



12/1/93

MASTER BUILDERS TECHNOLOGIES

1.4SC

CEILCOTE LINING SERIES *

For Concrete Substrates

NOTES TO THE SPECIFIER

- 1. This document has been prepared to assist specifiers in the preparation of specifications for **CEILCOTE LINING 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 Lining 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 LINING SERIES types including 25, 64, 74 and 652.

GUIDELINE SPECIFICATION

CEILCOTE LINING SERIES

(Concrete)

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

1.0 GENERAL

1.1 SCOPE

This specification covers the surface preparation and application of Lining 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.

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1.3 APPLICABLE STANDARDS AND TEST METHODS

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

- .1 Other reference documents include: CEILCOTE 380 or 380C (Conductive) Primer Technical Data Sheet and Ceilcote Standard Specification for Concrete to Receive Monolithic Linings and Toppings - CPT-1.

1.4 PROJECT/SITE CONDITIONS

- .1 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 Lining Series include:
 - CEILCOTE 380 or 380C (Conductive) Primer and Hardener
 - CEILCOTE Lining Series Resin and Hardener
 - Thin Film Curing Aid
 - Appropriate Filler (S-1)
 - Cloth Reinforcement (1 1/2 oz. mat and "C" glass surface veil)

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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 lining Series system requires the removal of dirt, oil, sealers, soft concrete, laitance and chemical contamination.

Method to be used may include, but should not be limited to, mechanical abrasion and/or abrasive blasting.

- .2 Concrete must be dry. Lining Series will not tolerate the presence of moisture during application.
- .3 Concrete quality must be addressed before the Linings Series can be applied. These conditions are air pockets, pinholes, tieholes, form burrs, honeycombs and cracks. Master Builders standards are to be used as guidelines for concrete repairs.

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.

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3.4 INSTALLATION/APPLICATION

- .1 Primer shall be Ceilcote 380 Primer* polyester concrete primer and hardener. It shall be applied by brush or roller to a film thickness of 3-5 mils, as per CEILCOTE 380 Primer Technical Data Sheet.

* To sparktest on concrete substitute to Ceilcote 380C (Conductive) Primer. To insure a pinhole free lining utilize this primer and sparktest at 100 volts per mil.

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

- .2 Basecoat shall be a mixture of Lining Series liquid, Hardener and appropriate S-1 powder. It shall be trowel applied at a thickness of 40-80 mils.

Ingredients are to be mixed thoroughly and in sequence. Stir hardener into lining Series liquid then add powder and continue mixing. Apply immediately, working time at 73°F (23°C) is 40 minutes.

- .3 Glass Reinforcement shall be (2) layers of 1 1/2 oz. mat and (1) layer of "C" glass surface veil. Press glass onto basecoat, roll on catalyzed resin and roll out entrapped air with ribbed roller. Repeat procedure for second layer of mat. Press in the "C" surface veil and roll it out until it is completely saturated.

- .4 Topcoat shall be a mixture of Lining Series Topcoat liquid and hardener. It shall be roller or spray applied to a wet film thickness of 15 mils.

Ingredients are to be mixed thoroughly and in sequence. Stir hardener into Lining liquid apply first resin coat. Second coat is a repeat procedure except that thin film curing aid is added to the mixture.

- .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. Target thickness shall be 1/8" 3/16".
- .2 If sparktesting is desired and a conductive primer is being utilized [CEILCOTE 380C (Conductive) Primer] sparktest at 15,000 to 20,000 volts to insure pinhole free lining.

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