

AMCON BLOCK & PRECAST – GUIDE SPEC FOR SPEC-FINISH SYSTEM 5-15-09

SPEC-FINISH™ System by Concrete Products Group. The following Guide Specification describes the Spec-Finish™ concrete masonry unit product, consisting of a unique mix design concrete masonry unit manufactured with preconditioning admixture, designed specifically to receive the Spec-Finish™ coating, and the Spec-Finish™ proprietary topcoat system

SECTION 042005 – SPEC-FINISH™ CONCRETE MASONRY UNITS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section describes Spec-Finish™ concrete masonry units and coating system.

1.2 RELATED SECTIONS

- A. Division 4 Section "Unit Masonry" for general concrete masonry unit products and assembly.

1.3 REFERENCES

- A. ASTM C90
- B. ASTM C270

1.4 PERFORMANCE REQUIREMENTS

- A. Provide Spec-Finish™ concrete masonry units by Concrete Products Group, LLC (800-789-0872) that contain Spec-Finish Pre-Conditioner by ACM Chemistries, Inc. Produced locally by Amcon Block & Precast, Inc. St. Cloud, MN (866-251-6030).
- B. Provide Spec-Finish™ coating system by TNEMEC Company, Inc. (877-226-1766).

1.5 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Manufacturer's Application Instructions.
- C. Samples for Initial Selection:
 - 1. Spec-Finish™ color selection chart.

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- D. Samples for Verification: For each Spec-Finish™ color indicated.
- E. Material Certificates: For Spec-Finish™ concrete masonry units, including preconditioning admixture. Include statement of material properties indicating compliance with requirements including compliance with standards and type designations within standards.
- F. Qualification Data: For applicator.

1.6 QUALITY ASSURANCE

- A. Sample Panel: Build sample panel to verify overall quality of masonry construction (including mortar joint workmanship), color, final finish and to demonstrate aesthetic effects. Prior to application of Spec-Finish coating, clean sample panel in accordance with Section 3 Execution, Item 3.3 Final Clean Down. Apply benchmark samples of Spec-Finish™ coating of each color selected to verify preliminary selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution. Sample Panel will not be taken down or destroyed until specifically approved by the architect.
 - 1. Build sample panels in size approximately **48 inches** long by **48 inches** high.

1.7 QUALIFICATIONS

- A. Applicator: Company specializing in application of Spec-Finish™ coatings by TNEMEC Company, Inc. (877-226-1766).

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Store Spec-Finish™ concrete masonry units on elevated platforms in a dry location. If units are not stored in an enclosed location, cover tops and sides of stacks with waterproof sheeting, securely tied. If units become wet, do not install until they are dry. Take care to not chip or damage Spec-Finish Units during staging process at job site. Do not install chipped or damaged units.
- B. Store Spec-Finish™ coating materials not in use in tightly covered containers in well-ventilated areas with ambient temperatures continuously maintained at not less than 45 deg F.
 - 1. Maintain containers in clean condition, free of foreign materials and residue.

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1.9 PROJECT CONDITIONS:

- A. Apply Spec-Finish™ coating only when temperature of surfaces to be painted and ambient air temperatures are between 50 and 95 deg F.
- B. Do not apply Spec-Finish™ coating in snow, rain, fog, or mist; when relative humidity exceeds 85 percent; at temperatures less than 50 deg F above the dew point; or to damp or wet surfaces.

PART 2 - PRODUCTS

2.1 SPEC-FINISH PRE-CONDITIONED CONCRETE MASONRY UNITS (CMUs)

- A. Products: Spec-Finish™ Concrete Masonry Units by Concrete Products Group; Produced locally by Amcon Block and Precast 866-251-6030:
 - 1. Concrete Masonry Units: ASTM C90.
 - a. Unit Compressive Strength: Provide units with minimum average net-area compressive strength as required by structural engineer for location and purpose. **<SPECIFIERS NOTE: Insert f'm value required by Structural Engineer here>**
 - b. Weight Classification: Normal weight.
 - c. **<SPECIFIERS NOTE: If this is a project with Sustainability Guidelines (eg LEED) and recycled content is desired in the Pre-Conditioned Spec-Finish CMU's, insert % Pre Consumer Waste Recycled content here. Contact Amcon Block and Precast for specific recycled contents and test reports. 866-251-6030>**
- B. ADMIXTURE: Spec-Finish Concrete Masonry Units shall be manufactured with Spec-Finish Preconditioning Admixture by ACM Chemistries.

2.2 MORTAR

- A. Type S Mortar meeting ASTM C270.

2.3 COATING SYSTEM

Spec-Finish™ Coating: **<SPECIFIERS NOTE: Insert either Enviro Standard Spec-Finish™, Enviro Custom Spec-Finish™, Vivarium Standard Spec-Finish™ or Vivarium Custom Spec-Finish™ here depending on specific project requirements>** by TNEMEC.

- 1. Represented by Coating Resources, Inc, Burnsville, MN (877) 863-6321

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PART 3 - EXECUTION

3.1 MORTAR JOINTING FOR SPEC-FINISH™ UNITS

Lay Spec-Finish CMU's maintaining 3/8" mortar joints. Tool joints slightly concave when thumb print hard using a jointer larger than joint thickness unless otherwise indicated.

3.2 GENERAL ERECTION REQUIREMENTS

- A. Install units level, aligned, plumb and true unless otherwise indicated. Install only quality units; reject **all** defective units. **Do not install units that have become chipped!**
- B. Neatly cut units utilizing a power masonry saw to obtain crisp, sharp edges that fit neatly with all adjoining work.
- C. Place adequate lighting a reasonable distance from the masonry work to ensure even illumination of the area. Do not use trough lighting.
- D. Lay units with full mortar coverage on head and bed joints, taking care not to obstruct or fill cores to be grouted or insulated. Keep cavity areas free of debris.
- E. Tool all mortar joints with a concave "C" profile when thumb print hard. Remove all excess mortar from the face of masonry units before it sets; **remember this is the finished surface!**<Specifiers note: **Rake finish joints are not recommended**>
- F. **Cover and keep dry all materials stored at the job site. At the end of work each day cover the top of the wall in such a way that rain or snow will not get into the cores or wall cavity!!**

3.3 FINAL CLEAN DOWN

Job site mixed muriatic acid is specifically prohibited;
Use Sure-Klean Burnished Custom Masonry Cleaner or Sure-Klean Custom Masonry Cleaner <Specifiers note: **select one**> in strict accordance with manufacturer's recommendations. Thoroughly pre-wet area to be cleaned. Allow product to work and thoroughly rinse with clean potable water when complete. All work is to be done with low pressure equipment. Job site sample panel must first be cleaned and approved by the architect before proceeding with the cleaning of the building.

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3.4 EXAMINATION PRIOR TO COATING APPLICATION

Examine substrates, areas, and conditions for compliance with the following requirements and other conditions affecting performance of the Spec-Finish coating system:

1. Maximum Moisture Content of Concrete Substrate: When measured with an electronic moisture meter, maximum moisture content to be no more than 12 percent.

Begin coating application only after unsatisfactory conditions have been corrected and surfaces are dry and Architect has approved Spec-Finish CMU Walls to receive Spec-Finish Coating.

2. Beginning coating application constitutes Contractor's acceptance of substrates and conditions.

3.5 PREPARATION

- B. Comply with manufacturer's written instructions and recommendations applicable to substrate and Spec-Finish™ system.
- C. Clean substrates of substances that could impair bond of Spec-Finish™ coating according to manufacturer's recommended practices, including dirt, oil, grease, and incompatible paints and encapsulants.
- D. Apply Spec-Finish™ CMU Filler by Tnemec prior to Spec-Finish™ coating

3.6 SPEC-FINISH™ COATING APPLICATION

- E. Apply Spec-Finish™ coating according to manufacturer's written instructions. Use applicators and techniques suited for coating and substrate.
- F. Tint each undercoat a lighter shade to facilitate identification of each coat if multiple coats of same material are to be applied. Tint undercoats to match color of topcoat, but provide sufficient difference in shade of undercoats to distinguish each separate coat.
- G. If undercoats or other conditions show through topcoat, apply additional coats until cured film has a uniform paint finish, color, and appearance.
- H. Apply coating to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.
- I. Thickness: Apply Spec-Finish™ coating in wet-film thicknesses recommended by manufacturer.

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3.7 FIELD QUALITY CONTROL

- J. Pre-Construction Meeting between the Mason, Coating Contractor, Amcon Block and Tnemec: to discuss concrete masonry unit construction, mortar joints and cleaning prior to beginning Spec-Finish wall construction .
- K. Pre-Coating Meeting between the Mason, Coating Contractor, Amcon Block and Tnemec: to inspect concrete masonry unit construction, mortar joints and cleaning prior to applying Spec-Finish Coating .
- L. Coating Inspection: Arrange for Tnemec technical personnel to inspect coating application during application and upon completion and submit report to Architect.
 - 1. Samples of material delivered to Project site will be taken, identified, sealed, and certified in presence of Contractor.
 - 2. Owner may direct Contractor to stop applying paints if test results show materials being used do not comply with product requirements. Contractor shall remove noncomplying-coating materials from Project site, pay for testing, and repaint surfaces coated with rejected materials. Contractor will be required to remove rejected materials from previously coated surfaces if, on repainting with complying materials, the two coatings are incompatible.
 - 3. Notify Architect or Owner 48 hours in advance of date and time of final inspection.

3.8 CLEANING

- M. Protect work of other trades against damage from paint application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.
- N. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

END OF SECTION 04205