

Nox-Crete Products Group  
1444 South 20th Street  
PO Box 8102  
Omaha, Nebraska 68108  
Toll Free 800-669-2738  
Phone 402-341-1976  
Fax 800-329-6733  
Website [www.nox-crete.com](http://www.nox-crete.com)  
E-mail [customerservice@nox-crete.com](mailto:customerservice@nox-crete.com)

## **Product Guide Specification**

Specifier Notes: This product guide specification is written according to the Construction Specifications Institute (CSI) 3-Part Format, including *MasterFormat*, *SectionFormat*, and *PageFormat*, as described in *The Project Resource Manual—CSI Manual of Practice, Fifth Edition*.

This section must be carefully reviewed and edited by the Architect or Engineer to meet the requirements of the project and local building code. Coordinate this section with other specification sections and the Drawings. Delete all “Specifier Notes” after editing this section.

Section numbers are from *MasterFormat 2010 Update*.

## **SECTION 03 47 00**

### **TILT-UP CONCRETE CURE AND BONDBREAKERS**

Specifier Notes: This section covers the following Nox-Crete Products Group tilt-up concrete cure and bondbreakers which prevent the adhesion of fresh concrete placed against existing concrete for the purpose of site cast, tilt-up and lift-slab concrete construction:

“Silcoseal 2000F”: Chemically reactive, water based,.

“Silcoseal Select”: Chemically reactive, water based.

Consult Nox-Crete Products Group for assistance in editing this section for the specific application.

## **PART 1 GENERAL**

### **1.1 SECTION INCLUDES**

- A. Tilt-Up concrete cure and bondbreakers.

### **1.2 RELATED REQUIREMENTS**

Specifier Notes: Edit the following list of related sections as required. Limit the list to sections with specific information that the reader might expect to find in this section, but is specified elsewhere.

- A. Section 03 30 00 – Cast-in-Place Concrete.
- B. Section 09 60 00 – Flooring.
- C. Section 09 90 00 – Painting And Coating.

### **1.3 REFERENCE STANDARDS**

Specifier Notes: List standards referenced in this section, complete with designations and titles. Delete standards not included in the edited section. Including a standard here does not require compliance with that standard.

- A. ASTM C 309 – Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete.

### **1.4 SUBMITTALS**

Specifier Notes: Edit submittal requirements as required. Delete submittals not required.

- A. Comply with Section 01 33 00 – Submittal Procedures.
- B. Product Data: Submit manufacturer's product data, including surface preparation and application instructions.
- C. Manufacturer's Certification: Submit manufacturer's certification that materials comply with specified requirements and are suitable for intended application.
- D. Manufacturer's Project References: Submit manufacturer's list of successfully completed tilt-up concrete cure and bondbreaker projects, including project name and location, name of architect, and type and quantity of tilt-up concrete cure and bondbreaker furnished.
- E. Warranty Documentation: Submit manufacturer's standard warranty.

### **1.5 QUALITY ASSURANCE**

- A. Manufacturer's Qualifications: Manufacturer regularly engaged, for past 5 years, in manufacture of tilt-up concrete cure and bondbreakers of similar type to that specified.
- B. Contractor's Qualifications:
  - 1. Contractor regularly engaged, for past 5 years, in application of tilt-up concrete cure and bondbreakers of similar type to that specified.
  - 2. Employ persons trained for application of tilt-up concrete cure and bondbreakers.
  - 3. Approved by manufacturer.

Specifier Notes: Edit site test application as required. Delete site test application if not required.

- C. Site Test Application: Construct site test application of tilt-up concrete cure and bondbreakers for evaluation of surface preparation techniques and application workmanship.
  - 1. Construct site test application using same materials for use in the Work.
  - 2. Construct site test application at locations determined by Architect.
  - 3. Do not proceed until workmanship of site test application is approved by Architect.
  - 4. Approved Site Test Application: Standard for workmanship of tilt-up concrete cure and bondbreakers.

Specifier Notes: Edit preinstallation meeting as required. Delete meeting if not required.

- D. Preinstallation Meeting:
  - 1. Convene preinstallation meeting 2 weeks before start of application of tilt-up concrete cure and bondbreakers.
  - 2. Require attendance of parties directly affecting work of this section, including Contractor, Architect, applicator, and manufacturer's representative.
  - 3. Review surface preparation, mixing, application, protection, and coordination with other work.

## **1.6 DELIVERY, STORAGE, AND HANDLING**

- A. Delivery and Acceptance Requirements: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.
- B. Storage and Handling Requirements:
  - 1. Store and handle materials in accordance with manufacturer's instructions.
  - 2. Keep materials in manufacturer's original, unopened containers and packaging until application.
  - 3. Store tilt-up concrete cure and bondbreakers between 40 and 100 degrees F (4 and 38 degrees C).
  - 4. Store materials in clean, dry area indoors, out of direct sunlight.
  - 5. Protect materials from freezing.
  - 6. Protect materials during storage, handling, and application to prevent contamination or damage.

## **1.7 AMBIENT CONDITIONS**

- A. Substrate and Ambient Temperatures: Apply tilt-up concrete cure and bondbreakers at substrate and ambient temperatures between 40 and 100 degrees F (4 and 38 degrees C).
- B. Do not apply tilt-up concrete cure and bondbreakers in wet conditions or when wet conditions are anticipated within 24 hours of application. Product must be allowed to fully dry after application to achieve proper bondbreaking performance.

## **PART 2 PRODUCTS**

## 2.1 MANUFACTURER

- A. Nox-Crete Products Group, 1444 South 20th Street, PO Box 8102, Omaha, Nebraska 68108. Toll Free 800-669-2738. Phone 402-341-1976. Fax 800-329-6733. [www.nox-crete.com](http://www.nox-crete.com). [customerservice@nox-crete.com](mailto:customerservice@nox-crete.com).

## 2.2 MATERIALS

Specifier Notes: Specify Nox-Crete Products Group “Silcoseal 2000F” or “Silcoseal Select”. Delete material not required. Consult Nox-Crete Products Group for assistance in determining appropriate tilt-up concrete cure and bondbreaker for the specific application.

- A. Tilt-Up Concrete Cure And Bondbreakers: “Silcoseal 2000F”.
1. Description: Non-wax containing, water-based, chemically reactive, tilt-up concrete cure and bondbreaker.
  2. Compliance: ASTM C-309, Type 1, Class A & B – Modified with a steel troweled finish.
  3. VOC: Less than 600 g/L.
  4. Vapor Pressure: Less than 16 mm Hg at 20 degrees C.
  5. Flash Point: 95° F PMCC.
- B. Tilt-Up Concrete Cure And Bondbreakers: “Silcoseal Select”.
1. Description: Non-wax containing, water-based, chemically reactive, tilt-up concrete cure and bondbreaker.
  2. VOC: Less than 120 g/L.
  3. Vapor Pressure: Less than 16 mm Hg at 20 degrees C.
  4. Flash Point: 103° F PMCC.

## 2.3 ACCESSORIES

Specifier Notes: When specifying “Silcoseal 2000F” or “Silcoseal Select” and improved tilt-wall finish/appearance is required, specify the following temporary joint filler and/or repair mortar. Delete material not required.

- A. Temporary Floor Joint Filler: “T-P Joint”.
1. Description: Flexible, pre-molded, temporary floor joint filler for sealing floor/casting slab saw-cut crack control joints to prevent concrete seepage, eliminating concrete fins on erected wall panel surfaces.
- B. Repair Mortar: “Panel Patch”.
1. Description: Fast-drying, smooth-textured, non-grit containing, portland-cement-based, polymer modified, concrete patching, resurfacing and finishing compound.

## PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Examine concrete surfaces to receive tilt-up concrete cure and bondbreakers.

- B. Notify Architect of conditions that would adversely affect application.
- C. Do not begin surface preparation or application until unacceptable conditions are corrected.

### **3.2 PREPARATION**

- A. Surface Preparation of Existing Concrete:
  - 1. Prepare surfaces in accordance with manufacturer's instructions.
  - 2. Clean concrete surfaces of dirt, dust, debris, oil, grease, floor joint saw cut residue, curing compounds, laitance, paint, standing water, and other contaminants which could adversely affect tilt-up concrete cure and bondbreaker performance.
- B. Temporary Floor Joint Filler:
  - 1. Install temporary floor joint filler in accordance with manufacturer's instructions in areas on floor designated to receive wall panel concrete.

### **3.3 MIXING**

- A. Mix materials in accordance with manufacturer's instructions.

### **3.4 APPLICATION**

- A. Apply tilt-up concrete cure and bondbreakers in accordance with manufacturer's instructions at locations indicated on the Drawings.
- B. Do not over or under apply tilt-up concrete cure and bondbreaker. Verify proper application rate and coverage is achieved in accordance with manufacturer's instructions.

### **3.5 PROTECTION**

- A. Protect applied tilt-up cure and concrete bondbreaker from damage during construction.

### **3.6 CLEANUP**

- A. Follow manufacturer's instructions for removal of residual tilt-up concrete cure and bondbreaker on floor and tilt-wall surfaces.

**END OF SECTION**