

SPEC NOTE: Update references to Division 01 – General Requirements specification sections to match actual section numbers and titles used for the project.

SPEC NOTE: Venger Group permits the use of this document for preparation of project specific documents; the information contained in this specification can be used at the discretion of the Consultant and recognizes that the information contained is a guideline for preparation of project specific requirements and uses the information contained at their own risk.

Part 1 General

1.1 SUMMARY

- .1 This Section includes requirements for supply and installation of electrostatic coatings including surface preparation and priming required for a complete and functional finish system.

1.2 RELATED REQUIREMENTS

- .1 Section 09 91 00 – Painting: General coordination of site activities and protection of adjacent finishes.

1.3 DEFINITIONS

- .1 Exposed Surfaces: Apply electrostatic coatings to all visible surfaces viewed from normal viewing conditions except top of horizontal surfaces located 2100 mm or more above finished floor level unless visible from above.
- .2 Semi-Exposed Surfaces: Apply electrostatic coatings to bottom of horizontal surfaces that are located below 1100 mm above finished floor, that are visible from offset angles, reflections or through openings in adjacent construction, or that are revealed when a door or panel is opened to expose additional finished surfaces.
- .3 Concealed Surfaces: Electrostatic coatings will not be required on surfaces that are fully enclosed or concealed from view in final construction except for identification marks or protection coating specified in other Sections of the Project Manual.

1.4 REFERENCE STANDARDS

- .1 The Society for Protective Coatings (SSPC):
 - .1 Surface Preparation Guidelines

1.5 ADMINISTRATIVE REQUIREMENTS

- .1 Coordination: Coordinate correction of defects and deficiencies in substrates that may adversely affect electrostatic coating work, except for minimal work specified in this section and preparation of surfaces to finishes under this Section of work and as follows:
 - .1 Review primers for compatibility between existing substrates or finishes and finish coatings specified in this Section.
 - .2 Pre-Construction Meetings: Conduct a pre-construction meeting with the Constructor, electrostatic coating applicator, others affected by work of this Section, and the Consultant and Owner in accordance with Section 01 31 19 – Project Meetings before starting work to discuss the following:
 - .1 Access to Site

- .2 Surface Preparation and Acceptability of Substrates
- .3 Protection of Adjacent Finishes
- .4 Protection of Completed Finishes
- .5 On-Site Fire Regulations and Air Quality Requirements
- .6 Sequencing and Scheduling

1.6 SUBMITTALS

- .1 Provide required information in accordance with Section 01 33 00 – Submittal Procedures.
- .2 Action Submittals: Provide the following submittals before starting any work of this Section:
 - .1 Product Data: Provide electrostatic coating materials manufacturer’s technical data sheets and performance evaluations for products listed in this Section indicating compliance with specified requirements.
 - .2 Samples for Verification: Submit [two (2)] samples indicating final colour match to Consultant for verification before ordering coating materials.
- .3 Information Submittals: Post the following at the work site before starting any work of this Section:
 - .1 Materials Safety and Data Sheets: Post manufacturer’s standard MSDS information for products specified in this Section in a visible location with cautions, hazards and recommended safety procedures clearly identified for the duration of the work of this Section on site.

SPEC NOTE: Delete the following Item when the project does not have a requirement for meeting LEED® IEQc4.2; adjust Section reference to match Consultant’s sustainable project general requirements.

- .4 Sustainable Design Submittals: Coordinate project sustainable design requirements with [Section 01 35 31 – LEED® Special Project Procedures]; in addition, provide information for following specific requirements of this Section:
 - .1 IEQ Credit 4.2 – Low-Emitting Materials, Paints and Coatings:
 - .1 Content: Use coatings that meet or are less than VOC Limits established by referenced standards of LEED® Canada.
 - .2 Compliance Requirements: Provide information for each site applied paint or coating used within the building envelope (interior side of weatherproofing system) indicating VOC Limit in grams per litre (g/L) meeting or less than limits listed for application of materials specified in this Section.

1.7 PROJECT CLOSEOUT SUBMISSIONS

- .1 Operation and Maintenance Data: Submit manufacturer’s written instructions for cleaning and maintenance procedures; include name of original installer and contact information in accordance with Section 01 78 23 – Operation and Maintenance Data.

1.8 QUALITY ASSURANCE

- .1 Qualifications: Provide proof of qualifications when requested by Consultant:
 - .1 Applicator: Use only manufacturer approved applicators and distributors having a minimum of five (5) years experience as an independent applicator specializing in coating large institutional or commercial projects and that is bondable and insured for all work being performed under this Section, and who is a current and sustaining member with the [Alberta Painting Contractors Association].
 - .2 Labourers: Use only experienced workers having full knowledge of specified primers and coatings, and who are trained in the use of the specified electrostatic painting equipment.

SPEC NOTE: Specify actual units where multiple units of equipment or furnishings will be coated; indicate actual location of sample installation on drawings where possible.

- .2 [Sample Installation[s]: Provide sample installation in accordance with Section 01 45 00 – Quality Control, covering [approximately 1000 mm x 1000 mm] [one locker unit] [one refrigeration unit] that will be used to assess the final finish and set the standard for remaining finishes; sample installation can form a part of the total work of this Section once accepted by the Consultant; repair or replace unacceptable sample finish installation.]

1.9 DELIVERY, STORAGE AND HANDLING

- .1 Delivery and Acceptance Requirements Deliver materials to Project site in manufacturer's original, unopened packages and containers bearing manufacturer's name and label and the following information:
 - .1 Product name or title of material
 - .2 Product description (generic classification or binder type)
 - .3 Manufacturer's stock number and date of manufacture
 - .4 Contents by volume, for pigment and vehicle constituents
 - .5 Thinning instructions
 - .6 Application instructions
 - .7 Colour name and number
 - .8 VOC content and sustainable labelling agency identified
- .2 Storage and Handling Requirements: Store materials in tightly covered containers in a well ventilated area at manufacturer's recommended minimum ambient temperature and as follows:
 - .1 Maintain storage containers in a clean condition, free of foreign materials and residue
 - .2 Keep oily rags, waste and similar combustible materials in closed metal containers and remove at end of each day
 - .3 Take measures to prevent spontaneous combustion of stored materials, and away from open flame heat source and other combustible material
 - .4 Keep storage area neat and orderly

1.10 SITE CONDITIONS

- .1 Ambient Conditions: Provide adequate ventilation in areas that electrostatic coatings are being applied; in areas that are free from dust generating activities; and with air and surface temperatures within manufacturer's recommended temperature and humidity range.

SPEC NOTE: Warranty listed in following Article is specific to Venger Group's coating application process; contact your local representative for a copy of the special warranty for reference.

1.11 WARRANTY

- .1 Special Warranty: Applicators pro-rated five (5) year warranty covering materials and installation when using Venger Group's recommended surface preparation and primer requirements; submit to Owner after completion of the work as a part of Project Closeout Submissions listed above.

Part 2 Products

2.1 MANUFACTURERS

SPEC NOTE: Venger Group USA has representation in Tulsa Oklahoma and Tampa Florida; contact your local representative if you require work outside of the Western Canada and the Pacific Northwest of the United States.

- .1 Acceptable Manufacturer: Use only priming and coating materials specified in this Section as manufactured by Accessa Coatings Solutions and distributed by the Venger Group:
 - .1 Telephone: (780) 986-6665 or (403) 276-6663
 - .2 Webpage: www.vengergroup.com
- .2 Substitutions: [No Substitutions Permitted] [Submit proposed substitutions in accordance with Section 01 25 00 – Substitutions a minimum of [ten (10) days] in advance of Bid Closing.]

2.2 MATERIALS

- .1 Surface Cleaning Materials: Citrus based, biodegradable heavy duty cleaning gel recommended by manufacturer and as follows:
 - .1 Astec Corp., RCHD Cleanser
- .2 Interior Use Electrostatic Coatings: Two component, waterborne epoxy coating, and provides excellent gloss retention and chemical resistance; and is heat resistant to 75°C and as follows:
 - .1 VOC Content: Less than 1 gram per litre [contributing to LEED® IEQc4.2 requirement for the project]
 - .2 Appearance: [High Gloss reading 90°] [Semi-Gloss reading 55° to 65°] [Satin Gloss reading 20°] on 60° gloss meter

SPEC NOTE: Electrostatic coatings specified in this Section can colour matched to any paint manufacturer's chip set in bright, pastel or metallic finishes.

- .3 Colour: Matching [List Manufacturer's Number and Colour Description]

SPEC NOTE: Priming is necessary for all bare metal surfaces. Finish coating can be used as a self primer on non-rusted steel or use Hydrapoxy Primer for all other bare metal surfaces; contact Venger for recommended primer and surface preparation required for all other surfaces. Typical applications can include metal elevator frames and doors, office furniture and partitions, washroom partitions, school lockers and machinery.

.4 Primer: Accessa Perfection Hydrapoxy Primer

SPEC NOTE: Venger Group may require an additional two (2) coats of clear polyurethane as a topcoat for high contact or high traffic surfaces.

.5 Finish Coating: Accessa Perfection Hydrapoxy Top Coat

.3 [Additional Electrostatic Coatings]: [Description]:

LEED® REQUIREMENT: Primers and undercoats must contain less than 100 g/L; Non-Flat Topcoats must contain less than 100 g/L; and Flat Topcoats must contain less than 50 g/L VOC's excluding water and colorants added at point of sale. Colorants cannot add more than 50 g/L additional VOC to the maximum amount listed above. Accessa Perfection Coatings listed in this Section are available in 5 coloured bases to minimize the amount of colorant that needs to be added to match the custom colouring required for the project.

- .1 VOC Content: [List grams per litre] [contributing to LEED® IEQc4.2 requirement for the project]
- .2 Appearance: [High Gloss reading 90°] [Semi-Gloss reading 55° to 65°] [Satin Gloss reading 20°] on 60° gloss meter
- .3 Colour: Matching [List Manufacturer's Number and Colour Description]
- .4 Primer: [Venger Recommended Product]
- .5 Finish Coating: [Venger Recommended Product]

2.3 EQUIPMENT

- .1 Abrasive Cleaning Equipment: Manufacturer's recommended coarse abrasive hand scrubbing and sanding pads, surface profiling abrasive blasting equipment or other equipment required to provide substrates ready for coating.
- .2 Electrostatic Handgun: Manufacturer's recommended, CSA approved electrically operated handgun, with isolation chamber, for on-site finishing and no adjustment or minimal thinning of specified electrostatic coating materials.
- .3 Personal Protective Equipment: Protective clothing and breathing protection required by provincial Health and Safety Regulations and as required by MSDS information provided by coating manufacturer.
- .4 Fire Safety Equipment: Provide a minimum 10 kg CO₂ fire extinguisher rated for materials being applied; keep in close proximity to items being coated.

Part 3 Execution

3.1 EXAMINATION

- .1 Verification of Conditions: Verify surface conditions and materials before beginning of installation of products specified in this Section.
 - .1 Installation of products specified in this Section will denote acceptance of site conditions.

- .2 Pre-installation Testing: Confirm that substrate configuration is suitable for coating transfer efficiency by applying to sample area and confirming adhesion in accordance with coating manufacturer's requirements

3.2 PREPARATION

- .1 Protection of Existing Conditions: Protect in-place construction from overspray, drips and other damage attributable to application of electrostatic coatings; provide adequate ventilation and covers before starting work of this Section and keep in place until coating is complete and dry.

SPEC NOTE: Surface preparation and limitations listed by the coating manufacturer must be followed by the application to ensure the integrity of the film and to avoid any peeling or delamination from the substrates.

Venger is aware of many conditions that can contribute to failures of coating systems under a variety of existing and new surface issues; coordinate with your Venger representative to ascertain what surface procedures are required for your project specific installation conditions.

- .2 Surface Preparation, Pre-coated Substrates: Clean and prepare surfaces in accordance with manufacturer's written instructions and as follows:

SPEC NOTE: Loose, chipped or flaking coatings may require removal of pre-applied coatings; confirm with your Venger representative before completing the following item.

- .1 [Strip existing surface coatings to bare metal and prepare substrates in accordance with requirements for bare substrates listed below.]
 - .2 Fill or remove dents and scratches by using mandrel and metal working techniques or filling with automotive body filler.
 - .3 Sand and wash surfaces being coated to remove contaminants deleterious to adhesion of coatings to substrates; feather out chips and scratches, and other preparation ready for new coating application.
 - .4 Wash surfaces using citrus cleaner to remove grease, oil and other contaminants which could affect primer bond to substrate.
- .3 Surface Preparation, Bare Substrates: Clean and prepare surfaces in accordance with manufacturer's written instructions and as follows:

SPEC NOTE: Confirm surface profile requirements with your Venger representative before making completing the following item.

- .1 Profile ferrous metals, galvanized steel and aluminum to remove surface gloss and provide a visible surface etch in accordance with coating manufacturer's surface preparation guideline.
- .2 Fill or remove dents and scratches by using mandrel and metal working techniques or filling with automotive body filler.
- .3 Wash surfaces using citrus cleaner to remove grease, oil and other contaminants which could affect primer bond to substrate.

3.3 APPLICATION

- .1 Apply electrostatic finish coatings in accordance with manufacturer's directions using skilled applicators to provide a premium grade, complete hiding, smooth coating; having uniform sheen, colour and texture; and free from surface defects and as follows:
 - .1 Test polarity level of paint and adjust to suit application requirements.

- .2 Apply primer compatible with finish coats to manufacturer's recommended wet film mil thickness.
- .3 Apply coats evenly and to cover surfaces perfectly to manufacturer's recommended wet film mil thickness and number of coats.
- .4 Apply additional coats at no additional cost where surfaces are not finished or covered completely.
- .5 Finish all exposed and semi-exposed surfaces [including outside and backside faces, and edges of doors].

3.4 CLOSEOUT ACTIVITIES

- .1 Protection: Post "Wet Paint" signs and yellow hazard taping around perimeter site finished items while work is in progress and until coatings have dried.
- .2 Demonstration and Training: Instruct Owner on proper care and maintenance of electrostatic coating to ensure long term performance and appearance.

END OF SECTION