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April 26, 2011

MEMO

TO: Steven Huss + Kristen Zaremba / Oakland Cultural Funding Program & PAAC Panelists

FROM: Sue Mark + Bruce Douglas / marksearch team

RE: *Walking the Invisible City* Markers: UPDATE

PROJECT BACKGROUND:

“Walking the Invisible City”, downtown Oakland’s first permanent self-guided walking tour, is the culmination of a 3-year community based project, 10,000 Steps. This project, whose main objective has been to raise awareness of the historic parks in downtown while bringing together the diverse communities who surround the parks, received initial funding (\$35,000) from The Creative Work (2007). Our collaborative partner is the Friends of Oakland Parks and Recreation. Over the course of the project, we have been working closely with neighborhood and community organizations to develop relevant temporary green art projects in and around the parks. With a whimsical workcart made from reused materials, we attended events in and around the parks including: Earth Day, National Night Out, First Fridays, Art + Soul, Chinatown StreetFest, the Farmers’ Market. During these events, we collected stories from passersby about their relationship to the parks in downtown. From these stories, as well as cultural, architectural and community histories, we have compiled the text that forms the content for “Walking the Invisible City”.

In 2009 we received an Individual Artists Grant from Oakland’s Cultural Funding Program to create “A Profile of Four Squares”, a multimedia installation documenting the communities and histories of these historic parks. This installation, at ProArts Gallery, included historic and contemporary newspaper articles and texts, photos collected from the community, maps and a series of four 10-minute video documentaries of each of the historic squares. This film, created by filmmaker Matt Dibble, is a valuable piece of community documentation: it chronicles the history of these parks as well as the transformation of the neighborhoods over the decades.

The Open Proposal Grant (\$14,000 pending) is covering the cost of designing, producing and installing 2/3 of the total markers (24 out of 36 unique markers). **Attachment A** shows the locations for the markers. We have also received \$3,000 from the National Trust for Historic Preservation to produce a 3-month cell phone tour, printed guide maps and interactive enhancements to our website. We are currently planning to launch the walking and cell phone tours with a celebration at the Oakland Museum (August, 2011). This day-long event will include: docent-led history bike tours

of the markers; a project ribbon cutting; a kid-friendly scavenger hunt around the historic parks; a Lion Dance by youth from Lincoln Square Recreation Center; Tai Chi demonstration and class led by practitioners from Madison Square Park; tamale making activity by Tina 'Tamale' Ramos from Old Oakland; information tables with flyers and brochures about neighborhood groups and organizations. This event, which will receive in-kind support from the Museum, is a critical community commencement for "Walking the Invisible City".

MARKER VETTING UPDATE:

We have completed the vetting process for all of the markers. Monique Tsang, from the City's Equal Access Office, has worked with us on the Chinese text. In addition, we vetted the changes she suggested with members of the Chinatown community. The Oakland Museum has approved of the marker we designed for them (**Attachment B**). All of the translation (Chinese, Spanish and Ohlone/Muwekma) for this marker has been vetted.

MARKER SAMPLES / SIDEWALK CONDITIONS:

We have produced three sample markers on different types of sidewalk conditions. Each marker is 24" x 21" and will fit on the sidewalk squares in the downtown region. We have etched two different markers on older sidewalk (**Attachment C**): each marker stencil is indicative of the size and style of font used for all of the designs. One of the markers includes Chinese characters. **Attachment D** demonstrates the results of etching onto relatively new sidewalk. **Attachment E** shows the range of sidewalk types that we will encounter as we install the markers. We have scouted the installation area for each of the markers. We have flexibility in locating the markers therefore we can select the best available sidewalk square in which to install the marker.

MARKER INSTALLATION PROCESS:

SPECIFIC LOCATION SELECTION:

- Markers will be sandblasted centered in sound smooth surfaced concrete sections (usually approximately square) at the sites designated on the project map.
- In most cases the specific locations will be outside the most heavily traveled portion of the sidewalk.

PREPARATION:

Newer sidewalk (surface consisting of concrete fines and sand):

- Clean marker area (bounded by the outline shape) with light sand blasting or wire brushing to remove residue.

Older sidewalk (surface consisting of weathered/worn exposed aggregate up to 1/8" pebble size):

- Clean entire sidewalk square with light sand blasting or wire brushing to remove residue.
- Mask the perimeter of the square with Duct Tape.
- Coat cleaned concrete with Micro-Top liquid polymer additive (priming).
- Trowel Grey colored Micro-Top concrete mix onto sidewalk, lightly covering the top and filling between exposed aggregate.
- **Note:** Micro-Top is a fine grained cementitious product designed for resurfacing exterior concrete. Micro-Top will be mixed with #60 grit sand to provide anti slip surface.
- Curing time: 1 day for Micro-Top.

ETCHING MARKER INTO SIDEWALK:

- Position plastic A-template (stencil).
- Sand blast through stencil to remove concrete or Micro-Top approx 1/32" depth.
- Position plastic B-template (removes bridges from enclosed letters).
- Sand blast exposed bridges.

COLORING MARKER IMAGE:

- Position plastic A-template (stencil).
- Spray Water Reducible Concrete Stain through template.
- Position plastic B-template (removes bridges from enclosed letters).
- Hand brush stain through template to color bridge areas.

SEALING MARKER IMAGE:

- Position plastic A-template (stencil).
- Spray CR-570 Outside Acrylic Sealer through template.
- Position plastic B-template (removes bridges from enclosed letters).
- Spray CR-570 Outside Acrylic Sealer through template.

ERROR CORRECTION:

- Disc Grinding/Filling and re-etching damaged portion of image, or entire marker.
- Die grinder (Dremel) for touch up of stain overspray on newer concrete.

WORK SITE PROTECTION

- Cover / Pedestrian Barrier to enclose and mark the marker while Micro-Top is curing (although normal footsteps will not harm it within 1/2 hour).
- Cover / Pedestrian Barrier will be put in place for 24 hours after the marker is sealed.
- Sandblasting with containment/collection system poses no hazard to passers-by. Spray painting is within contained stencil area, no protection of surroundings necessary. Portable 18" high wood barrier will be placed between work and any vertical surface needing protection within 2 feet of stencil work area.

MATERIALS:

Attachment F includes the technical specifications for all of the materials that we will be using to etch the sidewalk markers:

- **Micro Top** : a fine grained cementitious product designed for resurfacing exterior concrete.
- **Water Reducible Concrete Stain**: used to color all of the lettering on the markers and outlining on the markers.
- **CR-570 Outside Acrylic Sealer**: used to seal all of the lettering and outlining on the markers

ATTACHMENT INDEX:

Attachment A: Walking the Invisible City Map

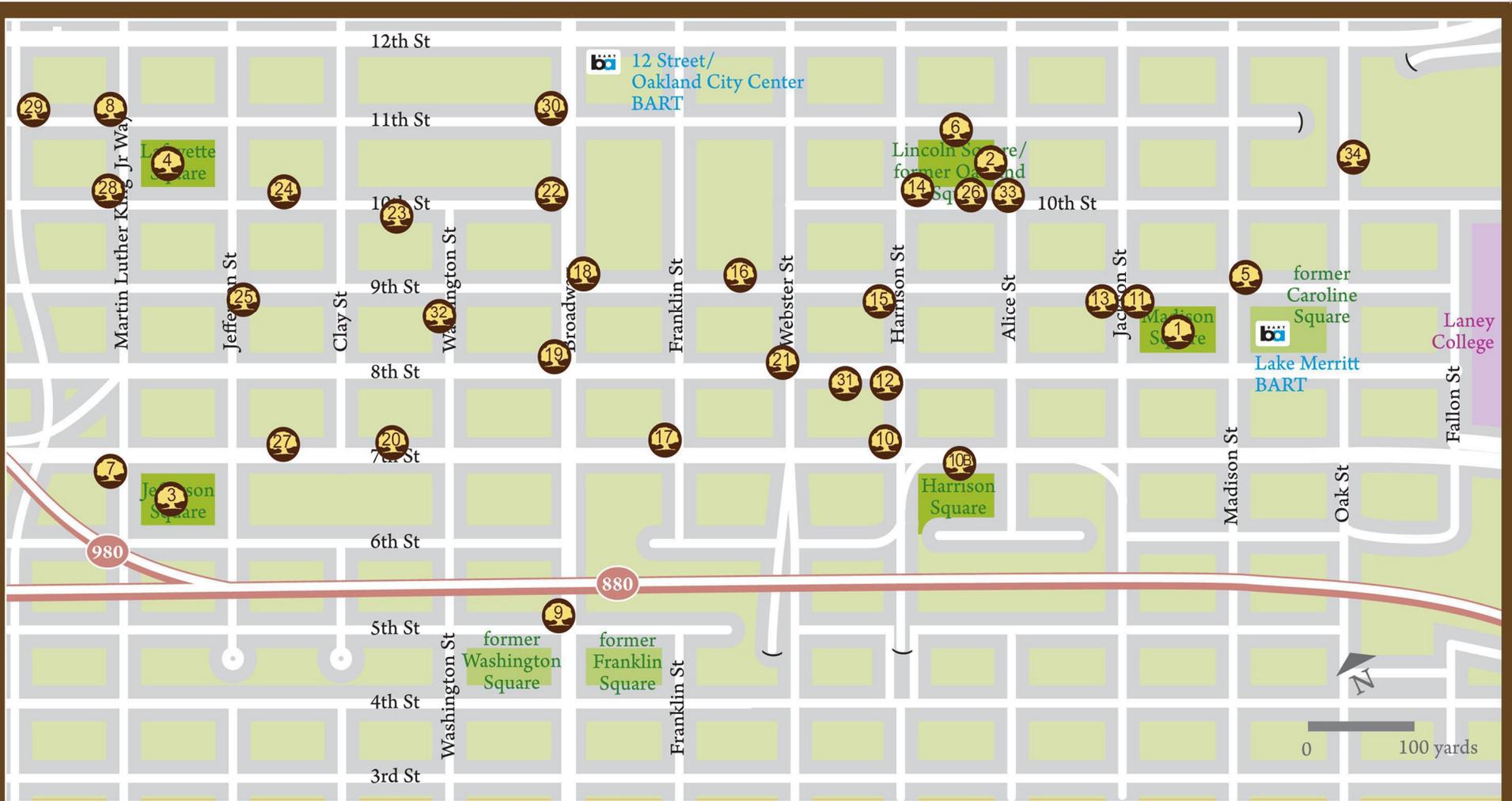
Attachment B: Oakland Museum Marker

Attachment C & D: Sample Etched Markers

Attachment E: Range of Sidewalks

Attachment F: Materials Specifications

ATTACHMENT A: Location map for Walking the Invisible City markers



10,000 STEPS: Walking the Invisible City

Proposal for 34 marker locations. Locations subject to approval by city staff and stakeholders. See key for marker content.

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ATTACHMENT B: Marker design for the Oakland Museum



ATTACHMENT C: Two Marker Samples etched on old concrete using Micro Top



Chinese Community
United Methodist Church

1887

Immigrants
become
Neighbors

以信望愛相待

One
Community

10kSTEPS.ORG

MADISON
SQUARE

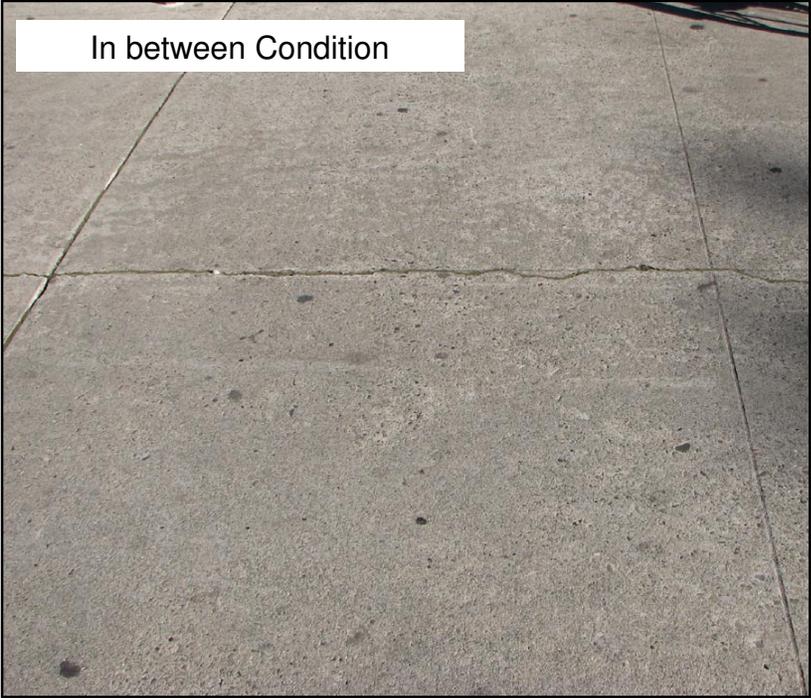
10000 STEPS

JEFFERSON
SQUARE

ATTACHMENT D: Marker Sample etched on new concrete



Attachment E: Range of sidewalk types encountered in Downtown Oakland



Attachment F includes the technical specifications for all of the materials that we will be using to etch the sidewalk markers:

Materials:

Innotech 'Micro-Topping':

Product Features and Benefits:

- INNOTECH MICRO-TOPPING is an extremely versatile product which can be feathered to a zero edge, used in interior or exterior applications and applied to vertical or horizontal surfaces. It is an ideal product for creating long lasting, colorfast and vibrant surfaces.
- This product features exceptional bond strength. This product adheres to most stable substrates, well bonded adhesives and coatings on stable substrates.
- INNOTECH MICRO-TOPPING features excellent abrasion resistance and will achieve a compressive strength of 6,000 PSI.
- This is a non-toxic design product and dries completely in 24 hours (@ 70 °F/21 °C).
- One of the advantages of INNOTECH MICRO-TOPPING is that it can be used to color and/or recolor old concrete surfaces. This ultra-thin concrete topping can be installed over damaged but stable existing concrete (or other materials) to transform surfaces into a cementitious palette, without affecting surrounding materials or substantially increasing the elevation of the finished surface.

Engrave-A-Crete 'WRC' Stain

Details:

- Concrete Resurrection Water Reducible Concentrate (CR-WRC) is an environmentally friendly (and California compliant) penetrating waterborne acrylic pigmented dye stain for concrete. A superior alternative to hazardous solvent and acid based stains. CR-WRC is designed to give predictable natural variegated colors or predictable bright solid colors.

Engrave-A-Crete 'Outside Acrylic' - Exterior Concrete Sealer (100 VOC)

Details:

- High quality clear, 25% solids, solvent based acrylic designed for sealing decorative concrete projects. Outside Acrylic is a hard acrylic polymer that produces coatings with excellent gloss, stain-resistance and are easy to clean. Adhesion to properly prepared concrete surfaces is excellent and the material is non-yellowing. (For Exterior Use Only)

Technical Data Sheets for each material follow:



FOR PROFESSIONAL USE ONLY

Technical Bulletin

MT TB.0110

Micro-Topping

Revive old concrete or create striking new surfaces with INNOTECH MICRO-TOPPING, an architectural concrete overlay. INNOTECH MICRO-TOPPING transforms structurally sound surfaces into colorful areas with architectural impact, while delivering exceptional abrasion resistance. Available in 42 standard colors this product produces areas of solid color, subtle variegation, marbled hues and various textures.

INNOTECH MICRO-TOPPING bonds to virtually any substrate, including concrete, wood, metal, plastic and sheet rock. This product is a combination of liquid polymer, color tint packs and specially formulated powder mixtures. The product can also be provided pre-colored for larger jobs. INNOTECH MICRO-TOPPING is applied in layers using trowels, brushes and squeegees, each producing a different finish texture—at a recommended thickness of only 20-mils, approximately the thickness of a credit card.

INNOTECH MICRO-TOPPING is designed as a three-part system (with an optional tint pack):

- INNOTECH MICRO-TOPPING Base Coat Powder
- INNOTECH MICRO-TOPPING Finish Coat Powder
- INNOTECH MICRO-TOPPING Liquid Polymer

INNOTECH MICRO-TOPPING Liquid is added to both the Base and Finish Coats to achieve the desired material consistency. INNOTECH recommends two base coat applications and one finish coat application as a minimum coverage guideline. **IMPORTANT:** Please reference the “Available Packaging and Coverage Information” section in this document for details.

Product Features and Benefits

- INNOTECH MICRO-TOPPING is an extremely versatile product which can be feathered to a zero edge, used in interior or exterior applications and applied to vertical or horizontal surfaces. It is an ideal product for creating long lasting, colorfast and vibrant surfaces.
- This product features exceptional bond strength. This product adheres to most stable substrates, well bonded adhesives and coatings on stable substrates.
- INNOTECH MICRO-TOPPING features excellent abrasion resistance and will achieve a compressive strength of 6,000 PSI.
- This is a non-toxic design product and dries completely in 24 hours (@ 70 °F/21 °C).
- INNOTECH MICRO-TOPPING is available in an unpigmented white or gray powder.
- The durable, high-strength INNOTECH MICRO-TOPPING colors can be chosen from the INNOTECH COLOR HARDENER color chart.
- Finish effects can include, but are not limited to, broom finished solid colors to knock down with subtle variegation to smooth marbled hues.
- INNOTECH MICRO-TOPPING can significantly reduce construction costs when elaborate graphics or extensive color changes are needed, which would otherwise require multiple forming and pouring phases.
- One of the advantages of INNOTECH MICRO-TOPPING is that it can be used to color and/or recolor old concrete surfaces. This ultra-thin concrete topping can be installed over damaged but stable existing concrete (or other materials) to transform surfaces into a cementitious palette, without affecting surrounding materials or substantially increasing the elevation of the finished surface.
- Some concrete surfaces possess flaws that make staining unpredictable, undesirable and often incompatible. This product provides a fresh, durable palette, ideal for applying stains and dyes.
- INNOTECH MICRO-TOPPING may also be the ideal design alternative to the following projects that would otherwise require costly repairs or removal and replacement:
 1. Slabs that have been badly scarred by heavy equipment or machinery.
 2. Where the removal of mastic and glues may not be economically feasible.
 3. Surfaces where carpet, laminate or tile has been removed.
- INNOTECH MICRO-TOPPING provides architects, designers and owners an expanded range of cementitious color selection that, in the past, was only available in less wear-resistant paint-type materials or multiple costly and time intensive colored concrete pours. The uses of INNOTECH MICRO-TOPPING include, but are not limited to, large-scale commercial flooring, graphic artwork, stenciling, monograms, logos, accenting or antiquing imprinted concrete, traversing vertical surfaces, countertops, residential flooring and artistic pallets for INNOTECH CHEMICAL STAIN[†] and INNOTECH LIQUID DYE CONCENTRATE[†].

Prior to Application

- Review the “Product Limitations” portion of this document.
- Sweep or vacuum loose dirt from the surface. Use a floor scraper or grinder to remove bumps and surface build-up. For best results, surface should be as flat and level as possible. Tools and equipment requirements are largely dependent on the project. Common to most projects are: mixing motor, mixing paddle, eye goggles, polyethylene sheeting (and/or rosin paper), duct or reinforced tape, graduated measuring containers, empty containers for mixing and cleanup, gloves and rags. Application tools depend on the project and include squeegees, trowels, drywall knives, brushes and rollers. Suggested prep, cleanup and trimming tools include: scrapers, drywall knives, hammers, chisels, brooms, dustpan and vacuum. Additional specialty tools may be necessary, depending on the type and extent of preparation required.
- INNOTECH utilizes the International Concrete Repair Institute (ICRI) Concrete Surface Profile (CSP) standards for specifying finished surface roughness prior to applying INNOTECH MICRO-TOPPING. For proper adhesion, the concrete must be a minimum #2 according to the ICRI CSP chart. Contact the ICRI at www.ICRI.org or INNOTECH for detailed information on surface profiles.
- If there are foreign materials (such as adhesives, paints or high-performance coatings) on the substrate, INNOTECH MICRO-TOPPING will bond tenaciously to those foreign materials. However, the ultimate test of the stability of the substrate depends on the integrity of the bond between the foreign material and the substrate (not between the foreign material and INNOTECH MICRO-TOPPING). If stable glossy coatings are to be covered, abrade with an 80-100 grit sanding screen.
- Standing oil and grease should be wiped clean, scrubbed with an appropriate industrial detergent such as INNOTECH CONCRETE DEGREASER-NEUTRALIZER[†], rinsed with clean water and completely dried before application of INNOTECH MICRO-TOPPING. Any remaining oil or grease stains should not affect adhesion, but over time can produce shadowing or ghosting of the original stain.
- Holes and large chips should be filled and trowelled flat using an appropriate structural-grade repair product prior to the base coat application.
- Control joints and moving/working cracks in the existing concrete are expected to transfer through the surface of the topping and create potential cracking problems. To isolate moving cracks, use a crack repair kit. Install according to kit instructions. In the case of existing joints or saw cuts, new joints or saw cuts must be placed directly over the existing joints or saw cuts. Any new joint or saw cut must penetrate entirely through the new layers of INNOTECH MICRO-TOPPING.
- Mask off perimeter and vertical surfaces for protection. Remove masking as soon as possible after application.
- If the concrete surface exhibits moisture issues, dusting or flaking, INNOTECH MVT REDUCTION[†] should be used to reduce vapor transmission and harden problem areas prior to application.

Product Application

- INNOTECH MICRO-TOPPING should be applied at a minimum of three coats: two base coats, followed by one finish coat. (Additional coats of either base coat or finish coat may be applied depending on project specifications).

- For best results, use a mechanical mixer with a multibladed mixing paddle.

Do not mix by hand.

- **Suggested Mixing Ratios:** Mixing ratio may vary slightly without affecting bond strength. However, it is critical to maintain material consistency for the entire area being treated.

Change in mix ratio could result in a color variation.

1. **Horizontal Surface:** Approximately 2-gallons of liquid to one 56-lb. bag of powder (base coat) and 2-gallons to one 40-lb. bag (finish coat).
2. **Vertical Surface:** Approximately 1-gallon of liquid to one 56-lb. bag of powder (base coat) and 1-gallon to one 40-lb. bag (finish coat).

Mixing Preparation: Mixing should be done in a cool area in 5-gallon buckets (or 15-gallon drums for larger jobs). Because material dries quickly when exposed to air, buckets and small mixing drums work best. Do not allow INNOTECH MICRO-TOPPING to air dry on tools or equipment. Wash mixing equipment immediately or place in water for later cleaning.

Mixing Instructions: The following instructions are for both INNOTECH MICRO-TOPPING Base Coat and Finish Coat.

- Mix only enough material for the immediate area to be covered. Use INNOTECH MICRO-TOPPING as soon as possible after mixing.
- If there is any unused material, it should be kept in a cool and covered place – do not leave exposed to sunlight. Pot life is approximately 2 hours at 70 °F. Pot life may be shortened considerably in hotter weather or extended in cooler weather. If the unused mixture begins to thicken, return it to original fluid consistency by remixing. If the mixture does not return to its original state, then discard.
- In a clean container, combine the INNOTECH MICRO-TOPPING Liquid Tint Pack with the Liquid Polymer. Blend thoroughly.
- Place $\frac{3}{4}$ of the INNOTECH MICRO-TOPPING liquids mixture needed in another clean mixing container.
- While mixer is running, slowly add $\frac{1}{2}$ of the INNOTECH MICRO-TOPPING powder.
- Mix until lump free.
- Add remaining liquid and powder and mix until lump free.
- Add small quantities of liquid or powder to achieve the desired consistency depending on the type of area to be covered and application method.

- For horizontal surfaces, a more fluid mix is desired, while for vertical surfaces, a drier stickier mix is desired. Test areas are always recommended to ensure desired results.

Primer and Base Coat Application: 2 Base Coats Recommended

- Prime the surface. Spray a thin, even coat of INNOTECH MICRO-TOPPING Liquid to prime the surface. Agitate the primer into the substrate with a stiff bristle brush or low RPM rotary scrubber, making sure to eliminate any puddles.
- Apply the first base coat of INNOTECH MICRO-TOPPING while the primer is still wet or tacky. If the primer dries, reapply and agitate to achieve a wet or tacky surface. The primer is needed for the initial base coat application only. The initial application of INNOTECH MICRO-TOPPING Base Coat should be applied in a wet fluid state to ensure proper adhesion and surface penetration.

- Pour only enough material that can be laid down in a 15- to 30-minute time period.
- Maintain a wet edge.
- Hot surfaces can accelerate the hydration rate, while cool temperatures will tend to slow the hydration rate. Moderate surface temperatures of 60 °F to 80 °F are recommended for best results.
- When working large areas, the base coat can be easily applied with a squeegee, trowel or roller. When working smaller areas or corners, use a trowel or small squeegee to apply the base coat.
- Spread thin, even coats of base coat across the surface.
- At 70 °F, the base coat should dry in about 45-60 minutes. If high humidity exists, fans can be used to move across the surface to speed set time.
- Once the first base coat has dried, proceed with the second base coat application.
- On new concrete surfaces, typically two base coat applications are sufficient. On pitted, damaged or rough surfaces, additional coats may be required (the use of repair mortar is recommended to fill larger voids).
- Once each base coat application can be walked on without marring the surface, care should be taken to knock down any irregularities, lumps or squeegee marks with a trowel, scraper or drywall knife. If base coat material dries to a final hardness before the surface can be manually smoothed, a (80- to 120-grit) screen may be needed to smooth the surface.
- It is critical to achieve a uniform, smooth base coat prior to application of the finish coat. Any imperfections in the base coat will telegraph through the finish coat.

Finish Coat Application: Optional Number of Coats

- Finish Coats are required to achieve a very smooth surface, for a rougher/more sandy finish the Finish Coat can be skipped.
- Finish Coats can be applied using any number of methods including, but not limited to, squeegees, trowels, rollers, brushes, brooms, sponges and hopper guns, each achieve a special texture and finish.
- Different colors of finish coat material can be blended to create marbled tones and effects.
- Pour only enough material that can be laid down in a 15- to 30-minute time frame and maintain a wet edge during application.
- Squeegee or trowel application is the best method for a smooth finish. Do not add water; this product does not float like concrete.
- As the finish material begins to set, a "second pass" with a trowel may be necessary to minimize application marks, and create a smooth surface.
- Once cured, a 150-grit sanding screen can be used on a rotary buffer to create an extra smooth surface.

When Using INNOTECH Chemical Stain† and Liquid Dye Concentrate†

- Once desired finish is achieved, material should be left to cure for 24 hours prior to staining.
- INNOTECH MICRO-TOPPING may not stain according to the stain or dye Color Charts. The combination of polymers and cement in INNOTECH MICRO-TOPPING may cause stains/dyes to react differently.
- Always test or sample stains/dyes in an inconspicuous area to ensure desired color effects are achieved.
- Sanding the top finish coat with a 100- to 150-grit sanding screen, or the use of INNOTECH CON-CLEAN† may allow better adhesion of the sealer.
- When using INNOTECH CHEMICAL STAIN†, it is highly recommended that a sample mock-up be done for desired results. Some chemical stains, due to their high intensity of color, may need to be diluted prior to staining INNOTECH MICRO-TOPPING.
- For best results, stain INNOTECH MICRO-TOPPING within 72 hours of application. Waiting longer than 72 hours can result in the stain not penetrating fully.

To Seal INNOTECH Micro-Topping

- Allow INNOTECH MICRO-TOPPING to fully cure (minimum 24 hours) before sealing. Sanding the cured top finish coat with a 100- to 150-grit screen or the use of CONCRETE CLEANER† may allow better adhesion of the sealer.
- **IMPORTANT:** Use only premium INNOTECH water-based sealers to protect the finished surface.
- Use of solvent-based sealers will soften the INNOTECH MICRO-TOPPING immediately and it will never achieve its full strength of 6000 psi in 7 days.
- Prior to sealing, the newly completed surface should be barricaded or blocked off to protect against foot traffic or contamination.
- Do not allow water on the surface until INNOTECH MICRO-TOPPING has completely cured. Excessive water before sufficient cure will affect bond and durability.
- Choose from a variety of premium INNOTECH water-based sealers appropriate to project requirements: Please reference the "INNOTECH SEALER AND MAINTENANCE PRODUCT GUIDE" to determine the correct sealer for a specific application.

Maintenance

All installations should be maintained on a routine basis with the use of INNOTECH maintenance products to ensure the preservation of a high-quality, long-lasting surface. Maintenance schedules will vary depending on a number of factors, including volume and intensity of traffic, ultraviolet light exposure, geographical location and weather conditions. Resealing will be required periodically, depending on the amount of foot traffic. As with any other surface treatment, the lifetime of this product is dependent on the care it is given. The use of a qualified flooring maintenance contractor is recommended for resealing, especially in commercial applications.

Product Limitations

- INNOTECH MICRO-TOPPING will not properly bond to wet or damp concrete.
- INNOTECH MICRO-TOPPING will not adhere properly to salt-damaged concrete (i.e. salt-finished surfaces or de-icing salt-infested surfaces).
- INNOTECH MICRO-TOPPING will not adhere to standing oil or grease. Certain aggressive stains, such as hydraulic fluids, proteins and animal waste by-products, may appear through the topping as "shadowing" on the finished surface. Any of these materials found on the substrate should be cleaned with an appropriate cleaner and then sealed with a water-based epoxy.
- If heavy adhesive tapes (such as duct tape) are left on sealed INNOTECH MICRO-TOPPING over an extended period of time, a chemical "weld" will be created between the tape and the INNOTECH MICRO-TOPPING. If this happens, the product may be subject to delamination.

Available Packaging and Coverage Information

INNOTECH MICRO-TOPPING has a shelf life of approximately 18 months.

Important: Coverage rates given below may vary slightly depending on surface profile and application method. Coverage may be significantly different on damaged, spalled or textured surfaces.

- INNOTECH MICRO-TOPPING Base Coat is produced in 56-lb bags: Coverage rate is approximately 450 square feet.
(For each bag used, 2-gallons of INNOTECH MICRO-TOPPING Liquid will be required.)
- INNOTECH MICRO-TOPPING Finish Coat is produced in 40-lb bags: Coverage rate is approximately 600-1000 square feet.
(For each bag used, 2-gallons of INNOTECH MICRO-TOPPING Liquid will be required.)
- INNOTECH MICRO-TOPPING Liquid is available in 2- and 5-gallon pails.

Product Shelf Life/Storage

INNOTECH MICRO-TOPPING has a shelf life of approximately 18 months.

Important: Avoid storing bags and liquid in hot warehouses or storage trailers as it will dramatically decrease the pot life and working time.

Liquid: INNOTECH MICRO-TOPPING Liquid should be stored indoors and above freezing temperatures. If the Liquid freezes, discard.

Powders: INNOTECH MICRO-TOPPING Powders should be stored indoors and away from moisture.

Product Handling

Prior to using INNOTECH MICRO-TOPPING, please reference the corresponding Material Safety Data Sheet to ensure safe handling.

Product Warranty

INNOTECH MICRO-TOPPING is a proprietary product, warranted to be of uniform quality within our stringent manufacturing tolerances. As no control is exercised over the product use, no warranty is made as to the effects of such use (neither expressed or implied). Obligation of the seller and manufacturer under this warranty shall be limited to a refund of the purchase price of that portion of the material proven to be defective. The user assumes all other risk and liability resulting from uses of this product. Contact INNOTECH with any questions regarding this policy. *Innotech is a registered trademark of CHROMASYSTEMS LLC, an Ohio company.*

†PLEASE REFER TO THE CORRESPONDING TECHNICAL BULLETIN FOR PRODUCT AND APPLICATION DATA.

INNOTECH MICRO-TOPPING and other INNOTECH products are for professional use only.

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INNOTECH products can be purchased at:



INNOTECH Decorative Concrete Products
2055 Enterprise Parkway • Twinsburg, OH 44087
Customer Service 877-829-7880 or 330-425-2506
Fax 330-425-2466
www.innotechdcp.com

CONCRETE STAIN & SUPPLY, LLC

Technical Data Sheet (TDS) CR-WRC STAIN

**This product may only be used on fully cured concrete. Allow a minimum of 28-45 days of cure time after the concrete is poured to allow ample time for the concrete to completely hydrate.

Description

Concrete Resurrection Water Reducible Concentrate (CR-WRC) is an environmentally friendly (and California compliant) penetrating waterborne acrylic pigmented dye stain. A superior alternative to hazardous solvent and acid based stains. CR-WRC is designed to give predictable natural variegated colors or predictable bright solid colors. A one step staining process, there is no residue to neutralize and scrub off. CR-WRC can also be used for faux finishing, changing hues, or correcting errors after acid staining (surface must be cleaned and neutralized prior to application). For interior and exterior concrete, horizontal or vertical.

Uses

CR-WRC may be used to achieve faux finishing effects such as marbling, veining, antiquing, mottling, graining, and layering. CR-WRC can also be applied in multiple coats to achieve a solid opaque color. Differing colors can be layered over the top of each other for a color blending. CR-WRC also allows the applicator to make custom colors by mixing different concentrate colors together.

Coverage

One quart CR-WRC yields 1.25 - 2.25 total gallons of "ready to use" stain. CR-WRC covers 100-500 sq ft per gallon. Coverage variations depend on concrete surface porosity and amount of material applied.

Mixing

Shake well before using
Use only *distilled* water for mixing.
Add 4 - 8 parts distilled water into an appropriate mixing container, then add 1 part CR-WRC. Mix thoroughly.

Application

When spraying CR-WRC protect surroundings with masking paper or masking plastic. Always use a filter when pouring the "ready to use" CR-WRC into a sprayer.

CR-WRC can be applied to dry or slightly damp concrete.

Concrete slabs must be a minimum 30 days old .

Tools that can be used for application of CR-WRC:

- Gravity feed HVLP sprayer (preferred)
- Pressure pot HVLP sprayer
- Airless sprayer
- Pump sprayer
- Cotton Rag
- Natural Sponge (sea sponge)
- Manufactured sponge
- Roller
- Brush (bristle or foam)

Concrete surface temperature must be between 50 -90 degrees.

It is acceptable to apply CR-WRC to damp concrete. In arid climates it may be necessary to dampen the concrete prior to application of stain to prevent the material from drying instantly. In order to penetrate the stain must have several minutes of "wet" time on the surface.

Surface Preparation

Concrete must be clean and free of all dirt and contaminants.

Concrete floors must be open and porous prior to applying CR-WRC.

Oil and grease must be removed prior to stain application using Concrete Resurrection Degreaser. Paint and or sealers must be removed prior to stain application using Concrete Resurrection Sealer/Paint Stripper

Interior floors:

Required minimum preparation is scrubbing using a floor machine (buffer) with a black pad or sanding screen.

Exterior surfaces:

Required minimum preparation is pressure washing.

Drying Time

Drying time is dependant upon temperature and humidity.

Dry to touch / recoat 15 -30 minutes

Light foot traffic 1 hour

Full usage after final coat of clear sealer is cured. (consult clear sealer manufacturer's specifications for full cure times)

Clean Up

Tools can be cleaned with water and/or soapy water.

Sealing

A minimum of 24 hours of drying time (after the stain has dried to the touch) is required before applying a clear sealer to the surface at exterior conditions 70-80 degrees Fahrenheit with 75% relative humidity. In more humid conditions and or cooler temperatures, additional time is required for complete curing (allow an additional 4 hours).

It is strongly recommended that a clear sealer be applied as a top coat for abrasion and UV resistance.

Sealer types:

Solvent based acrylic (preferred) – exterior use only

Water based Acrylic

Epoxy

Urethane

It is recommended that a non-skid/skid reducer be utilized when sealing exterior surfaces.

Storage and Shelf Life

Do not allow to freeze. Shelf life of unopened product is approximately one year. Mixed or diluted product shelf life stored in an airtight container is 30 days.

Use a water absorption test to determine the concrete's willingness to accept the CR-WRC stain

Variations

Results may vary due to shades and or hues of concrete. Texture of the slab affects final color appearance. Many slab characteristics show through the stain, especially with the more transparent colors

Warranty

This warranty is made in lieu of all other warranties, either expressed or implied. Before application the User shall determine the suitability of the product for his/her intended use and User assumes all risks and liabilities whatsoever in connection therewith. Neither seller nor manufacturer has any knowledge or control concerning the purchaser's use of this product and no warranty is made as to the results of any use. The Manufacturer and/or Seller warrants that if any goods supplied prove defective in material the sole obligation shall be to replace said product. Any claim of defective product must be received in writing within one (1) year from date of shipment. Neither Manufacturer nor Seller shall assume any liability for injury, loss, or damage resulting from use of this product.

CONCRETE STAIN & SUPPLY, LLC

Technical Data Sheet (TDS)

CR-550 (580 voc) / CR-560 (400voc) / CR-570 (100voc) OUTSIDE ACRYLIC

**This product may only be used on fully cured concrete. Allow a minimum of 28-45 days of cure time after the concrete is poured to allow ample time for the concrete to completely hydrate.

Product

High quality clear, 25% solids, solvent based acrylic designed for sealing decorative concrete projects. Outside Acrylic is a hard acrylic polymer that produces coatings with excellent gloss, stain-resistance and are easy to clean. Adhesion to properly prepared concrete surfaces is excellent and the material is non-yellowing.

Coverage

Coverage rate is 200-400 sq ft per gallon. Coverage variations depend on concrete surface porosity and amount of material applied.

Surface Preparation

Concrete must be clean and free of dirt, dust, oil, grease, mold and mildew, and any other contaminants.

RAC Stained concrete must be neutralized, thoroughly cleaned, and dry prior to sealing.

WRC Stained concrete must be completely dry prior to sealing.

All new concrete should be allowed to cure for a minimum of 45 days, or until a pH reading of 10.5 or less is achieved.

Concrete must be completely dry prior to sealer application. It is strongly recommended that a surface probe moisture meter be utilized to verify the surface is dry. After visually determining the concrete is dry, test a minimum of 10 different areas of the concrete with the moisture meter. Pay special attention to cracks, control joints, and slab edges.

Application Tools

- Pump sprayer
- Airless sprayer
- Roller • Brush

Preferred Method – Spraying

The application of solvent based sealers over WRC Water Reducible Acrylic must be by spray application. Application of solvent based sealers with a roller tends to emulsify the WRC Stain and transfer the color.

When spraying, protect surroundings with masking paper, masking plastic, or spray shield. Always use a filter when pouring Outside Acrylic into a sprayer.

Concrete surface temperature must be between 50 - 90 degrees (F). Use only high quality industrial grade solvent resistant spray equipment

If rolling Outside Acrylic work material into a wet edge, and avoid excessive back rolling. When applying 2 coats, roll the second coat perpendicular to the first.

Thinning

Thinning of Outside Acrylic with Xylene or Acetone is not allowed. Adding additional solvents to Outside Acrylic will make it non-compliant with Federal, State, and Local VOC compliance laws.

Drying Time

Dry to touch: 15-40 minutes

Recoat: 30-40 minutes

Light Foot Traffic: 3 hours

Vehicle Traffic: 72 hours

These dry times are for 75 degree (F) temperatures and medium humidity. Low temperatures will slow drying and curing time. Do not apply if rain is expected within 3 - 6 hours.

Clean Up

Tools can be cleaned with Xylene or Acetone.

Storage and Shelf Life

Do not allow to freeze. Shelf life of unopened product is approximately one year.

Keep away from heat, sparks & flame. Vapors may cause fire.

Safety

Always use appropriate safety equipment including but not limited to, goggles, face shield, rubber gloves, chemical resistant clothing or apron, and chemical respirator. For exterior use only.

INHALATION: Vapors may cause dizziness, headaches, or nausea. Immediately move to fresh air. Seek medical attention.

EYES: Contact with eyes can cause severe burning, irritation, and blurred vision. Flush with water. Seek medical attention.

SKIN: May cause severe irritation and or chemical burns. Wash with soap and water. Seek medical attention.

Keep out of reach of children.

Use only with adequate ventilation.

Keep away from heat, sparks & flame. Vapors may cause fire. Avoid prolonged contact with skin. Use only with adequate ventilation. Avoid breathing vapors or spray mist. Do not take internally. If swallowed, do not induce vomiting. Call physician immediately. Close container after use.

It is the sole responsibility of the property owner or applicator to determine the suitability and safety of applying this product in areas of pedestrian traffic.

Limitations

Do not apply when air or surface temperature exceeds 90 degrees (F) or LAP marking / poor penetration / bubbling may result. Do not apply to wet or damp concrete, moisture will inhibit penetration of the sealer and cause improper curing, flaking or lifting of the sealer. Do not apply when it may rain, or if dew may condense on the surface before the sealer has cured. Allow for extended dry times during cold weather / high humidity.

Warranty

The Manufacturer and/or the Seller warrants that if any goods supplied prove defective in workmanship or material, that Manufacturer and/or Seller shall replace them or refund the purchase price. This warranty is made in lieu of any and all other warranties expressed or implied. Before application, the User shall determine the suitability of the product for his intended use and User assumes all risks and liabilities whatsoever in connection therewith. Under no circumstances shall the Manufacturer and/or Seller be liable for incidental, consequential or other damages for alleged negligence, breach of warranty, or strict liability arising out of use or handling of this product. The sole liability of Manufacturer and/or Seller for any claims arising out of the use or sale of the product shall be for the User's purchase price. Any claim of defective product must be received in writing within one (1) year from date of shipment.

Prohibitions

Selected state and county jurisdictions prohibit or limit the use of solvent based products. Users should consult local guidelines before using this product.

Slip and Fall Precautions

OSHA and the American Disabilities Act (ADA) have standards for slip-resistance on pedestrian surfaces. The coefficient of friction required by ADA is .6 on level surfaces and .8 on ramps. Concrete Stain & Supply, LLC recommends the use of slip-resistant additives in all sealers or coatings that may be exposed to wet, oily or greasy conditions. It is the installer and end users' responsibility to provide a flooring system that meets current safety standards. Concrete Stain & Supply, LLC or its sales agents will not be responsible for injury incurred in a slip and fall accident.