





University of South Carolina Indoor Recycling and Waste Container Specifications

Design			
Material	Single Stream Recycling (commingled plastic, aluminum, and steel containers and mixed paper)	Mixed Paper Recycling	Landfill Waste (Trash)
Lid	 Mixed Recycling Lid	 Paper Slot Lid	 Funnel Lid
Location	Standard container for all indoor waste bins. New buildings, renovation projects, and replacement bins. Required containers to meet University of South Carolina's waste reduction and recycling goals and policies. (http://www.facilities.sc.edu/recycle)		
Bag Liners	30-gallon: 28 x 40" 1.5 mil drawstring Blue bag USC stores warehouse #P101344 40-gallon: TBD 60-gallon: 47"x52" blue bag	30-gallon: 28 x 40" 1.5 mil drawstring Blue bag USC stores warehouse #P101344 40-gallon: TBD 60-gallon: 47"x52" blue bag	30-gallon: 33x39" 1.5 mil Black bag USC stores warehouse #P101191 40-gallon: TBD 60-gallon: 47"x52" bag
Manufacturer	ErgoCan (SNS Films, LLC)		
Specs	Made in USA (Toledo, OH) from recycled plastic, interchangeable customizable panels for when programs update or change, recyclable. EC1119 – 30 gallon – Dimensions: 11"Wx19"Lx30"H EC – 40 gallon – Dimensions: 17.75"Wx17.75"Lx30.25"H (to be available 11/2015) EC2626 – 60 gallon – Dimensions: 26"Wx26"Lx35"H		
Link	http://www.ergocan.com		
Cost	30 gallon – EC1119 MSRP \$150.00. Shipping Extra. Price breaks in quantity: Call or email. 40 gallon – EC MSRP \$TBD. Shipping Extra. Price breaks in quantity: Call or email. 60 gallon – EC2626 MSRP \$570.00. Shipping Extra. Price breaks in quantity: Call or email.		
Contact	Manufacturer: Terry Netterfield (419) 842-1004 tnetterfield@ergocan.com	USC Recycling Coordinator: Larry Cook (803) 777-2223 lcook@fmc.sc.edu	

CARE + MAINTENANCE

A comprehensive care and maintenance program is just as important as the initial material selection. If you're a homeowner, you'll want to be aware of the care and maintenance requirements before you select a material. If you are an architect or designer, you'll want to know this information prior to specifying a material. It is strongly recommended that you provide this information to your client. This document covers:

UPDATED ON: 10.4.2012

- **GENERAL GUIDELINES** - How to care for materials based on application.
- **SUGGESTED PRODUCTS** - Products to be incorporated into an ongoing care and maintenance plan.

NEW YORK
BOSTON
CHICAGO
LOS ANGELES
NEW JERSEY
WASHINGTON DC

NATURAL STONE
PORCELAIN TILE
GLASS TILE
ENGINEERED STONE
RECLAIMED WOOD

Recommendations for the use of cleaning and maintenance products are included in this document as a convenience to the reader. The suggestions regarding product application are a guide in the use of the products and are not a guarantee of their performance. This document and the information provided herein, including any reference to products, is provided "as is", without any warranty or implied term of any kind. Stone Source specifically disclaims any responsibility or liability relating to the use of the suggested products and shall under no circumstances whatsoever, be liable for damages of any nature resulting from the use of or reliance upon information from this website or the products to which the information refers.



CARE + MAINTENANCE: GENERAL GUIDELINES

A comprehensive care and maintenance plan helps ensure long-term satisfaction with a material choice. These recommendations are based on those from The Marble Institute of America. If you have any questions or concerns regarding the information outlined here, please contact your Stone Source Sales Consultant for more information. For specific product recommendations, see CARE + MAINTENANCE: SUGGESTED PRODUCTS.

WHAT YOU SHOULD KNOW ABOUT CLEANING NATURAL STONE -

Natural stone can be classified into two general categories according to its composition: siliceous stone or calcareous stone. Knowing the difference is critical when selecting cleaning products. Siliceous stone is composed mainly of silica or quartz-like particles. It tends to be very durable and relatively easy to clean with mild acidic cleaning solutions. Types of siliceous stone include granite, slate, sandstone and quartzite. Calcareous stone is composed mainly of calcium carbonate and will react to acidic foods such as lemons or tomatoes. This reaction will result in a dulling in surface sheen and change in texture, otherwise referred to as "acid etching". Cleaning products that work on siliceous stone may damage the surface of calcareous surfaces. Types of calcareous stone include marble, travertine, limestone and onyx.

As a general rule of thumb, whenever a spill occurs, immediately blot the spill with a paper towel. Don't wipe the area; it will spread the spill. Flush the area with plain water and a mild liquid dishwashing detergent. Rinse several times. Dry the area thoroughly with a soft cloth. Do not use products that contain lemon, vinegar or other acids on marble or limestone. Do not use scouring powders or creams; these products contain abrasives that may scratch the surface.

For application-specific cleaning instructions, see below:

FLOORING APPLICATIONS

Dust interior floors frequently using a clean, dry dust mop. Sand, dirt and grit do the most damage to natural stone surfaces due to their abrasiveness. Mats or area rugs inside and outside an entrance will help to minimize the sand, dirt and grit that will scratch the stone floor. Be sure that the underside of the mat or rug is a non-slip surface. Do not use vacuum cleaners that are worn -- the metal or plastic attachments or the wheels may scratch the surface.

HELPFUL TIPS:

- DO use a cutting board in all kitchen countertop applications
- DO use coasters or placemats under all glasses, particularly those containing alcohol or citric juices
- DO use trivets under china, ceramics, silver or other objects that might scratch or scorch the surface
- DO protect flooring applications by using walk-off mats or area rugs
- DO dust mop floors frequently
- DO clean surfaces with mild detergent or stone soap
- DO thoroughly rinse and dry the surface after washing
- DO blot up spills immediately

- DON'T place hot items directly on the stone surface
- DON'T use vinegar, lemon juice or other cleaners containing acids on marble, onyx, limestone or travertine surfaces
- DON'T use cleaners that contain acid such as bathroom cleaners, grout cleaners or tub and tile cleaners
- DON'T use abrasive cleaners such as dry cleansers or soft cleansers
- DON'T mix bleach and ammonia; this combination creates a toxic and lethal gas
- DON'T ever mix chemicals together unless directions specifically instruct you to do so

BATHROOM APPLICATIONS

In the bath basin or other wet areas, soap scum can be minimized by using a squeegee after each use. To remove soap scum, use a non-acidic soap scum remover or a solution of ammonia and water (about 1/2 cup ammonia to a gallon of water). Frequent or over-use of an ammonia solution may eventually dull the surface of the stone.

VANITIES + OTHER COUNTERTOPS

Vanity tops may need to have a penetrating sealer applied. Check with your installer for recommendations. A good quality marble wax or non-yellowing automobile paste wax can be applied to minimize water spotting.

KITCHEN APPLICATIONS

All natural used for kitchen countertop applications must be regularly maintained and resealed to prevent staining. Always use a neutral detergent to clean marble countertops.

CARE + MAINTENANCE: GENERAL GUIDELINES

EXTERIOR POOL + PATIO APPLICATIONS

In outdoor pool, patio or hot tub areas, flush with clean water and use a mild bleach solution to remove algae or moss.

STAINING (wine, oil or grout stains on the surface of the stone)

Staining refers to the residual effect of a spill that cannot be removed with dishwashing detergent. Identifying the source of the stain is the key to removing it. If you don't know what caused the stain, ask the following questions to help identify the source: Where is the stain located? Is it near a plant, a food service area, an area where cosmetics are used? What color is it? What is the shape or pattern? What goes on in the area around the stain? Surface stains can often be removed by cleaning with an appropriate cleaning product or household chemical. Deep-seated or stubborn stains may require using a poultice or consulting with a professional.

The following sections describe the types of stains you may encounter and how to appropriately treat them without damaging the surface of the stone.

OIL-BASED

(grease, tar, cooking oil, milk, cosmetics)

An oil-based stain will darken the stone. Generally oil must be chemically dissolved so the source of the stain can be flushed or rinsed away. Clean gently with a soft, liquid cleanser with bleach OR household detergent OR ammonia OR mineral spirits OR acetone.

ORGANIC

(coffee, tea, fruit, tobacco, paper, food, urine, leaves, bark, bird droppings)

May cause a pinkish-brown stain and may disappear after the source of the stain has been removed. Outdoors, with the sources removed, normal sun and rain action will generally bleach out the stains. Indoors, clean with 12% hydrogen peroxide (hair bleaching strength) and a few drops of ammonia.

METAL

(iron, rust, copper, bronze)

Iron or rust stains are orange to brown in color and follow the shape of the staining object such as nails, bolts, screws, cans, flower pots, metal furniture. Copper and bronze stains appear as green or muddy-brown and result from the action of moisture on nearby or embedded bronze, copper or brass items. Metal stains must be removed with a poultice. Deep-seated, rusty stains are extremely difficult to remove and the stone may be

permanently stained.

BIOLOGICAL

(algae, mildew, lichens, moss, fungi)

Clean with diluted (1/2 cup in a gallon of water) ammonia OR bleach OR hydrogen peroxide. DO NOT EVER MIX AMMONIA AND BLEACH! THIS COMBINATION CREATES A TOXIC AND LETHAL GAS!

INK

(magic marker, pen, ink)

Clean with bleach or hydrogen peroxide (light-colored stone only!) or lacquer thinner or acetone (dark stones only!)

PAINT

Small amounts can be removed with lacquer thinner or scraped off carefully with a razor blade. Heavy paint coverage should be removed only with a commercial "heavy liquid" paint stripper available from hardware stores and paint centers. These strippers normally contain caustic soda or lye. Do not use acids or flame tools to strip paint from stone. Paint strippers can etch the surface of the stone; re-polishing may be necessary.

Follow the manufacturer's directions for use of these products, taking care to flush the area thoroughly with clean water. Protect yourself with rubber gloves and eye protection, and work in a well-ventilated area. Use only wood or plastic scrapers for removing the sludge and curdled paint. Normally, latex and acrylic paints will not cause staining. Oil-based paints, linseed oil, putty, caulks and sealants may cause oily stains. Refer to the section on oil-based stains.

WATER SPOTS AND RINGS

(surface accumulation of hard water)

Buff with dry (0000 grit) steel wool.

FIRE AND SMOKE DAMAGE

Older stones and smoke or fire stained fireplaces may require a thorough cleaning to restore their original appearance. Commercially available "smoke removers" may save time and effort.

CARE + MAINTENANCE: GENERAL GUIDELINES

MAKING AND USING A POULTICE

A poultice is a liquid cleaner or chemical mixed with an absorbent material to form a paste about the consistency of peanut butter. The poultice is spread over the stained area to a thickness of about 1/4" to 1/2" with a wood or plastic spatula, covered with plastic and left to work for 24 to 48 hours. The liquid cleaner or chemical will draw out the stain into the absorbent material. Poultice procedures may need to be repeated to thoroughly remove a stain. With regards to liquid chemicals **DO NOT EVER MIX AMMONIA AND BLEACH! THIS COMBINATION CREATES A TOXIC AND LETHAL GAS!**

POULTICE MATERIALS

Poultice materials include talc, kaolin, fuller's earth, whiting, powdered chalk, diatomaceous earth or white molding plaster. Approximately one pound of prepared poultice material will cover one square foot. Do not use whiting or iron-type clays such as fuller's earth with acid chemicals. The reaction will cancel the effect of the poultice. A poultice can also be prepared using white cotton balls, white paper towels or gauze pads.

OIL-BASED STAINS

Poultice with baking soda and water OR one of the powdered poultice materials and mineral spirits.

ORGANIC STAINS

Poultice with one of the powdered poultice materials and 12% hydrogen peroxide solution (hair bleaching strength) OR use acetone.

IRON STAINS

Poultice with diatomaceous earth and a commercially rated rust remover. Note that rust stains are particularly difficult to remove. You may need to call a professional.

COPPER STAINS

Poultice with one of the powdered poultice materials and ammonia. Note that copper stains are particularly difficult to remove. You may need to call a professional.

APPLYING THE POULTICE:

1. Prepare the poultice. If using powder, mix the cleaning agent or chemical to a thick paste the consistency of peanut butter. If using paper, soak in the chemical and let drain. Don't let the liquid drip.
2. Wet the stained area with distilled water.
3. Apply the poultice to the stained area about 1/4 to 1/2 inch thick and extend the poultice beyond the stained area by about one inch. Use a wood or plastic scraper to spread the poultice evenly.
4. Cover the poultice with plastic and tape the edges to seal it.
5. Allow the poultice to dry thoroughly, usually about 24 to 48 hours. The drying process is what pulls the stain out of the stone and into the poultice material. After about 24 hours, remove the plastic and allow the poultice to dry.
6. Remove the poultice from the stain. Rinse with distilled water and buff dry with a soft cloth. Use the wood or plastic scraper if necessary.
7. Repeat the poultice application if the stain is not removed. It may take up to five applications for difficult stains.
8. If the surface is etched by the chemical, apply polishing powder and buff with burlap or felt buffing pad to restore the surface.

BIOLOGICAL STAINS

Poultice with diluted ammonia OR bleach OR hydrogen peroxide.

ACID ETCHING (surface erosion of natural stone)

Marble, travertine, limestone and onyx will react to acidic foods (i.e. lemons or tomatoes) and acidic liquids (i.e. some cleaners or acid rain). This reaction will result in a dulling in surface sheen and change in texture, otherwise referred to as "acid etching". Some highly-pigmented liquids, such as wine, will etch the finish and stain the stone. Remove the stain (see MAKING AND USING A POULTICE) before attempting to address acid etching.

SOLUTION

- To remove an acid etch from a polished surface, use Fila Marble Restorer.
- To remove an acid etch from a honed surface use a mild neutral or alkali detergent and buff with dry (0000 grit) steel wool.
- Contact a professional stone restorer for refinishing or re-polishing etched areas that you cannot remove.

CARE + MAINTENANCE: GENERAL GUIDELINES

EFFLORESCENCE (film on surface of the material)

Materials that are exposed to moisture may, over time, develop a white or dark film on the surface. Efflorescence in natural stone is caused by water carrying mineral salts from below the surface of the stone rising to the exposed face. In porcelain tile efflorescence appears on the surface of grout joints or unglazed tiles and is caused by moisture reacting with impurities in the mortar.

SOLUTION

- For natural stone, if the installation is new, dust mop or vacuum the powder. You may have to do this several times. Do not use water to remove the powder; it will only temporarily disappear. If the problem persists, contact your installer to help identify and remove the cause of the moisture.
- For porcelain tile and natural stones with a minimal acid sensitivity rating, use Fila Deterdeck to clean the tiles.

SCRATCHING (scratch marks and abrasions appear on the surface)

Light scratching occurs over time with exposure to sand and other abrasives. The finish will patina or dull over time as a result of this scratching.

SOLUTION

- If a material with a low abrasion resistance is used, use walk-off mats at entrances and expect the material to patina rapidly.
- Always use a cutting board for countertop applications.
- Slight surface scratches may be buffed with dry lowest grit (0000 grit) steel wool.
- Deeper scratches and nicks in the surface of the stone should be repaired and re-polished by a professional.

CARE + MAINTENANCE: SUGGESTED PRODUCTS

	FILA PRW200	FILA CLEANER	FILA PS/87	FILA DETERDECK	FILA CR10	FILA FOB	FILA W68	FILA MP90	FILA STONE PLUS
	Water-repellent protector to avoid staining from grout residues.	Universal floor cleaner for materials with a honed or polished finish.	Degreasing floor cleaner for acid sensitive materials. Also used to remove epoxy residues.	Remove oxide residues from the surface of acid-resistant materials.	To clean epoxy residues, particularly in wall applications.	Solvent-based sealant.	Water-based sealant for natural stone.	Solvent-based sealant, particularly for exterior applications.	Solvent-based sealant and color enhancer for natural stone.
PRE-GROUTING PROTECTION	✓								
INITIAL CLEANING		✓	✓	✓	✓				
NATURAL EFFECT SEALANT						✓	✓	✓	
COLOR-ENHANCING SEALANT									✓
STANDARD MAINTENANCE		✓	✓						
SPECIAL MAINTENANCE			✓						

CARE + MAINTENANCE: SUGGESTED PRODUCTS

- FOR PRE-GROUTING PROTECTION -

SOLVING FOR: Highly absorbent material that needs to be protected in order to avoid staining from grout residues.

FILA PRW200

WATER-REPELLENT PROTECTOR

Features + Benefits

- Designed to protect surfaces from grout residues and staining.
- Does not affect adhesion between grout and material.
- It makes cleaning after laying simple.
- It speeds up drying after initial washing and therefore also the subsequent treatment stages.
- It does not alter the material's appearance.

Suitable for:

- Polished Natural Stone
- Terracotta
- Engineered Stone / Agglomerates

PROTECTION INSTRUCTIONS

Note: Shake the can before opening. Make sure the surface is completely free of dust.

1. No dilution necessary.
2. Apply an even coat using an airless spray pump (a paint brush, a sponge or other applicator may also be used.) Avoid surface pooling and ensure that the product also covers the edges of the laid material.
3. Allow to cure for 24 hours.
4. Apply grout, taking care to sponge off excess before it dries completely.

MAINTENANCE INSTRUCTIONS

Maintain surfaces using a diluted solution of FILA CLEANER.

- FOR INITIAL CLEANING 1 of 4 -

SOLVING FOR: Cleaning materials with a honed or polished finish.

FILA CLEANER

UNIVERSAL FLOOR CLEANER

Features + Benefits

- A gentle detergent for all floors.
- Safe for pretreated and sensitive surfaces.
- Essential for after-installation cleaning of acid-sensitive material such as polished natural stone.
- Cleans without damaging the surface.

Suitable for:

- Natural Stone (acid resistant only)
- Porcelain Tile
- Glazed Ceramic Tile
- Wood

CLEANING INSTRUCTIONS

Note: Always test in a small inconspicuous area to determine ease of use and desired results. Make sure the surface is swept or vacuumed to remove loose debris.

1. Dilute to 1:30.
2. Spread with a single-disc professional cleaner with a soft disc (white or beige) or a floor scrubbing brush.
3. Remove the residue with a vacuum drier or cloths. Rinse well.

With one liter, approximate coverage (using 1:30 ratio) is 50 m².

CARE + MAINTENANCE: SUGGESTED PRODUCTS

- FOR INITIAL CLEANING 2 OF 4 -

SOLVING FOR: Cleaning acid-sensitive materials.

FILA PS/87

DEGREASING FLOOR CLEANER

Features + Benefits

- Cleans and removes grease.
- Cleans without damaging the surface.
- Extremely easy to use.
- Removes epoxy grout residues.

Suitable for:

- Natural Stone (acid resistant only)
- Porcelain Tile
- Glazed Ceramic Tile

CLEANING INSTRUCTIONS

Note: Always test in a small inconspicuous area to determine ease of use and desired results. Prior to cleaning, make sure the surface is swept or vacuumed to remove loose debris.

1. Dilute to 1:20 and apply to the surface.
2. Leave on the surface for 5 minutes.
3. Clean using a single-disc professional cleaner fitted to the most appropriate disk (i.e. brown for terracotta) or with a floor cleaning brush.
4. Vacuum or wipe up residue.
5. Rinse area well with clean water.

- FOR INITIAL CLEANING 3 OF 4 -

SOLVING FOR: Cleaning acid-resistant materials such as unpolished Natural Stone, Porcelain or Ceramic Tiles.

FILA DETERDECK

ACID DESCALING FLOOR CLEANER

Features + Benefits

- Removes all grout residues and building-site dirt.
- Eliminates any saline efflorescence from terracotta.
- Removes lime deposits from floors, walls and bathroom fixtures.
- Removes rust stains.
- Does not alter color or appearance of the surface.
- Unlike Muriatic acid, does not emit fumes that are harmful to the user or to the environment.

Suitable for:

- Natural Stone (acid resistant, only)
- Porcelain Tile
- Glazed Ceramic Tile

CLEANING INSTRUCTIONS

Note: Always test in a small inconspicuous area to determine ease of use and desired results. Prior to cleaning, make sure the surface is swept or vacuumed to remove loose debris.

1. Spread with a single-disc professional cleaner or rag and leave the solution to act for a few minutes.
2. Clean using a single-disc professional cleaner fitted to the most appropriate disk (i.e. brown for terracotta) or with a floor cleaning brush.
3. Vacuum or wipe up residue.
4. Rinse area well with clean water.

Dilution and coverage depends on the material. With one liter:

Natural Stone (1:5-1:10 ratio) – 20/35 m²

Porcelain Tile (1:5 ratio) – 40 m²

NOTE: Deterdek should not be used on glossy or pre-polished marble or acid-sensitive materials.

CARE + MAINTENANCE: SUGGESTED PRODUCTS

- FOR INITIAL CLEANING 4 of 4 -

SOLVING FOR: Cleaning epoxy residues from porcelain, glazed, ceramic tiles and glass mosaics -- especially in wall applications

FILA CR10

CLEANER FOR EPOXY RESIDUES

Features + Benefits

- High-viscosity liquid detergent for cleaning off residues, stains and streaks of epoxy plaster.
- Its viscosity makes it easy to apply to vertical surfaces

Suitable for:

- Natural Stone (acid resistant, only)
- Porcelain Tile
- Glazed Ceramic Tile

CLEANING INSTRUCTIONS

Note: Shake before opening. Always test in a small inconspicuous area to determine ease of use and desired results. Prior to cleaning, make sure the surface is swept or vacuumed to remove loose debris.

1. No dilution necessary.
2. Wait at least 24 hours after grouting before cleaning with FILA CR10.
3. Using a large flat paintbrush, apply FILA CR10 directly to the surface.
4. Wait 30 minutes.
5. Rub with an abrasive sponge to remove epoxy residue. A single-brush machine fitted with the most appropriate disc can be used for floors.
6. Rinse thoroughly.
7. For more stubborn residues, repeat the same procedure, allowing the product to sit on the surface for longer than 30 minutes.

- FOR PROTECTION WITH NATURAL EFFECT 1 of 3 -

SOLVING FOR: Protecting matte, natural stones, agglomerates or materials with a cleft or antiqued finish.

FILA FOB

SOLVENT BASED OIL PROOFING

Features + Benefits

- Protective basecoat for waxed surfaces with rustic or rough finishes.
- Does not alter color or appearance of the surface.

Suitable for:

- Countertops or other areas that may come in contact with food.
- Natural stones with an antique or matte finish.
- Agglomerates

PROTECTION INSTRUCTIONS

Note: Prior to sealing, make sure the surface is swept or vacuumed to remove loose debris.

1. No dilution necessary.
2. For exterior applications: apply a first coat of HYDROREP (for natural stone) or FILA ES/82 (for terracotta) to the dry paving.
3. Wait at least 24 hours after grouting before applying an even, continuous coat of FILA FOB.
4. For indoor applications: apply FILA FOB with a large brush. The following day, apply one or two coats of the most suitable protective product (FILAJET, FILA MATT, FILA SATIN, FILA LONGLIFE).

MAINTENANCE INSTRUCTIONS

Maintain surfaces using a diluted solution of FilaCleaner.

CARE + MAINTENANCE: SUGGESTED PRODUCTS

- FOR PROTECTION WITH NATURAL EFFECT 2 of 3 -

SOLVING FOR: Protecting unpolished natural stones, particularly in exterior applications requiring anti-graffiti protection.

FILA W68

WATER-BASED STAIN PROTECTION FOR NATURAL STONE

Features + Benefits

- Seals and protects porous materials such as rough-finish natural stone, terracotta and cement from oily dirt.
- Reduces absorption of the surface without altering its appearance.
- Water based: it is environmentally friendly and requires a shorter treatment time as it can be applied to surfaces still not completely dry.

Suitable for:

- Countertops or other areas that may come in contact with food.
- Natural stones with an antique or matte finish.
- Agglomerates

PROTECTION INSTRUCTIONS

Note: Always test in a small inconspicuous area to determine ease of use and desired results. Prior to sealing, make sure the surface is swept or vacuumed to remove loose debris.

1. No dilution necessary.
2. Using a large flat paintbrush, apply FILA W68 to a clean, dry surface.
3. Rub the surface in a circular motion with a sponge or cloth to help with penetration of the product and the removal of any excess.
4. Wait 8 hours.
5. For a deeper color, repeat procedure.
6. Wait 8 hours between each application.

MAINTENANCE INSTRUCTIONS

Maintain surfaces using a diluted solution of FILA CLEANER.

- FOR PROTECTION WITH NATURAL EFFECT 3 of 3 -

SOLVING FOR: Protecting polished marble, granite and porcelain tiles, particularly in exterior applications requiring anti-graffiti protection.

FILA MP/90

SOLVENT BASED STAIN PROTECTION FOR NATURAL STONE + POLISHED PORCELAIN TILE

Features + Benefits

- Stain protection for polished marble, granite and porcelain tile.
- Anti-graffiti treatment for exterior cladding applications.
- Does not alter color or appearance of the surface.

Suitable for:

- Countertops or other areas that may come in contact with food.
- Polished Marble
- Polished Granite
- Polished Porcelain Tile

PROTECTION INSTRUCTIONS

Note: Always test in a small inconspicuous area to determine ease of use and desired results. Prior to sealing, make sure the surface is swept or vacuumed to remove loose debris.

1. No dilution necessary.
2. Using a large flat paintbrush, apply Fila MP/90 to a clean, dry surface.
3. Wait 24 hours.
4. When the surface is dry, remove the excess solvent using a single-disc professional cleaner (white or beige disc) or a household polished fitted with felt pads.
5. Stubborn residues can be removed with a cloth dipped in FILA SOLV.

MAINTENANCE INSTRUCTIONS

Maintain surfaces using a diluted solution of FILA CLEANER.

CARE + MAINTENANCE: SUGGESTED PRODUCTS

- FOR COLOR ENHANCING PROTECTION -

SOLVING FOR: Protecting interior and exterior applications that require color-enhancing protection.

FILA STONEPLUS

SOLVENT-BASED PROTECTIVE ENHANCER FOR NATURAL STONE

Features + Benefits

- Protects and enhances the original color of natural stone.
- Penetrates deeply, protecting material from water, oil and dirt.
- Ideal for windowsills, tops, rosettes and inset decorations.
- Non-yellowing, UV resistant, provides long-lasting protection.

Suitable for:

- Interior and exterior applications.
- Suitable for use on countertops or other areas that may come in contact with food.
- Polished, Honed and Textured Natural Stone surfaces.

PROTECTION INSTRUCTIONS

Note: Once treated with FilaStone Plus, stone cannot be returned to its original state. Always test in a small inconspicuous area to determine ease of use and desired results. Prior to sealing, make sure the surface is swept or vacuumed to remove loose debris.

1. No dilution necessary.
2. Using a large flat paintbrush, apply FILA STONEPLUS to a clean, dry surface.
3. Rub the surface in a circular motion with a sponge or cloth to help with penetration of the product and the removal of any excess.
4. Wait 8 hours.
5. For a deeper color, repeat procedure.
6. Wait 8 hours between each application.

MAINTENANCE INSTRUCTIONS

Maintain surfaces using a diluted solution of FILA CLEANER.

- FOR STANDARD MAINTENANCE -

SOLVING FOR: Maintaining surfaces with a honed or polished finish.

FILA CLEANER

UNIVERSAL FLOOR CLEANER

Features + Benefits

- A gentle detergent for all floors.
- Safe for pretreated and sensitive surfaces.
- Cleans without damaging the surface and is ideal for maintenance of waxed surfaces (though not suitable for waxed wood floors.)

Suitable for:

- Natural Stone (acid resistant only)
- Porcelain Tile
- Glazed Ceramic Tile
- Wood

CLEANING INSTRUCTIONS

Note: Always test in a small inconspicuous area to determine ease of use and desired results. Prior to cleaning, make sure the surface is swept or vacuumed to remove loose debris.

1. Dilute to 1:200. For very dirty floors dilute to 1:30-1:50.
2. Clean the surface with a cloth or an electric floor cleaner.
3. Solution diluted to 1:200 does not require rinsing.

With one liter, approximate coverage (using 1:200 ratio) is 1500 m2

CARE + MAINTENANCE: SUGGESTED PRODUCTS

- FOR SPECIAL MAINTENANCE -

SOLVING FOR: Removing wax, epoxy, grout residues and stains from porcelain tile.

FILA PS/87

STAIN REMOVER, WAX + EPOXY REMOVER FOR PORCELAIN TILE

Features + Benefits

- Cleans and removes grease.
- Cleans without damaging the surface.
- Extremely easy to use.
- Removes epoxy grout residues.

Suitable for:

- Natural Stone (acid resistant only)
- Porcelain Tile
- Glazed Ceramic Tile

Note: Always test in a small inconspicuous area to determine ease of use and desired results. Prior to cleaning, make sure the surface is swept or vacuumed to remove loose debris.

CLEANING INSTRUCTIONS - TO REMOVE STAINS

1. No dilution necessary.
2. Pour directly on the stain, allowing the FILA PS/87 to cover the surface of the tile.
3. Allow to dry completely.
4. Wash + rinse.

CLEANING INSTRUCTIONS - TO REMOVE WAX

1. Dilute to 1:5
2. Use a paint brush, a sponge or other applicator to apply FILA PS/87 to a clean dry surface.
3. Clean the surface with a cloth or an electric floor cleaner. Does not require rinsing.
4. For very dirty floors dilute to 1:30-1:50 then clean the surface with a cloth and scrubbing brush. Remove dirt and rinse.

BioBased Tile®

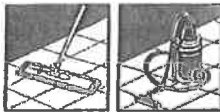
STRIATIONS™ | MIGRATIONS®

Armstrong® commercial BioBased Tile is coated with the Fast Start Factory Finish. Fortunately, the Fast Start Factory Finish makes initial maintenance quick and easy and does not require removal after installation. It is compatible with commercial floor polishes (such as Armstrong® S-480 Commercial Floor Polish) and reduces the need to strip the tile. BioBased Tile requires polishing for protection, ease of maintenance and an attractive overall appearance.

For Best Results:

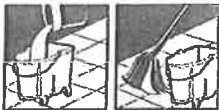
- When performing wet maintenance, always use proper signage and prohibit traffic until the floor is completely dry.
- Do not wet wash, machine scrub or strip the floor for at least 4 days after installation. This is to prevent excess moisture from interfering with the adhesive bond.
- The use of aggressive strippers such as mop-on/mop-off, no-scrub and no-rinse strippers is not recommended on tile floors less than 2 years old because these strippers may affect the adhesive bond.
- Do not use excessive amounts of liquid during maintenance.
- Do not use brown or black pads, equivalent brushes or stiff-bristled, highly abrasive brushes on Armstrong® resilient flooring.
- If it becomes necessary to move any heavy fixtures or appliances over the flooring on casters or dollies, the flooring should be protected with 1/4" or thicker plywood, hardboard or other underlayment panels. If other on-site work is continuing, consider using a protective covering such as plain, undyed Kraft paper to guard against damage to the new floor.

A. Initial Maintenance – Immediately After Installation



1. Sweep, dust mop or vacuum the floor thoroughly to remove all loose dust, dirt, grit and debris.

2. Remove any dried adhesive residue with a clean, white cloth dampened with mineral spirits, carefully following the warnings on the container.

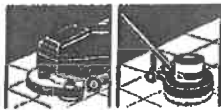


3. Damp mop the floor with a properly diluted neutral (pH 6 to 8) detergent solution such as Armstrong® S-485 Commercial Floor Cleaner.



4. Apply a minimum of 2 coats of a high-quality commercial floor polish (such as Armstrong® S-480 Commercial Floor Polish) to temporarily protect the floor until regular maintenance procedures can begin. The use of a high-quality stain-resistant sealer such as Armstrong® S-495 Commercial Floor Sealer beneath the polish should be considered in areas of high traffic, areas of high soil load and areas where staining potential is high.

B. Initial Maintenance - Preparation for Commercial Traffic



1. Machine scrub the floor with a properly diluted neutral detergent solution such as Armstrong S-485 Commercial Floor Cleaner and a scrubbing pad (3M blue or equal) or equivalent brush. If the floor is badly soiled and/or scratched, strip it using the same procedure but substituting a properly diluted stripping solution. **NOTE: The use of aggressive strippers such as mop-on/mop-off, no-scrub and no-rinse strippers is not recommended on tile floors less than 2 years old because these strippers may affect the adhesive bond.**



2. Thoroughly rinse the entire floor with fresh, clean water. Remove rinse water and allow the floor to dry completely.



3. Apply 3 to 5 coats of high-quality commercial floor polish, such as Armstrong S-480 Commercial Floor Polish. If the floor has been stripped, the application of a stain resistant sealer (such as Armstrong S-495 Commercial Floor Sealer) prior to the application of polish is recommended in areas that will be exposed to heavy traffic and/or staining agents.

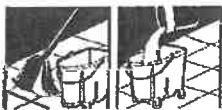
C. Daily/Regular Maintenance



1. Sweep, dust mop or vacuum the floor daily to remove dust, dirt, grit and debris that can damage the floor and become ground into the surface.



2. Spot mop as needed. Any spills should be cleaned up immediately.



3. Damp mopping of the floor should be performed on a regular or daily basis depending upon traffic and soil levels in the area. Use a properly diluted neutral detergent solution such as Armstrong S-485 Commercial Floor Cleaner.

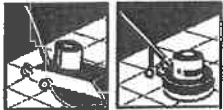
D. Periodic Maintenance



1. When needed, machine scrub the floor with a properly diluted neutral detergent solution such as Armstrong® S-485 Commercial Floor Cleaner and the appropriate scrubbing pad (3M red or equal for light scrub, 3M blue or equal for a deep scrub) or equivalent brushes.



2. Thoroughly rinse the entire floor with fresh, clean water. Remove rinse water and allow it to dry completely.



3. If there is sufficient polish (3 to 5 coats) remaining on the floor, buff, spray buff or burnish to restore gloss.



4. If needed, additional coats of floor polish should be applied at this time.

E. Restorative Maintenance – Stripping

NOTE: The use of aggressive strippers such as mop-on/mop-off, no-scrub and no-rinse strippers is not recommended on tile floors less than 2 years old because they may affect the adhesive bond.



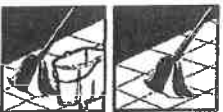
1. Mix stripping solution to the appropriate dilution, depending on floor finish build-up. Blockade areas to be stripped. Apply liberal amounts of solution uniformly to the floor with a mop. Let stripping solution soak for the appropriate amount of time recommended by the stripper manufacturer. Keep areas to be stripped wet. Rewet if necessary.



2. Machine scrub the floor (300 rpm or less) with a scrubbing pad (3M blue or equal) or equivalent scrub brush to break up the polish film. **Do not allow stripping solution to dry on the floor.**



3. Remove dirty stripping solution with a wet vacuum or mop. **TIP: Drizzling fresh, clean rinse water onto the dirty stripping solution will assist with a more thorough removal.**



4. Thoroughly rinse the entire floor with fresh, clean water. Remove rinse water and allow the floor to dry completely.



5. Apply 3 to 5 coats of high-quality commercial floor polish such as Armstrong S-480 Commercial Floor Polish. The use of a high-quality stain-resistant sealer such as S-495 Commercial Floor Sealer beneath the polish should be considered in areas of high traffic, high soil load and areas where staining potential is high.

ARMSTRONG® COMMERCIAL FLOORS LIMITED WARRANTY

PRODUCTS

Armstrong warrants its regular (first quality) commercial floor products to be free from manufacturing defects for (see applicable products and years below) from the date of purchase.

INSTALLATION

Armstrong warrants the installation integrity for products from the date of purchase through the warranty period (see applicable products and years below) if installed according to the Armstrong Guaranteed Installation Systems manual, F-5061. The F-5061 manual is revised on a yearly basis, and floors must be installed according to the recommendations contained in the issue of F-5061 that is current and available at the time of installation. The applicable warranty for new product installations not yet included in the current version of F-5061 shall be the warranty and installation guidelines and procedures as outlined in the new applicable product literature, until such time that the F-5061 has been updated.

WORKMANSHIP

Armstrong does not warrant the installers' workmanship. Workmanship errors should be addressed to the contractor who installed the floor. Your Armstrong® commercial floor should be professionally installed by contractors who have demonstrated expertise in installing commercial floors.

TERMS

Within One Year:

If a defect covered by this warranty is reported to Armstrong in writing within one year of purchase, Armstrong will supply new material of the same or similar grade sufficient to repair or replace the defective material. Armstrong will also pay reasonable labor costs.

Within Two Years:

If a defect covered by this warranty is reported to Armstrong in writing after one year but within two years of purchase, Armstrong will supply new material of the same or similar grade sufficient to repair or replace the defective material. Armstrong will also pay fifty percent of the reasonable labor costs.

After Two Years:

If a defect covered by this warranty is reported to Armstrong in writing after two years but within (see applicable products and years below) of purchase, Armstrong will supply new material of the same or similar grade sufficient to repair or replace the defective material. Armstrong will not pay labor costs.

Armstrong will not pay labor costs to repair or replace material with defects that were apparent before or at the time of installation.

EXCLUSIONS

The following are not covered by this limited warranty:

- Improper installation
- Differences in color between products and samples or photographs
- Indentation from improper loading including high heels, spiked shoes, rolling loads, chairs or other furniture not using floor protectors
- Discoloration
- Failure of the floor to adhere to the subfloor due to, for example, moisture, alkaline or hydrostatic pressure from the subfloor
- Inappropriate end-user activities

THERE ARE NO WARRANTIES BEYOND THIS EXPRESSED WARRANTY. ALL OTHER WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE EXCLUDED.

ARMSTRONG EXCLUDES ANY LIABILITY FOR LOST PROFITS OR ANY OTHER INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES. THE REMEDIES CONTAINED HEREIN ARE THE ONLY REMEDIES AVAILABLE FOR BREACH OF THIS WARRANTY.

WARRANTY OWNER

This limited warranty extends only to the original end-user.

Applicable Products and Years

5 Years	Rejuvenations™	LinoArt™ Sheet	Migrations®	MultiColor™
	MedIntone™	LinoArt™ Tile	Striations BBT™	Feature™ Tile & Strips
	MedIntech®	Parallel™ (12 mil)	Reina	Linoleum and Vinyl Weld Rods
	Merley™		ChromaSpin™	Vinyl Transition Strips
10 Years	Possibilities®		Stonetex®	Vinyl and Rubber Wall Base
	Connection Corlon™		Artefacts®	Rubber Stair Treads, Risers,
			Companion Square®	and Tiles
			Imperial® Texture Rave®	
16 Years			Imperial Texture	
20 Years			SDT™	
			Safety Zone™	
10 Years	Natural Creations®	Parallel™ (20 mil)		
16 Years	Abode®			
20 Years	Natural Creations® with the I-Set® Installation System			

S-700 Thin Spread Floor Tile Adhesive

⚠ CAUTION S-700 EYE AND SKIN IRRITANT

VCT-1 Adhesive

STIR WELL BEFORE USING.

For use with the following Installation Systems:

- Vinyl Composition Tile
- BioBased Tile

DESCRIPTION:

Type:	Water-based/asphalt-rubber
Color:	Black
Taggants:	Contains no visible taggants
Trowel:	S-891 Notched Steel Trowel or S-892 Replaceable Blade Trowel; fine notch (1/32" deep, 1/16" wide, 5/64" apart), U-notch
Coverage:	350–400 sq. ft./gallon (32–37 sq. m.)
Units:	1 gallon (3.78 L) and 4 gallons (15.14 L)
Open Time:	Until dry to touch; approximately 30 minutes or more
Working Time:	18 hours (working times may vary based on job conditions, substrates, temperature, and humidity)
Shelf Life:	1 year, unopened
Freeze/Thaw Stable:	Yes, to 10° F (-12° C)
VOC Content:	Zero g/L; calculated and reported, SCAQMD 1168
Clean Up:	Wet – clean, white cloth with neutral detergent and water Dry – clean, white cloth and mineral spirits
Subfloors:	All grade levels of concrete, ceramic, terrazzo and marble. Polymeric poured floors, suspended wood, and wood underlayments. Steel, stainless steel, aluminum, lead, copper, brass, and bronze. Properly mixed and applied powdered underlayment. Primed and poured-in-place gypsum subfloors. Radiant-heated subfloors where the surface temperature does not exceed 85° F (29° C).
Advantages:	Moisture and alkali resistant AGIS Guarantee Nonflammable, ammonia-free, and low odor Contains low or no organic solvents Can be used over "cutback" adhesive residue (reduces subfloor prep)

Mirrors: *Handle With Extreme Care*



GLASS

ASSOCIATION OF NORTH AMERICA

Mirror Division



Mirrors: Handle with Extreme Care

Tips for the professional on the care and handling of mirrors

The purpose of this publication is to provide the latest available information to glass dealers, distributors and installers on the procedures recommended by the Mirror Division of the Glass Association of North America (GANA) for the proper storage, handling, fabrication, shipping, installation, and cleaning of high quality mirror products.

The Mirror Division of GANA has undertaken this project with the objective of helping preserve the integrity and prolonging the life of mirrors.

Publication of this booklet, however, does not promise an end to all mirror problems. Edge deterioration (black edge) has been reduced due to improvements in mirror coatings. Most occurrences are a result of the use of improper cleaning agents. Research into more durable backing materials, consumer education, and improved mirror manufacturing processes is ongoing in a continuing effort to provide a durable, trouble-free, and environmentally safe product.

However, a mirror - because it is a combination of many delicate materials and processes - will never be indestructible. Proper storage, handling, fabrication and good installation practices go a long way in reducing potential failures or damage. Educating consumers in the proper care and cleaning of mirrors requires a continual effort on the part of the entire industry to ensure that the mirrors will be properly maintained after they have been installed.

This publication contains the best information currently available from material suppliers, experienced dealer-installers, and major mirror manufacturers on the care and handling of today's quality mirrors.

Disclaimer. This document is prepared by the Mirror Division of GANA solely to provide guidance regarding the proper installation and care of mirrors. It represents the collective experience of those in the mirror manufacturing industry; however, this document does not constitute a standard or specification, either mandatory or voluntary, for the installation and care of mirrors. Conditions and circumstances will vary from installation to installation. It is the responsibility of the mirror installer to ensure that the installation and care of the mirrors comply with all relevant rules, laws, regulations, applicable standards, and other requirements. GANA disclaims any liability for any loss or damage of any kind arising out of the use of this publication, and all those using it agree, as a condition of use, to release GANA from any and all liability, loss, or damage of any kind or nature arising out of or relating in any way to its use. Users of this publication understand that GANA is not responsible for any errors or omissions of any kind contained in the publication and that GANA does not design, develop, manufacture, install, guarantee, or make any express or implied representations or warranties as to fitness, merchantability, patent infringement, or other matters respecting products, processes, and equipment referred to in this publication. GANA does not guarantee any results of any kind relating to the use of this publication.

GANA expressly reserves the right, in its sole discretion, to revise, amend, or otherwise modify the publication from time to time as it sees fit and to do so without notice to prior recipients of the publication.



A Mirror – More than Just Glass

A mirror is a delicate and beautiful thing. Even though it is a combination of hard and durable components, the very nature of this blending creates a number of frailties that can ultimately lead to problems for both buyer and seller absent proper planning and care in handling.

Today's mirrors - made from the highest quality glass produced by the float process - are better in every way from those made just a decade ago. Surfaces are flatter and there are fewer surface and internal imperfections. Better edges are possible and closer tolerances can be maintained. State-of-the-art technology is employed to assure a better sheet of glass for silvering. Silvering methods have improved to provide maximum depth and reflectivity. Better copper solutions, the advent of copper replacement technology, and thermosetting mirror backing paint products, have offered improved protection to the silver layer for long-lived performance. A second method is to apply a copper-free protective film, which also offers environmental advantages. The copper layer has been eliminated and the silver coating has been stabilized with other chemicals.

But each of the five components which make up the mirror, glass; sensitizing solution; silver; copper "copper-free" chemicals, copper replacement coatings; and finish coatings, if improperly handled anywhere along the way from manufacture to final installation can lead to a failure of the mirror. Opportunities for mishandling are many. Each mirror must be shipped, stored, removed from storage, cut, perhaps beveled or drilled, finished, packed and shipped again, installed and cleaned. Because each mirror is indeed more than "just glass," an array of proper handling techniques described in this publication should lead to a durable installation.

Two positive benefits will result from employing these procedures: a handsome, trouble-free mirror installation and a satisfied customer.

Receiving, Storage and Transportation

Every time a mirror crate or an open mirror is moved, there is potential for damage. Therefore, the key to successful handling is to keep these movements to a minimum. Plan your storage in an efficient manner. Use proper handling techniques and equipment. Ship wisely. Review the suggestions below and compare them to your present practices.

- The very first - and important - step in maintaining mirror integrity is to *check your shipments on arrival*. If there appears to be moisture present, the mirrors should be unpacked and allowed to dry using a separating technique. Moisture can attack the backing or stain the face of a mirror over a period of time.
- Be sure that your mirror storage areas are in dry, adequately ventilated spaces. Don't store mirrors in areas of high humidity, where exposed to chemical fumes, or near high heat such as steam or water pipes. These conditions can cause deterioration of the mirror edges, backing, or surface staining.
- Mirrors should be unpacked as soon as possible to allow moisture caused by condensation to dissipate, especially if the mirrors have been subject to temperature changes during shipment.
- Store mirrors vertically, but *do not* pull mirrors from the ends of the case. Do not lay mirrors flat. Glass exhibits more strength, fewer strains when stored vertically.
- Don't store mirrors outdoors or in unheated areas. The mirror can be affected not only by the moisture prevalent under these conditions, but also by excessive expansion and contraction caused by cyclic temperatures.

- Block mirror cases up off floors and away from walls. This will assist in proper ventilation of the storage area and prevent any water damage to the bottom of the cases. Also, do not store crates or mirrors on uneven surfaces. This can lead to stresses and strains on the glass, which can lead to cracks and breakage.
- Mirrors should not be placed touching cinder block wall or other concrete material.
- Protect cases and mirrors from falling objects. Even a small impact could cause cracks and ruin a mirror.
- Be certain to rotate your mirror stocks. Consume older stocks first. Many experts believe that "aging" helps in the curing of the paint backing and thus results in a more durable installation. This aging process takes about a week and is the result of the purging of all solvents in the paint coating. Organize storage areas so that faster moving items are more readily accessible. This will reduce traffic and handling and make damage less likely.
- Be certain that handling equipment is strong enough to handle the weight of the mirror. A dropped mirror is usually a ruined mirror.
- Do not ship partially unpacked mirror cases without proper repacking. Movement within the case can cause damage or breakage.


If mirrors are transported in an open or exposed condition and become spattered or come in contact with foreign elements such as road salt, they should be washed with warm water and dried with a soft rag.

Fabrication

It is important to emphasize that care be taken during every step of fabrication to maintain the integrity of the back and edges of a mirror. Any major damage to these two areas will result in a useless product. Equally important, however, is cleanliness in the fabrication shop. *Dirt, grit, solvents, and other contaminants can lead to damage not only to the surface but also to the backing.*

- Always use gloves when handling mirrors. This protection works two ways. Hands are protected from sharp edges, and the edges and backing of the mirror from body salts and chemicals.
- Vacuum or sweep the cutting tables with a stiff brush regularly to keep dust down and to eliminate glass grit and particles which could scratch mirrors.
- Do as much fabrication in the shop as possible. This will reduce the possibility of on-site damage where conditions are usually less than perfect.
- Locate fabrication areas away from parts of the shop where mirrors could be exposed to solvents, heavy-duty cleaners, etc. which could affect the backing.
- Be sure that mirrors - especially backs and edges - are thoroughly washed after fabrication. Use only clean water for washing. If a glass washing machine is used, a recommended mild detergent may be used. No commercial glass cleaner can be recommended. Most contain ammonia or other strong chemicals which can damage the edge of the mirror.
- Depending on the geographical location, the glass shop may apply an approved sealant to all edges after fabrication and thorough edge cleaning with diluted rubbing alcohol. This will provide additional protection against moisture or other degrading chemical or atmospheric penetration of the backing.
- When grinding and polishing edges, remember that a wet belt sander is the recommended tool. If you are using dry belts, a recommended belt lubricant can be used, but some lubricants contain chloride contaminants. The best recommendation is the use of clean, fresh water. Also remember to keep the heat generated by sanding or swiping to a





minimum to prevent damage to the mirror backing. Never allow a belt to “fire”. The direction of rotation of the sanding belt must be toward the edge (thickness) of the mirror to prevent pushing contaminants into the paint backing. For example, when the mirror is positioned horizontally with the paint side down, the belt direction must be “up” from below the mirror and “down” from above the mirror.

- Diamond wheels should always be dressed and maintained in good cutting condition. Set wheels so as not to grind excessively on the paint side and edge grind in only one direction. Diamond wheels should also be used with clean water as a lubricant. If coolant is used, it should be clean, pure and have a pH of close to 7.
- Try to retain at least one factory edge when trimming, preferably at the bottom where mirror is subject to puddling.
- Don't slide mirror lites one over another. Scratching of the surfaces will result.
- Be sure mirrors are inspected before and after fabrication and that adequate light is provided in the inspection areas.
- If questions arise concerning approved coolants, cutting oils, sanding belts or cutting tools, contact the mirror manufacturer or other suppliers for specific instructions.

Installation

The best mirror job is one that is not only striking in appearance, but one that was trouble-free during installation. Proper techniques, carefully and professionally employed, can virtually guarantee this kind of result.

- As with fabrication, always use gloves when handling any mirror on the job site to prevent damage to the face or backing from skin-borne salts or chemicals.
- Where possible, lay out a mirror installation in your shop before taking it to the job site. Any errors in cutting or sizing can be caught and remedied immediately and no excessive handling will occur.
- Never install mirrors on new plaster, new or old masonry or on a freshly painted wall without proper sealing. Also, do not install in any new construction area where airborne solvents and heavy-duty cleaners are in the air. This is especially true in the case of new bathroom construction, where acid fumes from tile grout cleaners can severely damage mirror products.
- In humid climates, wait until the air conditioning is operating before installing mirrors.
- In newly constructed buildings that include concrete floors or cinder block walls, do not install mirror until floor or wall have been covered or sealed.
- Never install mirrors outdoors without additional engineered protection for the backing of the mirror.
- Set mirrors off the wall with an air space behind to provide ventilation for the backing whenever possible.
- If mastic must be used, be sure it is approved for mirror use. Mechanical fastening devices should always be used in conjunction with the mastic. This can help prevent possible personal injury or damage from the mirror in the event of future failure of the mastic.
- Be certain that the room or space in which the mirror is to be installed is properly ventilated during and after installation. Good ventilation will keep mirrors from “sweating” and creating condensing liquids which could be corrosive and damaging to mirrors.
- Never permit edges of the mirror to be exposed to “puddling” conditions such as on back splashes. Instead, raise the mirror up off the bottom with an angle clip which will not catch and retain water in contact with the mirror.
- Be sure that there are adequate tolerances between installed mirrors to avoid later problems as the building settles.

- Mirrors should be one of the last items installed in new construction after final cleanup. To insure the best mirror protection, installation should occur after air temperature control equipment (air conditioning or heating equipment) has been turned on.
- Consult with mirror manufacturers or other suppliers for recommendations on mastics, silicones (for trim out), belt lubricants, and other installation materials and tools.
- A light seam of clear (not acid based) silicone could be placed across the face of the mirror between the glass face surface and splash or J molding. This should be along the bottom of the mirror only and the other three sides open for ventilation. Care should be taken to ensure excessive material is not pushed to the paint edge of the mirror when applied.

Cleaning

The "final touch" on any outstanding mirror installation is proper cleaning. The techniques described here are good practices for you and should be passed on to your customers so they can maintain the mirror for the life of the job.

- The safest cleaner for a mirror is clean, warm water used with a soft cloth. An approved glass cleaner such as Windex or similar products may be used. Be careful not to allow the edges of the mirror to get or remain wet over a period of time.
- Do not use any acid or alkali cleaners for mirror cleanup after installation. They can attack both the surface and edges as well as the backing of the mirror. And never use an abrasive cleaner on any mirror surface.
- Do not use cleaners with heavy ammonia bases. These too can damage the mirror edges and backing and result in a ruined mirror.
- **Never spray any cleaner directly on to a mirror. Instead, apply the cleaner to a soft cloth and then wipe the mirror. This will also prevent "puddling" at the mirror edge where the cleaner could attack the backing.**
- Always use soft, grit-free cloths when cleaning a mirror to reduce chances of scratching the surface.
- Be sure to dry all joints and edges thoroughly to be certain no cleaner comes in contact with the edge and backing.
- Be sure to let your customers know that routine cleaning maintenance can be accomplished simply and effectively by washing, rinsing and drying the mirror.

Members of the mirror industry also encourage awareness of the industry consensus document ASTM C 1503 – *Standard Specification for Silvered Flat Glass Mirror*. The ASTM International standard addresses the requirements for silvered flat glass mirrors of rectangular shape supplied as cut sizes, stock sheets or as lehr ends; quality requirements of silvered annealed monolithic clear and tinted flat glass mirrors up to 6 mm (1/4 in.) thick; and mirrors intended to be used indoors for mirror glazing, for components of decorative accessories or similar use. The standard may be purchased by visiting the ASTM International website: www.astm.org.

For additional information on mirrors and the Mirror Division of the Glass Association of North America, visit the Division website: www.mirrorlink.org and the Association website: www.glasswebsite.com.

We are hopeful that you have found the suggestions contained in this publication, on the care and handling of mirror products, informative. If one or more of them are new to you and can improve your operations, this booklet has served its purpose. If you have been employing other techniques which you think would benefit other distributors, dealers and installers, please pass them on to us, and we will consider them for inclusion in future revisions of this publication.



➤ **SURE KLEAN®**

Vana Trol®

sensitive brick & stone cleaner

OVERVIEW

Sure Klean® Vana Trol® is a concentrated acidic cleaner for new masonry surfaces that are subject to vanadium, manganese and other metallic stains. Vana Trol® is designed to simplify rinsing and reduces potential for efflorescence.

SPECIFICATIONS

For all PROSOCO product specifications visit www.prosoco.com.

ADVANTAGES

- Clings to masonry surface, and softens excess mortar and job dirt.
- Slow-drying so it rinses clean without streaking.
- Controls green vanadium and brown manganese staining on color-sensitive brick and tile.
- Removes efflorescence on new brick, concrete block, and stone construction.
- Safe for use on most unpolished natural stone or cast stone.
- Designed for use with colored mortar.

Limitations

- Repeated applications may leave a detergent residue. To reduce potential for detergent residue: always prewet; rinse thoroughly; do not exceed two applications.
- Not effective for removing atmospheric dirt and black carbon stains. Use the appropriate Sure Klean® restoration cleaner to remove atmospheric staining from older masonry.
- Not for use on treated low-E glass; acrylic and polycarbonate sheet glazing; and glazing with surface-applied reflective, metallic or other synthetic coatings and films.

REGULATORY COMPLIANCE

VOC Compliance

Sure Klean® Vana Trol® is compliant with all national, state and district regulations.

TYPICAL TECHNICAL DATA

FORM	Clear liquid with slight amber color
SPECIFIC GRAVITY	1.11
pH	0.3 @ 1:6 dilution
WT/GAL	9.20 lbs
ACTIVE CONTENT	Not applicable
TOTAL SOLIDS	Not applicable
VOC CONTENT	Not applicable
FLASH POINT	Not applicable
FREEZE POINT	<-22°F (<-30°C)
SHELF LIFE	3 years in tightly sealed, unopened container

Vana Trol®

PREPARATION

Protect people, vehicles, property, metal, painted surfaces, plants and other non masonry materials from product, splash, residue, wind drift and fumes. When working over traffic, clean when traffic is at a minimum. Protect or divert traffic if necessary.

Vapors and liquid can damage a variety of metals and fabrics. Clean masonry before installing windows, doors, finished flooring, metal fixtures, hardware, light fixtures, roofing materials and other non masonry items that the cleaner could harm. If already installed, protect with polyethylene before application. Sure Klean® Strippable Masking is appropriate for use with this product to protect windows.

All caulking and sealant materials should be in place and thoroughly cured before cleaning.

On new construction, masonry cleaning should be done before installation of finished flooring, metal fixtures and all other non masonry materials. If such materials are already in place, protect with polyethylene and maintain sufficient ventilation to avoid buildup of potentially damaging fumes.

Construction soiling and mortar residues on new brick and tile surfaces clean most effectively if the cleaning is done within 14–28 days of installation. Mortar and grout smears left on the surface longer result in a more difficult clean down and may cause undesirable results. Cleaning

high-strength mortar/grout within seven days improves results.

Presence of excessive moisture in the wall contributes to efflorescence and other staining. Always protect open wall cavities from rain during construction.

Surface and Air Temperature

For best results, clean when air and masonry surface temperatures are 40°F (4°C) or above. Cleaning when temperatures are below freezing or will be overnight may harm masonry. If freezing conditions existed before application, let the masonry thaw.

Equipment

Use low-pressure spray (50 psi max) or densely-packed, soft-fibered masonry-washing brush.

ALWAYS TEST

ALWAYS TEST a small area of each surface to confirm suitability and desired results before starting overall application. Test with the same equipment, recommended surface preparation and application procedures planned for general application.

Do not apply with pressure spray above 50 psi. Such application will drive the chemicals deep into the surface making it difficult to rinse completely. Transport and store in a cool, dry place.

Rinse with enough water and pressure to flush spent cleaner and dissolved soiling from the masonry surface and surface pores without damage. Inadequate rinsing leaves residues which may stain the cleaned surface.

Masonry-washing equipment generating 400–1000 psi with a water flow rate of 6–8 gallons per minute is the best water/pressure combination for rinsing porous masonry. Use a 15–45° fan spray tip. Heated water (150–180°F; 65–82°C) may improve cleaning efficiency. Use adjustable equipment for reducing water flow-rates and rinsing pressure as needed for sensitive surfaces. Rinsing pressures greater than 1000 psi and fan spray tips smaller than 15° may permanently damage sensitive masonry. Water flow-rates less than 6 gallons per minute may reduce cleaning productivity and contribute to uneven cleaning results.

Storage and Handling

Store in a cool, dry place with adequate ventilation. Vapors and liquid can damage a variety of metals and fabrics. Do not alter or mix with other chemicals. Always seal container after dispensing. Published shelf life assumes upright storage of factory-sealed containers in a dry place. Maintain temperature of 45–100°F (7–38°C). Do not double stack pallets. Dispose of unused product and container in accordance with local, state and federal regulations.

Recommended for these substrates. Always test.
Coverage is in sq.ft./m. per gallon of concentrate.

Substrate	Type	Use?	Coverage
Architectural Concrete Block*	Burnished	yes♦	500–900 sq.ft. 46–84 sq.m.
	Smooth	yes	
	Split-faced	yes	
	Ribbed	yes	
Concrete*	Brick	yes	500–900 sq.ft. 46–84 sq.m.
	Tile	yes	
	Precast Panels	yes	
	Pavers	yes	
Fired Clay	Cast-in-place	yes	600–900 sq.ft. 56–84 sq.m.
	Brick	yes	
	Tile	yes	
	Terra Cotta	yes	
Marble, Travertine, Limestone	Pavers	yes	N/A
	Polished	no	
	Unpolished	yes	600–900 sq.ft. 56–84 sq.m.
	Polished	yes	
Granite	Unpolished	yes	800–1000 sq.ft. 74–93 sq.m.
	Polished	yes	
Sandstone	Unpolished	yes	700–1000 sq.ft. 65–93 sq.m.
	Polished	yes	
Slate	Unpolished	yes	600–900 sq.ft. 56–84 sq.m.
	Polished	yes	

*Sure Klean® Custom Masonry Cleaner is a more appropriate product.

♦Always perform a test panel of each surface to confirm suitability, proper dilution rates and desired results before overall application.

*Sure Klean® Burnished Custom Masonry Cleaner is a more appropriate product.

Repeated applications may damage surfaces. Always test to ensure desired results. Coverage estimates depend on surface texture and porosity.

APPLICATION

Before use, read "Preparation" and "Safety Information."

ALWAYS TEST (minimum 4-ft x 4-ft area) for suitability and results before overall application. Test each type of masonry and each type of stain. Let test area dry 3–7 days before inspection and approval by the project architect or building owner. Clean test areas according to the application below. Make the test panel available for comparison throughout the cleaning project.

Dilution

Dilute 4–10 parts water to 1 part concentrate depending on application. Adjust dilution rate based on test results. Always pour cold water into empty bucket first, then carefully add cleaner. Never use hot water. Handle in high-density polyethylene or polypropylene containers only. Acidic materials and fumes will attack metal.

Coverage Rates

When calculating the volume of cleaner required for porous, textured surfaces, assume 50 square feet per gallon of prepared cleaner. For dense, smooth surfaces, assume up to 150 square feet per gallon of prepared cleaner. The coverage rate chart assumes an average coverage rate of 100 square feet per gallon of prepared cleaner.

Application Instructions

Exterior Surfaces

Test thoroughly and follow preparatory work procedures above. Provide adequate ventilation. The following cleaning procedure is recommended unless otherwise indicated during testing:

1. Thoroughly saturate a large portion of the masonry surface with fresh water, working from the bottom to the top.
2. Using a densely-packed, soft-fibered masonry-washing brush or low pressure spray (50 psi max), apply diluted solution freely.
3. Leave cleaning solution on the wall for about 5 minutes, depending on absorption rate of

masonry and drying conditions. Do not let cleaner dry into the masonry. This may leave a residue and cause staining.

4. Reapply cleaning solution and scrape off heavy buildup of excess mortar using a wooden scraper or piece of brick. Take care to avoid damaging the masonry surface. Do not use metal scrapers, which may contribute to metallic staining.

To avoid streaking, keep adjacent and lower wall surfaces wet and rinsed free of cleaning residues.

Avoid more than one reapplication over the same area. Repeated applications may cause a white detergent film to be deposited on the masonry surface. If mortar deposits are not softened after the initial application, allow the solution to remain on the wall for a longer period of time, making sure that the cleaner does not dry into the masonry.

5. Rinse thoroughly with fresh water, removing all cleaning compound, free sand, loose material and debris. Rinse from the bottom of the work area to the top. Thorough rinsing is extremely important to ensure that all residues are removed from the porous masonry.

Interior Surfaces

Proper ventilation is necessary. Following the cleaning procedures outlined for exterior surfaces. Rinse thoroughly with fresh water using sponge or soft-fibered brush. If conditions do not allow sufficient water for complete rinsing, use a neutralizing rinse following this procedure:

1. Rinse with clear water.
2. Apply neutralizing rinse of 2 ounces baking soda to 1 gallon of clean water.
3. Saturate. Leave solution on surface 3 to 5 minutes.
4. Apply a final rinse of clear water.

Cleanup

Clean tools and equipment using fresh water.

BEST PRACTICES

Repeated applications may leave a detergent residue. To reduce potential for detergent residue: always prewet; rinse thoroughly; do not exceed two applications.

When diluting product, always pour cold water into empty bucket first, then carefully add cleaner. Never use hot water. Handle in high-density polyethylene or polypropylene containers only. Acidic materials and fumes will attack metal.

Do not apply with pressure spray above 50 psi. This drives the chemicals deep into the surface, making complete rinse difficult. Test spray equipment for compatibility and to avoid discoloration.

To avoid streaking, keep adjacent and lower wall surfaces wet and rinsed free of cleaning residues.

Rinse with enough water and pressure to flush spent cleaner and dissolved soiling from the masonry surface and surface pores without damage. Inadequate rinsing leaves residues which may stain the cleaned surface.

Never go it alone. For problems or questions, contact your local PROSOCO distributor or field representative. Or call PROSOCO technical Customer Care toll-free at 800-255-4255.



Vana Trol®

PRODUCT DATA SHEET
PROSOCO
SINCE 1939

SAFETY INFORMATION

Sure Klean® Vana Trol® is a concentrated, acidic cleaner. This product may damage a variety of common construction materials and has safety issues common to corrosive materials. Use appropriate safety equipment and job site controls during handling and application. Read full label and MSDS for precautionary instructions before use.

First Aid

Ingestion: Contact a physician immediately.

Eye Contact: Rinse for 15 minutes; get medical attention.

Skin Contact: Rinse for 15 minutes; get medical assistance as needed.

24-Hour Emergency Information:
INFOTRAC at 800-535-5053

WARRANTY

The information and recommendations made are based on our own research and the research of others, and are believed to be accurate. However, no guarantee of their accuracy is made because we cannot cover every possible application of

our products, nor anticipate every variation encountered in masonry surfaces, job conditions and methods used. The purchasers shall make their own tests to determine the suitability of such products for a particular purpose.

PROSOCO, Inc. warrants this product to be free from defects. **Where permitted by law, PROSOCO makes no other warranties with respect to this product, express or implied, including without limitation the implied warranties of merchantability or fitness for particular purpose.** The purchaser shall be responsible to make his own tests to determine the suitability of this product for his particular purpose. PROSOCO's liability shall be limited in all events to supplying sufficient product to re-treat the specific areas to which defective product has been applied. Acceptance and use of this product absolves PROSOCO from any other liability, from whatever source, including liability for incidental, consequential or resultant damages whether due

to breach of warranty, negligence or strict liability. This warranty may not be modified or extended by representatives of PROSOCO, its distributors or dealers.

CUSTOMER CARE

Factory personnel are available for product, environment and job-safety assistance with no obligation. Call 800-255-4255 and ask for Customer Care - technical support.

Factory-trained representatives are established in principal cities throughout the continental United States. Call Customer Care at 800-255-4255, or visit our web site at www.prosoco.com, for the name of the Sure Klean® representative in your area.

Porcelain Tile Installation & Cleaning Instructions

Porcelain Tile Installation and Cleaning Instructions

Installation:

Porcelain tile is a manmade tile. It can be unglazed, glazed, or honed to a high polish. Because of the composition of the body and how the tile is manufactured, the finished product is impervious, having less than 0.5% water absorption.

Due to the tile's low absorption, setting materials specifically recommended for porcelain tile installation by the setting material manufacturer should be used. When in doubt and for more specifics, refer to TCNA (Tile Council of North America) The Industry's guide for Installation Practices.

Cleaning:

General maintenance and cleaning of porcelain tile will vary depending on the surface and soil load. General cleaning should be performed first by sweeping or vacuuming to remove loose soil or other surface contaminants, and then lightly damp mopping with clean water. Depending on the soil load, a more aggressive cleaning process may be required. This would include the use of a neutral cleaner or a general household cleaner, followed by a thorough rinsing.