FLINTKOTE

A
protective coatings

B
floor wearing surfaces

C
specialty products
sealers
coatings
adhesives

the importance of protecting buildings and structures —against moisture, corrosion, weathering

Waterproofing, *dampproofing* and *corrosion-proofing* are essentially protective coating problems. Unless steel and concrete, insulation materials and other structural products have a barrier coating against the effects of moisture and corrosive elements, they rust or weather in a natural process of deterioration. Unpainted wood is one example. Insulation which depends on dry air cells to be effective is another. Masonry and metal are affected by fumes, gases, acids and alkalies as well as by water.

No single coating is applicable to all conditions. Accordingly, THE FLINTKOTE COMPANY supplies a wide line of products in this field. Each product is designed for meeting specific application and exposure requirements.

the proved protection of bituminous products

Bituminous coatings and sealers have been used throughout the centuries as the universal barrier to water and its companions of moisture vapor and weather. The present-day refinements in these materials, as against older time bitumens, make them more efficient. Basic blending of steam-refined petroleum asphalts and rigid laboratory control assure *dependable* coatings for the thousands of applications known today. FLINTKOTE asphaltic protective coatings are primarily for cold application. They are formulated to give better resistance than hot applied coatings. They are supplied in solvent and emulsion types. Grades are available for brush, spray, trowel and other methods of application.

FLINTKOTE asphalt base clay emulsions and solvent cutbacks are basic barriers

1 Asphalt Primer

Thin, penetrating liquid asphalt in a solvent vehicle; used to prime surfaces that are to receive asphalt protective coatings, particularly porous masonry.

2 C-13-HPC Emulsion

Stable, non-flowing, non-flammable asphalt base clay emulsion *without* fillers or fibers; applied by brush or spray. Also supplied lightly fibrated with asbestos as reinforced coatings: C-13-C4 and Spraykote.

3 C-13-E Emulsion

Most effective asphalt base clay emulsion in presence of moisture. It is especially formulated to provide tight film with added resistance to re-emulsification—as in water tank interior coating.

4 C-13-A Emulsion

Stable asphalt base clay emulsion heavily fibrated with asbestos; applied by trowel; non-flammable and odorless; preferred for coating insulation in cold storage rooms and boiler wall sealing.

5 Thermalkote®

Asphalt base clay emulsion containing high percentage of asbestos fibers to provide thick mastic with good weather resistance. Used for trowel application of heavy film over thermal insulation materials, particularly those exposed to weather.

6 Trowel Mastic

Heavy plastic asphalt cement containing mineral stabilizers; used for patching masonry, dampproofing walls by trowel coating the interior face of exterior walls, and sealing spandrel cloth and other flashing materials; applied at least ⅛ inch thick.

7 Semi-Mastic No. 214

Moderately fibrated solvent cutback asphalt for brush application; used for dampproofing masonry, coating steel and protecting roofs.

8 Spandrel Cloth

Durable cotton fabric, 40-ounce, treated to resist rot and mildew and coated both sides with ductile, flexible asphalt; used to provide tough, non-cracking, watertight flashing for spandrel beams, through-wall waterproofing, window heads, sills and copings.

9 C-19 Coating

Specially formulated solvent asphalt compound with extremely low rate of moisture vapor transmission; for sealing insulation and for protecting low-temperature cold service steel tanks, pipes and equipment.

It is important that the correct *asphalt product be selected for each specific application to assure the most efficient and lasting protection.*

steel protection

structural columns, beams, trusses; tanks and conduits; sheet metal walls, roofs; equipment

For steel exposed to weather, moisture or industrial fumes, an asphalt-base thick-film coating provides long-lasting protection at lowest cost. Either a clay emulsion type or a solvent cutback type coating may be used, the selection depending on the exposure conditions and the method of application (brush, spray or trowel).

Coverage for heavy-duty resistance to weather or corrosive elements averages per 100 square feet: on vertical surfaces, 2 gallons; on horizontal surfaces, 4 gallons (two coats). The protective film of each coat is many times the thickness of paint. Durability and resistance are increased by the thickness of the coating applied—in some cases, multiple coats, totalling ⅛ inch thickness, or 8 gallons per 100 square feet, are required.

When a light-reflective or color finish is desired, FLINTKOTE asphalt-base aluminum paint or Decoralt (resin base latex coating) is applied over the asphalt protective coating, see section C.

method of application

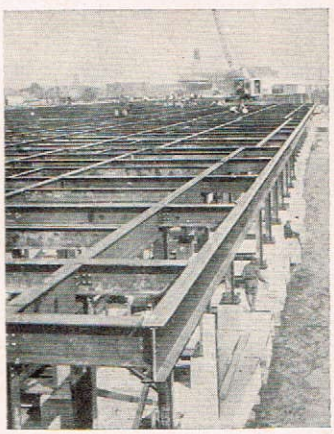
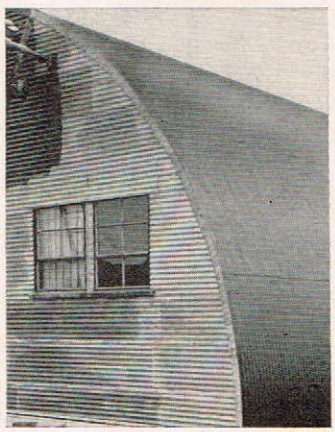
preparation

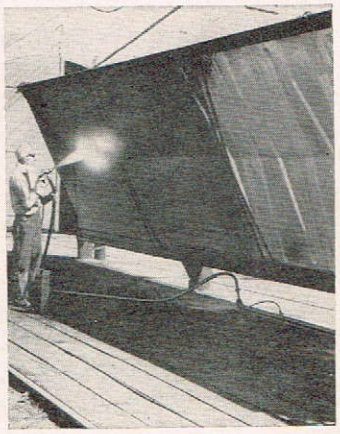
All metal surfaces to be protected with FLINTKOTE asphalt emulsion or cutback coatings must be cleaned of all mill scale, rust, dirt, oil and grease. If not coated immediately, a prime coat is necessary to prevent re-rusting.

coating

FLINTKOTE asphalt-base clay emulsion and solvent cutback coatings are supplied in a variety of consistencies suitable for brush, spray or trowel application. Emulsions are water-base products and are thinned, if necessary, by stirring in a small quantity of cool water. Solvent cutback asphalt coatings are thinned, if necessary, with petroleum naphtha.

A continuous, unbroken film of protection is best obtained by applying two or more coats in alternate directions. Spray pattern should assure uniform thickness of film. Thorough drying is essential. Emulsion coatings have a drying time which depends on temperature, humidity and thickness applied. Water and freezing do not affect the dried coating.



masonry protection

below grade

foundation walls, footings

Masonry below grade is subjected to ground water and consequently must be given resistance—by the application of a continuous coating to form a protective "envelope". Throughout the years, asphalt—in one of its many forms, hot or cold, solvent or emulsion—has proved the universal protective barrier.

Precaution should be taken to protect below-grade coatings from damage during construction and to allow at least 24 hours drying time before back filling. To prevent puncture of the asphalt coating film, a protection top layer of 15 pound asphalt saturated felt is recommended.

method of application

priming

On dry or porous masonry, use thin, penetrating FLINTKOTE Asphalt Primer. On fully aged concrete that may contain dampness, use FLINTKOTE C-13-HPC Emulsion diluted with about 15% cool water. Primer should be brushed on thoroughly.

coating

against hydrostatic pressure

cold application method: membrane reinforced clay emulsion coating. Over primed surface, apply three or more heavy coats of FLINTKOTE C-13-E Emulsion at rate of not less than 1½ gallons per 100 square feet. Embed membrane in all coats except the last. Lap membrane 2 inches and apply second ply at right angles to first. Brush smoothly to prevent wrinkles and coat thoroughly.

protection course: Apply one heavy coat of FLINTKOTE C-13-A Emulsion by trowel (about 12 square feet per gallon) and cover with layer of 15 pound asphalt saturated felt and guard against damage by backfill.

not against hydrostatic pressure

cold application method: emulsion or cutback coating, no membrane reinforcement Over primed surface, apply at least two coats of FLINTKOTE C-13-E Emulsion at the rate of not less than 1½ gallons per 100 square feet per coat, by brush or spray; *or*, a heavy coat of FLINTKOTE Trowel Mastic by trowel at least ⅛ inch thick (12 square feet per gallon wet).

above grade

exterior and interior walls

Effective dampproofing is obtained by the application of FLINTKOTE asphalt protective coatings to the interior face of exterior walls. Cavity walls and backup for metal and glass-faced exteriors require special consideration to minimize condensation moisture. Ask for recommendations regarding coatings and sealers for such applications.

method of application

priming

Treat above-grade masonry with FLINTKOTE Asphalt Primer preparatory to application of asphalt protective coating.

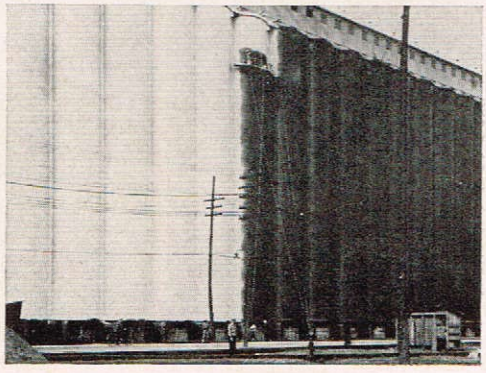
coating

with cutback asphalt, fibrated

Apply FLINTKOTE Trowel Mastic to form a continuous coating at least ⅛ inch thick. (If trowel application is not practicable, brush on at least two coats of Semi-Mastic No. 214 at least 1 gallon per 80 sq ft per coat.)

with asphalt base clay emulsion

Apply FLINTKOTE C-13-E Emulsion by spray or brush in heavy film thickness in two coats at the rate of 1½ gallons per 100 square feet per coat.



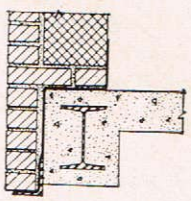
flashing protection

spandrel beams, through walls, concrete columns, around openings

The inherent nature of building construction is a comprehensive assembly of many unit parts with joints and seams. The use of flexible, asphalt-coated flashing cloth provides an impenetrable barrier to the passage of water at these many points in buildings.

method of application

Spread FLINTKOTE Trowel Mastic in a heavy coat over primed masonry surface. Then set flexible spandrel cloth in the adhesive mastic. Lap at least 4 inches at all joints. After fitting, topcoat the cloth with Trowel Mastic at least ⅛ inch thick for continuous coverage. Allow sufficient cloth for spandrel beams and concrete columns—so flashing can be turned up 8 inches on interior of walls after they are constructed.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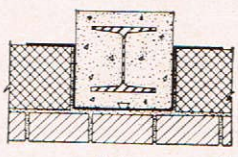
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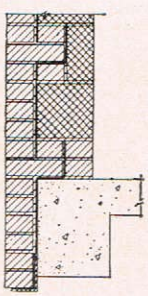
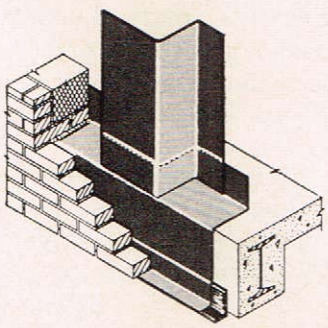
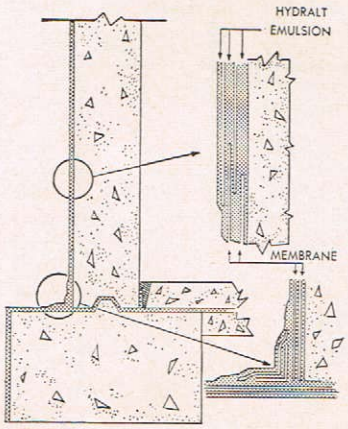

CONTINUOUS UNIT WALL FLASHING 12" WALL WITH 8" CINDERBLOCK BACKUP


ISOMETRIC VIEW



insulation protection

insulating materials: block, board, mat or wrap

These forms of insulation depend upon dry air cells for retarding the passage of heat or cold. For their full efficiency, complete sheathing by sealing and coating is necessary. FLINTKOTE provides a complete line for the protection of all types of insulation.

method of application

priming

All insulation materials which are to receive an asphalt protective coating should be primed prior to coating. Insulation held in place with wire should be primed over the wire.

coating

with clay emulsion fibrated coating

Apply heavy coat of FLINTKOTE C-13-A Emulsion by trowel at the rate of 8 gallons per 100 square feet for ⅛ inch thickness wet. (For outdoor weather resistance, greater film thickness of 12 to 14 gallons per 100 square feet is desirable.) Higher abrasion resistance is obtained by adding 1 to 2 pounds of fine mason's sand per gallon to the final coat.

with vapor-sealing cutback coating

For protection of insulation on cold service tanks or conduits, apply at least two coats of FLINTKOTE C-19 Coating at the rate of 2 gallons per 100 square feet.

with white insulation coating (*for interior use*)

In refrigeration spaces and over cork, fibrous glass or foamed plastic materials, a two-component, prepackaged mix of liquid latex and powder provides a trowel-applied white coating. One unit of mixture covers approximately 120 square feet per ⅛ inch thickness.

FLINTMASTIC†
cold-laid asphalt mastic floor wearing surfaces

Flintmastic is the trade name for floor surfacing made by mixing prescribed amounts of hydraulic cement (Portland or Lumnite), sand and stone chips with a binder of FLINTKOTE asphalt base clay emulsion.

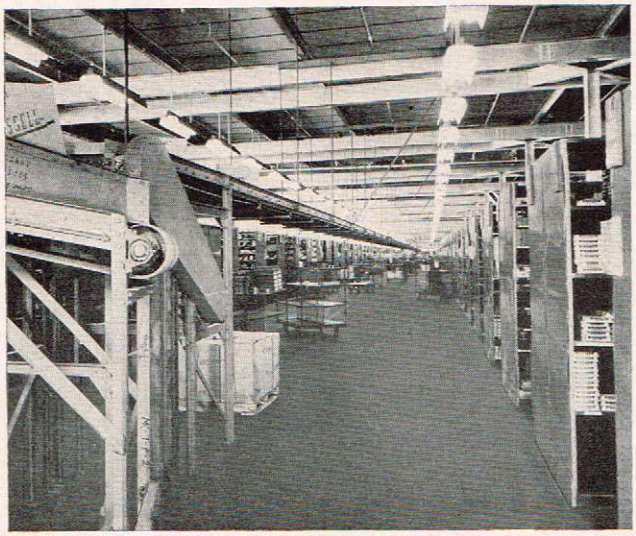
Flintmastic does not apply to asphalt mastics which appear similar but which employ the use of "chemical" or "soap type" asphalt emulsions as the binder. In other words, specifications must require asphalt base *clay* emulsion.

Flintmastic provides a floor surfacing that is non-slip and dustless, insulating and comfortable, tough and shock-proof. It is capable of carrying heavy traffic without rutting or cracking. It may be installed and opened to use in about twenty-four hours.

Flintmastic is not confined to newly built floors. It is the ideal resurfacing material for worn or damaged floors provided they are structurally sound.

The mix is handled in the same manner as concrete for spreading and finishing. Because of its asphaltic binder, it has the advantage, however, of being resilient and malleable. As resurfacing over suitable rigid bases, it may be laid in thickness from ⅜ inch up.

† *a trademark of the Flintkote Company*



four types of mixes

for hand finishing and patching

Use N-13-F Emulsion (reinforced with non-mineral fiber) as binder.

for machine finishing

Use N-13-HPC Emulsion (non-fibrated) as binder.

for outdoor applications

Use C-13-E Emulsion (treated for water resistance) as binder.

for underlayment and featheredging

Use N-13-HPC Emulsion with fine aggregate mix.

priming

surfaces to receive FLINTMASTIC, use C-13-HPC Emulsion diluted with cool water as bond coat.

materials required, coverage

Flintmastic mixtures must be proportioned accurately. The largest size of graded aggregate (sand or stone) used should not exceed 60%, nor be less than 40% of the thickness of the mastic laid.

Aggregate quantities are based on dry measurement. Where sand is damp, allow up to 20% additional for bulking. Yield of batches in table below are for ½-inch thickness.

mixture formula	Portland or Lumnite cement		FLINTKOTE asphalt base clay emulsion		well graded sand		crushed stone or grave chips	
	cu ft	gal	cu ft	gal	cu ft	gal	cu ft	gal
hand finished 1:2:2:4 mix yield: 130 to 140 sq ft	1	7½	2	15	2	15	4	30
power floated ¾:2:2:6 mix yield: 160 to 170 sq ft	¾	5½	2	15	2	15	6	45
underlayment and featheredge 1:2:4 sand mix yield: 100 to 110 sq ft	1	7½	2	15	4	30		

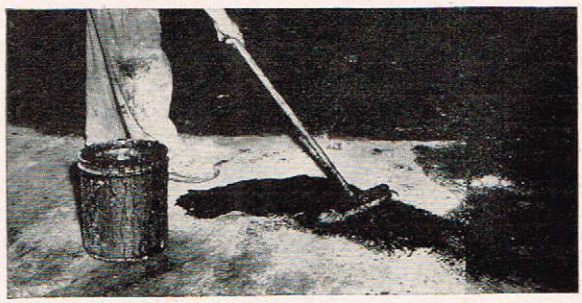
floor wearing surfaces

B

method of application for FLINTMASTIC

priming

The cleaned base is primed with FLINTKOTE C-13-HPC Emulsion diluted 15 to 20% with cool water. Apply at the rate of 1½ gallon per 100 square feet—by brush or mop. Allow priming bond coat to dry before laying mastic.

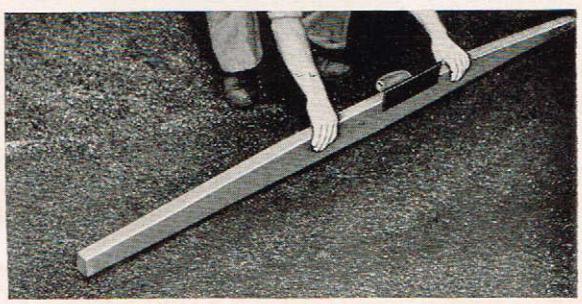


mixing

Use either a mortar box and hoe or mechanical batch mixer. Mix dry materials (cement and aggregates) first with minimum of water to obtain a very stiff mix before adding the asphalt base clay emulsion. Use water sparingly for workable consistency and continue mixing until the mastic is of uniform color and homogeneous throughout. Mix only sufficient quantity as will be used within one hour as mastic cannot be retempered.

hand finishing

Use screed strips (wood or metal) as depth guides for the thickness. Strike off with a straight-edge resting on the screed strips, working in a sawlike motion to level the mastic. When Flintmastic is sufficiently set up (1 to 3 hours), finish with wood floats followed by steel trowelling. Applicators finish from bridges or kneeling boards. Final trowelling to tighten the surfaces is delayed until *after* the initial set.



machine finishing

Use the denser (and drier) mix. Level with rake and strike board resting on screed strips for proper thickness. Power floating is begun as soon as the Flintmastic can bear the weight of the operator. Continue until all surface voids are filled and mastic is compacted to a dense, smooth surface.

Final finish, after initial set has taken place, consists of steel trowelling to erase all floating marks.

For curing, sealing for oil resistance and limitations of this type of flooring, see FLINTKOTE specification literature.

Latex floor wearing surfaces pre-packaged two-component mixes: latex liquid binder and powdered cementitious filler; easily laid

five types of mixes

Flintkote Latex flooring provides unique properties not found in other types of floor surfacing. It has high bonding strength and toughness without brittleness—in thickness often as little as ⅛ or ¼ inch. It is economical and easy to apply over almost any firm, sound base—such as concrete, steel plate or double-wood floors. For very thin resurfacing or topping worn surfaces, this type flooring cannot be equalled in economy. It should not be applied, however, over single wood floors or concrete subject to hydrostatic pressure.

Flintkote liquid latex binder and premixed dry filler are mixed by the user in the unit proportion of 1 gallon latex to 1 package of premix.

The Latex flooring mixes are designed for heavy or light duty floors, underlayment base under decorative floor coverings, and for finished floors in attractive colors. Each combination mix is especially formulated for the type and quantity of latex binder and amount of premix filler. Nothing else to buy!

Specific types are designated for: underlayment, trowel finish floors (neutral or colors), special duty resistance floors, terrazzo floors, patching. Coverage is from 40 to 60 square feet at ⅛ inch thickness per unit of mixture. All mixes are applied with trowel.

for underlayment

Flintkote Latex flooring for underlayment is the ideal material for smoothing rough or uneven concrete and wood floors to receive asphalt, vinyl-asbestos, rubber, vinyl and other types of floor tile or coverings.

for natural finish or colored floors

Pigments added to Latex trowel finish flooring mix provide decorative surfacing in one, economical finish. This type flooring is wear resistant and easily cleaned.

for special duty floors

Flintkote Latex flooring for resistance floors and special duty floors are designed to withstand exposure to many chemicals, acids and alkalies—also to heavy moving loads.

for terrazzo floors

Premix formulas of colored marble chips with Latex flooring binders produce an easily laid, economical, thin terrazzo surfacing having great beauty and durability.

for patching industrial floors and miscellaneous concrete

Flintkote Latex concrete patch is a two-component mix unit in a single package. Each package contains both liquid latex, (one gallon) and graded cementitious filler (either 40 pounds of fine mix *or* 60 pounds of coarse mix.) This general-purpose product is formulated for quick patching of concrete floors, walls, structural parts, beams, columns, foundations, curbs, railings, etc. It also serves as an easy working, non-shrinking mortar for masonry joints and cracks. It is self-curing.

floor wearing surfaces

B

method of application for LATEX

preparation of base

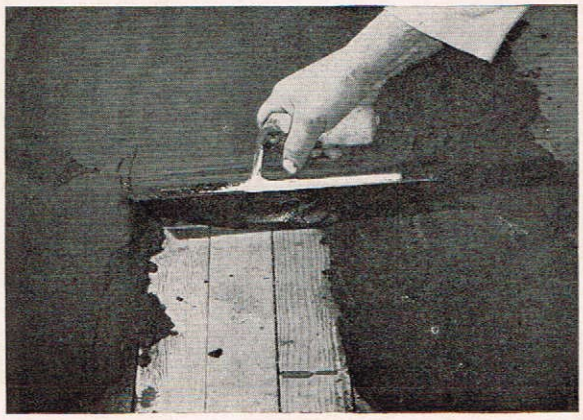
Concrete floors must be well cured and cleaned thoroughly of grease, dirt and other foreign matter. Double wood floors must be clean, secure and free from springiness. Priming is not ordinarily required but dampening (as with a wet broom) is recommended for porous bases to reduce suction. Unusual conditions may require special treatment. Obtain complete specifications.

mixing

Mix at one time only the size batch that can be trowelled in place before the mix begins to set. Working time varies with different job conditions. Use the first batch as a guide for working time—approximately one hour under normal conditions. Empty contents of one or more bags of premix (dry powder) into a clean mortar box or pan and add 1 gallon of latex (liquid) for each bag. Mix thoroughly to assure uniform blending and plasticity. This material cannot be retempered.

finishing

Spread mixed Latex flooring to the thickness required. Finest results are obtained by holding the trowel at a 45 degree angle and applying pressure as a "scratch coat". Then follow by full-body and smooth trowelling. The finish trowelling of Latex flooring, unlike that of concrete, cannot be delayed—because Latex flooring forms a skin which assists in the curing of the mixture. Tools should be kept clean with a wet cloth.



Flintar®

for asphalt pavement sealing

Flintar coal tar pitch emulsion is an outstanding product for application over all classes of asphalt paving—including home driveways, parking lots, streets, roads and air fields. Flintar serves as a highly effective protective coating against water, the weather and petroleum fuels and grease (which soften or dissolve asphalt). By nature, Flintar is impervious to these destructive forces. It thereby assures longer life for the asphalt pavement. Its uniform satin black color provides better appearance.

Flintar is supplied in heavy bodied emulsion for easy use in spreading by spray, brush, squeegee or by pressure distributor truck. Thinning, when necessary, is accomplished by stirring in a small amount of cool water. Unlike ordinary tar, this product does not flow under heat or crack from cold. Total rate of coverage is 1½ to 2 gallons per 100 square feet in two coats.

Decoralt†

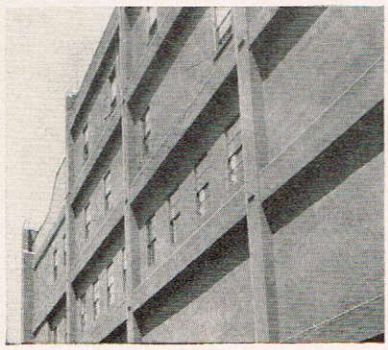
for decorative finish coating

Decoralt is a flexible latex-base coating supplied as a paste in several colors. Before using, it is thinned 50% with water; thus, 2 gallons of Decoralt, as supplied, provide 3 gallons of coating. It is applied in a relatively heavy film—by spray, brush, push broom or squeegee. It has good resistance to water and weather. Because of its mineral fillers, it also has excellent resistance to wear; this is evidenced by extensive use in coating asphalt-paved tennis courts, roof decks and walking surfaces.

for sealing

As a general seal coating in color, Decoralt is especially recommended over walls, tanks and insulated vessels which are weatherproofed with asphalt; it gives a pleasing appearance to these normally black surfaces. For exteriors of concrete, brick stucco and stone, Decoralt is applied like paint — but its heavy film provides greater sealing effectiveness, better weather and corrosion resistance.

† a trademark of the Flintkote Company



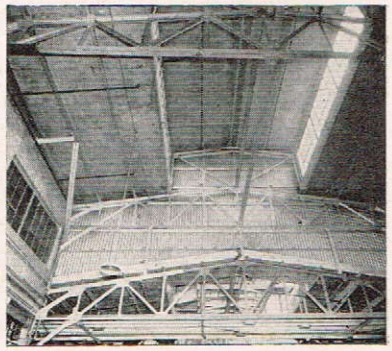
Asphalt-base Aluminum Paint

for light-reflective coating

Flintkote Aluminum Paint is a ready-mixed product of solvent-base asphalt liquid and aluminum flakes of high brilliance. (Upon application, these flakes leaf to the surface.) This Flintkote combination of asphalt and aluminum—provides both corrosion resistance and light reflection. High light reflectivity results in better appearance and cooler inside temperatures.

Consequently, this asphalt-base Aluminum Paint is widely used over bituminous surfaces such as asphalt protective coatings and roofing. On these surfaces, this paint (unlike aluminum paints with varnish or resin base) does not present the problem of bleeding.

FLINTKOTE Aluminum Paint is also used directly on clean metal fencing, sheet metal structures, interior columns, trusses and beams.



"ATLAS" builders' adhesives

for building erection with adhesives

The products described on this page constitute a complete line of specialized adhesives for walls, ceilings, floors and insulation materials. They are marketed by The Flintkote Company under the brand name "ATLAS". They are generally available through local distributors of building materials, insulation products, floor and wall coverings.

linoleum paste

An easy spreading, full-strength quality adhesive for installing felt underlayment, linoleum, felt base floor and wall covering not subject to moisture exposure. Used over wood and above grade concrete. One gallon covers from 120 to 160 square feet.

quick setting tile adhesive

rubberized, non-flammable

For adhering asphalt and vinyl-asbestos floor tile. Used over concrete, hardboard, plywood, mastic underlayment or felt wherever moisture is not a factor. Apply cement thinly with notched trowel or brush. Lay tile as soon as adhesive is tacky or up to 18 hours. One gallon covers up to 250 square feet.

rubber and flexible vinyl tile adhesive

light colored, non-staining, water resistant

For installing rubber tile and flexible vinyl flooring tile in above grade areas over suitable wood and concrete subfloors and felt underlayments. Spread with notched trowel. Tile may be laid from immediately up to approximately 30 minutes. One gallon covers 120 to 160 square feet.

waterproof adhesive

for linoleum, cork, rubber materials

A strong-bonding adhesive especially designed for water-resistant installation of linoleum and cork tile (as in bathrooms). Also used for sheet materials on sink tops, counters and walls. Apply adhesive with notched spreader and roll material immediately. One gallon covers 120 to 160 square feet.

tileboard cement

For erecting plain or enameled tileboard and hardboard materials to walls without shoring. Provides high strength, lasting bond. Apply cement to back of board with notched spreader. Place board in position and press firmly over entire surface. One gallon covers 50 to 60 square feet.

wall tile cement (white)

for plastic and metal tile

For adhering polystyrene, aluminum and other non-ceramic wall tile to base of plaster, plaster board, wood, hardboard or other clean, dry surface. Applied with notched trowel to leave furrows deep enough to grip tile. Set tile while cement is tacky. One gallon covers 40 to 50 square feet of base. (Complies with Commercial Standard CS168-50.)

acoustical tile and wallboard cement

For 12 x 12-inch acoustical tile. Apply daubs of cement to back of tile and press in place on ceilings of concrete, plaster, gypsum boards, etc. When tongue and groove materials are used, supplementary nailing is recommended. For wallboards and fiber plank, apply adhesive in daubs or with notched spreader and press board in place. One gallon installs 40 to 60 square feet.

asphalt tile cement

cutback type

For adhering asphalt or vinyl-asbestos floor tile on concrete slabs below grade (in basements), on grade or above grade. Spread cement with notched trowel in ridges. Do not lay tile while adhesive is wet; wait at least one hour (adhesive retains tack long after drying). One gallon covers up to 200 square feet.

cove base cement

for asphalt, rubber, flexible vinyl cove

Especially formulated for water-resistant cementing of asphalt, flexible vinyl and rubber cove base. Gives strong, immediate bond. Retains its pliancy. Apply cement to back of base and press firmly against clean wall. One gallon covers from 40 to 50 square feet or up to 150 lineal feet of 4-inch cove base.

Flintkote also manufactures a large number of adhesive compounds used with fibrous glass, foamed plastic, cork, sound-deadening felt, cloth and metal in industrial and building insulation applications. For complete details, request information regarding specific materials and uses.

Flintdek®

anti-slip coating in colors • for safety underfoot

Flintdek is a synthetic plastic for surfacing floors, decks, ramps, steps, ladder treads, catwalks, tank coverings and other walking areas which are hazardous for foot traffic. It may be used over concrete, wood, steel, stone, ceramics, plastics or aluminum. It protects steel against corrosion.

Flintdek, because of its mineral fillers, combines toughness (to meet wear) and tractive resistance against slipperiness under dry, wet or oily conditions. In all normal usage, it resists water, gasoline, oil, alcohol, animal fats, dilute acids and alkalies. When properly applied by trowel, serrated scraper or spray gun, Flintdek will not crack, chip or peel.

Five colors: red, green, slate gray, cement gray, high visibility yellow. One gallon covers approximately 50 square feet.

for further information

FLINTKOTE protective coatings, floor wearing surfacings, industrial cements and "ATLAS" builder's adhesives are distributed throughout the United States and Canada and in many foreign countries. FLINTKOTE continually seeks to offer "the right product for the right use". Recommendations are based on extensive research and product experience extending over half a century.

Detailed information and service by technical representatives are available on request. Write, phone or wire the nearest FLINTKOTE industrial division office. Technical representatives are located throughout the United States.

division offices

NEW YORK 20, New York
30 Rockefeller Plaza

CHICAGO HEIGHTS, Illinois
1232 McKinley Avenue

NEW ORLEANS 4, Louisiana
Hibernia Bank Building

LOS ANGELES 54, California
(Pioneer Division)
55th & Alameda Streets

THE FLINTKOTE COMPANY *Industrial Products Division*

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