

SECTION 09 67 70
ELEVATOR SPRAY-ON FLOORING

PART 1 – GENERAL

1.01 SECTION INCLUDES

- A. Spray floor system requirements.
- B. Spray application.
- C. Performance characteristics.
- D. Installation procedures.

1.02 RELATED SECTIONS

- A. Section 14 21 00, Electric Traction Elevators
- B. Section 14 24 00, Hydraulic Elevators

1.03 MEASUREMENT AND PAYMENT

- A. Separate measurement and payment will not be made for work required under this Contract Specifications Section. All costs in connection therewith will be considered incidental to the item of work to which they pertain.

1.04 REFERENCES

- A. American Society for Testing Materials (ASTM):
 - 1. ASTM D4541 Standard Test Method for Pull-Off Strength of Coatings Using Portable Adhesion Testers
 - 2. ASTM D412 Standard Test Method for Vulcanized Rubber and Thermoplastic Elastomer
 - 3. ASTM D2240 Standard Test Method for Shore D Hardness

1.05 SUBMITTALS

- A. Contractor shall submit to the District a list of the materials to be used in the spray flooring system material application. The submittal shall include the corresponding Material Safety Data Sheets (MSDS) for the various compounds to be used, including solvents, primer coat, membrane coat, top coat, accent speckles, and non-skid sealer. Contractor shall submit color swatches for approval. Color shall match previously sprayed existing elevators, which is slate gray.

1.06 QUALITY ASSURANCE

- A. The Contractor shall keep adequate and current production records including information relating to the control consistency and quality of the spray coat flooring material.
- B. District may audit the work in progress and records pertaining to the spray coat flooring.
- C. The intended minimum service life for each new installed spray coated floor is expected to be 10 years. Contractor shall warranty the new floor from defects in material quality and craftsmanship for 3 years after the date of installation.
- D. For every elevator, the Contractor shall keep records of the work done; records shall document elevator number, production number, date of production, temperature of the spray, pressure, quantity of spray used, and any information pertinent to the Work performed.
- E. The Contractor shall facilitate a thorough inspection by the Engineer to record punch-list items to be completed prior to Acceptance.
- F. Installer shall be experienced in the application of polyurea spray and have a minimum of 50,000 gallons of spray application experience in high profile public access areas and shall be certified by the manufacturer.

1.07 SITE CONDITIONS

- A. The substrate to receive application work shall be clean and dry of any moisture and contaminants that could affect the performance of the flooring material.
- B. Aboveground locations: application work may be applied during regular business hours.
- C. Underground locations: application work shall be applied during non-revenue hours with the nearest tunnel ventilation fan on, in exhaust mode.

PART 2 – PRODUCTS

2.01 PRODUCT REQUIREMENTS

- A. Spray-on Flooring: Precidium 550D-FR, designated matching product (DMP) high performance, polyuria elastomer, two-part compound mixed in a 1 to 1 ratio resin under conditions specified by the manufacturer, Quantum Technical Services Ltd. (Quantum) and with the specialized equipment and controls, specified by the manufacturer. Product shall be applied as a spray to a properly prepared surface. Product shall have the following performance characteristics:
 - 1. Flame resistance
 - 2. Zero Volatile Organic Compound (VOC)
 - 3. 24 hour curing time
- B. Primer: as recommended by manufacturer.
- C. Sealer: as recommended by manufacturer.
- D. Final finish on floor shall have no less than a 0.6 coefficient of friction for both wet and dry conditions.

PART 3 – EXECUTION

3.01 INSTALLATION

- A. The installer shall be certified by the manufacturer and use the best practices, methods and techniques and the appropriate equipment in the performance of the Work.
- B. The installer shall be responsible for the safety of its working crew, and shall provide its personnel safety protection equipment as required by the federal, state, and local regulatory agencies.
- C. The spray coat flooring material application shall be performed in a safe manner and shall be in compliance with the environmental, federal, state and local agency safety regulations.
- D. The sprayed-on material shall be built up to achieve flush transition with the elevator cab sill.
- E. Apply primer coat 3 mils thick over flooring substrate in accordance with the manufacturer's details.
- F. Apply spray-on flooring to a total thickness of 80 to 100 mils. Hot plural spray applied only. Maintain an even distance from surface providing a uniform application with an overlap from one pass to the next.

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- G. Top coat shall be applied to a thickness of 6 to 8 mils.
- H. Multicolor accent details shall be applied to a thickness of 6 to 8 mils.
- I. Apply sealer 100 grit no longer than 6 hours after installation at manufacturer's recommended coverage rates of 5 to 9 mils. If longer than 6 hours, refer to manufacturer's recoat instructions.
- J. Contractor shall sample air during and throughout the flooring application by an independent certified person and only terminated upon the Engineer's request.

END OF SECTION 09 67 70