



PERMA•CRETE®

WHY LIVE WITH UGLY  
CONCRETE SURFACES?®





# WHAT IS PERMACRETE?



PermaCrete products are the result of years of research and successful applications worldwide in all types of climates. A PermaCrete surface provides a new architectural, load-bearing surface of unusual strength and flexibility.

Available in an impressive array of colors and multiple textures, PermaCrete renews and strengthens both the beauty and durability of any surface that has deteriorated, is unattractive or has become unsafe. PermaCrete Matrix is an acrylic polymer cement compound of more than 6,000 PSI compressive strength which has twice the strength of standard concrete. PermaCrete's exclusive product line also includes sealers, epoxies, urethanes, cleaners and crack repair products.

Product applications can be hand-troweled, squeegeed or sprayed over many types of surfaces such as concrete, steel, foam, aggregate and masonry. PermaCrete is applied to patios, pool decks, pool interiors, driveways, sidewalks, bridges and airport runways... as well as most types of vertical surfaces.

## SIX BIG DIFFERENCES!



### .....FIRE TESTED

Only PermaCrete's unique, polymer cement surface exceeds the ASTM E-119 Fire Test and the ASTM E-84 & 95 Flame & Smoke Tests that are so critical for residential and commercial building surfaces!



### .....BALLISTICS TESTED

Only PermaCrete's proprietary mixture of exclusive products has withstood high-powered .38 caliber, 9 millimeter and .45 caliber ballistic penetration tests from a maximum muzzle velocity distance of just 18 inches!



### .....WATER TESTED

Only PermaCrete's select, polymer cement surfaces are tough enough to be used underwater in pools, spas, water parks and even commercial sewer systems, and still exceed the ASTM C-642 Water Absorption and ASTM D-2247 Moisture Resistance tests.



### .....HIGH TRAFFIC

Only PermaCrete's products are tough enough to resurface interstate bridges and airport runways, and still be applied in temperatures as low as 15°F.



### .....ON-SITE ADVISOR

Only PermaCrete can provide experienced, hands-on assistance at your job site for any type of installation to assure your customers the high quality job they expect and deserve.



### .....LASTS A LIFETIME

PermaCrete's unique characteristics, incredible toughness, and long-lasting durability separate its products from all others with assurance of lasting performance when properly applied and regularly maintained by a local Dealer.

# PERMACRETE PRODUCTS

To view additional products, marketing materials and installation equipment, go to [www.permacrete.com/products.php](http://www.permacrete.com/products.php)

## MATRIX MIXES

PermaCrete manufactures seven different types of Matrix Mixes: PermaCrete, PermaGrit, PolarSet, PolarGrit, Pool Interior, TropicSet and TropicGrit. All PermaCrete Matrix Mixes contain high, early-strength concrete compounds along with a blend of other special cements and additives. Available in 40 lb. bags; white mixture only. Mixes normally set in 20 to 30 minutes at 72°F (PermaCrete also sells Matrix Accelerator and Retarder to speed or reduce set times), and are open to foot traffic in 12-24 hours, and vehicular traffic in 48-72 hours.



## BONDING ADDITIVE

Matrix Bonding Additive is a high-solids, water soluble acrylic polymer solution that is used specifically for modifying Portland cement compositions such as PermaCrete Matrix Mixes. Cement mortars modified with Matrix Bonding Additive are hard, tough, durable and offer superior flexibility, adhesion and impact strengths. They also have excellent abrasion resistance and are unaffected by most industrial chemicals, ultraviolet light and heat. PermaCrete's Bonding Additive comes in five gallon pails.



## SEALERS

PermaCrete manufactures acrylic-emulsion Clear and Stain Sealers. PermaSeal Clear Sealer is a penetrating, acrylic-emulsion clear sealer that is milky white in color but dries to a clear, hard, very durable polymer film with an attractive gloss. PermaSeal Stain Sealer is a penetrating, acrylic-emulsion sealer stain that comes in 170 standard colors (see page 5) and virtually any custom color is also available. Both types of Sealers contain a pleasing vanilla aroma, and are resistant to chemicals, acids, salts, detergents, mildew, UV-rays and freeze-thaw cycles.



## EPOXIES

PermaPoxy Enamel is a 100% solids, two-component epoxy enamel containing epoxy resins and cycloaliphatic amine curing agents that contain no irritant or harmful fumes. Final cured film is hard but flexible, slip-resistant, and freeze-thaw resistant. It also provides lasting protection against industrial chemicals, mildew, solvents, alkali, acids and temperatures up to 550°F. An initial coat of PermaPrime E-Coat provides a high-solids, epoxy primer designed for recoat with PermaPoxy Enamel (or PermaThane CRU-750). See page 10 for more information about PermaPoxy Enamel.



## URETHANES

PermaThane CRU-750 is a high-solids, two-component acrylic urethane containing a styrene-acrylic co-polymer and aliphatic polyisocyanate. It has a unique elasticity which allows variations in stress and temperature. PermaThane is typically used for coating swimming pool & spa interiors, warehouse floors, chemical plants, racing shop garages, and sanitary sewer manholes. It provides remarkable protection against industrial chemicals, mildew, solvents, alkali, acids, MEK, brake fluid, Skydrol racing fuel and temperatures up to 550°F.



## CLEANERS

PermaCrete also manufactures two types of surface cleaners; Orange Power Degreaser and Blue Nitro Cleaner. Orange Power is a water base degreaser that is a non-toxic, non-petroleum liquid cleaner that contains a citrus solvent, surfactants and emulsifiers. Blue Nitro Cleaner is a heavy-duty liquid, industrial cleaner formulated for cleaning most surfaces. It's completely biodegradable and provides effective removal of all commonly encountered surface dirt and other contaminants.



MEMBER



# PRODUCTS (CONTINUED)

## CRACK REPAIR.....

PermaBond Crack Repair is a 100% solids, two-component, rapid curing, moisture tolerant, low viscosity, high strength, multi-purpose epoxy resin adhesive. It fills and seals large cracks and micro cracks in concrete surfaces. PermaBond Crack Repair restores concrete to a minimum 90% original strength (101% typical). It allows traffic within three hours at an ambient temperature of 72°F.



## SEALANTS.....

Available in 10 standard colors, as well as custom colors, PermaCaulk Sealant is a one-part elastomeric acrylic joint and crack sealant. It's an excellent, general purpose sealant designed for use in concrete slab expansion joints, masonry perimeters, window and door perimeters and other general purpose areas. PermaCaulk has excellent performance in moving joints and is tack-free within three hours of application. It's very efficient for exterior as well as interior applications.



## COLORANTS, PAINT CHIPS, AGGREGATES....

PermaCrete manufactures Matrix Colorant which is a liquid, water-base pigment, formulated for lasting durability and available in 22 standard colors with custom colors also available. Matrix Colorant is added directly to the Matrix and Bonding Additive mixture, or used in the hand-coloring of stone, brick or tile patterns. PermaPaint Chips are brilliantly colored, decorative vinyl paint chips used to embed in liquid-applied, seamless Epoxy flooring, or Matrix Mix applications by broadcasting the Chips directly onto wet surfaces before sealing. PermaCrete Aggregates are also used in similar fashion, but are brilliantly colored, fine-grain sand particles.



## OTHER PRODUCTS.....

**PermaWeld Mastic** - A liquid resin emulsion that welds any PermaCrete application to tile, glass, marble, metal and other surfaces.

**PermaStrip Remover** - A flammable, water soluble, paint, glue and varnish remover that's easily applied.

**PermaMesh Fiber Cloth** - A fibermesh cloth designed to add flex strength in PermaCrete vertical or roadway applications.

**PermaGel Epoxy** - A 100% solids, two-component epoxy resin used for structural cracks and underwater surfaces.

## TECHNICAL SPECIFICATIONS.....

### Architectural Specifications

TEST	METHOD	RESULTS
Compressive Strength.....	ASTM C-109.....	5690 PSI*
Flexural Strength.....	ASTM C-348.....	1835 PSI
Tensile Strength.....	ASTM C-190.....	855 PSI
Shear Bond Adhesion.....	ASTM C-882.....	>550 PSI
Impact Strength.....	Lab Method.....	22 in. /lb.
Abrasion Resistance.....	ASTM C-994.....	1.57% Wt. Loss
Slip Resistance.....	ASTM D-2047.....	0.78 Dry
Slip Resistance.....	ASTM D-2047.....	0.74 Wet
Water Absorption.....	ASTM C-642.....	6.5% (72 Hrs.)
Weight (Cured).....	1/8" Typical Thickness.....	1.12 lbs. / ft.
Freeze-Thaw.....	ASTM C-666.....	<0.5% Wt. Loss
Accelerated Weathering.....	ASTM G-23.....	Unaffected (4000 Hrs.)
Chemical Resistance.....	ASTM D-2299.....	Unaffected
Fire Resistance.....	ASTM E-108.....	Class A
Fire Resistance.....	UBC 32-7.....	Class A
Fire Resistance.....	ASTM E-119.....	Passes @ 1 Hr.
Flame Spread.....	ASTM E-84.....	Exceeds Standard
Wind Uplift.....	FM-152.....	Exceeds Standard
Moisture Resistance.....	ASTM D2247.....	Unaffected @ 6 Weeks
Mildew Resistance.....	ASTM G-21.....	Class A
Mildew Resistance.....	Mil 810-B.....	No Growth @ 6 Wks.
Wind Driven Rain.....	TTC-555B.....	No Penetration
Shrinkage.....	ASTM C-596.....	Exceeds Standard

\*6,000+ PSI compressive strength is achieved after final applications of PermaCrete Acrylic Sealers.

### Chemical Resistance Properties

COMMERCIAL DESCRIPTION	REAGENT (Concentrated)	ACRYLIC SEALER Splash Exp. 24 Hr. Exp.	EPOXY SEALER Splash Exp. 24 Hr. Exp.
<b>ACIDS</b>			
Acetic.....	CH <sub>3</sub> COOH.....	10.....10	10.....9
Hydrochloric.....	HCL.....	10.....5	10.....8
Nitric.....	HNO <sub>3</sub> .....	10.....10	10.....8
Sulfuric.....	H <sub>2</sub> SO <sub>4</sub> .....	10.....7	10.....9
<b>ALKALI</b>			
Potassium Hydroxide.....	KOH.....	10.....10	10.....10
Sodium Hydroxide.....	NaOH.....	10.....10	10.....10
<b>SOLVENTS</b>			
Diesel Fuel.....	Hydrocarbons.....	10.....4	10.....10
Gasoline.....	Hydrocarbons.....	10.....10	10.....8
Mek.....	CH <sub>2</sub> CH <sub>2</sub> COCH <sub>3</sub> .....	9.....7	10.....10
Oils.....	Hydrocarbons.....	10.....4	10.....10
Toluene.....	C <sub>6</sub> H <sub>5</sub> CH <sub>3</sub> .....	9.....8	10.....10
Xylene.....	C <sub>6</sub> H <sub>4</sub> CH <sub>3</sub> CH <sub>3</sub> .....	9.....7	10.....10
<b>STAINS</b>			
Coffee.....	Mixture.....	10.....10	10.....10
Cola.....	Mixture.....	10.....10	10.....10
Grape Juice.....	Mixture.....	10.....7	10.....10
Mustard.....	Mixture.....	10.....7	10.....7
Red Ink.....	Mixture.....	10.....10	10.....10
<b>Sealer Scale 0=Removed 3=Lite Soft 6=Lite Stain 10=Unaffected</b>			





# SURFACE COLORS

The Colors below represent the 170 standard colors available in PermaCrete Stain Sealer. Custom Colors are also available upon request. Please note that the Colors below are for identification purposes only. Always choose the final surface color from the PermaCrete Fan Deck.

61A	62A	63A	64A	111A	112A	113A	114A	141A	142A
143A	144A	151A	152A	153A	154A	161A	162A	163A	164A
211A	212A	213A	214A	221A	222A	223A	224A	241A	242A
243A	244A	261A	262A	263A	264A	1121P	1122T	1123D	1124T
1125P	1131P	1132T	1133D	1134T	1135P	2011P	2012P	2013P	3011P
3012T	3013D	3014T	3015P	3121P	3122T	3123D	3124T	3125P	4021P
4022T	4023D	4024T	4025P	4071P	4072T	4073D	4074T	4075P	4091P
4092T	4093D	4094T	4095P	4111P	4112T	4113D	4114T	4115P	4191P
4192T	4193D	4194T	4195P	4221P	4222T	4223D	4224T	4225P	5021P
5022T	5023D	5024T	5025P	5041P	5042T	5043D	5044T	5045P	5051P
5052T	5053D	5054T	5055P	5101P	5102T	5103A	5104T	5105P	5191P
5192T	5193D	5194T	5195P	5231P	5232T	5233D	5234T	5235P	6081P
6082P	6083P	7021P	7022T	7023D	7024T	7025P	7051P	7052T	7053D
7054T	7055P	7091P	7092T	7093D	7094T	7095P	7221P	7222T	7223D
7224T	7225P	8021A	8022A	8023T	8024T	8025P	8031T	8032T	8033A
8034T	8035P	8041T	8042P	8043P	8044P	8045P	8051A	8052A	8053A
8054T	8055T	OW20 1P	OW20 2P	OW24 1P	OW24 2P	OW9 1P	C8056 P	C8057D	7183D

# MULTIPLE APPLICATIONS



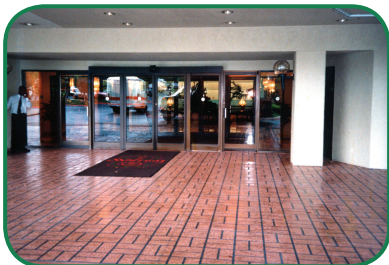
## .....DRIVEWAYS

Driveways represent a big source of damaged or deteriorated concrete. Compared to the cost of removal or repair of damaged driveway concrete, PermaCrete can be installed at a fraction of that cost and with convenient installation. Available in virtually any color or design, PermaCrete renews, strengthens and enhances to create a stunning new look. PermaCrete can be used to resurface concrete, masonry and aggregate driveways. Normal installation time is one to two days.



## .....PATIOS

Many patios are either worn concrete or mildewed aggregate. PermaCrete offers a new surface solution for virtually any type patio that's not only functional but maintenance free. Available in virtually any color or design, PermaCrete can be used to resurface concrete, masonry or aggregate patios. Normal installation time is one to two days.



## .....WALKWAYS

Sidewalks and other high traffic areas create all kinds of maintenance and performance problems. PermaCrete provides a new architectural, load-bearing surface of unusual strength and flexibility. It also repairs damaged, unsafe surfaces and is uniquely slip-resistant. PermaCrete is available in virtually any color or design and creates a stunning new look to last indefinitely with minimal maintenance. PermaCrete can be used to resurface concrete, masonry and aggregate sidewalks, as well as steel steps and walkways. Normal installation time is one to two days.



## .....INTERIOR FLOORS

Interior Floors surfaced with PermaCrete are a great alternative to tile, hardwood or carpet, and provide a permanent improvement to the value of any property. Since PermaCrete is available in virtually any color or design, it can create an entirely new look for a favorite room. PermaCrete is convenient to install and provides a surface with minimal maintenance. Normal installation time is one to two days. PermaCrete can be installed over concrete, tile and hardwood.



## .....POOL DECKS / POOL INTERIORS

PermaCrete is the only surface coating system that can be installed on pool decks & pool interiors, spas, hot tubs and fountains. PermaCrete's urethane sealers are resistant to UV and sun rays which provide long-lasting endurance and an eco-friendly application. Pool decks with PermaCrete are 20° cooler than concrete and resist stains, chemicals and freeze-thaw cycles. Available in hundreds of colors with many designs and textures, PermaCrete is the pool resurfacing product of choice. It can be installed over concrete, gunite, tile and masonry.



# MULTIPLE APPLICATIONS

## GARAGE FLOORS.....

Garage floors have frequent problems with oil stains, tire marks and slippery surfaces. Home owners and commercial garage owners appreciate the oil, chemical and slip-resistant surface of PermaCrete's 100% solids epoxy or urethane coatings which provide a stunning new finish. PermaCrete is available in many colors and designs and gives any garage floor a completely new look and maintenance-free surface. Normal installation time is two to three days.



## BATHROOM SURFACES.....

Bathroom floors, vanity tops, and shower stalls provide many headaches for homeowners from loose tiles, mildew and slippery surfaces. PermaCrete's unique products can be installed over existing tile areas, floor surfaces or vanity tops to revitalize a bathroom without having to remove or replace existing materials. PermaCrete surfaces are stain and mildew resistant, including grout lines in applied tile patterns. They're available in virtually any color or design and can be installed over concrete, tile, drywall or formica.



## COUNTERTOPS.....

Kitchen countertop options in today's marketplace are either too costly or provide low performance. PermaCrete provides a tough, durable countertop surface that out-performs others, and yet, is still economical. It also has a stain resistant, hard FDA food-safe surface that withstands boiling pots and pans as well as tough surface wear but which is still easily maintained. PermaCrete is available in virtually any color or design and can be installed over laminate, ceramic tile, formica, concrete or butcher block.



## WAREHOUSE / FACTORY FLOORS.....

Warehouse / factory floors are usually high-traffic and high-maintenance areas. PermaCrete products easily resurface spalled, deteriorated and even unsafe floors with very little down time, and withstand heavy equipment and constant traffic with minimal maintenance. PermaCrete is available in virtually any color or design to create a stunning new surface on all warehouse and factory floors.



## VERTICAL SURFACES .....

Residential and commercial wall surfaces provide the fastest growing use of PermaCrete products today. Structures built with concrete walls offer 10 times the strength and durability of structures built with wood or metal frame construction. A PermaCrete exterior coating adds superior strength, flexibility and protection against freeze-thaw cycles, chemicals, stains and surface penetration. PermaCrete is installed over ICF block, concrete block, brick, poured concrete or concrete panel walls.



# PATTERN INSTALLATION

The following pictures show PermaCrete's basic installation steps in a pattern installation. These steps vary depending upon the products used and the desired application.



## 1. Clean Surface

Clean and scrub surface with Blue Nitro and/or Orange Power. Then, pressure wash off with 3,000 psi.



## 2. Repair Surface (If Needed)

Saw out all cracks, except faint hair-line cracks. Repair cracks with Perma-Bond or PermaGel.



## 3. Mask Off Other Surfaces

Tape off expansion joints and paper any surrounding areas not being re-surfaced.



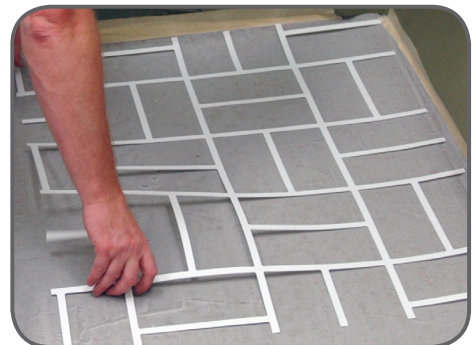
## 4. Apply Skim Coat

Pour Matrix mixture onto surface and spread over entire surface area with a squeegee or hand-trowel.



## 5. Seal Skim Coat

Stain or clear seal entire skim coat with airless sprayer or roller to create grout line color.



## 6. Apply Pattern Template

Place PermaCrete's reusable or disposable adhesive template over the surface area. Custom patterns can also be created by hand-taping.



## 7. Apply Top Texture Coat

Spray-on top texture coat of Matrix mixture. Easily trowel to desired finish.



## 8. Caulk Expansion Joints (If Needed)

Using PermaCrete's surface-colored caulks, fill expansion joints to complement design color.



## 9. Seal Top Texture Coat

Apply two coats of stain or clear sealer with airless sprayer. After it cures, remove template or tape.



# EPOXY INSTALLATION

PermaPoxy can be applied in a variety of colors and patterns over concrete, steel, masonry and wood. It's tough enough for warehouse, factory and garage floors, and yet versatile enough for countertops, bathroom showers, vanity tops, entrance foyers and tile floors.



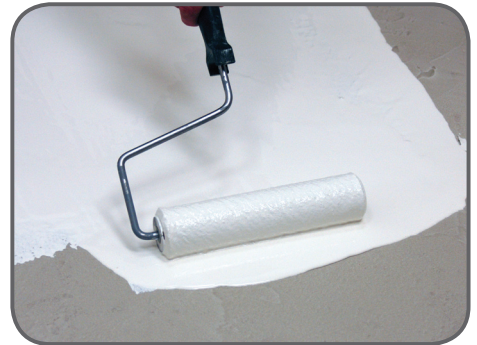
## 1. Clean Surface

Clean and scrub surface with Blue Nitro and/or Orange Power. Then, pressure wash off with 3,000 psi.



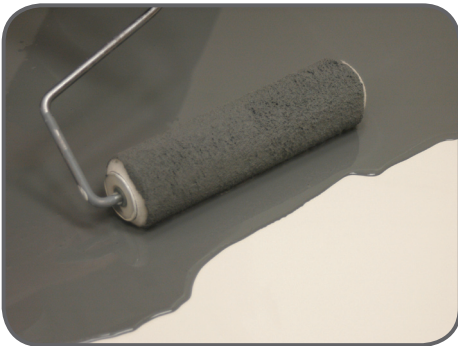
## 2. Fill Expansion Joints

For a seamless floor finish, fill all expansion joints with a special mixture of PermaPoxy.



## 3. Apply PermaPrime E-Coat

Apply one coat of PermaPrime E-Coat with brush, roller or airless sprayer.



## 4. Apply One Coat PermaPoxy

Apply one medium coat of PermaPoxy Enamel over entire surface area with roller or airless sprayer.



## 5. Broadcast Sand or Paint Chips

When PermaPoxy becomes tacky, broadcast Colored Sand Aggregates or Paint Chips to create desired look.



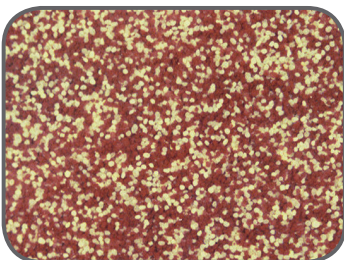
## 6. Apply Final Coat PermaPoxy

After first coat has completely dried, apply final coats of PermaPoxy Enamel for finished surface.

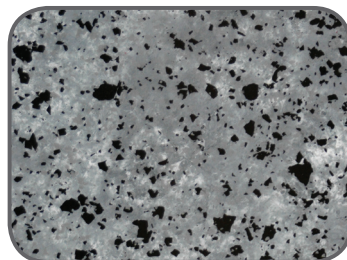
## PERMAPOXY COLORS (CUSTOM COLORS AVAILABLE)

Tile Red	Dark Grey	Medium Grey	Light Grey	Off White	White
Brown	Tan	Beige	Light Blue	Blue	Green

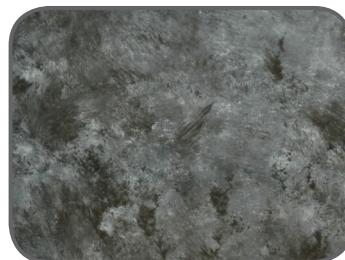
## SAMPLE EPOXY FINISHES



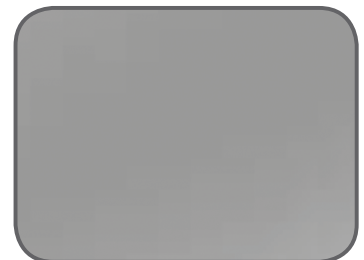
Sand Aggregates



PermaPaint Chips



Marble Finish



Smooth Finish



# VERTICAL APPLICATIONS

Residential and commercial wall surfaces provide the fastest growing use of PermaCrete products today. Structures built with concrete walls offer 10 times the strength and durability of structures built with wood or metal frame construction. A PermaCrete exterior coating adds superior strength, flexibility and protection against freeze-thaw cycles, chemicals, stains and surface penetrations. PermaCrete is installed over ICF block, concrete block, brick, poured concrete or concrete panel walls.

## BENEFITS OF PERMACRETE VERTICAL SURFACES

**Strength and Durability**

**Up to 6,000 PSI Compressive Strength**

**Water and Fire Resistant**

**Easy Maintenance**

**Mildew and Stain Resistant**

**UV and Sun Resistant**

**Available in Virtually Any Color or Design**

**Withstands Surface Penetration / Storms**

**Seamless Finish**

**Sealed & Non-Porous**

**Resists Freeze-Thaw Cycles**

**Easy to Install - Sprays On!**

**Feathercoated or Up To 2 Full Inches**

**Over 150 Million Sq. Ft. Installed Since 1990**



**Insulated Concrete Form (ICF)**



**Concrete Block**



**Regular Brick**



**Insulated Concrete Form (ICF)**



# VERTICAL INSTALLATION

PermaCrete's exclusive polymer cement surface provides an exterior coating of up to 6,000 PSI compressive and 1,800 PSI flexural strengths when applied in proper thicknesses. This unique surface also offers significant advantages over other coating products used to resurface building structures such as plaster, Dryvit, or reduced strength, synthetic stuccos. Those products usually contain little, if any, Portland cement and are primarily low-strength, non-sealed cosmetic coatings that provide less protection from weather erosion and other frequent surface abuses like staining, chipping or cracking.

PermaCrete's exterior finish provides a super strong surface that offers a more substantial brick-like protection. Available in virtually any color, texture or design, PermaCrete clearly offers the finest exterior surface available today for ICF block, concrete block, brick, poured concrete or concrete panel wall structures!



## 1. Apply Base Coat

Spray on one coat of PermaCrete Matrix as a base coat to be used to embed the fiber mesh to the wall surface.



## 2. Apply PermaMesh

Trowel in PermaMesh Fiber Cloth to bridge the ICF or concrete block seams and add flexural and tensile strengths.



## 3. Spray Over PermaMesh

Spray another coat of PermaCrete Matrix over surface to fully cover PermaMesh.



## 4. Apply Top Texture Coat

Spray final coat of colored PermaCrete Matrix onto surface for texture finish.



## 5. Trowel Desired Finish

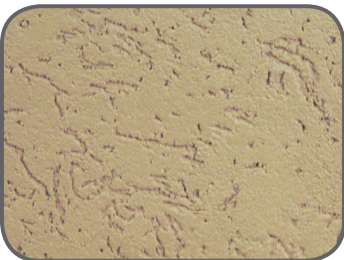
Trowel final texture coat to produce a lace, stucco or worm finish, or leave as is for a sand finish.



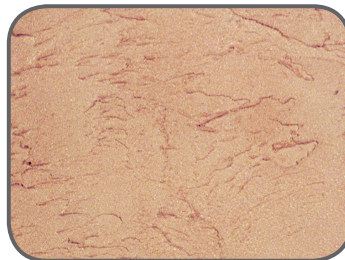
## 6. Spray Two Coats of Sealer

Apply two coats of stain sealer over entire surface with roller or airless sprayer.

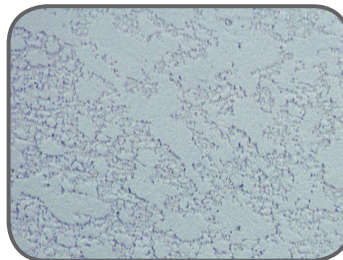
## SAMPLE VERTICAL TEXTURES



Worm



Stucco

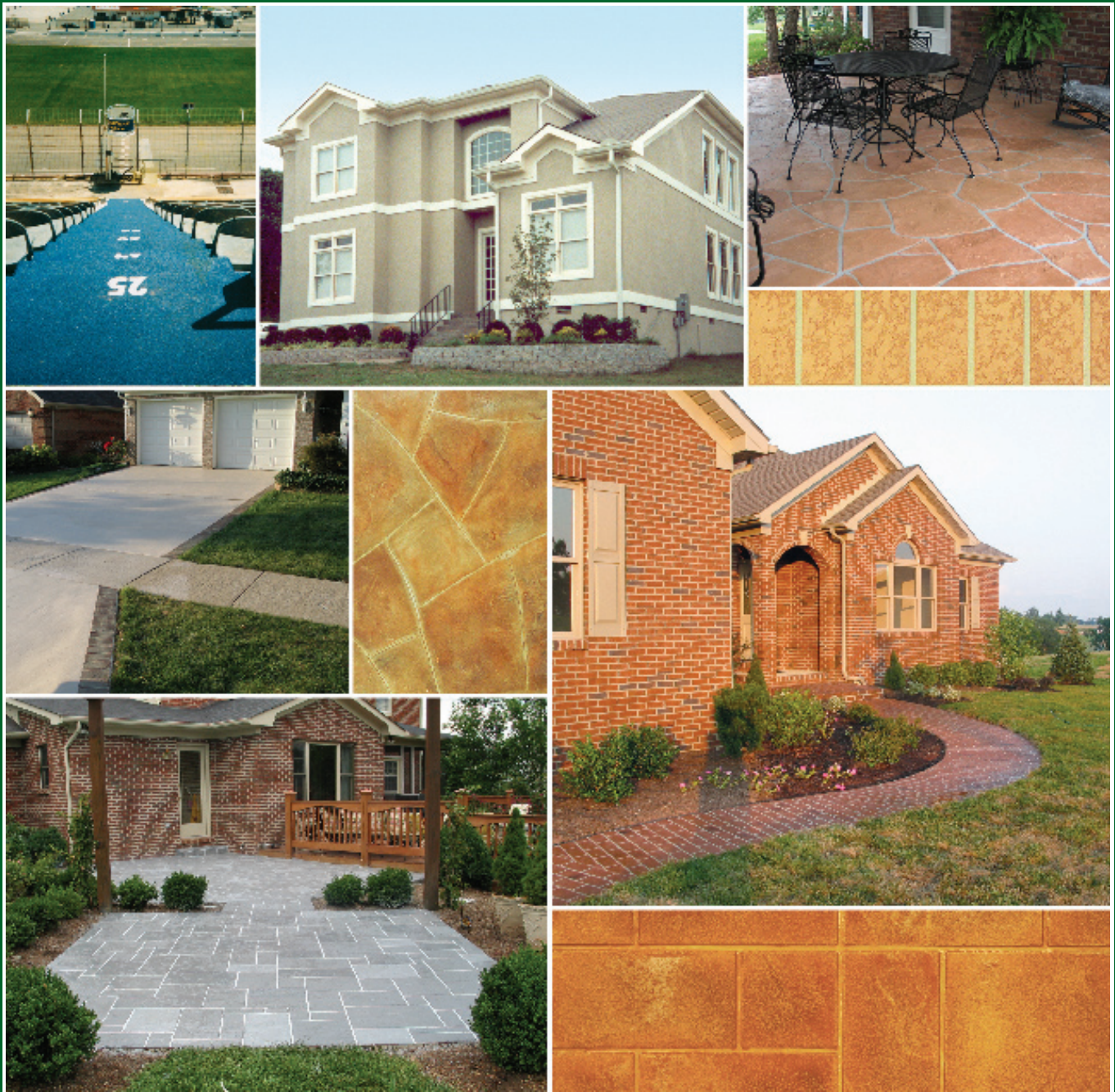


Lace



Sand





# PERMA•CRETE®

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Independent Dealer:

PermaCrete Dealerships are independently owned and operated