

12/1/93

MASTER BUILDERS TECHNOLOGIES

1.1S

**CEILCOTE 100 FLAKELINE SERIES \***

*For Steel Substrates*

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NOTES TO THE SPECIFIER

1. This document has been prepared to assist specifiers in the preparation of specifications for **CEILCOTE 100 FLAKELINE SERIES**, a Master Builders Inc., CEILCOTE Corrosion Control Product.
  2. This document was prepared as part of a complete specification for new construction or the renovation and upgrading of existing structures.
  3. This specification defines the necessary practices for surface preparation and application of CEILCOTE 100 FLAKELINE Series along with tolerances where applicable.
  4. Application under this specification must be done in accordance with the standard installation procedures and related documents.
  5. Questions regarding the selection, installation or intended end use of Master Builders Inc., CEILCOTE CORROSION CONTROL PRODUCTS should be directed to Master Builders, Inc.
- \* This specification may be used for all CEILCOTE FLAKELINE types including 103, 140 and 180.

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## GUIDELINE SPECIFICATION

### ***CEILCOTE 100 FLAKELINE SERIES***

The specification information below is intended for use by architects, engineers or other specifiers in defining the criteria needed to specify these polyester or vinyl ester lining systems.

#### **1.0 GENERAL**

##### **1.1 SCOPE**

This specification covers the surface preparation and application of CEILCOTE 100 FLAKELINE Series as normally encountered in field installations.

Deviations from this specification due to unforeseen or unknown field conditions, must be authorized by Master Builders.

The contractor shall furnish all materials, tools, equipment, appliances, transportation, labor and supervision required during the preparation and installation process.

##### **1.2 PRE-QUALIFICATION**

Applicator of material must be approved by material manufacturer and have at least (5) years experience in the application of this or a similar system. Previous experience must be verified by (3) references having similar applications.

Contractor(s) seeking approval of substitute materials shall submit their request in writing to the specifier at least 7 days before closing of bids. Include samples; complete performance data; certification from independent testing laboratory regarding conformity with specifications and list of completed successful installations, with phone number of responsible person to contact, to enable accurate appraisal of the system. Bidders shall be notified of acceptable substitute lining by written addendum or amendment.

##### **1.3 APPLICABLE STANDARDS AND TEST METHODS**

Physical properties and test methods for FLAKELINE SERIES are listed in CEILCOTE FLAKELINE SERIES TECHNICAL DATA SHEET and INSTALLATION PROCEDURES.

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- .1 Other reference documents include: CEILCOTE 370 TECHNICAL DATA SHEET and CEILCOTE Standard Specification for Steel Substrates to Receive Monolithic Linings - CPT-2.

### **1.4 PROJECT/SITE CONDITIONS**

- .1 For all application steps, the surface temperature, air temperature and material temperature should be between 50°F (10°C) and 110°F(43°C).

Do not apply if the relative humidity is more than 90% or the surface temperature is less than 5% above the dew point of the air in the working area.

- .2 Adequate ventilation and clean water supply required during installation.

### **2.0 PRODUCTS**

#### **2.1 ACCEPTABLE MANUFACTURER**

- .1 Master Builders, Inc., 23700 Chagrin Boulevard, Cleveland, Ohio 44122-5554, 216/831-5500 or 1-800-628-9990.
- .2 Master Builders Technologies Ltd. 3637 Weston Road, Toronto, Ontario, Canada, M9L1W1, 416-741-3830.
- .3 Tecnocreto, S.A. de C.V., Blvd. M. Avila, Camacho #80, 3er Piso, 53390 Naucalpan, Mexico Mexico 1-905-557-5544.

#### **2.2 MATERIALS**

- .1 Materials for CEILCOTE 100 FLAKELINE Series include:
  - CEILCOTE 370 Primer and Hardener
  - CEILCOTE 100 FLAKELINE Series Resin and hardener
  - FG-1 Dye
  - Styrene Smoothing Liquid

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### **3.0 EXECUTION**

#### **3.1 INSPECTION**

- .1 Before starting work, ensure environmental and site conditions are suitable for application and curing.
- .2 Inspect surface for acceptability.
- .3 Any and all deficiencies shall be reported in writing.

#### **3.2 PREPARATION**

- .1 Surface conditions to apply the CEILCOTE FLAKELINE system require the steel surface to be sandblasted to "White Metal" in accordance with SSPC SP5-63 or NACE No.1 using a clean, dry blasting media and a 3.0 mil anchor pattern. Blasted surfaces must be primed immediately after blasting, or within an 8 hour shift.

#### **3.3 PROTECTION**

- .1 Traffic Control - no individuals permitted in areas during application and until surface has cured, including protection after cure, against damage by others working in or over the area.
- .2 Compliance with OSHA, EPA, State and Local regulations or applicable agencies is mandatory when using these products.

#### **3.4 INSTALLATION/APPLICATION**

- .1 Primer shall be CEILCOTE 370 primer. It shall be spray, brush or roller applied to a film thickness of 1-4 mils, as per CEILCOTE 370 primer Data Sheet.

Ingredients are to be mixed thoroughly and applied to steel. Working time at 73°F (23°C) is approximately 45 minutes.

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- .2 Basecoat shall be a mixture of CEILCOTE 100 FLAKELINE Series, liquid Hardener and FG-1 Dye. It shall be trowel applied at a thickness of 30-75 mils.

Ingredients are to be mixed thoroughly and in sequence. Stir hardener into CEILCOTE 100 FLAKELINE Series liquid then add dye and continue mixing. Apply immediately, working time at 73°F (23°C) is 60 minutes.

Final step of base coat application is to smooth material surface immediately after troweling by use of paint rollers dampened with styrene smoothing liquid.

- .3 Topcoat shall be a mixture of FLAKELINE liquid and Hardener. It shall be trowel applied at a thickness of 30-75 mils.

Ingredients are to be mixed thoroughly and in sequence. Stir hardener into FLAKELINE liquid and continue mixing. Apply immediately, working time at 73°F (23°C) is 60 minutes.

- .4 Final step of topcoat application is to smooth material surface immediately after troweling by use of paint rollers dampened with styrene smoothing liquid.

If an extremely smooth surface is necessary use designated number resin system Resin Topcoat (i.e. CEILCOTE 103 FLAKELINE Resin Topcoat for CEILCOTE 103 FLAKELINE). This type of surface is normally used for wash down applications.

- .5 Installation Procedure provides further details on procedures listed previously.

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### **3.5 TESTING**

- .1 During application random wet film thickness reading shall be taken. Thickness shall be 30-75 mils for both basecoat and topcoat yielding a total target thickness of 80 mils.
- .2 After topcoat is hard, spark test at 10,000 volts to insure pinhole free lining.
- .3 Dry film thickness of 80 mils can be calibrated with a Dry Film Thickness Gauge (i.e. Elcometer or equivalent).

#### **Master Builders, Inc.**

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