



LimeStrong Color System powder pigments available from select distributors or online at: [www.limestrongartisan.com](http://www.limestrongartisan.com)

# LimeStrong™ Color System

## USER GUIDE

The LIMESTRONG COLOR SYSTEM consists of eight (8) standard base colors and a formulation system for calculating shades and blends using those eight colors. The color pigment powders were selected, tested, and designed to be consistently scalable to both batch size and color intensity. They come packaged in a lined, resealable paper bag; 250 grams per bag.

### COLORING PLASTER PROCESS

1. Refer to the Formulation Guide for overview of gram-weight method
2. Prepare sample board for accurate representation of on-wall color
3. Use a digital scale to weigh pigment amount for each sample batch
4. Mix pigment with batch-measured water before adding plaster mix
5. On back of sample boards/tiles, record **formulation code** used for each
6. Use the formulation code from the selected color sample board to calculate the color pigment needed for a full batch.

### MIXING POWDERED PIGMENTS

Mechanically mix powdered pigments thoroughly into *batch-measured* water BEFORE adding plaster. Turn mixing paddle at low speed as you add pigment to avoid bottom-settling. Continue to mix a low speed until all the powder is wet and dispersed. Then mix at high speed for 30 seconds to a minute. Add plaster immediately. When applying smooth, tight-finished grades like Stone or Marble, pigmented water should be strained before adding plaster to avoid any chance of bursting or starring.

### COLOR INTENSITY BY WEIGHT

The LimeStrong Color System is designed to scale rich dark to off-white by gram-weight: use less grams of pigment for lighter, less intense color; use more pigment for deeper colors. Use a digital scale to consistently weigh and add the same amount of pigment per mixed plaster batch.

### COLOR and SHADE CODE DESIGNATIONS

Each of the eight base colors is designated by a 2-letter code (**FX** for **Flax**, for example) for use in the formulation codes.



There are six (6) shades specified for each color. Shades are designated by letters A thru F (**A** being the lightest, **F** the darkest) and represent pigment amount by gram-weight. Blended colors use the 2-letter color code as well as percentage number designations. From a combination of these designations and a decimal multiplier, **formulation codes** are generated. Use of these codes provides an accurate and consistently repeatable method for coloring LimeStrong plaster, regardless of the batch size.

### RECORDING COLOR FORMULATIONS

Record the formulation code used on a project by job and on the sample board/tile for future reference. Partial bags of color pigment should be marked on-bag with remaining content weight for future use and stored in a dry place.



# FORMULATION GUIDE

Using the formulas detailed below, the LimeStrong Color System provides the applicator a rich variety of color possibilities using eight simple-to-manage base colors.

## BASE COLORS

Each of the eight base colors can be formulated, by a simple weight calculation, to produce a range of deep to light shades. Each of the six shades is designated by a four-digit number that functions as a decimal multiplier (Table 1). This number can be multiplied by any given quantity of dry LimeStrong plaster to get the proper quantity of pigment to create that shade.\* (See the Color Shade Grids on pages 3 - 4)

### EXAMPLE 1:

For a full batch (32lb/14,500g bag) of LimeStrong Stone at shade **B**, color Umber [UR]:  $14500g \times .0043 = 62g$  [add 62g of Umber pigment powder to full-batch mix water]

### EXAMPLE 2:

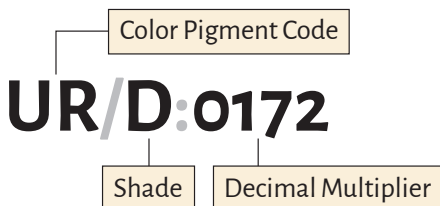
For a sample-board quart-amount batch (2lb/907g) of LimeStrong Stone at shade **B**, color Umber [UR]:  $907g \times .0043 = 4g$  [add 4g of Umber pigment powder to sample-batch mix water (1.5 - 2.0 cups)]

FORMULATION CODE: **UR/B:0043**

TABLE 1

| SHADE   g | MULTIPLIER | PIGMENT NEEDED |
|-----------|------------|----------------|
| F   1000g | .0690      | 4 bags         |
| E   500g  | .0345      | 2 bags         |
| D   250g  | .0172      | 1 bag          |
| C   125g  | .0086      | 1/2 bag        |
| B   62g   | .0043      | 1/4 bag        |
| A   31g   | .0021      | 1/8 bag        |

## BASE COLOR/SHADE FORMULA CODE



\*Find color formulation CALCULATORS online at: [limestrongartisan.com/calculators.html](http://limestrongartisan.com/calculators.html)

## BLENDED COLORS

The blended color calculations and formulations\* follow the same methodology, using two pigment color codes and a number representing the percentage of color used (Table 2).

### EXAMPLE 1:

For a full batch (32lb/14,500g bag) of LimeStrong Stone at a blend of **80%** Ocher [OR] and **20%** Slate [ST]:  
 $14500 \times .0138 = 200g + 14500 \times .0034 = 50g$  | **250g**  
 [add 250g of the blended pigments to full-batch mix water]

### EXAMPLE 2:

For a sample-board quart-amount batch (2lb/907g) of Stone at a blend of **80%** Ocher [OR] and **20%** Slate [ST]:  
 $907 \times .0138 = 13g + 907 \times .0034 = 3g$  | **16g** [add 16g of total blended pigment to sample-batch mix water (1.5 - 2.0 cups)]

FORMULATION CODE: **OR80:0138 + ST20:0034**

TABLE 2

## PERCENTAGE MULTIPLIERS

FIGURE ANY PERCENTAGE MULTIPLIER:

$250 \times \% \text{ (expressed in decimal) divided by } 14,500 = \text{multiplier}$

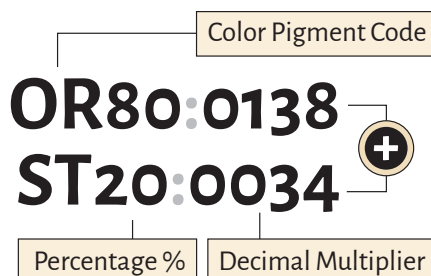
EXAMPLE:  $250 \times .75 \text{ (75\%)} \div 14500 = .0129$

NOTE: 250 is weight in grams of a single bag of color pigment; 14500 is weight in grams of a full bag/single mixed batch of plaster.

|     |       |     |       |     |       |
|-----|-------|-----|-------|-----|-------|
| 90% | .0155 | 60% | .0103 | 30% | .0052 |
| 80% | .0138 | 50% | .0086 | 20% | .0034 |
| 70% | .0120 | 40% | .0069 | 10% | .0017 |

| PIGMENT CODE | PERCENT OF BLEND | DECIMAL MULTIPLIER | CALCULATION: FULL BAG BATCH   |
|--------------|------------------|--------------------|-------------------------------|
| OR           | 80%              | .0138              | $14,500g \times .0138 = 200g$ |
| ST           | 20%              | .0034              | $14,500g \times .0034 = 50g$  |
|              | 100%             | .0132              | 250g                          |

## BLENDED COLOR FORMULA CODE



# FORMULATION GUIDE

|                  |                              |
|------------------|------------------------------|
| <b>UR/D</b>      | Color Code / <b>SHADE</b>    |
| <b>250g</b>      | Pigment Amount in Grams      |
| <b>.0172</b>     | Decimal Multiplier           |
| <b>UR/D:0172</b> | Color Shade Formulation Code |

Note: Grid shade formulas shown on pages 3 and 4 are for a full bag/batch of LimeStrong plaster.

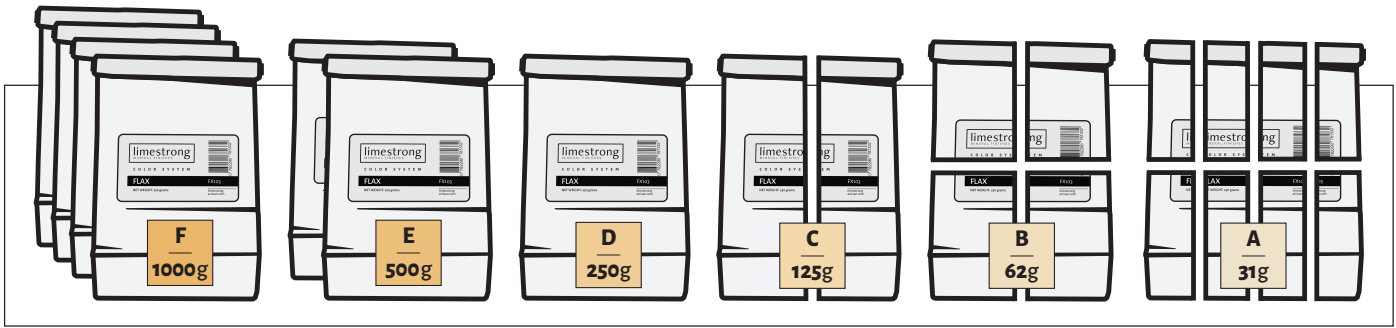
| UMBER [UR]   |   |   |
|--|---|---|
| <b>UR/F</b><br>—<br>1000g<br>—<br>.0690<br>—<br><b>UR/F:0690</b> | <b>UR/E</b><br>—<br>500g<br>—<br>.0345<br>—<br><b>UR/E:0345</b> | <b>UR/D</b><br>—<br>250g<br>—<br>.0172<br>—<br><b>UR/D:0172</b> |
| <b>UR/C</b><br>—<br>125g<br>—<br>.0086<br>—<br><b>UR/C:0086</b>  | <b>UR/B</b><br>—<br>62g<br>—<br>.0043<br>—<br><b>UR/B:0043</b>  | <b>UR/A</b><br>—<br>31g<br>—<br>.0021<br>—<br><b>UR/A:0021</b>  |

| SLATE [ST]   |   |   |
|--|---|---|
| <b>ST/F</b><br>—<br>1000g<br>—<br>.0690<br>—<br><b>ST/F:0690</b> | <b>ST/E</b><br>—<br>500g<br>—<br>.0345<br>—<br><b>ST/E:0345</b> | <b>ST/D</b><br>—<br>250g<br>—<br>.0172<br>—<br><b>ST/D:0172</b> |
| <b>ST/C</b><br>—<br>125g<br>—<br>.0086<br>—<br><b>ST/C:0086</b>  | <b>ST/B</b><br>—<br>62g<br>—<br>.0043<br>—<br><b>ST/B:0043</b>  | <b>ST/A</b><br>—<br>31g<br>—<br>.0021<br>—<br><b>ST/A:0021</b>  |

| OCHER [OR]   |   |   |
|--|---|---|
| <b>OR/F</b><br>—<br>1000g<br>—<br>.0690<br>—<br><b>OR/F:0690</b> | <b>OR/E</b><br>—<br>500g<br>—<br>.0345<br>—<br><b>OR/E:0345</b> | <b>OR/D</b><br>—<br>250g<br>—<br>.0172<br>—<br><b>OR/D:0172</b> |
| <b>OR/C</b><br>—<br>125g<br>—<br>.0086<br>—<br><b>OR/C:0086</b>  | <b>OR/B</b><br>—<br>62g<br>—<br>.0043<br>—<br><b>OR/B:0043</b>  | <b>OR/A</b><br>—<br>31g<br>—<br>.0021<br>—<br><b>OR/A:0021</b>  |

| MARINE [MN]  |   |   |
|--|---|---|
| <b>MN/F</b><br>—<br>1000g<br>—<br>.0690<br>—<br><b>MN/F:0690</b> | <b>MN/E</b><br>—<br>500g<br>—<br>.0345<br>—<br><b>MN/E:0345</b> | <b>MN/D</b><br>—<br>250g<br>—<br>.0172<br>—<br><b>MN/D:0172</b> |
| <b>MN/C</b><br>—<br>125g<br>—<br>.0086<br>—<br><b>MN/C:0086</b>  | <b>MN/B</b><br>—<br>62g<br>—<br>.0043<br>—<br><b>MN/B:0043</b>  | <b>MN/A</b><br>—<br>31g<br>—<br>.0021<br>—<br><b>MN/A:0021</b>  |

NOTE: The color chips shown on our Formulation Guide are for reference only; prep sample boards/tiles for accurate color representation.



| FLAX [FX]  |   |   |
|--|---|---|
| <b>FX/F</b><br>—<br>1000g<br>—<br>.0690<br>—<br><b>FX/F:0690</b> | <b>FX/E</b><br>—<br>500g<br>—<br>.0345<br>—<br><b>FX/E:0345</b> | <b>FX/D</b><br>—<br>250g<br>—<br>.0172<br>—<br><b>FX/D:0172</b> |
| <b>FX/C</b><br>—<br>125g<br>—<br>.0086<br>—<br><b>FX/C:0086</b>  | <b>FX/B</b><br>—<br>62g<br>—<br>.0043<br>—<br><b>FX/B:0043</b>  | <b>FX/A</b><br>—<br>31g<br>—<br>.0021<br>—<br><b>FX/A:0021</b>  |

| MESA [MS]  |   |   |
|--|---|---|
| <b>MS/F</b><br>—<br>1000g<br>—<br>.0690<br>—<br><b>MS/F:0690</b> | <b>MS/E</b><br>—<br>500g<br>—<br>.0345<br>—<br><b>MS/E:0345</b> | <b>MS/D</b><br>—<br>250g<br>—<br>.0172<br>—<br><b>MS/D:0172</b> |
| <b>MS/C</b><br>—<br>125g<br>—<br>.0086<br>—<br><b>MS/C:0086</b>  | <b>MS/B</b><br>—<br>62g<br>—<br>.0043<br>—<br><b>MS/B:0043</b>  | <b>MS/A</b><br>—<br>31g<br>—<br>.0021<br>—<br><b>MS/A:0021</b>  |

| SAGE [SG]  |   |   |
|--|---|---|
| <b>SG/F</b><br>—<br>1000g<br>—<br>.0690<br>—<br><b>SG/F:0690</b> | <b>SG/E</b><br>—<br>500g<br>—<br>.0345<br>—<br><b>SG/E:0345</b> | <b>SG/D</b><br>—<br>250g<br>—<br>.0172<br>—<br><b>SG/D:0172</b> |
| <b>SG/C</b><br>—<br>125g<br>—<br>.0086<br>—<br><b>SG/C:0086</b>  | <b>SG/B</b><br>—<br>62g<br>—<br>.0043<br>—<br><b>SG/B:0043</b>  | <b>SG/A</b><br>—<br>31g<br>—<br>.0021<br>—<br><b>SG/A:0021</b>  |

| CLAY [CY]  |   |   |
|--|---|---|
| <b>CY/F</b><br>—<br>1000g<br>—<br>.0690<br>—<br><b>CY/F:0690</b> | <b>CY/E</b><br>—<br>500g<br>—<br>.0345<br>—<br><b>CY/E:0345</b> | <b>CY/D</b><br>—<br>250g<br>—<br>.0172<br>—<br><b>CY/D:0172</b> |
| <b>CY/C</b><br>—<br>125g<br>—<br>.0086<br>—<br><b>CY/C:0086</b>  | <b>CY/B</b><br>—<br>62g<br>—<br>.0043<br>—<br><b>CY/B:0043</b>  | <b>CY/A</b><br>—<br>31g<br>—<br>.0021<br>—<br><b>CY/A:0021</b>  |