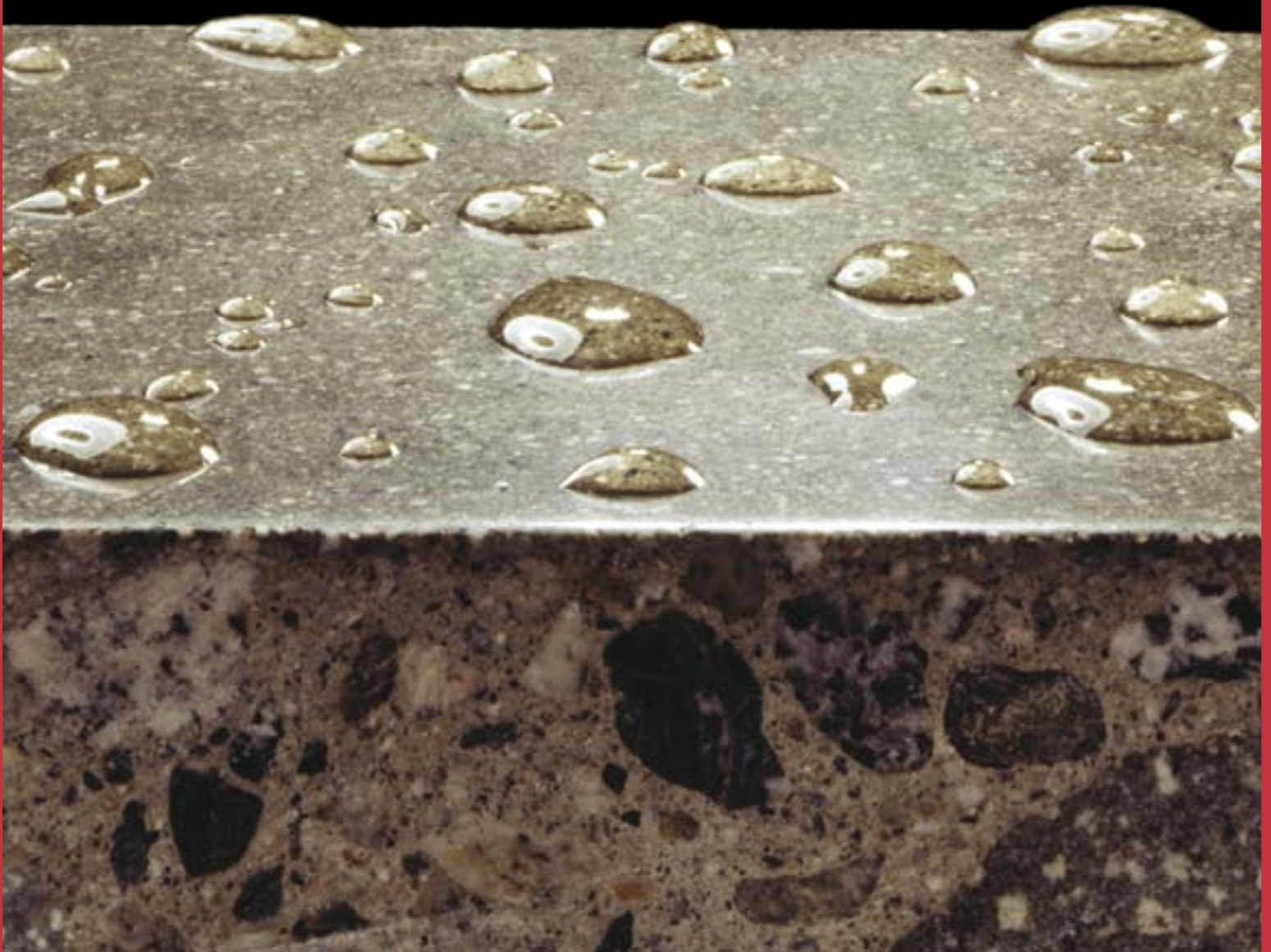


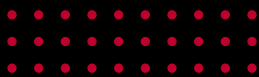
ASHFORD FORMULA™

THE FINAL TREATMENT FOR YOUR CONCRETE

the older it gets, the better you look.



Ashford Formula is a colorless, transparent liquid that penetrates concrete and masonry building materials, protecting, preserving, and strengthening them. It does this by effectively penetrating the surface and solidifying the components of the concrete into one solid mass. The effect is to increase density and toughen, harden and resist moisture for the life of the concrete.



**ASHFORD
FORMULA**
THE FINAL TREATMENT FOR YOUR CONCRETE

1 : SEALS



Ashford Formula seals portland cement based materials, concrete and other materials into a mass that is essentially solid, rather than the porous material that traditional concrete is on its own. Unlike film-forming surface treatments that peel away, the Ashford Formula eliminates the need for expensive reapplications by penetrating the concrete and closing the pores from within, converting the concrete into a solid densified mass. The Ashford Formula will inhibit the migration of water, oils, and other surface contaminants into the concrete.

2 : ABRASION RESISTANCE



The Ashford Formula makes concrete abrasion resistant. In fact, abrasion testing shows that an Ashford Formula treated floor will be 32% harder within the first 30 minutes of treatment. The treated concrete will continue to harden over time. The Ashford Formula also acts as a supplement to the surface and aggregate hardeners.

3 : CURES



Used as a curing agent, the Ashford Formula slows the outward migration of water from concrete. Its chemical reaction forms a densified barrier that reduces shrinkage, cracking and hairline checking.

4 : DUST PROOFS



Concrete naturally creates dust from efflorescence, which then settles on finished goods, racks and equipment. Ashford Formula combines with the concrete salts, becoming an integral part of the concrete and thus completely dust proofing the surface. This substantially reduces maintenance costs and protects sensitive equipment and finished manufactured products from dust particles.

5 : PERMANENT SHEEN

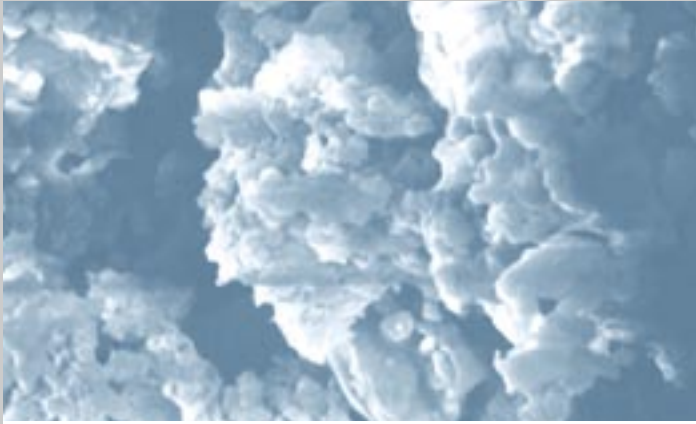


Over time, concrete treated with the Ashford Formula develops an attractive wax-like sheen. The more the floor is subjected to traffic and regular cleaning, the better it looks. Rather than eroding or wearing away, the concrete actually begins to self-polish under the abrasive action of traffic and cleaning.

6 : ELIMINATES HIGH MAINTENANCE COSTS

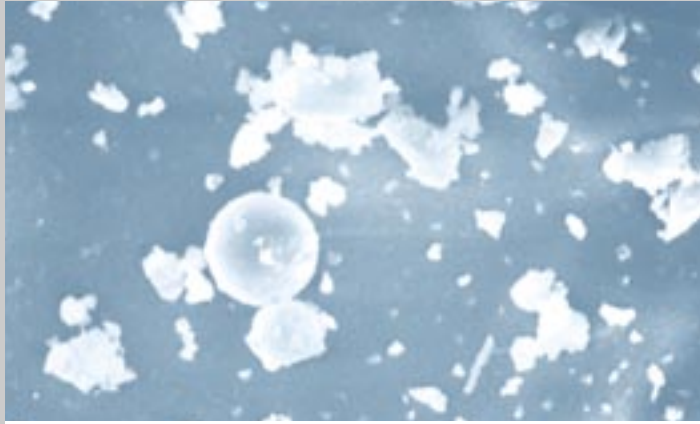


Within 6 to 12 months after being applied to steel-troweled surfaces, Ashford Formula develops a glossy, marble-like sheen that lasts the lifetime of your concrete. This eliminates the need for repeated applications of urethanes, waxes, acrylics and other expensive maintenance-intensive floor coatings. Because the Ashford Formula permanently seals concrete, foreign matter—including oil, alkalai, free lime, and traffic scum—cannot penetrate. Your concrete can be easily washed with a mop and soapy water or automatic scrubber.



UNTREATED CONCRETE, MAGNIFIED

The natural porosity leaves untreated concrete or masonry subject to penetration by moisture, oils, and other contaminants.



TREATED CONCRETE, MAGNIFIED

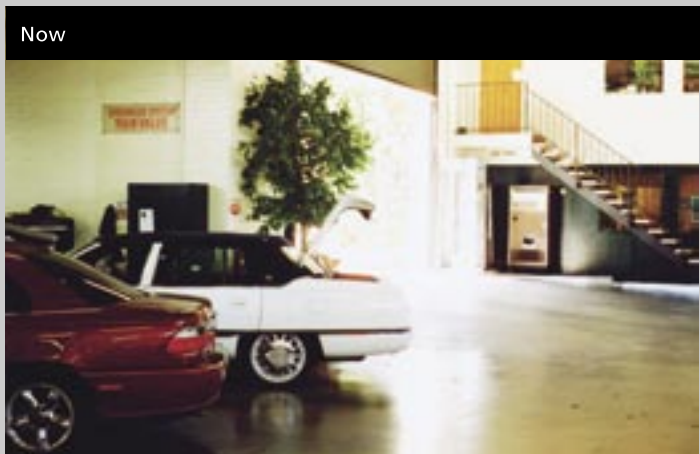
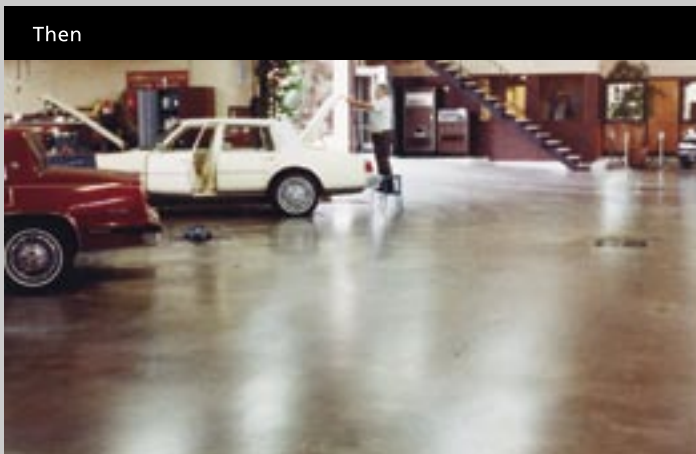
Ashford Formula reacts chemically with the concrete or masonry, binding it into a solid, dense mass which creates a permanent, effective seal.

ASHFORD FORMULA™

THE FINAL TREATMENT FOR YOUR CONCRETE

WARRANTY- Curecrete Distribution, Inc. stands behind the Ashford Formula with the longest warranty in the industry. Because the Ashford Formula has a successful track record going back to the 1940s, Curecrete Distribution has the confidence to back up the product. Nobody else has floors old enough to demonstrate that they can safely offer a long-term warranty. Floors treated over 50 years ago still look brand new despite such long-term wear.

for additional information on the Ashford Formula, go to www.ashfordformula.com



Casa de Cadillac treated their concrete floor with the Ashford Formula in 1949. The floor continues to perform and shine to this day. The cars have changed over time but the floor looks better than ever!

over two billion square feet...only the beginning

PROJECT LIST

WAREHOUSE/DISTRIBUTION CENTERS:

A.T. Plastics
Peachtree City, Georgia

Ameriserve Distribution
Shawnee, Kansas

Corporate Express
Kansas City, Missouri

LDS Print Shop & Distribution
Salt Lake City, Utah

Miller Brands of Phoenix
Phoenix, Arizona

Ray-O-Vac
Dixon, Illinois
560,000 sq. feet

Omega Industries
Elkhart, Indiana



Owen Distribution
Chambersburg, Pennsylvania

ABC Distributing
Miami, Florida
1,000,000 sq. feet

Random House
Westminster, Maryland

Security Capital
Foothill Ranch, California

Circuit City Distribution
Columbus, Ohio
325,000 sq. feet

Bridgestone Firestone
Portland, Oregon

Car Quest Distribution
Columbia, South Carolina

Bausch & Lomb
Tampa, Florida

Dillard's Distribution
Olathe, Kansas

Esprit Distribution
Lenexa, Kansas

Duracell
Indianapolis, Indiana

Sprint North Supply
Fayetteville, North Carolina

Best Buy
Nichols, New York

Kraft Food Dry Distribution
Stockton, California

Wal-Mart Distribution
Tomah, Wisconsin

MANUFACTURING FACILITIES:

Jiangsu Pengyao Pharmaceuticals
Jiangsu, China

**Budweiser Wuhan International
Brewing Company**
Hubei, China

Chesapeake Packaging
Mechanicsburg, Pennsylvania

Continental Plastics Co
Alpharetta, Georgia

**Mitsui Bussan Raw Materials
Development Corp.**
Osaka, Japan

Green Manufacturing
Milwaukee, Wisconsin

Praxair Manufacturing Co.
Hillsboro, Ohio

US Food Service
Yantis, Connecticut

Proctor & Gamble
Budapest, Hungary

General Mills
Cedar Rapids, Iowa

Pepsi
Tampa, Florida

Tropicana
Bradenton, Florida

American Axle & Manufacturing
Buffalo, New York

Car Quest/General Parts
Romeoville, Illinois

Ford Assembly Plant
Detroit, Michigan

General Motors Engine Plant
Flint, Michigan

Saturn
Spring Hill, Tennessee
4 million sq. feet

over two billion square feet...only the beginning

Chrysler Transmission Plant

Kokomo, Indiana

1,152,000 sq. feet

Home Depot

Leon, Guanajuato, Mexico

Boeing/Delta

Decatur, Alabama

Anheuser-Busch

Austin, Texas

Big O Beverage

Frankfurt, Kentucky

JC Penny

Haslet, Texas

1,000,000 sq. feet

Coca Cola

Burlington, Vermont

Frito-Lay

Ashville, North Carolina

Chrysler De Mexico

Toluca, Edo. De Mexico, Mexico

5,000 sq. meters

CORRECTIONAL FACILITIES:

Mecklenberg Intake Dention

Charlotte, North Carolina

127,000 sq. feet

Central Utah Correction Facility

Gunnison, Utah

Cherry Correctional Facility

Goldsboro, North Carolina

Coffee County Correctional

Nicholas, Georgia

Federal Correctional Institution

Scagoville, Texas

Herico County Prison

Richmond, Virginia

Pitches Honor Ranch

Castich, California

700,000 sq. feet

Lake Correctional Facility

Clermont, Florida

Western Correctional

Cumberland, Maryland



STADIUMS/ARENAS:

1996 Olympic Stadium

Atlanta, Georgia

AA Arena, Miami Heat

Miami, Florida

All American Sports Park

Las Vegas, Nevada

Salt Palace

Salt Lake City, Utah

750,000 sq. feet

Mariners Stadium

Seattle, Washington

Georgia Dome

Atlanta, Georgia

1,985,000 sq. feet

World Arena

Colorado Springs, Colorado

Show Center

La Plata, Argentina

United Center

Chicago, Illinois

Osaka Dome

Osaka, Japan



TECHNICAL DATA

product description

Colorless, odorless, nontoxic, noncombustible, nonflammable. Complies with all VOC regulations.

uses

Concrete, concrete block, exposed aggregate or any sand/aggregate cement combinations. New or old, rough or smooth surfaces.

functions

Seals, dust proofs, hardens and cures. Protects against dusting, pitting, palling, efflorescence, and temperature cracking in concrete. Inhibits freeze/thaw deterioration. Neutralizes excess internal alkali from concrete.

packaging

- ∴ 55-gallon drums/208 Liters
- ∴ 5-gallon drums/19 Liters

storage life

Two years. Agitate pail or drum before using.

surface preparation

Freshly finished concrete: No preparation required.
Existing concrete: Sweep, scrub, or strip concrete to remove any surface contamination or film.

applications required

One

coverage

Approximately 200 square feet/5 meters per gallon/liter. Coverage depends on the temperature and porosity of the concrete.

color

Clear

surface appearance

On smooth troweled concrete, a sheen develops within 4-12 months. All other surfaces retain their natural finish. The sheen can be developed more quickly by burnishing the floor with a propane burnisher.

thinners

None required

primer

None required

application method

Brush, roll or spray

cleanup

Soap and water

tools needed

Low-pressure sprayer (power), roller, brush or fine/soft bristle broom.

drying time

One to three hours. The surface may be used as soon as the application is complete and the surface is again dry to the touch. Newly laid surfaces require the normal hardening period.

temperature limits

Applicable in temperatures up to 135°F/57°C or as low as 35°F/1.7°C if the concrete is covered by plastic and completely protected from freezing for a period of 6 days.

painting

Allow at least 7 drying days before applying quality grade paint on existing concrete. Allow 28 days for proper curing before painting new concrete.

limitations

Do not apply the Ashford Formula to:

- ∴ Lightweight block or other extremely porous masonry, which contains actual holes and air pockets.
- ∴ Areas previously treated with curing or sealing agents, unless these coatings have completely worn off or have been removed by chemical or mechanical means.

NOTE

Apply to colored concrete only after the slab is fully cured. Do not get on glass or other finished surface.

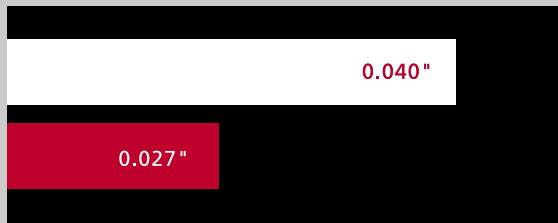
This technical information is provided as a general performance profile for evaluating the appropriate use of the Ashford Formula. Independent laboratories obtained the test performance results under controlled environments. Curecrete Distribution, Inc. makes no claim that these tests, or any other tests, accurately represent actual design and/or usage environments.

over two billion square feet...only the beginning

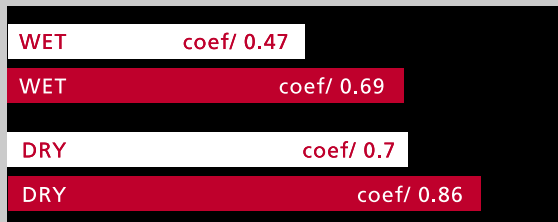
Performance Criteria



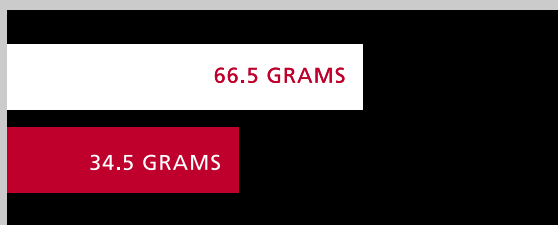
IMPACT RESISTANCE (increase)



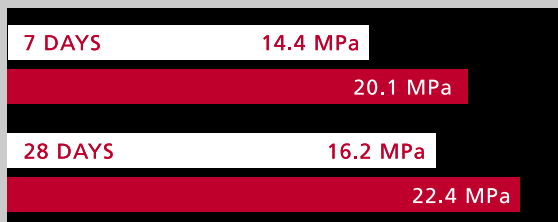
ABRASION RESISTANCE (depth of wear)



COEFFICIENT OF FRICTION



MOISTURE LOSS (after 24 hours)



COMPRESSIVE STRENGTH (at 7 & 28 days)

abrasion

ASTM C 779 - *Depth of Wear*

Abrasion Resistance to Revolving Disks:

An improvement of 32.5% over untreated samples after 30 minutes.

bonding

ASTM D 3359 - *Surface Adhesion*

Adhesion of Coatings: For epoxy, a 22% increase in adhesion over untreated samples. No change in adhesion for polyurethane.

curing

Moisture loss during the critical initial 24-hour period was determined on treated and untreated samples in a controlled environment cabinet: *Untreated samples registered a 93% greater moisture loss over treated samples.*

hardening

ASTM C39 - *Compressive Strength*

After 7 days: An increase of 40% over untreated samples.

After 28 days: An increase of 38% over untreated samples.

ASTM C 805 - *Rebound Number*

Impact resistance by Schmidt hammer:

An increase of 13.3% over untreated samples.

permeability

SEEPAGE RATE

Using a 7-foot (2.13 meter) head of water on a 4.91 square inch (124.71 mm) area treated with the Ashford Formula only allowed a rate of 0.00073 oz. (0.022cc) per hour. After several days the sample became damp, but no local seepage was observed.

friction

ASTM C 1028 - *Friction*

The coefficient of friction on steel-troweled samples treated with the Ashford Formula versus the reference tile (a higher ratio represents a reduction in slippage):

Dry, 0.86 vs. 0.71, and wet, 0.69 vs. 0.47.

weathering

ASTM G 23 - *Light Exposure Degradation*

Exposure to ultraviolet light and water:

No evidence of adverse effects on the samples treated with the Ashford Formula.

LEGEND: untreated sample

ASHFORD FORMULA™ treated sample

WAL-MART DISTRIBUTION CENTER



GUADALAJARA, MEXICO

TOKYO INTERNATIONAL AIRPORT



TOKYO, JAPAN

COSTCO



UTAH, USA



**ASHFORD
FORMULA™**
THE FINAL TREATMENT FOR YOUR CONCRETE

CURECRETE HISTORY

Past

Since its introduction to the United States in 1947, the Ashford Formula has single-handedly created the concrete densification concept and developed it into a widely accepted and acknowledged industry. Because of its unique and proprietary process for chemical densification, the Ashford Formula has been specified for use to enhance millions of square meters of concrete surfaces worldwide.

Present

The Ashford Formula continues to be recognized throughout the industry as the standard for quality expectations. Curecrete Distribution Inc. has also set high standards by creating a strong global presence. This allows for consistency in quality and customer service worldwide where the Ashford Formula is regularly and increasingly specified for use.

Future

With just one permanent application, many concrete surfaces are still performing today after 30, 40, and even 50 years of continuous use. Exposed concrete surfaces treated with the Ashford Formula are becoming the solution of choice by end-users and specifiers all over the world. Curecrete Distribution Inc. is dedicated to building a progressive, worldwide network of factory authorized distributors and certified applicators to ensure it meets the needs of even the most discriminating customers.

CURECRETE DISTRIBUTION, INC.
HQ 1203 W. SPRINGCREEK PL. SPRINGVILLE, UTAH 84663
P 801.489.5663 F 801.489.3307
www.ashfordformula.com



1. Product Name

Ashford Formula

2. Manufacturer

Curecrete Distribution Inc.
 1203 W Spring Creek Place
 Springville, UT 84663-0551
 (800) 998-5664
 (801) 489-5663
 Fax: (801) 489-3307
 www.ashfordformula.com

3. Product Description

BASIC USE

Ashford Formula, the leader in concrete densification since 1949, is a transparent, chemically reactive, water-based sealer that penetrates concrete and masonry building materials, protecting, preserving and strengthening them permanently by:

- Curing - Ashford Formula controls hairline checking and temperature cracking on new concrete. When applied to properly placed, structurally sound freshly finished concrete, Ashford Formula will uniformly cure the concrete through a combined chemical/moisture retention reaction so vital to the complete hydration process
- Sealing - Ashford Formula penetrates deep into the concrete forming a chemical reaction that locks the pores from within, providing a deep permanent seal on all types of concrete surfaces
- Hardening - Ashford Formula solidifies the component parts of the concrete into one solid mass, increasing the density, toughness, hardness and substantially increasing the abrasion resistance and durability of the concrete surface. Smooth steel troweled surfaces develop a marble-like finish and sheen. Ashford Formula treated concrete has been compressively tested 38% harder after 30 days than fully cured, untreated concrete
- Dustproofing - Ashford Formula chemically reacts with the salts in the concrete, permanently eliminating the release of concrete dust through the surface pores
- Neutralizing Alkali - As the Ashford Formula progressively penetrates the concrete, it



Wal-Mart facility, Guadalajara, Mexico

neutralizes the alkalis, forcing them to the surface where they can be washed away during the application. The deep alkalis are locked in, and efflorescence and the leaching of lime and alkalis stop

- Bonding - Ashford Formula prepares the treated surface for paints, caulking compounds, adhesives and floor coverings by eliminating the surface concrete salts that are so detrimental to proper bonding. Ashford Formula contains no silicone and is coatable and compatible with any type of covering when standard surface preparation guidelines are followed

With one application of Ashford Formula, concrete or other masonry is cured and permanently sealed for its lifetime, and is rendered highly resistant to oils, greases and other surface contaminants. The component parts of the concrete are solidified into a solid mass that toughens, hardens and increases the density. Surface alkalis are neutralized, and efflorescence and the leaching of lime and alkalis are stopped. Treatable materials include concrete, heavyweight concrete block, mortar, plaster, stucco, terrazzo, exposed aggregate and any sand-aggregate-cement combination. Applications include warehouses, distribution facilities, aviation hangars, manufacturing plants, food processing and distribution buildings, pulp and paper mills or other types of facilities with large exposed concrete floors.

COMPOSITION & MATERIALS

Ashford Formula complies with all USDA regulations and is nontoxic, noncombustible and nonflammable. It is not harmful to lungs or hands and contains no volatile organic compounds (VOCs).

SIZES

Ashford Formula is available in 55 gal (208 L) drums and 5 gal (19 L) pails.

COLOR, FINISH

Ashford Formula is clear and will not change the natural appearance of masonry or concrete. Where alkali, lime and other impurities are forced to the surface and the natural appearance is to be preserved, all treated surfaces must be flushed clean with clear water in accordance with manufacturer's instructions.

On smooth steel troweled concrete surfaces, a natural wax-like sheen will appear between 6 - 12 months after treatment. This can be accelerated by burnishing after curing. The sheen is caused by the hardening and sealing effects of the Ashford Formula, as well as by the abrasion from cleaning and use of the floor. A routine cleaning program using a floor scrubber with abrasive-type brushes will accelerate and enhance the sheen. The sheen will last the lifetime of the surface.

BENEFITS

- Controls hairline cracks in new concrete
- Only one application creates a permanent seal that is solid, rather than porous, on all

TABLE 1 PHYSICAL/CHEMICAL PROPERTIES

Abrasion resistance (ASTM C779)	At least 32.5% increase at 30 minutes
Surface adhesion (ASTM D3359)	At least 22% increase in epoxy adhesion; no change for polyurethane adhesion
Curing	At least 93% greater moisture retention during the initial critical 24 hour curing period compared to untreated samples
Compressive strength (ASTM C39)	At least 40% increase in compressive strength at 7 days compared to untreated samples At least 38% increase at 28 days compared to untreated samples
Impact resistance (ASTM C805)	At least 13.3% increase in impact resistance compared to untreated samples
Permeability	0.00073 oz (0.022 cc)/hour seepage rate using a 7 (2.13 m) head of water and a 4.91 in ² (3168 mm ²) treated area
Coefficient of friction (ASTM C1028)	0.86 dry, 0.69 wet
Weathering (ASTM G23)	Ultraviolet light and water spray exposure had no adverse effect on treated samples

types of concrete surfaces

- Hardens and strengthens within the concrete mass, protecting against deterioration and producing a floor that is resistant to traffic; rather than eroding, the floor surface actually self-polishes
- Treated surface resists dust, oils, greases and other surface contaminants, such as tire marks
- Effective curing agent when applied immediately after the finishing operation; stabilizes the surface, minimizes crazing and ensures that the concrete will meet or exceed its design strength
- Prepares the treated surface for paints, caulking compounds, adhesives and floor coverings
- Covers approximately 200 ft²/gal (5 m²/L), depending on concrete temperature and porosity
- Compatible with any type of covering when standard surface preparation guidelines are followed
- Thinners not required - Equipment is cleaned using water only

LIMITATIONS

- Ashford Formula is not to be used to seal light-weight block or other extremely porous masonry that contains actual holes and air pockets
- Ashford Formula is not for application over areas previously treated with curing or sealing agents unless these coatings have been removed by chemical or mechanical means
- On concrete that is abnormally porous or soft, additional applications of Ashford Formula may be required. This also applies to surfaces with open finishes, such as broom finished or scarified floors

4. Technical Data

APPLICABLE STANDARDS

ASTM International (ASTM)

- ASTM C39 Standard Test Method for Compressive Strength of Cylindrical

Concrete Specimens

- ASTM C779 Standard Test Method for Abrasion Resistance of Horizontal Concrete Surfaces
- ASTM C805 Standard Test Method for Rebound Number of Hardened Concrete
- ASTM C1028 Standard Test Method for Determining the Static Coefficient of Friction of Ceramic Tile and Other Like Surfaces by the Horizontal Dynamometer Pull-Meter Method
- ASTM D3359 Standard Test Methods for Measuring Adhesion by Tape Test
- ASTM G23 Practice for Operating Light-Exposure Apparatus (Carbon-Arc Type) With and Without Water for Exposure of Nonmetallic Materials (Withdrawn 2000)

PHYSICAL/CHEMICAL PROPERTIES

See Table 1.

5. Installation

PREPARATORY WORK

Deliver products in manufacturer's original, unopened, undamaged containers with identification labels intact. Store materials protected from exposure to harmful environmental conditions and at temperature and humidity conditions recommended by the manufacturer. Storage life is 2 years.

Verify that site conditions are acceptable for installation. Do not proceed with installation until unacceptable conditions are corrected.

On existing concrete remove all surface coatings. To remove dust, dirt and contamination from areas to be treated, sweep surface using a fine bristle broom, or scrub, hose off with water and let dry. Ashford Formula can be applied to damp surfaces as long as all puddled areas are swept away. This prevents the Formula from becoming diluted before it is able to penetrate the surface.

METHODS

Ashford Formula may be applied on new con-

crete by owners, contractors, or qualified applicators. If owners or their contractors apply the material, Curecrete requires that a field technician be on hand to provide assistance and ensure the application is done correctly. On existing concrete, Curecrete recommends that only qualified applicators prepare the surface and apply the material. Outside of the United States, the Ashford Formula can be applied only by certified applicators.

New Concrete

Apply product immediately following the finishing operation, as soon as the surface is firm enough to walk on and before hairline checking and temperature cracking begin. Curecrete recommends application using a low pressure, high-volume pump that will dispense material at 40 - 70 psi (276 - 483 kPa) and roughly 3 - 5 gal (11 - 19 L) per minute. Keep the entire surface wet with Ashford Formula for 30 minutes, working it into the concrete surface with a soft-bristled broom.

As the Ashford Formula becomes slippery underfoot, lightly mist the surface with water. As it again becomes slippery underfoot, thoroughly flush the entire surface with water and squeegee it completely dry to remove all surface alkali and/or Ashford Formula residue.

On exterior broom-finished surfaces, no flushing is required, but any remaining Ashford Formula must be squeegeed or broom-swept from the surface after 30 - 40 minutes.

Newly placed concrete requires the normal hardening period. Allow 30 days for proper curing before applying paint or covering.

Old Concrete/All Cured Surfaces

Spray with a low pressure sprayer or pour and brush with a soft bristle broom to saturate the entire surface with Ashford Formula. Keep the surface wet with the Formula for 30 minutes.

- Option 1 - If the majority of the Ashford Formula has been absorbed into the surface after 30 - 40 minutes, broom or squeegee



any excess material from all low spots and puddles so that all remaining Ashford Formula is entirely absorbed into the concrete or is totally removed from the surface

- Option 2 - If after 30 - 40 minutes the majority of the Ashford Formula is still on the surface, wait until it becomes slippery underfoot, then thoroughly flush the entire surface with clear water; squeegee completely dry to remove all Ashford Formula residue

The surface can be used as soon as it is again dry to the touch and the application is complete. Allow 3 - 7 days before applying paint or coverings.

Instructions for tilt-wall applications and vertical surface applications are available online at www.ashfordformula.com.

PRECAUTIONS

Performance

- Apply product with low pressure sprayer only. Do not use airless sprayers, as they atomize the material, allowing inhalation
- Diaper all construction equipment components that might drip oil, hydraulic fluid or other liquids
- Apply Ashford Formula to colored concrete only after the slab is fully cured
- Prevent Ashford Formula from getting on glass or other finished surfaces. If this occurs, immediately wipe with a damp cloth or flush the affected surface immediately. When applying near windows, mask the glass
- Do not apply Ashford Formula when the temperature falls to below 35 degrees F (1.7 degrees C)
- Protect new concrete from freezing for a period of 6 days
- If the Ashford Formula becomes frozen, thaw and agitate before using

Safety

- If taken internally, do not induce vomiting. Drink large amounts of milk or water. Consult a physician immediately
- May cause eye and mucous membrane damage. Avoid contact with eyes and mucous membranes. If contact occurs, flush with water for 15 minutes
- Surfaces treated with the Ashford Formula temporarily become slippery during application. Exercise care and caution to avoid falls

BUILDING CODES

Installation must comply with the requirements of all applicable local, state and federal code jurisdictions.

6. Availability & Cost

AVAILABILITY

Curecrete Distribution Inc. has inventory facilities throughout the United States, allowing for next day delivery to more than 95% of all zip codes, as well as same day service in some areas. Contact the manufacturer for local availability information.

COST

Ashford Formula is competitively priced. For specific price information, contact Curecrete Distribution Inc.

7. Warranty

Curecrete Distribution Inc. warrants that a properly prepared and structurally sound concrete or masonry surface treated with Ashford Formula according to the manufacturer's directions will remain dustproof, hardened and water repellent for 20 years. If the treated surface does not remain dustproof, hardened and water repellent after the specified sealing period, Curecrete Distribution Inc. will supply, at its own expense, sufficient Ashford Formula to reseal any defective area. This warranty does not apply if the Ashford Formula is improperly applied or if structural faults occur due to faulty workmanship, improper design or failure of materials other than the Ashford Formula. Complete warranty terms and conditions are available from the manufacturer. For details, consult Curecrete Distribution Inc.

8. Maintenance

Scrub the floor often. The abrasion polishes the floor and enhances the shine. Ample water used with routine detergent scrubbing will accelerate the sealing process.

Use a neutral to high pH detergent void of sulfates and hydroxides (caustic soda) to clean the floor. Acidic cleaners or sweeping compounds will dull the surface appearance.

Clean spills quickly. Highly concentrated acid may etch the surface if left in contact with the floor. Foods such as mustard and grape juice may leave a residual stain if not removed immediately.

Keep a good oil emulsifier on hand to clean up oil, grease or fats.

Waxing or coating with other products is unnecessary and is not recommended.

9. Technical Services

Technical assistance, including more detailed information, product literature, test results, project lists, assistance in preparing project specifications and arrangements for application supervision, is available by contacting Curecrete Distribution Inc.

10. Filing Systems

- MANU-SPEC®
- Additional product information is available from the manufacturer upon request.

Material Safety Data Sheet

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910 1200. Standard must be consulted for specific requirements.



U.S. Department of Labor
Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

IDENTITY (As Used on Label and List) Ashford Formula	Note: Blank spaces are not permitted. If any item is not applicable or no information is available, the space must be marked to indicate that.
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SECTION I

Manufacturer's Name Curecrete Chemical Company, Inc.	Emergency Telephone Number 800-728-2482 International Emergency Number (call collect) 801-629-0667 Telephone Number for Information 801-489-5663
--	---

Address (Number, Street, City, State, and Zip Code) 1203 West Spring Creek Place Springville, Utah 84663	Date Prepared February 5, 2007
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SECTION II – HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Hazardous Components (Specific Chemical Identity: Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (Optional)
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N/A – Water-based, catalytically modified inorganic sodium silicate material.

SECTION III – PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point	230°F (110°C)	Specific Gravity (H ₂ O = 1)	1.1 - 1.2 @ 20°C
Vapor Pressure (mm Hg.) 25°F (-3.89°C)	23.756	Melting Point	N/A
Vapor Density (AIR=1) 25°F (-3.89°C)	0.9996	Evaporation Rate Butyl Acetate = 1 (Water = 1)	1
Solubility in Water	100%	pH	11.3 - 11.6

Appearance and Odor **Clear liquid, odorless**

SECTION IV – FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used) N/A	Flammable Limits N/A	LEL	VEL
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Extinguishing Media **Non-flammable (water-based)**

Special Fire Fighting Procedures **N/A**

Unusual Fire and Explosion Hazards **N/A**

SECTION V – REACTIVITY DATA

Stability	Unstable		Conditions to Avoid
	Stable	X	N/A

Incompatibility (Materials to Avoid) Strong acids		
Hazardous Decomposition or By Products N/A		
Hazardous Polymerization	May Occur	Conditions to Avoid
	Will Not Occur	X N/A

SECTION VI – HEALTH HAZARD DATA

Route(s) of Entry:	Inhalation? If atomized.	Skin? N/A	Ingestion? Irritation of intestinal tract.
Health Hazards (Acute and Chronic)	Avoid direct contact with eyes and mucous membranes (caustic). Breathing of atomized mist may cause bronchial irritation (caustic). Use low-pressure sprayer. Extended exposure may dry natural oils of skin and cause skin irritation (caustic).		
Carcinogenicity:	NTP? N/A	IARC Monographs? N/A	OSHA Regulated? N/A
Signs and Symptoms of Exposure	Burning and itching in nose and throat (inhalation if atomized). Pain, redness and tearing (eye exposure), itching or burning (prolonged skin exposure).		
Medical Conditions Generally Aggravated by Exposure	Asthma and lung diseases, skin diseases.		
Emergency and First Aid Procedures	Flush eyes with water for 15 minutes. If ingested, do not induce vomiting. Drink large amounts of milk or water. Call a physician immediately. Remove contaminated clothing.		

SECTION VII – PRECAUTIONS FOR SAFE HANDLING USE

Steps to Be Taken in Case Material is Released or Spilled	Clean up with water.
Waste Disposal Method	Flush down sanitary sewer with large volume of water. Observe all local, state and federal regulations.
Precautions to Be Taken in Handling and Storing	N/A
Other Precautions	Floors may become slippery during application of the Ashford Formula.

SECTION VIII – CONTROL MEASURES

Respiratory Protection (Specify Type)	Use NIOSH approved mist respirator if atomized.	
Ventilation Not required unless atomized.	Local Exhaust Use with adequate ventilation.	Special
	Mechanical (General)	Other
Protective Gloves Use rubber gloves where extended contact may occur.	Eye Protection Avoid contact with eyes.	
Other Protective Clothing or Equipment	N/A	
Work/Hygienic Practices	Wash hands after handling. Wash contaminated clothing before reuse.	



APPLICATION SPECIFICATIONS FOR THE ASHFORD FORMULA™

I. INSTRUCTIONS FOR FRESHLY FINISHED CONCRETE

A. Surface Preparation

Freshly finished concrete surfaces require no surface preparation if the Ashford Formula™ is to be applied as a curing agent immediately after the finishing operation. On areas where forms are recently removed, all form oil and breaking compound residue must be removed so as not to inhibit the penetration of the Ashford Formula™ into the surface. The Ashford Formula™ can be applied in temperatures from 35°F/1.7°C to 135°F/57°C.

B. Application Instructions

Step 1

Immediately following the troweling operation, and as soon as the slab is safe to walk on, saturate the surface with the Ashford Formula™ at approximately 200 square feet per gallon (5m² per liter) using a low pressure, high volume sprayer. The Ashford Formula™ may also be applied by pouring it directly on the surface and spreading it evenly with a soft-bristled broom. **Note: The Ashford Formula™ is a penetrant, not a membrane. Enough material must be on the surface to allow the Ashford Formula™ to thoroughly soak in. As a guideline, there should be enough Ashford Formula™ on the floor to fill-in a footprint within several seconds of taking a step. This is often referred to as a flood coat or wet coat.** Once a wet coat has been achieved, work the Ashford Formula™ into the concrete surface with soft-bristled brooms. This step breaks surface tension and aids penetration.

Keep the surface wet with the Ashford Formula™ for a minimum of 30 minutes, and then wait for the Ashford Formula™ to become slippery and gel-like under foot. In extremely cool, windless conditions, the Ashford Formula™ can take up to 1-hour or longer to become slippery. In extremely hot conditions the Ashford Formula™ may begin to become slippery before the full 30-minute soak-in period. Additional Ashford Formula™ must be applied to the concrete in order to keep all areas of the concrete surface wet with the Ashford Formula™ for at least 15 to 20 minutes before becoming slippery in these hot conditions. **Note: No spot or area on the slab should be allowed to become dry during the soak in period. It is best to avoid dry areas by either brooming excess Ashford Formula™ over the more absorbent spots, or by putting down more Ashford Formula™. Pay particular attention to porous areas and slab edges, as these tend to dry out more quickly.**

Step 2

Immediately after the Ashford Formula™ becomes slippery, lightly mist the surface with water. This can be done either with a low-pressure sprayer or with a hose and nozzle (nozzle should be adjusted to create a mist). This step will resolubilize the Ashford Formula™ so that it is no longer slippery or gel-like. Agitate the floor with a broom to aid the penetration of the Ashford Formula™. Wait for the Ashford Formula™ to become slippery or gel-like a second time.

Step 3

At this point, thoroughly flush the surface with water. During the flushing process, the floor should be agitated with brooms to help loosen and remove excess Ashford Formula™ from the surface.

Step 4

Thoroughly squeegee the slab dry by pushing the water ahead of you off the slab edge. At this point, the floor should look like bare concrete with nothing on it. **Note: During the squeegee process, there may be some slippery patches. This is an indication that excess the Ashford Formula™ is still on the surface. These areas should be re-flushed and squeegeed again until the entire surface is dry.**

ADDITIONAL NOTES

- Please consult with your local technical representative for questions regarding application in extreme or unusual weather conditions - hot, cold, windy, or otherwise.
- Saw cutting may be done before or after the Ashford Formula™ is applied, depending on the immediate need for curing. It is critical in either case that the dust or slurry from cutting be immediately and thoroughly removed from the slab.
- Abnormally porous or soft concrete floors may require additional applications of the Ashford Formula™. This also applies to surfaces with open finishes, such as broom finished or scarified floors.
- Burnishing the surface with a 2000-RPM propane burnisher will help develop the sheen more quickly. For complete instructions contact the manufacturer.

II. INSTRUCTIONS FOR EXISTING CONCRETE

A. Surface Preparation

The concrete surface must be free of any material that would inhibit the penetration of the Ashford Formula™. This would include any curing or sealing compound, paints or coatings, construction laitance, and any surface dust or dirt. In some instances, the floor may need to be stripped, in which case it may also need to be neutralized. **Note: All surfaces that will be painted, striped, or have a coating or adhesive applied should use Step 2 (Option 2) as described on the next page. For additional information, call 800-998-5664 for the name of your qualified Ashford Formula™ technical representative.**

Step 1

Saturate the surface with Ashford Formula™ so that the entire surface is wet with Ashford Formula™ for 30 minutes.

Step 2 (Option 1)

If after 30-40 minutes the majority of the Ashford Formula™ has been absorbed into the surface, broom or squeegee any excess Ashford Formula™ (while still in its liquid form) from all low spots and puddles so that all remaining Ashford Formula™ is entirely absorbed into the concrete or totally removed from the surface.

Step 2 (Option 2)

If after 30-40 minutes the majority of the Ashford Formula™ is still on the surface, wait until it becomes slippery underfoot, then thoroughly flush the entire surface with clear water and squeegee completely dry to remove all Ashford Formula™ residue. If prior to 30 minutes the Ashford Formula™ becomes slippery, follow the Instructions for *Freshly Finished Concrete*.

III. INSTRUCTIONS FOR EXTERIOR CONCRETE**Step 1**

Saturate the surface with the Ashford Formula™ using a low pressure, high volume sprayer. Keep the entire surface glistening wet with Ashford Formula™ for 30 minutes.

Step 2

After the 30-minute application period, use a broom or mop to remove any puddles or concentrations of Ashford Formula™ from the slab.

TIP: A wide, fine bristle push broom works well to disperse the Ashford Formula™ on textured surfaces.

IV. INSTRUCTIONS FOR TILT-WALL APPLICATION**A. TILT-WALL APPLICATION WHEN THE ASHFORD FORMULA™ IS USED TO CURE THE CASTING BED**

When the Ashford Formula™ is used to cure the casting bed, follow the instructions for *Freshly Finished Concrete*. It is essential that particular care be given to the following guidelines:

- Ensure that all residue of the Ashford Formula™ has been removed from the surface of the casting bed during the flush and squeegee procedure. If certain areas are still slick during the squeegee operation, it is necessary to re-flush and re-squeegee the surface until the entire slab is free of any Ashford Formula™ residue. The concrete should appear as though there is nothing on it.
- Follow the bond-breaker manufacturer's application instructions. Also, follow the manufacturer's prescribed testing procedures for ensuring that enough bond-breaker has been applied for a sufficient period of time.

B. TILT-WALL APPLICATION WHEN ASHFORD IS NOT USED TO CURE THE CASTING BED.

It is critical that any substance used previously to cure the slab be completely stripped and/or removed from the surface of the concrete prior to the application of the Ashford Formula™. Bond breakers and/or curing agents (if left on the floor surface) will inhibit the penetration of the Ashford Formula™ and cause whitening. These substances are designed to dissipate from the floor surface, but may not do so completely. The Ashford Formula™ must be applied on clean, bare concrete. Qualified floor technicians must perform the floor preparation.

For guidelines on proper floor preparation, please contact a qualified Ashford Formula™ technical representative. To find a representative in your area, please call 800-998-5664.

V. VERTICAL SURFACE APPLICATION**Step 1**

Apply the Ashford Formula™ to the surface of the wall with a low-pressure sprayer or roller, starting at the top and working your way along the wall. Apply sufficient material to thoroughly wet the surface without allowing excessive amounts to run down the wall.

Step 2

As you work your way along the wall, if any previously sprayed areas appear to be fully absorbing the Ashford Formula™, re-spray those areas so that the entire wall is kept damp with the Ashford Formula™ for 30 minutes.

Step 3

Allow the treated surface to dry. If the treated surface is to be coated or painted or the natural appearance is to be preserved, thoroughly flush the vertical surface with water 10 minutes after the initial 30-minute application period.

VI. GENERAL GUIDELINES FOR ALL ASHFORD FORMULA™ APPLICATIONS

- Apply with low-pressure sprayer only. Do not use airless sprayers, as they atomize the material, allowing inhalation.
- May cause eye and mucous membrane damage. Avoid contact with eyes and mucous membranes. If contact occurs, flush with water for 15 minutes.
- If taken internally, do not induce vomiting. Drink large amounts of milk or water. CONSULT A PHYSICIAN IMMEDIATELY.
- Surfaces treated with the Ashford Formula™ temporarily become slippery during application. Exercise care and caution to avoid falls.
- Avoid contact with glass, aluminum, or other glazed or finished surfaces. Where contact occurs, immediately wipe with a damp cloth or flush with water. When applying near windows, mask the glass.
- Protect from freezing. If frozen, thaw and agitate before using. Do not use on cinder block or other highly porous material, which contains holes or air pockets.
- When used near blacktop, the Ashford Formula™ must be flushed away with water to eliminate any white discoloration that may appear when the surface is dry.