

THE PAINTING OF MASONRY

General Considerations . . . Preparing the Surface . . . Number of Coats . . . Formulas for Concrete, Stucco, Brick and Stone . . . Flat and Semi-Flat Finishes . . . Painting Concrete Floors

Fourth of a series of articles, designed to be filed for reference, on the painting of various building materials

THE painting of masonry is no more difficult than the painting of wood or metal. There is, however, one important difference. Brick, concrete, stone and stucco have extremely porous surfaces, while wood and metal surfaces are comparatively solid. In painting brick, concrete, stone, and stucco this porosity must be taken into consideration if best results are to be obtained. A specially designed priming coat should be applied that will fill up the pores and leave a solid, even surface for the second and third coats. Once this priming coat is on, the other coats need not be greatly different from those used on wood. Also, different degrees of porosity are encountered between stone and concrete and brick and stucco. This difference, too, must be taken into consideration in the priming coat.

Preparing the Surface

Brick and Stone.—All damaged places should be repaired before paint is applied. Either mortar or Portland cement may be used for this repair work.

If the brick is new, care should be taken to see that it is thoroughly dry before paint is applied. It is safer to allow two or three days of dry weather before painting. If the weather is cold, no painting should be attempted.

Stucco and Concrete.—Stucco, concrete or the mortar in brick and stone work should be allowed to stand and dry for at least a year before it is painted. Artificial aging is possible, however, by applying a solution made by dissolving two pounds of zinc sulphate in one gallon of water. After this solution has been applied, sufficient time should be allowed for the stucco or concrete to dry before the priming coat is applied.

Number of Coats

In order to secure the most satisfactory results, all masonry should receive three coats of paint—a priming or first coat, a body or second coat, and a finishing or third coat. At least four or five days should be allowed between coats.

Formulas: Brick and Stucco

Priming Coat

100 pounds Dutch Boy white-lead
7 gallons pure boiled linseed oil (or 7 gallons pure raw linseed oil and 1½ pints pure drier)
1 gallon pure turpentine
The preceding formula makes 10¾ gallons of paint and should cover about 5,375 square feet, one coat.

Alternate Priming Coat (Often preferred for brick and stucco)

70 pounds Dutch Boy white-lead
30 pounds Dutch Boy red-lead
5 gallons pure boiled linseed oil (or 5 gallons pure raw linseed oil and 1 pint pure drier)
¾ gallon pure turpentine

The preceding formula makes 8¾ gallons of paint and should cover about 4,885 square feet, one coat.

Second Coat

100 pounds Dutch Boy white-lead
4 gallons pure linseed oil (¾ boiled, ¾ raw)—(or 4 gallons pure raw linseed oil and 1 pint pure drier)
1 gallon pure turpentine
This formula makes 7¾ gallons of paint and should cover about 4,650 square feet, one coat.

Third Coat

100 pounds Dutch Boy white-lead
3¾ gallons pure linseed oil (¾ boiled, ¾ raw)—(or 3¾ gallons pure raw linseed oil and 1 pint pure drier)
1 pint pure turpentine
This formula makes 6¾ gallons of paint. It should cover about 3,900 square feet, one coat.

Formulas: Concrete and Stone

Concrete and stone are not as porous as brick and stucco; therefore they should be treated differently. The formulas below are specifically designed for concrete and stone.

Priming Coat

100 pounds Dutch Boy white-lead
5 gallons pure boiled linseed oil (or 5 gallons pure raw linseed oil and 1 pint pure drier)
1 gallon pure turpentine
This formula makes 8¾ gallons of paint. It should cover about 4,375 square feet, one coat.

Alternate Priming Coat

(Often preferred for concrete and stone)
70 pounds Dutch Boy white-lead
30 pounds Dutch Boy red-lead
4 gallons pure boiled linseed oil (or 4 gallons pure raw linseed oil and 1 pint pure drier)
¾ gallon pure turpentine
This formula makes 7 gallons of paint and should cover about 4,025 square feet, one coat.

Second Coat

100 pounds Dutch Boy white-lead
3 gallons pure linseed oil (¾ boiled, ¾ raw)—(or 3 gallons pure raw linseed oil and 1 pint pure drier)
¾ gallon pure turpentine
This formula makes 6¾ gallons of paint and should cover about 3,900 square feet, one coat.

Third Coat

100 pounds Dutch Boy white-lead
3½ gallons pure linseed oil (¾ boiled, ¾ raw)—(or 3½ gallons pure raw linseed oil and 1 pint pure drier)
1 pint pure turpentine

The preceding formula makes 6¾ gallons of paint and should cover about 3,900 square feet, one coat.

Flat and Semi-Flat Finishes

Excellent flat and semi-flat finishes on brick, stone, concrete and stucco can be secured by applying over the second coat one or two coats of paint made of Dutch Boy white-lead and Dutch Boy flatting oil. For flat Milwaukee finish, the proportions should be 2 to 3 gallons of flatting oil to 100 pounds of white-lead. For egg-shell gloss finish, use 1½ to 2 gallons of flatting oil and ¾ gallon of spar varnish to 100 pounds of white-lead. For brick-red finish on outside brick, thin the color with Dutch Boy flatting oil.

Painting Concrete Floors

The priming coat specified for concrete and stone can also be used for concrete floors but, because of the severe service to which a concrete floor is put, the second and third coats should be made to produce a harder finish than is used on walls. The following formulas will give this hard finish.

Second Coat

Before the second coat is applied, all cracks and other floor defects should be carefully repaired with putty. The putty should be firmly pressed into the cracks and smoothed over with a putty knife.

100 pounds Dutch Boy white-lead
1 gallon pure raw linseed oil
2 gallons pure turpentine
1 pint pure drier
This formula makes 6 gallons of paint and should cover about 3,600 square feet, one coat.

Third Coat

The third coat should be tinted with a little lampblack to match the natural color of the concrete.

100 pounds Dutch Boy white-lead
1 gallon pure raw linseed oil
1½ gallons pure turpentine
¾ gallon floor varnish
¾ pint pure drier
This formula makes 5¾ gallons of paint and should cover about 3,450 square feet, one coat. There are two things that must be kept in mind when applying paint to concrete floors. First each coat should be brushed on vigorously so that it will spread to a maximum. Second, each coat should be allowed at least four days to dry. One cause of sticky concrete floors is putting the paint on so thick that it does not dry thoroughly underneath.

Standard Specifications

Complete directions and formulas for painting the various materials used in building construction, including wood, metal, masonry and plaster, are contained in our "Standard Specification for the Use of White-Lead Paint" and our "Standard Specification for the Use of Red-Lead Paint." Both these specifications have in the back a supplement giving the specifications for paint materials of the American Society for Testing Materials and the United States Government. Copies may be had upon application to our nearest branch.

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