

# Butterfield Color® Renovatio™ Opaque Concrete Stain, Transparent Accent Stain, and Clear Seal – Guide Specification

NOTE\*\* This Section is based on systems of

NOTE\*\* Butterfield Color®

NOTE\*\* 625 West Illinois Avenue

NOTE\*\* Aurora, Illinois 60506

NOTE\*\* Telephone: 1-800-282-3388

NOTE\*\* Fax: 630-906-1982

NOTE\*\* www.butterfieldcolor.com

NOTE\*\* This guide specification is intended to be used by a qualified construction specifier. It should not be used without appropriate modifications.

NOTE\*\* Notes for review by specifier begin with “NOTE\*\*.” Optional text requiring a selection is enclosed within brackets, e.g., “Color shall be [gray] [white].” A blank line enclosed within brackets indicates items requiring specifier input, e.g., “Color: [\_\_\_\_\_].” Delete specifier notes and non-applicable optional text in final specification.

NOTE\*\* Specification Section numbers and Section titles are according to The Construction Specifications Institute MasterFormat™ 1995 edition and indicated within brackets for MasterFormat™ 2004 edition.

## GUIDE SPECIFICATION

NOTE \*\* Retain one Section number and title below and revise footer Section number and Section title to match.

SECTION 02769 [32 13 16.25]

OPAQUE STAINED CONCRETE PAVEMENT [OPAQUE STAINED CONCRETE PAVING]

SECTION 09930 [09 93 50]

OPAQUE STAINED CONCRETE

## PART 1 - GENERAL

### 1.1 SUMMARY

#### A. Section Includes:

NOTE\*\* Delete optional text below for exterior concrete pavement or interior concrete floor that is not required.

1. Stained concrete for [pavement] [floors].
2. Sealer.

B. Related Sections:

NOTE\*\* Delete subparagraphs below that are not required; add others as required.

1. [Division 2 Section “Stained Cement Concrete Pavement”] [Division 32 Section “Stained Concrete Paving”] for stained cast-in-place concrete pavement.
2. Division 9 Section “Concrete Floor Stain” for interior stained cast-in-place concrete.
3. Division 3 Section “Cementitious Stampable Overlay” for stained cementitious stampable overlays.
4. Division 3 Section “Concrete Resurfacing” for stained overlay cementitious toppings.

1.2 SUBMITTALS

- A. Submit according to Conditions of the Contract and Division 1 Specification Sections.
- B. Product Data: For each product indicated.
- C. Samples for Initial Selection: Manufacturer's color charts.
- D. Qualification Data: For Installer and manufacturer specified in Quality Assurance Article, including names and addresses of completed projects, architects, and owners.

1.3 QUALITY ASSURANCE

- A. Installer Qualifications: Two year's experience with projects of similar scope and quality.

NOTE \*\* Delete paragraph above or below.

- B. Installer Qualifications: Trained and approved by Manufacturer of stain products.
- C. Manufacturer's Qualifications: Three year's experience manufacturing products required.
- D. Source Limitations: Obtain products from same source throughout Project.
- E. Field Samples: Locate at site and obtain approval before start of final work. Field samples shall be a minimum of [4 by 4 feet (1.2 by 1.2 m)] [\_\_\_\_\_].
  1. Demonstrate range of colors, finishes, and workmanship, including sealing procedures.
  2. Approved field samples set quality standards for comparison with remaining work.
  3. [Remove field samples when directed.] [Approved field samples may become part of the completed Work if undisturbed at completion of Project.]

NOTE \*\* Delete paragraph below if preinstallation conference is not required.

- F. Preinstallation Conference: Conduct conference at site to comply with requirements of Division 1 Section “Project Meetings.”

1.4 DELIVERY, STORAGE AND HANDLING

- A. Deliver materials in original packaging with labels intact.

- B. Store in clean, dry and protected location, according to manufacturer's requirements.

## 1.5 PROJECT CONDITIONS

- A. Environmental Requirements: Comply with stain manufacturer's instructions.
  - 1. Do not apply stain if substrate, air, or product temperature is not between 50 to 90 deg F before and during installation.
  - 2. Do not apply stain if relative humidity is above 85 percent during installation.
  - 3. In hot weather, install stain in early morning or when substrates are shaded.
  - 4. Do not install stain if rain is predicted within 8 hours after installation.
  - 5. Substrates shall be uniformly dry, and free of standing water or ice.

## PART 2 - PRODUCTS

### 2.1 STAIN MATERIALS

- A. Opaque Stain: Three-component, polymerizing, penetrating stain designed for permanently coloring concrete [floors] [pavements].
  - 1. Product: Butterfield Color® Renovatio™ Opaque Concrete Stain.
  - 2. Colors: As selected by [Architect] [\_\_\_\_\_] from manufacturer's full range.
- B. Transparent Accent Stain: 3-Component, polymerizing, stain designed for antiquing stamped or textured concrete [floors] [pavements].
  - 1. Product: Butterfield Color® Renovatio™ Transparent Accent Stain.
  - 2. Colors: As selected by [Architect] [\_\_\_\_\_] from manufacturer's full range.

NOTE \*\* Delete subparagraph above if colors are selected and indicate color number in subparagraph below. Add a schedule if multiple colors are required. Delete subparagraph below if colors are not selected.

- 3. Colors: Provide the following color[s]:
  - a. Butterfield Color® Renovatio™ Opaque Concrete Stain Color [1] [\_\_\_\_\_]

NOTE \*\* Delete subparagraph below if only Renovatio™ Opaque Concrete Stain Color is required.

- b. Butterfield Color® Renovatio™ Transparent Accent Stain Color [1] [\_\_\_\_\_]

- C. Water: Potable.

### 2.2 SEALING MATERIALS

- A. Clear Sealer: Two-component, polymerizing, moderate-gloss.
  - 1. Product: Butterfield Color® Renovatio™ Clear Seal.
- B. Slip-Resistive Additive: Finely graded aggregate or polymer additive designed to add to sealer for slip-resistant surface.

## 2.3 MIXING

- A. Renovatio™ Opaque Concrete Stain and Renovatio™ Transparent Accent Stain:
  - 1. Mix Component A and Component B and pour complete contents into mixing pail.
  - 2. Mix Components A and B together, and allow material to sit for five minutes before adding Component C.
  - 3. Mix Component C bottle, and add contents to previously mixed Components A and B.
  - 4. Add four full bottles of water to combined components and mix thoroughly.
  
- B. Renovatio™ Clear Seal:
  - 1. Mix Component A and Component B, and pour complete contents of both bottles into mixing pail.
  - 2. Mix Components A and B together, and allow material to sit for five minutes before adding water.
  - 3. Add two full bottles of water to combined components and mix thoroughly.
  - 4. Do not use Component C.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine substrate and conditions for compliance with requirements.
  
- B. Do not proceed with stained concrete installation until unacceptable conditions are corrected.

### 3.2 SUBSTRATE PREPARATION

NOTE \*\* Delete paragraph below if concrete is not new.

- A. Allow concrete to cure minimum 28 days before staining.
  
- B. Protect surfaces not to be stained from run-off and tracking.
  
- C. Clean substrates thoroughly using CHO Concrete Cleaner and water with a scrub brush, according to manufacturer's instructions. Do not use muriatic acid to clean substrates before staining. Neutralize and flush residues from surface.
  
- D. For hard-troweled surfaces, open surface of substrates by sanding with 80-grit sanding disk or black scrubbing pad. Test sanding in an unobtrusive location to assure that excessive sanding does not expose sand and aggregate.
  
- E. Test substrates by spotting with water. If water beads, or does not penetrate surface, continue preparing substrates.
  
- F. Rinse until water is clear. Control, collect, and legally dispose of runoff.
  
- G. Allow substrates to dry thoroughly prior to application of stains.
  
- H. Divide substrates into small areas by natural stopping points, such as walls and joint lines.

- I. Protection: Protect substrates during the construction period as follows:
  - 1. Use safe-release blue painter's masking tape. Do not use adhesive or duct tape.
  - 2. Prevent petroleum products from staining substrates.
  - 3. Diaper hydraulic equipment.
  - 4. Do not park vehicles on substrates.
  - 5. Do not permit pipe-cutting equipment on substrates.
  - 6. Do not place steel reinforcing bars on substrates to avoid rust stains.
  - 7. Notify other trades of protection requirement before and after stain application.

NOTE \*\* Delete paragraph below if scoring is not required. Select optional text for time of scoring. If only one stain color is required, score after staining.

- J. Scoring: Score concrete surfaces [before] [after] staining with diamond blades to a depth of 1/8-inch (3.2 mm). Rinse until rinse water is clean. Control, collect, and legally dispose of runoff.

### 3.3 STAINING

- A. Opaque Concrete Stain:
  - 1. Apply with a clean and dry Renovatio™ Application Brush.
  - 2. Maintain a wet edge, but do not allow stain to puddle.
  - 3. Periodically agitate stain in mixing pail/pan during application.
  - 4. Immediately re-brush initial application until opaque concrete stain is tack free.
  - 5. If needed, re-apply stain within 24 to 48 hours after initial application.
  - 6. Verify slip resistance before opening surfaces to traffic. If additional slip resistance is required, apply sealer with slip-resistant additive.
  - 7. After three hours, dispose of any unused mixed material.

NOTE \*\* Delete paragraph below if Translucent Accent Stain is not required.

- B. Translucent Accent Stain:
  - 1. Do not apply translucent accent stain until the opaque concrete stain is tack free.
  - 2. Apply with a clean pump up sprayer or airless sprayer; do not brush.
  - 3. Periodically agitate material in mixing pail and sprayer reservoirs during application.
  - 4. Verify slip resistance before opening surfaces to traffic. If additional slip resistance is required, apply sealer with slip-resistant additive.
  - 5. After three hours, dispose of any unused mixed material.

NOTE \*\* Delete Article below if sealer is not required.

### 3.4 SEALING

- A. Only use Renovatio™ Clear Seal over Renovatio™ Opaque Concrete Stain and Renovatio™ Translucent Accent Stain. Apply sealer according to manufacturer's instructions.
- B. Apply sealer with foam rollers or airless sprayer.
- C. Do not apply sealer until stain is tack free.

D. Do not allow sealer to collect in joints or depressions.

NOTE \*\* Delete following two subparagraphs if slip-resistant finish is not required.

E. Apply slip resistant additive according to manufacturer's instructions before sealer is tack free.

F. Verify adequacy of slip resistance before opening up surfaces to traffic.

### 3.5 PROTECTION

A. Protect stained and sealed surfaces from moisture from any source for 14 hours after final application.

B. Protect stained concrete from damage or deterioration until date of Substantial Completion.

END OF SECTION

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