

GEORGE F. WOMRATH
BUSINESS SUPERINTENDENT

May 13, 1930

Subject: Paint for Schoolhouse
Interior Walls

Bureau of Standards
Washington, D. C.

Gentlemen:

Please send us your standard specifications or such specifications as you may have for the painting of schoolhouse walls and ceilings. We have putty coat walls and sand coat finish walls.

We have adopted a full gloss finish and three coat work.

We have found with some of the paints which we have used that after a year or two the paints crack, craze, check, peel, fade, lose their gloss, and turn yellow. Others will not stand repeated washing. These are some of the conditions which we hope you took into consideration when you prepared your standard specifications.

An early reply from you will be greatly appreciated.

Very truly yours,

George F. Womrath
Business Superintendent

GFW:Low

MAY 17 1930

EFH:JHMc

May 28, 1930.

VIA REGISTERED MAIL

V-1/ICP

Mr. George F. Womrath, Business Superintendent,
The Board of Education,
Minneapolis, Minnesota.

Subject: Paint for Interior Walls.

Dear Sir:

1. Receipt is acknowledged of your letter of May 13, 1930, concerning paint for interior walls.

2. We are enclosing copies of our Circulars Nos. 111 and 147 containing specifications for interior flat and gloss lithopone paints. We regret that we have no specifications covering a painting job for schoolhouse walls and ceilings. It is our opinion that the painting of plaster is an exceedingly difficult problem. Too often the paint is applied on new walls before the plaster has properly dried out. Again the plaster itself is subject to deterioration, and is often the cause of so-called paint failures. Likewise when a number of repaintings have been done, there is eventually a thick coat of paint built up on the plaster. Frequently the application of another coat of fresh paint may pull off this thick coating of paint down to the plaster.

3. In addition to the above-mentioned lithopone paints, interior paints for walls and ceilings are frequently made from mixtures of paste white lead or a combination of paste white lead and paste zinc oxide. To these are added linseed oil, turpentine and drier to make either gloss, semi-gloss or flat finishes. You will find formulas covering white lead paints in Technologic Paper No. 274, a copy of which is enclosed. In our opinion, these white lead or lead-zinc paints when properly made and applied are more durable than the ready-mixed lithopone paints. The usual lead-zinc types of ready-mixed exterior house paints are likewise very durable when used for interior purposes. In white, however, these exterior types of paint may show bad yellowing of the dried coat, when used on the interior.

4. In painting new walls, it is essential that the walls be dry before any paint is applied. A good size coat may consist of water-resisting varnish thinned with turpentine. After this is dry the first coat of paint should be thin and contain con-

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siderable boiled linseed oil. We suggest that you use the fewest possible number of coats of paint to give the desired appearance. Eggshell or gloss finishes wash better than the dead flat finishes.

5. You might be interested in the practice of one branch of the Government in painting new walls and ceilings. The priming or size coat is as follows: 100 pounds of paste white lead, 3 gallons of raw linseed oil, 5 gallons of turpentine and one gallon of drier. Coats of paint between this size coat and the finish coat are made as follows: 100 pounds of paste white lead, 2 gallons of linseed oil, 3 gallons of turpentine and one pint of drier. The finish coat is as follows: 100 pounds of paste white lead, 4 gallons of linseed oil, 1/2 gallon of turpentine and one pint of drier. This finish is an oil-glossy finish. In the above mixtures, zinc oxide paste in oil not to exceed 20 pounds may be substituted for an equal amount of white lead. We again emphasize the suggestion of using the fewest number of coats of paint consistent with the desired effect.

Respectfully,

E.F.H.
E. F. Hickson, Chemist.
pm

J.F.W.
Enclosures:
C 111 and 147.
T 274