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### Ohio State Engineer

**Title:** Porcelain Enamel

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**Issue Date:** Nov-1938

**Publisher:** Ohio State University, College of Engineering

**Citation:** Ohio State Engineer, vol. 22, no. 1 (November, 1938), 11-13.

**URI:** <http://hdl.handle.net/1811/35553>

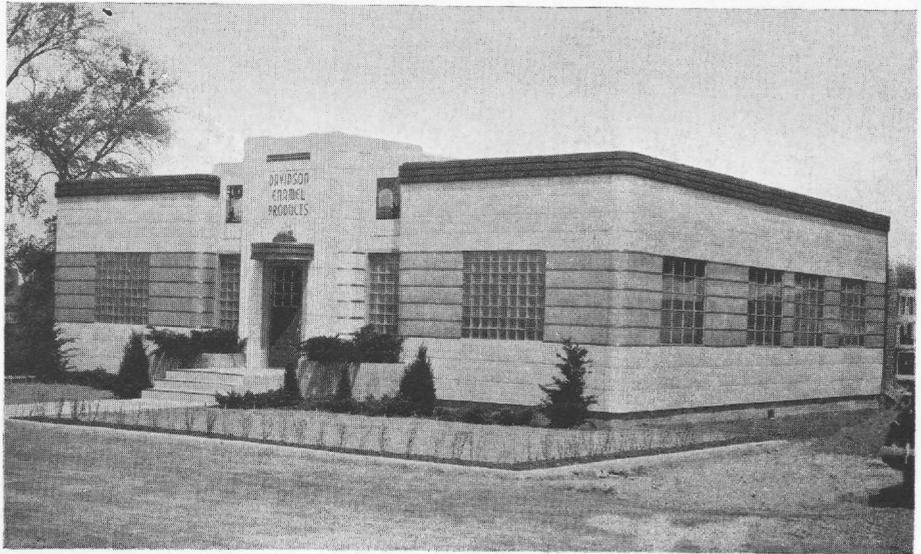
**Appears in Collections:** [Ohio State Engineer: Volume 22, no. 1 \(November, 1938\)](#)

# PORCELAIN ENAMEL

By ROLAND H. LYNCH

A porcelain  
enameled office  
building

*Courtesy of "Better Enameling."*



**I**F it were possible "to turn back the clock" many people would realize for the first time the vast number of changes that have taken place in the appearance of our modern buildings; for with the pell mell rush of this pre-occupied generation the sparkling beauty of our modern design is, to a large extent, unnoticed.

Storefronts — in reality glorified advertising signs — must attract these not-too-attentive shoppers through showmanship. Thus beauty and showmanship are becoming increasingly important in the advancement of porcelain enamel products as a facing material, both exterior and interior.

Porcelain-enameled iron is obtainable in a great variety of colors and in addition is readily adaptable to the complex curves and shapes of modern design with the minimum of alteration. Commercial buildings as well as restaurants, theaters, bus stations and filling stations are now being faced with this material in large numbers because of its attractiveness rather than its low maintenance cost.

The method of construction and the type of enamel used depends somewhat upon the locality. To insure lasting beauty and resistance to weathering the enamel is specially treated in regard to temperature, humidity and nearness to the ocean.

The conventional type of construction employs the use of enameled iron as a veneer in the form of huge panels which are attached to a wood or metal substructure by means of numerous clips. Oftentimes insulating boards are used as a backing to prevent waviness.

Enameled iron looks well with almost any type of material as can readily be observed with a glance at

any of the countless remodeled storefronts. Combinations of various materials with porcelain-enameled iron are now coming to life in our theaters, night clubs and apartment houses.

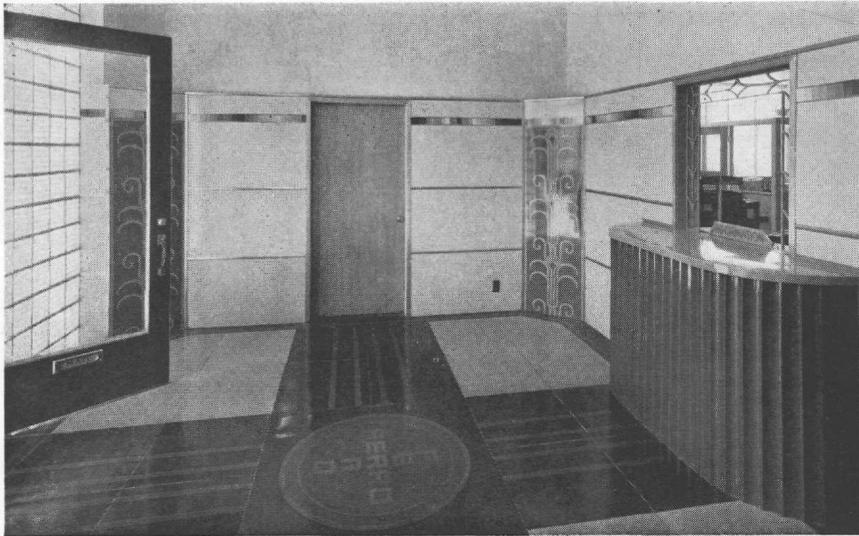
Modernization is pointing toward the increased use of porcelain-enameled iron in the residential field. Rapid growth in this field will certainly take place in the next few years as the news of its durability and beauty spread throughout the country. Even now, in the interiors of many homes, enameled iron has made a start in kitchens and bathrooms as a means of providing a clean, washable surface.

Porcelain enamel is an ideal finish for service stations. Its reflective qualities attract the attention of motorists both day and night when they are far enough away to slow up and make up their minds to stop. Although somewhat more expensive than the usual service station the fact of having a station that is indestructible and attractive — and will remain attractive for many years — more than compensates for any additional expense and leads to greater economy in the end.

Various types of display cases have long been faced with a porcelain-enameled material. These cases have proved again and again their worthiness and have led the way for the complete installation of porcelain fixtures in markets and groceries.

Permanence and durability are factors of primary importance to the advancement of porcelain-enameled products. Accurate observations and studies have proved beyond the possibility of a doubt the durability of porcelain-enameled products as a building material.

In the great Ohio River flood of somewhat more than a year ago the advantages of porcelain-enameled



A completely porcelain enameled office lobby—walls, ceiling and floor.

*Courtesy of "The Enamelist"*

iron over other types of material were clearly demonstrated. After the water had receded, it was a simple matter for the operators of a certain filling station to wash their station with the hose and give it the appearance of a new structure. Had another type of material been used it would probably have been necessary to have the building completely remodeled in order to restore it to a semblance of its former appearance.

Trailers, large and small, luxurious and crude, have given birth to an industry whose limits are unpredictable due to the speed with which it has established itself. Trailer owners demand durability, convenience and cleanliness, so the manufacturers naturally turned to porcelain enamel as a means of fulfilling these requirements.

A present-day trailer, with its porcelain-enameled sink, stove, mixer and refrigerator, is much more convenient than most homes of a decade ago. Appliance manufacturers have been cooperating with trailer builders in order that these new models can be equipped with miniature household necessities which will continue to increase the livability of these houses-on-wheels.

Twenty years ago porcelain-enameled signs could be found scattered here and there — today tourists see hundreds of thousands of these signs along our highways and in our state and national parks. These early signs have definitely stamped the fact that porcelain-enameled signs are by far the most economical signs in the long run and have paved the way for an ever-increasing usage of porcelain-enameled signs. Painted signs are expensive and will not withstand weathering, to say nothing of the other countless trials that signs must endure.

Trying tests of altitude and climate, fire and flood, have decisively proved that porcelain-enameled signs are the only practical signs for forests and parks. Hundreds of signs including direction signs, trail signs, altitude information, general information, historic information, names, camp signs and many others too numerous to mention, are required in even a single park.

Hardiness alone is not the entire story behind the use of porcelain-enameled signs in forests and parks. A material must be used that will blend artistically with the background or, if necessary, provide a sharp contrast in case of "Warning" or "Danger" signs. Porcelain enamel, with its variety of colors, makes an ideal material for these signs, and in addition it requires no cleaning. If the signs should ever become dirty or dusty the first shower washes them off, leaving them clear and gleaming without the necessity of having them cleaned.

Many of our great bridges employ the use of porcelain-enameled signs for use in promoting traffic movement at a safe, reasonable speed with the least possible chance for mis-direction or accident.

The San Francisco-Oakland Bay Bridge is equipped with small porcelain-enameled signs numbering over five hundred in addition to the huge porcelain-neon combination used for the large approach and direction signs. These signs vary from a few inches square to the incredible size of ten by fourteen feet. All of the signs on the bridge are reflectorized or illuminated in such a manner as to provide the greatest possible visibility in case of fog and other adverse weather conditions. It seems highly probable that a great percentage of our future bridges will employ these attractive, durable porcelain-enameled signs — signs which will outlast the bridge.

Our present day factories, in their efforts for better illumination are turning to enameled iron. Enameled surfaces offer a great degree of reflectance which is never lowered by the absorption of dirt and dust as are painted surfaces. Porcelain enamel, once installed, is there to stay — it does not need to be replaced every year or two — and because of this lasting quality will doubtlessly become of increasingly greater importance in solving our illumination problems.

Porcelain enamel has long been a necessity to the comfort and convenience of the home. Mixing machines, refrigerators, stoves and washing machines are

among the household articles which in addition to the earlier plumbing fixtures, bath tubs, wash basins and soap dishes, are now finished in porcelain enamel. Kitchen utensils in porcelain enamel may now be obtained in almost any desired color or combination of colors to fit in with the color scheme of the kitchen. Not a day passes that some household drudgery is not lessened or completely destroyed by this ally of comfort, sanitation and health and we hope not a day will pass by in the future that will not find a new use for porcelain enamel in the household utility line.

Among the more recent uses of porcelain enamel is its application to machines and equipment. Because of its hard, enduring surface, porcelain-enameled machine surfaces maintain high efficiency over long periods of time. Diesel engine manifolds as well as some of the higher priced automobiles are coated in places with porcelain enamel for appearance and rust prevention. Pumps and pump parts which come in contact with corrosive substances are often protected by a covering of corrosion-resisting porcelain enamel. Textile factories use porcelain-enameled thread guides to prevent worn and frayed threads. Tanks and vats for manu-

facturing corrosive liquids are usually enamel-lined. Milk cans and brewing equipment are lined with porcelain enamel to prevent metallic contamination. Porcelain enamel will not soon be forgotten in the machine and equipment line as it has grown to be an important factor in preserving and increasing the longevity of machines and equipment.

Although the process of porcelain enameling was known long ago, it is only within the past few years that rapid progress has been made in this field. We can expect and will have great advancement in this field in the future as this material with so many properties of great importance in the improvement of our innumerable modern necessities is certain to be used more and more in this modern world of changes.

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