

PLASTIC OR MASTIC COVERINGS FOR EXTERIOR WALLS OF HOUSES

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Home owners in many parts of the United States are being solicited through newspaper and direct-mail advertising to employ "applicators" to cover the side walls of their houses with a plastic or mastic material that will "end painting forever." The material itself is not sold to the public or to painting contractors; the "applicator" must be hired to put it on, although he often hires a commercial spray painter in the neighborhood to do it. As a rule, the advertising insists that the material is not a paint, although it is applied by spray guns just like paint. It is often called plastic siding. The covering is said to be as much as 10 or even 15 times as thick as a coat of paint, or to be 5/64 inch (78 mils) thick. Actual jobs observed however, have usually been nearer 20 mils thick, which is 4 to 5 times the thickness of a good coating of ordinary house paint. Besides extraordinary durability with no paint maintenance, the advertising commonly claims high thermal insulation and complete immunity to weather, fire, decay, and termites.

Applicators offer to put the plastic covering over wood siding, shingles, shakes, masonry, or metal, even if the surfaces have been painted previously. The principal sales so far seem to have been for houses on which there have been repeated failures of ordinary paints that have caused the owners to lose confidence in paint and to seek some alternative to it. House owners with troublesome paint problems should consider carefully the position in which they will find themselves if the claims made for the plastic covering prove no more reliable than the much less extravagant promises that were made for the ordinary house paints they have been using. If removal of 5 mils of paint is now considered prohibitively expensive, what will be the cost later on of removing an additional 20 mils of plastic material?

Competent technologists know of no way in which the ability of an entirely new product to do all that is claimed for the plastic coverings could be reliably determined by either the maker or by testing laboratories in the few years that have elapsed since they are alleged to have been invented. Moreover, there should always be grave doubts about radically new products that are offered to the public without qualifications before technical data to prove their worth has been published in the professional journals. The insistence in the advertising that the plastic coverings are not paints,

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when in composition and in use they clearly are paints, affords good reason for skepticism about other claims made for them. Accordingly, Better Business Bureaus, the National Painters' Magazine, the National Paint, Varnish, and Lacquer Association, and other experienced agencies agree in advising great caution about acceptance of the plastic coverings.

It is sometimes claimed that the plastic coverings were used by the armed services during the war. It is true that a thick coating of paint containing ground cork or other insulating material was applied on cold-water pipes to minimize sweating when more effective pipe coverings could not be used. There are, however, no published records of any uses of plastic coverings by the armed forces that would furnish evidence of their ability to give lifetime service on the exteriors of wood houses.

Some of the advertising of plastic coverings offers nicely printed guarantees of 10-year or even 20-year service. House owners should read such guarantees carefully to see exactly what, if anything, is promised if the performance of the product proves unsatisfactory. They should also consider carefully what assurance there is that the applicator will still be in business under the same corporate name 5 or 10 years from now.

Experienced paint men know that the chances of good performance decrease rapidly as the thickness of a coating increases beyond an optimum of about 5 mils. Wood can be reliably covered with thick layers of plastic of various kinds if it is done on clean, new wood under the controlled conditions of factory operations, but such favorable conditions rarely occur in working with old houses at the site. Often the chief reason for the paint failures that lead a house owner to become allured by the claims for plastic coverings is excessive thickness of the coating already on the house, which results from too frequent or too generous repainting. It would be indeed surprising if, after removing only the loose paint from such surfaces, reliable performance could be obtained by covering the surface with an additional 20 mils or more of new coating of any kind. Moreover, it cannot be assumed that the old paint left underneath is itself chemically stable, for when shut off from light and air by subsequent coatings, old brittle paint sometimes softens and relieves. One kind of paint blistering often seen on older houses, in which a glossy, varnishlike layer is found under the blisters, comes from such relieves of very old paint. The same sort of deterioration of old paint would be expected to go on under a plastic covering.

Another frequent cause of early paint failures is the entrance of excessive moisture into side walls of houses from time to time. The water may come from inside the house as condensation during cold weather, or it may come from outside when storm water penetrates through leaks of one kind or another. Such cases require proper corrective measures to keep the side walls dry, for the harm done to the paint may be relatively unimportant in comparison with the loosening and possible decay of the structural members of the house that may eventually take place if the condition is allowed to continue. Merely covering the outside with a thick plastic coating that retards drying out of the side walls even more than ordinary paint does, may well serve to hasten permanent damage to the structure.

Wood houses can be kept well painted with ordinary house paints of good quality for many decades without encountering serious trouble with peeling and scaling. In all parts of the United States houses can be found that were built in pioneer times, remain standing, and have a continuous history of successful paint maintenance, with the intervals between paintings at least 6 or 8 years apart, on the average. There is no reason why such successful past experience cannot be enjoyed in the future provided any faulty conditions in present houses are corrected, paints as reliable as those of former times are used, and reasonable practices of application and maintenance are followed. House owners who are having troubles with paint, will be wise to determine the reasons for their difficulties and to correct them by following procedures known to be reliable on the basis of long experience, rather than to seek an easy but doubtful solution in novel materials that have yet to be tested in service.