stick that stays in the bucket as you are working with limewash. That stick will remind you to constantly stir the limewash while you are working with it.

## TOOLS and MATERIALS

Clean 5 Gallon (20 liter) Bucket	Clean Stir Stick
1/2" Mixing Drill	Drill Attachment Mixing Paddle
Gloves	Bag-type Paint Strainer
Natural Bristle Brush, Large	

## PIGMENTING (ADDING COLOR)

LimeStrong Limewash can be pigmented with dry powder pigments or universal paint tints. We recommend using our LimeStrong Color System pigments, as they have been selected to work well with our Limewash.\*

Think of limewash as a light-to-medium colored finish. It is highly recommended not to exceed 100 grams of pigment per gallon formula of limewash (multiplier .11). Too much pigment can overwhelm the lime binder and cause dusting and durability problems. Because of this limitation, it can be difficult to achieve dark colors.

## MISTING

The first step in the limewash application process is to evaluate your substrate. How absorbent is it and how thick is the absorbent layer? Think of your substrate as a sponge. A very thin sponge requires only a small amount of water to become saturated. A very thick sponge can hold a lot of water. If your substrate has a high ability to absorb water it should be lightly misted before limewash application. If limewash is applied to a highly absorbent surface without misting it can dry out too fast and inhibit curing.

When you mist your wall, the water should absorb quickly into the substrate and not remain wet on the surface. Ambient conditions will effect this and common sense should be applied.

Examples of high-absorbent substrates that should *probably* be misted prior to applying each coat of limewash are those in the SUITABLE SUBSTRATES list, **except** thin-coat plasters (less than ¼-inch total thickness) over primed drywall.

## APPLYING LIMEWASH

Limewash should be applied in *at least* two coats. There is no maximum number of coats that can be applied. It is highly recommended that you allow at least 12 hours for drying and curing between coats. Do not apply limewash in freezing weather, excessively hot or windy weather, or to surfaces that are saturated from environmental conditions. If necessary, pre-mist your substrate before applying limewash. Using the proper brush, apply the freshly-stirred limewash in a consistent pattern, scrubbing the limewash into the texture of the wall with the brush. Common techniques are vertical, horizontal, crosshatch and figure 8. Avoid drips and runs. Wash the whole wall at one time and maintain a wet edge.

Limewash, when freshly applied and in a wet state, can appear somewhat translucent. It is *very tempting to apply too much*. Keep this in mind: you are creating a thin layer of calcification that is integral to the surface, not trying to build a film like with ordinary paints.

Allow the first coat to cure for a minimum of 12 hours. Mist again if necessary and apply the second coat in the same way. After the second coat has been applied and cured, you can apply subsequent coats to achieve the effect you desire. Limewash can be further diluted with water to create a glazed multi colored effect.

OPTIONAL STEP: Because our limewash does not contain acrylic binders, there is a chance of some slight dusting when rubbed, depending on the curing conditions. To resolve this, wait at least 24 hours for the final coat of limewash to cure. Then take a soft cotton rag or tee shirt and buff the walls. This will remove any areas that are dusting and—depending on the texture of the substrate—can give the limewash a smooth patina.

## CLEAN UP

Application of limewash can be a sloppy process. Take appropriate measures with masking and protection to ensure you don't damage adjacent surfaces. Limewash will stain certain species of unfinished wood. The best way to clean limewash is to let it dry, then use a soft abrasive material to “sand” it off. If you clean it after it cures, it should turn to powder and come right off. If there is residue left behind use plain white vinegar as a solvent to remove it.