

Paint for Preservation-

Of the great many American traditions, the tradition of waste is surely the most tragic. Over the past several decades, a great deal has been done to rectify the condition: checks on soil erosion, gains in reforestation, dramatic improvement in water conservation. Despite a heavy consumer education program, however, property losses continue to run in excess of five billion dollars annually because of the mis-use, or even the non-use, of paint.

The lesson is clear: "Save the surface and you save all". Properly selected and applied, paint may be called the purest form of property conservation.

In recent years, the paint industry has made remarkable technological strides. Special coatings have been developed for almost every imaginable surface. This progress has created a certain degree of consumer confusion—both in product selection and application.

Following is a brief examination of some of the newer coatings:

Prepared expressly for

Park Practice GRIST by:-

The National Paint, Varnish and
Lacquer Association, Inc.
1500 Rhode Island Ave., N. W.
Washington 5, D. C.

Two-Component Finishes

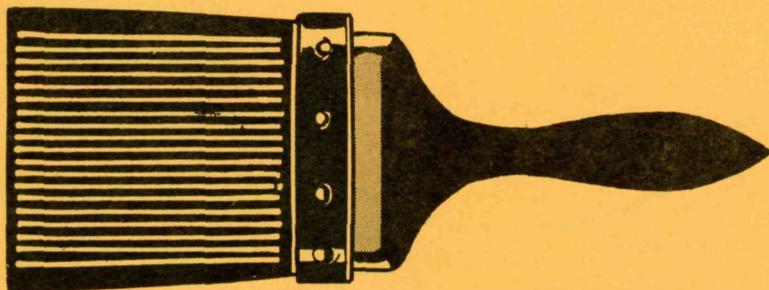
One of the developments that has attracted much attention is the use of two-component coatings. These consist of a resin and a catalyst or curing agent. They are mixed just before use and immediately start a chemical reaction. This reaction takes place on the surface, in the container, or anywhere else, and operates to "dry" the coating. It does not require the presence of air or the evaporation of solvent. It therefore permits the use of very thick coatings and enables the rate of cure to be adjusted with high precision depending on the requirements of the job. Unfortunately, the coating will cure just as rapidly in the container or on the brush and it therefore has a very limited useful life after mixing.

These coatings, however, have set new standards for hardness, adhesion, and chemical and abrasion resistance. In spite of their application problems, they have found substantial use in a number of specialized areas. Urethane two-component systems have extreme abrasion resistance and are used substantially in floor and deck enamels. Their color and color retention, however, are not always the best that could be desired. Polyester coatings have excellent exterior durability, color and color retention, and resistance to chemicals. Unless particular care is paid to the preparation of the surface, they may be deficient in adhesion. Epoxy coatings of this type are particularly noteworthy for their adhesion to most surfaces, but may be somewhat deficient in their exterior durability, particularly in the resistance of pigmented coatings to chalking.

The coating to be used in this group depends on the particular problems encountered. At present, coatings of this sort are produced for general use only on a limited basis. The tendency is to formulate a specific coating for a specific end use, since wide variations of properties may be obtained by variations in formulation.

Epoxy Coatings

The term "epoxy coatings" may be applied to any coating which contains a significant proportion of an epoxy resin. We have already discussed the two-component epoxy coating. It is possible, however, to make a wide variety of coatings containing epoxy resins which behave much more like conventional paints and varnishes in that they are one container products with a reasonable shelf life, which dry on exposure to air. These coating have excellent hardness, resistance to chemicals, and adhesion to smooth or glassy surfaces. Substantial use has been found for them in primers, furniture finishes, and industrial maintenance coatings.



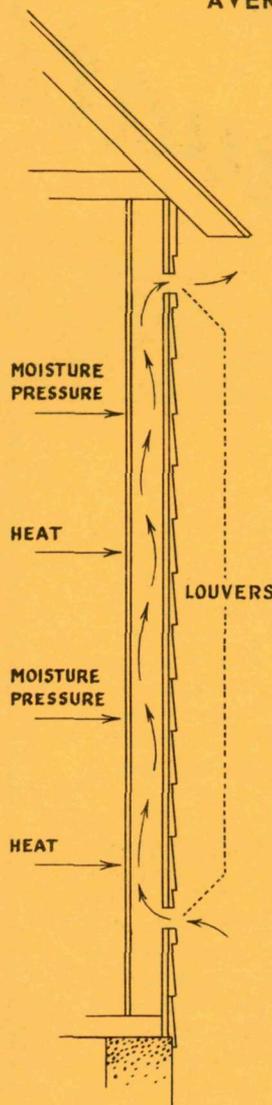
Urethane Coatings

In general, increasing urethane content is associated with increasing abrasion resistance and resistance to water and chemicals. A number of types of these coatings are available. Some of them are air drying, some converting by heat, and others converting by reaction with the moisture in the air. These materials are largely formulated for specific end use.

Polyester Coatings

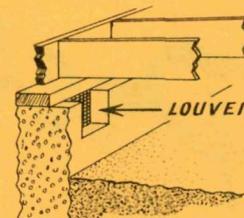
While it is possible to make one component polyester coatings, there are relatively few of these available. Only the two-component materials mentioned previously are available commercially.

AVERT THE MENACE OF MOISTURE



To protect exterior walls from moisture that invades from the room side, good ventilation is necessary.

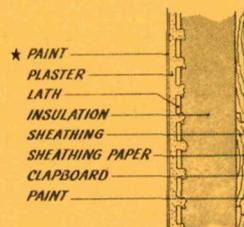
Crawl-space must be adequately ventilated



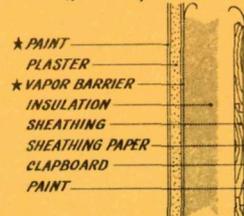
A house that's 20' x 30'—one that contains 600 square feet—requires 4 ventilators for the crawl-space. These should have a total area of at least 2 square feet. If screens or louvers are used, the openings must be larger.

Vapor barriers retard the invasion of moisture from the room side.

OLD CONSTRUCTION
Use paint as a vapor barrier

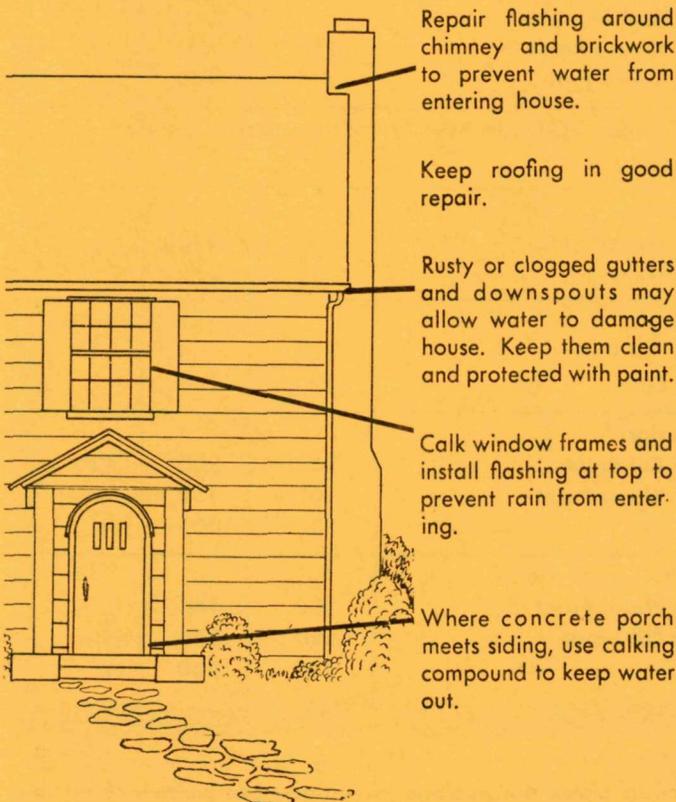
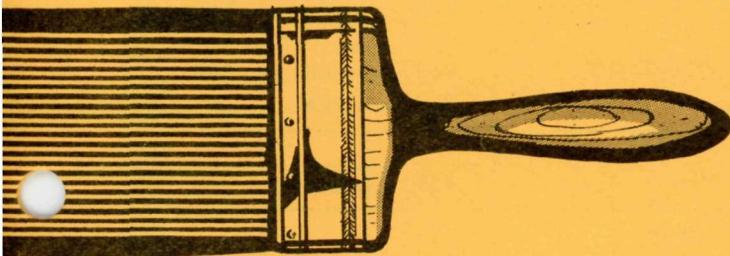


NEW CONSTRUCTION
Make doubly sure by using both types of vapor barriers



Latex Paints

Latex paints as a general product have been available for 15 years and cannot properly be described as "new". Their ease of application, rapid dry, ease of clean-up of brushes and rollers, and their resistance to alkali have made them very attractive to users. For interior walls and exterior masonry they are one of the standard and most useful products with a very substantial history of satisfactory performance. Only in recent years have latex paints with sufficient flexibility been developed to permit their use on exterior wood and on bituminous surfaces. They are among the established coatings for concrete, stucco, brick, cinder block, and similar surfaces. Latex paints do not generally have a very high degree of resistance to penetration by moisture vapor or standing water. Unless specially formulated in a floor and deck enamel, they are likely to be lacking in abrasion resistance. Since the latex products of different manufacturers may differ substantially in some of their properties and best conditions for use, it is even more important than ever that the manufacturer's directions for the use of these products as given on the label be followed implicitly. In particular, most manufacturers recommend the use of a specific primer as part of the "system", and the entire recommended system must be used to obtain the results desired.



Repair flashing around chimney and brickwork to prevent water from entering house.

Keep roofing in good repair.

Rusty or clogged gutters and downspouts may allow water to damage house. Keep them clean and protected with paint.

Calk window frames and install flashing at top to prevent rain from entering.

Where concrete porch meets siding, use calking compound to keep water out.

How to Rescue the OUTSIDE of Your Home from The Menace of Moisture

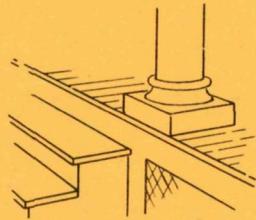
WATCH THESE DANGER SPOTS FOR MOISTURE



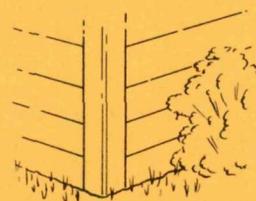
GUTTERS AND DOWNSPOUTS



WINDOW FRAMES AND SURROUNDING AREAS



STEPS AND PORCH POSTS



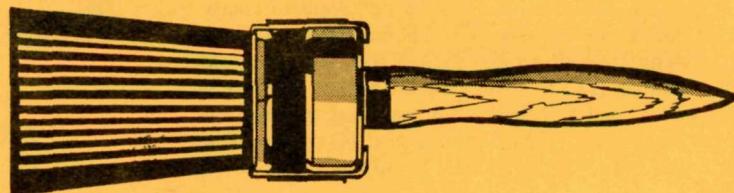
WOODWORK NEAR GROUND

Summary

There are certain serious problems which the ordinary user of these newer products must bear in mind. In the first place, many of these products are not readily available at every paint store. They must be formulated for a more or less specific end use. With the exception of latex, there are few general purpose paints in these newer categories. It is not economically feasible for the ordinary paint store to stock the wide variety of coatings needed to meet an ever-growing number of end uses. The consumer should not jump to the conclusion that simply because a paint is of a certain type which has given satisfactory performance or has been recommended to him, that it will perform satisfactorily for the end use he has in mind. To obtain satisfactory products in these newer finishes, a user must either buy in sufficient quantity that it is worthwhile for someone to make it for his particular end use or locate a source that has his particular end use in mind.

Very few of these newer materials behave exactly like the conventional paints. Requirements for mixing, thinning, surface preparation, and curing are likely to be substantially different from those of the oil, alkyd and latex paints that the user has become accustomed to. Therefore, it is very undesirable to follow some routine

which has been historically satisfactory with the older types of paints unless the manufacturer recommends it. This is most notably the case in surface preparation. For example, although two-component urethane floor finishes have remarkable abrasion resistance and will normally last three or four times as long as a conventional floor and deck enamel, they are likely to be deficient in adhesion to a floor which has not been properly cleaned. If the user is not prepared to do the type of surface preparation recommended by the manufacturer of these products, he will probably get better performance from a conventional floor and deck enamel. This problem is serious enough that with some of the specialized coatings the manufacturer will not sell them to the general public, but will only allow their use by franchised applicators who are properly trained in the requirements of surface preparation and application.



Concrete

So far as paint is concerned, alkali is public enemy number one. As concrete ages, the alkali at the surface neutralizes and leaches out. Thus, the older and drier the concrete, the less the painting problem.

Happily, the paint industry has developed alkali-resistant coatings, and these should always be employed where you are in the least doubt about the dryness of the surface. Where a moist concrete surface must be painted, Portland cement paint is the logical choice, since - in its case - moisture actually im-

proves the paint's cure. Still, the wise objective is to absolutely prevent the original seepage of the moisture into the cement. One may achieve this by applying a preventative coating (alkali-resistant) to the surface in direct contact with the moisture's source: the ground side of a wall or the underside of a floor, for instance.

Under ideal conditions, it is perfectly true that massive concrete-mixed, poured and cured in just the right way-will withstand erosion and decay. But do understand that "ideal conditions" means absolute protection from moisture, chemicals and abrasion, and the only absolute protection known to Man at this date is the proper paint.

Now let's consider some projects which may be on your agenda:

1. SWIMMING POOLS

(New) Cure period for fresh concrete is at least 30 days, longer under poor drying conditions. Water evaporation will bring salts to surface (efflorescence). Before painting, thoroughly clean and etch (muriatic acid). Recommended for etching: sprayer for side, long handled stiff brushes for bottom. Thoroughly scrub and wash down after etching, allow to completely dry.

(Old) Drain and wash down, then scrub entire surface to remove all deposits (algae, sediment, loose paint), check and correct cracks and other leaks. Where new concrete patches are necessary, follow with etching. Dark areas indicate mold or fungus, and should be scrubbed with tri-sodium phosphate base cleaner to kill growth. Wash and dry.

If old pool has been previously painted, and peeling is evident, all paint must be removed (sandblasting recommended). If peeling is not evident, merely check points mentioned in preceding paragraph. In any case, final step before painting should be to completely wash and dry.

Where the pool is new or old, any exposed metal present requires special treatment before painting. After removing any rust or corrosion, apply metal conditioner, follow with primer as directed by conditioner label. Finish coats will be the same as selected for painting pool.

Any paint used must be resistant to alkali. The following types are recommended: (1) solvent thinned rubber based (but not over old paint); (2) Portland cement (where surface is wet), and fill pool after painting to keep wet for curing; (3) exterior latex; (4) rubber base followed by latex; and (5) where color is not

a factor and black is not objectionable, bituminous coating.

Except where Portland cement paint and latex are used, all surfaces must be absolutely dry before painting begins. No matter the choice of paint used, the need for at least two coats should be self evident. This will permit complete coverage of any surface irregularities, such as cracks, chips and pocks.

Drying time (before pool is filled with water -- and, again, Portland cement is the exception) will vary according to the type coating used and weather conditions. Rubber (solvent) paints should be firm, hard and scratch resistant. Two weeks should be considered the safe minimum period under dry weather conditions.



AVERAGES OF THE COVERING POWER OF VARIOUS PAINTS

| SURFACE AND PRODUCT | COVERAGE PER GALLON IN SQUARE FEET | | |
|-------------------------------------------------------------------------------|------------------------------------|-------------|-------------|
| | 1st (or Primer) Coat | 2nd Coat | 3rd Coat |
| Frame Siding | | | |
| Exterior House Paint | 468 | 540 | 630 |
| Two Coat Systems | 350 | 400 | |
| Trim (Exterior) | | | |
| Exterior Trim Paint | 850 | 900 | 972 |
| Porch Floors and Steps | | | |
| Porch and Deck Paint | 378 | 540 | 576 |
| Asbestos Wall Shingles | | | |
| Exterior House Paint | 180 | 400 | |
| Rubber-based Paint | 350 | 400 | |
| Glazed Shingles (Consult Your Manufacturer for Complete Instructions.) | | | |
| Shingle Siding | | | |
| Exterior House Paint | 312 | 430 | |
| Shingle Stain | 150 | 225 | |
| Shingle Roofs | | | |
| Exterior Oil Paint | 150 | 250 | |
| Shingle Stain | 120 | 200 | |
| Brick (Exterior) | | | |
| Exterior Oil Paint | 150 | 200 | 420 |
| Cement Water Paint | 100 | 150 | |
| Latex | 140 | 200 | |
| Cement and Cinder Block | | | |
| Cement Water Paint | 100 | 140 | |
| Exterior Oil Paint | 180 | 240 | |
| Latex | 140 | 200 | |

This chart gives the average coverage—per gallon—of various finishing materials. The figures were obtained by averaging the claims of different manufacturers of similar products.

2. WALL SURFACES

(Interior Walls) Above Grade: no particular paint problem if concrete is old and dry and alkali is not present on surfaces -- use any high quality paint. In the case of new concrete, use one of the alkali-resistant coatings: Latexes, bituminous, Portland cement and those based on synthetic resins. Avoid oil paints. Below Grade: this is the problem area, with the success of any coating selected dependent on the opposite below grade surface (outside, exterior, earth contact) of the given wall. Ideally, this outside or exterior should be treated with several coats of impervious paint or bituminous paint before backfilling is undertaken. In this manner, a moisture barrier is set up which, in turn, forces damaging alkali to interior surface. If it is impossible to treat the exterior below grade surface in this way, then drainage should be controlled in such manner as to divert water and moisture from coming into contact with the surface. Where the situation is not ideal, always use Portland cement paint on the interior surface. Where it is ideal, above grade paints (mentioned previously) will perform satisfactorily.

(Exterior Walls) Below Grade: see above. Above Grade: If the wall is relatively free of alkali, prime with one coat of al-

kali resistant paint and finish with two coats of exterior latex, rubber base, or oil base stucco and masonry paints. Portland cement paint is also excellent and needs no primer.

(General) In the cases of interior walls both above and below grade, and exterior walls above grade, it is important to patch or calk all chips and cracks before applying prime coat. Where new cement is used to patch more than one square inch, etch (see Swimming Pools) before priming.

3. DECKS, FLOORS, PATIOS, PORCHES AND WALKS

Any concrete in direct contact with the ground has the same, basic problem as exterior walls -- below grade, previously discussed. Thus, either waterproofing or proper drainage should be provided on the earthside (underside) of the concrete. The only other problems to watch are also basic: patching of cracks and chips, and the advisability of etching where the concrete is new. After priming with one coat of alkali resistant paint, finish with two coats of a quality rubber base floor and deck enamel (so labeled), or any catalyzed coating, or any of the latex floor enamels. The latter have come along fast in popularity for these surfaces, and when used on new cement the etching is not necessary. Reinforced varnishes are satisfactory for covering indoor surfaces.

4. ROADS, CURBS AND PARKING AREAS

Marking Lines (traffic, parking), once something of a problem, have achieved longevity through the efforts of many paint manufacturers now offering special coatings for this purpose. In the absence of such coatings, exterior latexes and rubber based paints will prove satisfactory. The same paints are used for curbs, where color is often a factor, particularly in areas of planned landscaping or for safety.

5. RETAINING WALLS, FOUNDATIONS, TABLES AND BENCHES

See Section 2, above, as it pertains to Exterior Walls -- Above Grade. Same Paints apply.

6. CONCRETE COMMON SENSE

Before painting any concrete surface, assure yourself of maximum best results by checking these important points:

- 1) Surface should be clean and dry. Only exception is when using Portland cement paint, which will adhere to wet surface.
- 2) Surface cracks, indentations, chips and spalls should be corrected.
- 3) New concrete surfaces should be etched. Only exception is when using Latex.
- 4) Underside or earthside should be waterproofed. Otherwise, provide proper drainage.
- 5) Have sufficient paint on hand to provide a minimum of two finish coats.

| | | | |
|-------------------------------------------------------------------------|------------|-----|-----|
| Medium Texture Stucco | | | |
| Exterior Oil Paint | 153 | 360 | 360 |
| Cement Water Paint | 99 | 135 | |
| Latex | 150 | 250 | |
| Cement Floors and Steps (Exterior) | | | |
| Porch and Deck Paint | 300 | 400 | 400 |
| Color Stain and Finish | 510 | 480 | |
| Doors and Windows (Interior) | | | |
| Enamel | 603 | 405 | 504 |
| Picture Molding, Chair Rails and Other Trim | | | |
| Enamel (Note: Coverage, in this instance, is per gallon in lineal feet) | 1200 | 810 | 810 |
| Floors, Hardwood (Interior) | | | |
| Oil Paint | 540 | 450 | |
| Shellac | 400 | 500 | 500 |
| Varnish | 540 | 540 | 540 |
| Linoleum | | | |
| Varnish | 540 | 558 | |
| Walls, Smooth Finish Plaster | | | |
| Flat Oil Paint | 630 Primer | 540 | 630 |
| Gloss or Semi-Gloss Oil Paint | 630 Primer | 540 | 540 |
| Latex | 350 | 350 | 350 |

All figures are for brush painting.

Most of them are quoted from the "Price Guide" which gives much more information in its 165 pages.

Wood Exterior

1. BENCHES, TABLES AND CHAIRS

New, unpainted furniture: fill cracks, holes and dents with wood filler or putty, then sand to provide both even surface and adhesion. Prime (and allow to dry) with non-staining wood preservative all contact points with earth, stone, gravel or concrete. Prime all surfaces with an enamel undercoat. When dry, finish with two coats of a quality exterior enamel.

Old furniture: remove any peeling or flaky paint, then wash down all surfaces and allow to dry. Treat with wood filler and preservative as above and sand. Touch up worn spots with enamel undercoat. When dry, finish as above.

Exterior enamels, available in a wide range of colors, are recommended for best results. Many manufacturers now offer them in spray cans, a very handy method for painting wicker and rattan and less time consuming than brushing. Opaque enamels cannot be used where natural grain finish is desired, of course, and for this end result the clear finishes are suggested, such as a high quality spar varnish. Where color is desired and enamels are not used, trim and trellis paint, or farm equipment paint, will prove serviceable.

For any painting done outdoors, try to pick a day when ideal drying conditions exist: clear, windless, and low humidity.

Exterior Paint Estimator

| | 100' | 125' | 150' | 175' | 200' | 225' | 250' | 275' | 300' | 325' |
|-----|------|------|------|------|------|------|------|------|------|------|
| 24' | 5½ | 6½ | 7½ | 8½ | 10 | 11½ | 12½ | 14 | 15½ | 17 |
| 22' | 5 | 6 | 7 | 8 | 9 | 10½ | 12 | 13 | 14½ | 16 |
| 20' | 4½ | 5½ | 6½ | 7½ | 8½ | 9½ | 11 | 12 | 13½ | 15 |
| 18' | 4 | 5 | 6 | 6½ | 7½ | 9 | 10 | 11 | 12½ | 13½ |
| 16' | 3½ | 4½ | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 14' | 3½ | 4 | 4½ | 5½ | 6 | 7 | 8 | 9 | 10 | 11 |
| 12' | 3 | 3½ | 4 | 5 | 5½ | 6½ | 7 | 8 | 9 | 10 |
| 10' | 2½ | 3 | 3½ | 4 | 5 | 5½ | 6½ | 7 | 8 | 9 |

1. Find the perimeter of the house in top row of the table.
2. Move down that column to the figure opposite the height of your house to the eaves (in first vertical column). That's your one-coat estimate, in gallons.

2. PORCHES, FLOORS, DECKS,

RIDES, SWINGS AND PLAY AREAS

The alkyd base and latex floor enamels are noted for durability, may be used for linoleum and concrete surfaces as well as wood, and are recommended for all areas of heavy traffic. All are fast driers and all require a minimum of two coats. Most labels identify them as floor, porch or deck enamels. For surfaces not subjected to more than normal wear and tear, trim and trellis paints and farm equipment paints will prove serviceable.

3. SIGNS, ROAD MARKERS, ETC.

Use any quality house paint, exterior enamel or exterior latex. Where night vision is essential, lettering can be done in luminous or glass-beaded paints.

4. ROWBOATS, DINGHIES, SAILBOATS AND FLOATS

While the abundance of fine marine paints takes the mystery out of the performance, an astonishing number of failures are recorded yearly because of that old bugaboo: neglect of surface preparation. Wondering if the current paint job will suffice for the season? Just sand a given area a half dozen times; if the paint is brittle or powdery, it's useless. All old paint should be removed, all surfaces then sanded and cleaned. Caulk all seams. Make sure all surfaces are dry, then apply a coat of marine primer. When dry, apply a first coat of marine paint, and when this is dry (usually 24 hours later) add the second coat.

Use marine paint on all surfaces, whether they actually come in contact with water or not, inside and out. They are designed to withstand real punishment from sun, waves, marine growth, rain and abrasion.

If the boat is going to be in the water constantly, bottoms and undersides should have an additional coat of one of the special anti-fouling marine paints. The undersides of wharves and floats should be treated in like manner.

5. DOCKS, PIERS AND BULKHEADS

Marine deck paint, or floor and deck enamel, are the best choices for the surface areas not in direct contact with water. Three coats are suggested.

As for new posts, columns and other wood supports that are to be submerged in water, they should be treated with two coats of special preservatives manufactured for such usage, or with a single coating of heavy asphalt.

6. CANVAS

A number of special coatings have been developed for canvas, designated by the label, and offered in several colors. They provide a flexible, weather resistant film and should be applied to clean, dry surfaces only. No paint, however, will revive old worn and split canvas.

7. BUILDINGS AND TRIM

All exterior metal surfaces should be properly treated (see METAL) before general painting begins. Use any exterior house paint on clapboard sidings. These may also be used on shingles, or thinned oil base may be used as a stain. For the aged, weathered effect on shingles, use one of the tinted preservative liquids developed for this purpose. Water emulsion coatings are recommended for asphalt shingles.

Any exterior enamel or paint and trellis paint will serve for all wood trim, and of course, on all wood surfaces. A prime coat is always a good idea, and in the case of new wood, knot sealer should be applied to all knots and sappy areas before the prime.

On roofs, maximum protection will be assured if the shingles are dipped in the stain before being put in place. For flat roofs, asphalt roof coatings, or asphalt aluminum paints are best. (For tin roofs, see METAL).

8. SHAKES, SHINGLES, TRELLISES AND FENCES

Many manufacturers now offer special hard finishes for all rough exterior (wood) surfaces in a great variety of colors. Use these or any of the exterior housepaints (oil or latex). The hard finishes and the oil base paints may be thinned and used as stain. Be sure that all surfaces coming into contact with earth receive a prime coat of a non-staining wood preservative before painting is started.

Wood & Other Surfaces - Interior

In general, color plays a much more important role indoors than out. The right colors can make a small room seem larger, brighten a dark area, camouflage unattractive contours, visually raise or lower ceilings, provide a desired mood, the accomplish scores of other visual-magic tricks. But whatever your personal taste in colors, choose those (for the biggest surfaces: walls and ceilings) best suited to meet lighting conditions. White, for instance, provides the greatest amount of reflection, with the flat paints rated over the glossies. While providing less reflection than white, the pastel hues are superior to the solids.

1. WALLS AND CEILINGS

Plaster: for satisfactory results, surfaces must be dry before painting begins. Under normal conditions (temperature not under 50 degrees), it is safe to assume new plaster will dry out in one month. Applied to an unfurred wall, or solid brick or tile wall, plaster will take double the time. Where there is a question about dryness, check with moisture meter. Also check and correct for uniform density and "sweat outs". Finally, brush off any efflorescence (crystals). Continue daily until this disappears or appears infrequently. Be sure all oil or grease spots are removed by detergent wash, then permit to dry before painting. Alkyd resin paints are the best choices, with two coats a must. First coat should be considered a sealer, and allow allow seven days before applying second coat. If surface must be painted before completely dry, use prime coat of latex base paint (which will permit evaporation), add second coat after surface is completely dry (usually several weeks).

Wallboard: putty or caulk all nail holes, cracks and pits and make certain the entire surface is clean and dry. For prime coat, use latex, shellac, enamel, or alkyd base paints. Any type paint (flat, gloss or semi-gloss) may be used for finish coat. Latex is best choice for both coats if surface presents any application problem.

Wood panelling: no big problems here, simply a question of the type finish desired. Natural grain can be preserved by applying varnish plus final waxing. In the case of stains, finish with varnish to retain desired tone. Two coats of any interior alkyd paint will perform well where solid colors are desired. Prior to any painting, correct surfaces where necessary with wood filler.

2. FLOORS AND STAIRS

Simplest and best coatings for areas of heavy traffic (new floors) are the penetrating wood sealers and the urethane varnishes. There's also a wide color range available in stains, floor paints and enamels. Urethane varnishes and floor enamels--followed by waxing -- are recommended for rubber tile and linoleum. Asphalt tile needs only a heavy waxing. Stair treads may be treated the same as wood floors, but eliminate the waxing. Stair risers, since they are subjected to minor wear and tear, will take any paint suitable for woodwork.

3. WOODWORK

When the finish coat is to be opaque, all new woodwork will require an undercoating. Gloss and semi-gloss enamels are the best choices for finish coats, and the latexes will give satisfactory service. All three are ideal for refinishing old woodwork, too, but in this case certain points should be kept in mind: (1) remove all wax, sand any remaining old glossy areas to provide adhesive surface; (2) apply enamel undercoat when gloss or semi-gloss enamel is to be used as finish coat; (3) a change to a new color will require two finish coats. For natural grain finish, varnish and wax. If staining, use stain first, then varnish.

4. FURNITURE REFINISHING

In general, treatment is the same as described for old woodwork, as above. But when the refinish requires a dramatic change (old was opaque, new is to be natural grain or stain), then the old finish must be completely removed. Use a chemical paint or varnish remover, and check label to be sure it's one of the non-flammable, wax-free types, which are safest and easiest to use. Make sure room is well ventilated, and use rubber gloves. Apply remover to soak into old finish until finish is soft (usually about fifteen minutes). Scrape off old finish with putty knife or dull blade, avoiding gouging and scratching of wood. On carved or grooved surfaces, use steel wool or pointed stick. Entire process may have to be repeated,

Interior Paint Calculator

This table can be used as a guide for the number of gallons of paint required for the average two-coat interior job where walls are in good condition. New or worn floors will require more paint. Porous walls and ceilings also will require slightly more paint. Rough walls (sand-finished) require about 25% more paint.

| Distance Around Room in Feet | Gallons Required for | | Gallons Required for Walls | | | | | | | |
|------------------------------|----------------------|-------|----------------------------|-------|--------|--------|--------|--------|--------|--------|
| | | | Height of Walls | | | | | | | |
| | Ceiling | Floor | 8 Ft. | 9 Ft. | 10 Ft. | 11 Ft. | 12 Ft. | 14 Ft. | 16 Ft. | 18 Ft. |
| 34 | 3/8 | 1/4 | 1 | 1 1/4 | 1 1/4 | 1 3/4 | 1 3/4 | 2 | 2 1/4 | 2 1/2 |
| 38 | 1/2 | 3/8 | 1 1/4 | 1 1/2 | 1 1/2 | 1 3/4 | 2 | 2 1/4 | 2 1/2 | 2 3/4 |
| 42 | 1/2 | 3/8 | 1 1/4 | 1 1/2 | 1 1/2 | 2 | 2 | 2 1/4 | 2 3/4 | 3 |
| 46 | 3/8 | 1/2 | 1 1/2 | 1 3/4 | 1 3/4 | 2 | 2 1/4 | 2 1/2 | 3 | 3 1/4 |
| 50 | 3/8 | 1/2 | 1 1/2 | 1 3/4 | 2 | 2 1/4 | 2 1/2 | 2 3/4 | 3 1/4 | 3 1/2 |
| 54 | 3/4 | 3/8 | 1 3/4 | 2 | 2 1/4 | 2 1/4 | 2 1/2 | 3 | 3 1/2 | 3 3/4 |
| 58 | 3/4 | 3/8 | 1 3/4 | 2 | 2 1/4 | 2 1/2 | 2 3/4 | 3 | 3 1/2 | 4 |
| 62 | 1 | 3/4 | 2 | 2 1/4 | 2 1/2 | 2 3/4 | 3 | 3 1/4 | 3 3/4 | 4 1/4 |
| 66 | 1 | 3/4 | 2 | 2 1/4 | 2 1/2 | 2 3/4 | 3 | 3 1/2 | 4 | 4 1/2 |
| 70 | 1 1/4 | 1 | 2 1/4 | 2 1/2 | 2 3/4 | 3 | 3 1/4 | 3 3/4 | 4 1/4 | 4 3/4 |
| 74 | 1 1/4 | 1 | 2 1/4 | 2 1/2 | 2 3/4 | 3 1/4 | 3 1/2 | 4 | 4 1/2 | 5 |
| 78 | 1 1/2 | 1 1/4 | 2 1/2 | 2 3/4 | 3 | 3 1/2 | 3 3/4 | 4 1/4 | 4 3/4 | 5 1/4 |
| 82 | 1 3/4 | 1 1/4 | 2 1/2 | 2 3/4 | 3 | 3 1/2 | 4 | 4 1/2 | 5 | 5 1/2 |
| 86 | 1 3/4 | 1 1/2 | 2 3/4 | 3 | 3 1/4 | 3 3/4 | 4 | 4 1/4 | 5 1/4 | 5 3/4 |
| 90 | 2 | 1 1/2 | 2 3/4 | 3 1/4 | 3 1/2 | 4 | 4 1/4 | 5 | 5 1/2 | 6 |
| 94 | 2 1/4 | 1 3/4 | 3 | 3 1/4 | 3 1/2 | 4 | 4 1/2 | 5 1/4 | 5 3/4 | 6 1/2 |

then proceed as with woodwork.

In the case of metal furniture, prepare surface then apply metal primer over all bare or thin spots. When dry, touch up these areas with a thinned enamel undercoat. When dry, follow with one or two coats, as needed, of enamel, latex or flat paint.

Metal

Almost all exposed metal will corrode, and protective coatings are necessary. Unprotected copper will produce a corrosive wash which stains surrounding surfaces, and unprotected aluminum will, over a period of time, mottle and pit and look unattractive.

1. BUILDINGS AND OTHER EXTERIOR SURFACES

Removal of all rust (usually by sanding) is a must. Prime with metal primer. For final coats, use special metal paints, exterior enamels or housepaints. The exterior enamels are considered best for aluminum. Special screen enamel is not available for copper screening.

2. INTERIOR SURFACES

Use metal primer on steel and aluminum windows before painting. Same applies for heating ducts, radiators, pipes, sockets, rails and trim. For finish coat, use any quality latex, enamel, flat or aluminum paint. (See FURNITURE REFINISHING for metal furniture).

3. ROOFS

So-called tin roofs must be protected against the elements or rust and short life will result. Remove any existing rust and wash down with paint thinner (best for removing oil and grease) before painting. When surface is dry, apply coat of anti-corrosive primer. Finish with two coats of special metal roof paints, so labeled, and available in many colors. On aluminum sheet roofs, use zinc chromate for prime coat, finish with metal roof paints. The proper primer for galvanized steel is zinc dust-zinc oxide paint.

Failure at the factory level to provide a quality primer is the reason why most metal surfaces do not stand up after prolonged exposure to the elements. To refinish such surfaces and guarantee longevity, all loose, peeled and flaked paint must be removed with a good solvent and wire brushing. Next, use coarse sandpaper or steel wool to remove all rust and wash down with paint thinner. When clean surface is dry, apply primer of one of the anti-corrosives manufactured for use on metal. Two finish coats are recommended, and these may be selected from any of the quality exterior enamels, the farm implement enamels, or the auto finish enamels. Remember that in several cases, where the rusted metal surface is in poor condition, all old paint (as well as rust) should be removed before the prime and finish coats are applied.

4. COLOR AND DANGER

Color is being used more and more on the farm and in industry to signify danger areas on machinery and heavy equipment. A color in contrast to body color, or stripes of two contrasting colors, are among the methods used to designate cutting edges, gear openings and guards. Yellow and black or orange and black stripes are widely used.

How to Rescue the INSIDE of Your Home from The Menace of Moisture



To keep vapor from condensing on cold surfaces, ventilate attic well.

When bathing, allow moisture to escape through door or window. Eliminate plumbing leaks.

Install exhaust fan in kitchen to keep excess humidity from damaging your home.

Improve ventilation and humidity control to eliminate dampness in basements.

The Association has a number of 'HOW TO' booklets available to furnish more detailed information on paint subjects. Single copies are available free; quantities may be obtained at cost. Address: -

National Paint, Varnish & Lacquer Assn.,
1500 Rhode Island Ave., N.W.
Washington 5, D. C.

- Menace of Moisture
- How to Make a Small House Seem Large
- Outdoor Painting
- Indoor Painting
- Painting Toys and Children's Furniture
- How to Prevent Lead Poisoning in the Home
- Decorate to Flatter Your Personality
- How to Paint Your Wood Home
- Painting Insulation Board
- Painting Asbestos Cement Products
- Painting Hard Board
- Painting Swimming Pools
- Painting New Plaster
- Painting Insulation Siding
- Painting Southern Pine
- Painting Aluminum
- Painting Galvanized Steel
- Finishing Hardwood Floors
- Finishing Wood Furniture
- Exterior Latex Paints
- Painting Vinyl Wall Fabrics
- Painting and Decorating with Tape
- Painting Masonry Surfaces
- and others.