There's a Fist Full of Savings in DUTCH BOY WHITE LEAD

LOW COST PER GALLON MIXED
. . . you thin it yourself when and as needed

LOW COST PER SQUARE COVERED
. . . you get lots of spread because it's "all lead"

LOW COST PER HOUR SPREAD
. . . you get more production because it works easily

LOW COST PER YEAR OF SERVICE
. . . you get jobs that give long-lasting protection

LOW COST FOR REPAINT PREPARATION
. . . you get white lead's freedom from future trouble

THE
DUTCH BOY
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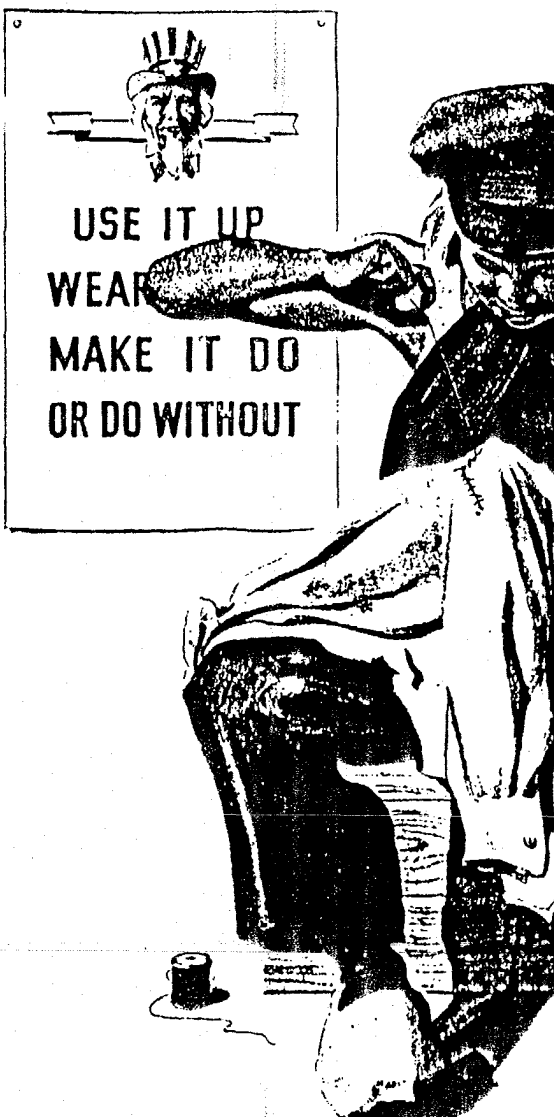


THE STORY OF DUTCH BOY'S WARTIME KEG

WHEN steel white lead and red lead kegs "went to war" many months ago, the fibre lead keg became a rather common object in many stores and shops around the country. The story of the development of this replacement package, which has done such a good job during the emergency, naturally should be of interest to those who stock it or work with it.

As has been the case with many another replacement item, the story is one of research and test, trial and error, all under the pressure of time and imminent restriction of promising materials.

The replacement of the familiar steel keg by the fibre container represents a development that started in 1942 and was successfully concluded in 1943, when volume production of the all-fibre keg was begun, following approval by the Consolidated Freight Classification Committee.

It was realized, at the start of the development of this container, that it must meet certain special requirements, the two outstanding being:

(1) Oil-proofness, so that it would retain the paste without loss of the linseed oil and volatile thinner.

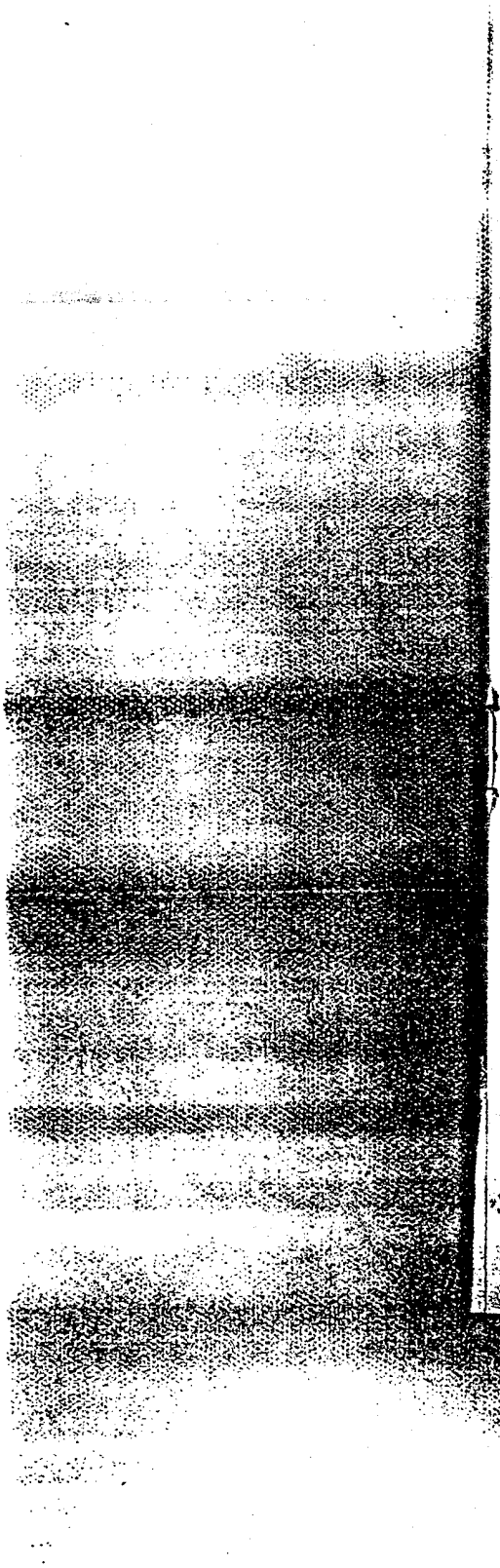
(2) Strength of construction, so that it would carry safely the heavy weight encountered in lead pastes.

Based on an article in "Modern Packaging" by F. J. Williams and A. R. Pitrot of National Lead Co. Laboratories.

While paint normally weighs from 10 to 20 pounds per gallon, soft paste white lead weighs approximately 30 pounds per gallon. The problem of carrying the weight was more serious, therefore, than it would be in the case of mixed paints, with the possible exception of ready-to-use white lead paint in 5 gallon kits.

The problem of retention of oil was undertaken first, since it was considered possible to properly design a container to carry one hundred pounds. Many materials of construction were tested but the emphasis was placed on wood and paper and combinations of these materials, because of their availability at the time.

In selecting a material of construction, wood was first considered because wooden kegs had been used for oil paste white lead prior to the use of steel. The consistency of the paste was quite stiff, and although some oil was absorbed by the wood, most of the oil was retained by the lead and the product was usable and unharmed by the container. However, the majority of the present day paste is soft paste which, while about the same weight as heavy paste, contains volatile thinner in addition to linseed oil. Such a paste is much more mobile than the heavy paste, and a serious vehicle loss would result if the retention by the container were inadequate.



An exhaustive series of tests on wooden containers of varying construction indicated that the retention was inadequate.

A large number of coated papers were tested for oil-retention with the thought in mind that these papers might be used in conjunction with other materials in fabricating a container. After many tests, a plasticized vegetable parchment was found which solved the oil-retention problem—it was oilproof and free from pinholes.

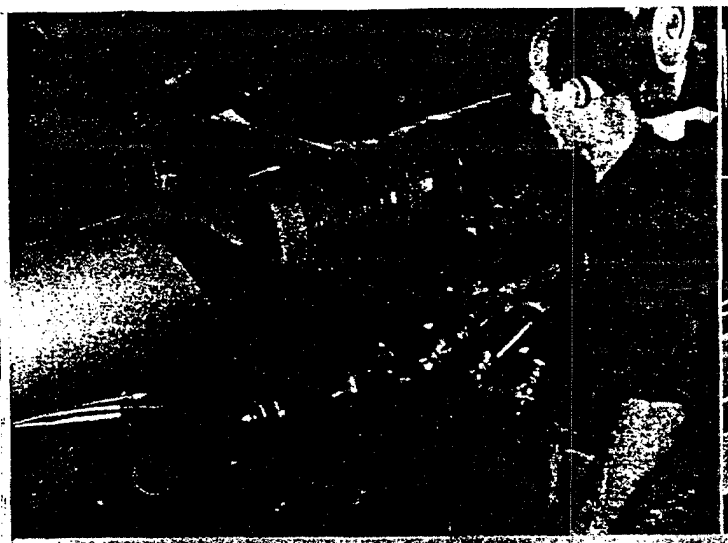
Once the problem of oil-proofing was considered solved, attention was turned to construction which would be suitable for carrying the weight involved. Since paper was to be used as the retention medium, it was also the logical and most adaptable material of construction. Spirally wound paper tubes were found to be sufficiently strong and easily constructed; furthermore, they could be lined with parchment during construction. The only weak spot in the proposed system was the adhesive used in gluing the parchment at the lap. A plasticized animal glue was found to be the only readily available material which would produce an oilproof seam and which would pass the necessary tests.

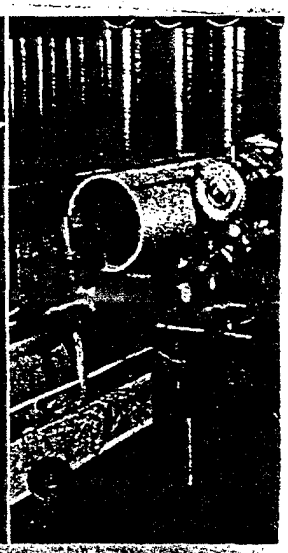
The construction of the container is relatively simple. The body is a spirally wound paper tube lined with oil-proof parchment and made in one continuous spiral winding operation. Both ends of the keg are identical, each consisting of three separate units —a parchment disc, a double disc assembly and a ring-sleeve assembly.

The sleeves or bands at the top and bottom of the kegs serve a dual purpose. Their primary function is to hold the discs in place and to fortify the ends. However, the bands also offer an area on which the container may be rolled without damage to the label, applied to the middle portion of the body. They also offer convenient hand holds for handling the container and finally and perhaps most important, they provide a cushioning area to prevent breakage or leakage when the keg is dropped, particularly when it is dropped on the chime.

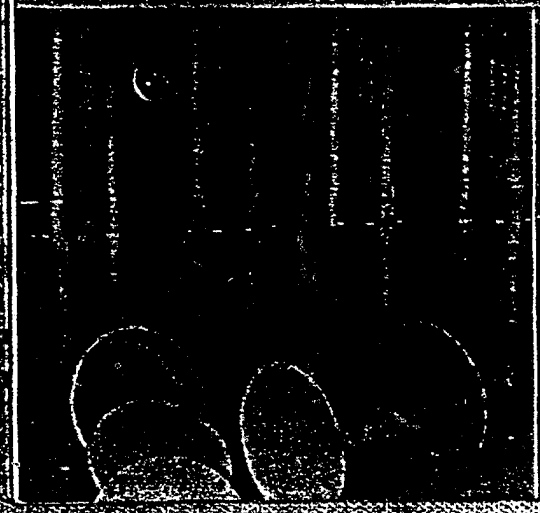
One end of the container is assembled when the container is made and the other end assembled after the container has been filled with paste lead. The opening of the container represents approximately the reverse operation. The top sleeve or band is removed, preferably by cutting through it with a hand saw, following which it may easily be stripped from the container. The disc or lid is then pried loose with a screw driver, leaving the parchment disc glued across the container like a drumhead. This disc, incidentally, is evidence to the consumer that the contents of the package have not been tampered with after leaving the filling bench. The disc is easily cut out by the painter, thus exposing the paste white lead, ready for use.

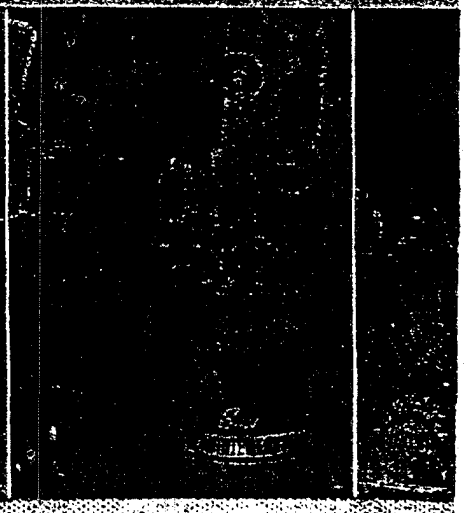
Turn page for photos which show various steps in the manufacture of Dutch Boy's wartime keg.



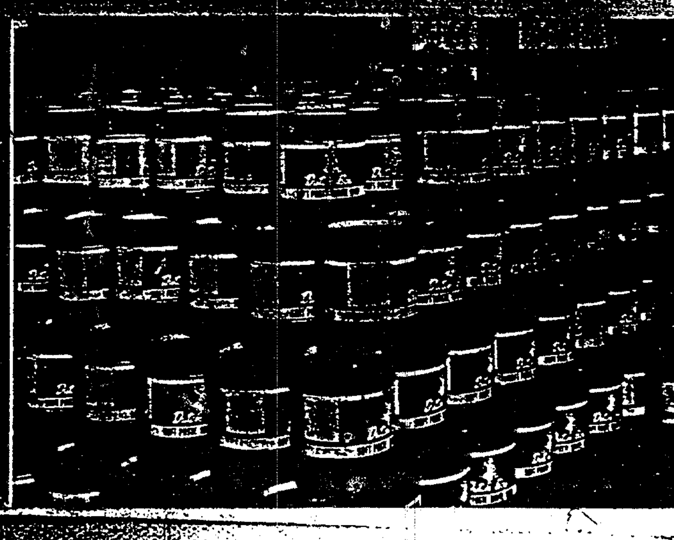


(1) The manufacture of the keg begins here. Both the body of the keg and the end bands or sleeves are spirally wound, numerous plies of paper being necessary for strength. (2) The spiral tubing is trimmed from the winding machine as a continuous fibre "pipe". As it reaches the point shown here an automatic cut-off saw rough cuts the keg bodies and bands to the proper sizes. Another machine smooths off the edges. (3) Die cut heavy fibre discs for the heads and bottoms of the kegs are wire stapled together on this machine. (4) Here the ring which helps form the top and bottom band assembly is stitched to the inside of the band. (5) A complete fibre container, with ends disassembled, before the Dutch





Boy label is put on. Note the metal stitches or staples on the stacked kegs. This is the only metal used in the construction of the wartime keg. (6) One hundred pounds of Dutch Boy Soft Paste White Lead goes into a fibre keg from a filling spout in the Dutch Boy factory. (7) After oil-proof glue has been brushed around the top and the edge of the filled keg, the parchment disc is put in place and the cover seated on it, the band is forced down to complete the closure of the keg. (8) A warehouse view of a stock of 100 lb. kegs of Dutch Boy Soft Paste White Lead. These fibre kegs stack well, roll straight, handle nicely, and, as painters have found, are quick and easy openers.



PAINTING MASONRY MATERIALS

WARTIME wear and neglect take their toll not only of exposed wood and metal surfaces but of masonry structures as well. Neglect of a frame dwelling is evident in the initial stages in a failing paint coating, later in loosened siding, curled shingles and rotted posts and columns. On structural metal, neglect shows up chiefly in the form of rust. On masonry, however, the evidences of neglect, or perhaps it should be called the need of attention, may not stand out so plainly. Often the first sign something is wrong with a brick, stucco or concrete wall is moisture appearing on the interior surfaces of the building. In some cases, cracks due to settling of the structure or to shrinkage of the masonry materials cause considerable trouble which might have been avoided had they been properly painted in their early stages, before they have widened and deepened beyond the painter's "jurisdiction".

Even in this enlightened day there still are painters who won't paint brick, stucco or concrete buildings if there are enough frame houses to keep them busy. Actually, there is no reason to anticipate trouble with masonry if a few simple precautions are observed. In the first place, the material should be thoroughly dry and clean before any paint goes on. Bare brick, stucco and concrete absorbs a lot of moisture in humid weather and during rains. As a matter of fact, a brick or stucco surface will easily absorb as much moisture during an hour's driving rain as the material can give up during a week of drying out. It takes plenty of warm, dry weather to rid masonry of moisture. The penalty for impatience is well known—a blistered and peeling film. So wait for the material to dry out completely before painting.

Giving mortar courses and joints a good paint coating is highly important in painting brick work. The brick faces may be sealed water tight by good paint, but inadequately painted mortar allows moisture to seep into the wall.

Next be sure to clean off dust and dirt, especially on stucco jobs. No one is putting on any more coats than he has to these days so it doesn't do to mix the dirt into the first coat of paint, figuring that later coats will cover up the discoloration completely. "Clean it up and save a coat of paint," is a good motto in masonry painting.

Of great importance in the preparatory stages of painting brick, stucco and concrete is the repairing of joints and cracks. The finer cracks can readily be filled with paint, but the larger fissures probably will have to be filled with white lead and linseed oil putty or caulking compound after the first coat of paint has been applied. If there are cracks, joints and holes so large that they have to be repaired with cement stucco, they should be filled before painting since the patching stucco will not stick to paint.

Rough stucco is hard on ordinary bristle brushes (and good ones are practically irreplaceable nowadays, as you may have discovered) so many painters do this type of painting with the Dutch brush shown here.

So much for the pre-painting treatment of bare brick, stucco and concrete. Masonry surfaces previously painted with cold water type paints should be vigorously wire-brushed to remove the old coating completely. Where oil base paints have been used, and the old film is intact, the surface may need only a brushing-off to remove dust and dirt.

Now, about the paint. Pure white lead, as always, is still the preferred paint for masonry as well as frame structures. The way it goes on, the way it looks, the way it protects, the

way it wears, *and* the way it *wears out* set white lead apart. Today, however, the painter may choose between paste white lead and ready mixed pure white lead paint. Dutch Boy Pure White Lead Exterior Primer can be counted on to do a top quality, decorative, durable, semi-flat job on masonry surfaces, and it will effectively stop ordinary moisture seepage. Two coats of this Primer should be applied, just as it comes in the container, with a couple of good drying days between the coats.

If the Exterior Primer is not available, Dutch Boy Soft Paste White Lead may be used, as follows:

Painting Exterior Stucco, Concrete and Stone

Materials	Priming Coat	Second Coat	Finishing Coat (Gloss)	Finishing Coat (Semi-Gloss)
Dutch Boy Soft Paste White Lead*..	100 lbs.	100 lbs.	100 lbs.	100 lbs.
Dutch Boy Linseed Replacement Oil.	5 gals.	2 gals.	3¼ gals.	1 gal.
Pure Turpentine	...	1 gal.	...	...
Dutch Boy Flatting Oil	...	...	...	2 gals.
Paint Produced	8¼ gals.	6¼ gals.	6½ gals.	6¼ gals.
Coverage Per Gallon, 1 Coat.....	200 sq. ft.	400 sq. ft.	500 sq. ft.	500 sq. ft.

Painting Exterior Common Brick

Materials	Priming Coat	Second Coat	Finishing Coat (Gloss)	Finishing Coat (Semi-Gloss)
Dutch Boy Soft Paste White Lead*..	100 lbs.	100 lbs.	100 lbs.	100 lbs.
Dutch Boy Linseed Replacement Oil.	5 gals.	3 gals.	3¼ gals.	1 gal.
Pure Turpentine	¾ gal.	1 gal.	...	...
Dutch Boy Flatting Oil	...	...	...	2 gals.
Paint Produced	9 gals.	7¼ gals.	6½ gals.	6¼ gals.
Coverage Per Gallon, 1 Coat.....	200 sq. ft.	400 sq. ft.	500 sq. ft.	500 sq. ft.

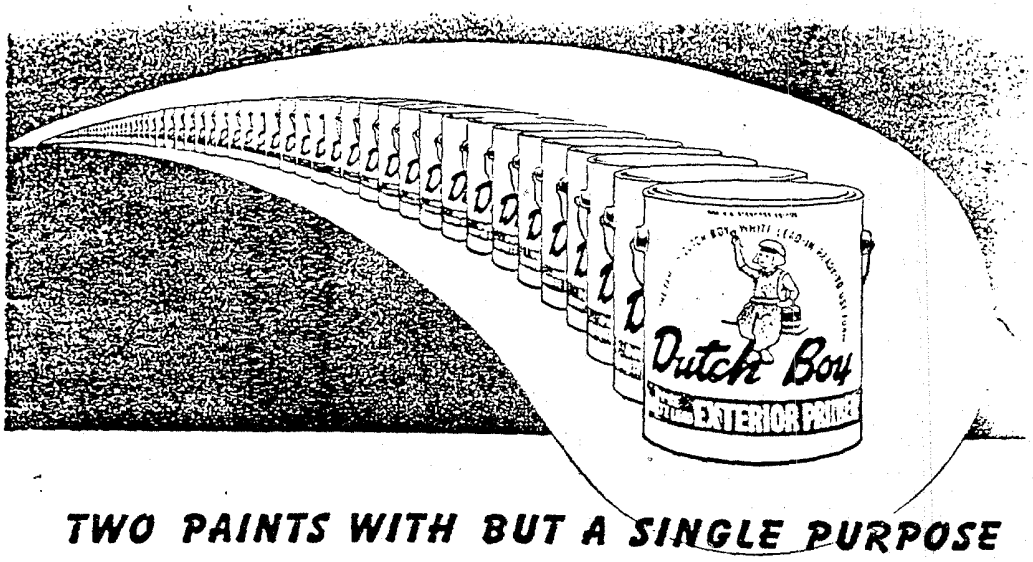
Repainting Previously Painted Brick, Stucco, Concrete and Stone

Materials	First Coat	Finishing Coat (Gloss)	Finishing Coat (Semi-Gloss)
Dutch Boy Soft Paste White Lead*.....	100 lbs.	100 lbs.	100 lbs.
Dutch Boy Linseed Replacement Oil.....	2 gals.	3¼ gals.	1 gal.
Pure Turpentine	1 gal.	...	...
Dutch Boy Flatting Oil	...	...	2 gals.
Paint Produced	6¼ gals.	6½ gals.	6¼ gals.
Coverage Per Gallon, 1 Coat.....	400 sq. ft.	500 sq. ft.	500 sq. ft.

* If heavy paste white lead is used, add 1 quart of turpentine to all formulas.

Each coat should be allowed a couple of days of good weather to dry and harden properly before the next coat goes on. During damp weather, a week may be needed between coats.

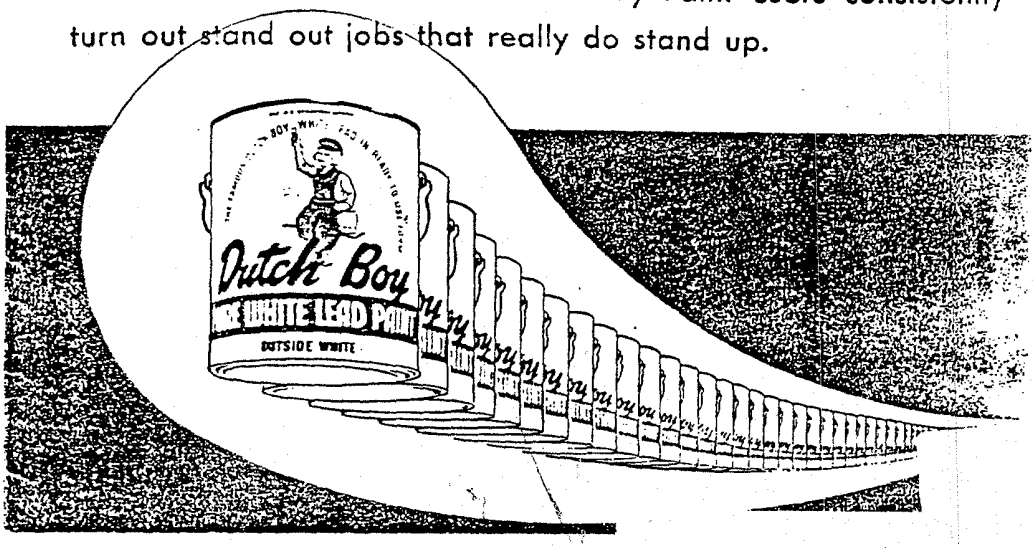
Stucco of magnesite composition should never be painted with an oil paint. The salts in the magnesite have a harmful effect on the oil, causing an early failure of the paint.



TWO PAINTS WITH BUT A SINGLE PURPOSE

...to produce stand out two-coat jobs that stand up

No question about it—it takes a paint with lots of lead to give you jobs with lots of looks and lots of life. The Dutch Boy Two-Coat System teams up a pair of paints that are loaded with lead: The Primer is an all-lead paint ... and so is the Outside White. No wonder Dutch Boy Paint users consistently turn out stand out jobs that really do stand up.



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