## SECTION 09 00 50

## SPRAY APPLIED FLOOR ADHESIVE

CSI 3-PART LONG-FORM GUIDE SPECIFICATION USE FOR CONTRACT DOCUMENT (CD) SPECIFICATION ISSUES

EDIT TO SUIT PROJECT

#### PART 1 - GENERAL

- 1.1 SUMMARY
  - A. Work of this Section consists of spray adhesive, and includes but is not limited to the following:
    - 1. Spray-Lock® 0.02 g/mL VOC Spray Adhesive for Flooring
    - 2. Substrate preparation
    - 3. Substrate testing
  - B. Related Documents and Sections: Examine Contract Documents for requirements that directly affect or are affected by Work of this Section. A list of those Documents and Sections include, but is not limited to the following:
    - 1. Drawings and general provisions of the Contract, including General and Supplementary Conditions and DIVISION 01 General Requirements, and DIVISION 02 through 49 Specification Sections apply to this Section.
    - SECTION 03 30 00, CAST-IN-PLACE CONCRETE For proper concrete design, underslab vapor barrier and finished concrete surface required to accept flooring adhesive and finish flooring system.
    - 3. SECTION 03 54 16, HYDRAULIC CEMENT UNDERLAYMENT: For leveling of existing concrete slabs.
    - 4. SECTION 06 10 00, ROUGH CARPENTRY: For proper wood-based panel underlayment required for an acceptable finish flooring system installation.
    - 5. SECTION 06 16 00, SHEATHING: For proper wood-based panel underlayment required for an acceptable finish flooring system installation.
    - 6. SECTION 09 65 00, RESILIENT FLOORING
      - a. SECTION 09 65 16, RESILIENT SHEET FLOORING
        - 1). SECTION 09 65 16.13, LINOLEUM FLOORING
      - b. SECTION 09 65 19, RESILIENT TILE FLOORING
    - 7. SECTION 09 68 00, CARPETING
      - a. SECTION 09 68 13, TILE CARPETING
      - b. SECTION 09 68 16, SHEET CARPETING

# 1.2 REFERENCES

NOTE: Coordinate and edit to the correct Section number below.

The numbers shown indicate relevant broad-scope, medium-scope and narrow-scope numbers of the CSI MasterFormat® system.

- A. Abbreviations and Acronyms in accordance with SECTION 01 10 00 [ **01 11 00** ], SECTION 01 40 00 and as follows:
  - 1. AHJ. Authority Having Jurisdiction from local, state and federal regulatory agencies.
  - 2. RH. Relative humidity.
- B. Definitions in accordance SECTION 01 10 00 [ 01 11 00 ], SECTION 01 40 00 and as follows:

- 1. Adhesive: A substance that unites or bonds surfaces together.
- 2. Aerosol Adhesive: Any adhesive packaged as an aerosol product in which the spray mechanism is permanently housed in a nonrefillable can designed for hand-held application without the need for ancillary hoses or spray equipment. Aerosol adhesives include special purpose spray adhesives, mist spray adhesives, and web spray adhesives, as defined by the California Air Resources Board consumer products regulation found in Title 17 of the California Code of Regulations, beginning at Section 94507.
- 3. Aerosol Spray Can: A hand held, pressurized, non-refillable container which expels adhesives from the container in a finely divided spray when a valve on the container is depressed.
- 4. <u>HAP</u>. Hazardous Air Pollutant
- 5. <u>LEED</u>®. Leadership in Energy and Environmental Design, a set of USGBC rating programs applicable to construction projects.
- 6. VOC. <u>Volatile Organic Compounds</u> are chemical compounds that have a high vapor pressure and low water solubility. They include a variety of chemicals, some of which may have short- and long-term adverse health effects when concentrated indoors.

NOTE: Edit items below to reflect project requirements.

- C. Referenced Standards in accordance SECTION 01 40 00 and as follows:
  - 1. ASTM. ASTM International; www.astm.org
    - a. ASTM D907, Standard Terminology of Adhesives
    - b. ASTM D1144, Standard Practice for Determining Strength Development of Adhesive Bonds
    - c. ASTM D1151, Standard Practice for Effect of Moisture and Temperature on Adhesive Bonds
    - d. ASTM D3167, Standard Test Method for Floating Roller Peel Resistance of Adhesives
    - e. ASTM D3983, Standard Test Method for Measuring Strength and Shear Modulus of Nonrigid Adhesives by the Thick-Adherend Tensile-Lap Specimen
    - f. ASTM D5116, Standard Guide for Small-Scale Environmental Chamber Determinations of Organic Emissions From Indoor Materials/Products
    - g. ASTM D6004, Standard Test Method for Determining Adhesive Shear Strength of Carpet Adhesives
    - h. ASTM E329, Standard Specification for Agencies Engaged in Construction Inspection and/or Testing
    - i. ASTM E699, Standard Practice for Evaluation of Agencies Involved in Testing, Quality Assurance, and Evaluating of Building Components
    - j. ASTM F710, Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring
    - k. ASTM F1482, Standard Practice for Installation and Preparation of Panel Type Underlayments to Receive Resilient Flooring
    - I. ASTM F1869, Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride
    - m. ASTM F2170, Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using In Situ Probes
  - 2. BAAQMD. Bay Area Air Quality Management District; www.baaqmd.gov
  - 3. CARB. California Air Resources Board; www.arb.ca.gov
  - 4. CRI. Carpet and Rug Institute; www.carpet-rug.org

- 5. EPA. U.S. Environmental Protection Agency; www.epa.gov
- 6. GS. Green Seal; www.greenseal.org
- 7. ISO/IEC. International Organization for Standardization, International Electrotechnical Commission; www.iec.ch/
- 8. NFPA. National Fire Protection Association; www.nfpa.org
  - a. NFPA 704, Standard System for the Identification of the Hazards of Materials for Emergency Response
- 9. RFCI. Resilient Floor Covering Institute; www.rfci.com
- 10. SCS. Scientific Certification Systems; www.scscertified.com
- 11. SCAQMD. South Coast Air Quality Management District; www.aqmd.gov
- 12. USGBC. United States Green Building Council; www.usgbc.org
- 1.3 ADMINISTRATIVE REQUIREMENTS

NOTE: Coordinate and edit to the correct Section number below.

- A. Coordination in accordance SECTION 01 30 00 [ **01 31 00** ], and as follows:
  - 1. Coordinate concrete slab or concrete topping finish in accordance SECTION 03 30 00 [ 03 54 00 ] [ 03 54 16 ] and DIVISION 09 finish flooring requirements.

NOTE: Specifier to closely coordinate applicable sections between concrete and other subfloor substrate finishes with floor finish covering requirements.

## 1.4 SUBMITTALS

NOTE: Coordinate and edit to the correct Section number below.

- A. Submittals to be in accordance with SECTION 01 30 00 [ **01 33 00** ] and SECTION 01 40 00.
- B. Product Data: Submit manufacturer's printed descriptions of materials, components and systems; performance criteria; use limitations; preparation instructions and recommendations; storage and handling requirements and recommendations; and installation methods.
- C. Certificates: Submit with manufacturer's signature certifying that each product and/or system meets the requirements of the performance characteristics, physical criteria, and applicable standards specified.
- D. Test and Evaluation Reports: Submit certified test results by a recognized testing laboratory in accordance with specified test methods for each product and/or system indicating physical, chemical and performance characteristics.
- E. Sustainable Design Submittals: Submit the following USGBC <u>LEED</u>® submittals online in accordance with SECTION 01 81 13, LEED REQUIREMENTS:
  - 1. LEED Credit EQ, Indoor Environmental Quality. Complete online LEED forms and submit other required materials as follows:
    - a. LEED 2009 IEQ 4.1, (1 point) Low Emitting Materials, Adhesives & Sealants: VOC Data
      - 1). Submit manufacturers' product data for construction **adhesives** and sealants, including printed statement of VOC content and MSDS Sheets.

NOTE: Aerosol adhesive products are exempt from the requirements of SCAQMD Rule 1168 and BAAQMD Regulation 8, Rule 51.

- b. **LEED 2009** IEQ 4.3, (1 point) Low Emitting Materials, Carpet and Resilient Flooring Systems: CRI Green Label
  - 1). Submit manufacturers product data for carpet systems that includes printed statement of adhesive VOC content complying with CRI Green Label Plus Indoor Air Quality Test Program.

- NOTE: LEED v4 (below) may be used projects after November 20, 2013 or LEED 2009 (above) may be used on projects only until October 31, 2016.
  - c. **LEED v4** (BD&C [ **ID&C** ] ) EQ Credit (1-3 points), Low-Emitting Materials: At least 90%, by volume, for emissions; 100% for VOC content

NOTE: If 90% of an assembly meets the criteria, the system counts as 100% compliant. If less than 50% of an assembly meets the criteria, the assembly counts as 0% compliant.

1). Submit General Emissions Evaluation meeting California Department of Public Health (CDPH) Standard Method v1.1–2010

NOTE: Coordinate and edit to the correct Section number below.

- F. Closeout Submittals to be in accordance with SECTION 01 70 00 [ 01 77 00 ] and as follows:
  - 1. Operation and Maintenance Data: Including, but not limited to, methods for maintaining installed products and precautions against cleaning materials with methods detrimental to finishes and performance.
  - 2. Executed Warranty Documentation: Manufacturers' material warranties and installers workmanship warranty.
  - 3. Record Documents: Drawings, Specifications, Product Data.

NOTE: Edit LEED Requirements below to suit project.

- 4. Sustainable Design Closeout Documentation: Complete and maintain online USGBC LEED® worksheets for the following credits:
  - a. LEED 2009 IEQ 4.1, IEQ 4.3
  - b. LEED v4 (BD&C [ ID&C ] ) EQ Credit

#### 1.5 QUALITY ASSURANCE

- A. Qualifications:
  - 1. Installer / Applicator: Perform installation with skilled, experienced and trained workmen supervised by trained personnel who shall have a minimum three (3) years successful experience in installations of similar size and scope.

NOTE: Installer / Applicator qualification requirement recommended for proper substrate preparation for the finish flooring material to be adhered.

- 2. Testing Agency: An independent testing agency with the experience and capability to conduct the testing indicated, meeting requirements of ISO/IEC Standard 17025 or ASTM E699 and ASTM E329.
- B. Source Limitations: Obtain spray-applied adhesive through one source from a single manufacturer or a Spray-Lock® approved distributor.

NOTE: To find an approved distributor, go to: <u>http://spraylock.com/distributors</u>

C. Sustainability Standards and Certifications:

NOTE: Edit sustainability standards and certifications below to suit project.

- 1. Adhesive and Sealant VOC Limits: According to Green Seal <u>GS-36</u> for aerosols.
- 2. VOC Limits: As tested using U.S. EPA Reference Test Method 8260B.
- 3. General Emissions Evaluation: Use California Department of Public Health (CDPH) Standard Method v1.1–2010, using the applicable exposure scenario (mg/m<sup>3</sup>).

NOTE: Benchmark mockup requirement recommended to test substrate preparation, workmanship, and compatibility between finish flooring material and adhesive.

- D. Benchmark Installations in accordance SECTION 01 40 00 and as follows: Provide on-site mockup installations to verify final selections made under sample submittals and prototypes, to demonstrate aesthetic effects and set quality standard benchmarks for materials and execution.
  - 1. Install mockup installations for benchmarking each unit type in the Work as indicated by the Drawings or directed by the Architect.
  - 2. Approved mockups will become benchmarked installations and may be incorporated into the Work where accepted without exception by the Architect.

### 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Delivery, Storage and Handling in accordance manufacturer's recommendations, SECTION 01 60 00 and as follows:
  - 1. Delivery and Acceptance Requirements
    - a. Deliver materials to Project site in an undamaged condition, in original, unopened and undamaged packages or containers bearing manufacturer's intact label, names, brand names, types and thicknesses of contents, and proper handling, storing, unpacking, protecting, and installation instructions, as warranted.
    - b. Inspect shipped materials on delivery to ensure compliance with requirements of Contract Documents and to ensure that products are undamaged and properly protected. Reject damaged goods and accept properly ordered, protected and undamaged goods.
  - 2. Storage and Handling Requirements
    - a. Store adhesive materials in a dry, temperature-controlled interior area at 65-80 deg F (18-27 deg C). Protect materials from damage from improper handling, exposure to temperature extremes, and the action of other trades.
  - 3. Packaging Waste Management
    - a. Request in writing that manufacturers, fabricators, suppliers and shippers provide least amount of packaging that adequately and properly protects, supports and contains the items shipped, and is reusable, returnable or recyclable.

# 1.7 FIELD CONDITIONS

A. Conditions and Measurements: Visit jobsite to verify installation conditions and floor measurements.

NOTE: Coordinate and edit to the correct Section number below.

- B. Ambient Conditions in accordance manufacturer's written recommendations, SECTION 01 70 00 [01 71 00][01 71 16] and as follows:
  - 1. New concrete slabs shall be flat, clean and dry meeting all moisture and adhesion tests, passing manufacturer's written requirements.
  - 2. Environmental Limitations: Maintain temperature and RH in accordance manufacturer's recommendations.
    - a. Maintain space, substrate temperatures, and RH for time prior to, during and after installation as recommended.
  - 3. Acclimate floor finish materials into spaces they will be installed a minimum 48 hours in advance of installation.
    - a. Do not install until all floor finish materials are same temperature as space where they are to be installed.

# 1.8 WARRANTY

NOTE: Coordinate and edit to the correct Section number below.

A. Provide executed warranties in accordance with SECTION 01 70 00 [01 78 00] [01 78 36].

- B. Provide Spray-Lock® Flooring Adhesive Manufacturer's:
  - 1. Material and Workmanship Warranty (Shelf life):
    - a. Aerosol (22oz) Flooring Adhesive to be free from defects in material and workmanship for a period of three (3) years from date of manufacture when handled, stored and transported in accordance adhesive manufacturer's requirements.
  - 2. Delamination Warranty that there shall be no delamination failure:
    - a. Due to adhesive failure for a period of five (5) years from date of installation when applied to adhere approved flooring materials in accordance Adhesive manufacturer's requirements.
    - b. As long as moisture vapor emissions do not exceed 90% RH (*for Spray-Lock*® *Standard Adhesives*) or 95% RH (*for Spray-Lock*® *Platinum Adhesives*), when tested in accordance with ASTM F2170.
    - c. For moisture in concrete slab conditions up to 8 lbs. (*for Spray-Lock*® *Standard Adhesives*) or 10 lbs. (*for Spray-Lock*® *Platinum Adhesives*) per 1,000 sq. ft. per 24 hours, when tested with a prepackaged calcium chloride crystal kit performed in accordance with ASTM F1869.
    - d. For concrete slab conditions up to a pH of 11 (*for Spray-Lock*® *Standard Adhesives*) or 12 (*for Spray-Lock*® *Platinum Adhesives*) when tested in accordance with ASTM F710.

## PART 2 - PRODUCTS

- 2.1 MANUFACTURERS / FABRICATORS
  - A. Manufacturers List: Subject to compliance with requirements, provide spray adhesive products by one of the following:
    - 1. Spray-Lock, Inc., 5959 Shallowford Road, Suite 405, Chattanooga, TN 37421; 423.305.6151; 423.305.6150 (fax); <u>www.spraylock.com</u>

NOTE: Coordinate and edit to the correct Section numbers below.

- Substitution Limitations: Manufacturers of equivalent products beyond those listed above shall be considered when submitted in accordance with SECTION 01 30 00 [01 33 00] and SECTION 01 60 00 using CSI Substitution Request Form 1.5C (During the Bidding Phase) or Form 13.1 (After the Bidding Phase.)
- B. Product Options: For information on Spray-Lock® products visit: <u>http://spraylock.com/adhesives</u>

#### 2.2 DESCRIPTION

- A. Spray-Lock® Spray Adhesive is an aerosol water-based aerosol adhesive that: Acts similar to pressure sensitive adhesives; contains less than 0.02 g/mL VOC; is non-flammable; and is a non-HAP that emits no dangerous fumes or odors.
- B. Sustainability Characteristics
  - 1. <u>USGBC</u> LEED Rating: Comply with project requirements intended to achieve the following Rating, as measured and documented according to the USGBC LEED® Green Building Rating and Version indicated:

# NOTE: Each LEED Version requires a different credit total to achieve the desired LEED Rating. Select one of the following Ratings:

- a. Rating: Certified
- b. Rating: Silver
- c. Rating: Gold

		Rating: Platinum
NOTE:		Select one of the following Versions:
	e.	Version: LEED 2009-NC (New Construction)
	f.	Version: LEED 2009-EB (Existing Building)
	g.	Version: LEED 2009-CI (Commercial Interiors)
	h.	Version: LEED 2009 for Schools
	i.	Version: LEED 2009 for Retail (Commercial Interiors)
	j.	Version: LEED 2009 for Healthcare
NOTE:		LEED v4 may be used projects after November 20, 2013 or LEED 2009 may be used on projects until October 31, 2016.
		Select BD&C or ID&C, deleting the one not used.
	k.	Version: LEED v4 - BD&C (Building Design and Construction)
	I.	Version: LEED v4 - ID&C (Interior Design and Construction)
NOTE:		LEED v4 - O&M (Operations and Maintenance) is not applicable to this section.
	Cre	
	a.	<ul> <li>redits apply to this Section are met as follows:</li> <li>Indoor Environmental Quality (EQ): LEED 2009</li> <li>1). IEQ Credit 4.1, Low-Emitting Materials - Adhesives and Sealants: (as applied Spray-Lock adhesives)</li> <li>a). Green Seal GS-36 requires a VOC limit of 70 g/L for Aerosol Adhesives, 65 g for Mist Spray Adhesives and 55 g/L for Web Spray Adhesives.</li> <li>b). Spray-Lock® Flooring Adhesive tested VOC is 0.02 g/mL using EPA Method 8260B.</li> <li>2). IEQ 4.3: Low Emitting Materials, Carpet and Resilient Flooring Systems, CRI Gre Label</li> <li>a). Spray-Lock® Adhesives comply with the CRI Green Label Plus; see certifica #GLP 60255</li> </ul>
NOTE:		<ul> <li>Indoor Environmental Quality (EQ): LEED 2009</li> <li>1). IEQ Credit 4.1, Low-Emitting Materials - Adhesives and Sealants: (as applied Spray-Lock adhesives) <ul> <li>a). Green Seal GS-36 requires a VOC limit of 70 g/L for Aerosol Adhesives, 65 g for Mist Spray Adhesives and 55 g/L for Web Spray Adhesives.</li> <li>b). Spray-Lock® Flooring Adhesive tested VOC is 0.02 g/mL using EPA Method 8260B.</li> </ul> </li> <li>2). IEQ 4.3: Low Emitting Materials, Carpet and Resilient Flooring Systems, CRI Gre Label <ul> <li>a). Spray-Lock® Adhesives comply with the CRI Green Label Plus; see certifica</li> </ul> </li> </ul>
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NOTE:		<ul> <li>Indoor Environmental Quality (EQ): LEED 2009</li> <li>1). IEQ Credit 4.1, Low-Emitting Materials - Adhesives and Sealants: (as applied Spray-Lock adhesives) <ul> <li>a). Green Seal GS-36 requires a VOC limit of 70 g/L for Aerosol Adhesives, 65 g for Mist Spray Adhesives and 55 g/L for Web Spray Adhesives.</li> <li>b). Spray-Lock® Flooring Adhesive tested VOC is 0.02 g/mL using EPA Method 8260B.</li> </ul> </li> <li>2). IEQ 4.3: Low Emitting Materials, Carpet and Resilient Flooring Systems, CRI Gre Label <ul> <li>a). Spray-Lock® Adhesives comply with the CRI Green Label Plus; see certifica #GLP 60255</li> </ul> </li> <li>Select either a. LEED 2009 or b. LEED v4, deleting the one not used.</li> <li>Indoor Environmental Quality (IEQ): LEED v4 - BD&amp;C [ID&amp;C]</li> <li>1). IEQ Credit (1-3 points): Low-Emitting Materials; at least 90%, by volume,</li> </ul>
NOTE:		<ul> <li>Indoor Environmental Quality (EQ): LEED 2009</li> <li>1). IEQ Credit 4.1, Low-Emitting Materials - Adhesives and Sealants: (as applied Spray-Lock adhesives) <ul> <li>a). Green Seal GS-36 requires a VOC limit of 70 g/L for Aerosol Adhesives, 65 g for Mist Spray Adhesives and 55 g/L for Web Spray Adhesives.</li> <li>b). Spray-Lock® Flooring Adhesive tested VOC is 0.02 g/mL using EPA Method 8260B.</li> </ul> </li> <li>2). IEQ 4.3: Low Emitting Materials, Carpet and Resilient Flooring Systems, CRI Gre Label <ul> <li>a). Spray-Lock® Adhesives comply with the CRI Green Label Plus; see certifica #GLP 60255</li> </ul> </li> <li>Select either a. LEED 2009 or b. LEED v4, deleting the one not used.</li> <li>Indoor Environmental Quality (IEQ): LEED v4 - BD&amp;C [ID&amp;C]</li> <li>1). IEQ Credit (1-3 points): Low-Emitting Materials; at least 90%, by volume, emissions; 100% for VOC content.</li> <li>a). General Emissions Evaluation in accordance with CDPH Standard Method</li> </ul>

- application accessory as recommended by the adhesive manufacturer.
  - 1. Aerosol Container Holder/Dispenser

# PART 3 - EXECUTION

3.1 EXAMINATION

NOTE: Coordinate and edit to the correct Section number below.

- A. Examination in accordance SECTION 01 70 00 [01 71 00 ] [01 71 16] and as follows:
  - 1. Acceptance of Conditions: Carefully examine installation areas with Installer/Applicator present, for compliance with requirements affecting Work performance.
    - a. Verify that field measurements, surfaces, substrates, structural support, tolerances, levelness, plumbness, temperature, humidity, moisture content level, cleanliness and other conditions are as required by the manufacturer, and ready to receive Work.
      - 1). Verify that concrete substrates meet ASTM <u>F710</u> and are flat as recommended by the finish-flooring manufacturer.
      - 2). Verify that wood and panel type underlayment substrates meet ASTM <u>F1482</u> and are flat as recommended by the finish-flooring manufacturer.
  - 2. Test substrates as required by manufacturer to verify proper conditions.

NOTE: Coordinate and edit requirements to the project substrates present.

- a. Portland-Cement Concrete:
  - 1). Perform moisture testing to verify that concrete substrate is sound and dry. Both of the following tests are required:
    - a). Perform relative humidity (RH) test using in situ probes in accordance ASTM <u>F2170</u>. Proceed with installation only after each substrate measures a maximum **90%** RH (*for Spray-Lock*® *Standard Adhesives*) **or 95%** RH (*for Spray-Lock*® *Platinum Adhesives*).
    - b). Perform anhydrous calcium chloride testing in accordance ASTM <u>F1869</u>. Proceed with installation only after substrates have maximum moisture-vaporemission rate of **8 lbs.** (*for Spray-Lock*® *Standard Adhesives*) **or 10 lbs.** (*for Spray-Lock*® *Platinum Adhesives*) of water/1000 sq. ft. in 24 hours.
  - 2). Perform alkalinity testing to verify pH level is **11** (*for Spray-Lock*® *Standard Adhesives*) **or 12** (*for Spray-Lock*® *Platinum Adhesives*) or below in accordance ASTM <u>F710</u>.
  - 3). Perform bond testing in accordance ASTM <u>F710</u> to determine compatibility of adhesive to concrete substrate.
- b. Wood Underlayment: Shall be dry, clean, structurally sound, well nailed and/or glued, free of voids and with joints that do not exceed 1/16 inch (1.6mm) in accordance floor finish manufacturer's installation instructions.
- 3. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 PREPARATION - FLOORING

NOTE: Coordinate and edit to the correct Section numbers below.

- Preparation in accordance flooring manufacturer's written instructions, SECTION 01 70 00 [ 01 71 00 ] [ 01 71 23 ] and as follows:
  - 1. Provide and prepare substrates to ensure proper adhesion of flooring system in accordance with spray-adhesive manufacturer's instructions.

NOTE: Select correct substrate(s), edit to suit project, and delete items that do not suit project.

- 2. Portland-Cement Concrete Substrates: Prepare substrate in accordance ASTM <u>F710</u>, and as follows:
  - a. Verify the substrate is smooth, permanently dry and clean being free of dirt, rust, oil, wax, paint, or other contaminants that will interfere with adhesive bonding. If substrate is not acceptable:

- 1). Mechanically abrade concrete slab with 350-400 rpm machine buffer using 16 grit sandpaper.
- 2). Remove debris by sweeping, brushing or vacuuming and then damp mopping substrate.
- 3). Inspect substrate and patch, repeat buffing and remove debris as needed.
- 4). If substrate is contaminated with wet / re-emulsified old adhesive, contact Spray-Lock® Technical Services for recommended preparation method.

NOTE: One industry method of visually inspecting substrate is to, at night and/or with the lights out, lay a high candlepower (360 lumen or higher) LED Flashlight, on the floor of each room to be inspected, and roll around the flashlight.

3. Wood Substrates and Panel Type Underlayment to be in accordance with ASTM <u>F1482</u> and floor finish manufacturer's requirements.

NOTE:	Specify use of exterior glues in lieu of interior urea-formaldehyde glue to
	reduce amount of indoor air pollutants.

- 4. Existing Substrates: Properly prepare manufacturer acceptable substrates to accept finish flooring.
- 5. Sweep or vacuum, and damp mop clean flooring substrates immediately prior to sprayapplied adhesive installation.

## 3.3 INSTALLATION / APPLICATION - FLOORING

NOTE: Coordinate and edit to the correct Section number below.

- A. Installation in accordance with each floor finish assembly product manufacturer's written instructions, SECTION 01 70 00 [01 73 00 ] [01 73 16 ] and as follows:
  - 1. Spray-Applied Adhesive Method:
    - a. Do not place finish-flooring product until adhesive applied to substrate is ready to receive it in accordance adhesive manufacturer's instructions.
    - b. Mark floor equivalent to manufacturer's recommended area for size of container used. Apply no more or less adhesive than what manufacturer recommends.
    - c. Outline perimeter of the room with a 4 to 5 inch (101 to 127 mm) wide band of adhesive. Apply the adhesive from 8 to 12 inch (508 to 762 mm) above the substrate.
    - d. Lay flooring finish material, adjust and reset until layout placement is certain.
    - e. Following installation of finish flooring (typically within an hour after installing) roll entire floor area with a 75 to 100 lb (34 to 45 kg) roller to ensure proper bonding with instant shear strength.
  - 2. Close space to traffic for 2 hours before beginning installation, however, flooring to be immediately available after rolling for all range of use.

#### 3.4 FIELD QUALITY CONTROL

NOTE: Coordinate and edit to the correct Section number below.

- A. Site Tests and Inspections in accordance with SECTION 01 40 00 [ 01 45 00 ] [ 01 45 23 ] and as follows:
  - 1. Inspect floor finish system installation for non-conforming work including, but not limited to, the following:
    - a. Lack of adequate adhesion
    - b. Adhesive overspray
      - 1). Clean off water-based adhesive overspray with a damp cloth.

- c. Improper substrate preparation as indicated by:
  - 1). Telegraphing of joints, dirt, or debris through the finish flooring
  - 2). Air blisters
  - 3). Buckling
  - 4). Cracks
- 3.5 CLEANING

NOTE: Coordinate and edit to the correct Section number below.

- A. Waste Management to be in accordance with SECTION 01 70 00 ] [ 01 74 00 ] [ 01 74 19 ] and as follows:
  - 1. Store and recycle cartons and aluminum adhesive containers.

## 3.6 CLOSEOUT ACTIVITIES

NOTE: Coordinate and edit to the correct Section number below.

- A. Perform Closeout Procedures to be in accordance with SECTION 01 70 00 [ 01 77 00 ] and as follows:
  - 1. Substantial Completion Requirements in accordance with SECTION 01 70 00 [ 01 77 00 ].
  - 2. Perform required Demonstration and Training with Owner's designated staff in accordance with SECTION 01 70 00 [ **01 79 00** ].
  - 3. Sustainable Design Closeout Documentation in accordance with SECTION 01 70 00 [ 01 78 00 ] [ 01 78 53 ]: LEED credit worksheet paperwork.
- B. Correct Non-Conforming Work in accordance with General Conditions, and to the acceptance of the Architect.

#### **END OF SECTION**

NOTE:	Be sure to obtain the latest version of this Guide Specification.
	This Guide Specification is not a completed document ready for use. It must be edited, deleting, adding, or modifying text, as required to suit project requirements.
	The professional stamping and the contracting parties of the Contract Documents are responsible for the accuracy of issued project specifications, including any use of this SPRAY-LOCK® Guide Specification.
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