

## SECTION 09 97 27

### SPECIAL WALL COATINGS

#### PART 1 GENERAL

##### 1.1 SUMMARY

###### A. Section Includes:

1. DESCO "Colortite" Technical Surfacing System by DESCO Coatings, Inc.

###### B. Related Sections:

1. Section 04 22 00 - Concrete Unit Masonry.

##### 1.2 REFERENCES

###### A. American Society for Testing & Materials (ASTM):

1. ASTM D968 - Abrasion Resistance of Organic Coatings by the Falling Abrasive Tester.
2. ASTM D822 - Operating Light and Water Exposure Apparatus (Carbon Arc Type) for Testing Paint, Varnish, Lacquer, and Related Products.
3. ASTM G26 - Operating Light-Exposure Apparatus (Carbon Arc Type) With and Without Water for Exposure of Nonmetallic Materials.

##### 1.3 QUALITY ASSURANCE

- ###### A. Applicator Qualifications:
- Properly trained and approved by the system manufacturer and having authorization to offer specified warranty. Minimum of seven (7) years experience installing the system in similar size and function projects. Submit installer letter of certification, signed by Technical Representative of system manufacturer. Applicator shall provide to the Architect a list of projects, including architect, general contractor and owner with material used, quantity installed and date completed on similar projects.

###### B. Field Sample:

1. Apply system to sample substrate material panel.
2. Reflect proposed color, texture, and workmanship.
3. Obtain acceptance of completed section from Architect before beginning work.

###### C. Pre-installation Conference:

1. Contractor shall arrange meeting no less than seven days prior to starting work.
2. Attendance:
  - a. Contractor
  - b. Coating Contractor
  - c. Architect/Owner's Representative
  - d. Coating Manufacturer Representative/Distributor.
3. Agenda:
  - a. Substrate condition.

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- b. Sequence and method of application of coating system.

## 1.4 PROJECT CONDITIONS

### A. Environmental Requirements:

1. Do not apply on frozen or frost-filled surfaces.
2. Do not apply if temperature is below 55 degrees F. or expected to fall below 55 degrees F within 24 hours.
3. Protect material from freezing.
4. Protect surfaces from rapid drying where windy, hot, and dry conditions exist.
5. Protect from precipitation for 24 hours after application.
6. Avoid applying material during rapid and extreme changes in temperature to prevent thermal shock cracks during the curing process.
7. The following conditions may require damping the surface prior to and during application.
  - a. Wind-caused rapid drying of surface.
  - b. Excessive surface temperature
  - c. Excessive air temperature
  - d. Direct sun
  - e. Low humidity.

## 1.5 SUBMITTALS

- A. Comply with requirements of Section 01 33 00.

## 1.6 WARRANTY

- A. Applicator shall notify manufacturer of project requirements before bidding. Manufacturer shall provide written statement before bidding to the Architect that they accept single source warranty for the entire installation including labor for one (1) year. Warranty shall include removal and replacement if proven defective. Defective items are, but are not limited to, debonding, regionalized discoloration, excessive wear and staining by bodily fluids. Non-acceptance in writing by manufacturer is grounds for rejection of product.

## PART 2 PRODUCTS

### 2.1 MATERIALS

- A. Subject to compliance with requirements, provide Desco “Colortite” Technical Surfacing System, with foundation coat, a color coat, two (2) color spots, and a glaze coat as manufactured by Desco Coatings, Inc.
- B. Substitutions: Must be approved prior to bid. Installed work in local area must be viewed by the Architect as part of substitution review.

- C. Coatings shall be colors as selected by the Architect. Colors may not be from the standard line.
- D. Glaze coat shall be a separate non-yellowing, aqueous glaze coat having a gloss or matte finish as selected by the Architect. Specifier should select either matte or gloss finish.
- E. Coating will conform to the following physical properties:

<u>Test</u>	<u>Method</u>	<u>Results</u>
Fire hazard	ASTM E-84	Flame spread – 0 Fuel contributed 0-5 Smoke developed 5
Scrubability deterioration	CGSB 1.GP.71	40,000 cycles w/o
Impact resistance	CGSB 1.GP.71	50 inch-pounds
Colorfastness	100 hours in fedeometer	Unaffected
Toxicity	Dept. of Agriculture	Approved
Stain resistance	Exposure to lard, mustard and lipstick.	Unaffected
Chemical resistance (to most chemicals, acids, alkalis, detergents, oils, fats, solvents.)	24 hour exposure	Unaffected

## PART 3 EXECUTION

### 3.1 EXAMINATION AND PREPARATION

- A. Examination:
  1. Examine substrate to which system is to be applied. Do not proceed if unsatisfactory conditions exist which hamper proper application.
  2. Beginning of application means ACCEPTANCE OF SUBSTRATE CONDITION.
- B. Preparation:
  1. Surfaces to receive system shall be free of defects such as honeycombs, form marks, tie holes, concrete dropping, laitance, dirt, dust, grease, form-release treatments, efflorescence, curing compounds, paint and any other foreign material.

### 3.2 APPLICATION

- A. General:
  1. Technical Surfacing System:
    - a. Apply material at a rate recommended by manufacturer, directly as it comes from the can and by manufacturer-approved methods using equipment specifically designed for this purpose.
    - b. Finished work shall match approved samples, be uniform in thickness, sheen, color and texture and be free from defects detrimental to appearance or performance.

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- c. The smoothness index of completed coating shall be at least 50% using a 60° Gardner Gloss-meter. The mode smoothness index of coated coarse substrates (concrete block) shall be at least 50% of that of same coating applied to a smooth substrate such as gypsum wall board).
- d. Total film thickness for primer, color coat and glaze shall be 45 to 60 mils over block and 15 to 20 mils over smooth surface. Verify the dry film thickness of completed coating system using a Tooke Mark II coating inspection gauge.

### 3.3 FIELD QUALITY CONTROL

- A. Maintain schedule of application of system in field office for Owner/Architect's review.
- B. The Contractor shall allow sufficient time to the specialty applicator to complete the coating application and at no time shall speed of project completion or unsuitable drying conditions be allowed to detrimentally speed up these operations. All substrates must be properly cured and dry. Moisture content of substrates shall not exceed 16%. Substrate temperature is to be maintained at a minimum of 55°F during application and for a minimum of 24 hours thereafter.
- C. The general contractor shall provide sufficient electric power, light and heat and working conditions to permit the proper application of these coatings. Areas to be coated must be kept free of traffic and no other trade may be allowed to work in area during application procedure.
- D. Plumbing fixtures, toilet and moveable partitions, radiators, grilles, etc., shall not be installed until the coatings have been applied.
- E. Painting and decorating, including installation of resilient floor covering shall be completed after the coatings have been applied.
- F. Hard floors and base, such as concrete, troweled epoxy, ceramic tile or terrazzo shall be completely finished before coatings application.
- G. Caulking, where necessary, is to be installed after coatings application. If caulking is to precede coatings, the caulking compound must be of the non-petroleum based type.
- H. Walls below grade shall be suitably waterproofed from the outside by others.
- I. At completion of the installation, an inspection shall be made jointly by the coatings contractor and general contractor to obtain approval that the coated surfaces are free of damage. It will then be the responsibility of the general contractor to protect this work from subsequent damage.

END OF SECTION

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