**SECTION - DESCO WALLGLASS REINFORCED CLOTH SURFACING SYSTEM**

**PART 1 - GENERAL**

1.1 RELATED DOCUMENTS

 A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Sections, apply to work of this Section.

1.2 SUMMARY

 A. This Section includes providing fiberglass reinforced special coating system.

 B. Related work in other sections:

 1. Masonry: Section

 2. Concrete: Section

 3. Painting: Section

1.3 QUALITY ASSURANCE

 A. All materials must be recommended and manufactured by a single supplier to insure compatibility and proper chemical and mechanical bond.

 B. Surfacing shall be applied by a surfacing applicator approved by the Architect, with a minimum of seven (7) years experience installing the brand of surfacing in similar size and function projects. A list of ten (10) completed projects using the specified materials must be submitted proving seven (7) years experience by the lead mechanic.

 C. Surfacing applicator shall provide to the architect a completed list of jobs including the names of the Architect, General Contractor, Owner, telephone numbers of all concerned, materials used, quantity installed and date completed on similar projects.

 D. Surfacing applicator must provide a written joint guarantee for materials and workmanship between applicator and surfacing manufacturer for one (1) year.

 E. Surfacing applicator or manufacturer seeking approval of products other than what is specified must supply samples, full product information, technical data with specifications, certification from an independent testing laboratory that the product being submitted for approval meets all requirements of the performance properties specified within this specification, installation instructions and comply with the above quality assurances in writing fourteen (14) days before bid letting. Omission of any item will result in an automatic rejection.

 F. Bidders will be notified by addendum of substitute surfacing materials, if approved.

1.4 SUBMITTALS

 A. Surfacing applicator shall submit samples of color and textures for Architect's approval.

 B. Prior to commencing work, at architect’s discretion, applicator shall install a 100 square foot sample on the job of desired color and texture and when approved, this will serve as the standard for the entire project.

1.5 PRODUCT STORAGE AND ENVIRONMENTAL CONDITIONS

 A. Material temperatures shall be a minimum of 55oF before use.

 B. Work on wall coating shall not commence until the building can be maintained at a minimum temperature of 55oF for 48 hours before, during and 48 hours after application. Areas shall also be broom clean and reasonably dust free and shall have adequately controlled ventilation with bright, uniform lighting.

1.6 PROJECT CONDITIONS

 A. Before commencing work, ensure environmental and site conditions are suitable for application and curing.

 B. Surfaces shall be acceptable in accordance with flooring manufacturer's recommendations.

 C. Notify Architect and Contractor in writing of unsuitable surfaces and conditions. Commencement of work shall imply acceptance of surfaces and working conditions.

1.7 PROTECTION

 A. Protect adjacent surfaces from damage resulting from work of this trade. If necessary, mask and/or cover adjacent surfaces, fixtures, cabinet work, equipment, etc. by suitable means.

1.8 WARRANTY

 A. Applicator shall notify manufacturer of project requirements before bidding. Manufacturer shall provide single source warranty for entire installation including labor for two years. Warranty shall include removal and replacement if proven defective. Defective items are, but not limited to, debonding, discoloration, excessive wear and staining by bodily fluids.

**PART 2 - PRODUCTS**

2.1 MATERIALS

 A. Chemical resistant wall surfacing with integral woven fiberglass cloth on smooth backing as called for on the drawings, shall be **Desco WallGlass** manufactured by Desco Coatings, Inc. **1-800-426-4164.**

 B. Desco WallGlass FC, fiberglass cloth, is a 25 to 40 mil system with 2% to 6% fiberglass cloth.

 **Architect should select this system for impact and abuse resistance it is typically used in Operating Rooms, Racquetball Courts, Processing Rooms and Kitchens. It can be used as a wainscot with the FX system above.**

 C. Coating shall be colors as selected by Architect. Standard colors are available.

 D. **Coating will conform to the following physical properties:**

|  |  |  |
| --- | --- | --- |
| **TEST** | **METHOD** | **RESULTS** |
| Compressive Strength | ASTM 695-85 | 10,370 psi |
| Tensile Strength | ASTM 695-85 | 3,160 psi |
| Tensile Elongation | ASTM D638-86 | 8.0% |
| Hardness | Shore D | 82 |
| Abrasion Resistance | ASTM D4060-90 | .033 |
| Mar Resistance | ASTM D5178-91 | 1.0Kg |
| Chemical Resistance - Unaffected by the following:  Acetic Acid 10% Citric Acid 4 oz/gal Fluorboric Acid 25% Hydrochloric Acid 45 fl.oz/gal Hydrofluoric Acid 10% Potassium Hydroxide 7 oz/gal Sulfuric Acid 65% Trisodium Phosphate 3 oz/gal |

**PART 3 - EXECUTION**

3.1 INSTALLATION

 A. FC Coating shall be applied in a six step process including priming, laying fiberglass, sanding of joints and imperfections, two body coats and three sealer coats. FR shall be applied in a 4 coat process, FS shall be applied in a 4 coat process with fiberglass strands applied in 2nd coat, FX shall be a three coat process.

 B. If FC coating is to be applied over block walls, the block walls must be plastered or parged. See separate section for the parameters of this work.

 C. Fiberglass for FC system shall be a tightly woven 6 ounce fiberglass cloth or approved equal by coating manufacturer.

 D. Total film thickness for the coating system including fiberglass shall be 25 to 40 mil system with 2% to 6% fiberglass cloth.

 E. When coatings are completed, the fiberglass cloth shall not be detectable by texture or pin holes.

3.2 OTHER CONDITIONS

 A. The General 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 shall not exceed 16 percent. Substrate temperature is to be maintained at a minimum of 50oF during application and for a minimum of 24 hours thereafter.

 B. The General Contractor shall provide sufficient electric power, light, 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.

 C. Plumbing fixtures, toilet and moveable partitions, radiators, grills, etc., shall not be installed until the coatings have been applied.

 D. Painting and decorating, including installation of resilient floor covering shall be completed after the coatings have been applied.

 E. Hard floors and base, such as concrete, ceramic tile or terrazzo shall be completely finished before coatings application.

 F. 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.

 G. Walls below grade shall be suitably waterproofed from the outside by others.

 H. 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